

Communicable Diseases Weekly Report

Week 30, 21 July to 27 July 2019

In summary, we report:

- [Invasive meningococcal disease](#) – six new cases in the reporting week
- [NSW STI Strategy 2016 – 2020: July to December 2018 data report](#)
- [Summary of notifiable conditions activity in NSW](#)

For further information see 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.

Invasive meningococcal disease

Six new cases of invasive meningococcal disease (IMD) were notified in this reporting week (Table 1). Cases occurred in two infants, two young adults and two people over 55 years of age. The cases are unrelated and occurred in multiple regional and metropolitan local health districts. Further testing has found that four of the cases were caused by meningococcal serogroup B, and one each by serogroups W and Y.

IMD is a serious, often fatal infection caused by the bacteria *Neisseria meningitidis*. There are six serogroups of meningococcal bacteria associated with IMD (A, B, C, W, X and Y), of which four (B, C, W and Y) cause almost all IMD in Australia. As in other temperate climates, IMD cases occurring in NSW tend to follow a seasonal trend, with a greater proportion of cases reported in late winter and early spring.

While IMD can affect people of all ages, children under five years of age and young people 15-24 years of age are considered at highest risk. For young children this relates to their immature immune system. For young adults this is due to increased rates of asymptomatic carriage of the bacteria in the nose and throat, and participation in activities which increase the likelihood of transmission.

Meningococcal bacteria are spread through close and prolonged contact with a person who is carrying the bacteria, who will usually be completely well. Close and prolonged contact includes activities such as intimate kissing, or sharing the same household. The bacteria does not survive well outside of the human body, and is not easily spread through sharing of drinks or utensils.

The initial symptoms of IMD are non-specific and often mimic other illnesses such as respiratory or gastrointestinal infections, making diagnosis difficult. Symptoms may include sudden fever; nausea, vomiting, or abdominal pain; headache, neck stiffness, or dislike of bright lights; joint pain; and a red-purple rash that doesn't disappear when pressure is applied. A rash does not always appear or it may occur late in the disease.

In young children, symptoms may also include irritability, difficulty waking up, high-pitched crying, rapid or laboured breathing or refusal to eat

People with IMD can become very unwell very quickly, and the disease can be fatal within hours of first symptom appearance. Anyone who thinks they, or someone they care for, might be experiencing symptoms of meningococcal disease should seek urgent medical care. The absence of a rash should not exclude the consideration of meningococcal disease. People presenting with non-specific symptoms should be encouraged to return to their doctor or to visit an emergency department if symptoms persist or rapidly worsen.

The National Immunisation Program provides meningococcal ACWY vaccine to children at 12 months of age and high school students in Year 10. People aged 14-19 years who are not enrolled in school, or who miss out on the school vaccination can access free vaccine from their GP. Vaccines against the most common strains of meningococcal B are available in Australia with a private prescription.

As vaccines do not cover all strains, everyone should know the symptoms of meningococcal disease and act fast if they present – even if they or the person they care for has received a meningococcal vaccination in the past.

Further information

- NSW Health [meningococcal disease website](#) and [meningococcal disease factsheet](#).
- [The Australian Immunisation Handbook](#) for more information on meningococcal vaccines.
- [NSW meningococcal disease data](#)

NSW STI Strategy 2016 – 2020: January to December 2018

Sexually transmissible infections (STIs) remain a significant health burden in NSW. [The NSW Sexually Transmissible Infections Strategy 2016-2020](#) provides a framework to respond to increases in STI notification rates across NSW. The Strategy outlines four goals:

1. Reduce gonorrhoea and syphilis infections and reduce the burden of disease of chlamydia infection
2. Sustain the low rates of STIs amongst sex workers
3. Sustain the virtual elimination of congenital syphilis
4. Maintain high coverage of HPV vaccination.

The [NSW Sexually Transmissible Infections Strategy 2016-2020: January to December 2018 Data Report](#) is now available. These data reports form the primary mechanism for reporting progress against the Strategy's targets (Table 1).

Table 1. Key STI data to 31 December 2018

Reduce gonorrhoea infections		
	2018	Change since 2017
Gonorrhoea notification rate (per 100,000 population)	128	11% higher (115)
Number of tests	934,944	3.5% higher (903,272)
Reduce infectious syphilis infections		
	2018	Change since 2017
Infectious syphilis notification rate (per 100,000 population)	18.6	31% higher (14.2)
Reduce pelvic inflammatory disease (PID) associated with chlamydia: Hospitalisations		
	2017	Change since 2016
Hospital admissions for chlamydia associated PID	181	13% lower (209)
Reduce pelvic inflammatory disease (PID) associated with chlamydia: Chlamydia notifications		
	2018	Change since 2017
Chlamydia notification rate (per 100,000 population)	388	5% higher (368)
Number of tests	646,183	4.9% higher (615,880)
Maintain levels of condom use for preventing the transmission of STIs		
	2017	Change since 2016
Proportion reporting condomless intercourse with casual partners	Men who have sex with men ¹	69% Increased by 12 per cent (57%)
	Young people aged 15-29 years ²	17.6% Increased by 1 per cent (16.6%)

¹ Sydney Gay Community Periodic Survey, Centre for Social Research, UNSW

² It's Your Love Life Periodic Survey, Centre for Social Research, UNSW

Maintain high coverage of HPV vaccination for Year 7 school students				
		2017	Change since 2016	
Course completion for human papillomavirus (HPV) vaccination	Female year 7 students	82%	Unchanged at 82%	
	Male year 7 students	79%	1% lower	
Increase comprehensive STI testing in priority populations in accordance with risk				
		2017	Change since 2016	
Comprehensive STI testing rates	Men who have sex with men	PFSHSs ³	87%	Increased 1 per cent (86%)
		GP ⁴	72%	Increased 4 per cent (68%)
	Young people	PFSHSs	64%	Increased by 5 per cent (59%)
		GP	37%	Increased by 1 per cent (36%)
	Female sex workers		84%	Increased by 2 per cent (82%)

In summary, from January to December 2018:

Gonorrhoea

- The gonorrhoea notification rate was 128 notifications per 100,000 population, 11% higher compared to 2017 (115 per 100,000 population) and double the rate compared to 2014 (64 per 100,000 population). The highest age-specific rate continued to occur in the 25-29 years age group; however the largest (45%) relative rate increase occurred in the 60+ years age group compared with 2017. A 13% decline in the gonorrhoea notification rate occurred in the 15-19 years age group.
- The gender specific gonorrhoea notification rate for males in 2018 was 210 per 100,000 males, a 9% increase compared to 2017. The female gender specific rate for 2018 was 45 per 100,000 females, a 21% increase compared to 2017.

Chlamydia

- The chlamydia notification rate was 388 notifications per 100,000 population, 5% higher than the rate for 2017 (367 per 100,000) and a 28% increase compared with 2014 (304 per 100,000). The highest age-specific rates of chlamydia notifications continue to occur in people aged 20-24 years.
- The chlamydia notification rate was higher in males than females (417 per 100,000 males compared to 358 per 100,000 females). This was due to a 7% increase in the rate in males compared with a 4% increase in the rate in females.

Infectious syphilis

- The infectious syphilis notification rate was 18.6 per 100,000 population, 31% higher than the rate for 2017 (14.2 per 100,000 population) and 79% higher compared with 2014 (10.4 per 100,000).
- Fewer than five percent of infectious syphilis notifications in 2018 were in women. There were 72 notifications in women in 2018, which is 1.6 times higher compared with 2017.
- Males notified with infectious syphilis were most commonly aged 30-44 years. Most men reported acquiring syphilis via male-to-male sex.

More detailed data can be found in the [NSW Sexually Transmissible Infections Strategy 2016-2020 January to December 2018 Data Report](#).

³ PFSHSs: Publicly funded sexual health services

⁴ General practices with high and medium case load of GBM in Sydney

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

Table 1. NSW Notifiable conditions from 21 July – 27 July 2019, by date received*

		Weekly		Year to date			Full Year	
		This	Last	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	9	8	432	493	1068	708	1266
	Giardiasis	48	47	1937	1769	2088	2937	3135
	Rotavirus	28	22	436	492	521	808	2319
	STEC/VTEC	1	1	37	33	34	57	53
	Salmonellosis	47	44	2316	2138	2542	3341	3681
	Shigellosis	18	13	502	179	132	530	236
	Typhoid	1	0	42	36	38	58	55
Respiratory Diseases	Influenza	5090	5463	62727	6056	18996	17423	103851
	Tuberculosis	8	10	326	285	291	507	542
Sexually Transmissible Infections	Chlamydia	627	554	18435	18474	17124	31196	29004
	Gonorrhoea	222	195	6896	6156	5460	10619	9160
	LGV	2	3	32	47	19	85	50
Vaccine Preventable Diseases	Haemophilus influenzae type b	2	0	8	3	5	6	9
	Meningococcal Disease	6	1	29	34	39	72	91
	Pertussis	111	87	3558	2270	3455	6281	5366
	Pneumococcal Disease (Invasive)	25	25	343	336	318	682	683
Vector Borne Diseases	Chikungunya	2	0	13	3	17	13	47
	Dengue	9	9	251	178	183	299	306
	Malaria	3	3	33	38	45	66	68
	Ross River	9	11	423	397	1434	570	1653
Zoonotic Diseases	Q fever	1	1	143	117	133	228	210

* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- 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.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. These reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Data on adverse events following immunisation is available online from the [TGA Database of Adverse Event Notifications](#).
- 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](#) and the [HIV Surveillance 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.