

Communicable Diseases Weekly Report

Week 28, 9 July to 15 July 2017

In summary, we report:

- Invasive meningococcal disease three notifications
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see <u>NSW Health Infectious Diseases</u>. Also see <u>NSW Health Infectious Diseases Reports</u> for links to other surveillance reports.

Invasive meningococcal disease

Three unrelated cases of invasive meningococcal disease (IMD) were notified this week (<u>Table 1</u>). The cases were all in adults, two being of serogroup Y and one serogroup B. This brings the total number of cases for 2017 to 37, the highest for this time of year since 2012.

There are several serogroups of *Neisseria meningitidis* which can cause invasive disease. The most common serogroups in Australia are B, C, W and Y. Following the introduction of a serogroup C vaccine in 2003, most cases in NSW have been caused by serogroup B.

Since 2014 however, Australia has seen an increase in the previously rare serogroup W. This serogroup was the most common across Australia in 2016, and NSW had 26 cases of serogroup W in 2016 when it usually only has around 4.

In response, NSW is providing free meningococcal ACWY vaccine (4vMenCV) to Year 11 and 12 students through a school-based vaccination program. The program continues with 103,862 students vaccinated to date in 2017. This is expected to provide individual protection against four meningococcal strains, and contribute to herd immunity in the broader population by reducing meningococcal carriage in the vaccinated adolescents. Teenagers aged 17 to 18 years who do not attend secondary school are able to access the free vaccine through their general practitioner.

The meningococcal ACWY vaccine is also recommended for travellers to countries where these serogroups are more common and for some people with certain high risk conditions that predispose them to developing IMD, such as those without a spleen.

A vaccine against some serogroup B strains is also now available in Australia. It is recommended for young children and adolescents but is not part of the National Immunisation Program.

Meningococcal disease is caused by infection with the bacterium *Neisseria meningitidis*. The bacteria are spread through direct contact of mucous membranes with the organism, such as exposure to respiratory droplets from the nose and throat of an infected person. Close contact may result in the bacteria colonising the throat of the exposed person but in most people this does not cause any disease. In only a very small proportion of people the bacteria may invade from the throat to other parts of the body, causing IMD.

IMD typically involves meningitis (infection of the lining of the brain), septicaemia (infection of the blood) or both. Up to 10 per cent of IMD infections are fatal even with appropriate antibiotic treatment, and survivors may be left with long-term complications.

Follow the links for more information on meningococcal disease, vaccination and notification data.

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 9 July to 15 July 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	7	11	1055	747	628	1184	1040
	Giardiasis	29	43	1947	2217	2090	3481	3413
	Hepatitis E	1	0	12	12	7	16	20
	Listeriosis	1	1	12	26	16	36	26
	Rotavirus	24	21	408	269	192	751	1033
	Salmonellosis	52	38	2463	2928	2644	4543	4022
	Shigellosis	5	2	114	181	94	310	172
Respiratory Diseases	Influenza	2194	1535	10429	5565	3818	35538	30301
	Legionellosis	1	4	74	81	61	134	96
	Tuberculosis	8	6	243	254	230	536	445
Sexually Transmissible Infections	Chlamydia	501	477	15891	14207	12545	25990	22525
	Gonorrhoea	158	128	5116	3802	2945	7005	5396
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	3	176	153	111	257	186
	Meningococcal Disease	3	2	37	27	23	75	47
	Mumps	1	1	68	26	32	67	65
	Pertussis	91	86	3221	5945	4030	10957	12079
	Pneumococcal Disease (Invasive)	25	15	268	234	221	544	494
	Rubella	1	0	3	8	4	10	6
Vector Borne Diseases	Dengue	2	0	165	297	202	481	344
	Malaria	1	4	41	24	23	59	47
	Ross River	8	6	1312	338	1298	541	1635
Zoonotic Diseases	Q fever	1	2	116	124	125	230	264

* Notes on Table 2: NSW Notifiable Conditions activity

- 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.
- 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 <u>Database of Adverse Event Notifications</u>.
- Only conditions for which at least one case report was received appear in the table. HIV and other blood-borne virus case reports are not included here but are available from the <u>Infectious Diseases Data</u> webpage.