Communicable Diseases Weekly Report

Week 28, 8 to 14 July 2018

In summary, we report:

- Invasive Meningococcal Disease – two new cases
- Leptospirosis – five new cases
- 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

Two cases of invasive meningococcal disease (IMD) were notified in this reporting week (Table 1). Both cases were in adult residents of metropolitan Sydney but were unconnected. Testing has shown one of the cases to have been caused by serogroup W, while results for the second case are pending.

IMD can affect people of any age but is more common among young children, adolescents and young adults. Asymptomatic carriage of meningococcal bacteria occurs in up to 25% of the population, with the highest carriage rates among adolescents.

People should be aware of the signs and symptoms of IMD, and seek treatment immediately if they present. For more information see the NSW Health Meningococcal Disease Advice Poster (PDF).

From 1 July 2018, the meningococcal vaccine administered at 12 months of age through the national childhood immunisation program has changed to a vaccine which protects against four meningococcal serogroups – A, C, W and Y (4vMenCV). This change was made in response to increases in cases caused by serogroup W across Australia.

In NSW the NSW Meningococcal Response Program commenced in February 2017, and provides free 4vMenCV to students in NSW high schools. In 2017 over 113,000 school students in years 11 and 12 received free vaccine through the NSW School Vaccination Program. The program is continuing in 2018, providing vaccine to all high school students in years 10 and 11. Vaccine is also available for free for persons aged 15-17 who do not attend school, through their GP.

A vaccine against some strains of serogroup B is also available in Australia. It is recommended for young children and adolescents, but is not part of the national program. People with certain high risk conditions that predispose them to IMD, such as those without a spleen, are also recommended to be vaccinated against all meningococcal serogroups for which a vaccine is available.

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

Leptospirosis

Five new cases of leptospirosis were confirmed this week in adult residents of the Mid North Coast region, as part on an ongoing investigation into the illness among farm workers in the region, bringing the total confirmed cases to nine. These infections were confirmed in people who have presented since April 2018 with a febrile illness, and had previously been notified as possible or probable leptospirosis cases.

Farm workers are the only people affected so far. The nine confirmed cases have been infected by the Arborea serovar of *Leptospira*; this serovar is found world-wide in rats and mice. This organism has also been detected in mice caught in the vicinity of where the affected people were working. The North Coast Public Health Unit is working with farm owners, SafeWork NSW and other government agencies to understand why these workers have caught this infection and to minimise ongoing risk of infection among other workers.

Leptospira bacteria usually enter the body through skin cuts or abrasions, and occasionally through the lining of the mouth, nose, or eyes. Water, soil or mud that has been contaminated with animal urine can be the source of infection. Eating contaminated food or drinking contaminated water has occasionally been responsible for transmission.

Follow the links for the NSW leptospirosis factsheet and leptospirosis data or the SafeWork NSW safety alert about leptospirosis.

Further information on *Leptospira* serovars and national leptospirosis surveillance is available from the WHO/FAO/OIE Collaborating Centre for Reference and Research on Leptospirosis, Australia and Western Pacific Region.

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 8 to 14 July 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	9	9	468	1055	747	1266	1184
	Giardiasis	39	44	1500	1996	2217	3134	3480
	Hepatitis A	1	0	60	15	27	72	41
	Rotavirus	9	6	462	418	269	2319	750
	Salmonellosis	44	44	2034	2456	2921	3680	4533
	Shigellosis	16	11	141	116	181	235	310
	Typhoid	1	2	35	37	25	55	37
Other Diseases	Acute Rheumatic Fever	1	1	14	10	7	19	16
Respiratory Diseases	Influenza	284	260	5330	10448	5564	103853	35540
	Legionellosis	1	1	80	75	81	138	134
	Tuberculosis	4	7	253	277	252	543	534
Sexually Transmissible Infections	Chlamydia	534	643	17176	16020	14204	28977	25989
	Gonorrhoea	171	217	5660	5118	3792	9173	6994
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	4	172	181	153	271	258
	Meningococcal Disease	2	1	31	36	27	91	70
	Mumps	1	1	47	71	26	128	67
	Pertussis	55	84	2110	3232	5944	5365	10956
	Pneumococcal Disease (Invasive)	21	21	275	268	234	683	545
Vector Borne Diseases	Barmah Forest	1	1	48	84	27	127	40
	Dengue	2	10	162	169	301	306	485
	Malaria	3	1	33	41	24	68	59
	Ross River	9	12	379	1419	364	1653	595
Zoonotic Diseases	Leptospirosis	2	5	16	13	12	20	16
	Q fever	2	3	97	123	125	210	231

*** Notes on Table 1: 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 (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.

- 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.
- Only conditions for which at least one case report was received appear in the table. HIV and chronic blood-borne virus case reports are not included here but are available from the Infectious Diseases Data webpage.