Communicable Diseases Weekly Report

Week 26, 24 June to 30 June 2018

In summary, we report:

- Leptospirosis – three new cases
- Changes to the National Immunisation Program
- 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.

Leptospirosis

Three new cases of leptospirosis were reported this week in adult residents of the Mid North Coast region (Table 1). These cases were identified amongst a number of people who have presented with a febrile illness to hospital emergency departments or GPs within the region and are being investigated by the North Coast Public Health Unit.

The people who are ill are farm workers. No cases have been identified outside this group of workers. All three cases were infected by the Arborea serovar of *Leptospira*; this serovar is found world-wide in rats and mice. The public health unit is working with the industry, 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.

Leptospirosis is a disease of humans and animals caused by *Leptospira* bacteria that are found in the urine and tissues of infected animals. Many different animals can harbour *Leptospira* bacteria in their kidneys, including rodents, dogs, cattle and pigs. The urine of infected rats and other rodents are the most common source associated with human infection.

Common symptoms of leptospirosis are fever, severe headache, sore muscles, chills, vomiting, and red eyes. Some people have mild symptoms while others go on to develop severe disease, which can be fatal if not treated.

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.

People at most risk are those who have close contact with infected animals or who are exposed to water, mud, soil, or vegetation that has been contaminated with animal urine. Some occupations are at higher risk (e.g. farmers especially sugar cane and banana farmers, veterinarians and abattoir workers). Recreational activities that involve contact with contaminated water or soil can also allow leptospirosis to be transmitted, for example during camping, gardening, bushwalking, white water rafting, and other water sports.

People who work with animals should remember to cover cuts and abrasions with a waterproof dressing, and wear protective clothing when working with animals that could be infected, especially if there is a chance of contact with urine. People should avoid swimming or wading in water where there is a possibility of heavy contamination with animal urine, particularly flood water, and also remember to cover cuts and abrasions with waterproof dressings to prevent exposure to soil, mud or water that may be contaminated with animal urine.

Although leptospirosis is relatively rare in Australia, it is more common in warm and moist regions such as north-eastern NSW and Queensland.

Follow the links for the NSW leptospirosis factsheet and leptospirosis data.

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.

Changes to the National Immunisation Program

On 1 July 2018 changes to the National Immunisation Program came into effect. The NSW Immunisation Schedule has been updated to reflect these changes, which are summarised below.

Pneumococcal (Prevenar13®)

The third dose of pneumococcal vaccine will now be given as a booster at 12 months of age. The first and second doses of pneumococcal vaccine will continue to be given at 6 weeks and 4 months (two dose primary course).

Children with medical conditions associated with an increased risk of invasive pneumococcal disease (IPD) will still receive the 6 month dose, and continue to have a booster dose at 12 months (i.e. doses at 6 weeks, 4, 6 and 12 months).

Children born between 1 July 2017 and 31 December 2017 without increased risk of IPD can receive a total of 4 doses of pneumococcal vaccine during the next six months. Parents should be reassured that this is safe. For these children, the 12 month vaccine is funded, but is not required to be considered fully immunised for family assistance payments.

Meningococcal ACWY (Nimenrix®)

Previously children were offered a combined meningococcal C-*Haemophilus influenzae* type b vaccine (Menitorix®) at 12 months of age.

From 1 July 2018, children will receive a meningococcal vaccine containing serogroups A, C, W and Y at 12 months of age, replacing Menitorix®. This will be supplied as Nimenrix® vaccine.

There is no catch-up program for this vaccine as it is a 'vaccine replacement'. Children who have already received their 12 month meningococcal C vaccine prior to 1 July 2018 are not eligible to receive the meningococcal ACWY vaccine under the National Immunisation Program but may purchase it from the private market. Care should be taken to ensure that there is a minimum interval of 8 weeks from their last meningococcal vaccine dose.

***Haemophilus influenza*e type b (Act-Hib)**

Children will now be offered their fourth dose of *Haemophilus influenzae* type b (Hib) vaccine at 18 months of age (Act-HIB®). They will continue to receive their primary course doses at 6 weeks, 4 and 6 months (Infanrix Hexa®).

Children born between 1 January 2017 and 30 June 2017 who received their fourth dose at 12 months do not require the additional dose of Act-HIB® at 18 months to be considered fully immunised. However these children can receive an additional funded dose at 18 months (total of 5 doses of Hib). Parents should be reassured that this is safe, but not required to be considered fully immunised for family assistance payments.

Whooping cough (Boostrix® or Adacel®)

Whooping cough (pertussis) vaccine has been provided free of charge on the NSW Immunisation Schedule to all pregnant women in their third trimester since April 2015.

From 1 July whooping cough vaccine continues to be available for all women in their third trimester but will be funded by the National Immunisation Program.

The new vaccines are available to order via the online ordering system. Additional information and resources relating to the changes are available from:
http://www.health.nsw.gov.au/immunisation/Pages/schedule-changes.aspx

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 24 June to 30 June 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	7	8	450	1037	722	1266	1184
	Giardiasis	49	33	1417	1912	2116	3134	3480
	Hepatitis E	1	2	8	11	11	20	16
	Rotavirus	12	16	446	365	254	2318	750
	Salmonellosis	45	56	1947	2367	2767	3680	4533
	Shigellosis	5	4	113	107	165	235	310
Respiratory Diseases	Influenza	189	144	4783	6704	4278	103853	35540
	Legionellosis	1	2	77	71	71	138	134
	Tuberculosis	5	15	231	254	233	543	534
Sexually Transmissible Infections	Chlamydia	572	620	15987	14916	13219	28977	25989
	Gonorrhoea	189	159	5306	4806	3476	9173	6995
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	7	163	173	146	271	258
	Mumps	2	0	44	68	21	128	67
	Pertussis	81	79	1966	3051	5678	5367	10956
	Pneumococcal Disease (Invasive)	18	18	233	227	207	682	545
Vector Borne Diseases	Barmah Forest	3	0	46	80	26	127	40
	Dengue	2	4	147	166	287	306	485
	Malaria	4	1	29	36	22	68	59
	Ross River	15	13	357	1401	358	1653	595
Zoonotic Diseases	Leptospirosis	3	0	6	13	11	20	16
	Q fever	1	2	89	119	120	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.