

Communicable Diseases Weekly Report

Week 27, 1 to 7 July 2018

In summary, we report:

- [Leptospirosis](#) – one new case
- [Legionellosis](#) – two 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.

Leptospirosis

One new case of leptospirosis was confirmed this week in an adult resident of the Mid North Coast region ([Table 1](#)), as part of an ongoing investigation into the illness among farm workers in the region, bringing the total confirmed cases to four. These cases were identified amongst a number of people who have presented with a febrile illness to Coffs Harbour emergency department or GPs in the region and are being investigated by the North Coast Public Health Unit.

Farm workers are the only people affected so far. The four confirmed cases have been infected by the Arborea serovar of *Leptospira*; this serovar is found world-wide in rats and mice. The 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.

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](#).

Legionellosis

Two new cases of legionellosis (Legionnaires' disease) have been reported over the past two weeks ([Table 1](#)). Both cases are residents of the Sydney metropolitan area and were confirmed to be due to *Legionella pneumophila* serogroup 1 (LP1). The cases appear unrelated. The local public health units have investigated both cases but have not found any common exposure sites linking the cases to each other or other recent cases.

Legionellosis is a type of pneumonia and the symptoms include fever, chills, cough and shortness of breath. Some people also have muscle aches, headache, tiredness, loss of appetite and diarrhoea. Risk factors for legionellosis include increasing age (most cases are in people aged over 50 years), smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high-dose corticosteroid medicines. People with legionellosis often have severe symptoms and infection is associated with a 10 to 15 per cent mortality rate.

Legionellosis is caused by infection with *Legionella* bacteria. There are around 50 different species of *Legionella* bacteria but most infections in NSW are caused by *L. pneumophila* or *L. longbeachae*. *L. pneumophila* is found in water and can contaminate air conditioning cooling towers, spas, plumbing systems and other bodies of warm water. Outbreaks are sometimes associated with contaminated cooling towers that are part of air conditioning systems in large

buildings. Regular inspection, disinfection and maintenance of cooling towers and plumbing systems limit the growth of bacteria and prevent outbreaks of Legionnaires' disease.

The NSW *Public Health Act 2010* and the Public Health Regulation 2012 control various man-made environments and systems which are conducive to the growth of *Legionella* bacteria and which are capable, under the right conditions, of transmitting the bacteria to people through the air. To further strengthen the regulation of cooling towers, NSW Health amended the Public Health Regulation to require monthly testing for *Legionella* and total bacteria in all cooling towers from 1 January 2018. Further regulatory changes are being finalised to require all cooling tower systems to have risk management plans and third party auditing.

Follow the links for more information on [Legionnaires' disease](#), on the [regulatory control of Legionnaires' disease](#), and on [notifications of Legionnaires' disease](#).

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 1 to 7 July 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	0	11	7	9	13	13
Enteric Diseases	Cryptosporidiosis	9	7	459	1048	734	1266	1184
	Giardiasis	44	49	1461	1960	2170	3134	3480
	Hepatitis A	1	0	60	15	27	72	41
	Hepatitis E	1	1	9	11	11	20	16
	Rotavirus	6	13	453	389	263	2319	750
	Salmonellosis	43	44	1989	2405	2847	3680	4533
	Shigellosis	11	5	124	109	172	235	310
	Typhoid	1	0	33	37	25	55	37
Other Diseases	Acute Rheumatic Fever	1	0	13	10	7	19	16
Respiratory Diseases	Influenza	258	189	5041	8241	4826	103853	35540
	Legionellosis	1	1	79	74	75	138	134
	Tuberculosis	7	6	245	264	242	543	534
Sexually Transmissible Infections	Chlamydia	605	572	16598	15469	13741	28978	25989
	Gonorrhoea	199	189	5470	4948	3632	9173	6995
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	5	166	177	148	271	258
	Meningococcal Disease	1	0	29	33	27	91	70
	Pertussis	82	81	2050	3139	5808	5365	10956
	Pneumococcal Disease (Invasive)	21	17	252	243	218	682	545
Vector Borne Diseases	Barmah Forest	1	3	47	84	26	127	40
	Dengue	6	2	154	166	296	306	485
	Malaria	1	4	30	40	24	68	59
	Ross River	13	15	371	1409	360	1653	595
Zoonotic Diseases	Leptospirosis	1	3	7	13	11	20	16
	Q fever	2	1	91	121	123	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.