

Communicable Diseases Weekly Report

Week 13, 22 March to 28 March 2020

In summary, we report:

- [Legionellosis](#) – seven new cases
- [Novel coronavirus 2019 \(COVID-19\)](#)
- [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.

Legionellosis (Legionnaires' disease)

Seven new cases of legionellosis (Legionnaires' disease) were notified in this reporting week (Table 1). Six of these cases were caused by *Legionella pneumophila* serogroup 1 (LP1). The remaining case was caused by *Legionella longbeachae*.

In March 2020, NSW Health received 15 notifications of legionellosis, of which all 15 were caused by LP1. The number of Legionellosis notifications overall is slightly higher than the average of the same month in the previous five years (n=12), however the number of infections caused by LP1 is 1.7 times higher than the average for the same month in the previous five years.

The cases notified in March have occurred across NSW and appear to be sporadic in nature, with the exception of one case from the beginning of March, a resident of South Eastern Sydney Local Health District, who has exposures in the Haymarket area, which was reported to be linked to a cluster of cases reported in [CDWR Week 9](#). A thorough investigation of three cases clustering in the same suburb of the Central Coast Local Health District has revealed no common exposures.

Table 1: Local Health District of residence, Legionellosis cases (all) notified to NSW Health 1 March to 31 March 2020

Local Health District of residence	Notifications
Central Coast	4
Hunter New England	2
Mid North Coast	1
Northern Sydney	1
South Eastern Sydney	1
South Western Sydney	5
Sydney	1
Western Sydney	2
Total	17

Eighty eight per cent of cases in March have occurred in males, and the average age at onset was 62 years (range 34 years to 84 years). The majority of cases were hospitalised, including at least one ICU admission. One death occurred in a person with a history of multiple myeloma. Reported

risk factors among cases included being a smoker (current or past) and having an immunosuppressive health condition or therapy.

Legionellosis is a type of pneumonia, which can be severe and occasionally fatal. Typical symptoms include fever, headache, chills, muscle aches, cough, and shortness of breath. The incubation period is commonly 5 to 6 days, but can be as short as 2 days or as long as 10 days. Legionellosis predominantly affects middle-aged and older people, particularly smokers, people with chronic lung disease, and people who are immunocompromised due to other medical conditions or medications.

Legionellosis is caused by *Legionella* bacteria. Most infections identified in NSW are caused by two *Legionella* species, *Legionella pneumophila* and *Legionella longbeachae*. *Legionella pneumophila* bacteria can contaminate warm water systems, whirlpool spas, air conditioning cooling towers, and other bodies of water. Legionellosis is not spread from person to person; it occurs from inhaling contaminated water aerosols or dust. Outbreaks are sometimes associated with aerosols generated by contaminated cooling towers on large buildings. Regular maintenance, inspection, and remedial action of cooling towers and plumbing systems limit the growth of the bacteria and prevent transmission of *Legionella*. To protect public health, requirements for risk-based management of water cooling and warm water systems are set out in public health legislation and regulations.

Further information

- NSW Health [Legionnaires' disease fact sheet](#)
- NSW Health [Legionellosis notification data page](#).

NSW Health information regarding the [regulatory control of Legionnaires' disease](#)

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the [NSW Health COVID-19 page](#).

Summary of notifiable conditions activity in NSW

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

Table 2. NSW Notifiable conditions from 22 March – 28 March 2020, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	22	12	305	306	295	669	708
	Giardiasis	38	55	736	1199	861	3271	2937
	Hepatitis E	1	0	7	4	2	23	18
	Paratyphoid	2	0	14	28	12	39	34
	Rotavirus	3	5	280	166	261	1756	808
	STEC/VTEC	2	3	34	24	19	80	57
	Salmonellosis	49	82	1415	1314	1170	3563	3336
	Shigellosis	12	14	334	227	60	868	531
Respiratory Diseases	Influenza	180	360	6876	7393	3303	116448	17409
	Legionellosis	7	3	33	55	40	153	171
	Tuberculosis	5	6	115	137	123	597	507
Sexually Transmissible Infections	Chlamydia	416	524	8101	8381	8077	32450	31180
	Gonorrhoea	159	194	2862	2998	2681	11713	10607
Vaccine Preventable Diseases	Mumps	4	3	30	17	28	56	72
	Pertussis	73	82	1085	1625	989	6386	6280
	Pneumococcal Disease (Invasive)	7	8	110	81	88	692	681
Vector Borne Diseases	Barmah Forest	1	4	30	16	23	63	74
	Dengue	2	1	48	120	98	453	299
	Ross River	12	14	73	185	119	578	571

* 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.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health [Latest Updates on COVID-19](#) page.
- 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](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies 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.