

# **Communicable Diseases Weekly Report**

#### Week 24, 11 to 17 June, and Week 25, 18 to 24 June 2023

In this report we provide information regarding legionellosis and a summary of notifiable conditions activity in NSW over the reporting period Week 24, 11 to 17 June, and Week 25, 18 to 24 June 2023.

For surveillance data on COVID-19 and influenza please see the latest <u>NSW Respiratory</u> Surveillance Report.

For up-to-date information regarding the Japanese encephalitis outbreak and the NSW response, please visit the <u>NSW Health Japanese encephalitis page</u>.

Information on notifiable conditions is available at the NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

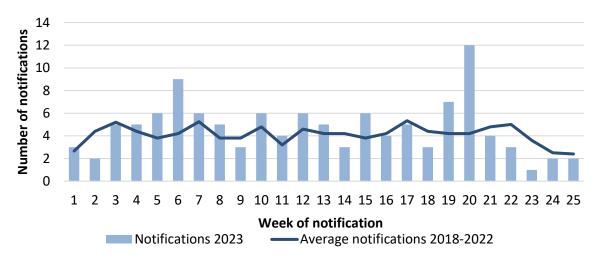
### Legionellosis

Two Legionnaires' disease cases were notified to NSW in each of reporting Weeks 24 (see Table 1) and 25 (see Table 2). Three cases were due to *Legionella pneumophila*, and one was due to *Legionella longbeachae*. For the year to 24 June (epidemiological weeks 1-25), there have been 117 notifications of Legionnaires' disease in NSW. This is higher than the average number of cases over the same period in the past 5 years (2018-2022 mean=98 cases). In 2023, epidemiological week 20 (beginning 14 May) had the highest number of cases reported (n=12), which well exceeded the 5 year average (mean=4 cases; Figure 1).

Increased legionellosis notifications this year appear to have been a result of sporadic cases; there have been several investigations into cases clustered in time and location, however, no confirmed point source has been identified.

*L. pneumophila* has been the dominant cause of notified infections in 2023 (n=69/117; 59%) (Figure 2), which is consistent with recent years.

Figure 1. Legionnaires' disease notifications by epidemiological week in 2023 (to 24 June) and average notifications by week (2018 to 2022), NSW\*



\*Data correct as of 11 June 2023

9 Number of notifications 8 7 6 5 4 3 2 1 0 3 15 16 17 18 19 20 21 22 23 24 25 11 12 13 14 Week of notification ■ Legionella longbeachae ■ Legionella pneumophila

Figure 2. Legionnaires' disease notifications by species and epidemiological week in 2023 (to 24 June), NSW\*

\*Data correct as of 11 June 2023

Legionnaires' disease, an infection of the respiratory system caused by *Legionella* bacteria, is characterised by fever, chills, cough and shortness of breath. Some people may also experience muscle aches, headache, tiredness, loss of appetite and diarrhoea. Legionnaires' disease typically affects people over the age of 50 years and can result in severe pneumonia requiring hospitalisation, especially in those who smoke tobacco, have an existing lung condition or a suppressed immune system.

Legionnaires' disease is not spread from person to person, but infection may occur after breathing in water aerosols or environmental dust contaminated with *Legionella* bacteria.

There are two types of *Legionella* bacteria that commonly cause Legionnaires' disease: *L. longbeachae*, which may be found in soil, bagged potting mix and landscaping products, and *L. pneumophila*, which can be present in building water systems such as air-conditioning cooling towers and warm water systems.

Following notification of a case of Legionnaires' disease, the local public health unit (PHU) works closely with the case or their family to investigate potential sources. Health Protection NSW in conjunction with the PHU reviews for common potential sources between cases, and monitors for any further cases or crossover in potential exposures.

#### Reducing risk of Legionnaires' disease:

Certain activities such as gardening, irrigation, and re-commissioning of spas or large air conditioning systems may increase the risk of *Legionella* bacteria exposure. The risk of Legionnaires' disease can be reduced by:

- Taking appropriate precautions when gardening and handling soil, potting mix and similar products, including:
  - Wetting down gardening products while working to reduce dust
  - Use of appropriate personal protective equipment including a P2/N95 mask and aloves
  - Washing hands after handling soil and potting mix and before eating, drinking, or smoking.
- Businesses ensuring cooling water systems are well maintained, particularly after periods
  of intermittent operation or seasonal usage, in line with the NSW <u>Public Health Regulation</u>.
- Regular maintenance (including disinfection) of spas, hot tubs and irrigation systems particularly those sourced from untreated water sources such as dams or reservoirs.

#### Further information:

- NSW Health Legionnaires' disease fact sheet
- NSW Health Legionellosis notification data page
- NSW Guidelines for Legionella Control in Cooling Water Systems

## Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period alongside reports received in the previous week, year to date and in previous years (Table 1).

Table 1. NSW Notifiable conditions from 11 – 17 June 2023, by date received\*

		Weekly		Year to date					<u>Full Year</u>			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	154	177	5751	5529	6424	4808	5340	13345	13016	11052	12071
	Cryptosporidiosis	7	16	295	212	286	392	402	463	444	548	669
	Giardiasis	35	59	1216	612	993	1141	1934	1410	1585	1986	3420
	Hepatitis A	2	0	45	11	0	18	36	37	8	19	61
	Rotavirus	22	21	1246	188	169	350	323	1803	356	500	1777
	STEC/VTEC	2	2	87	72	63	49	33	144	126	115	80
	Salmonellosis	46	38	1629	1722	1776	1907	2062	2968	3100	2885	3552
	Shigellosis	10	13	413	128	41	368	417	460	60	494	867
Other	Invasive Group A Streptococcus	14	17	319	0	-	-	-	142	-	-	-
Respiratory Diseases	Influenza	4517	4737	31038	76790	47	7290	27029	116313	125	7481	116402
	Legionellosis	2	1	115	141	105	76	83	269	216	171	154
	Respiratory syncytial virus (RSV)	1534	4744	27018	2	-	-	-	5669	-	-	-
	Tuberculosis	8	9	248	204	281	251	265	528	555	625	589
Sexually Transmissible Infections	Chlamydia	512	567	14675	11490	13933	12873	14767	25854	25299	27213	32466
	Gonorrhoea	242	208	5725	4600	4417	4697	5522	10230	7626	9861	11670
	LGV	1	1	20	8	20	33	24	29	36	44	69
Vaccine Preventable Diseases	Meningococcal Disease	2	3	21	7	12	9	13	36	23	22	59
	Mumps	1	4	18	3	3	49	27	27	6	56	59
	Pertussis	11	7	80	22	29	1301	2904	81	44	1400	6387
	Pneumococcal Disease (Invasive)	18	25	253	166	203	144	201	533	386	342	686
Vector Borne Diseases	Barmah Forest	2	1	61	42	63	143	41	89	111	271	63
	Dengue	5	3	143	25	1	76	226	170	4	78	460
	Malaria	1	0	40	13	2	19	28	42	8	25	73
	Ross River	4	9	225	532	507	1604	374	725	661	1991	596
Zoonotic Diseases	Q fever	5	2	74	98	112	112	135	198	209	212	249

Table 2. NSW Notifiable conditions from 18 – 24 June 2023, by date received\*

		Weekly				Year to date			Full Year			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	210	154	5972	5760	6686	5003	5534	13345	13016	11052	12071
	Cholera	1	0	1	2	0	0	0	2	1	0	0
	Cryptosporidiosis	5	7	299	221	297	395	409	463	444	548	669
	Giardiasis	44	35	1261	641	1028	1172	1982	1410	1585	1986	3420
	Rotavirus	27	22	1269	197	179	361	341	1803	356	500	1777
	STEC/VTEC	1	2	89	74	64	50	33	144	126	115	80
	Salmonellosis	60	46	1688	1761	1837	1937	2107	2968	3100	2885	3552
	Shigellosis	17	10	433	140	42	370	433	460	60	494	867
Other	Invasive Group A Streptococcus	20	14	335	0	-	-	-	142	-	-	-
Respiratory Diseases	Influenza	5441	4517	36550	91057	48	7312	32967	116313	125	7481	116402
	Legionellosis	2	2	117	142	107	77	85	269	216	171	154
	Respiratory syncytial virus (RSV)	1664	1534	28676	2	-	-	-	5669	-	-	-
	Tuberculosis	15	8	264	212	292	268	276	528	555	625	589
Sexually Transmissible Infections	Chlamydia	619	512	15311	12016	14353	13392	15460	25854	25299	27213	32466
	Gonorrhoea	214	242	5945	4835	4597	4899	5740	10230	7626	9861	11670
Vaccine Preventable Diseases	Mumps	1	1	19	5	3	50	28	27	6	56	59
	Pertussis	8	11	88	24	30	1305	3033	81	44	1400	6387
	Pneumococcal Disease (Invasive)	19	18	274	184	218	151	224	533	386	342	686
Vector Borne Diseases	Barmah Forest	2	2	63	42	66	150	42	89	111	271	63
	Dengue	8	5	151	30	1	76	230	170	4	78	460
	Malaria	2	1	42	14	2	20	29	42	8	25	73
	Ross River	4	4	229	542	518	1677	383	725	661	1991	596
Zoonotic Diseases	Q fever	2	5	76	99	114	116	140	198	209	212	249

#### \* 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.
- Surveillance data on COVID-19 can be found in the NSW Respiratory Surveillance Report.
- 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 <u>notifiable disease data</u> 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.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here.
   Related data are available from the <u>Infectious Diseases Data</u>, the <u>HIV Surveillance Data</u>
   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.