

Communicable Diseases Weekly Report

Week 3, 13 January to 19 January 2019

In summary, we report:

- [Invasive meningococcal disease](#) – one new case reported this week
- [Legionellosis \(Legionnaires' disease\)](#) – new cases and Sydney CBD investigation
- [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

One case of invasive meningococcal disease (IMD) was notified in this reporting week ([Table 1](#)), and a second unrelated case was reported early in week 4. These were in a young man from the Sydney region and a man aged in his eighties from regional NSW. The young man had received the meningococcal ACWY vaccine in 2017 as part of the [NSW Meningococcal W Response Program](#) but his illness was found to have been caused by the meningococcal serogroup B strain, which is not covered by that vaccine. The older man's illness was caused by meningococcal serogroup W. These are the first cases of meningococcal disease reported in 2019.

Invasive meningococcal disease is a rare, but serious and sometimes fatal bacterial infection caused by *Neisseria meningitidis*. Invasive meningococcal disease can affect people of any age, as evidenced by the two cases notified this week. However it is more common in children less than five years of age, and people aged 15-24 years

There are several serogroups of meningococcal bacteria, of which six are commonly associated with invasive disease (A, B, C, W, X and Y). Of these all but X (rarely seen in Australia) are preventable by vaccine. Vaccination against one serogroup does not provide protection against other serogroups

Meningococcal ACWY vaccine

The National Immunisation Program (NIP) offers free meningococcal ACWY (MenACWY) vaccine to all children at 12 months of age.

The MenACWY vaccine will continue to be offered to year 10 students via the NSW school vaccination program in 2019. To ensure all older adolescents have the opportunity to protect themselves against meningococcal disease caused by serogroups A,C,W and Y, people aged 15-19 years, who have not received the vaccine via the school program, can access the vaccine for free from their general practitioner.

Meningococcal B vaccine

Meningococcal B (MenB) vaccine protects against some meningococcal B strains. It is strongly recommended for children under 2 years of age and adolescents but is not funded by the NIP.

Because no vaccine protects against all strains of meningococcal disease all people must still be alert for symptoms of meningococcal disease, even if they have been vaccinated.

What are the symptoms of meningococcal disease?

Symptoms include sudden onset of fever, headache, neck stiffness, joint or abdominal pain, a dislike of bright lights, and nausea or vomiting. The characteristic red-purple, pinprick like rash, does not always present or may present late in the disease.

Seeking urgent medical attention is vital if meningococcal disease is suspected. Early symptoms may mimic other common illness and diagnosis is often difficult. People who have already seen a doctor but whose symptoms continue to worsen should see their doctor again or present to a hospital emergency department.

For more information follow the link to the [meningococcal disease](#) factsheet.

Follow the links for more information on meningococcal [vaccination](#) and [meningococcal disease notification data](#).

Legionellosis (Legionnaires' disease)

There were three notifications of legionellosis (Legionnaires' disease) in this reporting week ([Table 1](#)), with two due to *Legionella longbeachae* and one due to *Legionella pneumophila* serogroup 1 (LP1). The LP1 case reported recent travel to the Sydney central business district (CBD).

In the last four weeks there have been four LP1 cases who reported having spent time in the Sydney CBD (as well as other places) in the two to ten days prior to their symptoms starting. While no common source for these infections has been identified, precautions are being taken to ensure cooling towers in the area have been properly maintained. See the related NSW Health [media release](#) for further information.

What is legionellosis?

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. People with legionellosis often have severe symptoms and infection is associated with a 10-15 per cent mortality rate.

Risk factors for Legionnaires' disease include increasing age (most cases are aged over 50 years), smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high dose corticosteroids.

Legionellosis is caused by *Legionella* bacteria. There are around 50 different species of *Legionella* bacteria, but most infections in NSW are caused by *Legionella pneumophila* or *Legionella longbeachae*.

Legionella 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 the bacteria and prevent legionellosis outbreaks.

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 Legionnaires' disease.

Follow the link for more information on the [regulatory control of Legionnaires' disease](#).

Follow the links for more information on [Legionnaires' disease](#) and on case 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 13 January – 19 January 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Bloodborne	Hepatitis C - Newly Acquired	2	1	3	2	1	31	36
Enteric Diseases	Cryptosporidiosis	18	12	40	56	106	708	1266
	Giardiasis	63	51	151	152	204	2796	3134
	Hepatitis A	3	2	5	6	3	86	71
	Rotavirus	20	15	44	69	61	804	2319
	STEC/VTEC	3	4	8	6	9	57	53
	Salmonellosis	101	120	299	303	316	3340	3681
	Shigellosis	16	18	49	10	21	530	235
Enteric Diseases	Typhoid	2	4	12	4	4	116	110
Respiratory Diseases	Influenza	450	427	1087	727	484	17395	103852
	Legionellosis	3	5	13	6	5	167	138
	Tuberculosis	11	7	23	28	29	513	542
Sexually Transmissible Infections	Chlamydia	672	560	1486	1752	1761	31156	29006
	Gonorrhoea	231	191	536	668	587	10617	9161
Vaccine Preventable Diseases	Diphtheria	1	0	1	0	0	4	0
	Measles	2	2	5	0	4	18	32
	Meningococcal Disease	1	0	1	4	8	72	91
	Mumps	1	3	4	4	6	72	127
	Pertussis	171	180	498	248	461	6281	5366
	Pneumococcal Disease (Invasive)	9	4	20	28	17	688	683
Vector Borne Diseases	Barmah Forest	1	0	1	2	4	75	127
	Dengue	11	4	18	34	21	289	306
	Malaria	3	2	6	3	6	65	68
	Ross River	11	6	26	17	282	569	1652
Zoonotic Diseases	Leptospirosis	1	0	1	0	0	56	20
	Psittacosis	1	0	1	0	5	7	9
	Q fever	4	5	12	17	14	221	210

* 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.
- 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.
- 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](#) and the [HIV Surveillance Data Reports](#) webpages.