

Communicable Diseases Weekly Report

Weeks 51 and 52, 17 to 30 December 2017

In summary, we report:

- [Invasive meningococcal disease](#) – two cases reported
- [Legionellosis](#) – four cases reported
- [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

Two cases of invasive meningococcal disease (IMD) were notified in week 52 ([Table 1](#)). To date there have been 91 cases (by onset date) reported in 2017, compared with 71 for all of 2016. The two recent cases occurred in the Hunter New England and South East Sydney Local Health Districts. One of the cases was diagnosed in a visitor from Victoria. Both of the cases occurred in adults, with no links identified between them. One of the cases was due to serogroup W while serogroup information for the other case is pending.

IMD is caused by infection with one of several serogroups of *Neisseria meningitidis* bacteria. The most common invasive serogroups in Australia are B, C, W and Y. The bacteria are spread through direct contact of mucous membranes with the organism, such as exposure to respiratory droplets from the nose and throat of an infected person. In a very small proportion of people the bacteria invades from the throat to other parts of the body, causing IMD; usually involving meningitis (infection of the lining of the brain), septicaemia (infection of the blood) or both. It is important to identify symptoms of IMD early and immediately seek medical advice as prompt antibiotic treatment is lifesaving. For further information on warning signs for IMD see the [NSW Health Meningococcal Disease Advice Poster \(PDF\)](#) and [IMD fact sheet](#).

Following the introduction of a serogroup C vaccine in 2003, which is provided free of charge at 12 months of age, the number of infections caused by serogroup C has decreased substantially. Serogroup B has previously been the most common cause of IMD in Australia; however, serogroup W has become the predominant type Australia-wide with NSW case notifications almost tripling from 2015 (8 cases) to 2016 (25 cases). To date in 2017 there have been 19 IMD cases due to serogroup W, accounting for 21 per cent of all IMD notifications. See the [NSW Health meningococcal notifications data website](#) for further information on notifications over time.

In February 2017 the NSW Government announced the [NSW Meningococcal W Response Program](#) which provides free meningococcal ACWY vaccine (4vMenCV) to Year 11 and 12 students at their schools in 2017. This provides protection for these students as well as contributing to herd immunity in the broader population. In 2018 free meningococcal ACWY vaccine will be offered to students in Years 10 and 11, with free vaccine also available through GPs for students who do not attend school, or who miss school clinics.

The meningococcal ACWY vaccine is also recommended for travellers to countries where these serogroups are more common, and is required for pilgrims to the Hajj. A vaccine against some serogroup B strains is also available in Australia. It is recommended for young children and adolescents but is not part of the National Immunisation Program. People with certain high risk conditions that predispose them to developing IMD, such as those without a spleen, are also recommended to be vaccinated against all available meningococcal serogroups.

Legionellosis

Three cases of legionellosis (Legionnaires' disease) were reported in week 51 and one case was reported in week 52 ([Table 1](#)). Three of the case notifications were related to *Legionella pneumophila* 1 (LP1) infections and involved residents of the Hunter New England, Nepean Blue Mountains and Sydney Local Health Districts (LHD). The fourth legionellosis case notified was caused by *L. longbeachae* infection in a resident of Western Sydney LHD. Local public health units are following up these cases but to date there have been no sites of possible *Legionella* exposure identified in common between these or other recent cases.

To date in 2017, there have been 81 case of legionellosis due to *L. pneumophila* reported (by onset date), compared with 93 for all 2016. Follow the link for information on [legionellosis notifications](#).

Legionellosis is a type of pneumonia and the symptoms include fever, chills, cough and shortness of breath. It 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*. For further information on the illness see the [NSW Health legionellosis fact sheet](#).

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 legionellosis.

NSW Health established the Legionella Taskforce to consider changes to the already strong regulatory approach to preventing Legionnaires' disease in NSW. For further information see the [NSW Health Legionella control and Taskforce page](#).

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 17 to 30 December 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	4	12	1266	1184	1037	1184	1040
	Giardiasis	15	54	2991	3480	3400	3480	3413
	Hepatitis A	2	4	74	41	72	41	72
	Rotavirus	6	22	2306	750	1033	750	1033
	STEC/VTEC	2	2	53	65	29	65	29
	Salmonellosis	33	61	3680	4544	4019	4544	4022
	Shigellosis	2	6	233	310	172	310	172
	Typhoid	1	1	55	37	41	37	41
Respiratory Diseases	Influenza	42	101	103829	35540	30291	35540	30295
	Legionellosis	1	3	137	134	96	134	96
	Tuberculosis	2	12	502	534	445	534	445
Sexually Transmissible Infections	Chlamydia	175	538	28837	25994	22486	25994	22525
	Gonorrhoea	73	202	9213	7004	5381	7004	5395
Vaccine Preventable Diseases	Meningococcal Disease	2	0	92	70	45	70	46
	Mumps	2	2	123	67	65	67	65
	Pertussis	31	73	5356	10956	12056	10956	12078
	Pneumococcal Disease (Invasive)	4	8	680	544	494	544	494
Vector Borne Diseases	Dengue	1	6	296	485	343	485	344
	Ross River	4	7	1651	594	1630	594	1634
Zoonotic Diseases	Q fever	1	3	196	231	264	231	264

*** 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.
- 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.