

Communicable Diseases Weekly Report

Week 37, 9 to 15 September 2018

In summary, we report:

- [Invasive meningococcal disease](#) – three new cases including one death
- [Legionellosis](#) – two new LP1 cases
- [Measles](#) – one travel-associated case with a secondary local case
- [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

Three cases of invasive meningococcal disease (IMD) in adults were notified in this reporting week, including one fatal case in a man aged in his sixties (Table 1). The three cases occurred in different parts of the state and are unrelated. These infections were caused by serogroup Y (one case) and serogroup W (two cases). The fatal case was due to serogroup W infection.

Of the 46 cases of IMD reported to date this year, 43% have been caused by serogroup B, 30% by serogroup W, 22% by serogroup Y and 2% by serogroup C. A total of five deaths due to IMD have been reported in 2018 to 15 September; two due to serogroup B, and three due to serogroup W.

IMD can affect people of any age but it is more common in children under 5 years of age and people aged 15-24 years. The disease is often difficult to diagnose in the early stages as symptoms are often non-specific and can mimic other illnesses such as respiratory and gastrointestinal infections. Symptoms can worsen rapidly and the disease can become fatal within hours. Approximately 10% of IMD infections are fatal, and around 20% of survivors experience significant long-term complications. Early identification of symptoms and early initiation of antibiotic treatment is vital to reduce the risk of severe complications and death.

Vaccination against meningococcal disease is the best method of protection. Vaccines against meningococcal disease caused by serogroups A, C, W and Y are now provided as part of the [National Immunisation Program](#) at 12 months of age.

Since 2017, NSW has provided free meningococcal ACWY vaccine to secondary school students as part of the [NSW Meningococcal W Response Program](#). General practitioners in NSW can and should offer this free vaccine to people aged 15-19 years who have not received the vaccine at school.

Vaccines against meningococcal serogroup B are also registered for use in Australia and are available by prescription.

Follow the links for the [meningococcal disease factsheet](#), and data on [IMD notifications](#).

For more information on vaccination visit the new digital [Australian Immunisation Handbook](#).

Legionellosis

Two new cases of legionellosis (Legionnaires' disease) were reported in this reporting week (Table 1), both due to the *Legionella pneumophila* serogroup 1 (LP1) strain. One case occurred in a resident of Western Sydney Local Health District (LHD) and is part of a cluster of three LP1

cases currently being investigated who have links to the Lidcombe area. The second case was in a resident of South Western Sydney LHD who appears to be unrelated to the Lidcombe cluster.

Extensive inspection and testing of cooling towers and other possible sources of *L. pneumophila* bacteria was rapidly commenced in the Lidcombe area by NSW Health and local council officers to reduce the risk of further infections. On 17 September, the investigation team was notified testing of a sample taken from a water cooling system on a building in Lidcombe had grown *Legionella pneumophila* bacteria. The public health unit immediately issued an order to the building owner to decontaminate the system. The tower was shut down and decontaminated that day, removing any risk to the public from that tower. A media release was issued on 17 September to alert people who had been in the Lidcombe area on the early symptoms of legionellosis. A third case was reported in Week 38, and the [information to the public was updated](#).

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

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*.

Legionellosis is not spread from person to person, but can occur from inhaling contaminated water aerosols or dust. *Legionella longbeachae* is found in potting mix, compost and soils and infection is associated with gardening and the use of potting mix. People intending to handle potting mix should be wearing gloves and a mask, and should wet the potting mix to reduce dust. People should also wash their hands well with soap and water after handling potting mix or soil.

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](#).

Measles

A confirmed case of measles was notified in this reporting week (Table 1), in an unvaccinated adult resident of the Nepean Blue Mountains Local Health District who acquired their infection while travelling in Europe. A secondary case in an unvaccinated adult contact of this case has also now been confirmed (Week 38). These cases are unrelated to other cases reported recently (see [CDWR reports](#) for Week 34 and Week 35).

The local public health unit has issued measles alerts related to these cases, including specific advice for people who may have been exposed to these cases in parts of [Lithgow](#) and [Richmond](#) to watch for signs and symptoms of the infection.

Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red, blotchy, non-itchy rash spreading from the head and neck to the rest of the body. For further information see the [measles fact sheet](#).

To 20 September, 15 cases of measles have been reported in NSW in 2018. Ten of these cases acquired their infections overseas (nine in South or South-East Asia, one in Europe). The remaining five cases acquired their infection from contact with these overseas acquired cases.

NSW Health advises all travellers to ensure they are fully protected against measles prior to travel. Measles remains endemic in many parts of the world, including most of Asia and Africa, and parts of the Middle East. Large outbreaks are currently occurring across Europe and parts of South America.

Two doses of measles containing vaccine provide full immunity against measles in 99 per cent of vaccinated people. In Australia, these are currently given as measles mumps rubella (MMR) at 12 months and measles mumps rubella varicella (MMRV) at 18 months of age, as part of the National Immunisation Program.

There have been a [number of changes to the measles vaccination schedule](#) over time, and adults born between 1966 and 1994 should not assume they have received two doses as a child.

In NSW anyone born after 1966 who does not have documented evidence of having received two doses of measles containing vaccine, can receive MMR for free from their GP. People who are unsure whether they have received two doses of MMR can safely be given another dose even if they have had two doses in the past.

Parents planning travel with children less than 12 months of age are encouraged to discuss their travel plans with their GP, as the first dose of the measles vaccine can be given before their first birthday if the child is travelling to areas where measles is endemic or where outbreaks are occurring.

For more information on measles outbreaks in Europe follow the link to the [ECDC monthly measles and rubella surveillance report](#).

For more information on measles in other parts of the world (including Europe), follow the link to the [WHO measles and rubella surveillance data](#) page.

More information on measles vaccination, including recommendations for travellers can be found in the new digital [Australian Immunisation Handbook](#).

For data on measles notifications in NSW visit the [notifiable diseases data portal](#).

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 9 to 15 September 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	10	3	559	1125	829	1266	1184
	Giardiasis	50	51	1945	2419	2723	3134	3480
	Hepatitis A	1	1	71	37	30	72	41
	Rotavirus	20	10	583	1143	343	2319	750
	Salmonellosis	50	43	2448	2832	3489	3680	4533
	Shigellosis	8	21	281	161	222	235	310
	Typhoid	3	0	44	42	28	55	37
Other Diseases	Acute Rheumatic Fever	4	0	19	13	9	20	16
Respiratory Diseases	Influenza	1054	1260	12054	83500	28415	103853	35540
	Legionellosis	2	1	99	91	100	138	134
	Tuberculosis	12	7	369	376	353	541	533
Sexually Transmissible Infections	Chlamydia	537	599	22490	20790	18597	28974	25988
	Gonorrhoea	218	216	7661	6629	4978	9171	6993
	LGV	4	2	64	30	43	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	7	8	226	228	189	279	262
	Haemophilus influenzae type b	1	0	4	5	4	9	5
	Measles	1	1	14	26	10	32	16
	Meningococcal Disease	3	1	46	61	49	91	70
	Mumps	1	2	57	87	40	128	67
	Pertussis	137	114	3152	4134	7639	5365	10956
Vector Borne Diseases	Pneumococcal Disease (Invasive)	22	29	494	477	379	683	545
	Barmah Forest	4	1	61	103	34	127	40
	Dengue	1	2	195	216	369	306	485
	Malaria	5	2	50	53	38	68	59
	Ross River	13	5	457	1505	394	1653	595
Zoonotic Diseases	Q fever	3	6	147	162	150	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.