

# Communicable Diseases Weekly Report

## Week 31, 29 July to 4 August 2018

In summary, we report:

- [Invasive meningococcal disease](#) – one new case and new media campaign
- [Diphtheria](#) – one new case
- [Leptospirosis](#) – outbreak investigation update
- [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 new case of invasive meningococcal disease (IMD) was notified in this reporting week ([Table 1](#)), in a young man from the Sydney region. The man had recently returned from holiday in the UK and Europe. Tests have revealed that the illness was caused by serogroup Y meningococci.

Clearance antibiotics and vaccination have been provided to close contacts of the case, including a number of health care workers, who were directly exposed to nasopharyngeal secretions. Public health authorities overseas have been advised and asked to follow up relevant contacts with whom the case was travelling.

There have been 35 cases of IMD notified in NSW this year, of which 26% have occurred in children aged less than 5 years, and 20% have occurred in adolescents and young adults aged 15-24 years.

NSW Health has this week launched the annual meningococcal disease awareness campaign. The campaign is launched prior to the peak risk period for IMD which is in late winter and early spring.

This year's campaign is targeted towards adolescents and young adults, and parents of young children. Using social media, including Facebook and Snapchat, the campaign aims to encourage those at greatest risk of meningococcal disease to 'Know the Symptoms' and 'Act fast' if they suspect meningococcal disease. The NSW Health [meningococcal disease](#) website has also been revised to support the campaign.

Prior to the launch of the campaign, the NSW Government announced that the [Meningococcal W Response Program](#) which commenced in 2017, had received further funding, and will continue into 2019. The program provides free ACWY vaccine to NSW secondary school students through the [NSW School Vaccination Program](#).

Vaccine was offered to students in Years 11 and 12 in 2017, years 10 and 11 in 2018 and in 2019 will be offered to students enrolled in Year 10 in NSW. Young people who are in these age groups (16-18 years in 2017, 15-17 years in 2018, or 15 years in 2019) who do not attend school are eligible for free vaccine via their general practitioner.

To ensure all older adolescents have the opportunity to be protected, those aged from 15-19 years who have not received their meningococcal ACWY vaccine at school are encouraged to visit their GP before the end of 2018 for a free vaccine.

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

## Diphtheria

A case of respiratory diphtheria was notified in this reporting week ([Table 1](#)) in an adult female resident from Northern NSW Local Health District (LHD), aged in her 70s.

The woman presented to her general practitioner with an infective exacerbation of an existing respiratory disorder. Testing of a respiratory specimen was positive for toxigenic *Corynebacterium ulcerans*. The woman was treated with antibiotics and given a booster dose of diphtheria toxin containing vaccine. There was no evidence of a diphtheria membrane or other features of severe infection.

Close contacts of the case were provided with antibiotics and a booster dose of diphtheria toxin containing vaccine if required. No contacts were found to be carriers for *C. ulcerans*. For more information see the [media release](#) issued by the Northern NSW LHD.

This is the second case of diphtheria notified in NSW in 2018. The first case was reported in January involving a Sydney resident who developed a cutaneous diphtheria infection after travelling overseas.

Diphtheria is a contagious and potentially life threatening bacterial infection caused by toxin-producing strains of *Corynebacterium diphtheriae* and *Corynebacterium ulcerans*. Diphtheria was a common and deadly illness of childhood in Australia prior to the introduction of an effective vaccine against diphtheria toxin in the 1930s. Diphtheria infections, particularly those affecting the throat, are now very rare in NSW, with no cases reported between 2001 and 2017.

Symptoms of diphtheria depend on the site of infection, but the most severe form of diphtheria affects the throat and tonsils, where a membrane forms making it hard to breathe and swallow. The infection can also cause the lymph glands and tissues on both sides of the neck to swell, referred to as “bull neck”.

Diphtheria infection can also present as small skin sores that form larger ulcers (cutaneous diphtheria), commonly on the legs. This form of diphtheria is more common in the tropics.

Respiratory diphtheria is spread via respiratory droplets when an infected person coughs or sneezes. Transmission can also occur via close contact with an infected person’s mouth, nose, or throat. Cutaneous diphtheria can be transmitted via contact with the infected person’s skin. Without appropriate treatment, cases may be infectious for up to 4 weeks from symptom onset, or develop long term carriage.

*C. ulcerans* infection is also occasionally associated with consumption of unpasteurised milk, or contact with animals.

For further information see the [diphtheria](#) fact sheet.

For further information on the history of vaccination programs in Australia against diphtheria, see the [summary](#) prepared by the National Centre for Immunisation Surveillance and Research (NCIRS).

Follow the link for more information on diphtheria [vaccination](#) and [notifications data](#).

## Leptospirosis

One new case of leptospirosis was confirmed this week in an adult resident of the Mid North Coast region, as part on an ongoing investigation into the illness among farm workers in the region, bringing the total confirmed cases to twenty-four. This case was confirmed in a person who had previously been notified as a probable leptospirosis case.

Farm workers are the only people affected in the outbreak so far. The twenty-four confirmed cases have been infected by the Arborea serovar of *Leptospira*; this serovar is found world-wide in rats and mice. The North Coast Public Health Unit is working with farm owners, SafeWork NSW and

other government agencies to understand why these workers have caught this infection and to minimise ongoing risk of infection among other workers.

*Leptospira* bacteria usually enter the body through skin cuts or abrasions, and occasionally through the lining of the mouth, nose, or eyes. Water, soil or mud that has been contaminated with animal urine can be the source of infection. Eating contaminated food or drinking contaminated water has occasionally been responsible for transmission.

Follow the links for the NSW [leptospirosis fact sheet](#) and [leptospirosis data](#) or the SafeWork NSW safety alert about [leptospirosis](#).

Further information on *Leptospira* serovars and national leptospirosis surveillance is available from the [WHO/FAO/OIE Collaborating Centre for Reference and Research on Leptospirosis, Australia and Western Pacific Region](#).

## 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 29 July – 4 August 2018, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	0	13	8	9	13	13
Enteric Diseases	Cryptosporidiosis	17	13	506	1081	776	1266	1184
	Giardiasis	46	54	1656	2149	2403	3134	3480
	Hepatitis A	2	1	65	19	27	72	41
	Hepatitis E	1	1	11	15	13	20	16
	Rotavirus	11	15	499	573	298	2319	750
	STEC/VTEC	2	0	35	34	28	53	65
	Salmonellosis	65	47	2194	2596	3178	3680	4533
	Shigellosis	11	20	193	134	190	235	310
Respiratory Diseases	Influenza	424	374	6434	25397	9732	103853	35540
	Legionellosis	2	0	83	81	89	138	134
	Tuberculosis	12	20	297	302	286	540	533
Sexually Transmissible Infections	Chlamydia	508	632	18918	17582	15696	28977	25989
	Gonorrhoea	200	251	6345	5624	4171	9173	6993
	LGV	2	2	47	20	32	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	1	190	208	162	277	261
	Diphtheria	1	0	2	0	0	0	0
	Meningococcal Disease	1	3	35	42	31	91	70
	Pertussis	76	68	2332	3606	6402	5365	10956
	Pneumococcal Disease (Invasive)	18	43	354	340	285	683	545
Vector Borne Diseases	Dengue	3	6	174	188	333	306	485
	Malaria	3	3	41	45	33	68	59
	Ross River	3	8	399	1444	373	1653	595
Zoonotic Diseases	Leptospirosis	1	0	30	16	12	20	16
	Q fever	4	3	113	138	133	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.