

# Communicable Diseases Weekly Report

## Week 15, 5 April to 11 April 2020

In summary, we report:

- [Invasive meningococcal disease](#) – one new case
- [Novel coronavirus 2019 \(COVID-19\)](#)
- [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 teenager from a regional area of NSW. Testing found the infection to be caused by meningococcal serogroup B. The teen had previously received the meningococcal ACWY vaccine.

A large group of people identified as close contacts of the case have been provided with clearance antibiotics. The provision of clearance antibiotics to close contacts aims to clear the bacteria from the throat of asymptomatic carriers, and reduce the risk of further transmission and cases within the social network.

Invasive meningococcal disease, commonly referred to as meningococcal disease or IMD, is a rare but serious and sometimes fatal infection caused by *Neisseria meningitidis* bacteria. There are six serogroups of meningococcal bacteria associated with IMD in humans (A, B, C, W, X, Y), of which four (B, C, W, Y) cause almost all IMD in Australia.

Transmission of meningococcal bacteria requires close and prolonged contact with a person who is carrying the bacteria, who will usually be completely well. Close and prolonged contact includes activities such as intimate kissing or sharing the same household. The bacteria does not survive well outside of the human body, and is not easily spread through sharing of drinks or utensils. Smoking, including participation in group smoking activities such as shisha, vaping, and marijuana use, with or without sharing of implements are also considered risk behaviours for IMD.

Meningococcal disease can, and does, affect people of all ages, however children under five years of age and young people aged between 15 and 24 years are at highest risk. For young children, this is considered to be due to the naivety of their immune systems. For young people, this is likely due to increased rates of asymptomatic carriage of the bacteria in the nose and throat, and participation in activities, such as intimate kissing, partying and/or smoking, and sharing of households which increase the likelihood of transmission. People with weakened immune systems due to medical conditions or treatment, and those without a spleen are also at higher risk of invasive meningococcal infections.

IMD can present in a number of ways, the most common of which are meningitis (infection of the fluid surrounding the brain and spinal cord) and septicaemia (infection of the bloodstream) or a combination of the two. Septic arthritis (infection of the fluid surrounding the joints) is a less common presentation.

The initial symptoms of IMD are non-specific, will depend on the site of infection, and often mimic other illnesses making diagnosis difficult. Symptoms may include sudden fever; nausea, vomiting, abdominal pain, headache, neck stiffness, photophobia (dislike of bright lights), joint pain, and

irritability. A red-purple rash that is non-blanching (i.e. does not disappear when pressure is applied) is typical but does not always appear or may only occur late in the disease.

In young children, symptoms may also include irritability, difficulty waking up, high-pitched crying, rapid or laboured breathing or refusal to eat.

People with IMD can become very unwell, very quickly, and the disease can be fatal within hours of first symptom appearance. Globally, IMD has a 10% case fatality rate (CFR) and 20% of survivors have significant long term complications including limb or digit amputation, neurological deficits or skin scarring.

The National Immunisation Program provides meningococcal ACWY vaccine to children at 12 months of age and high school students in Year 10. Adolescents aged 14 to 19 years who are not enrolled in school, or who miss out on the school vaccination can access free vaccine from their GP. A vaccine against the most common strains of meningococcal B is available in Australia via private prescription.

As vaccines do not cover all strains of meningococcal bacteria, NSW Health encourages all people to know the symptoms of meningococcal disease, and to act fast if they present, even if they or the person they care for has received a meningococcal vaccination.

#### Further information

- NSW Health [meningococcal disease website](#) and [meningococcal disease factsheet](#)
- [The Australian Immunisation Handbook](#) for more information on meningococcal vaccines
- [NSW meningococcal disease data](#).

## Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the [NSW Health COVID-19 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 from 5 April – 11 April 2020, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	10	10	326	334	331	669	708
	Giardiasis	25	29	804	1382	969	3271	2937
	Hepatitis E	2	0	9	5	4	23	18
	Paratyphoid	1	0	15	29	13	39	34
	Rotavirus	5	3	294	200	294	1756	808
	Salmonellosis	33	40	1489	1490	1336	3562	3336
	Shigellosis	3	5	342	262	71	868	530
Respiratory Diseases	Influenza	20	53	7044	9052	3586	116448	17409
	Legionellosis	2	3	43	62	56	153	171
	Tuberculosis	8	14	135	164	141	598	507
Sexually Transmissible Infections	Chlamydia	288	406	8932	9639	9278	32450	31178
	Gonorrhoea	126	199	3180	3519	3092	11713	10607
	LGV	1	5	32	18	24	69	85
Vaccine Preventable Diseases	Meningococcal Disease	1	0	7	9	20	59	72
	Pertussis	20	33	1141	1907	1133	6386	6280
	Pneumococcal Disease (Invasive)	7	5	122	103	100	692	681
Vector Borne Diseases	Barmah Forest	3	1	34	23	30	63	74
	Dengue	3	3	55	139	106	453	299
	Ross River	44	26	148	223	143	578	571
Zoonotic Diseases	Leptospirosis	2	0	4	2	3	8	56

#### \* 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.

- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health [Latest Updates on COVID-19](#) page.
- 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.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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](#), the [HIV Surveillance Data 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.