

Communicable Diseases Weekly Report

Week 4, 22 to 28 January 2023

In this report we provide information regarding invasive meningococcal disease and a summary of notifiable conditions activity in NSW over the reporting period Week 4, 22 to 28 January 2023.

For surveillance data on COVID-19 and influenza please see the latest [NSW Respiratory Surveillance Report](#).

For up-to-date information regarding the **Japanese encephalitis** outbreak and the NSW response, please visit the [NSW Health Japanese encephalitis page](#).

Information on notifiable conditions is available at the 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 (meningococcal disease or IMD) were notified in this reporting week, both due to *Neisseria meningitidis* serogroup B.

Both cases occurred in high-risk age groups; one was an infant and the other a person in the 15 to 25 year age group.

The infant was an Aboriginal child with complex medical co-morbidities and their routine immunisations were up to date. As an Aboriginal infant, they were eligible for free meningococcal B vaccine under the National Immunisation Program (NIP), however this had not been administered as part of their schedule. Work is being done to improve immunisation provider awareness of the inclusion of meningococcal B vaccine in the NIP schedule for Aboriginal and Torres Strait Islander infants.

The older case had not been vaccinated against meningococcal disease and did not meet eligibility criteria for free meningococcal B vaccine.

Meningococcal disease

Meningococcal disease is a rare, but serious and sometimes fatal, acute, bacterial infection caused by *Neisseria meningitidis*.

Symptoms of meningococcal disease are varied and depend on the site of infection (the blood or the fluid surrounding the brain and spinal cord) and to a degree, the age of the person who is ill. Early symptoms can mimic other illnesses, however meningococcal disease generally presents and progresses rapidly and can become very severe and even fatal very quickly.

Figure 1: Symptoms of meningococcal disease

Non-specific symptoms	Fever, nausea, vomiting, headache, joint pain
Specific symptoms	Neck stiffness, unexplained severe limb pain, dislike of bright lights, severe headache, a red purple rash which does not disappear when pressed*
Symptoms in younger children	Irritability, difficulty waking up, high-pitched crying, rapid or laboured breathing, refusal to feed

* the rash does not always appear and often appears late in the illness. Do not wait for a rash to seek help/consider IMD

People with meningococcal disease require urgent treatment with antibiotics, in hospital. Anyone suspected to have meningococcal disease, should receive urgent medical advice.

Epidemiology of meningococcal disease

There are several serogroups of *N. meningitidis* bacteria which can cause IMD. In Australia serogroups B, C, W, and Y have caused the majority of IMD, with the predominant serogroup changing over time, influenced by vaccination. In 2022 serogroup B was the predominant serogroup.

Invasive meningococcal disease can affect anyone, however there are certain groups at increased risk of IMD. These include children under 5 years of age (particularly those under the age of 2), people aged 15-25 years, and people with certain medical conditions which result in their being immunocompromised. Aboriginal and Torres Strait Islander people are disproportionately affected by IMD compared to non-First Nations people.

Preventing meningococcal disease

Vaccination is a key component of meningococcal disease prevention. Meningococcal ACWY vaccines provide protection against development of meningococcal disease due to these serogroups, and reduce asymptomatic carriage of the corresponding meningococcal bacteria, lowering the risk of transmission. Meningococcal B vaccines provide protection against developing meningococcal disease due to several strains of meningococcal B bacteria but have less effect on carriage. Meningococcal vaccines are provided for free under the NIP for certain groups. Under the NIP, the following groups are eligible for free meningococcal vaccine:

Figure 2: Meningococcal vaccination eligibility under the NIP

Vaccine	Groups eligible for free vaccine
Meningococcal ACWY vaccine	<p>All children at 12 months of age</p> <p>Children aged 14-19 years (via the School Vaccination Program, their GP[^] or community pharmacy[^])</p> <p>People with certain medical conditions that cause increased risk of infection (including asplenia, hyposplenia, complement deficiency and those receiving eculizumab treatment)</p>
Meningococcal B vaccine**	<p>Aboriginal and Torres Strait Islander children < 2 years of age[#]</p> <p>People with certain medical conditions that cause increased risk of infection (including asplenia, hyposplenia, complement deficiency and those receiving eculizumab treatment)</p>
<p>* Registered pharmacist immunisers can now provide adolescent vaccines usually delivered via the School Program. This is to increase catch-up options available for those who may have missed their school program vaccines.</p> <p>[^] The vaccine itself will be free, however GPs and pharmacists may charge a consultation fee</p> <p>** The meningococcal B vaccine provided under the NIP protects against several, but not all strains within the meningococcal B serogroup.</p> <p>[#] See details regarding catch up program below</p>	

Free meningococcal B vaccination for Aboriginal and Torres Strait Islander children

The meningococcal B vaccine has been added to the NIP schedule for Aboriginal and Torres Strait Islander infants.

The meningococcal B vaccine is given at the same time as other routine childhood vaccinations – in NSW this is at 6 weeks, 4 months, and 12 months. It is safe to give the meningococcal B vaccine with other vaccines however prophylactic paracetamol is recommended. It is also important that all doses are given to ensure the highest level of protection. Infants with certain risk conditions may require an extra dose at 6 months of age.

A 'catch-up program' is in place until 30 June 2023. This means Aboriginal and Torres Strait Islander children can access free meningococcal B vaccine if they start their doses before they turn two years of age.

For more information see the [Infant meningococcal B vaccine](#) brochure or speak to your immunisation provider.

More information

- NSW Health [meningococcal disease website](#) and [meningococcal disease factsheet](#)
- NSW Health [Immunisation Schedule](#)
- NSW Health [Immunisation for Aboriginal and Torres Strait Islander people website](#)
- NSW Health [meningococcal disease data](#)
- The [Australian Immunisation Handbook](#) for more information on meningococcal vaccines

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period alongside reports received in the previous week, year to date and in previous years (Table 1).

Table 1. NSW Notifiable conditions from 22 to 28 January 2023, by date received*

		Weekly		Year to date					Full Year			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	231	317	1098	807	1021	1019	1058	12884	12712	10819	11930
	Cryptosporidiosis	19	18	54	32	62	68	59	463	444	548	669
	Giardiasis	39	41	140	72	115	210	293	1370	1504	1934	3375
	Haemolytic Uremic Syndrome	1	0	1	0	0	1	0	6	0	2	4
	Hepatitis A	3	3	7	2	0	5	5	37	8	19	61
	Listeriosis	1	2	3	1	1	1	1	33	22	20	16
	Rotavirus	67	61	403	17	28	172	61	1811	356	500	1777
	Salmonellosis	83	112	338	285	471	343	410	2966	3097	2883	3552
	Shigellosis	21	10	55	13	5	132	71	461	60	494	867
	STEC/VTEC	6	6	15	8	12	8	11	144	126	115	79
	Typhoid	2	1	4	1	0	6	6	47	2	37	64
Other Diseases	Invasive Group A Streptococcus	8	17	67	0	-	-	-	147	-	-	-
Respiratory Diseases	Influenza	290	320	1475	15	10	1919	1701	116315	124	7481	116402
	Legionellosis	5	2	13	23	22	11	23	266	214	171	154
	Respiratory syncytial virus (RSV)	182	163	623	0	-	-	-	5666	-	-	-
	Tuberculosis	4	10	47	23	43	31	29	529	559	625	589
Sexually Transmissible Infections	Chlamydia	570	728	2330	1360	2257	2540	2265	25853	25309	27233	32474
	Gonorrhoea	200	239	850	572	727	976	849	10230	7625	9881	11686
Vaccine Preventable Diseases	LGV	1	1	4	2	1	10	6	29	36	44	69
	Meningococcal Disease	2	0	5	1	1	4	3	36	23	22	59
	Mumps	1	0	1	0	1	7	4	23	6	56	59
	Pertussis	3	3	9	2	3	342	676	81	43	1400	6387
	Pneumococcal Disease (Invasive)	8	7	38	19	23	46	27	544	386	342	686
Vector Borne Diseases	Barmah Forest	1	4	13	2	10	7	4	89	111	271	63
	Dengue	7	6	20	2	1	25	28	163	4	76	456
	Malaria	3	2	7	1	0	2	6	42	8	25	73
	Ross River	11	15	57	106	75	15	36	725	659	1990	596
Zoonotic Diseases	Q fever	2	7	17	18	16	26	25	195	206	212	249

* 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.
- Surveillance data on COVID-19 can be found in the [NSW Respiratory Surveillance Report](#).
- 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.

- 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.