

# Communicable Diseases Weekly Report

## Week 34, 18 August to 24 August 2019

In summary, we report:

- [Measles](#) – three new imported cases
- [Invasive meningococcal disease](#) – three new cases
- [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.

### Measles

Three unrelated cases of measles in NSW residents were notified in this reporting week ([Table 1](#)). All three cases occurred in adults born between 1966 and 1994, who had recently returned from travel overseas (South America, New Zealand, and the Middle East). One of the cases had no history of any measles vaccinations, one reported having received one dose of measles vaccine as a child, and the vaccination history of the remaining case was unclear.

Between 1966 and 1994 there were a number of changes to the immunisation schedule and many people born in this period may have received only one dose of measles vaccine, or may have missed out on being vaccinated at all. While one dose of vaccine provides protection in around 95 per cent of people who receive it, 99 per cent of people who receive two doses will develop lifelong protection against measles.

Two doses of measles vaccine are recommended for all children as part of the National Immunisation Program; one at 12 months of age (as measles-mumps-rubella (MMR) vaccine) and another at 18 months of age (as measles-mumps-rubella-varicella (MMRV) vaccine). NSW health provides free MMR vaccine to anyone born during or after 1966 who does not have evidence of having received two doses of measles vaccine and has not had measles in the past.

NSW Health recommends people planning any overseas travel to discuss their travel plans with their general practitioner or a travel medicine clinic to ensure they are fully protected against measles. Measles cases worldwide have dramatically increased in 2019, and many countries are experiencing large and ongoing outbreaks. Unprotected travellers are at risk of measles infection when visiting areas with measles outbreaks and they may also be exposed to infected travellers from these areas.

Parents travelling to areas where measles is prevalent with children aged between 6 and 12 months should discuss adjusting their child's vaccination schedule with their doctor to ensure they are protected prior to travel. Measles vaccine can be given as early as 6 months of age.

Discussing travel plans with a GP or travel medicine service also provides an opportunity to discuss limiting risk of other preventable illnesses during travel, such as foodborne illnesses, mosquito and other vector borne diseases, sexually transmitted infections, and other vaccine preventable illnesses.

### Further information

- NSW Health [Infectious Diseases Alerts](#)
- NSW Health [Measles homepage](#), [Measles factsheet](#) and [Measles data](#)
- NSW Health [Staying healthy when travelling overseas factsheet](#).

## Invasive meningococcal disease (IMD)

Three unrelated cases of invasive meningococcal disease (IMD) were notified in this reporting week ([Table 1](#)) in three different regional areas of NSW. These infections occurred in two people aged in their seventies, and a person aged in their early twenties. Two of the infections were found to be caused by serogroup Y, with the remaining case caused by serogroup W.

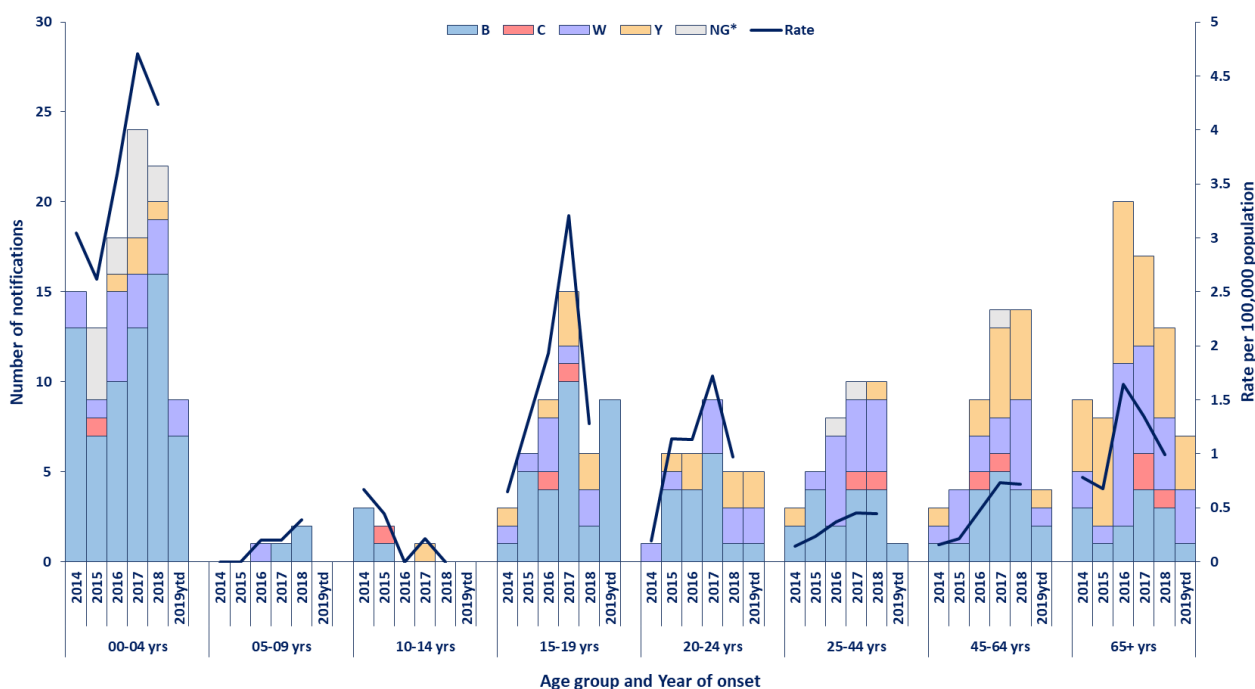
IMD is caused by *Neisseria meningitidis*, bacteria which are commonly carried harmlessly in the back of the nose and throat. Carriage of the bacteria is more common during adolescence and young adulthood (15-24 years).

IMD occurs when these bacteria enter the blood stream (septicaemia) or lining of the brain and spinal cord (meningitis). There are six serogroups of meningococcal bacteria that cause most disease worldwide, but there are four – serogroups B, C, W, and Y – which cause most IMD in Australia.

For the year to 28 August there have been 35 cases of IMD reported in NSW residents. Of these, 21 (60%) have been due to serogroup B, 8 (23%) have been due to serogroup W and 6 (17%) have been due to serogroup Y (Figure 1). IMD can affect people of any age but the incidence is highest in children under 5 years of age and in people aged 15-19 years.

The number and proportion of IMD cases caused by serogroup W or Y began increasing in 2014. Following introduction of new vaccination programs from 2017, there has been less serogroup W and Y disease in most age groups. IMD infections caused by serogroup W tend to be more severe and have a higher risk of death than other serogroups.

**Figure 1: NSW IMD notifications by serogroup and age-group for 2019 (01 Jan - 28 Aug), compared to the previous five years; NSW IMD annual notification rates for 2014-2018.**



\*NG includes both cases where the bacteria was not groupable, and cases where serogrouping was unable to be completed.

Meningococcal ACWY (Men ACWY) vaccine is offered to children at 12 months of age and 15 years of age as part of the National Immunisation Program. Vaccination is offered to Year 10 students in secondary schools as part of the [NSW School Vaccination Program](#).

People aged 15-19 years in NSW who have not received the Men ACWY vaccine at school are able to access free Men ACWY vaccine from their general practitioner (GP).

A vaccine against most strains of meningococcal B (Men B) is also available, and recommended in Australia, for anyone over 6 weeks of age who wishes to protect themselves from meningococcal B disease. This vaccine is not funded under the NIP and is available via private prescription from GPs.

## Further information

- NSW Health [Meningococcal disease homepage](#) and [Meningococcal disease factsheet](#)
- NSW Health [Meningococcal disease data](#)
- [The Australian Immunisation Handbook](#) (NH&MRC).

## 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 18 August – 24 August 2019, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Bloodborne	Hepatitis C - Newly Acquired	1	3	20	27	21	38	40
Enteric Diseases	Cryptosporidiosis	1	2	461	538	1107	708	1266
	Giardiasis	43	51	2132	1983	2297	2937	3135
	Hepatitis A	2	2	47	69	28	86	71
	Hepatitis E	1	0	15	12	16	18	20
	Listeriosis	1	0	8	17	12	19	20
	Rotavirus	30	37	571	537	795	808	2319
	STEC/VTEC	2	1	42	36	36	57	53
	Salmonellosis	49	51	2517	2329	2710	3340	3681
	Shigellosis	21	13	572	241	150	531	236
	Typhoid	1	0	46	40	41	58	55
Respiratory Diseases	Influenza	5675	5647	92656	8688	57217	17423	103851
	Tuberculosis	13	10	369	333	341	507	542
Sexually Transmissible Infections	Chlamydia	543	605	20871	20840	19194	31196	29002
	Gonorrhoea	250	265	7860	7037	6094	10619	9159
Vaccine Preventable Diseases	Measles	3	0	41	9	25	18	32
	Meningococcal Disease	3	1	35	41	52	72	91
	Mumps	1	0	32	54	79	72	127
	Pertussis	134	134	4083	2756	3909	6280	5366
	Pneumococcal Disease (Invasive)	15	15	413	421	410	683	683
Vector Borne Diseases	Chikungunya	1	0	17	3	27	13	47
	Dengue	1	10	288	198	206	299	306
	Malaria	4	3	44	44	51	66	68
	Ross River	6	7	451	431	1474	571	1653
Zoonotic Diseases	Q fever	3	3	158	140	154	228	210

### \* 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.
- 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.