

Communicable Diseases Weekly Report

Week 2, 8 – 14 January 2017

In summary, we report:

- [Meningococcal disease](#) – two new notifications
- [Measles](#) – one new case
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases on-line see [NSW Health Infectious Diseases](#).

Also see [NSW Health Infectious Diseases Reports](#) for links to other surveillance reports.

Meningococcal Disease

Two cases of meningococcal disease were reported this week ([Table 1](#)). No connection between the cases was identified. One of the cases occurred in Western Sydney Local Health District and one in the Hunter New England Local Health District. Both cases occurred in young adults. One case was caused by serogroup C, and was most likely acquired outside of Australia by a person who hadn't been previously vaccinated and the other case was caused by serogroup B.

Altogether four cases of meningococcal disease have been reported so far in 2017. In the same period of 2015 there were two cases notified, with one death. All cases of meningococcal disease in the first two weeks of 2017 have occurred in older teenagers or young adults, however people of any age are at risk of the disease.

Meningococcal disease is caused by infection with the bacterium *Neisseria meningitidis*. The bacteria are spread through direct contact of mucous membranes with the organism, such as exposure to respiratory droplets from the nose and throat of an infected person.

Close contact may result in the bacteria colonising the throat of the exposed person but in most people this does not cause any disease. In only a very small proportion of people the bacteria may invade from the throat to other parts of the body, causing invasive meningococcal disease (IMD).

IMD typically involves meningitis (infection of the lining of the brain), septicaemia (infection of the blood) or both. Up to 10 per cent of IMD infections are fatal even with appropriate antibiotic treatment, and survivors may be left with long-term complications.

There are several serogroups of *Neisseria meningitidis* which can cause invasive disease. The most common serogroups in Australia are B, C, W and Y. Since the introduction of a serogroup C vaccine in 2003 most cases in NSW have been caused by serogroup B. However, since 2014 there has been an increase in cases caused by serogroup W in NSW and other jurisdictions.

To date in 2017 in NSW, one case of meningococcal disease has been caused by serogroup B, one by serogroup W, and one by serogroup C. Serogroup results are pending for one case.

Vaccination against meningococcal C infection is included in the national immunisation schedule, with vaccination due at 12 months of age. Combined vaccines against the A, C, Y and W serogroups are generally only recommended for travellers to countries where these are more common and for some people with certain high risk conditions that predispose them to developing IMD, such as those without a spleen.

A vaccine against some serogroup B strains has recently become available in Australia; it is recommended for young children and adolescents but is not part of the National Immunisation Program.

Follow the links for more information on [meningococcal disease](#) and [vaccination](#).

Measles

One case of measles was notified in this reporting period in a young adult from Mid North Coast Local Health District (MNCLHD). This person was unvaccinated and acquired the infection outside of Australia, but developed symptoms after returning to the Mid North Coast. Identified close contacts are being followed up by the local public health unit. The case was in several public places whilst infectious so the public health unit has issued an alert to local media: <http://mnclhd.health.nsw.gov.au/category/media-releases/>.

This is the third case of measles in 2017, highlighting the importance of vaccination.

The measles virus is transmitted from person to person via respiratory secretions in the air following coughing and sneezing. Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red blotchy rash spreading from the head and neck to the rest of the body.

Infection with the measles virus can be serious with common complications including middle ear infection and viral or bacterial bronchopneumonia. Acute encephalitis occurs rarely and subacute sclerosing panencephalitis is a very rare fatal complication, occurring many years after infection in about one per 100,000 cases.

Vaccination is highly effective at preventing measles, with two doses of measles containing vaccine offering protection against infection in 99 per cent of people. Vaccination not only benefits those who receive it but also protects others, such as those too young or unable to be vaccinated, by reducing the risk that an unvaccinated person is exposed to measles virus; this is known as herd immunity.

Anyone born in or after 1966 should have had two doses of measles containing vaccine, which is free for people up to 51 years of age in NSW. Measles containing vaccine is now routinely offered to all children at 12 months (as measles-mumps-rubella) and 18 months (as measles-mumps-rubella-varicella) of age through the National Immunisation Program.

People born in or after 1966 and who are unsure of their vaccination status, or have not had two vaccine doses in the past (and not had a confirmed measles infection), should consult their GP for more advice. This is particularly important prior to overseas travel as the risk of being exposed to a case of measles is greater when travelling.

For more information please follow these links:

- [measles fact sheet](#)
- [measles notifications](#)
- [measles vaccination information](#).

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 8 – 14 January 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	45	28	73	30	24	1184	1040
	Giardiasis	58	37	95	147	130	3481	3412
	Rotavirus	14	21	35	34	24	744	1033
	STEC/VTEC	3	4	7	5	0	64	29
	Salmonellosis	112	69	181	240	254	4542	4022
	Shigellosis	5	8	13	14	6	303	172
Respiratory Diseases	Influenza	154	117	271	156	146	35532	30301
	Tuberculosis	10	9	19	17	11	535	444
Sexually Transmissible Infections	Chlamydia	470	405	875	947	952	25990	22548
	Gonorrhoea	171	137	308	229	217	7008	5400
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	2	4	3	6	253	186
	Measles	1	2	3	0	0	16	9
	Meningococcal Disease	2	2	4	1	3	76	47
	Mumps	1	1	2	1	2	61	64
	Pertussis	146	150	296	761	213	10941	12081
	Pneumococcal Disease (Invasive)	8	6	14	15	18	543	494
Vector Borne Diseases	Barmah Forest	1	0	1	3	1	27	184
	Chikungunya	1	1	2	1	0	38	37
	Dengue	3	2	5	8	11	461	343
	Malaria	1	2	3	3	1	59	47
	Ross River	77	35	112	17	38	503	1637
Zoonotic Diseases	Q fever	1	1	2	9	9	226	264

* 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.
- 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 other blood-borne virus case reports are not included here but are available from the [Infectious Diseases Data](#) webpage.