

Communicable Diseases Weekly Report

Weeks 51 - 52, 16 to 29 December 2018

In summary, we report:

- Measles –infectious returned traveller Sydney region
- Influenza unseasonal increase in cases Northern NSW
- Meningococcal disease three unrelated cases reported
- Summary of notifiable conditions activity in NSW

For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

Measles

One new case of measles was notified in this reporting week (<u>Table 1</u>), in an adult resident of the Sydney region who had recently returned from a holiday in Thailand. An <u>alert</u> has been issued warning susceptible people who visited the same locations as the man while he was infectious in the Sydney CBD and Eastern Suburbs between December 20 and 27 to watch out for symptoms of the infection. Patients of St Vincent's Hospital Emergency Department who were present at the same time as the man on Christmas Eve and December 27 have been contacted directly to assess their immunity to measles and offered preventive therapy if they are susceptible.

There is an increased risk of measles for travelers to South East Asia at present, particularly in Thailand and The Philippines where large outbreaks are ongoing. Anyone aged 52 years or younger planning holidays in South East Asia should check their vaccination history before they travel, and if they don't have two recorded doses of measles vaccine they should see their doctor for a free measles shot. Parents of infants aged between 9 and 12 months of age who are travelling should see their GP, as measles vaccine can be given early when there is a high risk of exposure.

Measles is a highly contagious viral infection, which is spread through the air by respiratory droplets formed when an infected person coughs or sneezes. Symptoms include fever, runny nose, cough, and conjunctivitis (sore red eyes) followed three to four days later by a red, spotty, non-itchy rash which starts on the head and neck and spreads to the rest of the body. The rash disappears in the order it presents. During the early stages of the disease, small, white clustered lesions known as Koplik spots may be found in the mouth.

Vaccination is the best protection against measles. Prior to the introduction of measles containing vaccine (MCV) in the late 1960s, measles was endemic in Australia, and was once considered a common disease of childhood.

Two doses of MCV provide full protection against measles in 99 per cent of vaccinated people. Currently, the vaccine is recommended and provided as part of the National Immunisation Program to children at 12 months of age as measles-mumps-rubella (MMR) vaccine, and 18 months of age as measles-mumps-rubella-varicella (MMRV) vaccine. The latest <u>Annual Immunisation Coverage Report</u> shows that vaccination rates in NSW are at their highest level ever, with more than 95 per cent of five year olds fully vaccinated against measles.

NSW Health encourages all people to ensure they are fully protected against measles. Free MMR is available from general practitioners for anyone born during or after 1966 who does not have evidence of prior measles infection, or having had two doses of MCV. Anyone who is unsure of whether or not they have had two doses in the past can safely receive another dose of the vaccine.

People born before 1966 are likely to have had measles as a child and are generally considered to be immune.

Vaccination protects the individual from infection if they are exposed to the virus, which may occur during overseas travel, as measles remains endemic in many areas of the world. High vaccination rates within a population limit the spread of the virus if it is introduced – either by a returned unvaccinated traveler, or a visitor from overseas. This is particularly important for protecting those unable to be vaccinated such as children less than 12 months old and people with compromised immune systems – a concept known as herd immunity.

Follow the links for more information on measles, notification data, and vaccination.

Influenza

Notifications of influenza were elevated across NSW this fortnight, with 324 cases reported (<u>Table 1</u>). This unseasonal increase in influenza has been noted across Australia, particularly in the <u>Northern Territory</u> and <u>South East Queensland</u>.

This brings the total number of influenza cases notified in NSW in 2018 to 17,317, fewer than a fifth of the cases notified in 2017 (103,852).

The largest increase in the past fortnight was in Northern NSW Local Health District, where 129 cases were notified during December. All age groups were affected, with most notifications in those under 25 years of age.

Testing of virus from patients indicates that three strains of influenza are circulating – influenza A (H1N1), influenza A (H3N2), and influenza B. These are the same strains that circulated during winter, and further investigation is underway to understand the reasons behind this unseasonal increase in influenza.

Supplies of influenza vaccine remain available from general practitioners. Pregnant women in particular are urged to be vaccinated – any not yet vaccinated should see their GP for a free influenza vaccination.

For further information see the NSW Health <u>influenza surveillance reports</u>. Note that influenza surveillance reports are issued monthly during the inter-seasonal period. For further information on influenza see the NSW Health <u>influenza website</u>.

Invasive meningococcal disease

Three new cases of invasive meningococcal disease (IMD) were notified this reporting fortnight (<u>Table 1</u>). The cases reside in three different Sydney health districts, and are all adults. All three have been identified as serogroup Y, but no links between these cases has been established. Two of the patients presented with meningitis, and the third with a meningococcal joint infection (septic arthritis). There have been 73 confirmed cases of IMD notified in NSW in 2018, fewer than the 91 notified in 2017, and similar to the 71 notified in 2016.

Invasive meningococcal disease can affect people of any age, but is more common among children less than 5 years of age, and people aged 15-24 years. The disease is often difficult to diagnose in the early stages, as symptoms are non-specific, and may mimic other illnesses such as common respiratory and gastrointestinal illnesses. The disease progresses rapidly, and even with rapid, appropriate treatment, can be fatal within hours.

Common symptoms of meningococcal disease include sudden onset of fever, headache, dislike of bright lights, neck stiffness, abdominal pain, vomiting, and abdominal or joint and muscle pain. In infants symptoms may be more general and can include irritability, drowsiness or difficulty waking, high-pitched or moaning cry, pale and blotchy skin, and refusing to eat.

The characteristic, non-blanching, red-purple rash does not always appear, or may present late in the disease.

NSW Health encourages anyone who thinks they, or someone they care for, might be experiencing symptoms of meningococcal disease, to seek urgent medical care. Patients are encouraged to return to the doctor, or visit an emergency department, if symptoms persist or rapidly worsen.

Vaccination provides protection against IMD. Vaccines against serogroups A, C, W and Y (MenACWY), also reduce carriage of meningococcal bacteria in the throat, reducing the risk of spread to other people. Vaccination against meningococcal serogroup C was provided as part of the National Immunisation Program (NIP) at 12 months of age from 2003 to July 2018, when it was replaced with a MenACWY vaccine. From April 2019 the MenACWY vaccine will also be provided to teenagers 14-19 years of age under the NIP, replacing state funded programs in place in NSW and most other states and territories during 2017 and 2018. Any young people aged from 15 to 19 years of age who did not receive the vaccine in school are encouraged to visit their GP for a free vaccination as soon as possible.

Vaccines against several strains of serogroup B disease are also registered for use in Australia, and are available for private purchase via prescription.

For further information see the meningococcal disease fact sheet.

Follow the links for more information on $\underline{\text{meningococcal vaccination}}$ and $\underline{\text{meningococcal disease}}$ notifications.

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 16 to 29 December 2018, by date received*

			Weekly		Year to date			Full Year	
		Week 52	Week 51	2018	2017	2016	2017	2016	
Bloodborne	Hepatitis C - Newly Acquired	1	1	31	36	25	36	25	
Enteric Diseases	Cryptosporidiosis	4	9	707	1266	1184	1266	1187	
	Giardiasis	23	45	2663	3133	3478	3133	3493	
	Hepatitis A	1	1	86	71	41	71	41	
	Hepatitis E	1	2	17	20	16	20	16	
	Rotavirus	3		799	2319	749	2319	750	
	Salmonellosis	56	75	3327	3681	4531	3681	4536	
	Shigellosis	7	15	528	235	310	235	310	
	Typhoid	2	0	114	110	74	110	74	
Respiratory Diseases	Influenza	109	215	17317	103852	35537	103852	35541	
	Legionellosis	2	2	166	138	133	138	134	
	Tuberculosis	11		523	542	531	542	531	
Sexually Transmissible Infections	Chlamydia	238	635	31090	29006	25969	29006	26024	
	Gonorrhoea	78	200	10574	9161	6988	9161	7004	
	LGV	1	2	85	50	60	50	60	
Vaccine Preventable Diseases	Measles	1	0	18	32	16	32	16	
	Meningococcal Disease	0	3	73	91	70	91	71	
	Mumps	1	1	71	127	67	127	67	
	Pertussis	94	204	6262	5366	10947	5366	10978	
	Pneumococcal Disease (Invasive)	6	7	681	683	545	683	545	
Vector Borne Diseases	Malaria	2	0	66	68	58	68		
	Ross River	1	9	565	1652	596	1652	600	

* 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 <u>notifiable disease data</u> 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.