

Communicable Diseases Weekly Report

Week 34, 22 to 28 August 2016

In summary, we report:

- [Influenza](#) - update
- [Meningococcal disease](#) – six new cases;
- [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.

Influenza

Influenza activity continues to be high across NSW although surveillance data indicates that it is near or may have even reached the peak of activity for this season. Aged care facilities continue to be severely affected with 127 facilities reporting outbreaks to public health units for the period up to 28 August 2016. To help prevent the spread of the virus relatives and staff of people living in residential care facilities are encouraged to stay away from facilities if they are unwell and have the flu.

Influenza is a highly contagious respiratory illness caused by influenza viruses. There are two main types of influenza virus that cause infection in humans - types A and B - and many sub-types or strains. Influenza can occur throughout the year but activity usually peaks in winter. In most people influenza presents with fever, a cough, runny nose, headache and aching muscles and the symptoms last around one week. In some people influenza is complicated by bronchitis or pneumonia, which often requires hospitalisation.

Certain groups are at higher risk of complications if infected with influenza. Influenza vaccine is strongly recommended and available free for people aged 65 years and over, people aged 6 months and over with medical conditions predisposing to severe influenza, pregnant women, and all Aboriginal and Torres Strait Islander people aged six months to 5 years or aged 15 years and over.

Influenza can also spread quickly in hospitals and residential institutions, particularly in aged care facilities. NSW Health encourages people with symptoms of influenza or other illness to delay visiting friends or family members in hospital or aged care until they have fully recovered.

For more detailed influenza surveillance information from a range of sources see the NSW Health [influenza surveillance reports](#). Follow the links for more information regarding [influenza notifications](#) and [seasonal influenza vaccination 2016](#).

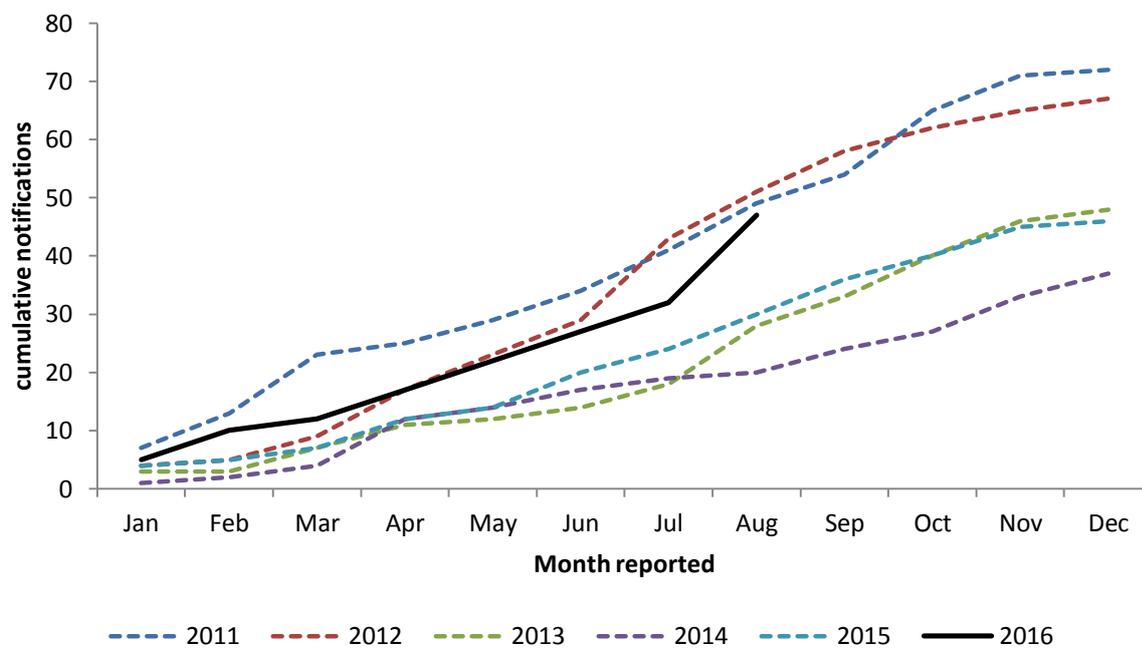
Meningococcal Disease

Six cases of meningococcal disease were reported this week ([Table 1](#)). No connection between the cases could be identified and all occurred in different local health districts. The age of the cases ranged from 18 to 87 years. Two of the cases have been typed as serogroup W and one as serogroup Y. To 28 August 2016, there have been 15 notifications of meningococcal disease in August, which is the highest number of cases reported in one month for the last five years.

A total of 44 cases of invasive meningococcal disease (IMD) have been reported so far in the 2016 reporting year, including four fatal infections. In the same period of 2015 there were 30 cases notified with no deaths. Three cases of meningococcal conjunctivitis have also been reported in August. While these are not counted as cases of IMD, public health follow up, including clearance

antibiotics for close contacts of severe meningococcal conjunctivitis is implemented, as there is a risk of invasive meningococcal disease arising. Cases of IMD in 2016 have occurred in both adults and children with an age range of 0 to 88 years. The number of IMD notifications in 2016 has increased compared to 2015 however they are still within the historical range of notifications in NSW (Figure 3).

Figure 3. Cumulative notifications of meningococcal disease by month reported from 2011 to 28 August 2016.



IMD 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 becoming established and reproducing in the throat of the exposed person but in most people this does not cause any symptoms. In only a very small proportion of people the bacteria may invade from the throat to other parts of the body, causing invasive disease.

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 2015 there has been an increase in cases caused by serogroup W in NSW and other jurisdictions.

To date in 2016 in NSW, 14 cases of IMD have been caused by serogroup B and 18 by serogroup W. Other cases in 2016 have been caused by serogroup Y (6), C (1) or a non-groupable strain (4); serogroup results are pending for four 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 people 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](#).

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 22 to 28 August 2016, by date received *

		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	8	8	803	657	290	1038	429
	Giardiasis	68	63	2581	2362	1991	3415	2942
	Rotavirus	5	8	316	288	333	1036	714
	Salmonellosis	56	48	3353	2886	3009	4044	4273
	Shigellosis	4	4	200	117	148	172	212
	Typhoid	1	1	28	29	31	41	44
Respiratory Diseases	Influenza	3214	3086	18551	12658	12112	30303	20888
	Legionellosis	1	1	88	70	50	96	72
	Tuberculosis	5	7	303	273	291	445	475
Sexually Transmissible Infections	Chlamydia	438	459	16988	14633	15251	22548	22899
	Gonorrhoea	111	139	4581	3530	3149	5401	4876
	LGV	1	3	34	17	11	20	14
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	1	157	123	195	182	257
	Haemophilus influenzae type b	1	0	4	4	4	5	6
	Meningococcal Disease	6	5	46	30	20	46	37
	Mumps	2	4	33	35	61	63	82
	Pertussis	157	169	6904	5303	1347	12083	3051
	Pneumococcal Disease (Invasive)	21	12	328	303	315	495	511
Vector Borne Diseases	Chikungunya	1	1	11	30	15	37	27
	Dengue	4	3	327	224	306	343	378
	Ross River	2	4	349	1373	415	1638	673
Zoonotic Diseases	Q fever	1	0	132	147	122	265	190

* 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.