

Communicable Diseases Weekly Report

Week 33, 15 August to 21 August 2016

In summary, we report:

- [Viral gastroenteritis](#) – update
- [Meningococcal disease](#) – five new cases; increase in serogroup W
- [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.

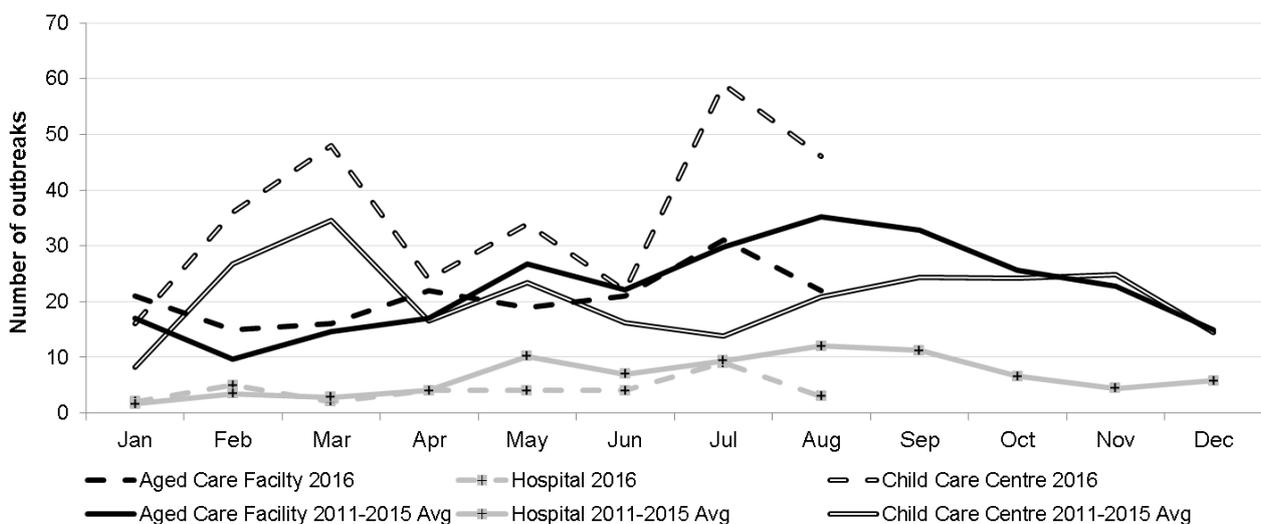
Viral gastroenteritis

There were 16 outbreaks of gastroenteritis in an institution reported in this period affecting at least 123 people. The five year average for August is 16 outbreaks per week. Two outbreaks occurred in an aged care facility, 13 occurred in child care centres and one occurred in a hospital. All outbreaks appeared to have been caused by a virus and spread from one person to another but no stool specimens have been collected.

Aged care facility and hospital gastroenteritis outbreaks have been at or below normal levels in 2016. Child care centre gastroenteritis outbreaks have, however, been far above average levels ([Figure 1](#)). It is not clear what has caused this as faecal samples are rarely collected in child care centres so the cause often remains unknown. Only 29 (10%) of outbreaks had a sample collected in 2016, and of these only four had positive results suggesting the cause of the outbreak (all norovirus).

The number of child care centres outbreaks reported each year has been increasing in recent years. This is believed to be due, at least in part, to more consistent reporting of child care centre outbreaks to local public health units.

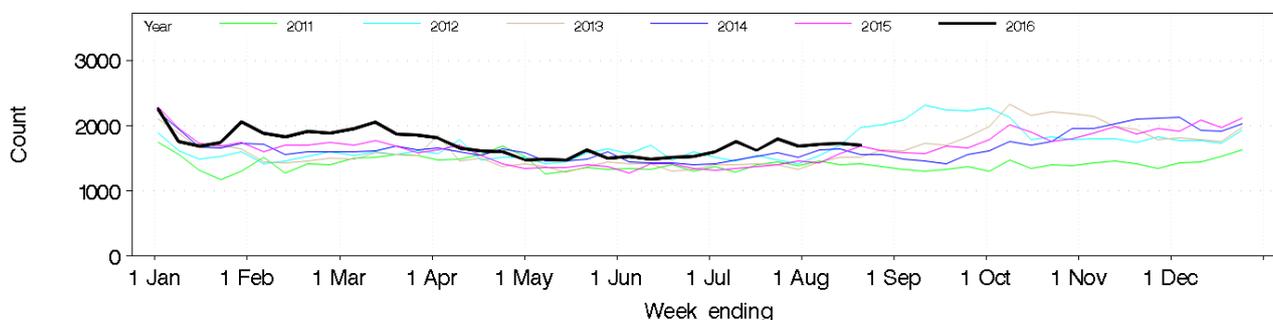
Figure 1. Gastroenteritis outbreak in institution notifications by month and facility



Gastroenteritis activity in the community, monitored through emergency department (ED) attendances at 60 NSW hospitals, has returned to seasonal levels with 1702 presentations during

this week (Figure 2), with the exception of South Western Sydney Local Health District where presentations remained elevated. Admissions from ED also returned to seasonal levels, with 352 people admitted from ED with gastroenteritis across 60 NSW hospitals.

Figure 2. Total weekly counts of emergency department presentations for gastroenteritis, for 2016 (black line), compared with each of the 5 previous years (coloured lines), persons of all ages, for 60 NSW hospitals.

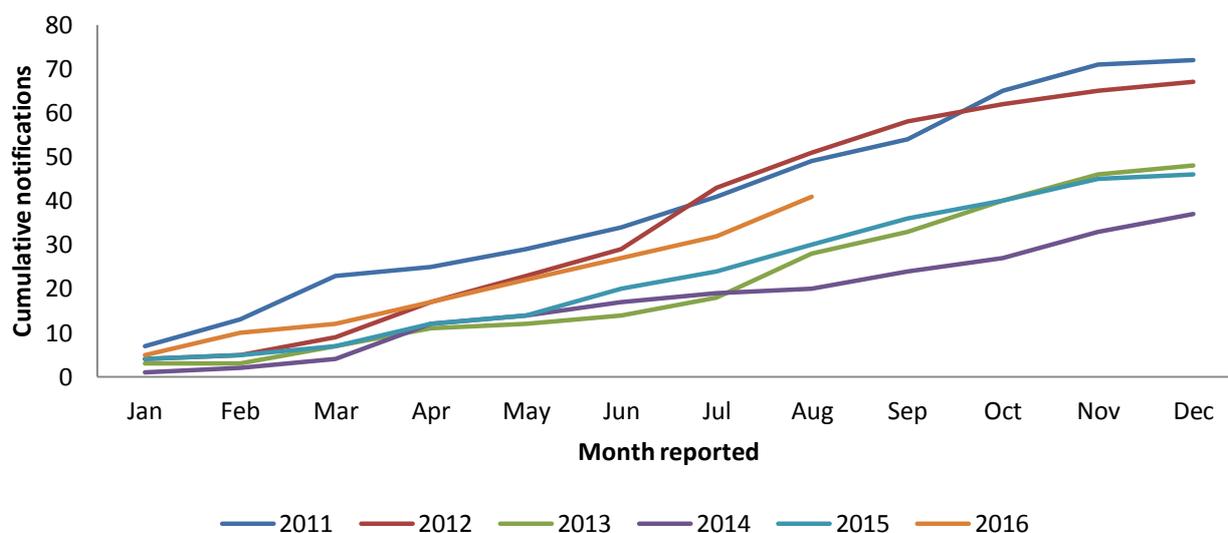


Meningococcal Disease

Five cases of meningococcal disease were reported this week, including one case of conjunctivitis and four cases of invasive meningococcal disease (IMD) (Table 1). There was no connection between the cases 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.

A total of 40 cases of IMD have been reported so far in the 2016 reporting year, including four fatal infections. In the same period of 2015 there were 27 cases notified with no deaths. Cases 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 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 15 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 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 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 15 to 21 August 2016, by date received *

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	8	11	795	654	288	1038	429
	Giardiasis	57	49	2507	2317	1940	3415	2942
	Hepatitis A	1	1	28	54	47	71	80
	Rotavirus	8	7	311	258	304	1036	714
	Salmonellosis	46	59	3295	2844	2969	4044	4273
	Shigellosis	4	4	196	116	141	172	212
Respiratory Diseases	Typhoid	1	0	27	29	31	41	44
	Influenza	3079	2498	15329	9160	9295	30303	20888
	Legionellosis	1	1	87	66	49	96	72
Sexually Transmissible Infections	Tuberculosis	7	12	282	264	280	445	475
	Chlamydia	453	450	16488	14225	14803	22548	22899
	Gonorrhoea	110	144	4430	3411	3061	5401	4876
Vaccine Preventable Diseases	LGV	2	0	31	15	9	20	14
	Adverse Event Following Immunisation	1	3	153	120	191	182	256
	Meningococcal Disease	5	3	40	27	20	46	37
	Mumps	4	0	31	35	61	63	82
	Pertussis	169	187	6747	5019	1291	12083	3051
Vector Borne Diseases	Pneumococcal Disease (Invasive)	11	11	306	289	298	495	511
	Chikungunya	1	0	9	29	15	37	27
	Dengue	1	6	320	222	301	343	378
	Malaria	1	1	35	26	67	47	87
	Ross River	4	1	347	1364	401	1638	673
Zoonotic Diseases	Brucellosis	1	1	7	8	2	10	3

*** 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.