

Communicable Diseases Weekly Report

Week 33, 12 August to 18 August 2018

In summary, we report:

- [Viral gastroenteritis](#) – 21 outbreaks reported in institutions
- [Leptospirosis](#) – Mid North Coast outbreak investigation update
- [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.

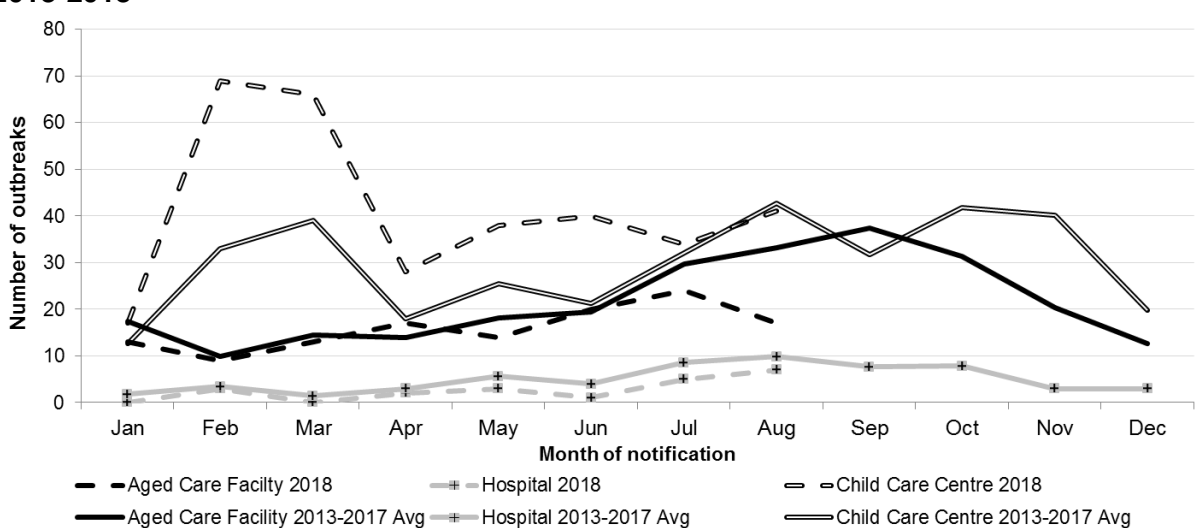
Viral gastroenteritis

There were 21 outbreaks of gastroenteritis in institutions notified during this reporting period, affecting at least 180 people. Forty-two percent of those affected were children 5 years or younger in child care centres. Fourteen outbreaks occurred in child care centres, with the rest reported from residential aged care facilities (3), hospitals (2), a short-term residential facility and a school.

One outbreak has been confirmed as being caused by norovirus. The rest are either waiting for results, did not have stool specimens collected, and one outbreak had a single case of *Shigella* infection detected. However, all outbreaks are suspected to have been caused by a virus, most likely norovirus, and spread from person to person. The detection of *Shigella* infection was in a returned traveller and is likely to have been a coincidental finding.

The increase in outbreaks compared to the previous month (Figure 1) is largely due to outbreaks in child care centres and, to a smaller extent, in hospitals. The number of child care centre outbreaks reported each year has been increasing. This is believed to be due, at least in part, to more consistent reporting of outbreaks by NSW child care centres to their local public health units.

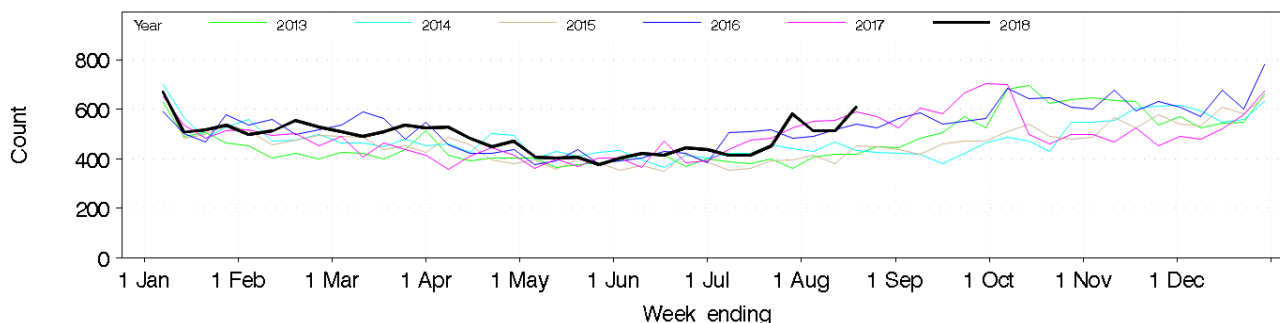
Figure 1. Gastroenteritis outbreak in institution notifications by month and facility, NSW, 2013-2018



Note: Counts for August 2018 are for the partial month and likely to increase.

As noted in the Week 30 report, gastroenteritis presentations to emergency departments were also elevated, particularly amongst young adults (Figure 2). However overall gastroenteritis presentations and admissions for gastroenteritis are fewer than seen in 2017.

Figure 2. Total weekly counts of Emergency Department presentations for gastroenteritis, for 2018 (black line), compared with each of the 5 previous years (coloured lines), persons aged 17-34 years, for 60 NSW hospitals.



Viral gastroenteritis is a common illness due to infection with one of a number of different viruses which cause vomiting and diarrhoea. The most common causes are norovirus and rotavirus.

Norovirus infections are the most frequent cause of viral gastroenteritis and are more common during the cooler months. Other symptoms may include nausea, fever, abdominal pain, headache and muscle aches.

Rotavirus is the most common cause of severe gastroenteritis in early childhood globally. Immunisation to prevent rotavirus infection is recommended and is free for children under 6 months of age. The vaccine is given as two oral doses, at six weeks and four months of age, with completion of the course by 24 weeks of age.

Most of the recent outbreaks are believed to have been due to norovirus. There is no indication of an increase in rotavirus activity in NSW, with only 517 cases so far in 2018 compared to the 685 rotavirus cases notified in the same period last year (Table 1).

High numbers of gastroenteritis outbreaks sometimes occur when new genotypes of norovirus or rotavirus appear, against which the population has not developed immunity. Molecular typing work is carried out each year to track these genetic changes but there is no information currently available to suggest a new genotype has emerged in either norovirus or rotavirus.

Viral gastroenteritis is highly infectious and is spread by the vomit or faeces of an infected person through close contact with infected persons, contact with contaminated surfaces, or consumption of contaminated food or drink. The viruses are often transmitted from person to person on unwashed hands.

Symptoms can take between one and three days to develop and usually last between one and two days, sometimes longer. Dehydration may follow bouts of vomiting and diarrhoea, particularly in young children. Those infected should rest well and increase the amount of fluids they drink, and if concerned see their local doctor.

The best way to prevent the spread of viral gastroenteritis is to wash your hands thoroughly with soap and running water for at least 10 seconds, particularly after using the toilet, assisting someone with diarrhoea or vomiting, attending nappy changes, and before preparing and eating food. It is vital that if you or your family contract gastroenteritis that you stay home from work or keep a child home from school or childcare if they are sick for at least 24 hours after the last symptom of gastroenteritis.

People who are sick with gastroenteritis should also avoid visiting others in vulnerable settings such as hospitals or aged care facilities. If your work involves handling food, or looking after children, the elderly or patients, do not return to work until 48 hours after symptoms have stopped.

For further information see the [norovirus](#) and [rotavirus](#) factsheets. Follow the link for more information on [controlling viral gastroenteritis outbreaks](#).

Leptospirosis

An outbreak of leptospirosis among farm workers on the Mid North Coast continues to be investigated, with the most recent report of illness commencing on 30 July 2018.

In this reporting week, seven new cases of leptospirosis were confirmed among people who developed symptoms of leptospirosis since 14 April 2018. The total number of confirmed cases to 18 August 2018 is 42. The onset of illness among workers peaked in the first two weeks of June.

Because of the length of time often required for confirmatory laboratory testing, many of these confirmed infections were actually in people who had been notified as a probable or possible leptospirosis case in previous weeks. This is because two blood specimens often need to be collected a number of weeks apart to demonstrate a rise in antibody level to confirm infection with the bacteria.

Farm workers are the only people affected in the outbreak so far. The 42 confirmed cases have been infected by the Arborea serovar of *Leptospira*; this serovar is found worldwide in rats and mice. The Mid North Coast Public Health Unit is working with farm owners, SafeWork NSW and other government agencies to understand why these workers have caught this infection and to minimise ongoing risk of infection among other workers.

Leptospira bacteria usually enter the body through skin cuts or abrasions, and occasionally through the lining of the mouth, nose, or eyes. Water, soil or mud that has been contaminated with animal urine can be the source of infection. Eating contaminated food or drinking contaminated water has occasionally been responsible for transmission.

Follow the links for the NSW [leptospirosis fact sheet](#) and [leptospirosis data](#) or the SafeWork NSW safety alert about [leptospirosis](#).

Further information on *Leptospira* serovars and national leptospirosis surveillance is available from the [WHO/FAO/OIE Collaborating Centre for Reference and Research on Leptospirosis, Australia and Western Pacific Region](#).

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 12 August – 18 August 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	0	14	9	10	13	13
Enteric Diseases	Cryptosporidiosis	8	11	525	1102	794	1266	1184
	Giardiasis	53	45	1757	2249	2516	3134	3480
	Rotavirus	7	10	517	685	314	2319	750
	STEC/VTEC	1	0	36	34	28	53	65
	Salmonellosis	49	43	2286	2683	3287	3680	4533
	Shigellosis	15	21	226	142	199	235	310
Respiratory Diseases	Influenza	618	591	7706	44041	15182	103853	35540
	Legionellosis	2	0	87	81	92	138	134
	Tuberculosis	8	8	314	327	310	540	533
Sexually Transmissible Infections	Chlamydia	552	647	20178	18668	16711	28977	25988
	Gonorrhoea	219	228	6796	5945	4466	9172	6993
	LGV	2	1	51	23	40	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	5	198	210	166	277	261
	Meningococcal Disease	1	1	37	48	37	91	70
	Mumps	1	0	54	80	34	128	67
	Pertussis	125	136	2604	3821	6762	5365	10956
	Pneumococcal Disease (Invasive)	24	23	400	397	308	683	545
Vector Borne Diseases	Dengue	3	6	188	202	347	306	485
	Malaria	1	1	42	49	35	68	59
	Ross River	12	8	422	1467	379	1653	595
Zoonotic Diseases	Leptospirosis	2	5	48	17	12	20	16
	Q fever	3	4	125	151	138	210	231

* 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 [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.
- 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.