Communicable Diseases Weekly Report

Week 35, 25 August to 31 August 2019

In summary, we report:

- Viral gastroenteritis – elevated institutional outbreaks and hospital visits
- 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.

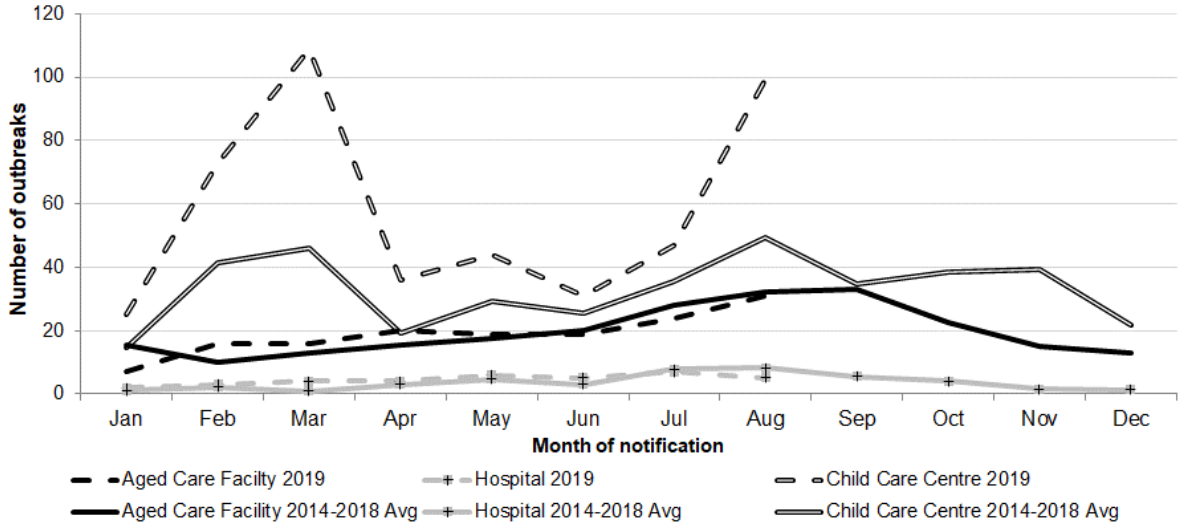
Viral gastroenteritis

In the month of August 2019, 143 outbreaks of gastroenteritis in institutions were notified, affecting at least 1,630 people. Half of those affected were children aged 5 years or younger in child care centres, from which 99 outbreaks (69%) were reported in this period. Outbreaks were also reported from residential aged care facilities (33), hospitals (5), schools and school camps (4) and group home settings (2).

Norovirus was the most common cause of illness identified, detected in 19 outbreaks (13 residential aged care facilities, three childcare centres and three hospitals). Rotavirus was also identified as the cause of two outbreaks, both in childcare centres. Other organisms which more rarely cause gastro-like illness have also been detected, but are not believed to be the cause of the gastroenteritis outbreaks. Results for the remaining outbreaks are either pending or stool specimens were not collected. However, all of the outbreaks are suspected to have been caused by a virus, most likely norovirus, and spread from person to person.

The increase in outbreaks compared to the previous month (Figure 1) is largely due to outbreaks in child care centres, which is almost twice the average for the month of August. Outbreaks among other institutional types are within average.

Figure 1. Gastroenteritis outbreaks in institution notifications by month and facility, NSW, 2014-2019



Gastroenteritis presentations to emergency departments and admissions to hospital were also above average levels, particularly amongst children under 5 (Figures 2 and 3).

Figure 2. Weekly counts of ED presentations for gastroenteritis, for 2019 (black line), compared with the 5 previous years (coloured lines), children aged under 5 years, 67 NSW hospitals.

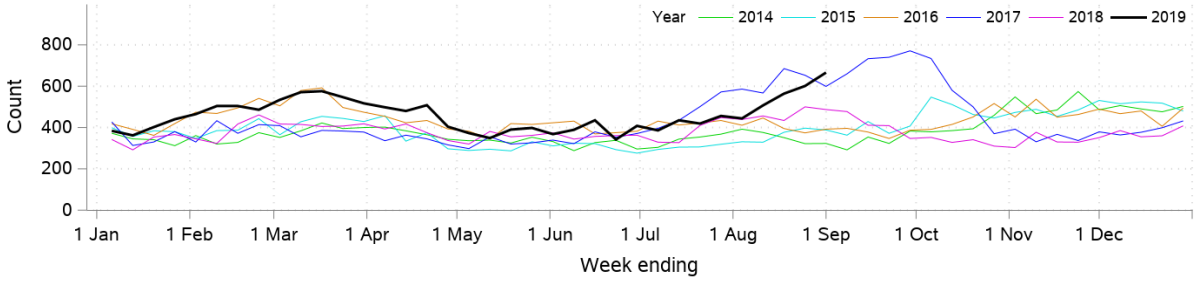
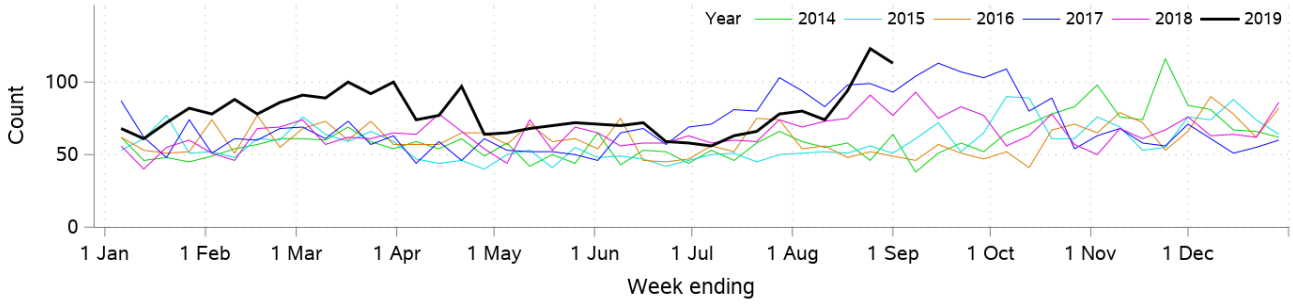


Figure 3. Weekly counts of ED presentations for gastroenteritis, *that were admitted*, for 2019 (black line), compared with the 5 previous years (coloured lines), *children aged under 5 years*, 67 NSW hospitals.



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, with norovirus being the most common and occurring more frequently during the cooler months.

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. However, there is slight increase in rotavirus activity in NSW as is usually seen at this period, with 618 cases so far in 2019 compared to 556 and 889 rotavirus cases notified in the same period in 2018 and 2017 respectively (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.

As well as vomiting and diarrhoea, other symptoms of viral gastroenteritis may include nausea, fever, abdominal pain, headache and muscle aches. 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.

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 25 August – 31 August 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	3	1	464	549	1110	708	1266
	Giardiasis	35	43	2169	2024	2340	2937	3135
	Rotavirus	44	32	618	556	889	808	2319
	Salmonellosis	35	50	2547	2360	2768	3340	3681
	Shigellosis	10	21	580	254	157	531	236
Respiratory Diseases	Influenza	4657	5688	97167	9812	67725	17423	103851
	Legionellosis	1	0	100	104	86	171	138
	Tuberculosis	8	14	377	341	349	507	542
Sexually Transmissible Infections	Chlamydia	600	594	21556	21455	19745	31193	29002
	Gonorrhoea	204	250	8058	7234	6285	10619	9159
Vaccine Preventable Diseases	Haemophilus influenzae type b	1	0	9	3	5	6	9
	Meningococcal Disease	1	3	36	42	54	72	91
	Mumps	2	1	34	54	81	72	127
	Pertussis	133	134	4213	2916	3980	6280	5366
	Pneumococcal Disease (Invasive)	21	15	436	436	429	683	683
Vector Borne Diseases	Barmah Forest	2	0	50	56	99	74	127
	Dengue	2	1	291	199	208	299	306
	Malaria	2	4	46	44	51	66	68
	Ross River	6	6	461	440	1477	571	1653
Zoonotic Diseases	Q fever	3	3	163	144	156	228	210

*** Notes on Table 1: NSW Notifiable Conditions activity**

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- 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.
- Cases involving interstate residents are not included.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the Infectious Diseases Data, the HIV Surveillance Data Reports and the Hepatitis B and C Strategies Data Reports webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.