

Communicable Diseases Weekly Report

Week 30, 23 July to 29 July 2017

In summary, we report:

- [Viral gastroenteritis](#) – there were 32 outbreaks of gastroenteritis in institutions this week, 129% higher than the historical five year weekly average for July
- [Invasive pneumococcal disease](#) – notifications of invasive pneumococcal disease during June and July were above the historical five year average
- [Summary of notifiable conditions activity in NSW](#)

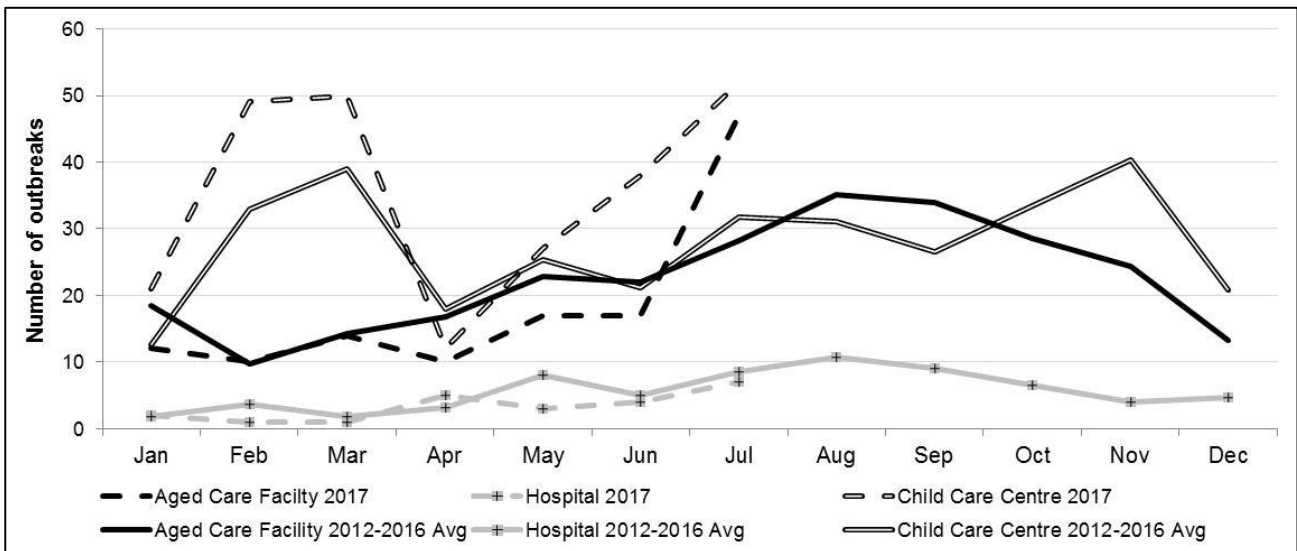
For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Viral Gastroenteritis

There were 32 outbreaks of gastroenteritis in institutions reported during this period. This is 129% higher than the previous five year weekly average number of outbreaks for July. At least 286 people were affected. Thirteen outbreaks occurred in aged care facilities, 16 occurred in child care centres and three occurred in hospitals. Four outbreaks have been confirmed as being caused by norovirus; the rest are either waiting for results or did not have stool specimens collected. However, all outbreaks appeared to have been caused by a virus and spread from person to person.

Aged care facility and child care centre outbreaks are predominantly affected by the increase (Figure 1). 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 public health units.

Figure 1. Gastroenteritis outbreak in institution notifications by month and facility, NSW, 2012-2017



Rotavirus notifications are also above expected levels this week. There were 37 notifications of rotavirus this week, 270% higher than the previous five year weekly average for July.

Rotavirus is the most common cause of severe gastroenteritis in early childhood globally. Immunisation to prevent rotavirus infection or reduce the severity of infection is recommended and is free for children under six months of age. In NSW, the vaccine is given as two oral doses, at six weeks and four months of age. The vaccine course must be completed by 24 weeks of age.

High numbers of notifications of gastroenteritis outbreaks often occur when new genotypes of gastroenteritis viruses (norovirus and rotavirus) appear, against which the population has not developed immunity. Molecular typing work is carried out each year to track these genetic changes.

Viral gastroenteritis is a common intestinal infection caused by a number of different viruses, usually resulting in vomiting and diarrhoea. Norovirus infections are the most frequent cause and are most common during the cooler months. Symptoms may include nausea, vomiting, diarrhoea, fever, abdominal pain, headache and muscle aches. These 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.

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. Viruses are often transmitted from person to person on unwashed hands.

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 people with gastroenteritis stay home from work, school and childcare while sick and for at least 24 hours after the last symptom of gastroenteritis.

For further information see the [norovirus](#) and [rotavirus](#) factsheets.

Follow the link for more information on [controlling viral gastroenteritis outbreaks](#).

Invasive Pneumococcal Disease

Notifications of invasive pneumococcal disease (IPD) during June and July (151) were above the historical five year average (126). IPD activity generally increases during the winter flu season, especially in older adults, with pneumococcal pneumonia often a secondary complication of influenza infection. The increase in pneumococcal notifications correlates well with the early start and increased number of notifications seen for influenza (for more information on influenza please see the [Influenza weekly report](#)). Notification rates of IPD have been highest in adults aged 65 years and over.

Pneumococcal infection can cause a variety of diseases including pneumonia, septicaemia (blood infection), otitis media and meningitis. Symptoms depend on the site of infection and the age of the person. People with pneumococcal pneumonia tend to experience shortness of breath, fever, lack of energy, loss of appetite, headache, chest pain and cough.

People most at risk of IPD include children under two years of age, older adults, Aboriginal and Torres Strait Islander people, people with lung disease, heart disease, cancer, kidney disease, HIV infection, people whose spleen has been removed or doesn't work properly, and people who smoke.

There are over 90 serotypes of pneumococcal bacteria. Different pneumococcal serotypes vary in their propensity to cause disease. Worldwide, only a limited number of serotypes are responsible for most cases of IPD but the predominant serotypes vary by age group and geographic area. The current pneumococcal vaccine used for children under the National Immunisation Program (NIP) - Prevenar 13 - covers the 13 serotypes that were most commonly associated with invasive disease.

The introduction of pneumococcal vaccination for children under the NIP has led to a dramatic reduction in the overall incidence of IPD in Australia in the primary target group of children under two years of age.

Pneumococcal vaccine is recommended and is free for children at 6-8 weeks, four months and six months of age, for all people aged 65 years or older, and for all Aboriginal people aged 50 years or older. It is also free for children aged 2-5 years with certain medical conditions and for Aboriginal people aged 15-49 years who have a chronic medical condition. GPs can provide more advice, as required.

Follow the links for more information on [pneumococcal disease](#), [invasive pneumococcal notifications data](#) and [pneumococcal 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 23 – 29 July 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	9	8	1072	765	645	1184	1040
	Giardiasis	38	40	2025	2333	2208	3481	3413
	Hepatitis A	2	1	18	27	53	41	72
	Rotavirus	37	48	494	290	217	750	1033
	STEC/VTEC	1	0	34	27	13	65	29
	Salmonellosis	47	43	2552	3091	2726	4544	4022
	Shigellosis	7	9	130	185	103	310	172
Respiratory Diseases	Influenza	4523	3417	18382	7870	5509	35541	30297
	Legionellosis	1	3	78	85	66	134	96
	Tuberculosis	5	7	257	271	251	534	445
Sexually Transmissible Infections	Chlamydia	468	443	16838	15168	13388	25990	22525
	Gonorrhoea	161	131	5424	4045	3181	7004	5395
Vaccine Preventable Diseases	Adverse Event Following Immunisation	9	8	196	159	116	257	186
	Meningococcal Disease	2	1	40	31	24	75	47
	Mumps	1	3	73	28	35	67	65
	Pertussis	112	115	3456	6257	4448	10957	12079
	Pneumococcal Disease (Invasive)	19	27	315	267	254	544	494
	Rubella	1	0	4	8	5	10	6
Vector Borne Diseases	Dengue	2	7	175	323	212	481	344
	Malaria	2	2	45	30	24	59	47
	Ross River	6	10	1330	343	1330	541	1635
Zoonotic Diseases	Q fever	2	3	123	128	136	230	264

* 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.