

Communicable Diseases Weekly Report

Week 11, 10 March to 16 March 2019

In summary, we report:

- [Influenza](#) – high inter-seasonal activity continues
- [World Tuberculosis Day](#) – Sunday 24 March 2019
- [Viral gastroenteritis](#) – increase in institutional outbreaks
- [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.

Influenza

The high inter-seasonal influenza activity first noted in December 2018 is continuing. Influenza notifications have been elevated across NSW and there have been 15 confirmed outbreaks in residential care facilities so far this year.

A NSW Health [media release](#) was issued to alert residential care facilities to be vigilant for influenza and remind people with flu or other symptoms not to visit facilities while unwell.

To date there have been 5,743 confirmed influenza notifications reported (by date of report), much higher than for the same period in 2018 (3,044), and in 2017 (2,315) ([Table 1](#)). Influenza A strains have accounted for over 90% of notifications.

In the most recent [global influenza update](#), the World Health Organization (WHO) has reported that influenza activity remains elevated in the temperate zone of the northern hemisphere but declining in some regions, with influenza A viruses accounting for the majority of influenza detections.

It is likely that the increased inter-seasonal influenza activity seen in NSW is at least partly related to overseas travellers returning with influenza infections, which may trigger local transmission and may be linked to a recent increase in influenza outbreaks reported in residential care facilities.

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.

Annual flu shots provide the best protection against influenza.

Further information

- [Influenza factsheet](#)
- [Influenza resources for residential care facilities](#)
- [Influenza vaccination under the national immunisation program](#)
- [NSW under 5s flu vaccine program](#)
- [Influenza notifications data](#)
- [NSW influenza surveillance reports](#)
- [NSW Health influenza homepage](#) – with a range of additional influenza resources.

World Tuberculosis Day

Sunday, 24 March 2019, marks [World TB Day](#), a day to raise public awareness about the devastating health, social and economic impacts of TB, and to increase efforts to end TB, which remains epidemic in much of the world. On this day in 1882, Dr Robert Koch discovered the bacteria that causes TB, which at the time was causing the deaths of one in seven people in Europe and the Americas. His discovery paved the way towards diagnosing and curing TB.

The global theme this year, “It’s time” - puts the emphasis on the urgency to act on the commitments made by global leaders to increase access to preventive therapy and TB treatment, ensure sufficient and stable financial resources are allocated to TB, build accountability, promote an end to stigma and discrimination, and promote an equitable, people-centred TB response. To see information on World TB Day 2019 social media campaigns see the [Stop TB Partnership](#).

[Tuberculosis \(TB\)](#) is a bacterial infection caused by *Mycobacterium tuberculosis*. Symptoms of TB disease include a cough lasting more than three weeks, fever, unexplained weight loss, night sweats and tiredness. Treatment usually requires a combination of special antibiotics for at least six months.

Despite being a curable illness it remains the world’s top infectious killer with an estimated 4,500 deaths each day globally. The WHO estimated that 10 million people fell ill with TB and 1.6 million people died from TB in 2017.

World TB Day highlights the global effort to find, treat and cure the millions of people who fall ill with TB each year. This includes approximately 3.6 million people who don't get the care they need, often due to factors such as poverty, stigma, conflict and lack of access to basic health services.

In Australia, the rate of TB infection is 5.9 cases per 100,000 people, one of the lowest rates in the world. In NSW in 2018 there were 514 cases of TB notified, giving a slightly higher rate of 6.5 cases per 100,000 people. The highest population rates for TB were in the Western Sydney, South Western Sydney and Sydney Local Health Districts. Over 90% of these cases were diagnosed in people who were born, or had spent significant amounts of time, in countries with a high prevalence of TB.

While local transmission of TB is a rare event in NSW there has been transmission of TB in some Aboriginal communities in NSW in recent years (Ref:1). In 2018, 8% of Australian-born cases diagnosed in NSW identified as Aboriginal people.

Multi-drug resistant TB (MDR-TB) strains are those that are resistant to two of the most effective first line TB drugs, and this is a continuing problem worldwide. In NSW, MDR-TB is still relatively rare with ten cases notified in 2018.

In NSW, actions being taken to work towards ending TB include:

- supporting the screening and prevention of TB in refugees and other immigrants
- increasing timely completion of screening of contacts of infectious cases
- using of new state-of-the-art whole genome sequencing technology to improve identification of TB transmission to allow better targeting of public health measures, in order to make NSW “TB transmission free”
- working closely with Aboriginal communities to encourage early diagnosis and treatment of TB among Aboriginal people in NSW.

Further information

- [NSW TB Program](#) – information on the network of specialised TB services (Chest Clinics) across the state which provide free, confidential and culturally appropriate services to ensure everyone in NSW gets the TB care they need.
- [TB notifications data](#)
- [TB epidemiology reports page](#) – with further information on TB notifications in NSW.

¹ Devlin S, Passmore E. Ongoing transmission of tuberculosis in Aboriginal communities in NSW. New South Wales Public Health Bulletin 2013; 24: 38-42.

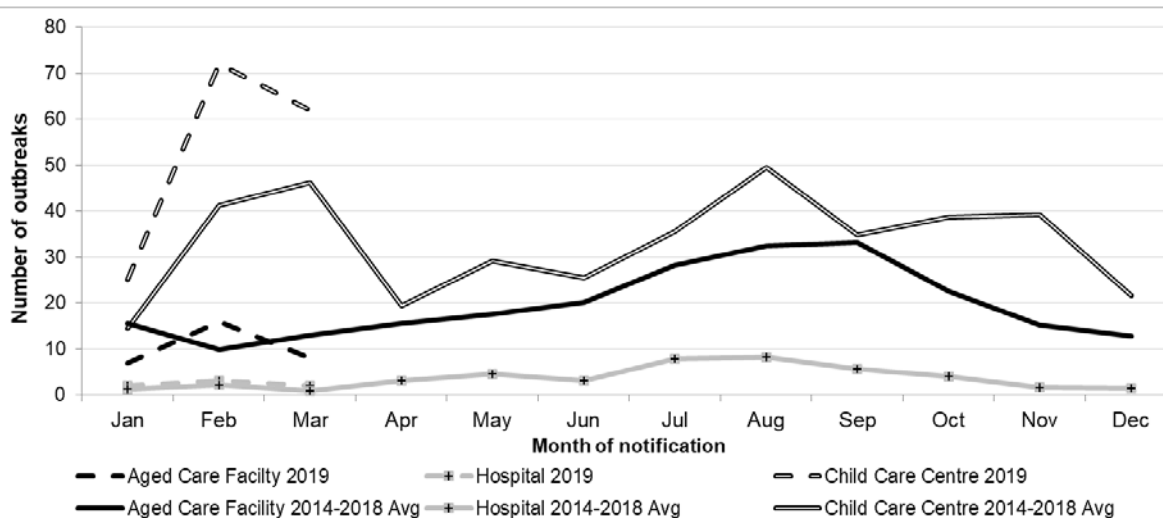
Viral gastroenteritis

There were 28 outbreaks of gastroenteritis in institutions notified during this reporting period, affecting at least 191 people. A total of 25 of the outbreaks occurred in child care centres and 80% of those affected were children aged 5 years or younger. The remaining three outbreaks occurred in residential aged care facilities.

Two of the 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 are suspected to have been caused by a virus and spread from person to person.

The increase in institutional outbreaks compared to the previous years is predominantly due to child care centre outbreaks (Figure 1). The number of child care centre outbreaks reported in the first quarter of the year has been increasing year on year. This is believed to be due, at least in part, to more consistent reporting of child care centre outbreaks to public health units in NSW.

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



* **Note** - the outbreak count for March 2019 is for the partial month and may increase.

Outbreaks of viral gastroenteritis occur more frequently when new virus strains (primarily of norovirus and rotavirus) emerge and spread in the community. 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.

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.

People with viral gastroenteritis should stay home from work, school or childcare until at least 24 hours after the last symptoms have stopped, and should avoid visiting others in vulnerable settings such as hospitals or aged care facilities. People whose work involves handling food or looking after children, the elderly or patients should not return to work until 48 hours after symptoms have stopped.

Further information

- [Norovirus and rotavirus factsheets](#)
- [Controlling viral gastroenteritis outbreaks guidance](#)

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 10 March – 16 March 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	18	26	246	248	642	708	1266
	Giardiasis	78	73	834	745	904	2798	3135
	Rotavirus	12	7	129	226	154	806	2319
	STEC/VTEC	2	0	21	15	16	57	53
	Salmonellosis	93	86	1119	1035	1277	3343	3681
	Shigellosis	13	12	194	50	57	530	235
	Typhoid	2	6	54	32	40	116	110
Respiratory Diseases	Influenza	642	549	5743	2964	1892	17422	103852
	Legionellosis	3	1	43	36	31	167	138
	Tuberculosis	13	10	107	109	105	514	542
Sexually Transmissible Infections	Chlamydia	616	586	6933	6878	6718	31190	29006
	Gonorrhoea	226	224	2468	2281	2231	10625	9161
	LGV	1	1	18	15	7	85	50
Vaccine Preventable Diseases	Haemophilus influenzae type b	1	0	2	0	2	6	9
	Measles	1	2	17	1	8	18	32
	Mumps	1	1	12	24	24	72	127
	Pertussis	120	97	1363	831	1453	6281	5366
	Pneumococcal Disease	5	8	73	78	75	688	683
Vector Borne Diseases	Barmah Forest	1	0	12	18	19	74	127
	Dengue	2	6	82	89	95	290	306
	Malaria	1	1	13	15	17	65	68
	Ross River	21	12	124	98	878	566	1653

* 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](#) and the [HIV Surveillance Data Reports](#) webpages.