

# Communicable Diseases Weekly Report

## Week 30, 22 to 28 July 2018

In summary, we report:

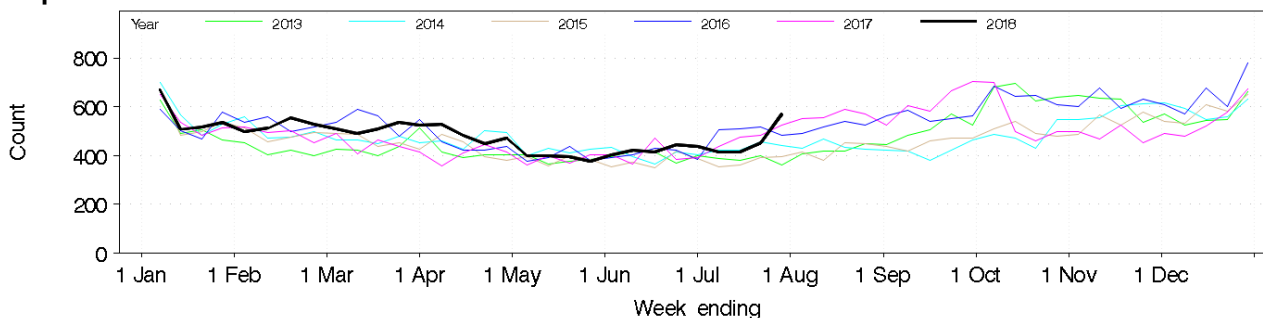
- [Viral gastroenteritis](#) – increased emergency department presentations
- [Hepatitis C](#) – raising awareness of hepatitis C treatment
- [Leptospirosis](#) – one new case
- [Summary of notifiable conditions activity in NSW](#)

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.

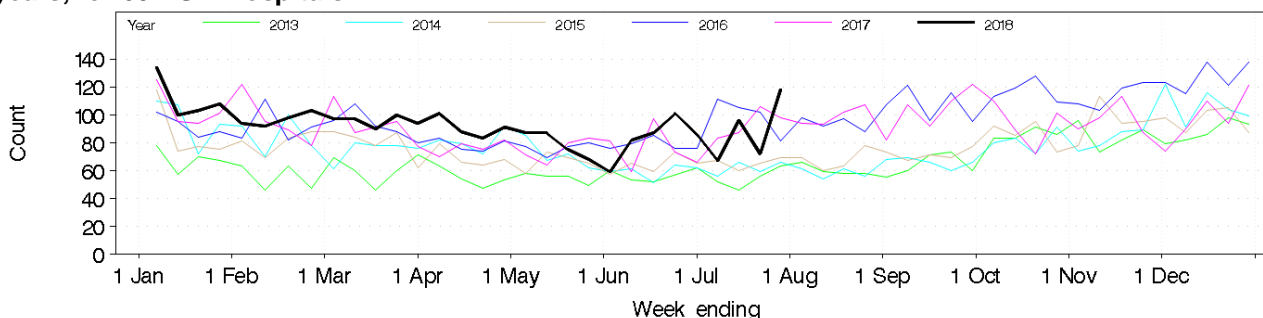
### Viral gastroenteritis

Emergency department (ED) surveillance showed a sharp spike in presentations for gastroenteritis this week, increasing to 1,844 visits compared to 1,636 presentations in the previous week. The increase in presentations was most notable amongst adults in the 17 to 34 year age group ([Figure 1](#)). There were 455 admissions from ED for gastroenteritis, again significantly higher amongst young adults ([Figure 2](#)). The gastroenteritis surveillance category includes provisional ED diagnoses of gastroenteritis, vomiting, diarrhoea and food poisoning, with an average of 1,603 ED presentations observed during this period in the previous 5 years.

**Figure 1. Total weekly counts of ED presentations for gastroenteritis, for 2018 (black line), compared with each of the 5 previous years (coloured lines), persons aged 17 to 34 years, for 60 NSW hospitals.**



**Figure 2. Total weekly counts of ED presentations for gastroenteritis, that were admitted, for 2018 (black line), compared with each of the 5 previous years (coloured lines), persons aged 17 to 34 years, for 60 NSW hospitals.**



Based on investigation of recent notifications of gastroenteritis outbreaks in institutions, it is most likely that these presentations are due to viral gastroenteritis caused by norovirus. Viral gastroenteritis is a common intestinal infection caused by a number of different viruses, usually

resulting in vomiting and diarrhoea. Norovirus infection is the most frequent cause and is most common during the cooler months of the year. 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.

There is no indication of an increase in rotavirus activity in NSW, with only 37 cases notified during July 2018 compared to 202 cases notified in July 2017. 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.

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 through consuming 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 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.

Follow the link for further information on [viral gastroenteritis](#).

## **Hepatitis C**

NSW Health is encouraging people living with hepatitis C to [access new treatments](#) to cure their infection.

Effective new treatments, called direct acting antivirals (DAAs), are now subsidised on the Pharmaceutical Benefits Scheme (PBS) for the treatment of adults with chronic hepatitis C. DAAs have a cure rate of over 95% and have few side effects. They need to be taken for only 8-12 weeks for most people (24 weeks for some). Hepatitis C treatment improves people's liver health by stopping liver damage caused by hepatitis C virus. Following treatment some of the damage that has already occurred may repair. Successful treatment clears the virus so that the person can no longer transmit HCV to another person. People living with hepatitis C are strongly recommended to see their general practitioner about accessing hepatitis C treatment. All people who currently inject drugs or have previously injected drugs should ask their doctor for a hepatitis C test.

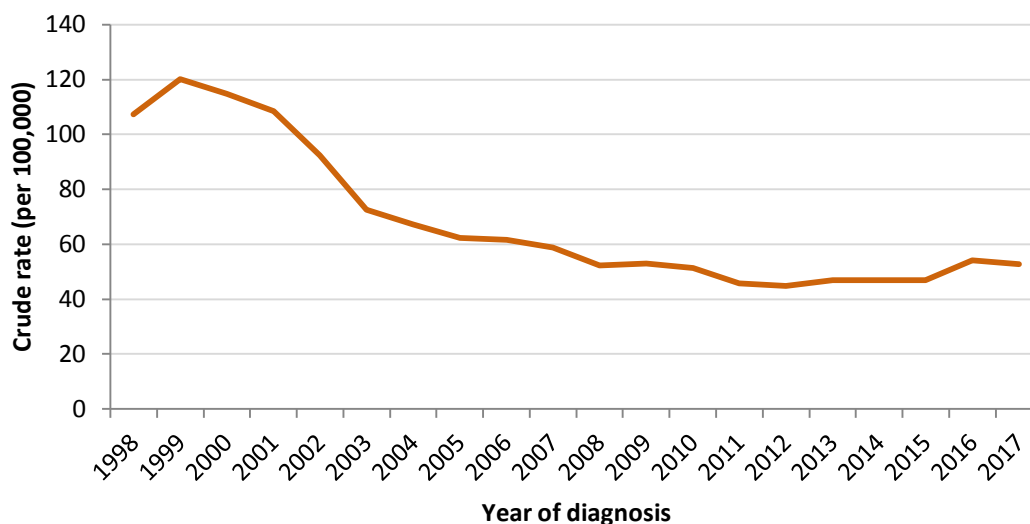
The hepatitis C notification rate in NSW has gradually declined over time. There was an upswing of notifications in 2016 thought to be due to people seeking testing prior to adopting the new treatments for hepatitis C, which became available on the PBS in March 2016 ([Figure 3](#)).

In 2017, the largest number of hepatitis C notifications was among males aged 25-44 years. A higher number of notifications were received for males compared with females with a ratio of 2.4:1.

To December 2017, 26% of an estimated 80,700 people living with hepatitis C in NSW had initiated treatment with 53% of those accessing treatment through their general practitioner (GP).

Throughout 2016 and 2017, screening and treatment has been scaled up across all correctional centres state-wide. From 1 March 2016 to 31 December 2017, 1,344 NSW residents initiated treatment in Justice Health settings, with approximately one-third of those among Aboriginal people.

Figure 3: Hepatitis C notification rate, NSW, 1998-2017



Hepatitis C is caused by a virus that infects the liver and can lead to long-term liver disease, cirrhosis and liver cancer. There are at least six genotypes of hepatitis C virus, with genotype 1 and genotype 3 being the most common genotypes in Australia.

Hepatitis C virus is transmitted from person to person when the blood of an infected person enters the bloodstream of an uninfected person. In Australia, spread is mostly through sharing needles and other injecting equipment contaminated with blood from an infectious person. Needle and syringe program outlets throughout NSW supply clean injecting equipment to encourage people to protect themselves from acquiring hepatitis C. The use of sterile injecting equipment also protects against hepatitis B and HIV infections, as well as preventing serious bacterial bloodstream infections.

Most people do not experience symptoms at the time they are infected with hepatitis C. When symptoms do occur, they usually develop within one to three months of infection and can include mild flu-like illness, loss of appetite, jaundice (yellowing of eyes and skin), dark urine, abdominal pain, nausea, vomiting or fatigue. More commonly, hepatitis C is diagnosed through screening asymptomatic people or investigating signs or symptoms of chronic liver disease. Following infection, 20-25% of people clear the virus from their bloodstream spontaneously. Those who do not clear the virus have chronic hepatitis C infection and are at risk of developing severe liver disease and liver cancer.

The NSW Hepatitis C Strategy 2014-2020 aims to reduce hepatitis C infections in NSW and improve the health outcomes of people living with hepatitis C, by reducing sharing of injecting equipment among people who inject drugs by 25% and increasing the number of people accessing hepatitis C treatment. Follow the link for information from the PBS on [hepatitis C treatments](#).

Follow the links for the latest [media release](#) and further information about [hepatitis C](#), the [NSW Hepatitis C Strategy 2014- 2020](#) and the [Data Reports](#) of the NSW Hepatitis B and C Strategies 2014-2020.

## Leptospirosis

One new case of leptospirosis was confirmed this week in an adult resident of the Mid North Coast region, as part of an ongoing investigation into the illness among farm workers in the region, bringing the total confirmed cases to fifteen. This case was confirmed in a person who had previously been notified as a probable leptospirosis case.

Farm workers are the only people affected in the outbreak so far. The fifteen confirmed cases have been infected by the Arborea serovar of *Leptospira*; this serovar is found world-wide in rats and mice. The 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 22 to 28 July 2018, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	14	8	490	1072	765	1266	1184
	Giardiasis	54	55	1610	2089	2333	3134	3480
	Hepatitis A	1	2	63	18	27	72	41
	Hepatitis E	1	0	10	15	12	20	16
	Rotavirus	12	11	485	515	290	2319	750
	Salmonellosis	47	48	2130	2546	3084	3680	4533
	Shigellosis	20	15	181	131	185	235	310
Respiratory Diseases	Influenza	362	285	5998	18786	7870	103853	35540
	Tuberculosis	19	9	283	291	270	540	533
Sexually Transmissible Infections	Chlamydia	625	573	18404	17123	15165	28977	25989
	Gonorrhoea	242	211	6132	5468	4035	9173	6994
	LGV	1	1	43	19	31	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	7	183	200	161	272	260
	Haemophilus influenzae type b	1	0	3	5	3	9	5
	Meningococcal Disease	2	0	33	39	31	91	70
	Mumps	3	1	51	76	28	128	67
	Pertussis	67	73	2256	3463	6256	5365	10956
	Pneumococcal Disease (Invasive)	43	20	336	318	267	683	545
	Rubella	1	0	1	3	8	5	8
Vector Borne Diseases	Barmah Forest	1	2	51	89	30	127	40
	Dengue	6	3	171	183	327	306	485
	Malaria	3	2	38	45	30	68	59
	Ross River	7	5	394	1435	371	1653	595
Zoonotic Diseases	Q fever	3	5	107	133	129	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.