

Communicable Diseases Weekly Report

Week 32, 5 August to 11 August 2018

In summary, we report:

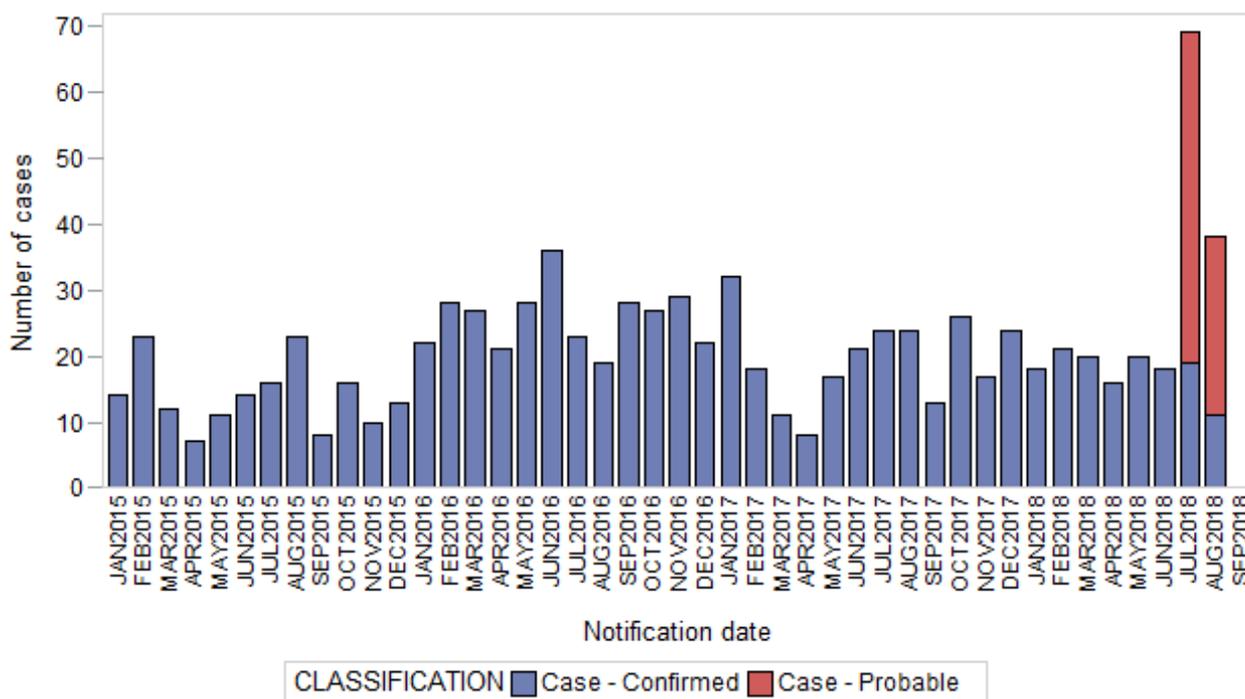
- [Shigellosis](#) – 21 new cases, new case definition
- [Leptospirosis](#) – outbreak investigation update
- [Summary of notifiable conditions activity in NSW](#)

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.

Shigellosis

On 1 July 2018 a new national case definition for shigellosis was introduced, which has changed the way that shigellosis cases are counted. The case definition has been expanded to include cases where there is strong, but not definitive, laboratory evidence of shigellosis as 'probable cases'. Probable cases are included in notification data. The increase in notifications of shigellosis is a reflection of the new probable case definition; notifications of confirmed cases are within usual levels (Figure 1).

Figure 1. Confirmed and probable shigellosis cases, NSW, since 1 Jan 2015



Of the twenty-one notifications of shigellosis received this reporting week ([Table 1](#)), seven were confirmed cases and fourteen were probable cases. Of the confirmed cases, five cases are thought to have acquired their infection through overseas travel, one is thought to have acquired their infections locally through male-to-male sexual contact, and one case has reported no clear risk factors. Five were serogroup *S. sonnei*, one *S. flexneri* and one is pending a serogroup result.

Shigellosis is a diarrhoeal disease caused by *Shigella* bacteria. There are four serogroups of *Shigella*: *S. dysenteriae* (Group A), *S. flexneri* (Group B), *S. boydii* (Group C) and *S. sonnei* (Group D). Serogroups A, B and C are further divided into over 30 serotypes.

Symptoms of shigellosis usually start one to three days after exposure, and include diarrhoea (often containing mucous and/or blood), fever, nausea, vomiting and abdominal cramps. The illness usually resolves in 5 to 7 days. Some people who are infected may not have any symptoms, but may still pass the *Shigella* bacteria to others.

Shigellosis is easily transmitted from person to person by the faecal-oral route, as only a small number of organisms are enough to cause illness. Strict personal hygiene is necessary to prevent person to person spread, which occurs if hands are not washed properly or if anything that is contaminated comes in contact with a person's mouth. Certain types of sexual activity, such as oral-anal sex, facilitate transmission of shigellosis from person to person. Globally, shigellosis is commonly acquired from ingestion of food contaminated by poor hand hygiene or by flies that have been in contact with human waste.

People with shigellosis can have the bacteria in their faeces and so remain infectious for some weeks after their symptoms have resolved. Treatment with appropriate antibiotics generally reduces the time a person is infectious to a few days. Antibiotics are therefore recommended for all people with shigellosis, even if symptoms are only mild, in order to reduce the risk of spread to other people. Antibiotic choice should be determined by testing results, due to frequent resistance of *Shigella* bacteria to one or more commonly used antibiotics. In the last 6 months, there has been an increase in the number of cases of multi-drug resistant *Shigella* reported in NSW. Information on the increase in drug resistance is available at on the NSW Health [shigellosis webpage](#).

Shigellosis can be prevented by thorough hand washing after any possible exposures to human faecal material, including after toileting, changing nappies and sexual activity. People who have diarrhoea should not have sex where there is any contact with the anus for seven days until after their symptoms have resolved.

People travelling to countries where shigellosis is common should avoid uncooked foods, including fruit and vegetables unless washed and peeled by the person themselves, and drink only bottled, boiled or treated water.

Follow the links for further information on [shigellosis](#) and [Shigella notifications data](#).

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. The total number of confirmed cases to 11 August 2018 is 35. The onset of illness among workers peaked in the first two weeks of June.

In this reporting week, eleven new cases of leptospirosis were confirmed among people who have had the onset of their symptoms since 14 April 2018. Because of the length of time often required for confirmatory laboratory testing, many of these confirmed infections were in people who had previously been notified as probable or possible leptospirosis cases 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 35 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 5 to 11 August 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis C - Newly Acquired	1	0	22	19	18	36	25
Enteric Diseases	Cryptosporidiosis	11	17	517	1096	786	1266	1184
	Giardiasis	45	49	1704	2211	2452	3134	3480
	Hepatitis A	1	2	66	22	28	72	41
	Hepatitis E	1	1	12	15	13	20	16
	Rotavirus	10	12	510	624	306	2319	750
	Salmonellosis	42	63	2236	2649	3239	3680	4533
	Shigellosis	21	11	211	135	194	235	310
	Typhoid	2	0	37	39	26	55	37
Other Diseases	Acute Rheumatic Fever	1	0	14	11	8	19	16
Respiratory Diseases	Influenza	574	487	7071	34349	12178	103853	35540
	Tuberculosis	8	14	304	311	300	540	533
Sexually Transmissible Infections	Chlamydia	610	561	19582	18159	16221	28977	25989
	Gonorrhoea	220	199	6570	5799	4327	9172	6993
	LGV	1	2	49	21	37	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	5	196	210	165	277	261
	Meningococcal Disease	1	1	36	47	33	91	70
	Pertussis	136	86	2479	3715	6589	5365	10956
	Pneumococcal Disease (Invasive)	22	18	376	373	296	683	545
Vector Borne Diseases	Barmah Forest	3	0	55	90	32	127	40
	Dengue	6	8	185	197	340	306	485
	Malaria	1	3	41	47	34	68	59
	Ross River	8	4	409	1458	375	1653	595
Zoonotic Diseases	Leptospirosis	5	2	45	16	12	20	16
	Psittacosis	1	0	6	6	1	9	9
	Q fever	4	7	122	147	135	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 [notifiable diseases data](#) webpage.