

Communicable Diseases Weekly Report

Week 23, 2 June to 8 June 2019

In summary, we report:

- [Shigellosis](#) – nine new cases
- [Measles](#) – 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.

Shigellosis

Of the nine notifications of shigellosis received this reporting week ([Table 1](#)), one was confirmed as *Shigella sonnei* and eight were probable cases (which are unable to be confirmed as the molecular test used is unable to differentiate between *Shigella* species and *Escherichia coli*). The person with *S. sonnei* is believed to have acquired their infection while travelling overseas.

These cases follow a notable increase in shigellosis notifications in May 2019 with 105 notifications, including 43 cases confirmed with a culture result. Of these, 17 cases (40%) are thought to have acquired their infection overseas, 17 likely acquired their infection through male to male sex (MSM) contact locally (40%) and eight had a local unknown source of infection (19%). One case could not be contacted. All MSM cases were *S. sonnei* biotype G, whereas the cases with unknown sources are a variety of *Shigella* serogroups and biotypes. No epidemiological links between the cases have been identified.

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. Multi-drug resistant *Shigella* is an emerging risk in NSW. Information on *Shigella* drug resistance is available 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.

Further information

- NSW Health [shigellosis factsheet](#) and [shigellosis notifications data](#)
- NSW Health [Staying healthy while travelling overseas factsheet](#).

Measles

A new case of measles was notified in this reporting week (Table 1), in a man in his forties recently returned from overseas travel. The man's measles vaccination status was unable to be verified. This person was believed to have been infectious while on a flight from Hong Kong to Sydney Airport, and on a train trip from the airport to south-western Sydney, prompting a NSW Health [measles alert](#).

Between 15 December 2018 and 8 June 2019, there have been 43 people infectious with measles in NSW. Of these, 38 are classified as NSW measles cases with the remaining five cases in people from other countries or other parts of Australia who spent time in NSW while infectious.

While the majority of these recent measles cases were imported, limited local transmission has occurred. Three separate outbreaks have resulted in nine secondary cases. As of 8 June 2019, all three of these outbreaks in NSW are considered over as no further linked cases have been detected during two incubation periods (36 days) since the most recent case in the outbreak was infectious.

Measles is a serious viral illness and one of the most highly communicable infectious diseases. The measles virus is usually spread through coughing or by contact with the nasal or throat secretions of an infected person.

The symptoms of measles usually start 7 to 18 days after exposure to someone who has measles. They include fever, cough, runny nose, conjunctivitis (red, watery eyes) and feeling unwell. After three to five days a rash with flat red spots breaks out, usually starting on the face before spreading to the rest of the body. People are usually infectious from around four days before the onset of the rash until four days after it appears.

Australia has eliminated measles, meaning that there is no ongoing, local transmission of the virus. Measles remains common in many parts of the world so there remains a risk of measles importation, particularly in Australian travellers who have not been adequately vaccinated.

Public health efforts aim to limit local transmission and prevent outbreaks of measles in vulnerable pockets of the community, such as under or unvaccinated people, babies too young to be vaccinated, and people with suppressed immune systems.

People are considered immune to measles if they have had a documented measles illness in the past or have evidence of having received two doses of a measles-containing vaccine. People born before 1966 are also considered immune as they are highly likely to have had measles infection as a child.

While one dose of vaccine induces effective protection in 95% of people, two doses are recommended as this provides long-term protection in 99% of people.

People who think they might have measles should avoid public places and see a doctor, but should call ahead to ensure they do not come in to contact with other people in the waiting areas.

Further information

- NSW Health [measles website](#) and [measles factsheet](#).
- [The Australian Immunisation Handbook](#) for more information on measles vaccine recommendations.

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 2 to 8 June 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	7	8	386	431	997	708	1266
	Giardiasis	45	50	1583	1416	1758	2937	3135
	Hepatitis E	1	0	10	6	10	18	20
	Rotavirus	11	8	270	412	308	808	2319
	Salmonellosis	53	60	2000	1811	2234	3342	3681
	Shigellosis	9	22	400	104	97	530	236
	Typhoid	1	1	38	32	34	58	55
Respiratory Diseases	Influenza	2788	2352	20864	4364	4469	17423	103851
	Legionellosis	4	2	81	77	58	171	138
	Tuberculosis	12	14	254	211	218	510	542
Sexually Transmissible Infections	Chlamydia	463	589	14116	14329	13375	31197	29005
	Gonorrhoea	202	256	5291	4752	4351	10621	9160
	LGV	2	1	23	36	13	85	50
Vaccine Preventable Diseases	Measles	1	1	37	8	25	18	32
	Mumps	1	1	26	40	64	72	127
	Pertussis	105	141	2772	1732	2747	6281	5366
	Pneumococcal Disease (Invasive)	10	7	191	188	188	686	683
Vector Borne Diseases	Dengue	3	2	38	41	64	74	127
	Malaria	7	6	201	144	155	299	306
	Ross River	8	11	342	304	1338	570	1653
Zoonotic Diseases	Q fever	1	5	118	90	101	227	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](#) and the [HIV Surveillance Data Reports](#) webpages.