

## Communicable Diseases Weekly Report

### Week 8, 16 February to 22 February 2020

In summary, we report:

- [Listeriosis](#) – 1 new case
- [Shigellosis](#) – 28 new cases
- [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.

### Listeriosis

One new infection of *Listeria* (listeriosis) was reported this week ([Table 1](#)) in a 42 year old woman. The woman was pregnant and had a miscarriage at 18 weeks due to the infection. The woman reported consuming numerous other foods which are a risk for listeriosis such as salad and fruit including from buffets and from catered spreads.

Listeriosis is a rare illness caused by eating food contaminated with a bacterium called *Listeria monocytogenes*. This bacterium is widespread throughout nature, being commonly carried by many species of both domestic and wild animals. *Listeria* survive refrigeration but are killed at cooking temperatures.

Outbreaks of illness have been associated with raw milk, soft cheeses, pre-prepared salads (for example, from salad bars), unwashed raw vegetables, pâté, cold diced chicken, pre-cut fruit, fruit salad and most recently rockmelon.

Babies can be born with listeriosis if their mothers eat contaminated food during the pregnancy.

People at increased risk of listeriosis include pregnant women and their unborn child, newborns, older people and people with weakened immune systems, for example: people on cancer treatment or steroids, or people with diabetes, kidney disease, liver disease or living with HIV infection. Listeriosis may be severe in these individuals, and infections during pregnancy may cause still birth or premature delivery.

People at increased risk of listeriosis should not eat the following foods:

- rockmelon (cantaloupe)
- pre-cut fruit, including fruit salad
- pre-packed cold salads, including coleslaw
- frozen vegetables, unless cooked prior to consumption
- pre-cooked cold chicken, cold delicatessen meats, paté or meat spreads
- raw seafood, smoked seafood (unless cooked and served hot), chilled seafood
- unpasteurised milk or milk products
- soft cheeses such as brie, camembert, ricotta, or blue-vein cheese
- soft serve ice cream
- sprouted seeds.

Fruit and vegetables eaten raw should be thoroughly washed prior to eating.

Follow the links for further [listeriosis data](#), the [listeriosis factsheet](#) and the NSW Food Authority [Food safety during pregnancy brochure](#).

## **Shigellosis**

A total of 28 notifications of shigellosis were received in this reporting week ([Table 1](#)). Eleven were confirmed *Shigella* infections, including 7 confirmed as *Shigella sonnei*, one confirmed as *Shigella flexneri* and three with species pending. The remaining 17 cases were probable cases only, as they were tested by PCR only and did not have known links to confirmed cases. Cases detected by PCR with no epidemiological links are classified as probable cases because this test method is unable to differentiate between *Shigella* species and enteroinvasive *Escherichia coli*.

Four cases were men who have sex with men (MSM) who most likely acquired the infection through sexual activity. This includes one case who was included in a cluster of shigellosis linked to gay cruise in the Caribbean in January 2020. A total of four infections in NSW patients have now been linked to the cruise. The strain of *Shigella sonnei* detected in this cluster has shown extensive drug resistance (XDR). NSW Health and the US CDC have liaised to discuss this potential international outbreak of this highly resistant organism. The CDC reported 9 known cases from the cruise. Whole genome sequencing results of two of these cases were indistinguishable from the NSW cases. The CDC are leading an investigation with the cruise organiser to ensure information about the illness and prevention messages are shared with passengers and crew.

Six of the other cases likely acquired their infection during overseas travel. The final case was locally acquired from an unknown exposure.

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 another 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, because *Shigella* bacteria are often resistant to one or more commonly used antibiotics.

Multi-drug resistant (MDR) shigellosis is increasing in NSW. An alert issued to health care providers in 2018 was most recently updated in December 2019. NSW Health has been working closely with ACON to communicate with at risk community groups about safe sex, early detection and treatment options.

Further information about the increase in drug resistance is available on the [shigellosis alert page](#).

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 clinical advice for treating multi-drug resistant (MDR) shigellosis
- NSW Health Staying healthy while travelling overseas factsheet.

## Summary of notifiable conditions activity in NSW

The following table (Table 1) summarises notifiable conditions activity over the reporting period.

**Table 1. NSW Notifiable conditions from 16 February 2020 – 22 February 2020, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	45	31	199	181	157	669	708
	Giardiasis	70	70	431	709	521	3271	2937
	Listeriosis	1	0	2	2	14	16	19
	Paratyphoid	1	0	7	14	8	39	34
	Rotavirus	12	13	239	119	176	1756	808
	STEC/VTEC	3	2	19	19	11	80	57
	Salmonellosis	138	147	845	852	757	3564	3336
	Shigellosis	28	27	244	153	38	869	531
	Typhoid	1	7	18	22	9	63	58
Respiratory Diseases	Influenza	564	605	4465	4046	2236	116448	17409
	Tuberculosis	13	13	66	76	78	598	507
Sexually Transmissible Infections	Chlamydia	686	703	5153	5122	4938	32452	31181
	Gonorrhoea	223	211	1848	1791	1678	11715	10609
	LGV	1	4	17	12	12	69	85
Vaccine Preventable Diseases	Mumps	3	1	17	13	20	56	72
	Pertussis	80	81	654	1096	625	6386	6280
	Pneumococcal Disease (Invasive)	8	9	72	51	57	692	681
Vector Borne Diseases	Barmah Forest	3	2	14	12	11	63	74
	Dengue	4	1	34	76	77	453	299
	Malaria	1	1	6	11	9	73	66
	Ross River	5	2	26	83	59	577	571
Zoonotic Diseases	Psittacosis	1	0	1	2	0	10	7
	Q fever	5	3	33	61	37	248	228

### \* 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](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.