

## Communicable Diseases Weekly Report

### Week 4, 19 January to 25 January 2020

In summary, we report:

- [Novel coronavirus 2019](#) – updated information
- [Shigellosis](#) – 46 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.

### Novel coronavirus 2019

At the end of December 2019, a new coronavirus currently known as 2019-nCoV, was identified as the cause of acute respiratory illness in Wuhan City, China. Since an initial overview of the outbreak in China and the NSW response was reported in the [Week 3](#) Communicable Diseases Weekly Report, the situation has continued to evolve rapidly.

The World Health Organization now considers the 2019-nCoV outbreak a [Health Emergency of International Concern](#). Reported case numbers have continued to rise in Wuhan City, the remainder of Hubei Province, as well as in other provinces of China and internationally. In Australia, there have been a number of confirmed cases of 2019-nCoV infections, including (as of 1 February) four cases in NSW. All four NSW cases were admitted to hospital. A number of contacts were identified and contacted.

Laboratory capacity for urgent 2019-nCoV testing in NSW has been further expanded, and a number of persons are tested each day. Updated guidance regarding the assessment and management of persons with suspected 2019-nCoV infection has been provided to GPs and hospitals.

Evidence about the clinical and epidemiological features of 2019-nCoV are rapidly emerging – see the [NSW Health website](#) for updated guidelines.

Coronaviruses are a family of viruses which occur in both humans and animals. Human coronaviruses usually cause mild respiratory disease such as the common cold. Some animal strains can spread between animals and people, causing illness in humans. The initial cluster of cases reportedly attended a seafood and live animal market in Wuhan, suggesting that 2019-nCoV likely originated in an animal species.

2019-nCoV is genetically related to the SARS (severe acute respiratory syndrome) coronavirus and belongs to the same family as MERS (Middle East respiratory syndrome) coronavirus. The clinical course of 2019-nCoV is believed to be less severe than SARS; however knowledge of this novel virus continues to evolve. The time from exposure to the virus to onset of symptoms has been estimated to be approximately 6-7 days on average, to a maximum of 14 days. Symptoms may include fever, headache, cough, sore throat, and shortness of breath. A small number of very mild and asymptomatic infections has also been reported internationally.

NSW Health urges anyone who develops respiratory symptoms and who has travelled to Hubei province in the 14 days prior to symptom onset or who has been in contact with a known case to call their GP or the healthdirect line on 1800 022 222. Calling ahead and advising of the potential 2019-nCoV infection is vital to ensure that precautions can be taken on arrival. People with symptoms are also advised to wear a surgical mask to prevent the spread of infections to others. In addition, routine

hygiene practices such as frequent handwashing and cough etiquette should always be applied, as these also reduce the likelihood of transmitting common diseases such as colds and influenza.

### Further information

- [New South Wales novel coronavirus page](#) for a range of NSW-specific information for health professionals and the public, including resources in Mandarin
- [Australian Government Department of Health novel coronavirus page](#), including a [resources page](#) with a range of fact sheets and posters
- Australian Government Department of Foreign Affairs and Trade's [Smartraveller website](#) for up to date information for Australian travellers.
- World Health Organization [Coronavirus page](#)

## Shigellosis

A total of 46 notifications of shigellosis were received in this reporting week ([Table 1](#)). Thirteen were confirmed *Shigella* infections, including 11 confirmed as *Shigella sonnei*, one confirmed as *Shigella dysenteriae* and one with species pending. The remaining 33 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 linked to a cluster of shigellosis linked to a New Year's festival in northern NSW, first described in the [Week 2](#) Communicable Diseases Weekly Report. A total of eight infections in NSW patients have now been linked to the festival. These case-patients were all MSM who attended the festival. There are at least three different strains involved in this cluster, including two different multi-drug resistant *Shigella sonnei* strains, and a *Shigella flexneri* strain.

Thirteen of the other cases likely acquired their infection during overseas travel. Cases described travel to a number of countries during their exposure period in Central Asia, South East Asia and the Pacific Islands.

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.

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 19 January 2020 – 25 January 2020, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	13	16	64	62	70	669	708
	Giardiasis	48	45	163	295	222	3270	2937
	Paratyphoid	2	1	5	5	6	39	34
	Rotavirus	16	47	141	74	86	1748	808
	STEC/VTEC	1	4	7	12	6	80	57
	Salmonellosis	88	89	310	427	375	3561	3336
	Shigellosis	46	34	123	74	16	869	531
	Typhoid	1	0	4	6	3	63	58
Respiratory Diseases	Influenza	496	482	1600	1767	998	116412	17409
	Legionellosis	1	0	4	23	9	153	171
	Tuberculosis	8	8	26	32	42	597	507
Sexually Transmissible Infections	Chlamydia	621	796	2236	2336	2204	32412	31181
	Gonorrhoea	230	322	853	889	838	11699	10610
	LGV	2	2	8	6	7	69	85
Vaccine Preventable Diseases	Measles	1	4	11	8	0	58	18
	Meningococcal Disease	1	1	4	2	4	59	72
	Mumps	2	1	6	5	5	56	72
	Pertussis	78	76	311	701	304	6384	6280
	Pneumococcal Disease (Invasive)	9	19	49	28	32	692	681
Vector Borne Diseases	Barmah Forest	3	2	6	4	2	63	74
	Chikungunya	2	0	3	3	2	32	13
	Dengue	2	2	14	30	46	453	299
	Malaria	2	0	2	7	4	73	66
	Ross River	2	1	10	37	21	578	571
Zoonotic Diseases	Q fever	2	7	19	26	21	246	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.