

# **Communicable Diseases Weekly Report**

## Week 14, 29 March to 4 April 2020

In summary, we report:

- Bacillus cereus food poisoning family cluster linked to rice
- Novel coronavirus 2019 (COVID-19)
- Summary of notifiable conditions activity in NSW

For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

## **Bacillus cereus food poisoning**

A woman in her 40s from metropolitan Sydney was admitted to intensive care with septic shock and multi-organ failure, suspected to be caused by *Bacillus cereus* toxin-mediated food poisoning. The woman had no known underlying health conditions, but developed serious symptoms within hours of consuming a dish prepared with rice that had been cooked one week earlier. While other family members had also consumed the dish, they experienced milder symptoms and did not require admission to hospital. The woman unfortunately passed away. *B. cereus* was subsequently detected in leftover rice samples submitted to the laboratory.

*B. cereus* is a type of bacteria which can cause food poisoning. Its potential to cause illness is largely due to secreted enzymes and toxins. There are two types of toxin-induced food poisoning caused by *B. cereus*, dependent on which toxin is involved. The diarrhoeal toxin causes an illness characterised by diarrhoea, whilst the emetic toxin causes a vomiting illness. The diarrhoeal toxin is produced in the small intestine after ingestion of either bacilli or spores, whereas the emetic toxin is present in contaminated food. Both of these toxins cause a rapid onset of illness; within 24 hours of food consumption.

*B. cereus* is able to survive in food processing environments because of its ability to adapt to environmental conditions and withstand extreme temperatures. It has previously been found in a diverse range of foods such as rice, dairy products, spices, bean sprouts, and other vegetables. In particular, fried rice has been a dish commonly associated with *B. cereus* toxin-mediated food poisoning. This is because *B. cereus* is often found in uncooked rice. Once the rice is cooked and cooled to room temperature, heat-resistant spores continue to grow and form a heat resistant toxin which is not destroyed by further reheating, including stir-frying.

Treatment of food poisoning due to *B. cereus* includes supportive care only. Antibiotics are not indicated.

*B. cereus* toxin poisoning can be prevented by following safe food handling practices. This includes always making sure that cooked rice is refrigerated within an hour, and not leaving cooked rice in the fridge for longer than three days.

Follow the links for a <u>NSW Food Authority advice</u> about storing cooked rice, and further information about *Bacillus cereus* and food poisoning.

## **Novel coronavirus 2019 (COVID-19)**

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the NSW Health COVID-19 page.

## 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 29 March to 4 April 2020, by date received\*

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	10	22	318	320	312	669	708
	Giardiasis	27	39	772	1292	908	3271	2937
	Listeriosis	3	0	6	2	15	16	19
	Rotavirus	3	3	285	182	279	1756	808
	Salmonellosis	40	49	1456	1402	1246	3563	3336
	Shigellosis	5	12	339	246	64	868	531
	Typhoid	1	0	29	32	22	63	58
Respiratory Diseases	Influenza	47	185	6959	8174	3454	116448	17409
	Legionellosis	3	8	41	56	48	153	171
	Tuberculosis	14	5	129	150	132	598	507
Sexually	Chlamydia	334	422	8507	9067	8611	32450	31179
Transmissible	Gonorrhoea	192	178	3059	3265	2866	11713	10607
Infections	LGV	5	0	31	17	22	69	85
Vaccine Preventable	Measles	1	0	17	28	4	58	18
Diseases	Pertussis	33	73	1116	1772	1059	6386	6280
	Pneumococcal Disease (Invasive)	5	8	115	90	96	692	681
Vector Borne	Barmah Forest	1	1	31	21	26	63	74
Diseases	Dengue	3	2	52	128	100	453	299
	Malaria	1	0	15	19	18	73	66
	Ross River	24	13	98	203	134	578	571

#### \* 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.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health <u>Latest Updates on COVID-19</u> page.
- 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 <u>notifiable disease data</u> 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 <u>Database of Adverse Event Notifications</u>.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the <u>Infectious Diseases Data</u>, the <u>HIV Surveillance Data Reports</u> and the <u>Hepatitis B and C Strategies Data Reports</u> 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.