

## Communicable Diseases Weekly Report

### Week 36, 2 to 8 September 2018

In summary, we report:

- [Salmonella Enteritidis](#) – outbreak linked to contaminated eggs
- [Mycobacterium chimaera](#) – fifth NSW case confirmed
- [Candida auris](#) – first NSW case reported
- [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.

### Salmonella Enteritidis outbreak linked to contaminated eggs

There were 41 notifications of salmonellosis this reporting week (Table 1). Overall salmonellosis notifications are lower than recent years despite high levels of testing.

This week twenty-eight cases of one type of *Salmonella* infection, *Salmonella* Enteritidis, notified over past weeks were linked to contaminated eggs sold in the Sydney metropolitan region. All cases either live in or have travelled to greater Sydney during the time when they would have been exposed. As a result of the joint NSW Health and NSW Food Authority investigation, eggs sold under the brand “Glendenning Farms” have been recalled.

Consumers are advised to not consume the recalled product but to return it to place of purchase for a full refund. More information on the affected product is available in the NSW Food Authority [recall advice](#).

More information on the outbreak is available from the NSW Health [Salmonella Enteritidis outbreak alert](#) and NSW Food Authority [media release](#).

Products containing undercooked eggs and improper separation of foods while cooking are the most common source of outbreaks of salmonellosis in NSW.

Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg dressings, desserts and sauces need to follow safe handling practices. They should try to use alternatives to raw eggs in foods which are not subsequently cooked. Alternatives include commercially produced dressings and sauces, or pasteurised egg products.

At home, people can reduce their risk of *Salmonella* poisoning by following the NSW Food Authority's [four food safety tips](#).

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around six to 72 hours after eating food contaminated with the organism. Symptoms typically last four to seven days, but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

Follow the link for further information on [safe handling of raw egg products](#) from the NSW Food Authority.

Follow the link for further information on [salmonellosis notifications](#).

Follow the link for the [salmonellosis factsheet](#).

### ***Mycobacterium chimaera***

A fifth NSW resident has been confirmed to have *Mycobacterium chimaera* infection linked to contaminated open-heart surgery equipment. Similar to the previous four confirmed NSW cases, the man in his 60s underwent open-heart cardiac surgery to replace damaged heart valves at Prince of Wales Hospital in 2015. A sixth patient who also had a valve replacement at Prince of Wales Hospital in 2015 is currently under investigation for this infection.

Hospitals around the world have been affected by this issue which is thought to have arisen following contamination of heater-cooler devices during manufacture up until September 2014. This has been linked to at least 100 cases of *M. chimaera* infections in cardiac surgery patients worldwide. The first case in Australia was confirmed in Queensland in 2016, and two other cases have been recognised in people who had surgery in Victoria.

Heater-cooler devices are essential to conduct open-heart cardiac surgery as they control the temperature of the blood during the period when blood circulation is via a heart by-pass machine so that complex heart surgery can be undertaken. The design of heater-cooler devices resulted in water from the machine being aerosolised and potentially contaminating the surgical site. This means that it is essential that the water used in the machines is free from pathogenic organisms.

*M. chimaera* is a slow growing bacterium usually found in water or soil, and previously has been found as the cause of some human lung infections in patients with structural lung disease such as cystic fibrosis or bronchiectasis. It is part of the family of “non-tuberculous mycobacteria” which has some similarities to the bacteria that cause tuberculosis. In relation to open-heart surgery, the incidence of *M. chimaera* infection is very low but the risk is believed to increase for other patients who had their operation in the same facility where a case has been confirmed.

Patients who have been infected with *M. chimaera* have presented with symptoms from 3 months to 5 years following surgery. *M. chimaera* infection is not spread from person to person.

In December 2016 NSW Health contacted surgical patients who may have been exposed to *M. chimaera* from contaminated open-heart surgery equipment used in four affected NSW public hospitals prior to August 2016 (when the contaminated equipment was replaced or removed from service). These patients have been advised to be alert to the most common symptoms of *M. chimaera* infection: persistent fevers, unexplained weight loss and unusual or increasing shortness of breath. Patients who had heart valve or aortic graft surgery at Prince of Wales in the risk period are sent an annual reminder to be alert for symptoms.

Information has also been sent to GPs and relevant specialists noting that some patients have presented with osteoarthritis, cholestatic hepatitis, nephritis, splenomegaly, or ocular disease. Specialist infectious disease assessment is recommended as treatment of the infection includes combination antimicrobial therapy and may require repeat surgery if prosthetic heart valves or grafts are involved.

For further information see:

NSW Health [M. chimaera and cardiac surgery alert](#) page.

Clinical Excellence Commission (CEC) [M. chimaera information and resources](#) page.

## **Candida auris**

The first known case of *Candida auris* in a NSW hospital has been reported in a patient recently hospitalised overseas. Appropriate infection control measures, including strict isolation, have been in place since the patient's arrival into the NSW hospital, so this incident is not thought to have placed other patients at risk of infection.

*C. auris* is an uncommon species of fungus that was first discovered in 2009 and since then has been identified as a cause of several outbreaks in healthcare facilities around the world. *C. auris* is of concern because it is resistant to many antifungal medicines and because it may be misidentified if not being specifically looked for in the laboratory.

*C. auris* can be carried asymptotically but can also cause serious infections in patients. It can be spread from person to person, particularly on shared equipment or through contamination of the patient's environment, requiring contact precautions.

This case highlights that patients who have been hospitalised overseas are at risk of multi resistant organism (MRO) acquisition and this may result in inadvertent introduction into Australian health facilities. Routine implementation of good hand hygiene, cleaning, appropriate screening, and other infection control precautions are a priority to reduce the risk of transmission of *C. auris* and other MROs.

For further information

<https://www.cdc.gov/fungal/candida-auris/recommendations.html>

## 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 September 2018, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	1	16	10	10	12	13
Enteric Diseases	Cryptosporidiosis	3	11	549	1117	825	1266	1184
	Giardiasis	48	41	1892	2381	2674	3134	3480
	Hepatitis A	1	0	70	34	30	72	41
	Rotavirus	7	17	556	1020	337	2319	750
	STEC/VTEC	1	0	37	38	29	53	65
	Salmonellosis	41	33	2392	2805	3437	3680	4533
	Shigellosis	22	14	272	158	215	235	310
Respiratory Diseases	Influenza	1021	1059	10700	77057	25815	103853	35540
	Legionellosis	1	0	96	89	98	138	134
	Tuberculosis	5	10	356	359	343	540	533
Sexually Transmissible Infections	Chlamydia	563	587	21880	20274	18128	28976	25988
	Gonorrhoea	202	194	7426	6439	4839	9171	6993
	LGV	2	4	60	29	42	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	9	215	225	180	279	262
	Measles	1	3	13	25	10	32	16
	Meningococcal Disease	1	1	43	59	46	91	70
	Mumps	2	0	56	85	39	128	67
	Pertussis	103	161	3001	4054	7365	5365	10956
	Pneumococcal Disease (Invasive)	29	18	470	460	364	683	545
Vector Borne Diseases	Barmah Forest	1	0	57	101	34	127	40
	Dengue	3	0	194	210	363	306	485
	Malaria	2	0	45	53	37	68	59
	Ross River	4	8	441	1493	391	1653	595
Zoonotic Diseases	Brucellosis	1	1	4	3	7	6	10
	Q fever	5	2	140	159	146	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 [Infectious Diseases Data](#) webpage.