

Communicable Diseases Weekly Report

Week 8, 18 to 24 February 2018

In summary, we report:

- Listeriosis one new case and outbreak investigation
- <u>Invasive meningococcal disease</u> two new cases
- 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.

Listeriosis

One new case of *Listeria* infection (listeriosis) was reported this week (<u>Table 1</u>). This case was a resident of Northern Sydney Local Health District aged in her 70s who had significant underlying health conditions, and unfortunately died from the infection.

An additional case, a resident of the Illawarra Shoalhaven Local Health District aged in her 80s was notified on February 26, bringing the total notifications since 1 January 2018 in NSW to 15, which is higher than the five year average for this period (4.4 cases). This case did not have any underlying risk factors for listeriosis other than her age. Her food history included a number of high risk foods including pre-cooked chicken stored at room temperature and sushi containing raw fish. In 2018 cases have been reported across the state, including in Murrumbidgee, Northern NSW and several Sydney local health districts. An investigation into the increase commenced at the end of January. All listeria isolates in NSW routinely undergo whole genome sequencing to analyse relatedness between cases.

Six of the 15 NSW cases are related and part of a multijurisdictional outbreak investigation, which includes cases from Victoria, Queensland and Tasmania, who developed illness between 17 January and 22 February 2018. The NSW Food Authority and NSW Health have issued a joint media alert advising people who are most vulnerable to *Listeria* infection to avoid eating rockmelon after these cases were linked to consumption of the fruit from one particular farm in Nericon, NSW. The farm ceased production on 23 February and affected produce has been withdrawn from the supply chain, including from retailers. Consumers, particularly those who are at higher risk of developing listeriosis are advised to discard any rockmelon purchased prior to March 1.

Isolates from six of the remaining nine cases in NSW this year have been sequenced, with three results pending. Sequencing results for these additional six cases indicate that they are not related to each other or to other cases notified in NSW this year.

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.

Eating foods that contain *Listeria* bacteria does not cause illness in most people, but in some higher risk groups can result in severe illness and death. Outbreaks of listeriosis have been associated with the consumption of unpasteurised milk, soft cheeses, pre-prepared salads (for example, from salad bars), unwashed raw vegetables, pâté, cold diced chicken and pre-cut fruit and fruit salad. *Listeria* survives refrigeration but is sensitive to cooking temperatures.

People at increased risk of listeriosis include pregnant women, older people and people with weakened immune systems; for example, people on cancer treatment or corticosteroids, or people

with diabetes, kidney disease, liver disease or people living with HIV infection. Listeriosis may be severe in these individuals.

People at increased risk are reminded to avoid all foods that pose a risk of listeriosis, including:

- Pre-cut melons such as rockmelon or watermelon
- Pre-packed cold salads including coleslaw and fresh fruit salad
- Pre-cooked cold chicken, cold delicatessen meats, pâté
- Raw seafood, uncooked smoked seafood (e.g. smoked salmon)
- Unpasteurised milk or milk products, soft cheeses (e.g. brie, camembert, ricotta or bluevein)
- Sprouted seeds or raw mushrooms.

Fruit and vegetables eaten raw should be thoroughly washed prior to eating to reduce the risk of *listeria* contamination.

The NSW Food Authority and NSW Health are continuing investigations into other possible sources of the remaining recent listeriosis cases.

For further information on which people are at increased risk of listeriosis and which foods to avoid see the Listeriosis fact sheet and the NSW Food Authority Food safety during pregnancy brochure.

Follow the link for further NSW Health listeriosis data.

Invasive meningococcal disease

Two cases of invasive meningococcal disease (IMD) were notified this week (<u>Table 1</u>), both in young adults. One of the cases was in a European tourist who probably acquired their infection in New Zealand. The other case was a resident of the Northern Sydney Local Health District (NSLHD).

Tests showed the NSLHD case to be serogroup Y, while the tourist was infected with serogroup W. Clearance antibiotics and vaccination have been provided to all close contacts of the cases, including 15 members of a tour group travelling with the tourist.

The provision of antibiotics to close contacts of IMD cases aims to clear meningococcal bacteria from the nose and throat of asymptomatic carriers, who may have passed the virulent strain to the case; and prevent potential additional transmission within the contact network. Clearance antibiotics are not the same as treatment for IMD, and close contacts are advised to be aware of the signs and symptoms of IMD, and seek treatment immediately if they present. For more information see the NSW Health Meningococcal Disease Advice Poster (PDF).

When infection is due to serogroup A, C, W or Y, close contacts are also offered meningococcal vaccine to further reduce the risk of secondary cases arising in the contact network.

IMD is caused by infection with one of several serogroups of the *Neisseria meningitidis* bacterium. The most common invasive serogroups in Australia are B, C, W and Y. The bacteria are spread through direct contact of mucous membranes with the organism, such as exposure to respiratory droplets from the nose and throat of an infected person. For more information on the illness see the NSW Health Meningococcal disease fact sheet.

Following the introduction of a serogroup C vaccine in 2003, which is provided free of charge at 12 months of age, the number of infections caused by serogroup C has decreased substantially. The Australian Government has announced that from July 2018 the serogroup C vaccine will be replaced with a vaccine that covers four strains – A, C, W and Y (4vMenCV) – for children at 12 months of age. Serogroup B has previously been the most common cause of IMD in Australia; however, serogroup W has become the predominant type Australia-wide with NSW case notifications almost tripling from 2015 to 2016. Europe has also seen a consistent increase in the number of cases of IMD caused by serogroup W since 2011. For more information see the European Centre for Disease Control and Prevention (ECDC) website.

In February 2017 the NSW Government announced the NSW Meningococcal W Response Program which provided free meningococcal 4vMenCV to Year 11 and 12 students at their schools in 2017.

In 2018, 4vMenCV will be offered to year 10 and 11 students. For more information see the <u>NSW</u> Meningococcal W Response Program.

Follow the links for more information on meningococcal disease, vaccination and notification data.

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 18 to 24 February 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis C - Newly Acquired	1	1	8	5	4	43	25
Enteric Diseases	Cryptosporidiosis	27	23	151	386	206	1266	1184
	Giardiasis	72	67	465	641	724	2994	3480
	Listeriosis	1	2	14	2	8	20	36
	Rotavirus	18	17	165	130	122	2318	750
	STEC/VTEC	2	1	11	12	13	53	65
	Salmonellosis	86	95	747	927	1179	3686	4544
	Shigellosis	5	6	40	49	50	235	310
	Typhoid	1	1	9	15	16	55	37
Other Diseases	Acute Rheumatic Fever	1	0	1	1	1	19	16
Respiratory Diseases	Influenza	273	280	2194	1381	899	103862	35540
	Legionellosis	4	4	22	19	14	138	134
	Tuberculosis	5	4	59	74	83	531	534
Sexually Transmissible Infections	Chlamydia	685	567	4654	4850	4139	28980	25992
	Gonorrhoea	218	188	1692	1602	1013	9228	7002
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	2	10	32	23	268	258
	Meningococcal Disease	2	0	8	10	9	91	70
	Mumps	1	3	19	18	6	128	67
	Pertussis	76	81	607	1113	2520	5367	10956
	Pneumococcal Disease (Invasive)	9	6	55	55	43	683	545
Vector Borne Diseases	Barmah Forest	1	2	10	13	10	127	40
	Dengue	3	3	70	67	69	306	485
	Malaria	1	0	9	12	9	68	59

* 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.
- 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.