

Communicable Diseases Weekly Report

Week 40, 1 to 7 October 2017

In summary, we report:

- Measles two new cases
- Listeriosis one new case
- Hepatitis A update on Sydney outbreak
- 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.

Measles

Two cases of measles were notified during this reporting week (<u>Table 1</u>). Both cases occurred in adults, one could not recall their vaccination status, and the other recalled receiving one dose of a measles containing vaccine. One case acquired their infection in Victoria where there is an ongoing measles outbreak and the other likely acquired the infection in Sutherland Shire.

Whilst infectious they visited a number of locations in Sydney around Sutherland Shire, the Northern Beaches and western Sydney, before being diagnosed with measles and isolated. NSW Health media alerts have been issued providing information on the exposure sites for these and other recent cases. NSW public health units have followed up NSW contacts where possible to provide information and vaccination as required.

The World Health Organization announced that Australia had achieved measles elimination in 2014, although multiple lines of evidence suggest that endemic measles transmission may have been interrupted as early as 1999. This is a significant achievement of public health in Australia and demonstrates the effectiveness of the Australia's vaccination program.

A measles-free status means that the only cases occurring in Australia involve people who caught the disease whilst overseas, or catch the disease from them or their contacts after they return. Because measles remains common in many parts of the world, it is vital that all children and adults receive two doses of measles vaccine to protect them from this highly infectious virus.

People born between 1966 and 1994 may have missed vaccination completely, or only had one dose of measles vaccine due to changing vaccination schedules during this period. People in this age group should not assume that they are protected against measles unless they have a record of two doses. People who are unsure if they have received two doses of a measles vaccine in the past can safely be given another measles vaccine. The vaccine is free and provided through GPs.

Ensuring protection against measles through vaccination is particularly important prior to overseas travel as the risk of being exposed to a case of measles is greater outside Australia. Parents taking young infants overseas to countries where measles is common should discuss vaccination with their GP before they leave. In some circumstances measles vaccine can be given as early as nine months of age; however, in this instance, two further doses at 12 and 18 months are required for full protection.

The measles virus is highly infectious and it is readily transmitted from person to person via respiratory secretions in the air following coughing and sneezing. Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red blotchy rash spreading from the head and neck to the rest of the body.

Infection with the measles virus can be serious with common complications including middle ear infection and viral or bacterial bronchopneumonia. Acute encephalitis occurs rarely and subacute sclerosing panencephalitis is a very rare fatal complication, occurring many years after infection in about one per 100,000 cases.

Measles containing vaccine is routinely offered to all children at 12 months (as measles-mumps-rubella) and 18 months of age (as measles-mumps-rubella-varicella) through the National Immunisation Program.

For further information on measles please see the <u>measles fact sheet</u>. For further information on measles notifications in NSW residents see the diseases data page.

Follow the link for more measles vaccination information.

Listeriosis

One new case of *Listeria* infection (listeriosis) was reported this week in a pregnant woman (<u>Table 1</u>). She had presented with fever, abdominal pain and vomiting in the second trimester of pregnancy. Unfortunately the fetus was also affected and the pregnancy was lost.

This is the fourth case of pregnancy-related listeriosis in NSW in 2017; however, there are no links between the four cases. Over the last five years, there has been an average of one case of pregnancy-related listeriosis each year. Pregnant women are at increased risk from listeriosis because their immune systems tend to be suppressed, and infection in the mother can be passed on to the developing fetus or newborn. Listeriosis during pregnancy may cause stillbirth or premature delivery.

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. Other people at increased risk of listeriosis include 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.

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 should not eat pre-packed cold salads including coleslaw and fresh fruit salad, pre-cut fruit, 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 blue-vein), sprouted seeds or raw mushrooms.

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

Follow the links for further <u>listeriosis data</u>, the <u>listeriosis factsheet</u> and the NSW Food Authority Food safety during pregnancy brochure.

Hepatitis A

Six new cases of hepatitis A infection were reported this week (<u>Table 1</u>). Four of the six new cases were locally acquired, and two are presumed to have been acquired overseas. On average, there are three cases reported in NSW per month, and most cases usually acquire their infection overseas.

From July 25 to October 7, 2017, there were a total of 27 cases of hepatitis A reported in adults in NSW under investigation as part of a locally transmitted outbreak.

Molecular typing of the viruses isolated from 18 of these cases has shown that they share an identical common partial genome sequence, meaning that the cases are all part of the same outbreak. The median age of the 18 cases is 44 years (range 21 to 69 years). Seventeen of the 18 cases are male, with seven reporting being men who have sex with men (MSM). Two of the 18 cases travelled outside Australia during their incubation (exposure) period. These 18 cases are residents of South Eastern Sydney Local Health District (LHD) (9), Sydney LHD (3), Northern Sydney LHD (2), Western Sydney LHD (1), Central Coast LHD (1), Illawarra Shoalhaven LHD (1) and Hunter New England LHD (1). Two of the three cases who live outside Sydney reported travel to Sydney during their exposure period.

The molecular typing of hepatitis A viruses in this cluster shows they are very similar to a strain currently circulating in Europe associated with a large, multi-country outbreak. Since June 2016, 1,500 confirmed hepatitis A cases and 2,660 probable or suspected cases have been reported in Europe, predominantly among MSM (see the <u>ECDC report</u>).

The nine remaining cases have molecular typing results pending: all of the nine cases are males and the median age is 37 years (range 21 to 60 years). Five of these cases report MSM activity during their exposure period. The cases are residents of Sydney LHD (3), South Eastern Sydney LHD (1), South Western Sydney LHD (1), Western Sydney LHD (1), Northern Sydney LHD (1), Hunter New England LHD (1) and Central Coast LHD (1). One of the two cases that live outside of Sydney is known to have had household contact with another pending case that lives in Sydney.

It is suspected that the earlier cases and some of the later cases have been exposed to a common source as they share overlapping incubation periods. Secondary cases have also been identified, with evidence that some infections have been transmitted from person to person. Men who engage in sexual activity with other men (MSM) are being reminded to get vaccinated as anal sex and oral-anal sex have been identified as risk factors for infection (see media release). Despite extensive investigation, to date no food item or other possible exposure has been found in common with all the cases. NSW public health units are continuing to investigate possible sources of infection in conjunction with the NSW Food Authority (see the related media release).

Hepatitis A is a viral infection of the liver. Symptoms include feeling unwell, lack of appetite, aches and pains, fever, nausea, and abdominal discomfort, followed by dark urine, pale stools and jaundice (yellowing of the skin and eyes). The illness usually lasts from one to three weeks. People who experience these symptoms are advised to see their GP.

Infected people can transmit the virus to others from two weeks before the development of symptoms until one week after the appearance of jaundice. The virus is spread by the faecal-oral route, including through the consumption of contaminated food or water or by direct contact with an infected person. While infectious, people diagnosed with hepatitis A should avoid preparing food or drink for other people, sharing utensils or towels, or having sex for at least one week after onset of jaundice.

There is no specific treatment for hepatitis A and people sometimes require hospitalisation for supportive care. A safe and effective vaccine is available, with two doses spaced at least six months apart shown to provide high levels of protection against infection for many years. Hepatitis A vaccination is routinely recommended for people at higher risk of infection and those who are at increased risk of severe liver disease. These include travellers to countries where hepatitis A is common (most developing countries), some occupational groups, men who have sex with men, people with developmental disabilities and people with chronic liver disease.

People exposed to hepatitis A can be protected from developing the disease if they receive the vaccine or protective antibodies within two weeks of exposure.

Follow the links for NSW Health <u>hepatitis A notification data</u> and the NSW Health <u>hepatitis A</u> fact sheet.

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 1 to 7 October 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Bloodborne Diseases	Hepatitis C - Newly Acquired	1	1	27	22	22	25	29
Enteric Diseases	Cryptosporidiosis	11	5	1147	856	708	1184	1040
	Giardiasis	28	41	2440	2847	2690	3481	3413
	Hepatitis A	6	2	47	30	64	41	72
	Listeriosis	1	0	14	29	19	36	26
	Rotavirus	123	141	1499	395	627	750	1033
	STEC/VTEC	1	2	43	35	14	65	29
	Salmonellosis	37	32	2947	3654	3164	4544	4022
	Shigellosis	4	4	170	239	136	310	172
	Typhoid	2	1	46	30	33	37	41
Respiratory Diseases	Influenza	2963	5071	98013	32175	28886	35540	30295
	Legionellosis	4	0	97	107	80	134	96
	Tuberculosis	11	6	378	383	335	534	445
Sexually Transmissible Infections	Chlamydia	386	412	21963	20082	17393	25991	22525
	Gonorrhoea	121	148	7105	5341	4238	7003	5395
Vaccine Preventable Diseases	Measles	2	0	28	10	7	16	9
	Meningococcal Disease	2	6	70	56	36	70	46
	Pertussis	62	59	4341	8270	7045	10956	12078
	Pneumococcal Disease (Invasive)	15	18	538	419	402	544	494
Vector Borne Diseases	Dengue	3	3	216	380	260	481	344
	Malaria	2	1	57	41	33	59	47
	Ross River	7	7	1420	378	1464	542	1635

* 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.