

Communicable Diseases Weekly Report

Week 37, 10 to 16 September 2017

In summary, we report:

- Measles one new imported case
- Hepatitis A three new locally-acquired 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.

Measles

One case of measles was notified during this reporting week (<u>Table 1</u>). This case was in a young, unvaccinated adult who acquired the infection while in Thailand.

Whilst infectious they visited a number of locations in Sydney around Sutherland Shire before being diagnosed with measles and isolated. A NSW Health <u>media alert</u> has been issued providing information the exposure sites. 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 are infected by someone who contracted the disease whilst overseas. 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 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 <u>measles vaccination information</u>.

Hepatitis A

Three new cases of locally-acquired hepatitis A infection were reported this week (Table 1).

From July 25 to September 16, 2017, there have been 18 cases of hepatitis A reported in adults in NSW. On average, there are three cases reported in NSW per month, and most cases acquire their infection overseas. Only two of the 18 recent cases have any overseas exposure.

Molecular typing of the viruses isolated from 11 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 11 cases is 47 years (range 29 to 69 years). Ten of the 11 cases are male, with three reporting being men who have sex with men (MSM). These 11 cases are residents of South Eastern Sydney Local Health District (LHD) (5), Sydney LHD (2), Northern Sydney LHD (2), Illawarra Shoalhaven LHD (1) and Hunter New England LHD (1). The two 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 seven remaining cases have molecular typing results pending: all are males with a median age of 41 years (range 30 to 60 years). Five of these cases report MSM activity during their exposure period. The cases are residents of South Eastern Sydney LHD (3), Sydney LHD (2), Western Sydney LHD (1), and Central Coast LHD (1). The Central Coast case reported travel to Sydney during their exposure period.

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 some cases (see media release). Despite extensive investigation, to date no food item or other possible exposure has been found in common with all the cases. Health Protection NSW and public health units are continuing to investigate possible sources of infection in conjunction with the NSW Food Authority (see the related media release).

The recent NSW cases are unrelated to the national outbreak of hepatitis A linked with frozen berry consumption which was under investigation from June to September 2017. None of the locally acquired cases of hepatitis A in NSW match the genetic type of the berry outbreak, and few have reported eating any brand of frozen berries prior to their illness.

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. 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 10 - 16 September 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Bloodborne Diseases	Hepatitis D	1	0	10	14	7	20	9
Enteric Diseases	Cryptosporidiosis	8	4	1125	829	683	1184	1040
	Giardiasis	32	38	2325	2723	2547	3481	3413
	Hepatitis A	3	4	36	30	62	41	72
	Rotavirus	103	124	1078	343	458	750	1033
	STEC/VTEC	2	0	40	31	13	65	29
	Salmonellosis	27	33	2836	3497	3033	4544	4022
	Shigellosis	4	2	159	222	130	310	172
Respiratory Diseases	Influenza	6434	9685	83453	28415	25554	35540	3029
	Tuberculosis	14	8	348	355	311	534	44
Sexually Transmissible Infections	Chlamydia	460	508	20596	18602	16248	25991	2252
	Gonorrhoea	174	141	6596	4988	3928	7003	539
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	8	215	186	135	257	18
	Measles	1	0	26	10	7	16	,
	Meningococcal Disease	2	5	60	49	32	70	46
	Mumps	1	2	82	40	39	67	6
	Pertussis	76	67	4128	7639	6349	10956	12078
	Pneumococcal Disease (Invasive)	13	29	466	379	363	544	49
Vector Borne Diseases	Dengue	4	1	205	365	247	481	344
	Malaria	1	2	54	38	31	59	4
	Ross River	8	14	1393	361	1427	541	163

* 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 <u>Database of Adverse Event Notifications</u>.

•	Only conditions for which at least one case report was received appear in the table. HIV and other chronic blood-borne virus case reports are not included here but are available from the Infectious Diseases Data webpage.