Communicable Diseases Weekly Report

Week 24, 10 June to 16 June 2018

In summary, we report:

- Hepatitis A – three new cases
- Acute rheumatic fever – one new case
- 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.

Hepatitis A

Three new cases of hepatitis A infection were reported during this reporting week (Table 1). One case was a teenager from metropolitan Sydney who acquired their infection from overseas. Over 50 local close contacts of this case were identified and recommended post-exposure prophylaxis.

The other two cases are thought to have acquired their infections in NSW, and are adults from metropolitan Sydney and regional NSW. Neither reported consuming Creative Gourmet Pomegranate Arils; however, both consumed other foods which may be a risk for hepatitis A. The isolates for these cases will be genotyped to determine if they are related. Close contacts of these cases have also been recommended post-exposure prophylaxis where appropriate.

Creative Gourmet Pomegranate Arils were recalled in April 2018 and have so far been linked to 26 cases nationally, in New South Wales (12 cases), Australian Capital Territory (1 Case), Queensland (1 case), Western Australia (3 cases), Victoria (5 cases), South Australia (2 cases) and the Northern Territory (2 cases). See the Hepatitis A outbreak linked to pomegranate webpage for further information about this outbreak and what people should do if they have eaten this product.

Of the 57 hepatitis A cases notified in NSW to 16 June this year, 24 have been acquired in NSW, including six which were linked to an imported (acquired overseas) case. NSW Health investigates each hepatitis A case with an in-depth questionnaire including what foods were eaten in the 15 to 50 days before disease onset to try to determine the possible source of their infection. NSW Health investigates possible sources of all locally-acquired hepatitis A notifications in conjunction with the NSW Food Authority.

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. 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 the 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 and 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.

Routine hepatitis A vaccination requires two doses spaced at least six months apart. This has been 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.

Follow the links for NSW Health hepatitis A notification data and the NSW Health hepatitis A fact sheet.

Acute rheumatic fever

One case of acute rheumatic fever (ARF) was reported this week in an Aboriginal child from Hunter New England Local Health District (LHD). The family of this case will be provided with information about ARF, rheumatic heart disease (RHD) and how to reduce the risk of recurrent episodes of ARF. Permission will also be sought to add this case to the NSW Health ARF/RHD register to help with the ongoing management of this case.

In 2017, there were 45 notifications of ARF and RHD in NSW, including one recurrent case of ARF. This was a 36% increase over 2016 likely due to improved case reporting since the conditions became notifiable in October 2015. Overall, 79% of people notified were aged less than 25 years, with 53% aged between 5 and 14 years. The majority of people are from high risk backgrounds: 50% identified as Aboriginal and Torres Strait Islander and another 41% identified as having a Maori or Pacific Island background.

ARF is a rare but serious inflammatory complication of infection with group A streptococcus (GAS). GAS infection is common and usually presents as a sore throat. Polyarthritis (pain and swelling in several joints) and fever are the most common symptoms of ARF. Other signs and symptoms may include signs of carditis (inflammation of the heart) such as a heart murmur, chorea (jerky limb movements arising from inflammation of the brain), erythema marginatum (a distinctive skin rash), and subcutaneous nodules. Episodes of ARF can cause permanent damage to the heart valves leading to RHD.

ARF most commonly affects children aged 5-14 years, and higher rates of ARF and RHD occur in particular population sub-groups, including Aboriginal and Torres Strait Islander people, Maori and Pacific Island people, and people born outside of Australia, particularly those from South-east Asia and Africa. Higher rates are also seen in women and in people living in disadvantaged conditions and where access to health services is poor.

An initial course of antibiotics, either a single intramuscular injection of benzathine penicillin G (BPG) or a 10 course of penicillin, is recommended for patients with an acute episode of ARF. Otherwise, patients are given supportive treatment with the aim of reducing joint pain, swelling, and fever. In addition, people diagnosed with ARF require long-term follow-up to prevent further episodes of ARF, including administration of BPG intramuscularly every 21-28 days for a minimum of 10 years. This is given to prevent repeat GAS infections, which may lead to repeat episodes of ARF and worsening valvular disease. People with ARF should also have annual medical and dental reviews, and an echocardiogram every two years. People with RHD may require more frequent clinical review.

NSW Health has established a register for people diagnosed with ARF and RHD to assist patients and their doctors manage adherence to regular penicillin prophylaxis and clinical reviews. Notification is required for new cases of ARF in people of all ages and RHD in those aged less than 35 years. Notification is the first step in accessing the NSW RHD Register for both new and existing cases. In 2017, 42% of eligible people gave consent to be added to the NSW RHD Register. NSW Health has also recently released a Framework to guide services in the diagnosis and management of ARF and RHD patients at a local level.

Timely and appropriate treatment of sore throats and skin infections in high-risk populations, such as Aboriginal and Torres Strait Islander people and Maori and Pacific Islander people, can reduce

the risk of ARF. The NSW Health guideline GL2014_21, Infants and children: Acute management of sore throat recommends the use of antibiotics to prevent ARF in high risk populations.

Further information is available from NSW Health and RHD Australia.

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 June – 16 June 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	0	16	14	15	35	25
Enteric Diseases	Cryptosporidiosis	6	12	435	1011	698	1266	1184
	Giardiasis	42	48	1338	1775	2005	2994	3480
	Hepatitis A	3	0	57	14	24	72	41
	Rotavirus	6	5	416	321	240	2318	750
	STEC/VTEC	1	3	31	30	21	53	65
	Salmonellosis	46	41	1845	2280	2611	3680	4533
	Shigellosis	4	5	104	100	147	235	310
Other Diseases	Acute Rheumatic Fever	1	0	12	8	7	19	16
Respiratory Diseases	Influenza	89	70	4432	4937	3702	103851	35540
	Legionellosis	2	2	72	61	71	138	134
	Tuberculosis	9	6	209	230	219	543	534
Sexually Transmissible Infections	Chlamydia	438	591	14731	13806	12231	28977	25990
	Gonorrhoea	170	200	4939	4496	3166	9173	6996
	LGV	1	0	26	15	26	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	8	7	147	164	138	271	258
	Meningococcal Disease	1	0	27	27	23	91	70
	Mumps	2	0	42	66	18	128	67
	Pertussis	87	68	1803	2842	5406	5367	10956
	Pneumococcal Disease (Invasive)	10	13	196	199	184	681	545
Vector Borne Diseases	Barmah Forest	2	2	42	68	26	127	40
	Dengue	1	4	142	159	276	306	485
	Ross River	24	13	318	1366	345	1653	595
Zoonotic Diseases	Psittacosis	1	0	5	6	1	9	9
	Q fever	2	5	84	108	110	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.