Communicable Diseases Weekly Report

Week 02, 6 January to 12 January 2019

In summary, we report:

- Hepatitis A and typhoid fever – infections in returning travellers
- Measles – two new cases with eight since Christmas.
- 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 and typhoid fever

Two new cases of hepatitis A infection and four new cases of typhoid fever were reported during this reporting week among residents of metropolitan Sydney (Table 1).

Five of these six infections (one hepatitis A, four typhoid fever) were in otherwise healthy adults who acquired their illness during overseas travel while visiting family over the holiday period (in India, Pakistan, Samoa, Malaysia or Singapore). Both hepatitis A and typhoid are preventable through the vaccinations recommended for people travelling to countries endemic for hepatitis A and typhoid fever.

People travelling overseas should visit their GP or travel clinic at least four weeks before travel to confirm they are up to date with the vaccinations recommended for their destinations, and to allow time to have any vaccines they are missing. It is also important to remember to be alert to symptoms of serious infectious diseases on your return from any travel overseas.

The other case of hepatitis A was acquired in NSW. The infection was diagnosed in a preschool child who did not travel or have any contact with known hepatitis A cases, but had possibly been in contact with returned travellers. The hepatitis A virus isolate for this case will be genotyped to determine if it is related to any other cases in Australia. As hepatitis A can be easily spread among small children, over 50 child care contacts of this case were identified and recommended post-exposure prophylaxis.

Hepatitis A

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.

Typhoid fever

Typhoid fever is caused by an infection with bacteria called *Salmonella* Typhi. People with typhoid may experience mild or severe symptoms. The symptoms may include fever, headache, non-productive cough, general discomfort and a lack of appetite. Some people have rose-coloured

spots on the trunk of the body. Constipation or diarrhoea may occur. If symptoms are severe, hospitalisation may be required. Symptoms generally start 8 to 14 days following infection but possibly as early as 3 days or as late as 60 days after infection.

Typhoid is treated with antibiotics. Some people may never have symptoms but may be carriers of typhoid or paratyphoid. Antibiotic treatment is required to treat carriers also.

The bacteria that cause typhoid and paratyphoid fever are found in the faeces of infected individuals. Some people (known as carriers) continue to carry the bacteria even after symptoms have resolved.

Transmission usually occurs when faecally-contaminated food and water are ingested. Therefore, typhoid fever is more common in less developed countries with poor sanitation, poor hand hygiene and food handling standards, and untreated drinking water. Raw fruits and vegetables and shellfish are the types of foods most often associated with the illness. Flies may also transfer the bacteria to food.

Further information

Further information on these infection is available in the NSW Health hepatitis A fact sheet and typhoid fact sheet.

Further information on safe travel and travel precautions is available from the NSW Health factsheet Staying healthy when travelling overseas.

Measles

NSW Health is again urging all residents to ensure they are fully protected against measles after two new cases were reported this week (Table 1). Subsequently, three more infectious cases were notified early in week 3, bringing the total number of infectious cases in NSW since Christmas to eight.

A series of alerts have been issued by NSW Health advising people, including passengers on two international flights, to be on the lookout for symptoms until 29 January.

Six of the eight cases had acquired their infections overseas, including Thailand (2), Sri Lanka (2), Myanmar (1), and the Philippines (1). The remaining two cases acquired their infection in Australia following contact with people who caught the infection overseas.

One of the cases this week was a close contact of an earlier case (a child visiting from Thailand reported in Week 1) who developed the infection despite receiving preventive therapy. This unvaccinated Sydney resident had been identified as a close contact of the case prior to his illness, and he received an injection of antibodies (normal human immunoglobulin) as preventive therapy.

Immunoglobulin is usually highly effective (about 90%) in preventing measles in susceptible contacts if administered within six days of first exposure to an infectious case. In this instance the therapy was not completely effective as the person developed measles symptoms nine days after his first exposure to the case, but fortunately his symptoms were relatively mild.

Of the eight recent measles cases, three were unvaccinated older children or adolescents, one was an unvaccinated adult, and one was a child from overseas with uncertain vaccination history. The three remaining cases occurred in adults with undocumented vaccination histories.

Measles vaccination

The National Immunisation Program (NIP) currently recommends measles, mumps, rubella (MMR) vaccine for children at 12 months of age, and a second dose at 18 months as measles, mumps, rubella, varicella (MMRV) vaccine.

A single dose of measles vaccine was gradually introduced into immunisation programs in Australia from the late 1960's to the early 1970's. This means that measles infection became rare for those born in 1966 and later. However the important second dose was not introduced until the 1990's, and was at first given in primary school and then moved to a preschool dose. These changes in schedule

and the lack of an immunisation register until 1996 mean that many adults have unknowingly missed one or both doses of measles vaccine and remain susceptible to infection if exposed.

People born during or after 1966 who are not sure if they have received two doses of a measles-containing vaccine in the past are encouraged to get a free measles vaccine (MMR) from their GP. This is particularly important prior to overseas travel. People aged 16 years and older can now also access MMR from authorised pharmacists in NSW for a fee.

Measles and overseas travel

Parents travelling with children aged less than 12 months (i.e. under the recommended age for the first measles vaccine) should consult their doctor prior to travel. The first dose of a measles vaccine can be given as early as nine months of age if children are travelling to areas where measles may be circulating.

Returned travellers experiencing symptoms of measles should seek medical attention, but call ahead to alert staff at medical practices and emergency departments to advise them of your symptoms, so that measures can be taken to limit your exposure to others on arrival.

Travel history should be sought for all patients presenting with febrile illness, and clinicians should suspect measles in patients presenting with fever, cough, coryza, conjunctivitis, and/or rash. Potential sites of recent exposure to infectious measles cases in NSW are listed on the NSW Health Alerts Page.

There should be a higher level of suspicion for measles if the patient is unvaccinated (or of unknown vaccination status) and has recently travelled overseas, or reports contact with a local case. Patients suspected of having measles should be isolated until a negative result is received, or until four days after the presentation of rash.

Further information

For more information follow the link to the measles factsheet.

Follow the links for more information on measles vaccination, travelling overseas, measles notification data and measles alerts.

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 6 January to 12 January 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	12	8	20	40	72	708	1266
	Giardiasis	51	32	84	84	102	2665	3133
	Hepatitis A	2	0	2	2	2	86	71
	Rotavirus	14	9	24	35	36	802	2319
	STEC/VTEC	4	1	5	3	7	57	53
	Salmonellosis	119	74	187	209	189	3339	3681
	Shigellosis	18	12	31	8	14	528	235
	Typhoid	4	6	8	4	2	116	110
Respiratory Diseases	Influenza	421	222	630	399	301	17382	103852
	Legionellosis	4	5	8	4	3	167	138
	Tuberculosis	8	6	14	18	23	513	542
Sexually Transmissible Infections	Chlamydia	557	251	801	974	1004	31125	29006
	Gonorrhoea	189	110	299	390	349	10603	9161
	LGV	2	0	2	4	0	85	50
Vaccine Preventable Diseases	Measles	2	1	3	0	3	18	32
	Mumps	3	0	3	3	3	72	127
	Pertussis	176	155	321	166	302	6277	5366
	Pneumococcal Disease (Invasive)	4	8	9	16	12	688	683
Vector Borne Diseases	Dengue	2	4	9	24	10	288	306
	Malaria	2	1	3	3	3	65	68
	Ross River	6	10	15	11	148	569	1652
Zoonotic Diseases	Q fever	4	3	7	9	10	218	210

*** Notes on Table 1: NSW Notifiable Conditions activity**

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- 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.
- Cases involving interstate residents are not included.
- 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.
- Chronic blood-borne virus conditions (such as HIV, Hepatitis B and C) are not included here. Related data are available from the Infectious Diseases Data and the HIV Surveillance Data Reports webpages.