

Communicable Diseases Weekly Report

Week 25, 18 June to 24 June 2017

In summary, we report:

- Hepatitis C two newly acquired cases
- Safe travel in the school holidays advice on avoiding infectious diseases while travelling
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see <u>NSW Health Infectious Diseases</u>. Also see <u>NSW Health Infectious Diseases</u> Reports for links to other surveillance reports.

Hepatitis C

Two cases of newly acquired hepatitis C infection were notified in this reporting week. Both cases affected women in the 30-39 year old age-group; one is a regional NSW resident while the other lives in Sydney.

As hepatitis C can be a chronic infection it is rarely possible to know when a person acquired their infection. In rare instances, such as the cases above, previous negative tests for hepatitis C are available which allow public health officers to identify a period where the person is likely to have acquired their infection. Investigation of possible sources of infection for these cases is then undertaken by the relevant local public health units. At this stage there is no indication of any common exposure between these two recently notified cases.

Hepatitis C is caused by the hepatitis C virus (HCV) that infects the liver. This can result in severe liver damage with liver failure and/or liver cancer. About 80% of people who are infected with HCV will go on to have a chronic (long lasting) liver infection. HCV is transmitted from person to person when the blood of an infected person enters the bloodstream of an uninfected person.

In Australia, HCV transmission most frequently occurs when people share injecting equipment contaminated with the blood of an infected person. Needle and syringe program outlets throughout NSW supply clean injecting equipment to encourage people to protect themselves from acquiring hepatitis C. The use of sterile injecting equipment also protects against hepatitis B and HIV infections, as well as preventing serious bacterial bloodstream infections.

Effective new treatments, called direct acting antivirals (DAAs), are now subsidised on the Pharmaceutical Benefits Scheme for the treatment of people with chronic hepatitis C. DAAs have a cure rate of over 95% and have few side effects. They need to be taken for only 12 weeks for most people (24 weeks for some) and are available in tablet form for most cases. Previously available treatments were less effective, frequently had severe side effects and were given by injection for 6 to 12 months.

Hepatitis C treatment improves people's liver health by stopping liver damage caused by HCV. Following treatment some of the damage that has already occurred may repair. Successful treatment clears the virus so that the person can no longer transmit HCV to another person. People living with hepatitis C are strongly recommended to see their general practitioner about accessing hepatitis C treatment.

The NSW Hepatitis C Strategy 2014-2020 aims to reduce hepatitis C infections in NSW and improve the health outcomes of people living with hepatitis C, by reducing sharing of injecting equipment among people who inject drugs by 25% and increasing the number of people accessing hepatitis C treatment. Follow the link for information from the PBS on hepatitis C treatments.

Follow the links for further information about <u>hepatitis C</u>, the <u>NSW Hepatitis C Strategy 2014- 2020</u> and the 2016 Annual Data Report of the NSW Hepatitis B and C Strategies 2014-2020.

Safe travel in the school holidays

Many people are now preparing to travel to warmer destinations during the school holidays, such as to Bali, Thailand or the Pacific islands. It is important to remember that there is a wide range of infectious disease risks to consider before and during overseas travel.

Common infections acquired by travellers include those that follow ingestion of contaminated food, water or other drinks. Most of these are diarrhoeal diseases due to a range of gut pathogens but infections such as hepatitis A and typhoid fever are also acquired this way. Vaccines against hepatitis A, typhoid and cholera are available but these don't cancel the need for food safety precautions.

Mosquito-borne infections, such as <u>malaria</u>, <u>dengue</u>, and <u>Zika virus</u>, are important causes of fever in Australian travellers returning from areas where these infections are prevalent. <u>Yellow fever</u> occurs only in parts of Africa and Central and South America, while tick-borne encephalitis occurs in parts of Europe and Asia. Japanese encephalitis is spread by mosquitoes, usually in rural areas of Asia, particularly near rice paddies. A young Australian recently died from Japanese encephalitis after returning from a holiday in Bangkok and Phuket, underlining the importance of preventing mosquito bites when travelling. Make sure you pack an effective insect repellent if you are travelling to any regions where these infections circulate.

Due to the confirmed role of Zika virus causing congenital abnormalities in fetuses of some women infected during pregnancy, all pregnant women are advised to not travel to areas with active Zika virus transmission. The Australian Department of Health maintains a list of current Zika virus affected countries.

People intending to travel overseas should make an appointment to see their general practitioner or travel doctor well before the departure date. This gives an opportunity to discuss general health and allows enough time to have vaccinations related to the trip, including boosters for routine vaccinations and special vaccinations for particular destinations, and for <u>malaria</u> prophylaxis to be commenced if recommended.

Vaccines are available for protection against <u>yellow fever</u> and <u>Japanese encephalitis</u>, however these are only recommended for travel to specific regions. Prophylactic antibiotics to protect against <u>malaria</u> often needed to be started several weeks prior to travel. Other supplies to help prevent mosquito bites, such as bed-nets, may also need to be purchased.

Vaccine-preventable infections such as <u>influenza</u>, <u>meningococcal disease</u>, <u>measles</u>, <u>mumps</u> and <u>varicella (Chickenpox)</u> are a risk for travellers and can be prevented through routine vaccinations. Tuberculosis is a rare infection in travellers, but is a significant risk for those who spend long periods in <u>areas where TB is common</u>.

Blood-borne and sexually transmitted infections, such as hepatitis C and human.immunodeficiency virus (HIV), may pose a threat to some Australian travellers. Travellers may also be put at risk in some parts of the world where health care has less stringent infection control practices and non-sterile medical equipment is used. Hepatitis B vaccination will be relevant for many travellers.

Travellers to Asia, including Bali, may be exposed to a variety of other exotic infectious agents, such as <u>rabies</u> (from bites or scratches from rabid dogs, cats, monkeys and other land-based mammals in many countries), and <u>leptospirosis</u> (through activities like rafting or wading in contaminated streams). Of these, only rabies can be prevented by vaccination.

Further information on safe travel and travel precautions is available from the NSW Health factsheets Staying healthy when travelling overseas and Mosquitoes are a health hazard.

For more information of specific infections, see the $\underline{\text{NSW Health Communicable Disease fact}}$ sheets website.

There are several websites with reliable up-to-date information on risks to health in the countries you are planning to visit:

- The <u>Australian Department of Health</u> website has a range of important information for Australian travellers, including information on <u>Zika virus</u> and <u>yellow fever</u>, including current yellow fever vaccination requirements.
- The Australian Immunisation Handbook provides specific advice on <u>vaccination for</u> international travel.
- The Australian Government <u>Smartraveller website</u> has general information on health as well as areas where travel may be dangerous. This site also allows you to register your trip in case of an emergency while you are overseas.
- The US Centers for Disease Control and Prevention (CDC) <u>travel website</u> has country-specific and disease-specific advice for travellers as well as for health professionals.

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 – 24 June 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	12	10	1023	711	598	1184	1040
	Giardiasis	44	48	1815	2067	1919	3481	3413
	Hepatitis A	1	0	14	24	48	41	72
	Listeriosis	1	0	10	25	15	36	26
	Rotavirus	22	11	339	248	171	751	1033
	Salmonellosis	37	39	2322	2688	2492	4543	4022
	Shigellosis	5	3	105	155	85	310	172
	Typhoid	1	0	35	25	26	37	41
Respiratory Diseases	Influenza	758	492	5691	3966	2686	35538	30301
	Legionellosis	8	3	69	71	53	134	96
	Tuberculosis	12	9	219	227	208	532	443
Sexually Transmissible Infections	Chlamydia	485	398	14245	12784	11338	25990	22525
	Gonorrhoea	133	136	4667	3339	2587	7005	5397
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	2	158	142	100	257	186
	Meningococcal Disease	2	0	30	24	20	75	47
	Pertussis	112	91	2949	5539	3514	10957	12079
	Pneumococcal Disease (Invasive)	9	11	210	193	187	543	494
Vector Borne Diseases	Barmah Forest	3	4	59	22	141	35	184
	Ross River	19	29	1284	329	1268	541	1635
Zoonotic Diseases	Q fever	3	5	105	115	115	230	264

* 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 other blood-borne virus case reports are not included here but are available from the <u>Infectious</u> Diseases Data webpage.