

# **Communicable Diseases Weekly Report**

### Week 29, 16 July to 22 July 2017

In summary, we report:

- <u>Dengue</u> seven new cases, including four linked to Sri Lanka
- Measles one new case in an overseas traveller
- Summary of notifiable conditions activity in NSW

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

### **Dengue**

There were seven new cases of dengue notified this week (<u>Table 1</u>). While this mosquito-borne infection can be acquired in many parts of the world, locations in South East Asia are most commonly associated with dengue infection in NSW travellers. Four of these cases were in people who became infected during travel in Sri Lanka, a country that has seen a large increase in dengue activity in 2017. The Sri Lanka Ministry of Health <u>recently reported</u> that from 1 January to 7 July 2017 there had been 80,732 dengue fever cases (a 4.3 fold increase), including 215 deaths.

Of the 164 dengue cases reported so far in NSW in 2017 (by onset date), the most common countries where the infection has been acquired are Vanuatu (20.1%), Indonesia (19.5%), Thailand (14.6%), Fiji (12.2%) and Sri Lanka (10.4%).

Dengue is usually spread by one of two types of mosquito: the 'yellow fever' or 'dengue mosquito' (*Aedes aegypti*) and the 'Asian tiger mosquito' (*Aedes albopictus*). These mosquitoes become infected when they feed on someone who has the dengue virus in their bloodstream. Once the mosquito is infected, the virus multiplies inside the mosquito over several days and can infect other people when the mosquito feeds again.

Dengue usually presents with severe flu-like symptoms. Symptoms usually begin 4 to 7 days (range 3 to 14 days) after being bitten by an infected mosquito, and include sudden fever, chills, severe headache with pain behind the eyes, swollen glands, muscle and joint pain and extreme fatigue. There may also be abdominal pain, nausea and vomiting. A faint red rash sometimes develops on the upper body around the third day. The fever typically lasts around 6 days. Severe dengue is a rare but potentially deadly complication characterised by bleeding and/or circulatory collapse. A blood test is required to correctly diagnose dengue and distinguish it from other similar mosquito-borne infections.

People who travel to dengue-affected areas are at risk. Affected areas include many tropical countries throughout Asia, the Pacific, Latin America and the Caribbean, and parts of sub-Saharan Africa and the Middle East. For a map showing areas where dengue is likely to be present see the HealthMap Dengue site.

There are currently no vaccines available in Australia against dengue. Travellers to affected areas should avoid being bitten by mosquitoes. Peak biting activity of the dengue mosquito is during daylight hours; they will often enter buildings and hide in dark places such as under furniture. They tend to bite around the feet and ankles, and the bites often go unnoticed.

Travellers to dengue-affected areas should stay in accommodation with screened windows and doors and wear light-coloured clothing that covers the arms and legs. Travellers should apply insect repellent containing DEET or picaridin to exposed skin, and re-apply during the day according to the manufacturer's instructions. Repellents containing oil of lemon eucalyptus (OLE) or para menthane diol (PMD) also provide adequate protection.

Travellers, particularly pregnant women and couples planning pregnancy, should also be aware of the risk of Zika virus, another mosquito-borne infection related to dengue. For specific advice on Zika virus see the <u>NSW Health Zika virus information page</u>.

For additional advice on steps to avoid being bitten by mosquitoes see the <u>Mosquitoes are a</u> Health Hazard Factsheet.

For further information on dengue notifications in NSW residents see the diseases data page.

### **Measles**

One case of measles was notified during this reporting week (<u>Table 1</u>). This case was in a young adult visiting from Indonesia who first developed symptoms in Melbourne before flying to Sydney. In Sydney they visited a number of locations around the CBD and inner west before being diagnosed with measles and isolated. A NSW Health <u>media alert</u> has been issued providing information on the flight and other exposure sites. NSW public health units have followed up NSW contacts where possible to provide information and vaccination as required.

This is the first case of measles in NSW since an outbreak in March 2017 was triggered by a returning traveller from Indonesia (Bali).

Australia was one of the first countries in the Western Pacific region to be declared 'measles-free' thanks to the effectiveness of its childhood 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 local 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 when travelling. 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 two further doses at 12 and 18 months are still 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 <u>diseases data page</u>.

Follow the link for more measles vaccination information.

## 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 16 – 22 July 2017, by date received\*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	8	7	1063	756	639	1184	1040
	Giardiasis	38	29	1985	2281	2156	3481	3413
	Hepatitis A	1	0	16	27	53	41	72
	Rotavirus	43	24	451	277	200	750	1033
	Salmonellosis	41	51	2502	3016	2683	4544	4022
	Shigellosis	9	5	123	183	98	310	172
Respiratory Diseases	Influenza	3064	2206	13506	6544	4562	35541	30297
	Legionellosis	1	1	75	85	64	134	96
	Tuberculosis	8	10	253	259	243	534	445
Sexually Transmissible Infections	Chlamydia	414	501	16305	14682	12975	25990	22525
	Gonorrhoea	127	159	5242	3901	3053	7005	5396
Vaccine Preventable Diseases	Adverse Event Following Immunisation	8	4	187	157	113	257	186
	Haemophilus influenzae type b	1	0	5	2	3	5	5
	Measles	1	0	26	10	7	16	9
	Meningococcal Disease	1	3	38	28	23	75	47
	Mumps	3	2	72	27	32	67	65
	Pertussis	112	92	3341	6077	4231	10957	12079
	Pneumococcal Disease (Invasive)	26	26	295	250	235	544	494
	Rubella	1	1	4	8	4	10	6
VectorBorne Diseases	Barmah Forest	3	0	73	26	146	35	184
	Dengue	7	2	172	308	206	481	344
	Malaria	2	1	43	26	23	59	47
	Ross River	9	8	1322	340	1313	541	1635
Zoonotic Diseases	Q fever	3	1	121	126	130	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
  Infectious Diseases Data webpage.