

Communicable Diseases Weekly Report

Week 49, 5 to 11 December 2016

In summary, we report:

- Measles one new case
- Ross River virus increase in notifications.
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see NSW Health Infectious Diseases.

Also see NSW Health Infectious Diseases Reports for links to other surveillance reports.

Measles

One case of measles was notified this reporting week in an adult from Northern NSW Local Health District. It is likely that this person acquired the infection through contact with another infectious case while in Queensland. Contacts are being followed up by the local public health unit. Thirteen measles cases have been reported this year to date in NSW. Of these cases, seven acquired the infection outside Australia, and six acquired their infection in Australia (three in Queensland, two in NSW, and one with an unknown state of acquisition). Northern NSW Local Health District has issued a media alert about the most recent case

Measles is endemic in many countries and it is important for people planning travel to make sure they are vaccinated. Travellers returning from areas where measles still circulates should seek medical advice if they develop the symptoms of measles. It is important that if someone suspects that they or a family member has symptoms of measles, they call ahead to their local doctor or emergency department so arrangements can be made to keep the person with suspected measles away from others who could be at risk of infection.

The measles virus is 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 3-4 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 1 per 100,000 cases.

Vaccination is highly effective at preventing measles with two doses of measles containing vaccine offering protection against infection in 99% of people. Vaccination not only benefits those who receive it but also protects others, such as those too young or unable to be vaccinated, by reducing the risk that an unvaccinated person is exposed to measles virus; this is known as herd immunity.

Anyone born in or after 1966 should have had two doses of measles containing vaccine, which is free for people up to 50 years of age in NSW. Measles containing vaccine is now routinely offered to all children at 12 months (as measles-mumps-rubella) and 18 months (as measles-mumps-rubella-varicella) of age through the National Immunisation Program.

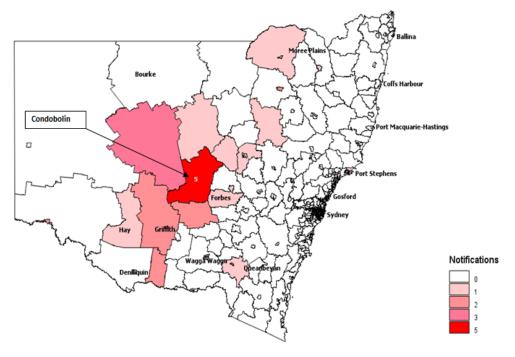
If you were born in or after 1966 and are unsure of your vaccination status, or have not had two vaccine doses in the past (and not had a confirmed measles infection), consult your GP for more advice. This is particularly important prior to overseas travel as the risk of being exposed to a case of measles is greater when travelling.

For more information please follow these links: <u>measles fact sheet</u>, <u>measles notifications</u> and measles vaccination.

Ross River virus

There were 18 notifications of human Ross River virus (RRV) infection reported this week, up from 13 notifications in the previous week (<u>Table 1</u>). Since 1 November 2016 there have been 41 notifications of RRV, with the highest numbers of cases reported from parts of the Murrumbidgee and Western NSW local health districts (LHD), with few reports from coastal areas (Figure 1). The Condobolin area had the highest number of notifications (5) for NSW.

Figure 1. Notifications of Ross River virus, 1 November to 11 December 2016, by onset date.



While RRV notifications remain at relatively low levels there is an upward trend, particularly in the parts of Murrumbidgee and Western NSW LHDs affected by flooding earlier this year. This is also consistent with the continuing reports of RRV and other arboviruses being detected in mosquitoes collected from these parts of NSW as part of routine surveillance. See the NSW Arbovirus and Vector Monitoring Program weekly reports for further details.

After periods of flooding, mosquito numbers can rapidly increase and cause nuisance as well as increase the risk of transmission of RRV and other arboviruses. For advice see the NSW Health fact sheet Advice on Mosquito Control During Floods and Public Events.

RRV is one of a group of arboviruses characterised by transmission through the bite of infected mosquitoes. Some people who are infected with the virus do not develop symptoms, while others experience flu-like symptoms that include fever, chills, headache and aches and pains in the muscles and joints.

Patients often report that their joints can become swollen, and joint stiffness may be particularly noticeable in the morning. A rash may also appear on the torso, arms or legs. The rash and other symptoms usually resolve after 7 to 10 days, although some people may experience symptoms such as joint pain and tiredness for many months.

There are no vaccines to protect against the arboviruses that cause human infections in NSW; therefore prevention relies on measures to avoid being bitten by mosquitoes and to reduce mosquito breeding near homes. Mosquitoes that carry these viruses are usually most active in the hours after sunset and again around dawn, but may bite throughout the day.

People should remember to cover up and take care to reduce the risk of a serious mosquito-borne infection by following some simple precautions:

- Use an effective repellent on exposed skin areas. Re-apply repellent every few hours, according to the instructions, as protection wears off from perspiration, particularly on hot nights or during exercise.
- The best mosquito repellents contain diethyl toluamide (DEET) or picaridin. Repellents containing oil of lemon eucalyptus (OLE; also known as extract of lemon eucalyptus) or para menthane diol (PMD) also provide adequate protection. Some products (e.g. citronella) provide only short periods of protection.
- Topical repellents are not recommended for use on children below the age of 3 months.
- Note that prolonged or excessive use of repellents can be dangerous, particularly on babies and young children. Avoid putting repellent near eyes and mouth, spread sparingly over the skin, and rinse off once you are indoors.
- Provide mosquito netting, where necessary both indoors and outdoors.
- Cover up as much as possible with loose fitting clothing and sensible footwear. Avoid tight clothes.
- Cover your clothes with repellent as mosquitoes can bite through material, but be careful as some repellents stain clothes.
- Use mosquito coils outdoors and plug-in devices with vaporising mats indoors.

For more information, see the following NSW Health fact sheets and resources:

- NSW Health Mosquitoes are a Health Hazard factsheet with tips on prevention
- NSW Health Fight the Bite! campaign posters and media resources
- NSW Health Ross River virus notifications data.

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 5 to 11 December 2016, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	54	32	1065	910	394	1038	429
	Giardiasis	51	55	3332	3222	2756	3416	2942
	Hepatitis A	2	1	36	69	73	71	80
	Rotavirus	26	33	673	971	669	1036	714
	STEC/VTEC	6	3	58	25	30	29	31
	Salmonellosis	99	73	4296	3749	3988	4040	4272
	Shigellosis	5	5	287	160	203	172	212
	Typhoid	2	0	66	80	84	82	88
Respiratory Diseases	Influenza	134	155	35198	30183	20747	30306	20888
	Tuberculosis	7	9	479	413	455	445	475
Sexually Transmissible Infections	Chlamydia	478	549	24736	21234	21723	22548	22899
	Gonorrhoea	155	160	6651	5076	4635	5398	4876
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	4	242	181	251	186	258
	Haemophilus influenzae type b	1	0	5	5	6	5	6
	Measles	1	1	13	8	67	9	68
	Meningococcal Disease	3	1	73	45	35	46	37
	Mumps	2	2	56	56	80	64	82
	Pertussis	221	260	10433	10750	2695	12083	3051
	Pneumococcal Disease (Invasive)	5	12	537	471	486	495	511
Vector Borne Diseases	Dengue	5	6	428	314	367	343	378
	Malaria	3	2	56	44	85	47	87
	Ross River	18	13	437	1591	611	1637	673
Zoonotic Diseases	Psittacosis	1	1	9	2	12	3	13
	Q fever	2	10	208	249	172	265	190

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