

Communicable Diseases Weekly Report

Weeks 51-52, 19 December 2016 to 1 January 2017

In summary, we report:

- [Measles](#) – one new case in the Sydney cluster
- [Ross River virus](#) – continuing increase in notifications from central NSW
- [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 in this reporting period in an adult from Sydney Local Health District (SLHD). This person was a known close contact of one of the two measles cases recently reported from the Sydney metropolitan area (see [CDWR Week 50/2016](#)). This is the fourth case in a cluster linked to an imported measles case identified in early December. Close contacts are being followed up by the local public health unit and a public warning was issued highlighting additional areas of possible exposure in Leichardt, Pyrmont and Neutral Bay.

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 per cent 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.

People born in or after 1966 and who are unsure of their vaccination status, or have not had two vaccine doses in the past (and not had a confirmed measles infection), should consult their 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:

- [measles fact sheet](#)
- [measles notifications](#)
- [measles vaccination information](#).

Ross River virus

There were 39 notifications of human Ross River virus (RRV) infection reported this fortnight ([Table 1](#)). There were 71 RRV notifications made in December 2016 which was at the upper end of the historical average for this time of year, and which continues the early upward trend in the 2016/17 arbovirus season (Figure 1). Notifications continued to be highest for residents in central parts of the state, most notably in the Griffith area which had 6 notifications (Figure 2). There were few notifications in coastal parts of the State or in the Sydney metropolitan area.

Figure 1. Ross River virus notifications in NSW residents by month of disease onset, January 2013 to December 2016.

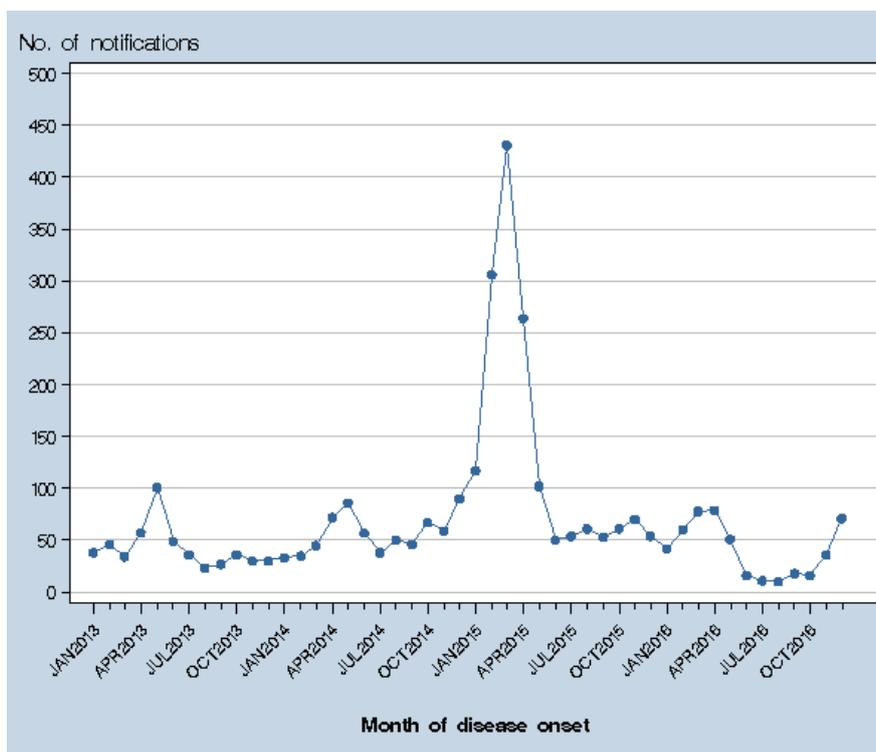
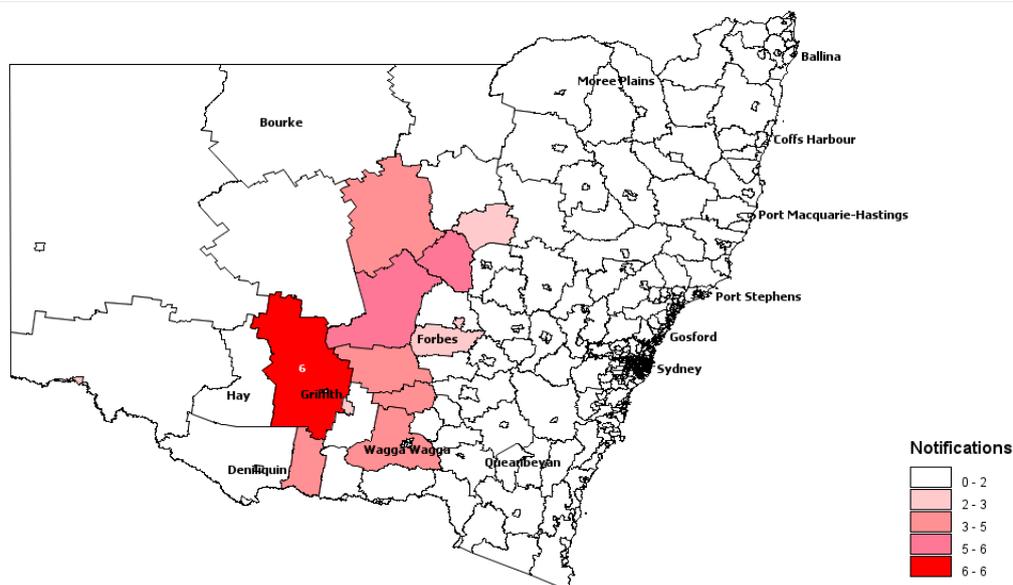


Figure 2. Ross River virus notifications in NSW residents for December 2016, by onset date and Australian Bureau of Statistics statistical area 2 (SA2).



The upward trend in human RRV notifications is also consistent with the continuing reports of RRV and other arboviruses being detected in mosquitoes collected from central parts of NSW as part of routine surveillance. See the [NSW Arbovirus and Vector Monitoring Program weekly reports](#) for further details.

NSW Health has recently issued a [media alert](#) renewing its call for people to protect themselves against mosquito bites when spending time outdoors during the holiday period to reduce the risk of arbovirus infections. This is particularly important for people travelling to areas with current Ross River virus activity.

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](#).

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](#).

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 19 December 2016 to 1 January 2017, by date received*

		Weekly		Year to date			Full Year	
		This week (52)	Last week (51)	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	12	53	1184	1024	429	1038	429
	Giardiasis	21	54	3465	3397	2942	3416	2942
	Haemolytic Uremic Syndrome	1	1	4	11	7	11	7
	Hepatitis A	3	0	40	70	80	71	80
	Listeriosis	1	1	36	26	23	26	23
	Rotavirus	2	34	740	1030	714	1036	714
	STEC/VTEC	1	2	64	28	31	29	31
	Salmonellosis	40	96	4546	4009	4272	4040	4272
	Shigellosis	2	9	303	171	212	172	212
Respiratory Diseases	Influenza	65	127	35522	30295	20888	30306	20888
	Legionellosis	4	3	129	95	72	96	72
	Tuberculosis	4	13	518	443	475	445	475
Sexually Transmissible Infections	Chlamydia	109	465	25929	22470	22898	22548	22898
	Gonorrhoea	41	146	6994	5361	4876	5398	4876
Vaccine Preventable Diseases	Measles	1	0	16	9	68	9	68
	Meningococcal Disease	1	2	76	46	37	46	37
	Pertussis	82	201	10925	11960	3051	12083	3051
	Pneumococcal Disease (Invasive)	1	6	550	491	511	495	511
Vector Borne Diseases	Malaria	1	2	59	46	87	47	87
	Ross River	8	31	501	1634	673	1637	673
Zoonotic Diseases	Q fever	1	0	223	263	190	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 [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.