

Communicable Diseases Weekly Report

Week 11, 9-15 March 2015

In summary, we report:

- [Legionnaires' disease](#) – two new cases
- [Ross River virus](#) – ninety five notifications this week
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases and alerts see the [Infectious Diseases](#) webpage.

Follow the [A to Z of Infectious Diseases](#) link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the [NSW Health Infectious Diseases Reports](#) webpage.

Legionnaires' disease

Two cases of Legionnaires' disease were notified during this reporting period. Both cases were caused by infection with *Legionella pneumophila* serogroup 1 (LP1). A review of the possible environmental exposures of both cases during their incubation periods identified travel to the Illawarra area, among other exposures. However, further investigation by the Illawarra Shoalhaven Local Health District public health unit failed to identify any likely common source of infection.

Legionnaires' disease is a type of pneumonia and the symptoms include fever, chills, cough and shortness of breath. Some people also have muscle aches, headache, tiredness, loss of appetite and diarrhoea. Risk factors for Legionnaires' disease include increasing age (most cases are aged over 50 years), smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high dose corticosteroids. People with Legionnaires' disease often have severe symptoms and infections are associated with a 15% mortality rate.

Legionnaires' disease is not spread from person to person. *L. pneumophila* bacteria can contaminate air conditioning cooling towers, spas, plumbing systems and other bodies of warm water. Outbreaks are sometimes associated with contaminated cooling towers that are part of air conditioning systems in large buildings. Regular inspections, disinfection and maintenance of cooling towers and plumbing systems limit the growth of the bacteria and prevent outbreaks of Legionnaires' disease.

The *Public Health Act 2010* and the *Public Health Regulation 2012* control various man-made environments and systems which are conducive to the growth of *Legionella* bacteria and which are capable, under the right conditions, of transmitting Legionnaires' disease. Follow the link for more information on the [regulatory control of Legionnaires' disease](#).

Legionnaires' disease can also be caused by other serogroups of *Legionella pneumophila* and other types of *Legionella* bacteria. *Legionella longbeachae* is a common cause in NSW and is found in potting mix and soils. To prevent Legionnaires' disease it is recommended that people handling potting mix wet the mix beforehand to reduce dust, wear gloves and a mask and wash their hands after handling potting mix or soil.

Follow the links for more information on [Legionnaires' disease](#) and on [notifications of Legionnaires' disease](#).

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Ross River Virus

There were 95 notifications of Ross River virus (RRV) infection reported this week (Table 1). Although this is a decrease on the previous week (128 notifications), notifications remain well above the average for this time of year. Notifications continue to be highest among residents of Northern NSW Local Health District (LHD), followed by the Hunter New England and Mid North Coast LHDs.

In this reporting week, the NSW arbovirus surveillance and mosquito monitoring program (NSWAP) detected RRV isolates from mosquito collection sites in Griffith, Leeton, Tweed, and Lake Macquarie. In Sydney, RRV was detected at several sites at Homebush and along the Georges River. There have been no arbovirus seroconversions in sentinel chickens in NSW this season.

The NSWAP also reported that mosquito collections from north coast collection sites remain well up following the recent rains associated with Tropical Cyclone Marcia, and were high generally in coastal areas including Sydney. For inland areas, mosquito numbers were again lower this week, although still high in Leeton.

The continuing elevated risk of RRV in many parts of NSW has prompted another warning for NSW residents including those planning travel during Easter and school holidays – see <http://www.health.nsw.gov.au/news/Pages/2015-nsw-health.aspx> .

Ross River virus is one of a group of arboviruses ('arthropod-borne' viruses) 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. Some 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.

During summer and autumn months remember to cover up and take care to reduce your chances of picking up a serious mosquito-borne infection by following these 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. Botanical based products (e.g. eucalyptus, 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.
- 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 further information:

- [NSW Arbovirus surveillance and vector monitoring program](#) (external link)
- 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](#).

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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 09 to 15 March 2015, by date received

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	37	38	288	144	501	427	1132
	Giardiasis	88	79	871	751	637	2939	2242
	Hepatitis A	2	3	28	30	29	80	62
	Rotavirus	5	9	93	89	112	710	508
	Salmonellosis	115	134	1396	1404	1134	4298	3483
	Shigellosis	1	1	44	88	34	209	136
	Typhoid	1	0	12	16	18	44	58
Respiratory Diseases	Influenza	86	88	807	700	397	20751	8403
	Legionellosis	2	1	21	18	23	72	108
	Tuberculosis	5	4	67	101	97	471	443
Sexually Transmissible Infections	Chlamydia	438	512	4940	5595	5167	22883	21090
	Gonorrhoea	117	94	1153	1141	1090	4863	4267
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	7	34	76	216	252	509
	Measles	1	0	5	47	3	68	33
	Pertussis	106	104	1261	513	665	3032	2378
	Pneumococcal Disease (Invasive)	2	5	52	57	75	509	490
	Rubella	1	1	4	2	1	10	12
Vector Borne Diseases	Barmah Forest	7	4	41	52	123	163	438
	Dengue	7	12	95	121	59	378	303
	Malaria	1	1	11	26	23	87	93
	Ross River	95	128	637	105	125	676	512
Zoonotic	Q fever	3	3	39	59	38	190	163

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.

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