

Communicable Diseases Weekly Report

Epi-Week 11 10 March 2014 – 16 March 2014

In summary, we report:

- **Legionnaires' disease** – a cluster of three cases associated with Bankstown
- **Measles** – seven new cases, six locally acquired
- **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

Four new cases of Legionnaires' disease were notified in this reporting week (Table 1). Two of the four cases were caused by infection with the legionella bacteria species known as *Legionella pneumophila* 1 (LP1) and two with *L. longbeachae*.

The South Western Sydney Local Health District (SWSLHD) Public Health Unit has identified that the two LP1 cases and a third LP1 case reported in February had lived in, worked or travelled through the same area of Bankstown and may have been exposed there. The public health unit, together with Bankstown City Council, has investigated cooling towers and other possible sources in the area. No source of the infections was found, with testing of water samples taken from the cooling towers in the area not demonstrating the presence of *Legionella* bacteria. The most recent case became unwell on 7 March 2014. Emergency Departments and general practitioners in SWSLHD were informed of the cases and asked to be on alert for any other possible cases. To 20 March 2013 there have been no further notifications of legionella in people who have been in the Bankstown area.

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), cigarette smoking and immunocompromising conditions such as diabetes, chronic lung disease, chronic kidney disease, cancer or being treated with high dose corticosteroids. People can become very sick with pneumonia; most people recover but the disease is occasionally fatal. 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 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.

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 [control of Legionnaires' disease](#).

L. longbeachae infections are most commonly due to inhaling dust from potting mix or similar contaminated soil sources. The risk of infection from potting mix dust can be reduced by following the manufacturers' warning present on potting mix labels, including wearing gloves and a high-filtering ('P2') mask when using potting mix, wetting down the potting mix to reduce the dust, and washing your hands after handling potting mix or soil.

Follow the link for more information on [Legionnaires' disease notifications data](#).

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Measles

There were seven notifications of measles this reporting week (Table 1), aged from 17 to 33 years. Only one case was acquired overseas, in someone who had travelled to Thailand and Myanmar. Four cases were family relatives of previous cases, including three siblings. One case was locally acquired in an area that had reported recent cases, but no epidemiological link to the previous cases could be identified. The seventh case had attended the music festival in Gosford where previously reported cases acquired their infections.

To 20 March 2014 there have been 42 notifications of measles in NSW in 2014. There are 3 main cluster groups.

One cluster of 13 cases originated from the Philippines. A brother and sister both acquired measles in the Philippines with secondary transmission to another family member. One of the cases attended the music festival in Gosford, resulting in six secondary cases in festival attendees. There were four tertiary cases in family members of one of the cases from the music festival. The average age of this cluster is 20 years (range 17-30 years).

There was another cluster of seven locally acquired cases. Two cases were Year 8 students at a K-12 independent school in western Sydney who are considered co-secondary cases linked to an unidentified index case at the school. Another student at the school was a tertiary case and there were four further cases in family members or social contacts making a total of seven cases.

The third cluster of four cases occurred in a family group where the index case imported the illness from the Northern Territory.

The remaining cases were largely overseas-acquired. These included ten from the Philippines, three from Vietnam, and one each from Bali, Indonesia, Hong Kong/Singapore and Thailand/Myanmar.

Figure 1: NSW measles notifications by age group and gender, 2014 to 20 March

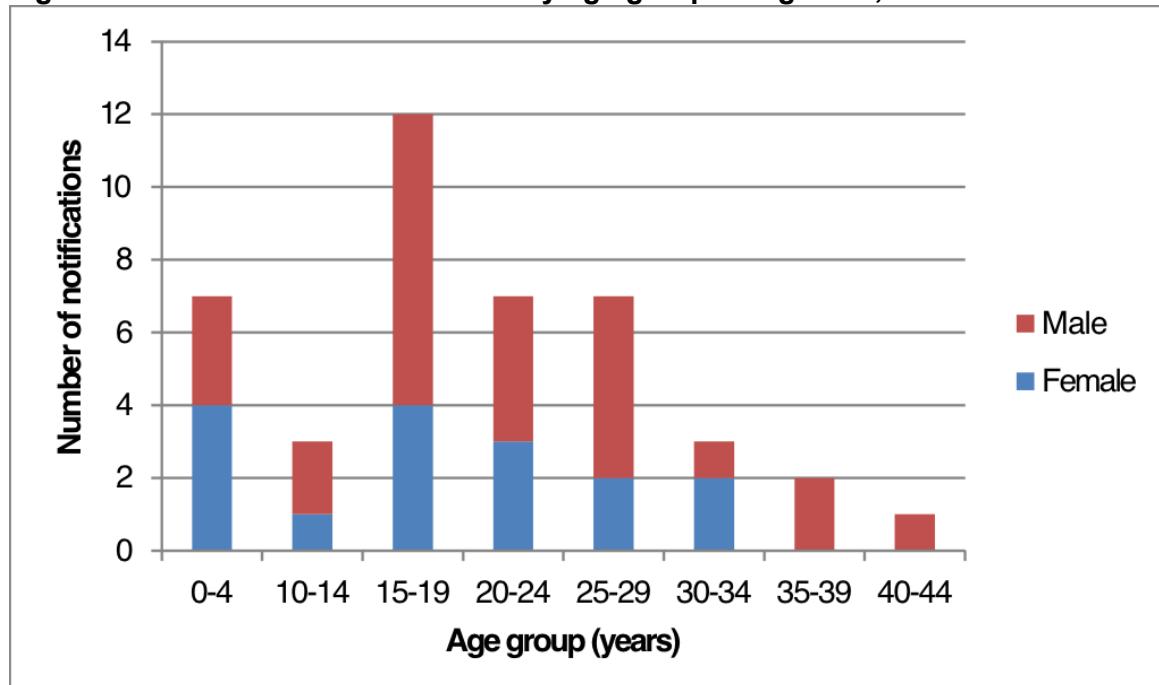


Figure 1 shows the age and gender distribution of measles notifications in 2014. Twenty-nine of 42 (69%) notifications have been aged 15 to 34 years. Of the 12 cases in the age group with the highest number of notifications, those aged 15 to 19 years, 6 had refused vaccination, 5 were of unknown vaccination status and only 1 was known to be fully immunised.

Figure 2 shows the Public Health Units that have received notifications and undertaken contact tracing for each case.

Figure 2: NSW confirmed measles notifications by epi-week and public health unit, 2014 to 20 March

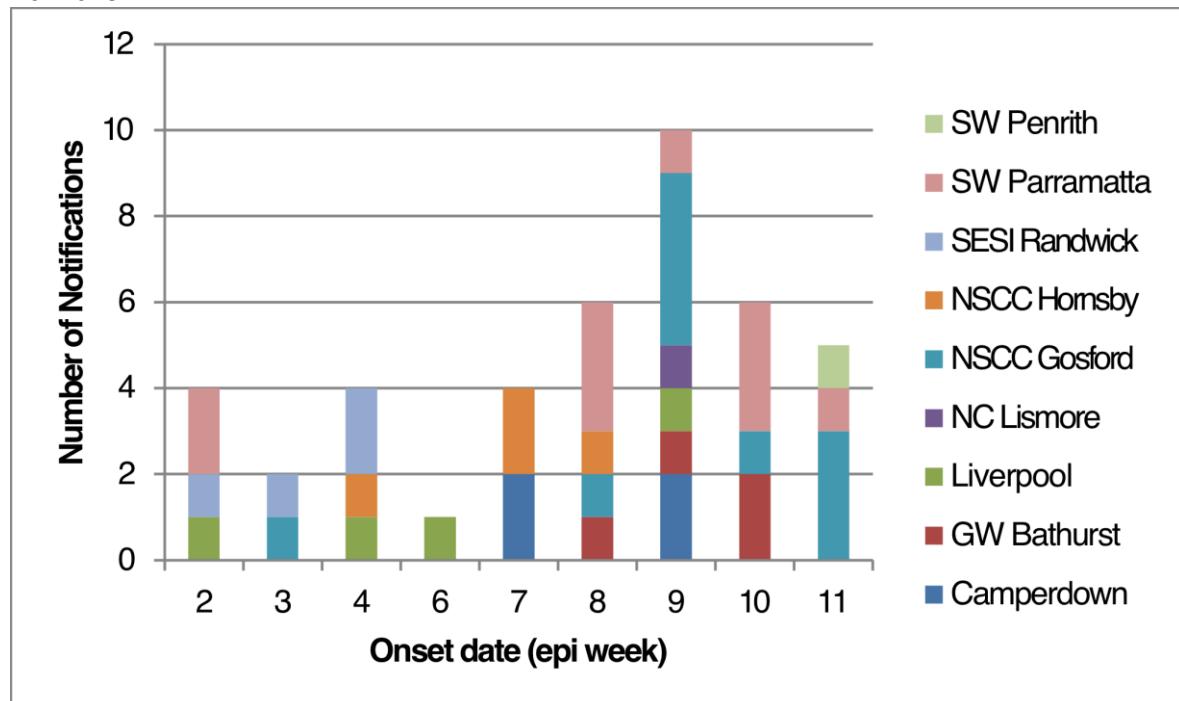
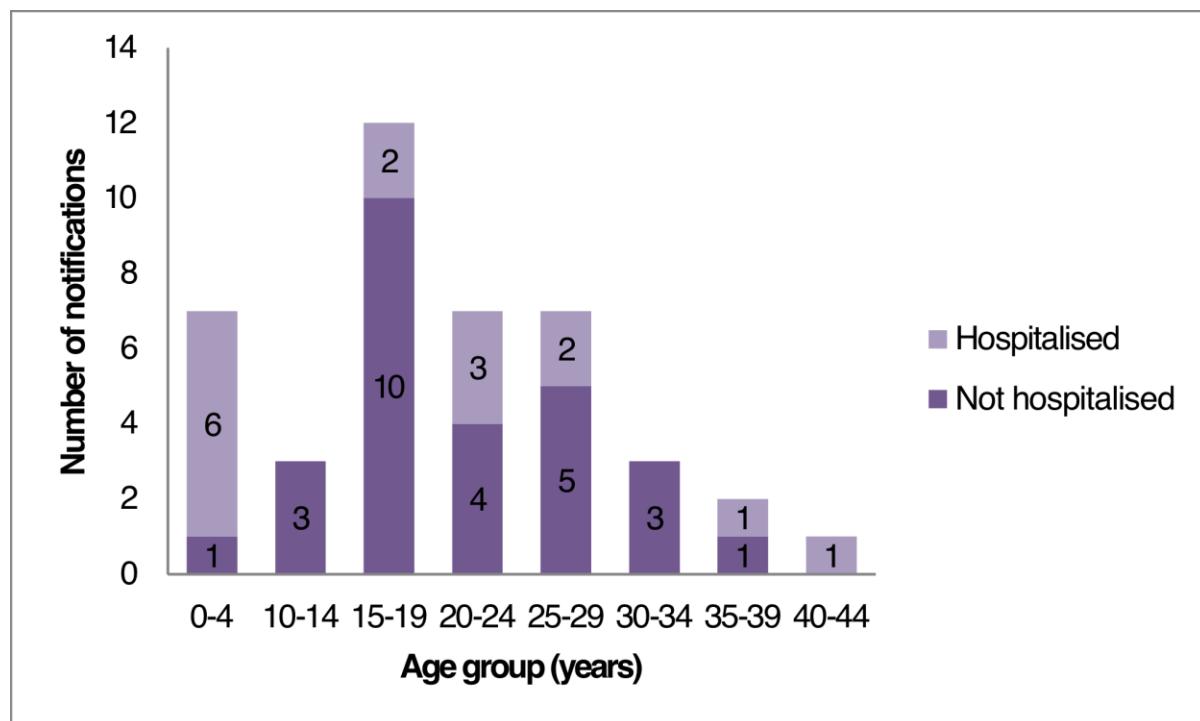


Figure 3: NSW confirmed measles notifications admitted to hospital by age, 2014 to 20 March



Measles is a serious disease and can result in severe illness with complications. Of the 42 cases to 20 March in 2014, 15 (36%) have required admission to hospital (Figure 3). The largest proportion requiring hospitalisation was in the under 5 year age group with four of five cases (80%) being admitted to hospital.

Measles is preventable by vaccination. Everyone born during or after 1966 should ensure that they have had two doses of a measles containing vaccine. If unsure, a dose of measles-mumps-rubella vaccine should be obtained from a general practitioner. Children should receive two doses of vaccine, one at 12 months of age and the second at 18 months. Babies who are travelling before their vaccines are due can be given the first dose as early as nine months of age. Children over 18 months who have not had their second dose of measles vaccine should be vaccinated now.

Follow the links for further information about [measles](#) and [measles vaccination](#) (external link).

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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 10 March to 16 March 2014, by date received.*

		This week	Last week	Year to date			Full Year	
				2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	11	13	135	500	162	1132	655
	Giardiasis	71	91	684	636	590	2244	2012
	Hepatitis A	2	3	25	29	10	62	41
	Rotavirus	6	10	79	112	182	508	1758
	STEC/VTEC	1	0	17	10	5	24	14
	Salmonellosis	128	168	1291	1133	957	3486	2941
	Shigellosis	9	5	83	34	46	136	131
Respiratory Diseases	Influenza	44	52	622	397	200	8401	8038
	Legionellosis	4	0	13	23	40	104	106
	Tuberculosis	1	4	57	96	102	436	470
Sexually Transmissible Infections	Chlamydia	409	519	5122	5161	5435	21074	21260
	Gonorrhoea	85	97	1041	1091	965	4270	4116
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	11	55	216	68	508	269
	Measles	7	10	43	3	2	33	174
	Meningococcal Disease	1	1	4	7	9	48	68
	Mumps	1	5	28	24	21	87	110
	Pertussis	33	42	435	665	2063	2378	5998
	Pneumococcal Disease (Invasive)	2	8	50	76	53	490	564
Vector Borne Diseases	Barmah Forest	5	2	51	124	91	441	343
	Dengue	8	6	87	56	90	294	285
	Malaria	1	4	23	23	12	93	68
	Ross River	12	11	92	125	167	512	596
Zoonotic	Q fever	1	1	39	32	35	155	124

*** 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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