

Communicable Diseases Weekly Report

Epi-Week 48: 24 November – 30 November 2014

In summary, we report:

- Haemophilus influenzae type b disease (Hib) one new case in an infant
- Legionnaires' disease two new cases
- Hepatitis A four new cases; one locally acquired
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases and alerts see the <u>Infectious Diseases</u> webpage.

Follow the <u>A to Z of Infectious Diseases</u> link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the <u>NSW Health</u> <u>Infectious Diseases Reports</u> webpage.

Haemophilus influenzae type b disease (Hib)

There has been a single case of invasive *Haemophilus influenza* type b (Hib) disease reported this week in child less than one year of age who had received only one dose of Hib vaccine. The child was hospitalised with sepsis and meningitis. This is the third case of Hib disease in a child under 5 years of age to be reported in 2014.

Hib disease is caused by *Haemophilus influenzae* type b bacteria. Infection in young children can lead to serious illness including meningitis (inflammation of the lining of the brain) and epiglottitis (swelling in the back of the throat that can block breathing and swallowing), and less commonly infection of a joint, bone or lung. Hib meningitis has a relatively high fatality rate and a high rate of permanent complications, such as deafness, in those that do survive.

Hib disease can be prevented by vaccination. It was quite common in Australia before Hib vaccine was included in the routine childhood immunisation schedule in 1993. Since then there has been a reduction of over 95% in the number of notified cases of Hib in Australia. For example, in Australia in 1992, 448 cases of Hib disease were reported in children under 10 years of age, compared to only seven in 2012. A four dose course of Hib vaccine is recommended in NSW for all infants at 6 – 8 weeks, 4, 6 and 12 months of age.

Follow the links for further information on Hib disease, Hib notification data and Hib vaccination.

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Legionnaires' disease

Two new cases of Legionnaires' disease were notified in this reporting week (Table 1). Both cases were caused by infection with the *Legionella* bacteria species known as *Legionella pneumophila* serogroup 1 (LP1). One of the cases was in Thailand for their whole exposure period (time period during which when the infection would have been acquired). The other case had potential exposures in the Bankstown area, which the Local Health District Public Health Unit is currently investigating.

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 with Legionnaires' disease 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 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 <u>regulatory control of Legionnaires' disease</u>.

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 <u>Legionnaires' disease</u> and on <u>notifications of</u> <u>Legionnaires' disease</u>.

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Hepatitis A

Four new cases of hepatitis A were notified this week (Table 1). Three of the cases were in unvaccinated travellers recently returned from Lebanon (1), Fiji (1) and Samoa (1). Another case was notified in an unvaccinated teenager who had no overseas travel; the source of their infection remains unknown.

Hepatitis A is a viral infection of the liver. The virus can survive in the environment for several weeks in the right conditions (for example, in sewage). Hepatitis A is usually acquired when virus from an infected person is swallowed by another person through: eating contaminated food, drinking contaminated water, handling nappies, linen and towels soiled with the faeces of an infectious person, or through direct contact (including sexual) with an infectious person.

An effective hepatitis A vaccine is available but may take up to two weeks to provide protection. Hepatitis A vaccination is recommended for people at higher risk of infection and those who are at increased risk of severe liver disease. This includes travellers to countries where hepatitis A is common (including most developing countries), some occupational groups, men who have sex with men, people with developmental disabilities and people with chronic liver disease

Follow the links for the <u>hepatitis A factsheet</u>, and for more information on <u>hepatitis A</u> <u>notifications</u> and <u>hepatitis A vaccination</u>.

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Summary of notifiable conditions activity in NSW

Table 1. NSW notifiable conditions from 24 to 30 November 2014, by date received.*

The following table summarises notifiable conditions activity over the reporting period (Table 1).

		Weekly		Year to date			Full Year	
		This week	Last week	2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	15	8	388	1091	619	1132	655
	Giardiasis	57	52	2727	2149	1936	2242	201
	Hepatitis A	5	1	71	58	37	62	4
	Listeriosis	1	0	19	32	31	33	3
	Rotavirus	25	23	657	493	1731	508	175
	Salmonellosis	77	98	3957	3288	2767	3483	294
	Shigellosis	2	1	198	129	125	136	13
Respiratory Diseases	Influenza	52	49	20572	8285	7891	8403	803
	Legionellosis	1	2	65	104	105	108	10
	Tuberculosis	10	11	433	408	441	437	46
Sexually Transmissible Infections	Chlamydia	499	460	21549	20017	20304	21090	2126
	Gonorrhoea	91	103	4580	4063	3959	4267	411
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	4	227	494	263	509	26
	Haemophilus influenzae type b	1	0	6	7	2	9	
	Mumps	2	0	76	82	107	89	11
	Pertussis	83	111	2607	2251	5769	2378	600
	Pneumococcal Disease (Invasive)	14	4	483	469	548	490	56
Vector Borne Diseases	Barmah Forest	3	1	158	420	334	438	35
	Chikungunya	2	2	24	22	1	22	
	Dengue	4	2	359	286	281	303	28
	Malaria	1	0	84	91	66	93	6
	Ross River	26	11	618	498	582	512	59
Zoonotic	Leptospirosis	1	0	13	11	22	11	2

* 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> (external link).
- 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 <u>Infectious Diseases Data</u> webpage.
- This table for week 48 was updated 12 Dec 2014 due to an error.

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