

Communicable Diseases Weekly Report

Epi-Week 29: 14 July – 20 July 2014

In summary, we report:

- Influenza in residential care facilities
- <u>Haemophilus influenzae type b</u> one new case
- Measles
- Leptospirosis
- 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 <u>NSW Health Infectious Diseases Reports</u> webpage.

Influenza in residential care facilities

Over recent weeks, 13 residential care facilities have notified confirmed influenza outbreaks to public health units. At least 190 residents have been affected, with 31 residents requiring hospitalisation and two deaths have occurred associated with facility outbreaks.

A range of public health measures have been implemented in accordance with the <u>National Residential Care Facilities Outbreak Guidelines</u>. All outbreaks to date have been confirmed as being due to the influenza A (H3N2) strain.

Reports of influenza outbreaks in aged care facilities were uncommon from 2009 to 2011. This is thought to be as a result of the higher levels of sero-protection observed in people in older age-groups against the influenza A(H1N1)pdm09 strain which predominated in those years. Influenza outbreak reports increased dramatically in 2012 when the influenza A(H3N2) strain predominated.

With the H3N2 influenza strain being the dominant strain circulating this year in NSW, people in older age-groups, including residents of aged care facilities, will be at higher risk of infection. Free vaccination is available for residents of aged care facilities and uptake is generally well utilised. It is also important that staff and visitors to aged care facilities are also vaccinated to help prevent the introduction of influenza. It is not too late to vaccinate.

Follow the links for further information on <u>influenza vaccination</u>, <u>influenza data</u>, <u>influenza homepage</u>, and information on <u>residential care facilities</u>.

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Haemophilus influenzae type b

There was one new case of *Haemophilus influenzae* type b (Hib) disease identified this week from metropolitan Sydney (Table 1). The case was in an adult with sepsis and meningitis who responded well to treatment. Follow-up of vulnerable close contacts of this case was undertaken by the local public health unit.

Hib disease is caused by infection with *Haemophilus influenzae* type b bacteria. Infection can lead to serious illness including meningitis and epiglottitis.

Since Hib vaccines were included in the routine childhood immunisation schedule in 1993, there has been a reduction of more than 95% in notified cases of Hib (1). Four doses of Hib vaccine are recommended in NSW for all infants at two, four, six and twelve months of age.

Follow the link for further information on Haemophilus influenzae type b data.

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Measles

One measles case was notified in this reporting week (Table 1). This case was a young adult from the Illawarra Shoalhaven Local Health District who reported symptoms just over a week after returning from holiday in Bali where they are likely to have been infected. The local public health unit contacted people who may have been exposed at the cases workplace, a GP and a hospital emergency department.

There have been 58 measles cases in NSW in 2014, of which 24 have acquired their infection overseas (mostly from the Philippines, Vietnam and Indonesia). There are also outbreaks in other Australian states following introduction of measles in returning travellers from south east Asia and Papua New Guinea.

Measles is highly infectious and is spread easily through the air. Symptoms can include fever, tiredness, runny nose, cough and sore red eyes which usually last for several days before a red, blotchy rash appears. Complications can range from an ear infection and pneumonia to swelling of the brain.

Children should receive two doses of vaccine, one at 12 months and the second at 18 months of age. Babies who are travelling overseas 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 can be vaccinated now. Anyone born during or after 1966 should have two doses of vaccine (at least four weeks apart), and NSW Health is offering a measles vaccine catch-up program in over 140 high schools in Term 3.

NSW Health urges everyone planning international travel to ensure they are up to date with their vaccinations (including measles) prior to their departure.

Follow the link for further information on <u>measles disease notifications</u>. Follow the link for further information on <u>measles vaccination</u> (external link).

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Leptospirosis

There was one new case of leptospirosis reported this week (Table 1) in an adult resident of Mid North Coast Local Health District. The case is suspected to have been exposed through their work on a fruit farm which included pest control.

Leptospirosis is a disease of humans and animals caused by *Leptospira* bacteria that are found in infected animal urine and animal tissues. Many different animals can harbour *Leptospira* bacteria in their kidneys, including rodents, dogs, cattle and pigs. The urine of infected rats and other rodents are the most common source associated with human infection, particularly in sugarcane plantations.

Common symptoms of leptospirosis are fever, severe headache, sore muscles, chills, vomiting, and red eyes. Some people have mild symptoms while others go on to develop severe disease.

Leptospira bacteria usually enter the body through skin cuts or abrasions, and occasionally through the lining of the mouth, nose, or eyes. Outbreaks are usually associated with exposure to flood water contaminated with the urine from infected animals.

¹ Haemophilus influenzae type b. The Australian Immunisation Handbook - 10th Edition 2013. NH&MRC.

Water, soil and mud that have been contaminated with animal urine can be the source of infection. Eating contaminated food or drinking contaminated water has occasionally been responsible for transmission.

People at most risk are those who have close contact with animals or who are exposed to water, mud, soil, or vegetation that has been contaminated with animal urine. Some occupations are at higher risk (e.g. farmers especially sugar cane and banana farmers, veterinarians and abattoir workers).

Recreational activities that involve contact with contaminated water or soil can also allow leptospirosis to be transmitted, for example during camping, gardening, bushwalking, white water rafting, and other water sports.

Although leptospirosis is relatively rare in Australia, it is more common in warm and moist regions such as north-eastern NSW and Queensland. Most people acquire their infections while travelling overseas.

People who work with animals should remember to cover cuts and abrasions with a waterproof dressing, and wear protective clothing when working with animals that could be infected, especially if there is a chance of contact with urine.

People should avoid swimming or wading in water where there is a possibility of heavy contamination with animal urine, and also remember to cover cuts and abrasions with waterproof dressings to prevent exposure to soil, mud or water that may be contaminated with animal urine.

Follow the link for further information on leptospirosis 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 14 July to 20 July, by date received.*

		Weekly		Year to date			Full Year	
		This week	Last week	2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	5	9	270	958	495	1131	655
	Giardiasis	50	44	1731	1416	1331	2241	2014
	Hepatitis A	1	1	41	44	21	62	41
	Rotavirus	10	12	234	231	421	508	1759
	Salmonellosis	59	44	2751	2277	1779	3485	2942
	Shigellosis	4	6	135	71	82	136	131
	Typhoid	2	0	27	42	29	58	43
Respiratory Diseases	Influenza	559	384	2805	1655	4402	8401	8037
	Legionellosis	2	2	42	60	78	108	108
	Tuberculosis	13	10	232	237	253	440	469
Sexually Transmissible Infections	Chlamydia	346	407	12888	12311	12632	21087	21266
	Gonorrhoea	90	71	2692	2560	2359	4266	4116
	LGV	1	0	8	20	8	28	28
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	6	161	396	188	509	269
	Haemophilus influenzae type b	1	0	3	4	2	9	2
	Measles	1	0	58	13	43	33	174
	Meningococcal Disease	1	0	18	18	41	48	67
	Mumps	1	2	52	61	77	89	110
	Pertussis	36	43	996	1359	3925	2378	5998
	Pneumococcal Disease (Invasive)	18	25	246	268	292	489	564
Vector Borne Diseases	Barmah Forest	1	3	125	297	214	440	352
	Dengue	2	12	265	171	185	302	287
	Malaria	2	4	61	53	36	93	68
	Ross River	5	9	352	363	454	513	597
Zoonotic	Leptospirosis	1	0	7	6	21	11	23
	Q fever	2	1	92	90	77	157	125

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* 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
 Infectious Diseases Data webpage.

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