

Communicable Diseases Weekly Report

Week 41 07 October 2013 – 13 October 2013

In summary, we report:

- Measles three cases reported this week; one acquired in Bali and two locally acquired
- Pertussis fewer notifications in 2013 than in the previous 5 years
- 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</u> <u>Diseases Reports</u> webpage.

Measles

A further three measles cases were notified in this reporting week (Table 1). The three cases were reported in children (age range: 10 months to 13 years), from three Local Health Districts.

The first of the three cases was an unvaccinated 13 year old from North Coast Local Health District (LHD) who acquired measles infection in Bali. During the last week, there have been at least seven Bali-acquired measles cases reported in three Australian states and territories. There have been 21 measles case-notifications in NSW in 2013, of which 13 were acquired overseas or interstate or were linked to people who were infected overseas. NSW Health urges everyone planning international travel, particularly those who may be travelling to Bali for "Schoolies", to ensure they are up to date with their measles and other vaccinations prior to their departure.

The second measles case was a 2 year old fully vaccinated child from Illawarra LHD, and the third measles case was a 10 month old infant (too young to be vaccinated) from Northern Sydney LHD. As with five other measles cases reported since September, the sources of infection of these two measles cases remain unknown. The high proportion of recent cases with an unknown source of infection, combined with the increasing geographic spread now affecting younger age groups, indicates measles is circulating undetected in the community. Molecular investigations have identified one of the recent locally acquired measles cases to be infected with measles virus genotype D9, which is circulating in South East Asia (Indonesia, Philippines and Singapore).

The three cases had spent time in Byron Bay, Dreamworld on the Gold Coast in Queensland, Coledale, Manly, as well as general practitioner surgeries in Manly, Nowra and Leichhardt and the Byron Bay Hospital Emergency Department, while infectious. 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. Children over 18 months who have not had their second dose of measles vaccine can be vaccinated now. Two doses of measles vaccine are 99% effective in preventing measles. Anyone born during or after 1966 should have two doses of vaccine (at least 4 weeks apart).

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

Follow the link for more information on measles case notifications data.

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Pertussis

There were only 26 notifications of pertussis (whooping cough) in NSW in this reporting week (Table 1). Pertussis notifications in NSW have been consistently at or below 200 per month since January 2013, the lowest rate during the last five years. Year to date in 2013 there have been 1,802 notifications, compared with 4,972 and 10,528 for the same period in 2012 and 2011 respectively. Monthly pertussis notifications peaked at 1,870 in November 2010 and at 1,975 in January 2009.

Pertussis is a highly contagious respiratory infection caused by the bacterium *Bordetella pertussis*. It can be life threatening for babies and young children, particularly those not fully protected by vaccination. During coughing attacks, a baby's breathing can be obstructed and they may become blue or stop breathing. Pertussis can lead to pneumonia, feeding problems with weight loss, seizures, brain damage, and in some cases, death. Elderly people can also experience serious complications if infected with pertussis.

Pertussis begins with symptoms of a cold with a blocked or runny nose, mild fever and a cough. The cough becomes characteristic in that it occurs in bouts of severe coughing, often followed by vomiting or a crowing noise (the whoop) which occurs as air is drawn back into the chest. Bouts of coughing often persist for many weeks. People who have been immunised may have a persistent cough without the characteristic whoop.

Vaccination provides the best protection against pertussis. It is very effective in preventing severe pertussis, but less effective against milder coughing illness. Immunity, both from natural infection and from vaccination, is not long lasting so booster doses are required for good protection.

Babies should be protected from pertussis by ensuring they are vaccinated on time, ensuring children and adults in contact with the baby are vaccinated, and keeping the baby away from anyone with a cough.

Babies should receive three doses of pertussis vaccine with the first dose given as early as 6 weeks of age, the second dose given at 4 months of age and the third dose given at 6 months of age. A booster dose is due at 3½ years of age and a second booster in year 7 of high school.

Whooping cough vaccination is strongly recommended for adults in contact with young babies too young to be vaccinated. Woman planning a pregnancy, and those in the third trimester of pregnancy are encouraged to be vaccinated to protect their young babies. An alternative is vaccination of the mother as soon as possible after birth of the baby.

Follow the link for further information on pertussis vaccination in NSW.

Follow the link for more information on pertussis 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 07 October 2013 to 13 October 2013, by date received.

		This week	Last week	Year to date			Full Year	
				2013	2012	2011	2012	201
Enteric Diseases	Cryptosporidiosis	4	2	1005	548	287	655	35
	Giardiasis	35	35	1809	1657	1981	2015	237
	Listeriosis	1	0	30	26	15	36	2
	Rotavirus	13	12	365	1376	785	1761	120
	Salmonellosis	42	52	2678	2261	3005	2942	356
	Shigellosis	6	6	104	102	97	131	12
	Typhoid	1	1	47	32	39	43	4
Respiratory Diseases	Influenza	174	306	7533	7556	5271	8039	579
	Tuberculosis	4	9	299	322	425	440	53
Sexually Transmissible Infections	Chlamydia	272	340	16348	16867	16159	21261	2044
	Gonorrhoea	55	86	3386	3231	2113	4114	281
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	7	436	228	297	263	35
	Measles	3	2	21	157	78	172	8
	Pertussis	26	34	1802	4972	10528	5996	1341
	Pneumococcal Disease (Invasive)	10	12	405	465	434	563	53
Vector Borne Diseases	Barmah Forest	5	3	353	254	412	344	47
	Dengue	2	6	206	240	111	289	14
	Malaria	1	1	70	54	68	68	8
	Ross River	3	4	416	509	528	596	59

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>.
- 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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