

Communicable Diseases Weekly Report

Week 23, 1 to 7 June 2015

In summary, we report:

- Pertussis 157 new cases
- MERS Coronavirus (MERS-CoV) update alert issued
- Summary of notifiable conditions activity in NSW

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

Pertussis

There were 157 confirmed cases of pertussis (whooping cough) reported for the period 1-7 June 2015 compared to 180 for the previous week (Table 1). May 2015 accumulated the greatest number of notifications for any month since May 2012. Comparing May 2015 to the equivalent period in 2014, the greatest increase in notifications occurred in the Central Coast and Mid North Coast Local Health Districts (Figure 1). The Mid North Coast saw notifications clustered around Bellingen and Coffs Harbour. Illawarra-Shoalhaven Local Health District also experienced unusually high notifications in May, including 13 notifications in a public school. Pertussis notifications have steadily increased over the last 12 months, mainly in the Sydney metropolitan region (Figure 2).

Pertussis, also known as 'whooping cough', is a highly contagious bacterial infection affecting the respiratory system, caused by the organism *Bordetella pertussis*. It affects individuals of all ages, but is more severe (and can be fatal) in small babies, particularly those too young to be vaccinated or those who are unvaccinated. Elderly people are also at increased risk of developing complications from pertussis.

Pertussis is a vaccine preventable disease, and is notifiable in NSW. Vaccination against pertussis is recommended for children at 6-8 weeks, 4 and 6 months of age, with a booster at 18 months of age, 4 years of age and in the first year of high school. The NSW Antenatal Pertussis Vaccination Program commenced on 1 April 2015, offering free diphtheria, tetanus and pertussis (dTpa – Boostrix®) vaccine to all pregnant women in the third trimester (preferably at 28 weeks), to protect infants through maternal pertussis antibody transfer until they are old enough to be vaccinated at 6 weeks of age. Boostrix® vaccine is provided free to GPs, Aboriginal Medical Services and antenatal clinics for all pregnant women in the third trimester.

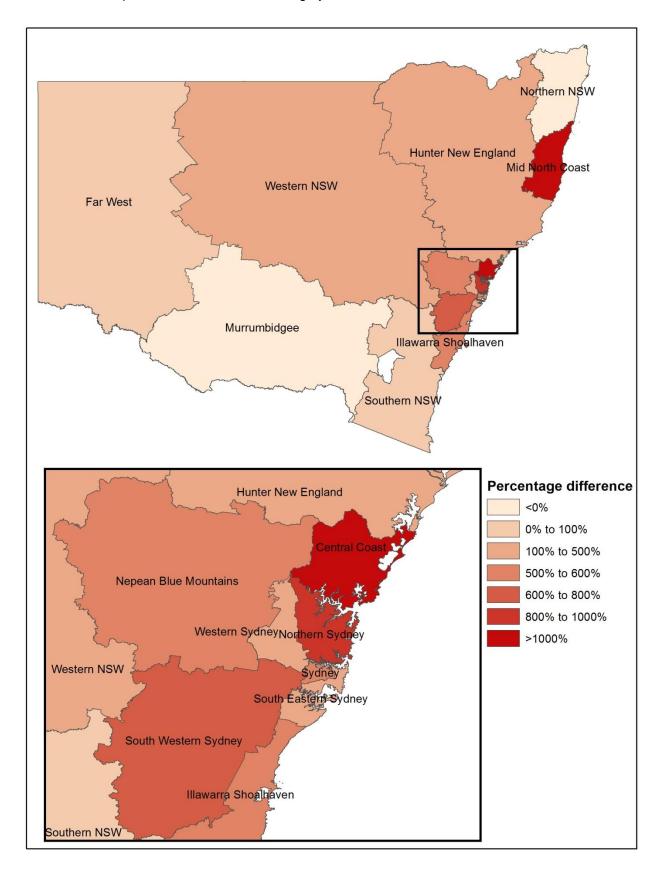
Follow the link for more information about patient management for GPs

Follow the link for more information regarding Antenatal Pertussis Vaccination Program,

Follow the link for more information regarding pertussis notifications

Figure 1. Percentage difference in pertussis notifications by Local Health District for the month of May 2015, compared to May 2014.

NB: Central Coast reported 29 cases for the 2015 period compared to no cases in 2014 and has been placed in the >1000% category. Far West reported 1 case for the 2015 period compared to no cases in 2014. It has been placed in the 0% to100% category.



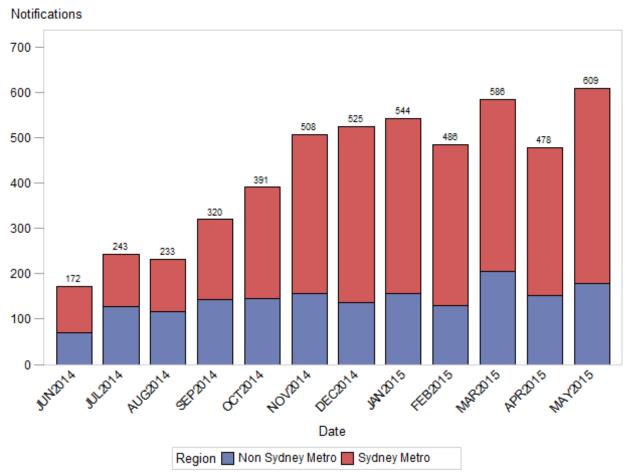


Figure 2. Number of pertussis notifications in NSW by month 1 June 2014 to 31 May 2015

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MERS Coronavirus (MERS-CoV) update

There has been a recent sharp increase in the number of cases of MERS-CoV reported due to an outbreak in South Korea. The outbreak began with a man who travelled to multiple countries in the Middle East during the 14 days prior to onset before returning to South Korea. As of 10 June 2015 there have been 108 cases including nine deaths reported by South Korea, mainly arising due to exposures of other patients and health care workers in several health facilities in Seoul, prior to the cause of the man's disease being recognised. One of the 108 cases travelled to China after leaving quarantine in South Korea.

MERS-CoV is a respiratory infection due to a new type of coronavirus, first recognised in 2012. Infection with MERS-CoV can cause a rapid onset of severe respiratory disease. Other symptoms include fever, muscle pain, diarrhoea and vomiting. Most severe cases have occurred in people with underlying conditions that may make them more likely to get respiratory infections. As of 10 June 2015, the World Health Organization (WHO) global case count was 1,271 laboratory-confirmed cases of MERS-CoV, including at least 453 deaths (case fatality rate 36%) since the first cases were reported in September 2012.

All cases of MERS-CoV world-wide have had a history of residence in or travel to the Middle East (mainly Saudi Arabia), or contact with travellers returning from these areas, or can be linked to an initial imported case. There have been no cases in Australia.

The WHO emphasises the need for universal application of standard infection control precautions, and transmission-based precautions when in contact with suspected or confirmed cases, and that it is not possible to distinguish MERS-CoV from other respiratory infections except with laboratory testing.

Camels are suspected to be the primary source of infection for humans, but the exact routes of direct or indirect exposure are not fully understood, and further studies (particularly case control studies) are needed. The WHO advises that people should avoid drinking raw camel milk or camel urine, or eating camel meat that has not been properly cooked.

There is no evidence of ongoing community transmission in any country and only occasional instances of household transmission. Transmission in health care settings has been a feature of the outbreak.

For more information see the NSW Health MERS-CoV webpage.

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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 1 to 7 June 2015, by date received

		We	Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013	
Enteric Diseases	Cryptosporidiosis	9	14	574	240	899	428	1132	
	Giardiasis	67	70	1777	1509	1209	2942	224	
	Listeriosis	1	0	13	16	22	23	3	
	Rotavirus	3	8	157	179	188	714	50	
	Salmonellosis	53	69	2363	2516	2001	4304	348	
	Shigellosis	1	1	75	116	58	210	13	
	Typhoid	1	0	24	24	38	44	5	
Respiratory Diseases	Influenza	119	96	2037	1372	810	20888	840	
	Legionellosis	4	0	48	37	47	72	10	
	Tuberculosis	8	14	167	190	192	472	44	
Sexually Transmissible Infections	Chlamydia	407	445	10219	10907	9975	22899	2108	
	Gonorrhoea	58	84	2284	2275	2012	4876	426	
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	3	87	156	358	255	50	
	Meningococcal Disease	1	1	16	15	13	37	4	
	Mumps	1	1	19	45	49	82	8	
	Pertussis	157	180	2964	866	1143	3051	237	
	Pneumococcal Disease (Invasive)	17	7	155	154	190	512	49	
	Rubella	1	1	5	4	5	10	1	
Vector Borne Diseases	Barmah Forest	2	3	136	106	263	163	43	
	Chikungunya	1	0	23	8	10	27	2	
	Dengue	4	5	169	229	123	378	30	
	Ross River	19	23	1305	299	306	677	51	
Zoonotic	Leptospirosis	1	0	5	6	5	16	1	
	Q fever	2	2	94	81	74	190	16	

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.