

Communicable Diseases Weekly Report

Week 11, 11 March to 17 March 2018

In summary, we report:

- Measles one new case, and potential NSW exposures to a Victorian case
- Tuberculosis World Tuberculosis Day is on March 24
- Summary of notifiable conditions activity in NSW

For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

Measles

One case of measles was notified in this reporting week (<u>Table 1</u>) in an overseas visitor, who acquired the infection in their home country. The case was an adult male in their twenties who was visiting relatives in Deniliquin and spent time in the town centre while infectious. Close contacts have been given information and vaccinated if necessary. The Murrumbidgee Local Health District also issued a local media alert for people who were in the Deniliquin CBD on 9 March.

The Victorian Department of Health and Human Services (DHHS) has also recently identified a measles case in a traveller who flew from Bali to Melbourne via Sydney, arriving in Sydney in the morning of 10 March. The case was infectious while on the flight (Qantas QF44) and while waiting for their connecting flight in Sydney airport. Please see the <u>Victorian DHHS media release</u> for more information.

The measles virus is highly infectious and it is readily transmitted from person to person via respiratory secretions in the air following coughing and sneezing. The time from exposure to an to onset of symptoms is around 10 days (range 7-18 days, occasionally longer) to the onset of fever and about 14 days to the onset of the rash.

Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red blotchy rash spreading from the head and neck to the rest of the body. Infection with the measles virus can be serious with common complications including middle ear infection and viral or bacterial bronchopneumonia.

People at risk of developing measles include children less than 12 months of age, who are too young to be vaccinated, and people born after 1965 who have not received 2 doses of measles containing vaccine.

Measles containing vaccine is routinely offered to all children at 12 months (as measles-mumps rubella) and 18 months of age (as measles-mumps-rubella-varicella) through the National Immunisation Program. People born between 1966 and 1994 should not assume that they have had two doses of vaccine due to changing vaccination schedules during this period. People who are unsure if they have received two doses of a measles vaccine in the past can safely be given another measles vaccine. The vaccine is free in NSW for people up to 52 years of age and provided through GPs.

People with measles symptoms should seek medical advice as soon as possible, and call ahead to the GP or emergency department so that arrangements can be made to keep them away from others to minimise the risk of spreading infection. For further information on measles please see the <u>measles fact sheet</u>. For further information on measles notifications in NSW residents see the <u>diseases data page</u>. Follow the link for more measles vaccination information.

World Tuberculosis Day

Saturday, 24 March 2018 marks <u>World TB Day</u>, a day which commemorates the discovery of the bacteria which cause tuberculosis (TB) by Dr Robert Koch in 1882, and aims to raise public awareness for action against TB. The global theme this year is "Wanted: Leaders for a TB-free world" which focuses on building a commitment to end TB from the top levels of government right down to community leaders, health care workers, and people affected by TB.

<u>Tuberculosis</u> is a bacterial infection caused by *Mycobacterium tuberculosis*. Despite being a curable illness it remains the world's top infectious killer with an estimated 5,000 deaths each day globally. The World Health Organization (WHO) estimated that 10.4 million people fell ill with TB and 1.7 million people died from TB in 2016. Anyone can contract TB; however the disease tends to flourish among vulnerable populations such as those living in poverty, and groups that are marginalised.

Symptoms of TB disease include a cough lasting more than three weeks, fever, unexplained weight loss, night sweats and tiredness. Treatment usually requires a combination of special antibiotics for at least six months.

In Australia, the rate of TB infection is 6 cases per 100,000 people, one of the lowest rates in the world. In NSW in 2017 there were 532 cases of TB notified, giving a slightly higher rate of 6.8 cases per 100,000 people. The highest population rates for TB were in the Western Sydney, South Western Sydney and Sydney Local Health Districts. Over 90% of these cases were diagnosed in people who were born, or had spent significant amounts of time, in countries with a high prevalence of TB.

While local transmission of TB is a rare event in NSW there has been transmission of TB in Aboriginal communities in NSW (Devlin, Passmore. 2013 ¹). In 2017, 9% of Australian-born cases diagnosed in NSW identified as Aboriginal people.

Multi-drug resistant TB (MDR-TB) strains are those that are resistant to two of the most effective first line TB drugs, and this is a continuing problem worldwide. In NSW, MDR-TB is still relatively rare with only eight cases notified in 2017.

In NSW, actions taken to work towards ending TB include the following:

- supporting the screening and prevention of TB in refugees and other immigrants
- investigating the use of new state-of-the-art whole genome sequencing technology to improve identification of TB transmission to allow better targeting of public health measures, in order to make NSW "TB transmission free"
- working closely with Aboriginal communities to encourage early diagnosis and treatment of TB among Aboriginal people in NSW.

For further information see the NSW TB Program website.

The <u>NSW TB Program</u> includes a network of specialised TB services (Chest Clinics) across the state which provide free, confidential and culturally appropriate services to ensure everyone in NSW gets the TB care they need.

For further information on TB notifications in NSW see the <u>TB epidemiology reports page</u> and the <u>TB data page</u>.

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¹ Devlin S, Passmore E. Ongoing transmission of tuberculosis in Aboriginal communities in NSW. New South Wales Public Health Bulletin 2013;24: 38-42.

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 11 March to 17 March 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	0	2	6	6	13	13
Enteric Diseases	Cryptosporidiosis	26	31	243	640	302	1266	1184
	Giardiasis	81	68	685	897	1018	2994	3480
	Hepatitis A	2	3	26	10	13	72	41
	Rotavirus	16	10	225	155	146	2318	750
	STEC/VTEC	3	1	15	16	14	53	65
	Salmonellosis	87	100	1020	1274	1533	3687	4544
	Shigellosis	6	1	49	57	70	235	310
	Typhoid	3	2	16	20	20	55	37
Respiratory Diseases	Influenza	215	260	2937	1892	1367	103851	35540
	Legionellosis	3	3	35	31	22	138	134
	Tuberculosis	13	7	85	105	112	532	534
Sexually Transmissible Infections	Chlamydia	597	650	6798	6736	5653	28977	25991
	Gonorrhoea	207	193	2269	2234	1414	9173	7000
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	6	25	61	47	271	258
	Measles	1	0	1	8	3	32	16
	Meningococcal Disease	2	0	13	14	11	91	70
	Pertussis	58	63	817	1457	3253	5367	10956
	Pneumococcal Disease (Invasive)	6	5	77	76	56	681	545
Vector Borne Diseases	Dengue	3	6	87	94	107	306	485
	Ross River	10	19	99	878	145	1653	594
Zoonotic Diseases	Psittacosis	1	0	1	6	0	9	9
	Q fever	2	4	45	59	60	210	231

* 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 chronic blood-borne virus case reports are not included here but are available from the <u>Infectious Diseases Data</u> webpage.