

Communicable Diseases Weekly Report

Week 42, 17 to 23 October 2016

In summary, we report:

- [Measles](#) – one new case notified
- [Tuberculosis](#) – investigation of an infected healthcare worker at Sydney Dental Hospital
- [Viral gastroenteritis](#) – increase in activity
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases on-line see [NSW Health Infectious Diseases](#). Also see [NSW Health Infectious Diseases Reports](#) for links to other surveillance reports.

Measles

One case of measles was notified this reporting week in an unvaccinated adolescent from Northern NSW Local Health District. It is likely that the source of infection was another person with undiagnosed measles as the case has had no international travel or contact with a known measles case. Contacts are being followed up by the local public health unit and Queensland Health where the person attended a private hospital. Eleven measles cases have been reported this year to date in NSW.

Nationally in the past fortnight five other cases of measles were notified, including a traveller infectious with measles returning home to [Western Australia from a holiday in Japan](#). Similarly New Zealand public health authorities have issued a [measles alert for Queenstown](#) following the diagnosis of a resident, likely acquired from overseas travellers.

Measles is endemic in many countries and it is important for people planning travel to make sure they are vaccinated. Travellers returning from areas where measles still circulates should seek medical advice if they develop the symptoms of measles. It is important that if someone suspects that they or a family member has symptoms of measles, they call ahead to their local doctor or emergency department so arrangements can be made to keep the person with suspected measles away from others who could be at risk of infection.

The measles virus is transmitted from person to person via respiratory secretions in the air following coughing and sneezing. Symptoms of measles include fever, runny nose, sore red eyes and cough, followed 3-4 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. Acute encephalitis occurs rarely and subacute sclerosing panencephalitis is a very rare fatal complication, occurring many years after infection in about 1 per 100,000 cases.

Vaccination is highly effective at preventing measles with two doses of measles containing vaccine offering protection against infection in 99% of people. Vaccination not only benefits those who receive it but also protects others, such as those too young or unable to be vaccinated, by reducing the risk that an unvaccinated person is exposed to measles virus; this is known as herd immunity

Anyone born in or after 1966 should have had two doses of measles containing vaccine, which is free for people up to 50 years of age in NSW. Measles containing vaccine is now routinely offered to all children at 12 months (as measles-mumps-rubella) and 18 months (as measles-mumps-rubella-varicella) of age through the National Immunisation Program.

If you were born in or after 1966 and are unsure of your vaccination status, or have not had two vaccine doses in the past (or had a confirmed measles infection), consult your GP for more advice. This is particularly important prior to overseas travel as the risk of being exposed to a case of measles is greater when travelling.

For more information please follow these links: [measles fact sheet](#), [measles notifications](#) and [measles vaccination](#).

Tuberculosis

A person with active tuberculosis (TB) who works at the Sydney Dental Hospital was notified this week. The person was working while possibly infectious from late April until early October and a number of co-workers and patients may have been exposed to the TB bacteria. Sydney Local Health District is coordinating screening and assessment of identified contacts. There is no ongoing risk for patients at the Sydney Dental Hospital. See media release [here](#).

TB is a disease caused by infection with the bacterium *Mycobacterium tuberculosis*, or closely related bacteria. TB infection most commonly affects a person's lungs but can also cause infection in other parts of the body. With lung TB the symptoms are prolonged cough, fevers, unexplained weight loss and night sweats. TB is spread through the air when a person with TB in the lungs or throat coughs, sneezes or speaks. TB is treated with a combination of antibiotics for a period of at least 6 months. Once treatment starts, the person quickly becomes non-infectious to other people. TB is curable with treatment.

Since the 1980's Australia has maintained one of the lowest rates of TB in the world. Each year, approximately 1,300 new cases of TB are reported in Australia, of which 400-500 are diagnosed in NSW. Despite Australia's success in reducing TB, there is no room for complacency. Global connectivity through air travel and migration means that TB will remain a public health concern in Australia until worldwide control of TB is achieved.

The NSW TB Program provides a comprehensive multidisciplinary service for the prevention and control of TB in NSW, a service that is vital to maintaining Australia's success in reducing the burden of TB. The NSW TB Program consists of a network of specialised TB services (also known as Chest Clinics) located across the state, providing free, confidential, accessible and culturally appropriate services to all – to ensure everyone in NSW gets the TB care they need.

The most recent NSW TB Report (2012-2014) can be found [here](#). For more information please see the [TB factsheet](#).

Viral gastroenteritis

Emergency department (ED) surveillance has shown an increase in gastroenteritis activity across NSW, with 2,028 presentations and 476 admissions recorded in the past week (Figure 1). The increase was particularly notable in admissions for young adults aged 17-34 years (Figure 2).

This surveillance category includes provisional ED diagnoses of gastroenteritis, vomiting, diarrhoea and food poisoning, with an average of 1,403 ED presentations and 312 admissions usually observed during this period. Western Sydney Local Health District (LHD) observed the largest increases (data not shown).

Figure 1. Total weekly counts of Emergency Department presentations for gastroenteritis, for 2016 (black line), compared with each of the 5 previous years (coloured lines), persons of all ages, for 60 NSW hospitals.

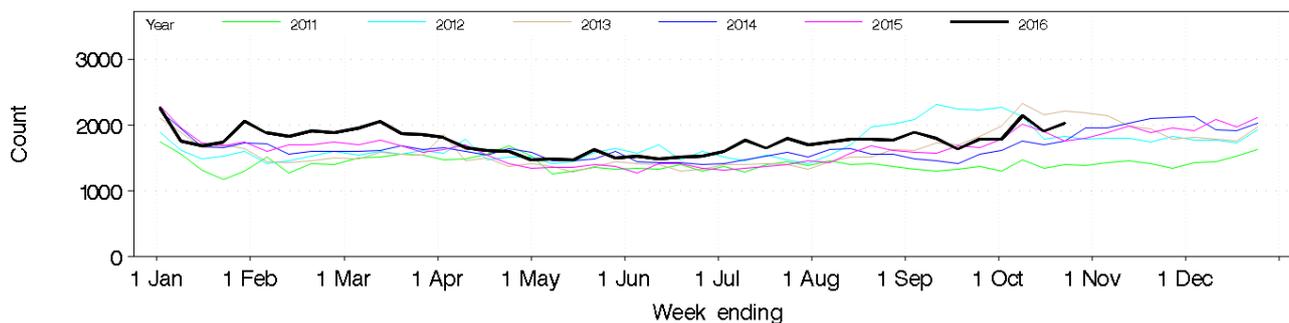
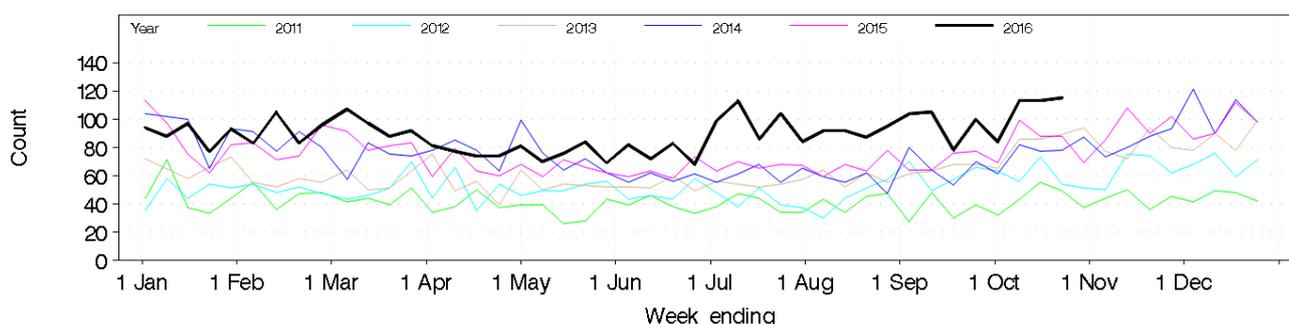


Figure 2. Total weekly counts of Emergency Department presentations for gastroenteritis, that were admitted, for 2016 (black line), compared with each of the 5 previous years (coloured lines); persons aged 17 to 34 years, for 60 NSW hospitals.



Many early childhood education and care centres, aged care facilities and some hospitals have also been affected by recent outbreaks of viral gastroenteritis. Since October 1 there have been 60 outbreaks of gastroenteritis in institutions reported, affecting at least 965 people. Norovirus was detected as the cause of illness in 11 of these outbreaks and rotavirus in one. Ten food complaints were investigated during this time with the symptoms consistent with viral gastroenteritis. Norovirus was detected in one investigation.

Viral gastroenteritis is a common intestinal infection caused by a number of different viruses, usually resulting in vomiting and diarrhoea. Norovirus infections are the most frequent cause and are most common during the cooler months. Symptoms may include nausea, vomiting, diarrhoea, fever, abdominal pain, headache and muscle aches. These symptoms can take between one and three days to develop and usually last between one and two days, sometimes longer. Dehydration may follow bouts of vomiting and diarrhoea, particularly in young children. Those infected should rest well and increase the amount of fluids they drink, and if concerned see their local doctor.

Rotavirus is the most common cause of severe gastroenteritis in early childhood globally. Immunisation to prevent rotavirus infection is recommended and is free for children under 6 months of age. In NSW, the vaccine is given as two oral doses, at six weeks and four months of age, with completion of the course by 24 weeks of age.

Viral gastroenteritis is highly infectious and is spread by the vomit or faeces of an infected person through close contact with infected persons, contact with contaminated surfaces or through consuming contaminated food or drink. Viruses are often transmitted from person-to-person on unwashed hands.

The best way to prevent the spread of viral gastroenteritis is to wash your hands thoroughly with soap and running water for at least 10 seconds, particularly after using the toilet, assisting someone with diarrhoea or vomiting, attending nappy changes, and before preparing and eating food. It is vital that if you or your family contract gastroenteritis that you stay home from work or keep a child home from school or childcare if they are sick for at least 24 hours after the last symptom of gastroenteritis.

People who are sick with gastroenteritis should also avoid visiting others in vulnerable settings such as hospitals or aged care facilities. If your work involves handling food, or looking after children, the elderly or patients, do not return to work until 48 hours after symptoms have stopped.

Follow the link for further information on [viral gastroenteritis](#).

Summary of notifiable conditions activity in NSW

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

Table 1. NSW notifiable conditions from 17 to 23 October 2016, by date received *

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	18	18	893	721	327	1038	429
	Giardiasis	51	47	2945	2770	2372	3415	2942
	Hepatitis A	2	0	31	64	59	71	80
	Listeriosis	1	1	31	21	19	26	23
	Rotavirus	25	23	440	687	500	1036	714
	STEC/VTEC	3	5	43	16	28	29	31
	Salmonellosis	67	54	3777	3253	3469	4040	4273
	Shigellosis	11	2	251	141	177	172	212
Respiratory Diseases	Influenza	463	677	33317	29360	20223	30306	20888
	Legionellosis	1	0	103	82	53	96	72
	Tuberculosis	6	12	382	341	379	445	475
Sexually Transmissible Infections	Chlamydia	420	508	20938	17896	18516	22548	22899
	Gonorrhoea	103	114	5550	4360	3939	5400	4876
	LGV	1	0	44	19	11	20	14
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	5	206	152	219	186	258
	Meningococcal Disease	1	2	64	38	25	46	37
	Measles	1	0	11	7	67	9	68
	Mumps	1	2	43	44	74	64	82
	Pertussis	253	222	8724	7457	1919	12083	3051
	Pneumococcal Disease (Invasive)	8	15	442	411	419	495	511
Vector Borne Diseases	Chikungunya	1	1	18	34	19	37	27
	Dengue	9	8	372	269	337	343	378
	Ross River	3	2	376	1483	510	1638	673

* Notes on Table 1: NSW Notifiable Conditions activity

- Data cells represent the number of notifiable disease 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 in the current reporting week 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.