

Communicable Diseases Weekly Report

Week 34, 19 August to 25 August 2018

In summary, we report:

- [Measles](#) – one new case in an overseas traveller
- [Hepatitis B and C](#) – NSW annual data report for 2017 released
- [Legionellosis](#) – three travel-related cases
- [Summary of notifiable conditions activity in NSW](#)

For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Measles

A case of measles was notified in this reporting week in an unvaccinated child visiting NSW from South East Asia (Table 1). The child spent time in a number of locations between Friday 17 and Sunday 19 August, whilst unknowingly infectious. Potential exposure sites include a number of popular tourist attractions across Sydney city, the ski fields at Perisher and the Canberra Centre in the ACT. For full details on exposure sites please see the [measles alert](#).

The measles virus is highly infectious and is readily transmitted from person to person via respiratory secretions in the air, following coughing and sneezing. The time from exposure 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 rash.

Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red, blotchy, non-itchy rash spreading from the head and neck to the rest of the body. For further information see the [measles fact sheet](#).

Anyone born in Australia after 1966 who has not received two doses of measles containing vaccine is at risk of catching measles if exposed. People born in Australia before 1966 are generally considered to be immune to measles as they are highly likely to have had the infection, which also provides long term immunity.

Two doses of measles vaccine have been provided for free as part of the National Immunisation Program since 1992. Doses are currently administered at 12 months and 18 months of age as measles-mumps-rubella (MMR) and measles-mumps-rubella-varicella (MMRV) vaccines respectively.

People born between 1966 and 1994 should not assume that they are fully protected against measles as changes to the vaccination schedule during this time means they may have only received one dose.

MMR is provided for free to anyone in NSW born in or after 1966 who does not have documented evidence of having received two doses of vaccine. People who are unsure of whether they have received two doses can safely be given another dose.

Follow the links for more information on [measles vaccination](#) and [data](#) on measles notifications in NSW.

NSW Hepatitis B and C Strategies 2014-2020: 2017 annual data report

Hepatitis B and C are viral infections of the liver, which in some people become chronic, leading to liver cirrhosis or liver cancer. They are part of the group known as blood borne viruses, as they are usually transmitted through blood, or blood products. Transmission can occur in medical, dental or cosmetic procedures where instruments are not properly sterilised, through people who use injection drugs sharing injecting equipment, through sexual intercourse, or from mother to infant around the time of birth.

Hepatitis B infections notified in NSW are mainly in people who have acquired the infection overseas in countries with high rates of hepatitis B infection. Hepatitis C infections notified in NSW are usually locally acquired through injecting drug use.

Hepatitis B and C infections remain a significant public health burden in NSW. The [NSW Hepatitis B and C Strategies 2014-2020](#) provide a framework to effectively respond to changes in hepatitis B and C epidemiology across NSW. The Strategies outline four goals:

1. Reduce hepatitis B infections in NSW
2. Improve health outcomes of people living with hepatitis B
3. Reduce hepatitis C infections in NSW
4. Improve health outcomes of people living with hepatitis C

The PBS listing of new hepatitis C treatments in 2016, during the life of the Strategy, has increased the focus on improving access to treatment in key settings, particularly for people who inject drugs.

NSW Health has committed to the elimination of hepatitis C in NSW by 2028.

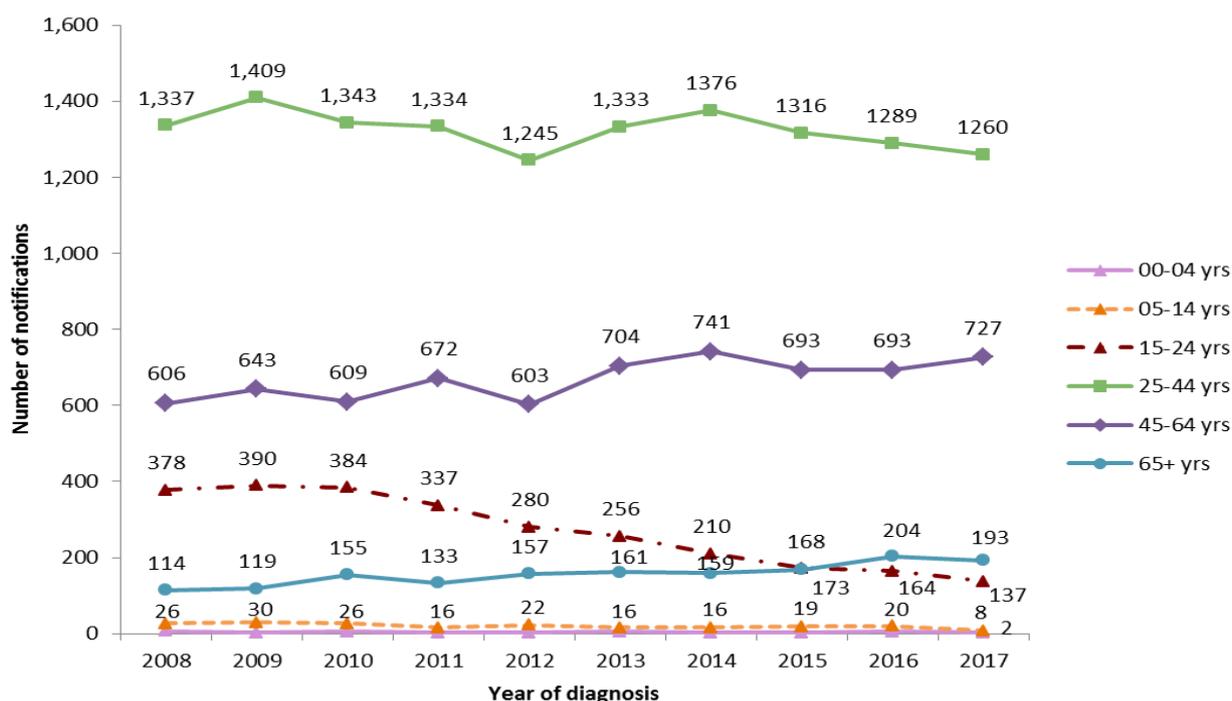
The [NSW Hepatitis B and C Strategies 2014-2020: 2017 Annual Data Report](#) is now available. These reports form the primary mechanism for reporting progress against the Strategies' targets. A summary of the 2017 report is provided below.

Hepatitis B

Notifications

The NSW hepatitis B notification rate declined between 2016 and 2017, from 31 to 29 notifications per 100,000 population. Notifications of hepatitis B in young people aged 15-24 years have continued to decline (Figure 1), which may be related to the immunisation program for adolescents introduced as a school-based program in 2004.

Figure 1: Hepatitis B notifications in NSW by age group and year of diagnosis, 2008-2017.



In NSW, hepatitis B infection is not evenly distributed, with higher notification rates in some areas including Western Sydney, South Western Sydney, South Eastern Sydney, Sydney and Northern Sydney Local Health Districts. This is due to the larger proportion of people in these districts who were born in countries with a high burden of hepatitis B.

Prevent

In 2017, hepatitis B childhood vaccination coverage for children aged 12 months increased slightly to 94.6% (vs 94.2% in 2016). There was also a slight increase in the hepatitis B childhood vaccination coverage for children aged 24 months to 96.1% (vs 95.8% in 2016).

In 2016, the proportion of women giving birth in a hospital in NSW who were screened for hepatitis B remained high at 98%. The proportion of babies born to mothers living with hepatitis B who received hepatitis B immunoglobulin within 12 hours of birth also remained high at 98.7%.

Test

The number of hepatitis B tests performed in NSW each year is continuing to increase gradually. In 2017, 621,934 tests for hepatitis B surface antigen were performed in 15 laboratories in NSW, a 4.7% increase from 2016 (593,778 tests).

Manage

From 1 July 2016 to 30 June 2017, there were 13,907 viral load tests provided for people with chronic hepatitis B not receiving treatment in NSW. This is similar to the number of viral load tests provided for the same period in 2015-16 (14,121 tests).

In 2017, a total of 8277 NSW residents were dispensed hepatitis B treatment for chronic hepatitis B in the five LHDs with the highest prevalence of hepatitis B, which represented 92% of the hepatitis B treatment dispensed for the whole state. This is an 8% increase compared to 2016.

Hepatitis C

Notifications

The hepatitis C notification rate declined slightly in 2017 compared to 2016 (from 54 to 53 notifications per 100,000 population). This followed an upswing in the notification rate in 2016 thought to be due to increased targeted testing associated with highly effective and safe direct acting antivirals becoming available on the Pharmaceutical Benefits Scheme in March 2016.

The number of hepatitis C notifications amongst people aged 15-24 years rose markedly in NSW in 2017 compared with 2016 (Figure 2). Most of the increase was among people diagnosed in the Justice Health setting, where hepatitis C testing and treatment services have been scaled up.

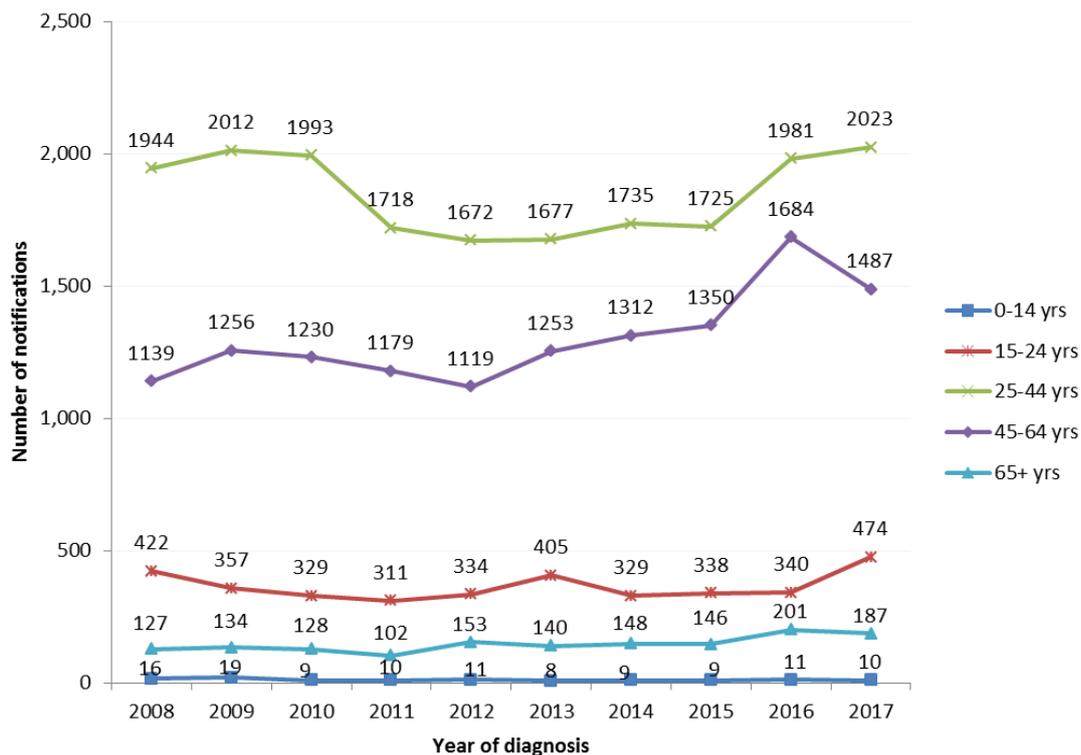
In 2017, the Far West, Northern NSW and Western NSW Local Health Districts recorded the highest rates of hepatitis C notification in NSW (131, 77 and 67 notifications per 100,000 respectively), while Northern Sydney LHD had the lowest rate (16 notifications per 100,000).

Prevent

Twenty per cent of respondents in the 2017 NSW Needle and Syringe Program (NSP) Enhanced Data Collection reported receptive syringe sharing in the previous month, the same as the level reported in 2016. In 2017, 20,861 people commenced an opioid treatment program in NSW, similar to 2016 (20,326).

Test

The number of hepatitis C tests performed in NSW is continuing to increase gradually each year. In 2017, 558,559 tests for hepatitis C antibody were performed in 15 laboratories in NSW, a 5.5% increase from 2016. Testing was relatively high across all quarters of 2017.

Figure 2: Hepatitis C notifications in NSW by age group and year of diagnosis, 2008-2017.

Treat

To December 2017, 26% of the estimated 80,700 people living with hepatitis C in NSW had initiated treatment with 53% of those accessing treatment through their general practitioner.

Throughout 2016 and 2017, screening and treatment has been scaled up across all correctional centres state-wide. From 1 March 2016 to 31 December 2017, 1344 NSW residents initiated treatment in Justice Health settings, with approximately one-third of those among Aboriginal people.

More detailed data can be found in the [NSW Hepatitis B and C Strategies 2014-2020: 2017 Annual Data Report](#).

Legionellosis (Legionnaires' disease)

There were five notifications of legionellosis (Legionnaires' disease) this reporting week (Table 1). While all of the cases were due to *Legionella pneumophila* infection, three of the cases are believed to have been acquired during overseas travel (South East Asia, South Asia, and Europe). The two cases acquired locally were in residents of the Central Coast and Northern Sydney Local Health Districts. Public health investigations have not identified links between these two cases, or to other recent cases, and there have been no likely environmental sources identified.

Legionellosis is a type of pneumonia and the symptoms include fever, chills, cough and shortness of breath. Some people also have muscle aches, headache, tiredness, loss of appetite and diarrhoea. Legionellosis is usually caused by infection with either the *L. pneumophila* or *L. longbeachae* strains.

L. pneumophila is found in water and can contaminate air conditioning cooling towers, spa pools, plumbing systems and other bodies of warm water. Legionellosis outbreaks affecting overseas travellers are often due to exposure to contaminated cooling towers or spa pools in hotels.

Follow the links for more information on [Legionellosis](#), on the [regulatory control of Legionella in NSW](#), and on [notifications of Legionellosis](#).

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 19 August – 25 August 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	11	8	536	1111	802	1266	1184
	Giardiasis	41	56	1802	2297	2576	3134	3480
	Hepatitis A	2	0	69	28	29	72	41
	Listeriosis	1	0	17	12	26	20	36
	Rotavirus	12	8	530	795	320	2319	750
	Salmonellosis	34	49	2318	2714	3342	3680	4533
	Shigellosis	13	14	236	149	203	235	310
	Typhoid	1	0	40	41	28	55	37
Other Diseases	Acute Rheumatic Fever	1	0	16	12	8	20	16
Respiratory Diseases	Influenza	745	644	8477	56262	18519	103853	35540
	Legionellosis	5	3	93	84	93	138	134
	Tuberculosis	18	10	335	340	317	540	533
Sexually Transmissible Infections	Chlamydia	511	566	20703	19213	17238	28977	25988
	Gonorrhoea	214	230	7020	6098	4608	9172	6993
	LGV	1	2	52	24	40	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	4	202	213	171	279	262
	Measles	1	0	9	25	10	32	16
	Meningococcal Disease	4	1	41	52	43	91	70
	Pertussis	123	125	2727	3915	6930	5365	10956
	Pneumococcal Disease (Invasive)	24	24	424	410	329	683	545
Vector Borne Diseases	Barmah Forest	1	0	56	95	32	127	40
	Dengue	2	3	192	206	355	306	485
	Malaria	1	1	43	51	35	68	59
	Ross River	8	12	430	1475	384	1653	595
Zoonotic Diseases	Leptospirosis	3	3	51	18	12	20	16
	Q fever	3	4	131	154	143	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 (i.e. by report date). Note that [notifiable disease data](#) available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.
- 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 [Infectious Diseases Data](#) webpage.