

Communicable Diseases Weekly Report

Week 35, 26 August to 1 September 2018

In summary, we report:

- [Measles](#) –locally acquired case related to two overseas acquired cases
- [Invasive meningococcal disease](#) – one fatal case
- [HIV](#) – Quarter 2 2018 report released
- [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

Three cases of measles were reported this week. A new locally acquired case of measles was notified in an unvaccinated child from Mid North Coast Local Health District (case 1). This child acquired their infection following contact with another unvaccinated child (case 2) who developed the illness shortly after returning from travel in South East Asia. The sibling of the recently returned child (case 3) was also reported to have had measles during their trip.

These cases are unrelated to the case reported in [Week 34](#).

Cases 1 and 2 attended school whilst unknowingly infectious, resulting in transmission to at least one other child, who was notified in Week 36. To 06 September, a total of four cases are included in this cluster. The local public health unit has notified the public via a media statement and alerted local general practitioners and emergency departments.

The local public health unit is working with the school to reduce the risk of further transmission. Thirteen children who are not vaccinated or have not received two doses of a measles containing vaccine have been excluded from attending school until 14 days after their last potential exposure to measles.

Others in the community known to have been in contact with the cases are being contacted directly, however anyone in the Coffs Harbour-Woolgoolga area who is not vaccinated against measles should be alert to symptoms, particularly those who were in Woolgoolga on 28 August or in the Coffs Harbour central business district on 29 or 30 August 2018. The time from exposure to the disease and the onset of symptoms is typically about 10 days but can be as long as 18 days so people should be alert to symptoms until 17 September. Anyone born during or after 1966 who has not received two doses of measles vaccine should seek vaccination from their doctor.

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](#).

Two doses of measles containing vaccine provide full immunity to 99 per cent of vaccinated people. In Australia these are given as measles mumps rubella (MMR) and measles mumps rubella varicella (MMRV) vaccines at 12 and 18 months of age respectively. Parents planning travel with a child less than 12 months of age should discuss their travel plans with their GP, as the first dose can be given earlier in certain circumstances.

NSW residents born in Australia during or after 1966, or born overseas, without documented evidence of having received two doses of vaccine or past measles infection can be vaccinated for

free at their GP. People who are unsure of whether they have had two doses can safely be given another dose.

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

Invasive meningococcal disease

A fatal case of invasive meningococcal disease (IMD) was notified in this reporting week, in a young woman from the Central Coast. The disease was caused by serogroup W meningococcal bacteria. Clearance antibiotics and vaccination have been provided to close contacts of the case.

Invasive meningococcal disease can affect people of any age but is more common among young children, adolescents and young adults. Asymptomatic carriage of meningococcal bacteria occurs in up to 25% of the population, with the highest carriage rates among adolescents.

Diagnosis of IMD is often difficult in the early stages of the disease as symptoms can be similar to other illnesses such as gastroenteritis and respiratory infections. Symptoms may be relatively mild at first but worsen very quickly, and may be fatal within hours. Even with rapid treatment, up to 10% of cases will be fatal. Currently in Australia disease caused by serogroup W is associated with a higher rate of death than that due to other serogroups.

Vaccination is the best means of prevention for IMD. However, as routine childhood vaccines (including those provided by the school-based program) do not protect against all serogroups, all people must still be alert for the symptoms and signs of IMD and seek treatment immediately if they occur, even if they have been vaccinated. Early treatment with antibiotics is life saving. For more information see the [NSW Health Meningococcal Disease Advice Poster \(PDF\)](#).

Vaccination against meningococcal serogroup C has been included on the National Immunisation Schedule at 12 months of age since 2003. Between 2003 and 2008, 'catch-up' vaccination for those aged 1-19 years was conducted via state based school programs and general practitioners. On 1 July 2018, the vaccine administered at 12 months of age was changed to the vaccine covering serogroups A, C, W and Y.

In NSW, free meningococcal ACWY vaccine was offered to high school students in years 11 and 12 in 2017 and years 10 and 11 in 2018. In 2019, it will be offered to students in year 10. People aged 15-19 years who have not received the ACWY vaccine via the school program can visit their general practitioner to receive a free vaccine.

Providing vaccine to older adolescents, who are more likely to be carriers of the bacteria, will directly protect them and also decrease carriage of these serogroups. Reducing carriage in this age group will reduce transmission to others and thereby help prevent infections within the broader community.

Follow the links for more information on [meningococcal disease](#), [vaccination](#), and [notification data](#).

HIV

[Reports on progress](#) against the NSW *HIV Strategy 2016-2020* are published every three months. The NSW HIV surveillance [Data report - Quarter 2 2018](#) is now available.

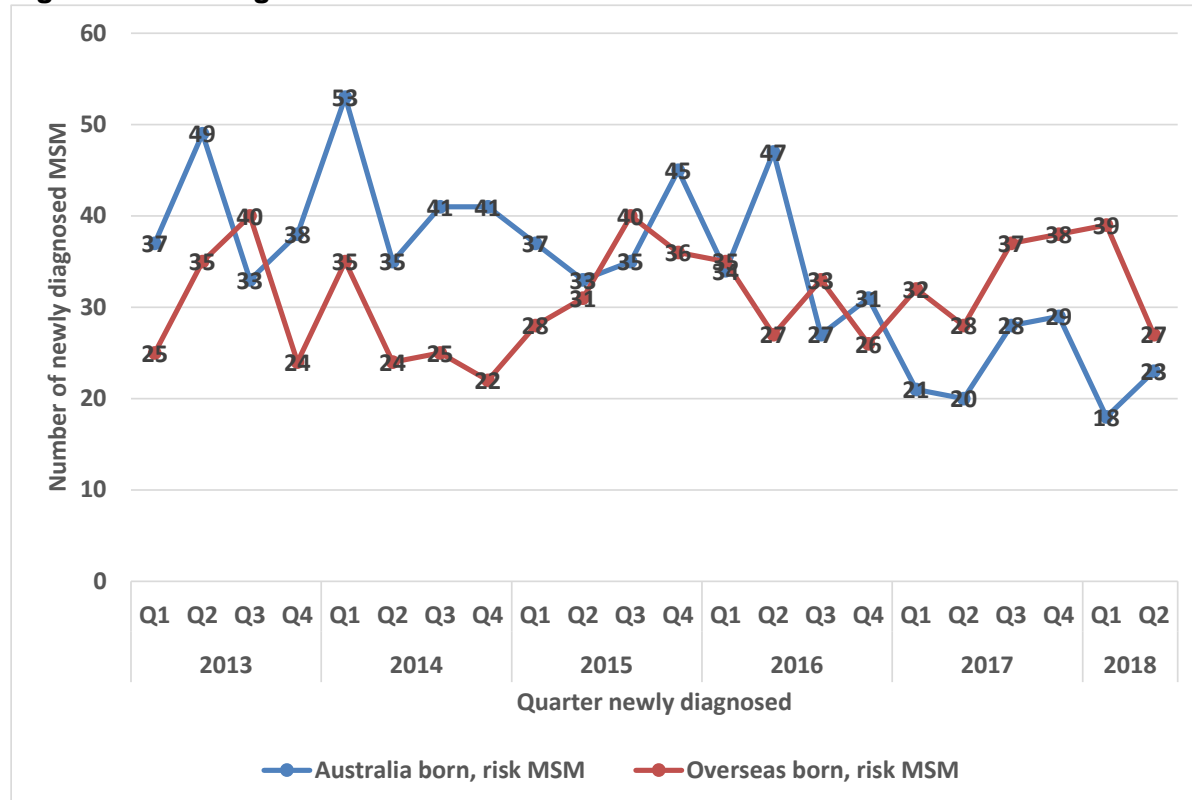
In April to June (Q2) 2018, 60 NSW residents were notified to NSW Health with newly diagnosed HIV infection, 27% fewer than the Q2 2013-2017 average of 82.4.

Fifty (83%) of the people newly diagnosed in Q2 2018 were men who have sex with men (MSM) and ten (17%) were reported to have had heterosexual exposure to HIV. This is 24% fewer MSM and 30% fewer heterosexual people compared with the new diagnoses averages of Q2 2013-2017.

Twenty-three of the 50 (46%) MSM newly diagnosed were Australian-born, which was 38% fewer than the average for Q2 2013-2017 (36.8) (Figure 1). Eleven of 23 (48%) Australian-born newly diagnosed MSM had evidence their infection was acquired within one year of diagnosis (early stage infection), 35% fewer than the Q2 2018 average of 17.0.

Twenty-seven of the 50 (54%) MSM newly diagnosed were overseas-born, which was 7% fewer than the average for Q2 2013-2017 (29.0) (Figure 1). Eleven of 27 (41%) overseas-born newly diagnosed MSM had evidence of early stage infection, 17% less than the Q2 2013-2017 average of 13.2. Year to date however, there is a 10% rise in the number of overseas born MSM newly diagnosed January to June 2018 (66), compared with the average count for January to June 2013-2017 (60).

Figure 1: New diagnoses Jan 2013-June 2018 in Australia versus overseas born MSM



HIV testing in NSW continued to scale up with 147,464 HIV serology tests performed in 15 laboratories in NSW, which was 6% more than in Q2 2017 (138,952). Despite year on year increased testing, and innovation in access to and methods for taking an HIV test, two-thirds of MSM newly diagnosed in Q2 2018 had not had an HIV test in the 12 months prior to diagnosis.

With respect to progress on rapid initiation of antiretroviral therapy (ART) post diagnosis, of the 312 people newly diagnosed in 2017 now followed up six months post diagnosis, 22% initiated ART within two weeks, 56% within four weeks, 73% within six weeks, 89% within three months and 93% within six months of diagnosis. The median time to ART initiation was 25.5 days.

ART is also effective in preventing HIV-negative people from acquiring the infection. On 1 March 2016, the population level HIV pre-exposure prophylaxis (PrEP) study (EPIC-NSW) commenced in NSW with 9,477 participants when enrolments ceased on 30 April 2018. HIV PrEP became available on the Pharmaceutical Benefits Scheme on 1 April 2018. No new HIV diagnoses have been made in EPIC-NSW participants who continued to take PrEP as directed throughout the trial.

The declining trend in HIV notifications, in the context of high testing and treatment among people living with HIV, suggests that HIV transmissions in NSW are decreasing.

The continued fall in the number of new diagnoses in Australian-born MSM, particularly in diagnoses made in early infection, reflects the joint efforts of all NSW partners in the HIV response, and the multiple combination prevention strategies.

NSW Health is working with key partners to conduct rigorous research and coordinate state-wide efforts to better engage overseas-born MSM in HIV prevention and testing services.

Information on HIV and many other resources can be found on the [NSW Health Ending HIV](#) landing page. More detailed data can be found in the [NSW HIV Strategy 2016-2020 Quarter 2 - 2018 Data Report](#).

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 26 August to 1 September 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	15	9	10	12	13
	Hepatitis D	1	0	7	13	14	21	20
Enteric Diseases	Cryptosporidiosis	11	10	546	1113	812	1266	1184
	Giardiasis	40	41	1842	2336	2622	3134	3480
	Rotavirus	16	13	547	885	327	2319	750
	Salmonellosis	33	35	2351	2771	3397	3680	4533
	Shigellosis	14	13	250	156	207	235	310
	Typhoid	1	1	41	42	28	55	37
Other Diseases	Acute Rheumatic Fever	2	1	18	12	9	20	16
Respiratory Diseases	Influenza	968	810	9569	67373	22320	103853	35540
	Tuberculosis	9	20	346	348	326	540	533
Sexually Transmissible Infections	Chlamydia	544	521	21276	19733	17693	28976	25988
	Gonorrhoea	189	226	7221	6290	4724	9171	6993
	LGV	3	1	55	27	42	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	9	1	211	217	176	279	262
	Measles	3	1	12	25	10	32	16
	Meningococcal Disease	1	4	42	53	46	91	70
	Pertussis	159	126	2894	3987	7125	5365	10956
	Pneumococcal Disease (Invasive)	17	24	440	429	345	683	545
Vector Borne Diseases	Ross River	8	8	437	1478	387	1653	595
Zoonotic Diseases	Brucellosis	1	0	3	3	7	6	10
	Leptospirosis	1	3	52	18	12	20	16
	Q fever	2	3	133	156	145	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.