

Communicable Diseases Weekly Report

Week 23, 3 June to 9 June 2018

In summary, we report:

- [HIV – Data report - Quarter 1 2018](#)
- [Legionellosis](#) – two new cases reported
- [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.

HIV

[Reports on progress](#) against the NSW *HIV Strategy 2016-2020* are published every three months. The NSW HIV surveillance [Data report - Quarter 1 2018](#) is now available.

In January to March 2018 (Q1 2018) there were 73 NSW residents notified with newly diagnosed HIV infection, 14 per cent (%) less than the average for Q1 2013-2017. Fifty-nine (80%) of the new diagnoses were in men who have sex with men (MSM), 13% less than the average new diagnoses count for MSM in Q1 2013-2017. Eleven (15%) others reported heterosexual acquisition of HIV, 20% less than the average count for Q1 2013-2017. Of the remaining three new diagnoses in Q1 2018, one was acquired via injecting drug use and two were other/unknown exposures.

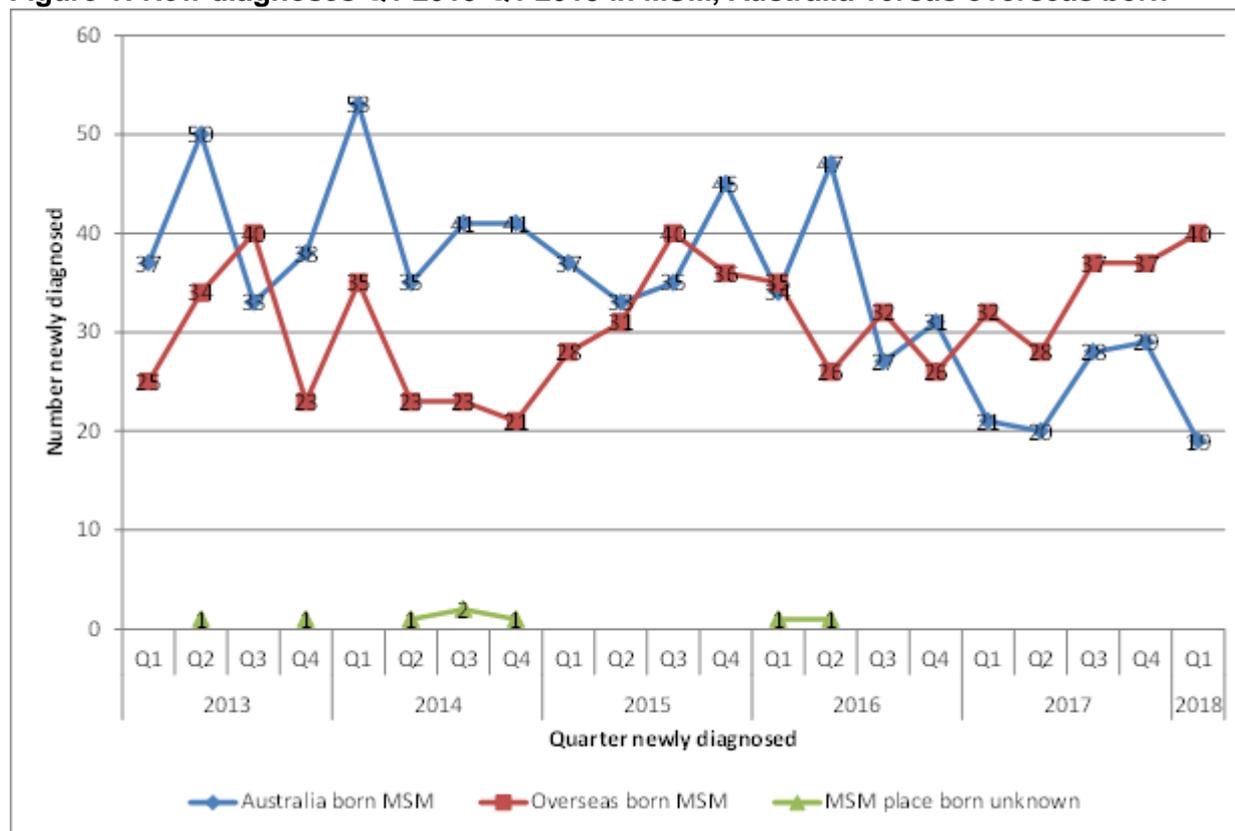
Of 59 MSM newly diagnosed in Q1 2018, 19 (32%) were Australian-born, continuing a 15 months downward trend in new diagnoses in this sub-group. This is 48% less than the average new diagnoses count for Australian-born MSM in Q1 2013-2017. Conversely, new diagnoses in overseas born MSM increased by 29% in Q1 2018 (n=40) compared with the Q1 2013-2017 average ([Figure 1](#)).

There was an 18% (n=31) drop in the number of people newly diagnosed with evidence that the infection was acquired within one year of diagnosis (early stage infection) compared to the average early stage infection count in Q1 2013-2017. This drop occurred exclusively in Australia-born MSM, with 63% fewer early stage infections in Q1 2018 (n=7) in this sub-group compared to the average in the group in Q1 2013-2017. Early stage infection in overseas born MSM increased by 33% in Q1 2018 (n=20). Fifteen of 20 early stage infections in overseas born MSM in Q1 2018 were most likely acquired in Australia.

HIV testing in NSW continued to scale up with 8% more serology tests done in Q1 2018 compared with Q1 2017 (159,692 versus 147,674). In publically funded sexual health services, there was a 7% increase in the number of MSM tested compared with Q4 2017 (9991 versus 9259). Despite year on year increases, and innovation in accessing and undergoing HIV testing in NSW, of all 59 MSM newly diagnosed in Q1 2018, 40 (68%) had not had a test in the 12 months prior to diagnosis (same proportion for Australia-born and overseas born MSM).

With respect to progress on rapid initiation of antiretroviral therapy (ART) post diagnosis, of the 229 people newly diagnosed in January to September 2017 now followed up six months post diagnosis 75% initiated ART within six weeks of diagnosis. The median time to ART initiation was 26 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 9,468 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.

Figure 1: New diagnoses Q1 2013-Q1 2018 in MSM, Australia versus overseas born

Efforts to reduce new HIV infections in the Australian born MSM community must continue, whilst renewed efforts are needed to increase access to innovative HIV testing, prevention and care services in all groups who are at risk of acquiring HIV. NSW will enhance HIV surveillance to obtain more information about the characteristics and circumstances of people newly diagnosed with HIV. The information will be used to develop more effective interventions to prevent HIV and promote earlier HIV testing.

Information on HIV and many other resources can be found from the [NSW Health Ending HIV](#) landing page. More detailed data can be found in the [NSW HIV Strategy 2016-2020 Quarter 1 - 2018 Data Report](#)

Legionellosis

There were two notifications of legionellosis (Legionnaires' disease) this reporting week ([Table 1](#)). Unfortunately one of the affected patients has died. Both of the cases were confirmed to be due to *Legionella pneumophila* serogroup 1 (LP1) and involved residents of the Northern Sydney and the Central Coast Local Health Districts. The local public health units having been investigating both cases but have not found any common exposure sites linking the cases to each other or other recent cases.

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. Risk factors for legionellosis include increasing age (most cases are in people aged over 50 years), smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high-dose corticosteroid medicines. People with legionellosis often have severe symptoms and infection is associated with a 10 to 15 per cent mortality rate.

Legionellosis is caused by infection with *Legionella* bacteria. There are around 50 different species of *Legionella* bacteria but most infections in NSW are caused by *L. pneumophila* or *L. longbeachae*. *L. pneumophila* is found in water and can contaminate air conditioning cooling towers, spas, plumbing systems and other bodies of warm water. Outbreaks are sometimes associated with contaminated cooling towers that are part of air conditioning systems in large

buildings. Regular inspection, disinfection and maintenance of cooling towers and plumbing systems limit the growth of bacteria and prevent outbreaks of Legionnaires' disease.

The NSW *Public Health Act 2010* and the Public Health Regulation 2012 control various man-made environments and systems which are conducive to the growth of Legionella bacteria and which are capable, under the right conditions, of transmitting the bacteria to people through the air. To further strengthen the regulation of cooling towers, NSW Health amended the Public Health Regulation to require monthly testing for *Legionella* and total bacteria in all cooling towers from 1 January 2018. Further regulatory changes are being finalised to require all cooling tower systems to have risk management plans and third party auditing.

Follow the links for more information on [Legionnaires' disease](#), on the [regulatory control of Legionnaires' disease](#), and on [notifications of Legionnaires' disease](#).

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 3 – 9 June 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	11	16	428	1001	682	1266	1184
	Giardiasis	47	42	1295	1727	1948	2994	3480
	Rotavirus	5	16	410	310	233	2318	750
	STEC/VTEC	3	2	30	29	21	53	65
	Salmonellosis	41	48	1799	2240	2542	3680	4533
	Shigellosis	5	6	100	97	140	235	310
Respiratory Diseases	Influenza	71	94	4344	4443	3485	103851	35540
	Legionellosis	2	1	68	58	68	138	134
	Tuberculosis	6	7	197	221	213	544	534
Sexually Transmissible Infections	Chlamydia	586	625	14287	13395	11811	28977	25990
	Gonorrhoea	199	192	4768	4360	3057	9173	6996
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	5	137	160	132	271	258
	Pertussis	63	74	1710	2751	5279	5367	10956
	Pneumococcal Disease (Invasive)	13	14	186	188	165	681	545
Vector Borne Diseases	Barmah Forest	2	0	40	64	25	127	40
	Dengue	3	6	141	155	269	306	485
	Ross River	11	20	290	1338	333	1653	595
Zoonotic Diseases	Q fever	5	5	82	101	107	210	231

* Notes on Table 2: 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 is 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.