

# Communicable Diseases Weekly Report

## Week 12, 17 March to 23 March 2019

In summary, we report:

- [HIV – Data report - Quarter 4 & Annual 2018](#) – HIV data report new release
- [Measles](#) – five new cases
- [Summary of notifiable conditions activity in NSW](#)

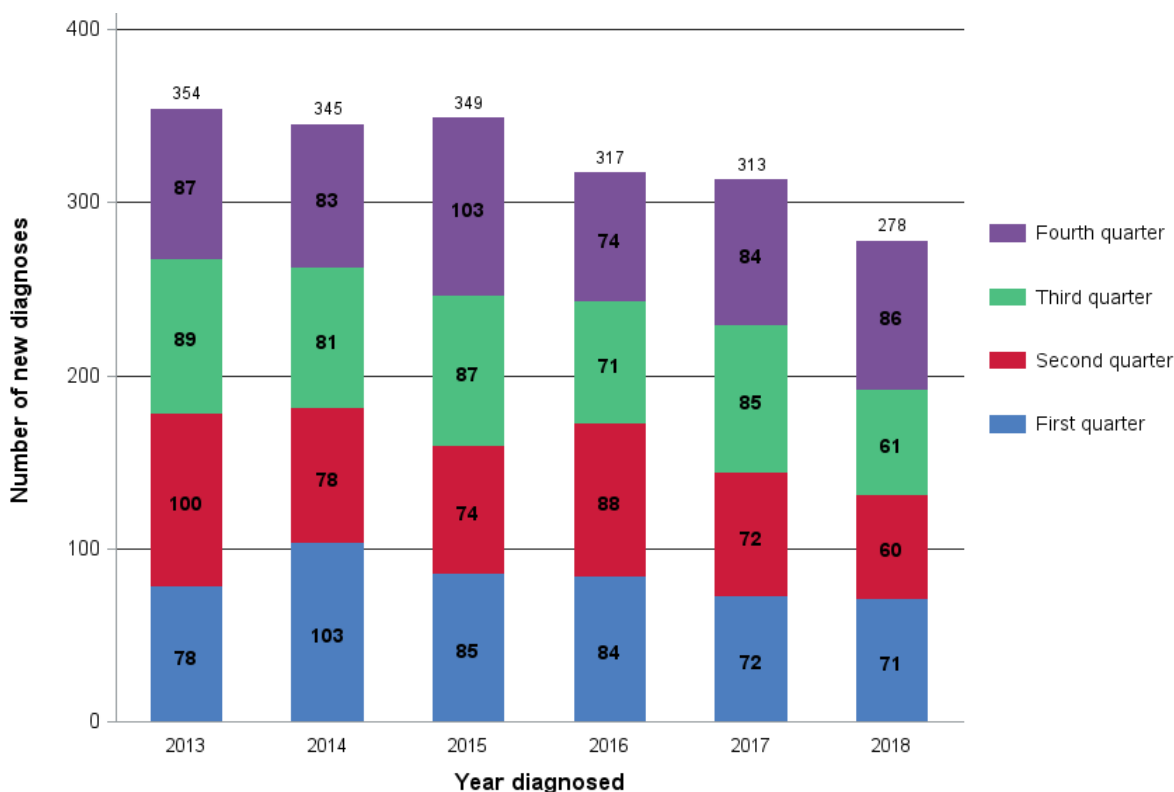
For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

### HIV – Data report

[Reports on progress](#) against the NSW *HIV Strategy 2016-2020* are published every three months. The NSW HIV surveillance [Data report - Quarter 4 & Annual 2018](#) is now available.

In 2018, 278 NSW residents were notified to NSW Health with newly diagnosed HIV infection (Figure 1), 17% fewer than the 2013-2017 average of 335.6. This is the lowest number of annual notifications since surveillance of HIV began in NSW in 1984.

**Figure 1: Number of NSW residents with newly diagnosed HIV infection in 2013-2018**



Two hundred and sixteen (78%) of those newly diagnosed in 2018 were men who have sex with men (MSM) and 52 (19%) were reported to have had heterosexual exposure to HIV. This is 19% fewer MSM, and 6% fewer heterosexual people compared to the new diagnosis averages of 2013-2017.

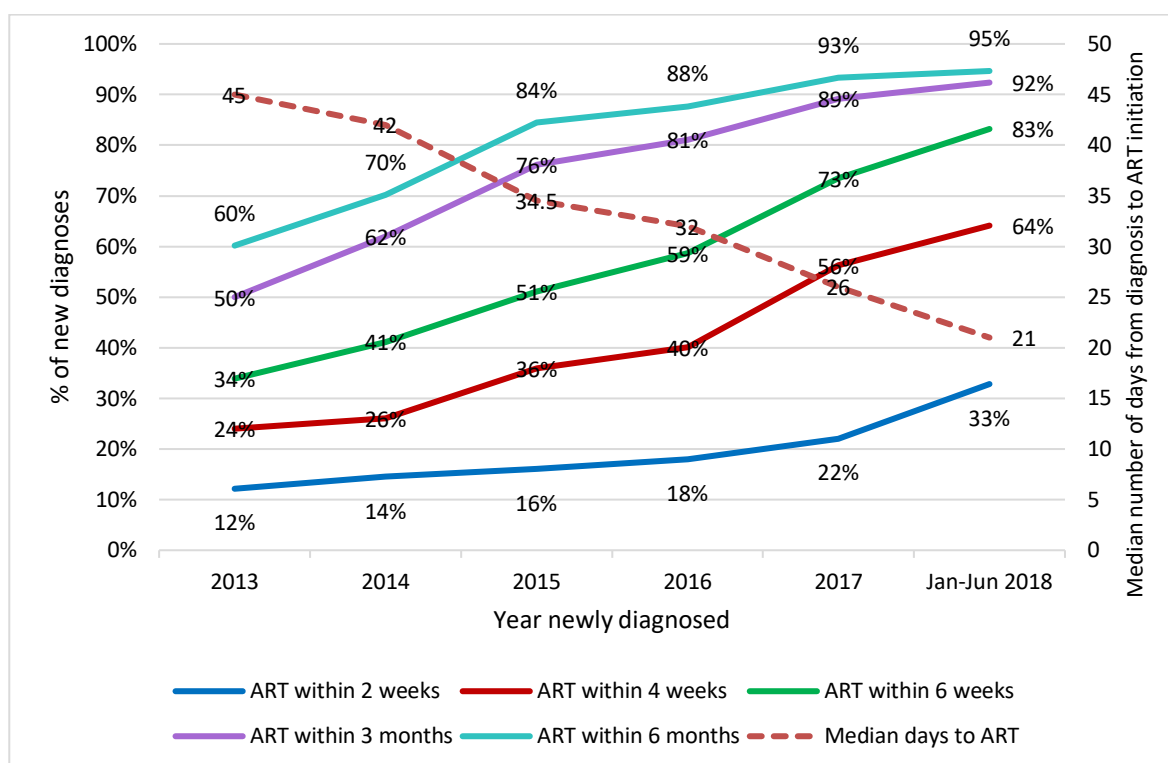
In 2018, the divergence of the epidemic between Australian-born and overseas-born MSM seen in 2017 has continued. Ninety-five (44%) MSM newly diagnosed in 2018 were born in Australia, a 33% reduction compared to 2013-2017. One hundred and twenty-one (56%) were born overseas, a reduction of only 3% compared to the 2013- 2017 average of 124.2.

Forty-seven (33%) overseas-born MSM had evidence of late or advanced stage infection, 33% higher than 2013-2017. This may reflect better detection of undiagnosed infections caused by increased screening of this population. In contrast, the number of new diagnoses in Australian-born MSM with evidence of late or advanced stage infection declined by 23% in 2018.

HIV testing in NSW has continued to increase with 592,318 serology tests performed during 2018 in 15 laboratories across NSW, 6% more than 2017 (559,010). However, despite the increase in testing and innovation in access to testing, almost two thirds of MSM newly diagnosed in 2018 had not had an HIV test in the 12 months prior to their diagnosis.

The time from HIV diagnosis to anti-retroviral treatment (ART) initiation continues to decline, with the median falling to 21 days. Of 131 people newly diagnosed in January to June 2018 now followed up six months post diagnosis, 33% initiated ART within two weeks, 83% within 6 weeks and 95% within 6 months of diagnosis (Figure 2).

**Figure 2: Time to ART for NSW residents newly diagnosed from Jan 2013-Jun 2018**



There was a slight increase in early diagnoses for Australian-born MSM in Q4 2018 relative to the rest of 2018. However, the large overall decline in HIV notifications in the context of high HIV testing and treatment rates, and high uptake of pre-exposure prophylaxis (PrEP) suggests that HIV transmission in NSW is decreasing. This reflects the joint efforts of all NSW partners in the HIV response.

NSW continues to focus on reducing infections in overseas-born MSM. Coordinated state-wide efforts are targeting international students attending universities and English language schools, to improve their engagement with health services and increase HIV testing.

## Measles

There were a further five notified cases of measles in NSW in this reporting week (Table 1), prompting alerts to residents of [Western Sydney](#), [Northern Sydney](#), [South Western Sydney](#), and the [Haymarket](#) area of the CBD to be alert for signs and symptoms of measles infection, and ensure they have been protected with two doses of measles containing vaccine. These five cases take the total number of people infectious with measles in NSW since December 2018 to 26.

Three of the cases were acquired locally as these people had no history of recent travel. Investigations into the source of their infections are ongoing, although two of these cases were in people staying at the same Backpacker's hostel and are likely to have been exposed to the same, as yet unidentified, measles case. The other case was in South Western Sydney. While no direct link was established, an infant had been infectious with measles [in the same area](#) two weeks before this case became unwell.

The other two measles cases were acquired by NSW residents while travelling overseas; one in Thailand and the other in the Philippines. Both of these countries are currently known to have large numbers of measles cases, increasing the risk of infection for travellers who are not immune.

People are considered immune to measles if they have had measles in the past or have evidence of having received two doses of a measles-containing vaccine. People born before 1966 are highly likely to have had measles infection as a child and are considered immune. While one dose of vaccine provides some protection, two doses is more effective and provides lifelong protection in 99% of people. Several recent measles cases in NSW have reported a history of childhood vaccination, however, this and the number of doses received could not be confirmed.

Australian children receive two doses of measles-containing vaccine as part of the National Immunisation Program, at 12 months (as the measles-mumps-rubella (MMR) vaccine) and 18 months of age (as the measles-mumps-rubella-varicella (MMRV) vaccine). Infants who are travelling to countries where the risk of measles infection is high can receive measles vaccine as early as 9 months of age to protect them while travelling however, if this dose is given before 11 months of age, they will still need to receive their 12 month MMR and 18 month MMRV doses as per the schedule. For children travelling between the age of 12 and 18 months, the second dose can be administered early, so long as more than four weeks has passed since the first dose was given.

Information about [MMR for travellers](#) <12 months and the [minimum age for first dose](#) of MMR can be found in the Australian Immunisation Handbook.

Free measles vaccine (MMR) is also available to anyone in NSW born during or after 1966 who cannot confirm that they have had two doses in the past. For anyone unsure of whether they have received two doses in the past, it is safe to receive another dose, and better to be safe than sorry.

Measles infection is caused by a virus that is spread between people by respiratory droplets (e.g. coughing or sneezing) or contact with nose or mouth secretions. The virus is highly contagious and can remain in the air inside a room for up to 30 minutes after an infected person has left the space.

The symptoms of measles usually start 7 to 18 days after exposure to someone who has measles. They include fever, feeling unwell, cough, runny nose, conjunctivitis (sore, red eyes) and a spotty red rash.

People who think they might have measles should avoid public places and see a doctor, but should call ahead to ensure they do not come in to contact with other people in the waiting areas.

For more information see the NSW Health [measles fact sheet](#) or [measles website](#).

## 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 17 March to 23 March 2019, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Bloodborne	Hepatitis C - Newly Acquired	1	0	6	11	9	38	40
Enteric Diseases	Cryptosporidiosis	27	18	273	276	702	708	1266
	Giardiasis	67	78	901	819	993	2798	3135
	Hepatitis A	2	0	19	33	10	86	71
	Hepatitis E	1	0	3	1	5	17	20
	Rotavirus	4	12	132	241	162	806	2319
	STEC/VTEC	1	3	23	17	17	57	53
	Salmonellosis	94	96	1219	1112	1369	3343	3681
	Shigellosis	14	13	208	55	59	530	235
	Typhoid	6	2	60	38	40	116	110
Respiratory Diseases	Influenza	639	655	6440	3148	2100	17422	103852
	Legionellosis	5	4	50	37	32	167	138
	Tuberculosis	14	14	123	113	114	514	542
Sexually Transmissible Infections	Chlamydia	646	634	7580	7519	7396	31189	29006
	Gonorrhoea	257	233	2732	2520	2440	10625	9161
Vaccine Preventable Diseases	LGV	1	1	19	18	8	86	50
	Measles	5	1	22	2	11	18	32
	Pertussis	116	121	1481	912	1590	6281	5366
	Pneumococcal Disease (Invasive)	7	6	83	81	79	688	683
Vector Borne Diseases	Rubella	1	0	5	0	0	1	5
	Barmah Forest	1	1	13	22	22	74	127
	Dengue	6	4	92	90	99	290	306
	Malaria	3	1	16	17	19	65	68
	Ross River	10	21	135	110	921	567	1653
Zoonotic Diseases	Q fever	3	1	66	53	60	224	210

### \* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- 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.
- Cases involving interstate residents are not included.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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](#).
- Chronic blood-borne virus conditions (such as HIV, Hepatitis B and C) are not included here. Related data are available from the [Infectious Diseases Data](#) and the [HIV Surveillance Data Reports](#) webpages.