

Communicable Diseases Weekly Report

Week 38, 15 September to 21 September 2019

In summary, we report:

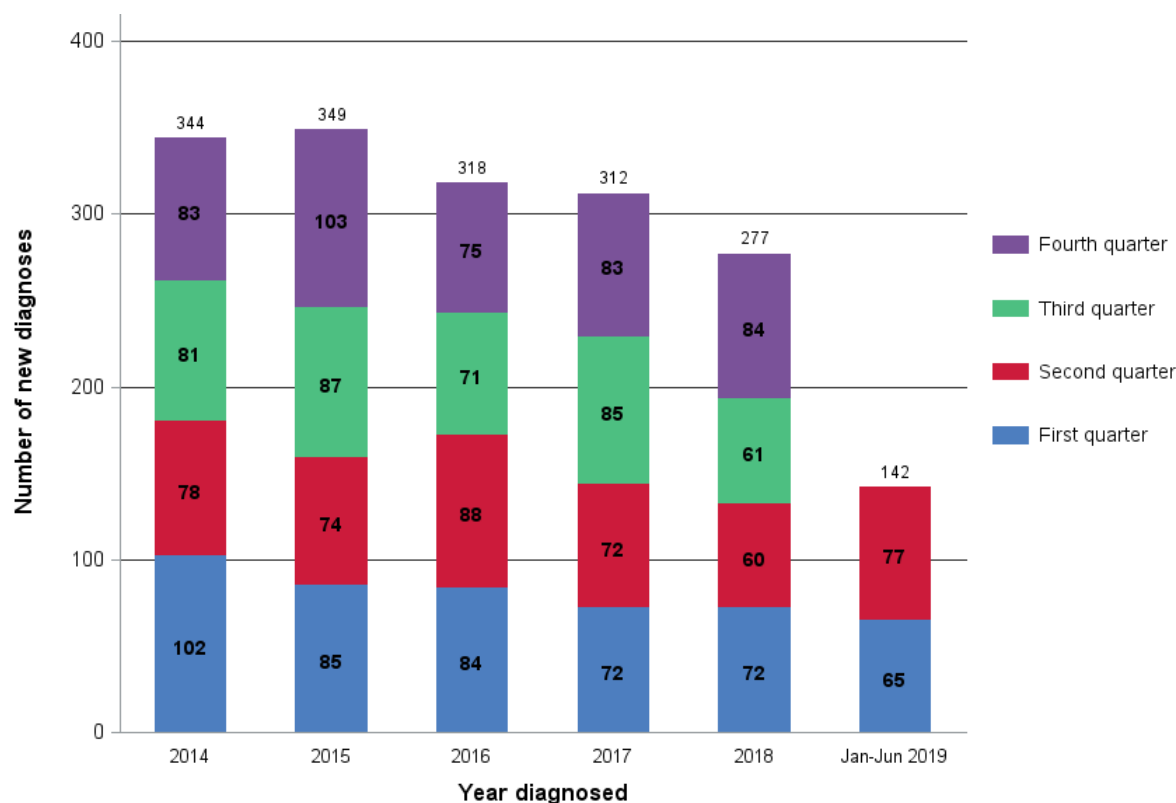
- [HIV](#) – Quarter 2 2019 data report available
- [Measles](#) – four new cases, including two locally acquired
- [Summary of notifiable conditions activity in NSW](#)

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 2 2019](#) is now available. From January to June 2019, 142 NSW residents were notified to NSW Health with newly diagnosed HIV infection (Figure 1), 10% less than the January to June 2014-2018 average of 157.4.

Figure 1: NSW residents with newly diagnosed HIV infection, January 2014 – June 2019.



One hundred and fourteen (80%) of those newly diagnosed in January to June 2019 were men who have sex with men (MSM) and 20 (14%) were reported to have had heterosexual exposure to HIV. This is 9% fewer MSM and 25% fewer heterosexual people compared to the five year new diagnosis averages for the same period.

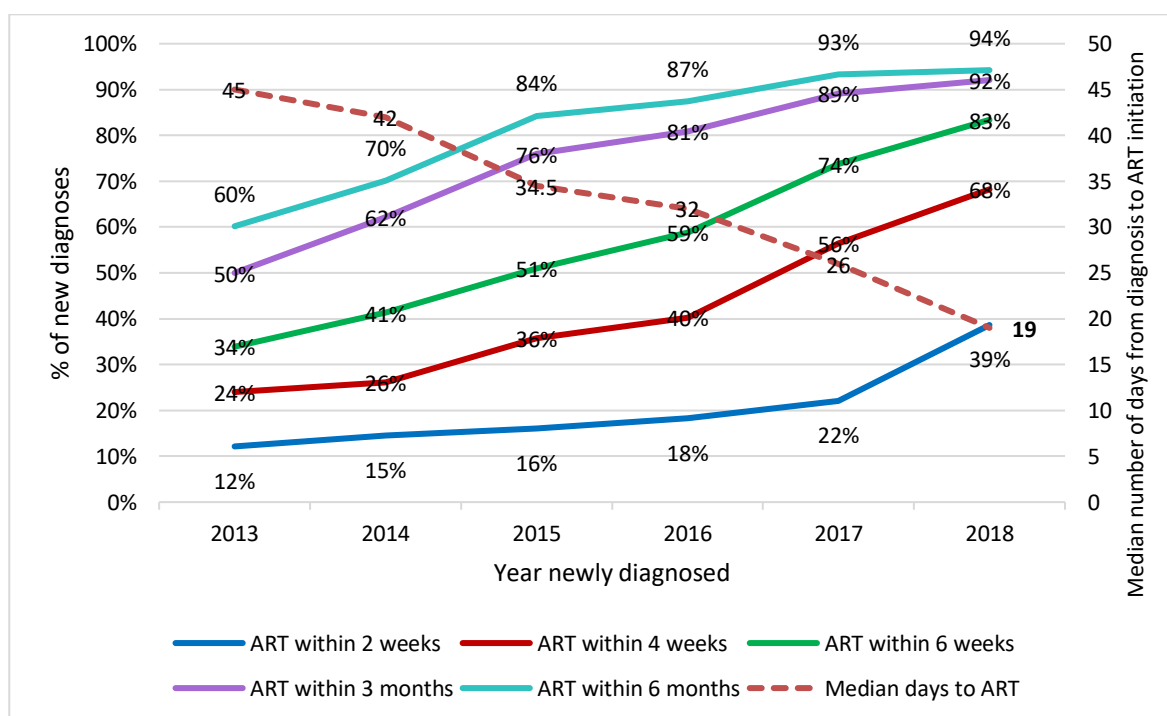
Only 38 (27%) of new diagnoses in January to June 2019 had evidence that their infection occurred in the 12 months preceding diagnosis (early stage infection), a 42% decrease compared to the January to June average for 2014-2018. This decline in early stage infection was seen in both Australian and overseas born MSM, with reductions of 39% and 38%, respectively.

There were 75 HIV notifications of overseas-born MSM in the first six months of 2019, a 23% increase compared to the average for January to June 2014-2018. Of these 75, 35 (47%) were diagnosed with late stage infection, indicating that they had likely acquired their infection at least four years before they were diagnosed. This is an increase of 61% relative to the comparison period. Most of these men were aged between 20 and 40 years, had lived in Australia for four years or less and likely acquired their infection overseas. This emphasises the need to ensure that MSM arriving from overseas feel comfortable engaging with healthcare and test as soon as possible after arrival in NSW.

HIV testing in NSW has continued to increase with 308,774 serology tests performed during January to June 2019 in 15 laboratories across NSW, 3% more than the same period in 2018 (301,108). However, despite the increase in testing and innovation in access to testing, around two thirds of MSM newly diagnosed in 2019 to 30 June 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 19 days. Of 277 people newly diagnosed in 2018 now followed up six months post diagnosis, 39% initiated ART within two weeks, 83% within 6 weeks and 94% within 6 months of diagnosis (Figure 2). Of those on ART by 6 months, 89% had an undetectable viral load, which means they were no longer able transmit HIV to others.

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



The continued decline in HIV notifications of early stage infections 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 diverse groups by raising HIV awareness, encouraging testing and making healthcare more accessible. The ‘Discreet life’ campaign that targets men who travel overseas for sex and MSM who identify as heterosexual is one such program, encouraging these men to test more frequently and raise their understanding of effective prevention measures. Another initiative is the new a[TEST] Chinese clinic, which offers free and confidential HIV and STI screening by Mandarin-speaking community peers and nurses.

Measles

Four new cases of measles were notified in this reporting week ([Table 1](#)). Two of the cases occurred in returned travellers, while the other two cases were in Western Sydney residents with no history of overseas travel or contact with a known case of measles.

Two cases in returned travellers

An unvaccinated child was diagnosed with measles after returning from the United Kingdom. The World Health Organization (WHO) recently declared that the UK was no longer considered 'measles free' following increasing community spread of measles in 2018 and 2019.

The other imported measles case was in a man aged in his 40s who had recently returned from Queenstown in New Zealand. The man had received one dose of measles vaccine as a child. Eight recent measles cases in NSW have been acquired in NZ, including four acquired in Queenstown.

Two locally acquired cases

The two locally-acquired measles cases were reported in unvaccinated adult residents of Western Sydney. Neither case had travelled outside of NSW prior to their illness or were known to have contact with previously identified cases, raising the possibility of contact with an unidentified case.

Information about measles and measles vaccination

Measles is a serious viral illness and one of the most highly communicable infectious diseases. The measles virus is usually spread through coughing or by contact with the nasal or throat secretions of an infected person.

The symptoms of measles usually start 7 to 18 days after exposure to someone who has measles. They include fever, cough, runny nose, conjunctivitis and feeling unwell. After three to five days a rash with flat red spots breaks out, usually starting on the face before spreading to the rest of the body. People are usually infectious from four days before the onset of the rash until four days after.

People are at risk of measles if they have never had measles infection in the past or if they have not received two doses of measles vaccine. People born before 1966 are considered immune as it is highly likely they had measles infection as a child.

Two doses of measles vaccine provides lifelong immunity to 99 per cent of people vaccinated. Measles vaccines are offered to all children under the National Immunisation Program at 12 months of age as measles-mumps-rubella (MMR) and 18 months of age as measles-mumps-rubella-varicella (MMRV).

NSW Health also provides free catch-up MMR vaccine to anyone born during or after 1966 who has not received two measles vaccine doses. If the vaccine history is uncertain it is safe to have another dose.

NSW Health encourages all people to ensure they are protected against measles, particularly prior to overseas travel. People travelling with children under the age of 12 months should discuss travel plans with their doctor, as the immunisation schedule can be altered to provide protection to children travelling to high risk areas, from 6 months of age.

General practitioners should consider measles in any patient presenting with fever and rash, regardless of travel history, and apply appropriate infection control precautions while the diagnosis is either confirmed or excluded.

Further information

- NSW Health [measles website](#) and [measles factsheet](#).
- [The Australian Immunisation Handbook](#) for more information on measles vaccine recommendations.

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 15 September – 21 September 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	2	5	475	571	1127	708	1266
	Giardiasis	36	59	2299	2211	2473	2937	3135
	Hepatitis E	2	0	17	12	16	18	20
	Listeriosis	1	2	11	17	13	19	20
	Rotavirus	62	32	760	607	1305	808	2319
	STEC/VTEC	2	2	46	37	40	57	53
	Salmonellosis	57	41	2689	2498	2868	3340	3680
	Shigellosis	16	13	623	299	165	531	236
	Typhoid	2	1	52	45	43	58	55
Respiratory Diseases	Influenza	2214	2806	108323	13164	90277	17423	103851
	Legionellosis	5	7	116	111	93	171	138
	Tuberculosis	9	4	401	371	383	508	542
Sexually Transmissible Infections	Chlamydia	565	547	23321	23213	21310	31192	29001
	Gonorrhoea	204	200	8695	7867	6806	10618	9159
	LGV	1	1	42	66	30	85	50
Vaccine Preventable Diseases	Measles	4	2	52	16	26	18	32
	Meningococcal Disease	1	2	47	48	63	72	91
	Mumps	2	1	41	58	87	72	127
	Pertussis	149	96	4568	3340	4212	6280	5366
	Pneumococcal Disease (Invasive)	20	14	493	497	507	681	683
Vector Borne Diseases	Barmah Forest	2	5	308	209	221	299	306
	Chikungunya	2	1	49	52	55	66	68
	Ross River	13	7	494	462	1516	571	1653
Zoonotic Diseases	Q fever	2	2	175	157	164	228	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](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.