Communicable Diseases Weekly Report

Week 48, 25 November to 1 December 2018

In summary, we report:

- HIV – Quarter 3 - 2018 report released
- Hepatitis D – New Hepatitis D case notified
- Summary of notifiable conditions activity in NSW

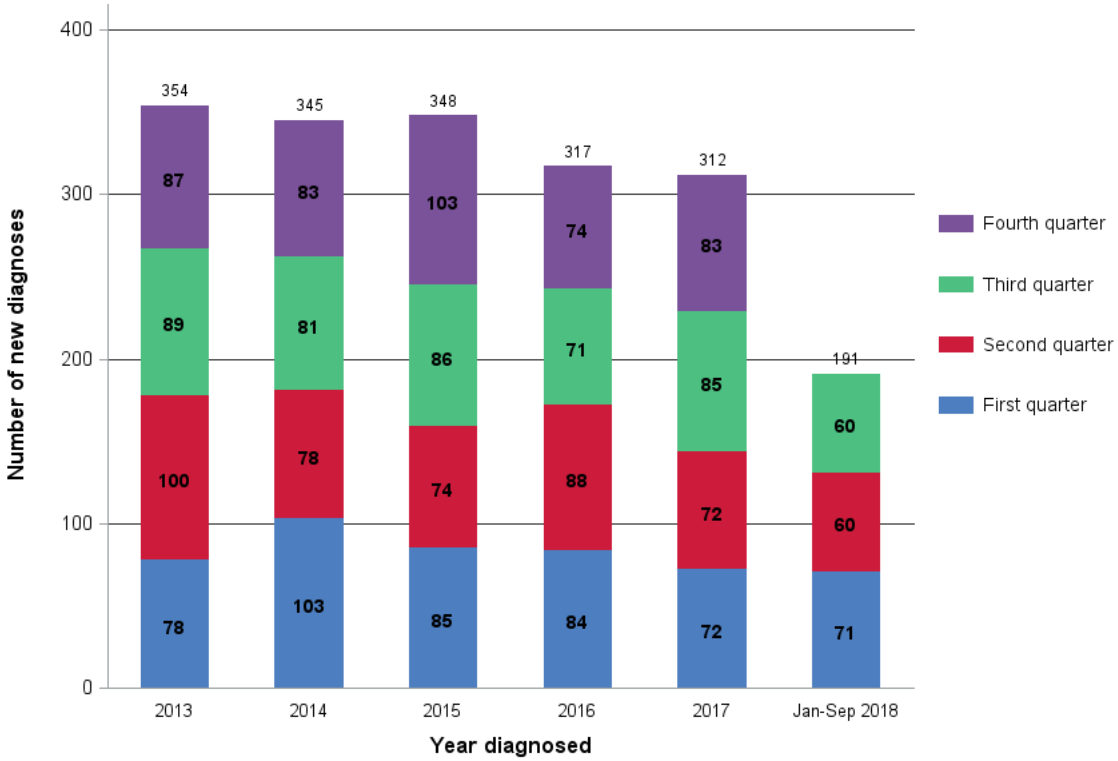
For further information see NSW Health infectious diseases page. This includes links to other NSW Health infectious disease surveillance reports and a diseases data page for a range of notifiable infectious diseases.

HIV

Reports on progress against the NSW *HIV Strategy 2016-2020* are published every three months. The NSW HIV surveillance Data report - Quarter 3 2018 is now available.

In July to September (Q3) 2018, 60 NSW residents were notified to NSW Health with newly diagnosed HIV infection (Figure 1), 27% fewer than the Q3 2013-2017 average of 82.4.

Figure 1: Number of NSW residents with newly diagnosed HIV infection from Jan 2013-Sep 2018



Forty-five (75%) of those newly diagnosed in Q3 2018 were men who have sex with men (MSM) and twelve (20%) were reported to have had heterosexual exposure to HIV. This is 34% fewer MSM, but a similar number of heterosexual people compared to the new diagnosis averages of Q3 2013-2017.

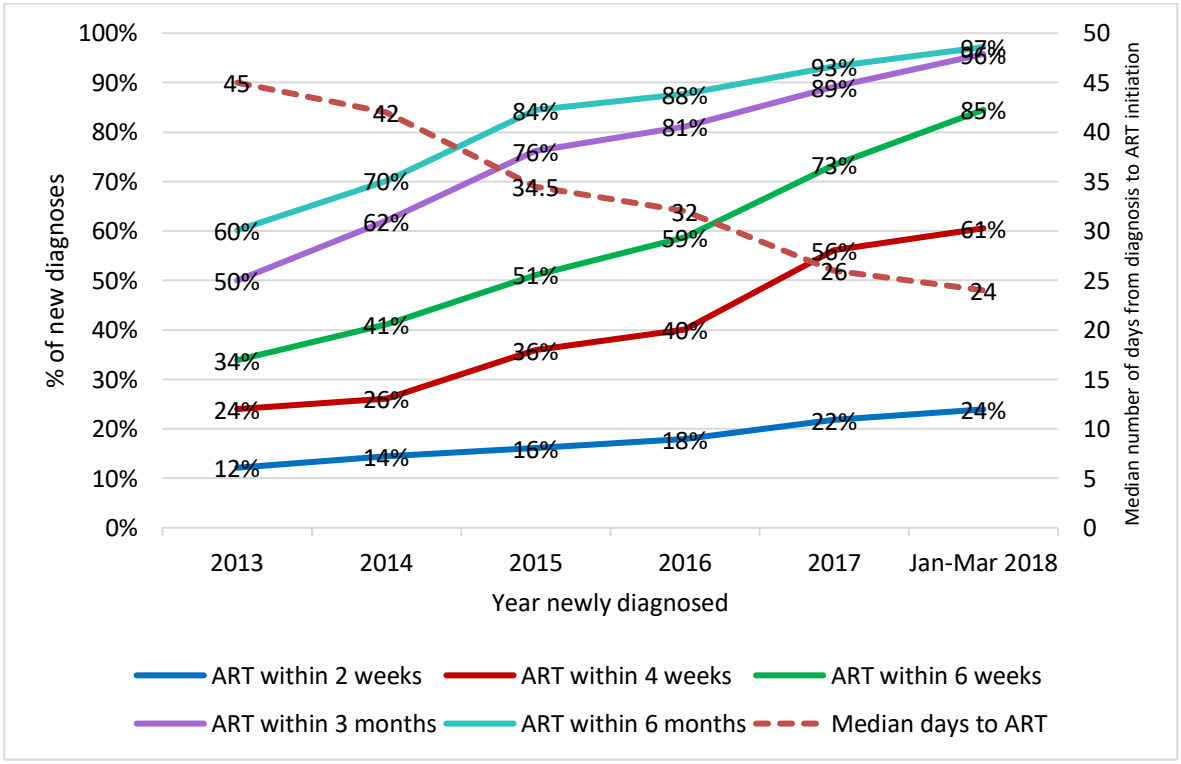
In 2018 to 30 September, the divergence of the epidemic between Australian-born and overseas-born MSM seen in 2017 has become more apparent. Sixty-four (42%) of MSM newly diagnosed in January to September 2018 were born in Australia, a 40% reduction compared to the same period in 2013-2017. Eighty-eight (58%) were born overseas, a reduction of 7% compared to the same period in 2013 to 2017.

Thirty-two (36%) of the 88 overseas-born MSM had evidence of late or advanced stage infection, a rise of 19% compared to the January 2013 to September 2017 average. In contrast, the number of new diagnoses in Australian-born MSM with evidence of late or advanced stage infection declined by 18% in the same period.

HIV testing in NSW has continued to increase with 149,641 serology tests performed in Q3 2018 in 15 laboratories across NSW, 4% more than Q3 2017 (143,220). However, despite the increase in testing and innovation in access to testing, over two thirds of MSM newly diagnosed to 30 September in 2018 had not had an HIV test in the 12 months prior to their diagnosis.

With respect to progress on rapid initiation of antiretroviral therapy (ART) post diagnosis, of the 71 people newly diagnosed in January to March 2018 now followed up six months post diagnosis, 24% initiated ART within two weeks, 85% within 6 weeks and 97% within 6 months (Figure 2). The median time to ART initiation continues to decline and was 24 days.

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



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. In particular, the increasing decline in new diagnoses of Australian-born MSM as well as the promising slight decrease in overseas-born MSM reflects the joint efforts of all NSW partners in the HIV response.

Coordinated state-wide efforts are being implemented to better target those who do not engage with conventional testing and prevention services, such as MSM born overseas, MSM who do not identify as gay or bisexual, and those who have sex in countries with higher HIV prevalence.

Follow the link for more information on HIV notifications data.

For more information on HIV see the NSW Health HIV factsheet.

Hepatitis D

A new case of hepatitis D was notified during this reporting period. The case was a man in his fifties living in metropolitan Sydney who is undergoing treatment for hepatitis B.

Hepatitis D, also called delta hepatitis, is the least common but most severe form of viral hepatitis. Hepatitis D virus is a defective virus that requires the helper function of the hepatitis B virus to multiply and is therefore only found in people who are infected with hepatitis B. Hepatitis D is not commonly identified, with an average of 13 cases reported in NSW each year between 2008 and 2017. The Australasian Society for HIV Medicine (ASHM) recommends HDV testing for all people who are infected with hepatitis B.

The symptoms of hepatitis D are similar to hepatitis B, and include: a mild flu-like illness, a yellowing of the skin and eyes (jaundice), abdominal pain, loss of appetite, nausea and vomiting, dark urine and fatigue.

Hepatitis D is found in the blood and so is spread in similar ways to hepatitis B. Infection can occur through sharing injecting equipment, or through needle stick or sharps injuries. It is less common for hepatitis D to be spread through sexual contact, or mother to baby transmission compared to hepatitis B.

Hepatitis D infection can occur as a co-infection, which means it occurs at the same time as hepatitis B infection, or it can occur as a super-infection in people who already have chronic hepatitis B.

Most people who are co-infected with hepatitis D will clear the virus. However, some people who are co-infected with hepatitis B and hepatitis D may experience a more serious acute illness and have a higher risk (2%–20%) of developing acute liver failure compared to people infected with hepatitis B alone.

People with chronic hepatitis B who are also infected with hepatitis D usually develop chronic hepatitis D infection and have a higher risk of developing chronic liver disease and cirrhosis (scarring of the liver) than those infected with hepatitis B alone.

As infection with hepatitis D can only occur with hepatitis B, immunisation against hepatitis B infection will also prevent hepatitis D. Hepatitis B vaccination is part of the routine childhood immunisation program, with a total of four vaccine doses given at birth, 6 weeks, 4 months and 6 months of age.

There is no medication or vaccine to prevent hepatitis D super-infection in people with chronic hepatitis B. Prevention of hepatitis D super-infection can only be achieved through education to reduce exposure to infectious blood. Under the NSW Hepatitis B and C Strategies 2014-2020, NSW Health aims to reduce sharing of injecting equipment among people who inject drugs by 25 per cent by 2020.

For more information on hepatitis D go to the Hepatitis Australia website.

Follow the links to the NSW Health website for more information on hepatitis B and vaccination.

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 25 November– 1 December 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	10	11	666	1222	1011	1266	1187
	Giardiasis	62	49	2505	2967	3289	3135	3494
	Hepatitis A	1	2	81	63	35	72	41
	Listeriosis	1	0	18	17	33	20	36
	Rotavirus	16	10	750	2226	650	2319	750
	STEC/VTEC	1	3	54	48	52	53	65
	Salmonellosis	56	65	3045	3443	4186	3685	4536
	Shigellosis	15	28	478	212	288	235	310
Respiratory Diseases	Influenza	225	213	16498	103500	35073	103865	35544
	Legionellosis	8	7	155	129	120	138	134
	Tuberculosis	9	11	484	498	478	542	533
Sexually Transmissible Infections	Chlamydia	668	570	29082	26998	24308	29010	26027
	Gonorrhoea	200	196	9913	8527	6503	9170	7005
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	6	288	271	248	279	261
	Haemophilus influenzae type b	1	0	6	8	4	9	5
	Meningococcal Disease	2	1	70	91	70	97	76
	Mumps	1	0	67	121	60	128	67
	Pertussis	274	280	5401	5061	10229	5366	10978
	Pneumococcal Disease (Invasive)	9	11	636	659	525	683	545
Vector Borne Diseases	Barmah Forest	1	1	71	121	35	127	40
	Chikungunya	1	0	10	42	35	47	39
	Dengue	11	8	268	289	460	306	486
	Malaria	1	0	63	66	53	68	59
	Ross River	11	4	543	1622	465	1653	599
Zoonotic Diseases	Brucellosis	1	0	8	5	10	6	10
	Q fever	4	2	208	192	216	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.