Communicable Diseases Weekly Report

Week 17, 23 April to 29 April 2017

In summary, we report:

- Meningococcal ACWY vaccination program – new program in secondary schools
- NSW Hepatitis B and C Strategies 2014-2020 – 2016 annual data report
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see NSW Health Infectious Diseases.

Also see NSW Health Infectious Diseases Reports for links to other surveillance reports.

Meningococcal ACWY vaccination program in secondary schools

Meningococcal disease is a serious illness that usually causes meningitis (inflammation of the lining of the brain and spinal cord) and/or septicaemia (blood poisoning). Rare forms of the disease include septic arthritis (joint infection), pneumonia (lung infection) and epiglottitis (infection and swelling of the top of the windpipe). The bacteria that cause meningococcal disease can also cause conjunctivitis (infection of the outer lining of the eye and eyelid).

People with meningococcal disease can become extremely unwell very quickly. Five to ten per cent of patients with meningococcal disease die, even despite rapid treatment.

NSW Health is implementing a meningococcal ACWY school-based vaccination program in secondary schools from Term 2 2017 that will provide protection against meningococcal serogroups A, C and Y as well as W. The program is in response to the emergence of meningococcal W as a significant cause of invasive meningococcal disease in Australia since 2013. Evidence suggests that this strain of the disease is more severe than other types commonly circulating in Australia.

The program commenced on 1 May 2017 and is targeting Year 11 and 12 students in all high schools across NSW.

For more information please see: NSW Meningococcal W response program.

Other meningococcal vaccines

Vaccination against meningococcal C is already included in the National Immunisation Program Schedule. It is recommended for all children at one year of age as part of free routine immunisation.

A vaccine against some serogroup B strains has recently become available in Australia; it is recommended for young children and adolescents but is not part of the National Immunisation Program.

Meningococcal ACWY vaccination is also recommended (but not provided free) for people travelling to countries where epidemics of meningococcal A, C, W and Y occur and is part of the requirements for people travelling to perform Hajj.

For more information on meningococcal disease, see the meningococcal fact sheet.

NSW Hepatitis B and C Strategies 2014-2020: 2016 annual data report

Hepatitis B and C are viral infections of the liver, which in some people become chronic, leading to liver cirrhosis or liver cancer. They are part of the group of "blood borne" viruses, as they are usually transmitted through blood, or blood products. Transmission can occur in medical, dental or cosmetic procedures where instruments are not properly sterilised, through people who use injection drugs sharing injecting equipment, through sexual intercourse, or from mother to infant around the time of birth.

Hepatitis B infections notified in NSW are mainly in people who have acquired the infection overseas in countries with high rates of hepatitis B infection. Hepatitis C infections notified in NSW are usually locally acquired through injecting drug use.

Hepatitis B and C infections remain a significant public health burden in NSW. The NSW Hepatitis B and C Strategies 2014-2020 provide a framework to effectively respond to changes in hepatitis B and C epidemiology across NSW. The Strategies outline four goals:

1. Reduce hepatitis B infections in NSW
2. Improve health outcomes of people living with hepatitis B
3. Reduce hepatitis C infections in NSW
4. Improve health outcomes of people living with hepatitis C

The NSW Hepatitis B and C Strategies 2014-2020: 2016 Annual Data Report is now available. These Data Reports form the primary mechanism for reporting progress against the Strategies' targets.

In summary, in 2016:

Hepatitis B

Notifications

- The notification rate of hepatitis B in NSW has remained stable between 2015 and 2016, at 31 notifications per 100,000 population.
- Evidence shows that vaccination programs for hepatitis B are starting to have a benefit with declining rates of new infection in NSW, particularly in younger age groups. Of those people newly diagnosed with hepatitis B in 2016, 4 (<1%) were 0-4 years, 20 (1%) were 5-14 years, 164 (7%) were 15-24 years, 1,290 (54%) were 25-44 years, 703 (29%) were 45-64 years and 206 (9%) were 65 years and over.
- In NSW, hepatitis B infection is not evenly distributed, with higher notification rates in some areas including Western Sydney, South Western Sydney, South Eastern Sydney, Sydney and Northern Sydney Local Health Districts, where there are large numbers of migrants from countries with a high burden of hepatitis B.

Prevent

- In 2016, the hepatitis B childhood vaccination coverage for children aged 12 months was 94% which is higher than coverage in the same period in 2015 (93%). Coverage at 24 months of age was 96%, which is higher than in 2015 (95%).
- In 2015, the proportion of women giving birth in a hospital in NSW who were screened for hepatitis B was 99%. This result is consistent with 2014.
- In 2015, 99% of babies born to mothers living with hepatitis B received hepatitis B immunoglobulin (HBIG) within 12 hours of birth. This result is also consistent with 2014.

Test

- The number of hepatitis B tests performed in NSW each year is continuing to increase gradually. In 2016, 593,778 tests for hepatitis B surface antigen were performed in 15 laboratories in NSW, a 5.2% increase from 2015 (564,264 tests).

Manage

- In 2016, there were 10,608 viral load tests provided for people with chronic hepatitis B not receiving treatment in NSW. This represents a 3% increase compared to the same period in 2015 (n=10,263).
- Between 1 October 2015 and 30 September 2016, a total of 8,067 NSW residents were dispensed hepatitis B treatment for chronic hepatitis B at least once in public hospitals, private hospitals and community pharmacies in NSW. This result is almost 10% higher than in the same period in 2015.

Hepatitis C

Notifications

- After a decline in the hepatitis C notification rate from 2002 onwards, the hepatitis C notification rate increased between 2015 and 2016. In 2016, the hepatitis C notification rate was 55 notifications per 100,000 population, higher than in 2015 (47 per 100,000) and the highest annual rate since 2007.This is thought to be due to increased targeted testing associated with highly effective and safe direct acting antivirals becoming available on the Pharmaceutical Benefits Scheme in March 2016.
- Hepatitis C notifications amongst people aged 45-64 years rose markedly in NSW in 2016 (1691 notifications per 100,000 population) compared to 2015 (1353 per 100,000 population). Increases were also seen amongst those aged 25-44 years and 65 years and over, while notifications amongst people under 25 years of age have remained stable.
- In 2016, the Far West, Northern NSW and Central Coast Local Health Districts recorded the highest rates of hepatitis C notification in NSW (98, 97 and 93 notifications per 100,000 respectively), while Northern Sydney LHD had the lowest rate (17 notifications per 100,000).

Prevent

- Among respondents in the 2016 NSW Needle and Syringe Program (NSP) Enhanced Data Collection (NNEDC), reports of receptive syringe sharing (RSS) in the previous month increased from 16% in 2015 to 20% in 2016 (p=0.003). In the four years between 2013 and 2016, RSS remained stable, with 22% of respondents reporting RSS in 2013 (4 year trend, p = 0.333). The Australian NSP Survey (ANSPS) indicates that the proportion of NSW respondents who reported receptive sharing of needles and syringes in the previous month was 13% in 2013; 16% in 2014; and 14% in 2015.
- Between 1 January 2016 to 30 June 2016, there were 588 people who commenced an opioid treatment program in NSW, which is an 18.6% increase compared to the same period in 2015 (n=496).

Test

- The number of hepatitis C tests performed in NSW is continuing to increase gradually each year. In 2016, 529,651 tests for hepatitis C antibody were performed in 15 laboratories in NSW, a 5.0% increase from 2015 (504,405 tests). Testing was relatively high across all quarters of 2016.

Treat

- Between 1 March to 30 September 2016, 8,8731 NSW residents initiated hepatitis C treatment with direct acting antivirals ,which is approximately 11% of the 80,7003 people living with chronic hepatitis C in NSW.

More detailed data can be found in the NSW Hepatitis B and C Strategies 2014-2020: 2016 Annual 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 23 April to 29 April 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	26	29	860	529	488	1184	1040
	Giardiasis	60	60	1348	1491	1385	3481	3413
	Listeriosis	1	0	6	19	9	36	26
	Rotavirus	8	3	212	196	125	746	1033
	Salmonellosis	73	75	1838	2051	1976	4543	4022
	Shigellosis	3	0	70	98	61	310	172
	Typhoid	2	2	31	22	18	37	41
Respiratory Diseases	Influenza	114	130	2882	2431	1482	35538	30301
	Legionellosis	1	3	40	44	34	134	96
	Tuberculosis	5	6	144	167	135	532	444
Sexually Transmissible Infections	Chlamydia	488	395	9901	8557	7899	25998	22545
	Gonorrhoea	158	128	3277	2147	1817	7004	5397
Vaccine Preventable Diseases	Adverse Event Following Immunisation	7	6	111	83	66	257	186
	Meningococcal Disease	2	1	21	16	12	76	47
	Mumps	1	4	46	11	17	67	65
	Pertussis	127	80	2091	4306	2141	10957	12079
	Pneumococcal Disease (Invasive)	6	8	110	106	96	542	494
Vector Borne Diseases	Barmah Forest	3	1	24	14	114	35	184
	Dengue	5	1	110	197	148	481	344
	Malaria	2	0	25	13	19	59	47
	Ross River	25	17	1018	252	1106	541	1635
Zoonotic Diseases	Q fever	2	2	74	84	75	230	264

*** 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.
- 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 other blood-borne virus case reports are not included here but are available from the Infectious Diseases Data webpage.