Communicable Diseases Weekly Report

Week 12, 21 to 27 March 2016

In summary, we report:

- Influenza – update
- *Haemophilus influenzae* type b – one new case
- 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.

Influenza

The number of influenza notifications is higher than is usual for this time of year, with influenza A(H1N1) the most common virus strain identified and likely to predominate during the winter season. A(H3N2) and B viruses are also circulating but at lower levels.

Influenza activity in the northern hemisphere was below expected seasonal levels during their flu season, which may indicate a mild winter flu season in Australia. However precautions should still be taken to minimise the spread of influenza including vaccination and hand hygiene.

Influenza, or flu, is a highly contagious respiratory illness caused by influenza viruses. There are three main types of influenza virus that cause infection in humans – types A, B and C – and many sub-types or strains. Influenza can occur throughout the year but influenza activity usually peaks in winter.

Influenza viruses are mainly spread by droplets in the air made when an infected person coughs or sneezes. Influenza can also be acquired by touching surfaces where infected droplets have landed and then touching the mouth or nose with the contaminated hand.

People with influenza typically experience fever and chills, cough, sore throat and runny or stuffy nose, muscle aches, joint pains, headaches and fatigue. Nausea, vomiting and diarrhoea can also occur though these symptoms are more common in children than adults.

While anyone can get influenza, children under the age of 2 years, adults aged 65 years or older, Aboriginal and Torres Strait islander people aged 15 years or older, pregnant women and people with chronic medical conditions are at greatest risk of complications from influenza virus.

Annual vaccination before winter provides the best protection against influenza. People should also take care to cover their face when they cough or sneeze and wash hands thoroughly and often.

Seasonal influenza vaccination is available for anyone aged 6 months and over to protect against influenza, provided they do not have a medical reason that precludes them from receiving influenza vaccines. People at higher risk of influenza complications are strongly recommended to have an annual influenza vaccination, and are eligible for free quadrivalent influenza vaccine (protecting against 4 strains) under the National Immunisation Program. This includes pregnant women, Aboriginal people 6 months to 5 years and 15 years and older, all people aged 65 and over and people aged six months and over with medical conditions predisposing them to severe influenza. It is also strongly recommended that health care workers have an annual influenza vaccination.

Further information about flu is available on the NSW Health website

For more information on vaccination visit the NSW Health Immunisation website

Haemophilus influenzae type b

There was one case of *Haemophilus influenzae* type b (Hib) disease identified in the Sydney region this reporting week. The case was an infant who developed a Hib bloodstream infection with cellulitis around one eye. The infant was fully vaccinated for age. The local public health unit undertook follow up to identify susceptible contacts and provide clearance antibiotics.

This is the first Hib notification in 2016 in NSW. Hib is now rare in NSW with an average of five cases reported per year for the past five years.

Hib disease is caused by infection with *Haemophilus influenza*e type b bacteria. Humans are the only known reservoir, and the organism can be carried asymptomatically in the back of the nose and throat. Hib is predominantly transmitted from asymptomatic carriers by direct contact with respiratory droplets or discharges from the nose and throat. It can also rarely be transmitted from people with Hib disease. Hib does not survive in the environment on inanimate surfaces.

Infection can lead to serious illness including meningitis and epiglottitis (inflammation of the epiglottis). Since Hib vaccines were included in the routine childhood immunisation schedule in 1993, there has been a reduction of more than 95% in notified cases of Hib. Hib vaccine is recommended in NSW for all infants at six weeks, four, six and twelve months of age and is provided as part of free routine immunisation in combination with other vaccines due at those ages.

Follow the links for further information on *Haemophilus influenzae* type 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 21 to 27 March 2016, by date received *

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	29	38	341	349	154	1038	429
	Giardiasis	66	89	1107	1060	846	3414	2942
	Hepatitis A	1	2	14	36	30	71	80
	Rotavirus	1	9	141	103	97	1036	714
	Salmonellosis	74	114	1626	1570	1499	4045	4275
	Shigellosis	5	6	75	53	92	172	212
Respiratory Diseases	Influenza	136	125	1525	1018	753	30296	20887
	Legionellosis	2	3	26	23	20	96	72
	Tuberculosis	4	7	98	89	110	442	474
Sexually Transmissible Infections	Chlamydia	368	459	5832	5886	6116	22544	22898
	Gonorrhoea	60	114	1331	1387	1251	5399	4875
	LGV	1	0	10	8	4	19	14
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	5	41	52	92	182	256
	Haemophilus influenzae type b	1	0	1	0	0	5	6
	Pertussis	199	236	3493	1549	544	12076	3052
	Pneumococcal Disease (Invasive)	7	4	72	58	67	494	511
Vector Borne Diseases	Dengue	10	10	106	117	137	340	378
	Flavivirus - other & unspecified	1	0	7	0	0	1	5
	Ross River	21	15	206	769	111	1640	673
Zoonotic Diseases	Brucellosis	1	0	3	2	0	10	3
	Q fever	2	5	51	57	62	267	190

*** 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.