Communicable Diseases Weekly Report

Week 6, 7 February to 13 February 2021

In summary, we report:

- *Haemophilus influenzae* type b (Hib) disease – one new case
- Salmonellosis – cluster under investigation
- Novel coronavirus 2019 (COVID-19)
- 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.

Haemophilus influenzae type b (Hib) disease

One case of *Haemophilus influenzae* type b (Hib) disease was notified in this reporting week in an unvaccinated infant.

Hib bacteria can live harmlessly in the throats of healthy people and can be unknowingly passed on to others. The bacteria are spread through contact with droplets from the nose or throat of someone carrying the bacteria, usually in household-like settings.

Hib infection causes a febrile illness with one or more of four clinical syndromes: meningitis, epiglottitis, pneumonia or osteomyelitis. If untreated, infections can be fatal or leave patients with long-term complications. See the Hib factsheet for more details.

Occasionally, close contacts of Hib cases may be offered clearance antibiotics. Clearance antibiotics are designed to 'clear' the bacteria from the nose and throat of asymptomatic carriers who may have passed it onto the case. For Hib cases, clearance antibiotics are only given to household contacts if the household contains a vulnerable person, such as an unvaccinated infant, an inadequately vaccinated child under two years, or a person who is immunosuppressed or does not have a functioning spleen. In healthcare settings clearance antibiotics are given to close contacts who are vulnerable people, and healthcare workers who have come into direct contact with the respiratory secretions of the case. For childcare settings, close contacts with a household-like level of exposure are given clearance antibiotics if any contacts are vulnerable people.

Hib was the most common cause of bacterial meningitis in Australian children before the introduction of Hib vaccines to the immunisation schedule in 1993. Hib disease is now rare in NSW.

Vaccination against Hib is routinely provided to children on the National Immunisation Program (NIP) at 6 weeks, 4, 6, and 18 months of age.

Since 1 July 2020 the Hib vaccine is also funded for people aged 5 years and over who have no spleen (asplenia) or where their spleen is not functioning normally (hyposplenia) and were not vaccinated or were incompletely vaccinated during childhood. Asplenia and hyposplenia cause a specific type of immunodeficiency which increases the risk of sepsis (blood infection) from certain types of bacteria, including Hib bacteria.

Additional information regarding changes to the NIP schedule from 1 July 2020 is available from: https://www.health.nsw.gov.au/immunisation/Pages/schedule-changes.aspx.

More than 95 per cent of young children develop effective protection after receiving their full course of Hib vaccines. Although Hib vaccines are believed to provide long-lasting immunity, the exact duration of immunity is not known.

Further information

- NSW Health Hib fact sheet
- NSW Health Hib notifications data.
- Australian Immunisation Handbook chapter on Hib vaccination

Salmonellosis

There have been 108 notifications of salmonellosis this reporting week (Table 1). Public health units are currently investigating the cause of an increase of *Salmonella* Saintpaul cases from across NSW. Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals and the environment. Notifications usually begin to climb steeply in December each year and peak over summer. This is because *Salmonella* bacteria thrive in warmer weather and can produce an infective dose in contaminated food in a shorter time. The investigation into the increase in *Salmonella* Saintpaul cases began in January and year to date there have been 211 cases in NSW when normally we would expect to see closer to 30 cases.

In Australia, most *Salmonella* infections occur after eating contaminated food or sometimes after contact with another person with the infection. Items such as contaminated fresh produce, products containing undercooked eggs and contamination of foods during food preparation are the most common source of salmonellosis in NSW. Unless the packaging indicates it is already washed and ready to eat consumers should wash fresh produce at home under cool tap water immediately before eating and cut away damaged or bruised areas as bacteria can grow in these areas. Where appropriate, cooking or blanching can also reduce the risk from fresh produce. Eggs are a healthy and nutritious food, however they also need careful handling to keep them safe. People can follow the NSW Food Authority's nine simple egg safety recommendations to reduce the risk of *Salmonella* infection from eggs at home.

Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg dressings, desserts and sauces are required to follow "Food Safety Guidelines for the Preparation of Raw Egg Products" or use alternatives to raw eggs in ready to eat foods. Safer alternatives include commercially produced dressings and sauces, or pasteurised egg products.

Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around 6 to 72 hours after eating food contaminated with the organism. Symptoms typically last four to seven days but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

Follow the link for further information on the four food safety tips and safe handling of raw egg products from the NSW Food Authority.

Follow the link for the NSW Health salmonellosis factsheet.

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the NSW Health COVID-19 page.

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 7 February – 13 February 2021, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2021	2020	2019	2020	2019
Enteric Diseases	Botulism	1	0	1	0	1	1	1
	Cryptosporidiosis	10	11	81	122	118	550	669
	Giardiasis	36	43	201	310	489	1791	3271
	Rotavirus	4	2	25	217	96	463	1755
	STEC/VTEC	2	0	13	14	15	114	80
	Salmonellosis	108	72	645	558	629	2888	3556
	Shigellosis	3	1	9	191	112	494	867
Respiratory Diseases	Influenza	2	2	15	3329	2846	7475	116444
	Legionellosis	7	5	38	14	31	168	153
	Tuberculosis	12	7	65	43	52	608	590
Sexually Transmissible Infections	Chlamydia	570	673	3660	3815	3672	27254	32490
	Gonorrhoea	194	202	1157	1465	1330	9909	11702
	LGV	2	1	4	12	10	44	69
Vaccine Preventable Diseases	Haemophilus influenzae type b	1	0	1	1	1	6	11
	Meningococcal Disease	1	0	2	4	4	22	59
	Pertussis	2	5	10	493	921	1405	6386
	Pneumococcal Disease (Invasive)	4	8	38	55	42	361	691
Vector Borne Diseases	Barmah Forest	3	5	18	9	9	271	63
	Malaria	1	0	2	4	9	25	73
	Ross River	27	21	124	21	60	1986	592
Zoonotic Diseases	Leptospirosis	2	2	5	2	0	12	9
	Q fever	2	1	17	35	42	204	248

*** 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.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health Latest Updates on COVID-19 page.
- 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.