

Communicable Diseases Weekly Report

Week 6, 3 February to 9 February 2019

In summary, we report:

- [Haemophilus influenzae type b \(Hib\) disease](#) – one new case
- [Measles](#) – one new NSW case and alert for passengers
- [Invasive meningococcal disease](#) – case confirmed in an infant
- [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](#)

A case of invasive disease caused by *Haemophilus influenzae* type b (Hib) was notified in this reporting week ([Table 1](#)). The case occurred in a person over the age of 50 years who lives in regional NSW.

Haemophilus influenzae is a bacteria which usually resides harmlessly in the upper respiratory tract. Some strains of *H. influenzae* are surrounded by a polysaccharide capsule and these are classified into 6 serotypes (a-f) whereas strains without a capsule are classified as untypeable. Both capsulated and non-capsulated strains of *H. influenzae* are able to cause disease in humans, ranging from localised upper and lower respiratory tract infections and otitis media to invasive infections such as septic arthritis and meningitis.

H. influenzae type b, commonly known as Hib has historically been the strain most commonly associated with invasive *H. influenzae* infection; and unlike other strains has previously been associated with outbreaks.

Hib is mainly transmitted via respiratory droplets from asymptomatic carriers, and rarely by infected persons. Invasive Hib disease occurs when the bacteria spread from the throat to other body sites. Hib can cause infections of the meninges (lining of the brain and spinal cord), epiglottitis (flap that protects food from entering the trachea), lungs and more rarely, joints or bones. The symptoms of Hib disease depend upon the site of infection and are similar to other bacterial infections of these sites.

Without appropriate treatment, Hib meningitis and epiglottitis are invariably fatal, and many children who survive Hib meningitis suffer neurological sequelae.

Prior to the introduction of vaccination against Hib, it was a leading cause of meningitis in children under the age of 5, and epiglottitis in children was almost exclusively caused by Hib.

Vaccination against Hib has been included in the National Immunisation Schedule since 1993, after which significant reductions in the number of Hib infections in children have been observed particularly among Aboriginal and Torres Strait Islander children. Nationally however, absolute rates of Hib in Indigenous children continue to be higher than those in non-Indigenous children.

Hib vaccine is currently offered to all children at 6 weeks, 4, 6, and 18 months of age.

Follow the links for the [Haemophilus influenzae type b factsheet](#).

Find out more about Hib vaccination in the [Australian Immunisation Handbook](#).

Measles

A case of measles in a NSW resident was notified in this reporting week ([Table 1](#)), and an [alert for passengers](#) was issued by NSW Health after ACT Health confirmed a case of measles in an ACT resident who had transited through Sydney International Airport while infectious.

The new case was in an adult male resident of metropolitan Sydney who had recently returned from the Philippines. The young man had a record of receiving two doses of measles vaccine earlier in his life, however was unfortunately still susceptible to the infection. While two doses of measles vaccine are highly effective in preventing infection, one per cent of people don't respond to the vaccine and are susceptible to infection. Fortunately the young man was effectively isolated while infectious and the local public health unit were able to follow up directly and provide preventive treatment to potential contacts at a medical centre and work place.

A total of 14 infectious measles cases have spent time in NSW since the end of December 2018. Of these, two were residents of the ACT, and one a resident of Queensland. The majority of cases have been acquired during overseas travel, and alerts have been issued to passengers of five international flights. Information regarding previous cases can be found in [CDWR 2019](#) weeks 1, 2 and 4.

Two doses of measles containing vaccine provide the best protection against measles. NSW Health recommends all people aged 12 months or older, and born during or after 1966 receive two doses of measles vaccine. Two doses are offered to children under the National Immunisation Program, and NSW Health provides free measles-mumps-rubella (MMR) to anyone born during or after 1966, who does not have evidence of having received two doses in the past.

For more information see the NSW Health [Alerts page](#), visit the [Measles web page](#), or download the [Measles fact sheet](#).

Invasive meningococcal disease (IMD)

One case of invasive meningococcal disease was notified in this reporting week ([Table 1](#)) in a young adult from a regional local health district. Tests to identify the serogroup are pending.

Invasive meningococcal disease is caused by *Neisseria meningitidis*, bacteria which are commonly carried in the back of the nose and throat, without causing illness.

Invasive meningococcal disease occurs when these bacteria enter the blood stream (septicaemia) or lining of the brain and spinal cord (meningitis). There are several serogroups of meningococcal bacteria, of which four (B,C,W,Y) are most frequently associated with invasive disease in Australia.

Meningococcal disease is a rare, but often fatal illness. Up to 10 percent of people with meningococcal disease die, even with appropriate treatment. Initial symptoms may be non-specific and mimic other illnesses such as respiratory or gastrointestinal infections. The disease progresses rapidly and may become fatal within hours. The characteristic rash does not always appear, and often presents late in the illness.

NSW Health encourages people who think they, or someone they care for, are experiencing symptoms of meningococcal disease to seek medical treatment urgently. If they have already seen a doctor, but symptoms continue to worsen, they should return to the doctor or present to their local emergency department.

Vaccines against most strains of meningococcal bacteria associated with invasive disease are available in Australia.

Meningococcal ACWY (Men ACWY) vaccine is offered to children at 12 months of age as part of the National Immunisation Program (NIP). [Men ACWY vaccine](#) will also be offered to students in Year 10 in NSW Secondary Schools in 2019, via the [School Vaccination Program](#).

People aged 15-19 years in NSW who have not received the Men ACWY vaccine at school are able to access free Men ACWY vaccine from their general practitioner (GP).

A vaccine against most strains of meningococcal B (Men B) is also available, and recommended in Australia, for all people over 6 weeks of age. This vaccine is not funded under the NIP and is available via private prescription from GPs.

For further information see the [Meningococcal Disease webpage](#), the [Australian Immunisation Handbook](#) or download the [Meningococcal disease factsheet](#).

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 3 February – 9 February 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	36	20	112	107	247	708	1266
	Giardiasis	108	70	405	369	460	2798	3134
	Hepatitis A	4	2	11	12	6	86	71
	Hepatitis E	1	0	1	0	3	17	20
	Rotavirus	12	9	77	131	114	806	2319
	Salmonellosis	105	89	602	576	682	3343	3681
	Shigellosis	16	18	108	28	42	530	235
	Typhoid	6	2	24	14	20	116	110
Respiratory Diseases	Influenza	530	472	2649	1672	1052	17422	103852
	Legionellosis	3	2	26	14	16	167	138
	Tuberculosis	9	10	48	61	54	513	542
Sexually Transmissible Infections	Chlamydia	702	558	3476	3558	3632	31189	29006
	Gonorrhoea	196	196	1209	1283	1216	10624	9161
	LGV	3	0	9	11	2	85	50
Vaccine Preventable Diseases	Haemophilus influenzae type b	1	0	1	0	1	6	9
	Measles	1	1	10	0	5	18	32
	Meningococcal Disease	1	1	4	6	9	72	91
	Mumps	1	1	6	15	12	72	127
	Pertussis	103	113	886	463	875	6281	5366
	Pneumococcal Disease (Invasive)	6	8	41	44	32	688	683
Vector Borne Diseases	Barmah Forest	2	3	8	7	13	75	127
	Dengue	11	6	43	65	49	289	306
	Malaria	2	0	8	8	11	65	68
	Ross River	11	8	49	42	566	568	1652
Zoonotic Diseases	Q fever	5	4	30	32	28	223	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.
- 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](#) and the [HIV Surveillance Data Reports](#) webpages.