

Communicable Diseases Weekly Report

Epi-Week 31: 28 July – 03 August 2014

In summary, we report:

- **Ebolavirus disease (EVD) in West Africa** – update and clinical resources
- **Influenza** – continuing increase in community activity
- **Meningococcal disease** – one new case reported
- ***Haemophilus influenzae* type b (Hib) infection** – one new case reported in a child
- **Summary of notifiable conditions activity in NSW**

For further information on infectious diseases and alerts see the [Infectious Diseases](#) webpage.

Follow the [A to Z of Infectious Diseases](#) link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the [NSW Health Infectious Diseases Reports](#) webpage.

Ebolavirus disease (EVD) outbreak in West Africa

The largest outbreak of Ebolavirus disease (EVD) ever reported is continuing in Guinea, Liberia, Sierra Leone and Nigeria in West Africa. The World Health Organization (WHO) has reported that as of 1 August 2014 the cumulative number of cases attributed to EVD in the four countries stands at 1 603 including 887 deaths (see: http://www.who.int/csr/don/2014_08_04_ebola/en/).

Unlike some parts of Africa, Australia has no local host for the disease, good infection control in health care settings, processes for the safe handling of deceased bodies, and effective public health responses, so if a patient with EVD was to present in Australia, transmission would be unlikely to be sustained.

However our hospitals need to be ready for an infected patient arriving by plane or presenting to an emergency department. Health Protection NSW in collaboration with the Australian Department of Health, the Clinical Excellence Commission and the Emergency Care Institute has developed advice for emergency department staff, hospital clinicians and laboratory staff – available at: <http://www.health.nsw.gov.au/Infectious/alerts/Pages/EVD.aspx> .

The Australian Department of Health has also developed separate advice for general practitioners (GPs) and the general community – available at: <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-ebola.htm> .

Travel advice is available from the Australian Department of Foreign Affairs and Trade's Smartraveller website: <http://www.smartraveller.gov.au/> .

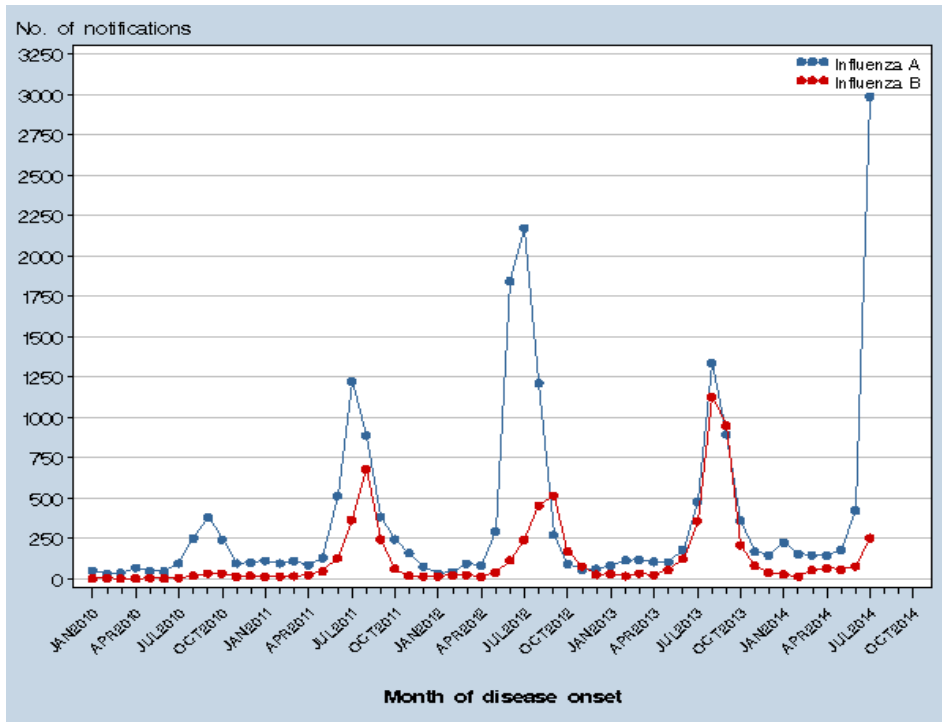
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Influenza

** Please also note that comprehensive NSW influenza surveillance reports are also published each week by the Communicable Diseases Branch.*

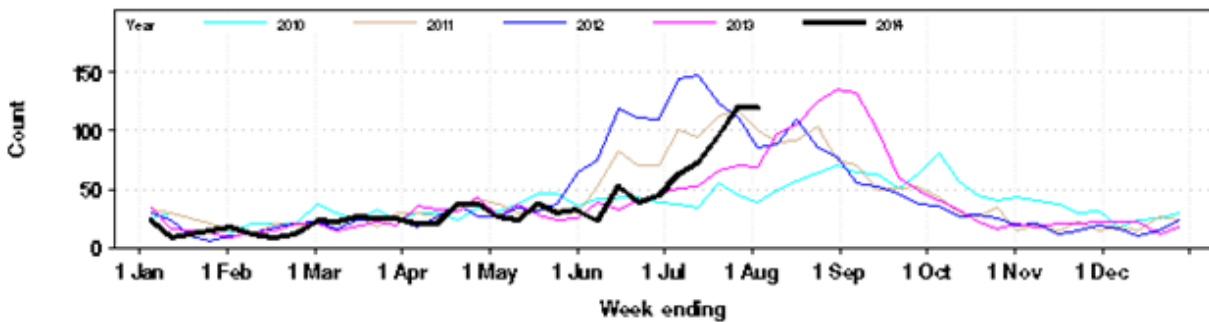
There were 1 331 laboratory-confirmed influenza cases notified this week (Table 1), an increase from 902 notifications in the previous week. This was the highest weekly total number of notifications for a number of years, and was predominantly due to influenza A strains (Figure 1).

Figure 1: Influenza notifications in NSW residents, by month of disease onset. January 2010 to August 2014.



The number of patients presenting with influenza-like illness to NSW emergency departments (EDs) was steady at 120, which was above the usual range for this time of year but below recent seasonal peaks (Figure 2).

Figure 2: Total weekly counts of Emergency Department presentations for influenza-like illness, for 2014 (black line), compared with each of the five previous years (coloured lines) excluding 2009, persons of all ages, for 59 NSW hospitals.

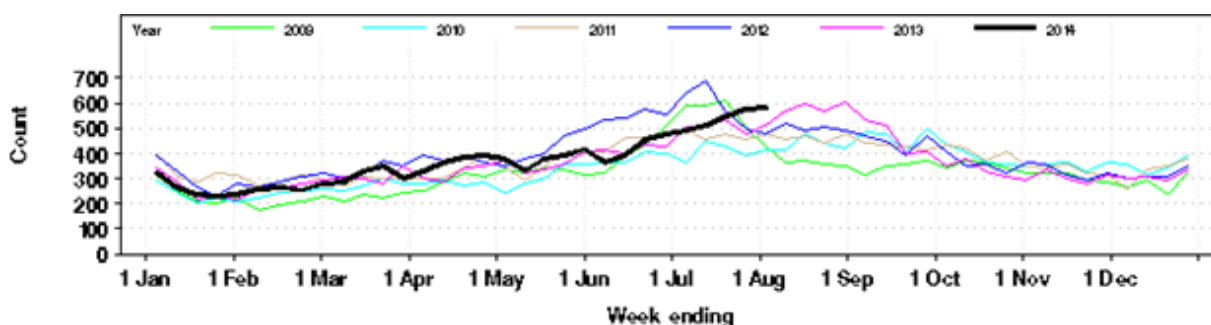


Pneumonia is a common complication of influenza infection, but pneumonia has many other causes. Numbers of presentations for pneumonia can increase substantially during influenza season. Severe pneumonia can lead to admission to a critical care ward.

The number of patients presenting with pneumonia increased to 583, which was above the usual range for this time of year but below seasonal peaks in recent years (Figure 3).

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Figure 3: Total weekly counts of Emergency Department presentations for pneumonia, for 2014 (black line), compared with each of the five previous years (coloured lines) excluding 2009, persons of all ages, for 59 NSW hospitals.



With the influenza A(H3N2) strain being the dominant strain circulating this year in NSW, people in older age-groups, including residents of aged care facilities, will be at higher risk of infection. As reported in the [Week 29 report](#) and a recent [media release \(1 Aug 2014\)](#), influenza outbreaks have continued to be reported in aged care facilities as well as in hospitals.

People are advised to defer visits to friends and relatives in aged care facilities and hospitals if they have cold or flu symptoms.

Free vaccination is still available for residents of aged care facilities. It is also important that staff and visitors to aged care facilities are also vaccinated to help prevent the introduction of influenza. It is not too late to vaccinate.

Other practical steps to stop the spread of influenza include:

- Covering your face when you cough or sneeze and throwing used tissues in a rubbish bin.
- Washing your hands thoroughly and often. Wash hands for at least 10 seconds, especially after coughing, sneezing or blowing your nose, or use an alcohol-based hand rub.
- Staying at home until you're well. Wait at least 24 hours after your symptoms resolve so you are less likely to infect other people.

Follow the links for further information on [influenza vaccination](#), [influenza data](#), and information on [influenza resources for residential care facilities](#).

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Meningococcal disease

A confirmed case of meningococcal disease in an elderly woman resulting in death was reported in the Hunter New England Local Health District (HNE LHD) this reporting period (Table 1). During the infectious period the individual spent time in a primary school as a visitor. The HNE LHD public health unit is coordinating communication to the school groups affected.

Meningococcal disease is a bacterial infection caused by the organism *Neisseria meningitidis*. Infection with *N. meningitidis* can result in meningitis or septicaemia, both of which can be fatal. It is spread by droplets from the respiratory tract and has an incubation period of 1-10 days; usually 3-4 days.

Meningococcal disease can affect anyone in any age group. The largest proportion of cases in Australia are in children under 5 years old, followed by 15-24 year olds.

There are several serogroups of the meningococcal bacterium. In Australia vaccination against meningococcal group C bacteria has been included in the routine immunisation program since 2003. There has been a marked decline in the number of meningococcal group C cases since the introduction of the vaccine. All children should receive the meningococcal C vaccine at 12 months of age. A vaccine for meningococcal group B bacteria has been available in Australia

since 2014; however it is not on the routine vaccination schedule. Vaccines are available against other strains of the disease, but their use is mainly for travellers at high risk of disease, such as to the Hajj or the meningitis belt of Africa, or for people with health conditions that put them at higher risk of meningococcal disease, such as losing their spleen.

Meningococcal disease may present with sudden onset of fever, intense headache (with or without vomiting), a stiff neck and sensitivity to light. A petechial (purple, dotted, spreading) rash may also appear.

Anyone with symptoms of meningococcal disease should seek immediate medical care, such as at their local hospital emergency department.

Follow the link to the [meningococcal disease – winter advice poster \(pdf\)](#).

Follow the link for further information on [meningococcal disease notifications](#).

Follow the link for further information on [meningococcal vaccination \(external link\)](#).

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[Haemophilus influenzae type b \(Hib\) infection](#)

One case of Hib disease was reported this week (Table 1) in an unimmunised child aged less than 5 years from the Northern NSW Local Health District. The child presented with sepsis and epiglottitis. This is the second case of Hib infection in NSW this year in a child aged less than 5 years; the previous case involved meningitis in a child who was fully vaccinated for their age. Two other cases have been reported in adults

Haemophilus influenzae type b disease is a bacterial infection spread via droplets from the respiratory tract, usually during coughing and sneezing. The incubation period is unknown but is estimated to be as short as two days. Hib disease can cause epiglottitis (inflammation and swelling of the epiglottis resulting in airway obstruction), sepsis and meningitis (inflammation of the lining around the brain and spinal cord).

Onset of symptoms is often sudden and may include fever, headache, stiff neck, nausea, vomiting, aversion to light and drowsiness in the case of meningitis, and difficulty breathing and swallowing, pale colour and fever in the case of epiglottitis. Infants may not show classical signs but rather present with drowsiness, poor feeding and high fever in the case of meningitis and drooling, snuffling or light snoring noises and an inclination to try and remain upright in the case of epiglottitis.

Without appropriate antibiotic treatment, disease resulting from Hib infection can be fatal.

Those most at risk of Hib are children aged less than 5 years. A vaccine for Hib has been included in the routine vaccination schedule since 1993 – this has led to a reduction of more than 95% of cases of Hib. Vaccination against Hib is recommended at 2, 4, 6 and 12 months of age.

Follow the link for further information on [Hib infection notifications](#).

Follow the link for further information on [Hib vaccination \(external link\)](#).

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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 28 July to 03 August 2014, by date received.*

		Weekly		Year to date			Full Year	
		This week	Last week	2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	7	4	281	974	509	1132	655
	Giardiasis	48	39	1825	1499	1383	2242	2014
	Hepatitis A	1	0	42	45	22	62	41
	Rotavirus	14	7	258	248	475	508	1760
	Salmonellosis	54	51	2873	2346	1858	3483	2941
	Shigellosis	2	0	137	75	87	136	131
	Typhoid	1	1	29	43	30	58	43
Respiratory Diseases	Influenza	1331	902	5433	2304	5192	8401	8037
	Legionellosis	3	1	47	62	82	108	108
	Tuberculosis	3	3	244	251	268	440	469
Sexually Transmissible Infections	Chlamydia	417	343	13822	13157	13400	21089	21267
	Gonorrhoea	89	89	2902	2704	2505	4266	4116
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	3	167	402	194	509	269
	Haemophilus influenzae type b	1	0	4	4	2	9	2
	Measles	1	2	61	14	57	33	174
	Meningococcal Disease	1	1	20	23	46	48	67
	Mumps	1	1	54	65	83	89	110
	Pertussis	53	54	1122	1440	4141	2378	6000
	Pneumococcal Disease (Invasive)	10	21	275	293	309	489	564
Vector Borne Diseases	Barmah Forest	2	0	127	307	221	440	352
	Dengue	4	3	277	190	194	302	288
	Malaria	1	2	64	59	40	93	68
	Ross River	15	10	379	376	466	513	598

* 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](#) (external link).
- 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.

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