

Communicable Diseases Weekly Report

Week 28 08 July 2013 – 14 July 2013

In summary, we report:

- [Enterovirus infections](#) – steady Emergency Department activity
- [Meningococcal disease](#) – one new case reported
- [MERS coronavirus](#) – two new cases reported from the Middle East
- [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 and enterovirus surveillance reports, see the [NSW Health Infectious Diseases Reports](#) webpage.

Enterovirus infections

Enterovirus infections (other than poliomyelitis) are not notifiable in NSW. NSW Health monitors enterovirus activity through NSW Emergency Department (ED) presentations for “meningitis or encephalitis” and for [hand, foot and mouth disease](#) (HFMD).

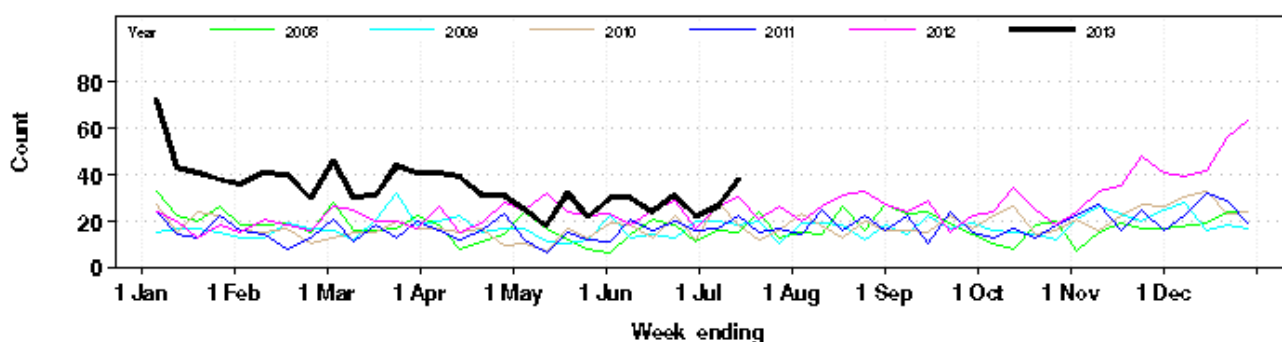
Enterovirus infections can rarely lead to meningitis or encephalitis but there are also a range of other causes for these illnesses. HFMD can be caused by a range of enteroviruses.

The number of patients presenting with “meningitis or encephalitis” increased above usual levels in November 2012 and peaked in early January 2013 at around 70 presentations per week (Figure 1). Increased activity was noted in many parts of the state, affecting a wide range of age-groups. The most commonly identified cause was infection with one of two strains of echovirus, a common type of enterovirus which can also cause HFMD.

In March and April 2013 there was a second rise in presentations for “meningitis or encephalitis”. This rise coincided with reports from doctors of an increase in the number of young children aged less than five years old with severe neurological complications, and often caused by a particular type of enterovirus called enterovirus 71. Many of the reports related to children from the northern and south-eastern regions of Sydney. Numbers of “meningitis or encephalitis” presentations have since declined but have remained above the level of recent years (Figure 1).

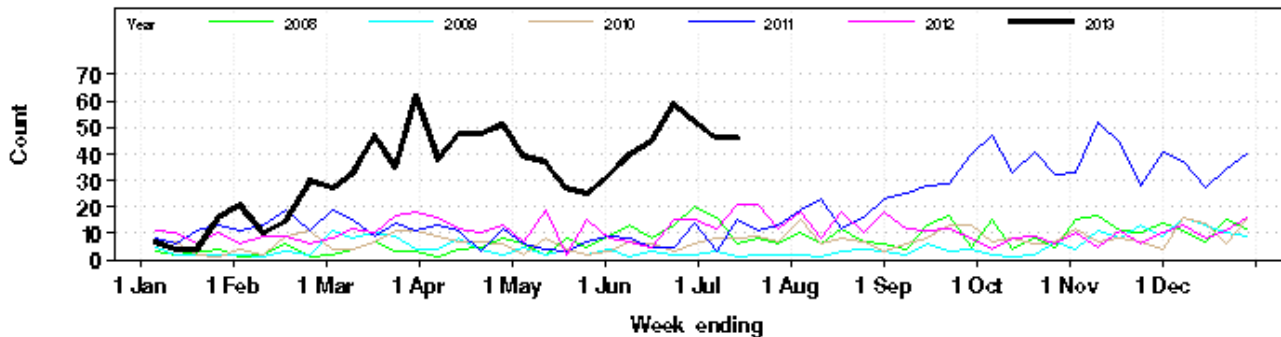
In the past week, the number of patients presenting to EDs with “meningitis or encephalitis” increased to 38 and was above the usual range for this time of year (Figure 1).

Figure 2. Total weekly counts of ED presentations for meningitis/encephalitis, for 2013 (black line), compared with each of the 5 previous years (coloured lines), all ages, for 59 NSW hospitals.



ED presentations for HFMD remained steady this week but were above the usual range. Presentations were mainly in children under 5 years (Figure 1). Numbers were above usual levels in the South Eastern Sydney, South Western Sydney, Central Coast, and Northern Sydney Local Health Districts.

Figure 1: Total weekly counts of ED presentations for HFMD for 2013 (black line), compared with each of the 5 previous years (coloured lines), children aged under 5 years, for 59 NSW hospitals.



The two NSW reference laboratories conducting additional typing of enterovirus samples report that there have been at least 70 patients who have tested positive for enterovirus 71 (EV71) this year. Other enteroviruses, including coxsackieviruses and echoviruses, have also been identified.

The National Enterovirus Reference Laboratory in Melbourne has also [recently reported](#) that some EV71 isolates from NSW and other parts of Australia this year have been confirmed to be C4a, a sub-genogroup circulating in China and South East Asia in recent years, which has been associated with more severe neurological complications than other sub-genogroups.

Follow the link for more information on [enterovirus infections](#).

[back to top](#)

[Meningococcal Disease](#)

One case of invasive meningococcal disease was reported this week (Table 1). The case occurred in a 10 year old child from the Sydney area who had previously received a meningococcal serogroup C vaccine. The local public health unit has investigated this case to identify and manage close contacts. The meningococcal serogroup that caused this infection is not yet known.

Meningococcal disease is caused by infection with *Neisseria meningitidis* bacteria, of which there are several serogroups. In NSW, most reported cases are due to serogroup B, for which there is no vaccine available in Australia. Disease caused by serogroup C strains has become rare in NSW since the introduction of serogroup C vaccines into the routine childhood immunisation schedule in 2003.

Meningococcal C vaccination is recommended for all children at one year of age and provided as part of free routine immunisation. Quadrivalent meningococcal vaccines protect against serogroups A, C, Y and W135 and are recommended for certain groups including travellers to countries where there are epidemics of these strains (eg. sub-Saharan Africa) and for pilgrims performing the annual Hajj in Saudi Arabia. Follow the link for further information on [meningococcal vaccines](#)

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

[back to top](#)

[MERS coronavirus \(MERS-CoV\) update](#)

Since the previous report, the World Health Organization has reported two new cases of MERS-CoV infection in the Middle East. In total there have been 82 confirmed cases with 45 deaths. Cases have been reported in or from Saudi Arabia, Jordan, Qatar, UAE, UK, France, Italy, Germany, and Tunisia. Most cases have developed severe acute respiratory infections.

For more information and links see the [NSW Health MERS-CoV website](#).

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1). See explanatory notes below.

Table 1. NSW Notifiable Conditions activity for the period 08 July – 14 July 2013 (by date received).

		This week	Last week	Year to date			Full Year	
				2013	2012	2011	2012	2011
Enteric Diseases	Cryptosporidiosis	14	7	939	469	226	655	354
	Giardiasis	31	30	1329	1282	1531	2015	2377
	Rotavirus	4	10	211	375	414	1761	1208
	STEC/MTEC	1	0	17	10	4	14	9
	Salmonellosis	40	55	2139	1712	2509	2943	3566
	Shigellosis	3	2	66	76	75	131	126
Respiratory Diseases	Influenza	118	137	1222	3265	1721	8041	5791
	Legionellosis	1	2	52	70	66	105	104
	Tuberculosis	2	6	169	209	274	441	538
Sexually Transmissible Infections	Chlamydia	371	359	11368	11819	11131	21263	20449
	Gonorrhoea	82	92	2346	2200	1382	4114	2818
	LGV	2	0	20	7	26	28	36
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	4	365	180	231	262	352
	Meningococcal Disease	1	0	15	39	40	68	72
	Pertussis	21	37	1248	3742	7222	5996	13410
	Pneumococcal Disease (Invasive)	15	15	245	260	250	563	530
Vector Borne Diseases	Barmah Forest	3	5	287	197	344	344	471
	Dengue	3	4	121	182	82	289	148
	Malaria	1	3	45	33	41	68	82
	Ross River	8	5	336	443	475	596	591
Zoonotic	Q fever	1	4	71	74	70	123	145

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.