

Communicable Diseases Weekly Report

Week 2, 5 to 11 January 2015

In summary, we report:

- [Invasive Meningococcal Disease](#) – two new cases
- [Ross River Virus](#) – 25 new cases; continuing early rise in activity
- [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.

[Invasive Meningococcal Disease](#)

There were 2 cases of invasive meningococcal disease reported this week (Table 1). One was a serogroup B case, whilst the other was serogroup C in a 12 year old unvaccinated male from Western Sydney LHD.

Invasive meningococcal disease is a rare but severe illness caused by *Neisseria meningitidis* bacteria. *N. meningitidis* resides harmlessly in the throat of about 10% of the population, but in some people causes severe and sometimes fatal illness in the form of meningitis (inflammation of the tissues surrounding the brain and spinal cord) or septicaemia (infection of the blood).

Symptoms of invasive meningococcal disease often appear rapidly and include fever, headache, stiffness of the neck, dislike of light and a characteristic blotchy, spreading rash that does not change colour when pressure is applied. Medical attention should be sought immediately if meningococcal disease is suspected.

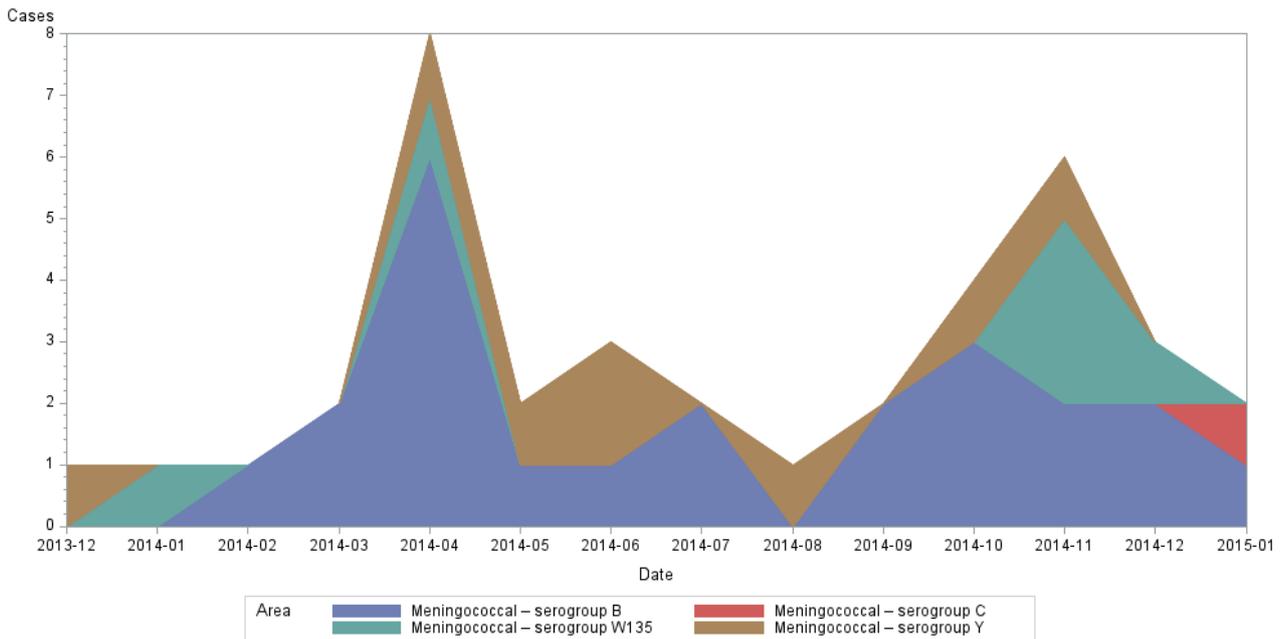
Meningococcal disease is spread by close contact such as intimate kissing, or sleeping in the same room/dormitory overnight. Close contacts of a confirmed meningococcal case are offered precautionary antibiotics, and in some circumstances also vaccination.

Disease caused by serogroup C bacteria has become rare in NSW since the introduction of serogroup C vaccines into the routine childhood immunisation schedule in 2003. The vaccine is given at 12 months of age. A strain B vaccine is also available and is recommended by the Australian Technical Advisory Group on Immunisation (ATAGI) for children under two years of age and adolescents aged 15-19 years, but is not included on the routine immunisation schedule. 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 (e.g. sub-Saharan Africa) and for pilgrims performing the Hajj or Umrah in Saudi Arabia.

This is the first reported case of serogroup C disease in NSW since October 2013. Figure 1 shows a stacked area plot for meningococcal disease for the last 14 months, demonstrating the serotype makeup of the reported cases.

For more information regarding invasive meningococcal disease notifications, follow this link: <http://www0.health.nsw.gov.au/data/diseases/meningococcal.asp>

For information regarding meningococcal vaccines follow this link (external link): <http://ncirs.edu.au/immunisation/fact-sheets/index.php>

Figure 1: Stacked area plot of invasive meningococcal cases between December 2013 and January 2015 showing serogroup makeup

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Ross River Virus

There were 25 notifications of Ross River virus (RRV) infection reported this week (Table 1). This continues the increasing trend in RRV notifications from late 2014 which is earlier than the typical increase in notifications seen from February to April (Figure 2). Notifications continue to be highest from resident along the north coast (Northern NSW, Mid North Coast, and Hunter New England Local Health Districts) and there has also been a rise in notifications from the Murrumbidgee Local Health District.

The NSW arbovirus and mosquito monitoring programme has reported high numbers of mosquitoes in Sydney and in the Riverina area this week, consistent with recent above average rainfall, particularly in December 2014. No arboviruses were detected from trapped mosquitoes or from the sentinel chicken flock this reporting week.

Ross River virus is one of a group of arboviruses ('arthropod-borne' viruses) characterised by transmission through the bite of infected mosquitoes. Some people who are infected with the virus do not develop symptoms, while others experience flu-like symptoms that include fever, chills, headache and aches and pains in the muscles and joints. Some joints can become swollen, and joint stiffness may be particularly noticeable in the morning. A rash may also appear on the torso, arms or legs. The rash and other symptoms usually resolve after 7 to 10 days, although some people may experience symptoms such as joint pain and tiredness for many months.

There are no vaccines to protect against the arboviruses that cause human infections in NSW; therefore prevention relies on measures to avoid being bitten by mosquitoes and to reduce mosquito breeding near homes. Mosquitoes that carry these viruses are usually most active in the hours after sunset and again around dawn, but may bite throughout the day.

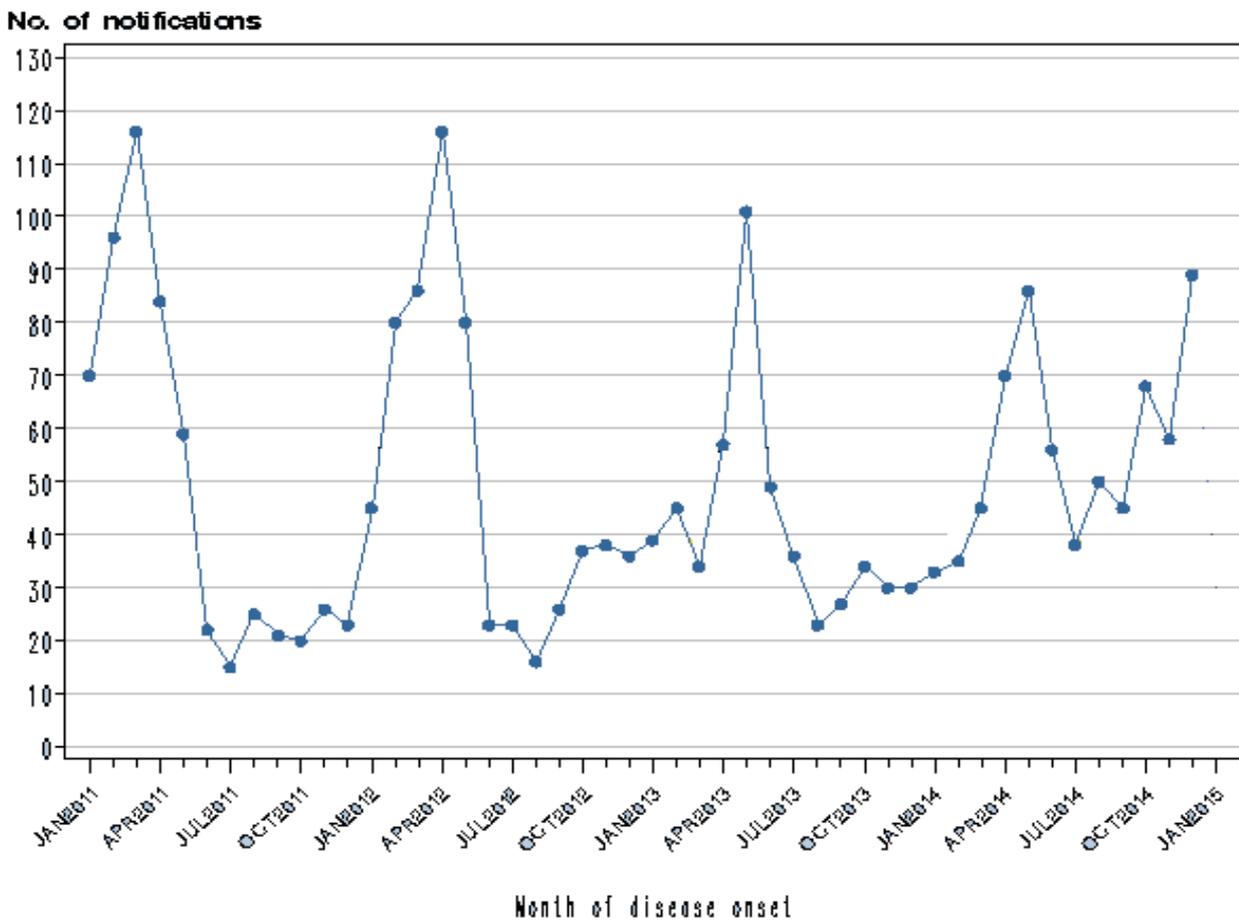
During summer and autumn months remember to cover up and take care to reduce your chances of picking up a serious mosquito-borne infection by following these simple precautions:

- Use an effective repellent on exposed skin areas. Re-apply repellent every few hours, according to the instructions, as protection wears off from perspiration, particularly on hot nights or during exercise.
- The best mosquito repellents contain Diethyl Toluamide (DEET) or Picaridin. Botanical based products (e.g. Eucalyptus, Citronella) provide only limited periods of protection.
- Topical repellents are not recommended for use on children below the age of 3 months.
- Note that prolonged or excessive use of repellents can be dangerous, particularly on babies and young children. Avoid putting repellent near eyes and mouth, spread sparingly over the skin, and rinse off once you are indoors.
- Provide mosquito netting, where necessary – both indoors and outdoors.
- Cover up as much as possible with loose fitting clothing and sensible footwear. Avoid tight clothes.
- Cover your clothes with repellent as mosquitoes can bite through material, but be careful as some repellents stain clothes.
- Use mosquito coils outdoors and plug-in devices with vaporising mats indoors.

Follow the link for the [Mosquitoes are a health hazard](#) factsheet.

Follow the link for information on the [NSW arbovirus surveillance and monitoring program](#).

Figure 2: Ross River virus notifications in NSW residents, by month of onset. January 2011 to December 2014.



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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 5 January to 11 January 2015, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	9	3	12	39	63	427	1132
	Giardiasis	53	41	103	116	117	2939	2242
	Hepatitis A	1	1	2	4	2	79	62
	Hepatitis E	1	0	1	1	1	36	16
	Rotavirus	12	7	17	27	39	709	508
	Salmonellosis	110	76	198	318	283	4298	3483
	Shigellosis	3	1	3	22	8	207	136
	Typhoid	1	1	2	4	4	44	58
Respiratory Diseases	Influenza	65	44	101	197	101	20749	8403
	Legionellosis	3	0	5	2	4	73	108
	Tuberculosis	4	3	6	26	24	457	437
Sexually Transmissible Infections	Chlamydia	436	173	597	1204	1157	22887	21089
	Gonorrhoea	99	42	140	276	239	4861	4267
	LGV	1	0	1	1	3	13	29
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	0	3	8	4	239	509
	Meningococcal Disease	2	1	3	1	1	37	48
	Mumps	2	1	2	7	5	79	89
	Pertussis	91	84	153	164	206	3016	2378
	Pneumococcal Disease (Invasive)	10	1	11	10	31	508	490
Vector Borne Diseases	Barmah Forest	1	1	2	13	26	163	438
	Dengue	2	2	3	18	18	376	303
	Ross River	25	12	34	27	37	682	512
Zoonotic	Brucellosis	1	0	1	0	0	2	4
	Q fever	3	3	4	22	9	183	163

*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.

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