

Communicable Diseases Weekly Report

Week 46, 9 to 15 November 2015

In summary, we report:

- Parechovirus Increasing number of admissions
- Ross River Virus 25 notifications this week
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases and alerts see the <u>Infectious Diseases</u> 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 <u>NSW Health Infectious</u> <u>Diseases Reports</u> webpage.

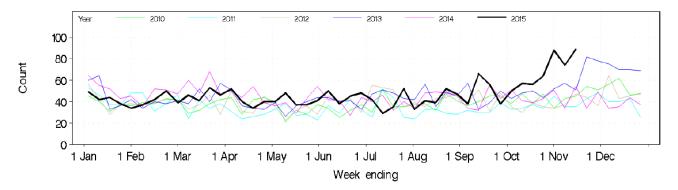
Parechovirus

Emergency department (ED) surveillance has revealed an increasing trend in the number of ED presentations and subsequent admission for fever or unspecified infection in children under one year of age since early October 2015 (Figure 1).

There was a similar rise in presentations for this age group around the same time in 2013 that was associated with increased parechovirus activity (see the following link for further information: http://www.health.nsw.gov.au/Infectious/alerts/Documents/Parechovirus-Alert-2013-archive.pdf.).

NSW children's hospital services have confirmed that there has been a small but significant increase in the number of infants who have been admitted with parechovirus infections confirmed by laboratory testing. Most cases identified to date have been under 3 months of age, and have presented with fever, rash, and irritability. Many cases have also had abdominal symptoms such as abdominal distension and diarrhoea.

Figure 1. Total weekly counts of Emergency Department presentations for fever or unspecified infection that were admitted, for 2015 (black line), compared with each of the 5 previous years (coloured lines), children aged under 1 year, for 59 NSW hospitals.



Parechoviruses are a group of viruses which are part of the same virus family as enteroviruses. These viruses usually cause no symptoms but when illness occurs it is most commonly a mild diarrheal illness or respiratory infection. Infection with some strains can rarely lead to more severe blood infection (sepsis) and neurological infection (meningitis or encephalitis), particularly among young children.

Children under 3 months of age are most likely to develop severe disease – and babies can become unwell very quickly – but most recover after a few days with supportive treatment.

Parechovirus is usually spread from person to person through contact with respiratory droplets, saliva, or faeces from an infected person. Good hygiene is therefore the best protection: wash hands with soap and water after going to the toilet, before eating, after wiping noses, and after changing nappies or soiled clothing. Ensure the mouth and nose are covered when coughing and sneezing. Wipe the nose and mouth with tissues, dispose of used tissues and then wash your hands.

People who are unwell with colds, flu-like illness or gastro illness should stay away from small babies. If you are caring for a small baby and are unwell, wash your hands or use an alcohol-based hand rub before touching or feeding the baby. There is no specific treatment for parechovirus: treatment is supportive only.

For further information see <u>Human parechovirus factsheet</u>.

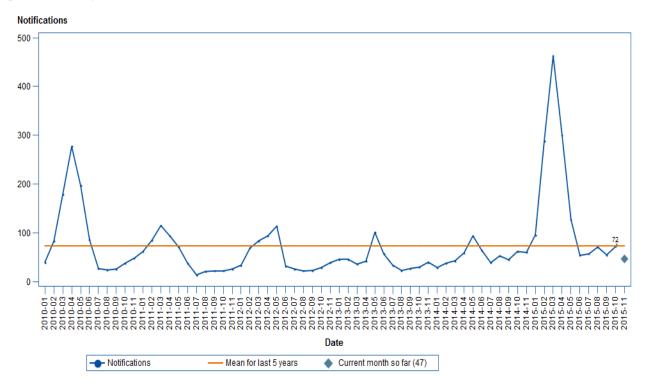
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Ross River Virus

There were 25 notifications of Ross River virus (RRV) infection reported this week, up from 17 notifications in the previous week (<u>Table 1</u>). The NSW Arboviral Surveillance and Mosquito Monitoring program suggests mosquito numbers are still low and the risk of acquiring RRV is also low. Reports of human RRV infections at this time of year are likely to include cases of past infection as the serological marker of an acute infection (IgM) can also persist for months after the infection.

Coastal NSW experienced the largest recorded increase in RRV activity during the past summer and autumn (<u>Figure 2</u>). Notifications were highest among residents of Northern NSW Local Health District, particularly the coastal area bordering southern Queensland, which also reported highly increased RRV activity.

Figure 2: Ross River virus notifications in NSW residents, by month of onset, 2010 to 2015 (year to date).



The Bureau of Meteorology has forecast below average rainfall for November 2015 to January 2016 due to the current El Niño weather event which may keep mosquito numbers low, particularly in inland areas. However, increasing temperatures may encourage mosquito numbers in coastal areas and other areas with recent rainfall, increasing the risk of transmission of arboviruses such as RRV and Barmah Forest Virus (BFV).

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.

Patients often report that their 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 short 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.

For further information:

- NSW Arbovirus surveillance and mosquito monitoring program (external link)
- NSW Health Mosquitoes are a Health Hazard factsheet with tips on prevention
- NSW Health Fight the Bite! campaign posters and media resources
- NSW Health Ross River virus notifications data.

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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 9 to 15 November 2015, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	28	26	794	363	1062	429	1132
	Giardiasis	70	60	3005	2640	2064	2942	2242
	Rotavirus	32	44	858	632	468	714	508
	STEC/VTEC	2	0	20	30	22	31	24
	Salmonellosis	88	80	3574	3832	3141	4302	3483
	Shigellosis	2	0	147	193	118	211	136
Respiratory Diseases	Influenza	63	137	30016	20643	8179	20887	8403
	Legionellosis	2	1	87	65	98	72	109
	Tuberculosis	15	9	367	436	397	473	443
Sexually Transmissible Infections	Chlamydia	416	455	19746	20766	19061	22890	21083
	Gonorrhoea	64	57	4626	4443	3863	4873	4263
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	6	168	241	487	256	509
	Mumps	1	0	48	76	82	82	89
	Pertussis	487	445	9367	2486	2142	3051	2379
	Pneumococcal Disease (Invasive)	4	11	455	459	460	511	490
Vector Borne Diseases	Barmah Forest	2	2	180	154	412	163	438
	Dengue	3	6	285	357	275	378	303
	Malaria	1	2	38	84	87	87	93
	Ross River	25	17	1632	568	481	677	512
Zoonotic	Leptospirosis	1	1	13	11	11	16	11
	Q fever	2	6	217	163	149	190	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. The onset date for the illness may have been earlier.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. Reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Information is available online from the TGA <u>Database of Adverse Event Notifications</u>.
- Only conditions for which at least one case report was received appear in the table.
 Information on HIV and other blood-borne virus case reports are not included here but are available from the <u>Infectious Diseases Data</u> webpage.

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