Communicable Diseases Weekly Report

Epi-Week 5 27 January 2014 – 2 February 2014

In summary, we report:

- **Measles** – four new imported cases from the Philippines
- **Arbovirus surveillance update**
- **Salmonellosis** – increased 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.

Measles

Four new imported measles cases were notified in this reporting week (Table 1). Three cases were in adults and the fourth was in an infant 10 months of age. All four measles cases were acquired in the Philippines. Imported measles cases from the Philippines have also recently been detected in Western Australia, Victoria, the Northern Territory, Queensland and New Zealand.

Measles is highly infectious and is spread easily through the air. Symptoms can include fever, tiredness, runny nose, cough and sore red eyes which usually last for several days before a red, blotchy rash appears. Complications can range from an ear infection and pneumonia to swelling of the brain.

NSW Health urges everyone planning international travel to ensure they are up to date with their vaccinations, especially measles, prior to their departure

Children should receive two doses of vaccine, one at 12 months and the second at 18 months. Babies who are travelling before their vaccines are due can be given the first dose as **early as 9 months of age**. Children over 18 months who have not had their second dose of measles vaccine can be vaccinated now.

Anyone born during or after 1966 should have two doses of vaccine (at least 4 weeks apart).

Follow the link for further information on measles disease notifications.
Follow the link for further information on measles vaccination (external link).
Follow the link for NSW Health media release.

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Arbovirus surveillance update

Notifications of local infections with Barmah Forest virus (BFV), Ross River virus (RRV) and imported dengue infections were within the normal range for this time of year (Table 1). Dengue infections so far in 2014 have been most commonly associated with travel to Fiji, Indonesia, and the Philippines.

In this reporting week, the NSW arbovirus surveillance and mosquito monitoring program (NSWAP) detected a BFV isolate from the Georges River area in the south of Sydney, leading to local health alerts. There have been no reports of human infection with BFV in residents from the

Georges River area to date this year, and no arbovirus seroconversions in the sentinel chickens in NSW this season.

The NSWAP reported that along the NSW coast, levels of the saltmarsh *Aedes vigilax* mosquito (a vector of BFV and RRV) continued to decline, although recent tides are expected to result in increased adult activity over the next two weeks. Mosquito levels remain high in several areas in Sydney. For the inland, the collections at Griffith remain high, probably as a result of above average precipitation in the region, but as the remainder of the inland has been dry, mosquito densities remain low.

Since late 2012 there has been an increase in national notifications for BFV infection. Many of the notifications have been based on detection of single IgM antibody to BFV in the absence of an IgG seroconversion or confirmation by an arbovirus reference laboratory. There is epidemiological and laboratory evidence to suggest that many of these reports may reflect false positive results or past infection.

To minimise the reporting of false positive BFV test results, NSW Health recommends the testing of acute and convalescent samples. Only an IgG seroconversion or an IgM result confirmed by a reference laboratory should be used to confirm recent BFV disease.

Further information:

- NSW Arbovirus surveillance and vector 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 arbovirus notifications data.

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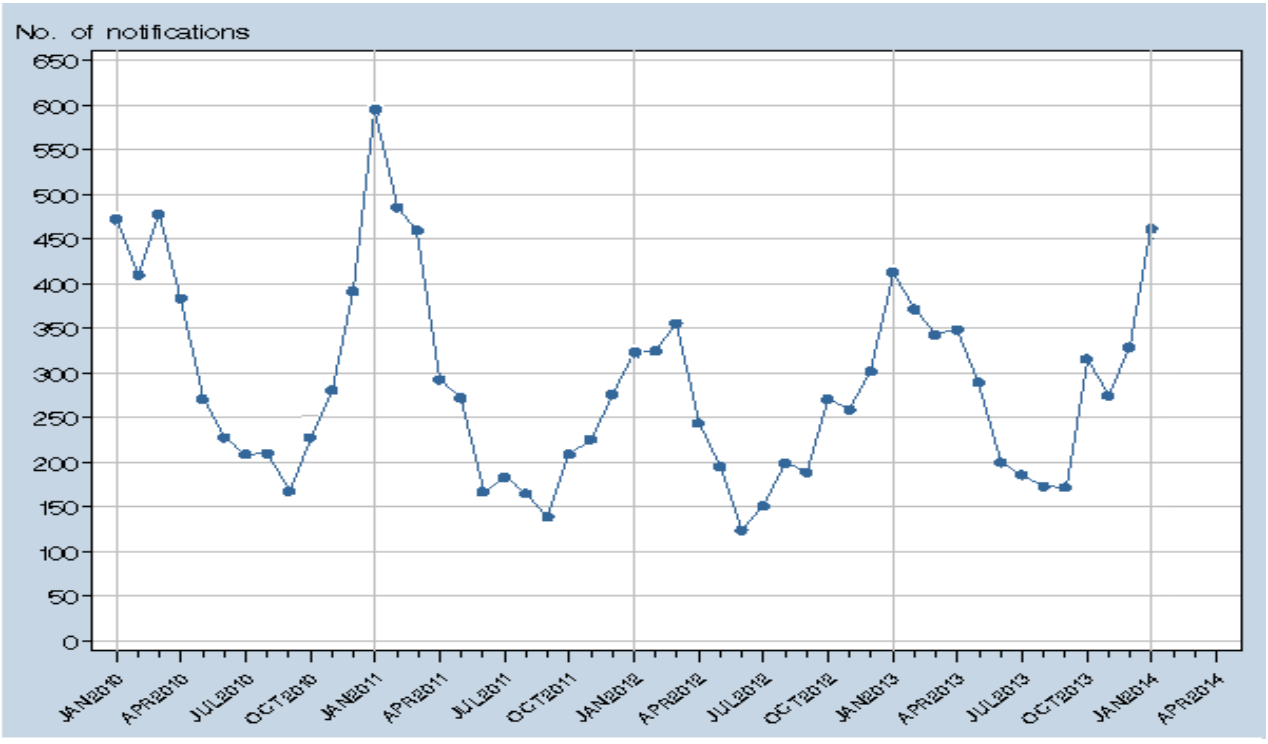
Salmonellosis

A total of 103 cases of *Salmonella* infection (salmonellosis) were notified in this reporting week (Table 1). This is a seasonally expected rise as salmonellosis typically peaks in NSW in the summer months (Figure 1).

Figure 1. Salmonellosis notifications in NSW residents by month of onset, January 2010 to January 2014.



The Sydney Local Health District Public Health Unit is currently investigating a food premises in Sydney University in conjunction with the NSW Food Authority. The investigation relates to 12 confirmed salmonellosis cases and six suspected cases.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria. There are around 2,500 different strains of *Salmonella*, many of which cause infections in both animals and humans.

Over 20 percent of notifications occur in children under the age of 5 years. The symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around 6 to 72 hours after ingestion of the organism. Symptoms typically last for 4 to 7 days, but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those who have weakened immune systems.

Most *Salmonella* infections occur from eating under-cooked animal products, such as poultry, eggs and meat. Thorough cooking kills the bacteria. *Salmonella* infections can also be acquired by cross contamination in the kitchen when kitchen equipment or hands that are contaminated from raw animal products come into contact with uncooked foods such as salad items. *Salmonella* bacteria are excreted in the stools of infected people and can thereby spread from person to person. Transmission can also occur directly from animals to humans.

Salmonella gastroenteritis can be prevented by thorough cooking, good hygiene and proper food storage practices:

- Minced meat, sausages, hamburgers and chicken should be cooked until the juices run clear and there are no pink areas inside.
- Steaks only need to be seared on the outside and can be rare inside.
- Any cracked or dirty eggs should be discarded. Eggs should be cooked until the white is firm and the yolks begin to thicken.

To prevent cross contamination of food:

- use different chopping boards, trays and utensils when preparing raw and ready-to-eat foods, and wash hands and equipment that have been in contact with raw animal products with hot soapy water immediately after use; and
- store raw foods (such as meat) in sealed containers to prevent fluid spilling onto other food.

Poor food storage can allow *Salmonella* to grow. The fridge temperature should be kept under five degrees Celsius. Leftover foods should be placed in the fridge as soon as possible and not left outside the fridge to cool, particularly in summer. Reheat food until all parts of the food are steaming hot. It's best to thaw frozen foods in the fridge or microwave.

Personal hygiene is also important - always wash hands after contact with animals, and especially before eating or handling food. Young children's hands should always be washed before eating, and frequently during the day, particularly if there are pets in the household.

People with *Salmonella* infection should ensure they wash their hands frequently, particularly after going to the toilet, and avoid preparing food for others until they are well. Infected people who are food handlers, or whose work involves care for children, patients or the elderly should be excluded from work until 48 hours after their symptoms resolve. Children with salmonellosis should not attend childcare until 24 hours after their diarrhoea has ceased.

Follow the link for further information on salmonellosis.

Follow the link for further information on *Salmonella* notifications.

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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 27 January to 2 February 2014, by date received. *

		This week	Last week	Year to date			Full Year	
				2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	13	15	67	174	54	1132	655
	Giardiasis	37	43	188	266	254	2245	2013
	Hepatitis A	3	3	8	11	0	62	41
	Rotavirus	4	9	37	82	82	508	1761
	STEC/VTEC	2	7	11	3	4	24	14
	Salmonellosis	103	103	512	562	478	3485	2941
	Shigellosis	8	5	37	16	30	136	131
	Typhoid	2	1	6	11	3	58	43
Respiratory Diseases	Influenza	50	62	278	183	81	8401	8040
	Legionellosis	1	2	5	10	25	102	106
	Tuberculosis	4	6	28	45	50	416	445
Sexually Transmissible Infections	Chlamydia	352	449	1963	2481	2594	21064	21260
	Gonorrhoea	98	99	456	513	482	4270	4115
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	3	14	27	18	503	264
	Measles	4	2	10	2	2	33	174
	Mumps	1	0	6	10	13	86	110
	Pertussis	27	23	165	399	1211	2376	5997
	Pneumococcal Disease (Invasive)	2	6	20	44	34	492	564
Vector Borne Diseases	Barmah Forest	1	6	21	53	28	441	344
	Dengue	3	14	30	34	43	287	285
	Malaria	1	4	6	15	6	92	68
	Ross River	4	4	32	64	59	512	597

*** 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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