

# **Communicable Diseases Weekly Report**

### Week 43, 19 to 25 October 2015

In summary, we report:

- <u>Pertussis</u> continuing rise in notifications
- Salmonellosis notifications starting to increase
- Emergency Department surveillance increase of fever or unspecified infection
- 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 <u>NSW Health Infectious</u> <u>Diseases Reports</u> webpage.

### **Pertussis**

Pertussis notifications in NSW have continued to increase with over 1,000 cases reported per month in September and August 2015 (Figure 1). October is likely to have the highest notifications of pertussis for any month this year. Cases are also increasing in children aged 12 to 23 months , with 47 cases reported in the period up to 30 October 2015 compared to 25 in of September 2015. However the most affected age group continues to be school aged children, with almost 50 % of pertussis notifications having occurred in this group in 2015. Information has been provided to all NSW schools to encourage early diagnosis and treatment, and help reduce the spread of infection in the community.

Pertussis, also known as 'whooping cough', is a highly contagious bacterial infection affecting the respiratory system which is caused by the bacterium *Bordetella pertussis*. It affects individuals of all ages but is more severe (and can be fatal) in small babies, particularly those too young to be vaccinated or those who are unvaccinated. Elderly people are also at increased risk of developing complications from pertussis.

1,400 1,200 Pertussis notifications 1,000 800 600 400 200 0 March June July June July August April May October January March April January December February February September November September 2014 2015

Figure 1. NSW pertussis notifications for the period January 2014 to September 2015.

Pertussis is a vaccine preventable disease, and is notifiable in NSW. Vaccination against pertussis is recommended for children at 6-8 weeks, 4 and 6 months of age, with a booster at 18 months of

Year and month of notification

age, 4 years of age and in the first year of high school. Boosters are important due to progressive waning of immunity with increasing time since the last dose.

The NSW Antenatal Pertussis Vaccination Program commenced on 1 April 2015, offering free diphtheria, tetanus and pertussis (dTpa – Boostrix®) vaccine to all pregnant women in the third trimester of pregnancy, preferably at 28 weeks gestation. As there is placental transfer of maternal pertussis antibodies to the foetus, infants of mothers vaccinated during pregnancy acquire protective immunity that protects them during the period before they are old enough to be vaccinated at six weeks of age. Boostrix® vaccine is provided free to general practices, Aboriginal Medical Services and antenatal clinics for all pregnant women in the third trimester.

Follow the link for more information about pertussis in childcare and schools.

Follow the link for more information about pertussis <u>patient management for GPs.</u>

Follow the link for more information regarding the Antenatal Pertussis Vaccination Program.

Follow the link for more information regarding pertussis notifications.

Back to top

## **Salmonellosis**

There have been 65 notifications of salmonellosis this reporting week (Table 1). Salmonellosis notifications have been increasing as the weather in NSW has become warmer.

Salmonella notifications usually begin to climb steeply in December each year and peak over summer because Salmonella flourishes in warmer weather so is able to produce an infective dose in contaminated food in a shorter time. Products containing undercooked eggs are the most common source of outbreaks of salmonellosis in NSW. Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg dressings, desserts and sauces need to follow safe handling practices. They should try to use alternatives to raw eggs in foods which are not subsequently cooked. Alternatives include commercially produced dressings and sauces, or pasteurised egg products.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around six to 72 hours after ingestion of the organism. Symptoms typically last for four to seven days, but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

Follow the link for further information on <u>safe handling of raw egg products</u> from the NSW Food Authority.

Follow the link for further information on salmonellosis notifications.

Follow the link for the salmonellosis factsheet.

Back to top

## Emergency department (ED) surveillance

Although the number of emergency department presentations for fever or unspecified infection in children aged under one year decreased from 191 last week to 184 this reporting week, this was above the usual range for this time of year, but not statistically significant (Figure 2).

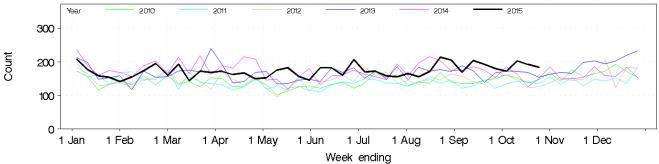
However admissions from emergency department increased from 54 to 64 for fever or unspecified infection in children, which was above the usual range for this time of year but not statistically significant.

In NSW in November 2013, the number of emergency department presentations and admissions for fever or unspecified infection in children aged under one year of age increased above usual

levels and was associated with increased parechovirus activity – see <a href="http://www.health.nsw.gov.au/Infectious/alerts/Documents/Parechovirus-Alert-2013-archive.pdf">http://www.health.nsw.gov.au/Infectious/alerts/Documents/Parechovirus-Alert-2013-archive.pdf</a>

The rise in presentations and admissions for fever or unspecified infection in infants will be monitored to see if it is related to parechovirus activity, or if it will be a sustained increasing trend. Infections with influenza or a range of other viruses will also contribute to presentations in this category.

Figure 2. Total weekly counts of emergency department presentations for fever or unspecified infection, for 2015 (black line), compared with each of the 5 previous years (coloured lines), children aged under 1 year, for 59 NSW hospitals. 2015 data covers period up to the week ending 25 October.



Back to top

## 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 19 to 25 October 2015, by date received\*

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	5	11	729	337	1025	429	1132
	Giardiasis	55	61	2827	2483	1936	2942	2242
	Hepatitis A	1	0	64	61	54	80	62
	Listeriosis	1	2	22	19	31	23	33
	Rotavirus	46	47	738	556	435	714	508
	Salmonellosis	65	68	3336	3606	2962	4302	3483
	Shigellosis	4	5	142	184	113	209	136
	Typhoid	4	0	38	36	51	44	58
Respiratory Diseases	Influenza	223	428	29643	20459	7933	20887	8403
	Legionellosis	1	1	81	57	94	72	109
	Tuberculosis	6	4	322	399	366	473	443
Sexually Transmissible Infections	Chlamydia	378	386	18267	19412	17764	22892	21083
	Gonorrhoea	54	87	4145	4149	3630	4875	4263
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	3	154	226	471	256	509
	Pertussis	399	358	7932	2120	1978	3051	2379
	Pneumococcal Disease (Invasive)	14	9	429	439	430	511	490
Vector Borne Diseases	Barmah Forest	2	1	175	151	392	163	438
	Dengue	3	6	267	347	263	378	303
	Malaria	1	0	35	83	81	87	93
	Ross River	19	16	1578	536	450	677	512
Zoonotic	Q fever	4	3	195	151	137	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 Database of Adverse Event Notifications.
- 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.

Back to top