

Communicable Diseases Weekly Report

Week 18, 29 April to 5 May 2018

In summary, we report:

- [Ross River virus](#) – 21 new notifications
- [Pertussis](#) – update
- [Summary of notifiable conditions activity in NSW](#)

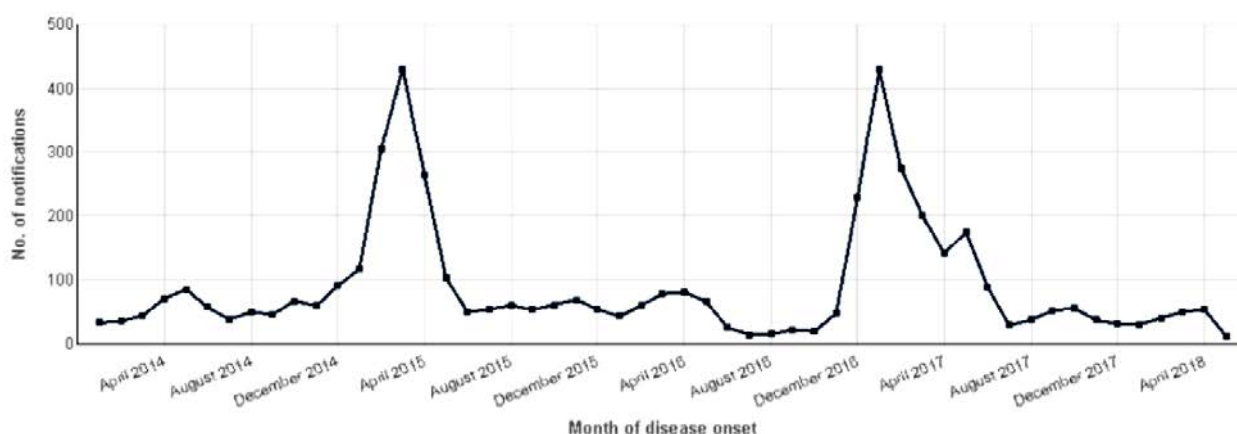
For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Ross River virus

There were 21 notifications of Ross River virus (RRV) infection in this reporting week ([Table 1](#)), a small increase compared to the previous week (15 notifications), and has included residents of both coastal and inland regions. RRV notifications for the year to date have been dramatically reduced compared to the previous year ([Table 1](#)) and are likely to decrease in frequency as we move into the cooler months.

While reports of arbovirus identifications in the NSW mosquito surveillance program have been rare this year, a recent RRV-positive identification in mosquitoes collected from the Central Coast highlights a continuing risk to the community (see the [weekly program report](#) for the week ending 4 May 2018).

Figure 1. Ross River notifications in NSW residents, by month of disease onset. January 2014 to May 2018. ⁽¹⁾



RRV is one of a group of arboviruses characterised by transmission through the bite of infected mosquitoes. Some people who are infected with the virus do not develop symptoms, while others develop the classic Ross River Fever illness characterised by fever, chills, headache and aches and pains in the muscles and joints.

¹ Note that from 1 January 2016, the national surveillance case definition for RRV infection was updated, reducing the likelihood of false positive notifications. While this has improved the validity of RRV infection notifications, it also makes comparisons with data from previous years more difficult.

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; prevention therefore 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. People should remember to cover up and take care to reduce the risk of a serious mosquito-borne infection by following some simple precautions – see the NSW Health [Mosquitoes are a health hazard](#) factsheet with tips on prevention.

For more information, see the following NSW Health fact sheets and resources:

- NSW Health [Ross River Fever](#) fact sheet.
- NSW Health [Fight the bite! campaign posters and media resources](#)
- NSW Health [Ross River notifications data](#) .

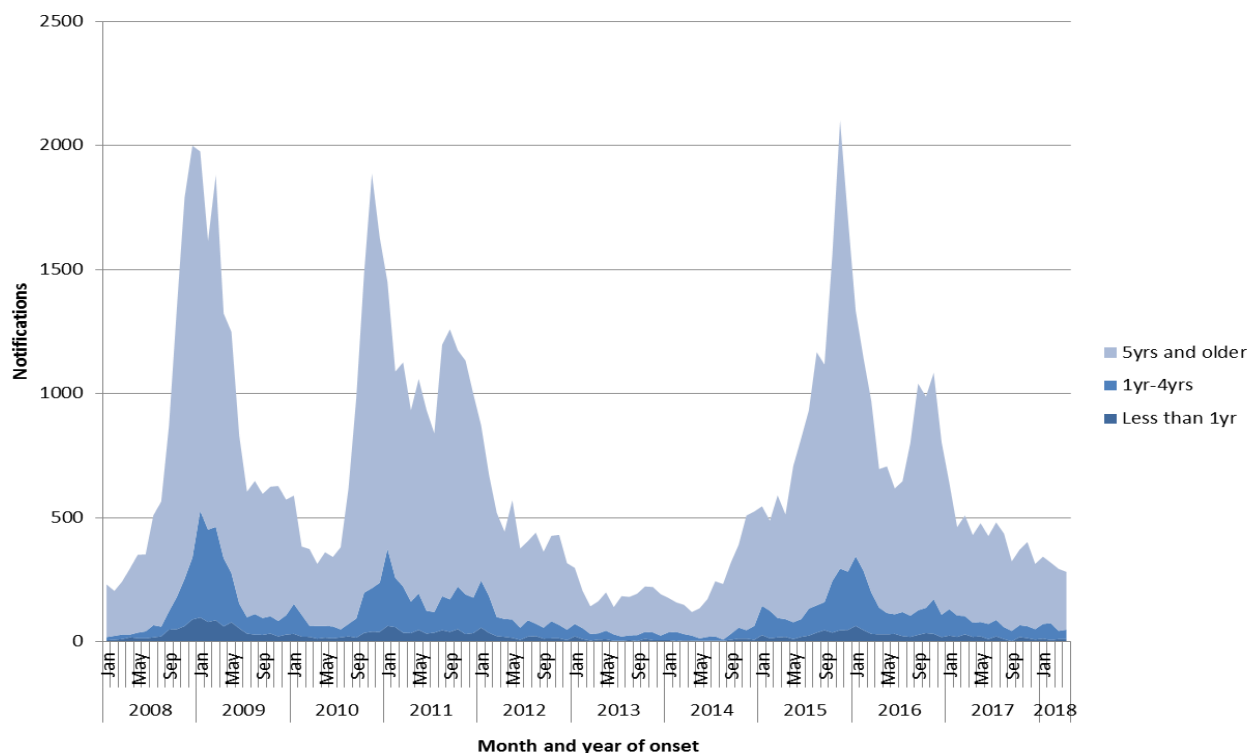
Pertussis

Pertussis notifications in NSW continue to decline since a peak in late 2016. There were 288 cases notified in April 2018, the lowest monthly total since August 2014. Moreover, the proportion of pertussis cases in the high-risk *children less than one year* age group continues to fall ([Figure 2](#)).

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

Pertussis is a vaccine preventable disease, with vaccination recommended for children at 6-8 weeks, 4 and 6 months of age, with booster doses at 18 months of age, 4 years of age, and in the first year of high school. Boosters in children are important due to progressive waning of immunity with increasing time since last dose.

Figure 2. NSW pertussis notifications, January 2008 to April 2018, by age at onset



NSW Health commenced the NSW Antenatal Pertussis Vaccination Program in April 2015 in response to increased notifications in the second half of 2014. The program offers free diphtheria, tetanus and pertussis (dTpa – Boostrix®) vaccine through general practices, Aboriginal Medical Services and antenatal clinics to all pregnant women in the third trimester of pregnancy, preferably at 28 weeks gestation. Antibodies produced by the mother in response to vaccination are transferred to the unborn baby and persist in the baby during the first few months of life. This helps to protect the infant against pertussis in this high-risk period while they are developing their own immunity through vaccination, which commences at 6-8 weeks of age.

The Commonwealth Government has recently announced that maternal pertussis vaccination will become part of the National Immunisation Program from July this year.

For further information see the [pertussis fact sheet](#).

Follow the link for more information on [pertussis notifications data](#).

Follow the link for more information on the [NSW Antenatal Pertussis Program](#).

Follow the link for more information on [pertussis vaccination](#).

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 29 April – 5 May 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	12	9	370	906	566	1266	1184
	Giardiasis	48	51	1043	1419	1554	2994	3480
	Hepatitis A	1	2	46	10	20	72	41
	Rotavirus	11	10	332	224	197	2318	750
	Salmonellosis	62	57	1525	1931	2156	3687	4544
	Shigellosis	5	1	80	77	106	235	310
	Typhoid	1	1	27	31	23	55	37
Other Diseases	Acute Rheumatic Fever	2	0	9	6	5	19	16
Respiratory Diseases	Influenza	74	76	3844	3026	2571	103851	35540
	Legionellosis	2	0	58	47	50	138	134
	Tuberculosis	6	7	155	167	173	543	535
Sexually Transmissible Infections	Chlamydia	622	522	11092	10610	9187	28977	25990
	Gonorrhoea	204	185	3716	3519	2317	9173	6996
Vaccine Preventable Diseases	Adverse Event Following Immunisation	8	16	77	118	88	271	258
	Pertussis	76	67	1323	2224	4476	5367	10956
	Pneumococcal Disease (Invasive)	10	4	118	120	114	681	545
Vector Borne Diseases	Barmah Forest	2	0	34	33	15	127	40
	Dengue	1	1	110	123	209	305	485
	Malaria	2	0	21	26	13	68	59
	Ross River	21	15	192	1140	271	1653	595
Zoonotic Diseases	Q fever	1	1	65	83	89	210	231

* 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 chronic blood-borne virus case reports are not included here but are available from the [Infectious Diseases Data](#) webpage.