

## Communicable Diseases Weekly Report

### Week 43, 20 October to 26 October 2019

In summary, we report:

- [Acute rheumatic fever and rheumatic heart disease](#) – 2016-2018 NSW Surveillance and Register report available
- [Salmonella Weltevreden](#)– recall expanded
- [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.

### Acute rheumatic fever and rheumatic heart disease

Acute rheumatic fever (ARF) is a rare but serious inflammatory complication of infection with Group A Streptococcus (GAS). Polyarthrititis (pain and swelling in several joints) and fever are the most common symptoms of ARF. Other signs and symptoms may include carditis (inflammation of the heart), chorea (jerky limb movements arising from inflammation of the brain), erythema marginatum (a distinctive skin rash), and subcutaneous nodules. Episodes of ARF can cause permanent damage to the heart valves leading to rheumatic heart disease (RHD).

People diagnosed with ARF require long-term follow-up, including benzathine penicillin G (BPG) injections every 21-28 days for a minimum of 10 years. This is given to prevent repeat GAS infections, which may lead to repeat episodes of ARF and worsening valvular disease. People with ARF should also have annual medical and dental reviews, and an echocardiogram (ultrasound of the heart) every two years. People with RHD may require more frequent clinical review.

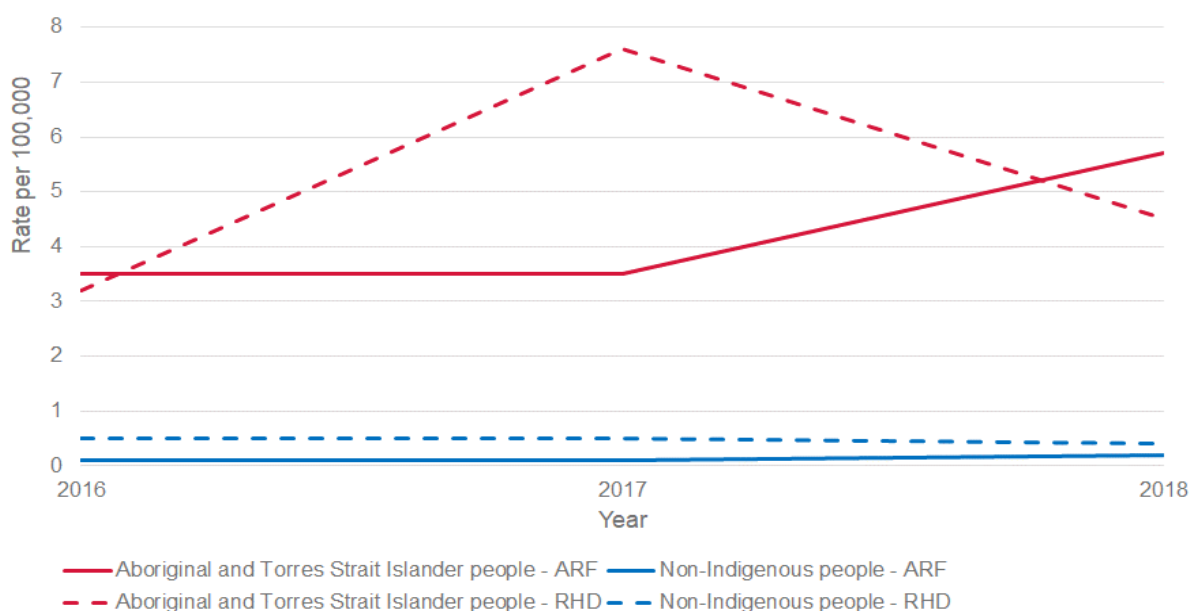
ARF in people of all ages and RHD in people aged less than 35 years became notifiable in NSW in October 2015. NSW Health has established a register for people diagnosed with ARF and RHD to assist patients and their doctors manage adherence to regular penicillin prophylaxis and clinical reviews in May 2016. The first annual [NSW RHD Program Surveillance and Register Report](#) with data for 2016-2018 was recently published on the NSW Health website

There were 67 notifications of ARF and 70 notifications of RHD in NSW between 1 January 2016 and 31 December 2018. The average annual rate of notification during this period was 0.3 per 100,000 population for ARF in people of all ages and 0.7 for RHD in people aged less than 35 years per 100,000.

Aboriginal and Torres Strait Islander people were at substantially higher risk of both ARF and RHD ([Figure 1](#)). The average crude rate of notification of ARF in Aboriginal and Torres Strait Islander people was more than 20 times higher than for non-Indigenous people and 10 times higher for RHD. In NSW, people from Maori and Pacific Island backgrounds are also at higher risk, representing 34 per cent of cases of ARF and 41 per cent of cases of RHD.

Western Sydney LHD reported the highest number of cases of both ARF (25) and RHD (23). The majority of these cases were people reporting Pacific Island ancestry. Hunter New England and Western NSW LHDs reported the highest number of notifications of ARF in Aboriginal and Torres Strait Islander people (8), and Mid North Coast and Hunter New England LHDs reported the highest number of notifications of RHD in Aboriginal and Torres Strait Islander people (5).

**Figure 1. Crude rate of notification per 100,000 population of ARF in people of all ages and RHD in people aged less than 35 years by Indigenous status and year, 2016-2018**

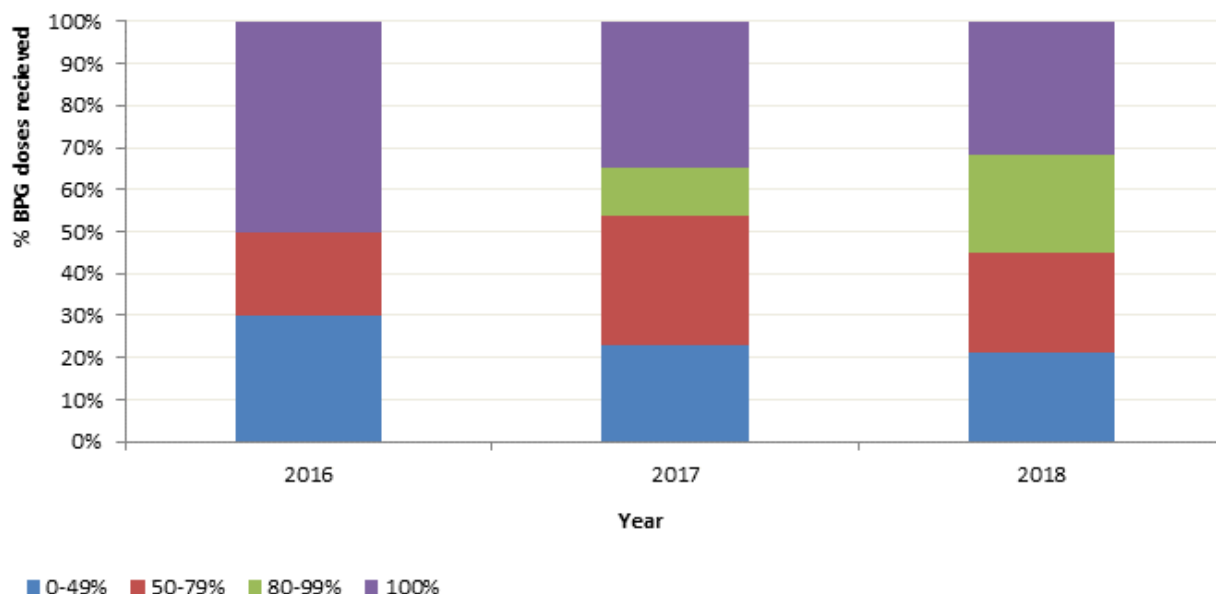


The median age at diagnosis was 13 years for people with ARF and 12.5 years for people with RHD. Eighty-four per cent of people diagnosed with ARF were aged less than 25 years.

One hundred and four individuals eligible for inclusion on the NSW RHD Register were identified between the establishment of the Register on 20 May 2016 and 31 December 2018, including cases notified prior to the establishment of the Register and cases not notifiable in NSW. Of these, 54 provided consent to be included on the Register by 31 March 2019.

The Register sends reminders to doctors when their patient/s will soon be due for an injection of BPG. About 50 per cent of people on the Register received more than 80 per cent of their scheduled doses of BPG and 25-30 per cent of cases received less than 50 per cent of their scheduled doses (Figure 2).

**Figure 2. Proportion of BPG doses received for people consented to the NSW RHD Register prescribed BPG due to receive at least one dose of BPG by year for each year on the Register, 20 May 2016-31 December 2018**



### Further information

- NSW Health [ARF and RHD fact sheet](#).
- NSW Health [ARF and RHD notifications data](#).

## Salmonella Weltevreden

There have been 82 notifications of salmonellosis in this reporting week ([Table 1](#)). Among these were five cases of *S. Weltevreden* infection, a rare strain of *Salmonella* for which on average fewer than two cases are reported monthly in NSW.

Public health unit staff have interviewed 20 patients with *S. Weltevreden* infection since 1 September and found that 17 (85%) reported eating a CORE Powerfoods frozen microwave meals in the few days before onset of illness. Following investigation by the NSW and Victorian food regulators, the manufacturer issued a voluntary recall of the products and NSW Health issued a [media release](#) warning consumers to return or dispose of CORE Powerfoods frozen microwave meals. Core Ingredients subsequently expanded the [recall](#) of their frozen meal products as further information about potentially contaminated products became available.

As of 30 October, a total of 51 people across Australia are believed to have fallen ill after consuming CORE Powerfoods frozen meals.

The recall includes eight varieties of the frozen meals (Going Nuts, Deep South Chilli, Muay Thai Meatballs, Holy Meatballs, Naked Chicken, Seismic Chicken, Old School, and Smokey Mountain Meatballs) with best before dates from 5 March 2020 to 4 October 2020.

Food safety agencies are working with the company to identify the possible source of the contamination.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Notifications in NSW usually begin to climb steeply in December each year and peak over summer. This is because *Salmonella* bacteria thrive in warmer weather and can produce an infective dose in contaminated food in a shorter time.

Products containing undercooked eggs, and improper separation of foods during food preparation are the most common causes of outbreaks of salmonellosis in NSW. Frozen meals have been identified as the cause of *Salmonella* outbreaks in countries such as the USA and Canada.

Frozen food should always be cooked thoroughly following manufacturer instructions before consumption. This is because they might include ingredients that have not gone through a pathogen kill-step process. Microwave ovens may not cook food evenly, so particular caution must be taken to ensure the food is thoroughly cooked.

Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around six to 72 hours after eating food contaminated with the organism. Symptoms typically last four to seven days, but can continue for much longer. Hospitalisation is occasionally required for the management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

### Further information

- NSW Food Authority links for further information on the [four food safety tips](#) and [safe handling of raw egg products](#)
- NSW Health [salmonellosis factsheet](#)
- [NSW Health media release \*Salmonella gastro linked to frozen microwave meals\*](#).

## 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 20 October – 26 October 2019, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	9	5	504	616	1171	708	1266
	Giardiasis	42	34	2797	2447	2693	2937	3134
	Hepatitis A	1	1	52	77	54	86	71
	Rotavirus	31	49	964	691	1962	808	2319
	STEC/VTEC	5	1	57	45	44	57	53
	Salmonellosis	82	62	2982	2743	3121	3337	3680
	Shigellosis	26	15	715	370	193	531	236
Respiratory Diseases	Influenza	312	486	113412	15506	102374	17412	103845
	Legionellosis	4	2	127	126	106	171	138
	Tuberculosis	11	19	483	421	429	508	542
Sexually Transmissible Infections	Chlamydia	615	673	26360	26128	24012	31183	28988
	Gonorrhoea	202	208	9715	8954	7635	10614	9151
	LGV	2	3	49	71	37	85	50
Vaccine Preventable Diseases	Meningococcal Disease	1	2	53	58	81	72	91
	Mumps	2	1	48	65	98	72	127
	Pertussis	127	110	5114	4182	4609	6280	5363
	Pneumococcal Disease (Invasive)	15	24	576	574	594	681	682
Vector Borne Diseases	Barmah Forest	2	1	58	64	111	74	127
	Dengue	5	8	365	231	249	299	306
	Malaria	3	0	55	61	62	66	68
	Ross River	4	5	531	510	1578	571	1653
Zoonotic Diseases	Q fever	1	5	201	197	176	228	210

### \* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- 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 (i.e. by report date).
- Note that [notifiable disease data](#) available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.
- Cases involving interstate residents are not included.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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](#).
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the [Infectious Diseases Data](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.