

Communicable Diseases Weekly Report

Week 20, 16 May to 22 May 2021

In summary, we report:

- Acute rheumatic fever one new case
- Novel coronavirus 2019 (COVID-19)
- Summary of notifiable conditions activity in NSW

For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

Acute rheumatic fever and rheumatic heart disease

There was one new case of acute rheumatic fever (ARF) reported this week. This was the third notified case of ARF this year in an Aboriginal child in Northern NSW Local Health District (LHD). NSW Health are working with local organisations and communities to identify and address underlying risk factors for ARF.

ARF is an uncommon but serious inflammatory complication of infection with Group A Streptococcus (Strep A). Polyarthritis (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), 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 benzylpenicillin G (BPG) injections every 21-28 days generally for 10 years or until the age of 21 years, whichever is longer. This is to prevent further Strep A infections, which may lead to recurrent 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 and it is important that routine immunisations are kept up to including annual influenza immunisation.

ARF in people of all ages, and RHD in people aged less than 35 years, became notifiable in NSW in October 2015. NSW Health established a register in May 2016 for people diagnosed with ARF and RHD, to assist patients and their doctors manage adherence to regular penicillin prophylaxis and clinical reviews. Families and primary care providers of ARF and RHD cases are provided with information about ARF, RHD and how to reduce the risk of recurrent episodes of ARF, and consent sought for inclusion on the NSW ARF/RHD Register to help with their ongoing management.

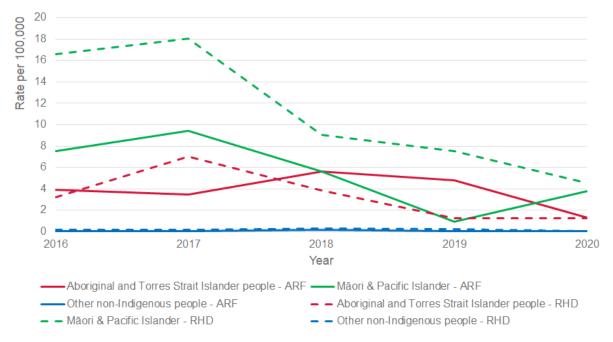
There were 94 notifications of ARF and 93 notifications of RHD in NSW between 1 January 2016 and 31 December 2020. The average annual rate of notification during this period was 0.2 per 100,000 population for ARF in people of all ages and 0.5 for RHD in people aged less than 35 years per 100,000 population.

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

In NSW, both Aboriginal and Torres Strait Islander people and Māori and Pacific Islander people are 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 60 times higher

than for low risk non-Indigenous people and more than 15 times higher for RHD. The average crude rate of notification of ARF in people from Māori and Pacific Island backgrounds was almost 90 times higher than for low risk non-Indigenous people and almost 60 times higher for RHD.

Figure 1. Crude rate of notification per 100,000 population of ARF in people of all ages and RHD in people in NSW aged less than 35 years by ancestry and year, 2016-2020



The majority (84%) of Aboriginal people notified with either ARF and RHD in NSW live in rural and regional LHD. By contrast, 90% of people from Māori and Pacific Island backgrounds notified with either ARF or RHD in NSW live in metropolitan LHD.

Timely and appropriate treatment of sore throats and skin infections in high-risk populations, such as Aboriginal and Torres Strait Islander people and Māori and Pacific Islander people, can reduce the risk of ARF.

Further information on these conditions is available from NSW Health and RHD Australia.

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the NSW Health COVID-19 page.

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 16 May - 22 May 2021, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2021	2020	2019	2020	2019
Enteric Diseases	Cryptosporidiosis	3	3	248	373	375	550	669
	Giardiasis	38	46	783	931	1700	1791	3271
	Listeriosis	1	2	9	6	4	20	16
	Rotavirus	2	6	100	321	262	464	1755
	STEC/VTEC	3	0	53	42	29	114	80
	Salmonellosis	66	35	1577	1740	1841	2888	3556
	Shigellosis	1	2	36	356	357	494	867
Respiratory Diseases	Influenza	7	5	33	7251	13688	7487	116442
	Legionellosis	2	6	90	72	71	170	153
	Tuberculosis	13	10	235	207	213	623	590
Sexually Transmissible Infections	Chlamydia	560	577	11807	11170	12523	27277	32495
	Gonorrhoea	194	166	3729	4055	4638	9905	11702
	LGV	1	0	17	33	20	44	69
Vaccine Preventable Diseases	Meningococcal Disease	2	0	8	8	11	22	59
	Pertussis	1	0	24	1261	2402	1405	6386
	Pneumococcal Disease (Invasive)	10	16	156	138	153	359	691
Vector Borne Diseases	Barmah Forest	1	4	57	97	31	271	63
	Ross River	12	22	442	1093	317	1989	593
Zoonotic Diseases	Leptospirosis	3	8	51	6	4	12	9
	Q fever	3	1	71	90	123	206	248

* 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.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health <u>Latest Updates on COVID-19</u> page.
- 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 <u>notifiable disease data</u> 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.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here.
 Related data are available from the <u>Infectious Diseases Data</u>, the <u>HIV Surveillance Data</u>
 Reports and the <u>Hepatitis B and C Strategies Data Reports</u> 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.