

Communicable Diseases Weekly Report

Week 20, 14 to 20 May 2023

In this report we provide information regarding acute rheumatic fever (ARF) and a summary of notifiable conditions activity in NSW over the reporting period Week 20, 14 to 20 May 2023.

For surveillance data on COVID-19 and influenza please see the latest [NSW Respiratory Surveillance Report](#).

For up-to-date information regarding the Japanese encephalitis outbreak and the NSW response, please visit the [NSW Health Japanese encephalitis page](#).

Information on notifiable conditions is available at the 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 (ARF)

There were two new cases of ARF reported this week; one in an Aboriginal person from Northern NSW Local Health District (LHD) and one in a non-Indigenous child in Western Sydney LHD. The child had a concurrent rheumatic heart disease (RHD) notification.

ARF is an uncommon but serious inflammatory complication of infection with group A *Streptococcus* bacterium. 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 RHD.

There have been 20 notified cases of ARF in NSW to 21 May 2023; of which 12 had disease onset in 2023 (Figure 1). The remaining cases are due to delayed notification of cases; in particular, Northern NSW LHD had eight cases retrospectively notified. The number of notified cases in 2023 year-to-date are substantially higher than the eight and two cases diagnosed in the same period in 2021 and 2022 respectively. The increase may be due to an increase in the community burden of group A *Streptococcus* bacterium. NSW Health reported an increase in invasive group A streptococcal (iGAS) cases at the end of 2022¹.

¹ Health Protection NSW (2022). Invasive group A streptococcal disease. *Communicable Diseases Report: Week 52*. Available from <https://www.health.nsw.gov.au/Infectious/Reports/Publications/cdwr/2022/cdwr-week-52-2022.pdf>, accessed 9 February 2023.

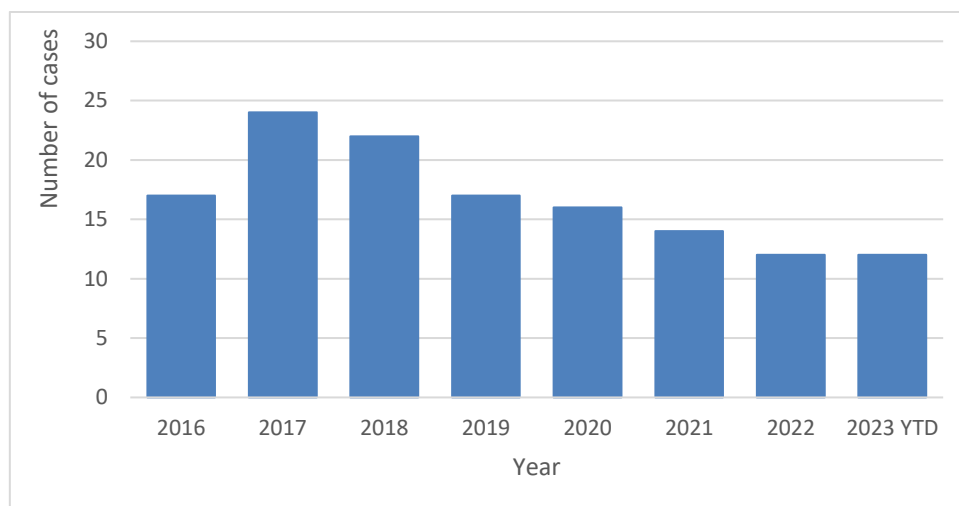


Figure 1. Notified cases of ARF by disease onset, NSW, 1 January 2016 to 21 May 2023

Aboriginal and Torres Strait Islander people are at high risk for ARF and RHD. Half of the ARF cases diagnosed in NSW since January 2016 have been in Aboriginal and Torres Strait Islander people. In NSW, people from Māori and Pacific Island backgrounds are also at higher risk than the general population. Timely and appropriate treatment of sore throats and skin infections in high-risk populations can reduce the risk of ARF.

People diagnosed with ARF require long-term follow-up, including benzathine benzylpenicillin G (BPG) injections every 21-28 days generally for a minimum of 5 years or until the age of 21 years, whichever is longer. This is to prevent further group A Streptococcal infection, which may lead to recurrent episodes of ARF, progression to RHD and/or worsening valve disease in people with existing RHD. 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.

The NSW ARF/RHD Register can assist patients and their doctors manage adherence to regular BPG injections and clinical reviews. The Register provides families and primary care providers of people diagnosed with ARF and RHD with information about ARF and RHD, on how to reduce the risk of recurrent episodes of ARF and provides support with their ongoing management.

Further information on these conditions is available from [NSW Health](#) and [Menzies School of Health Research](#).

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period alongside reports received in the previous week, year to date and in previous years (Table 1).

Table 1. NSW Notifiable conditions from 14 to 20 May 2023, by date received*

		Weekly		Year to date					Full Year			
		This week	Last week	2023	2022	2021	2020	2019	2022	2021	2020	2019
Enteric Diseases	Campylobacter	192	236	5042	4608	5451	4216	4637	13346	13015	11052	12071
	Cryptosporidiosis	7	11	239	179	251	372	372	463	444	548	669
	Giardiasis	47	59	997	513	822	1038	1695	1410	1585	1986	3420
	Hepatitis A	2	4	36	8	0	18	34	37	8	19	61
	Listeriosis	2	2	17	14	9	6	4	33	22	20	16
	Rotavirus	24	30	1142	146	129	330	256	1802	356	500	1777
	STEC/VTEC	2	4	77	51	54	42	28	144	126	115	79
	Salmonellosis	46	45	1442	1519	1592	1764	1824	2968	3100	2885	3552
	Shigellosis	14	15	352	98	36	358	359	460	60	494	867
	Typhoid	2	1	44	16	0	32	36	47	2	37	64
Other Diseases	Invasive Group A Streptococcus	13	12	246	0	-	-	-	142	-	-	-
Respiratory Diseases	Influenza	2099	1264	14622	14023	32	7253	13782	116315	125	7481	116402
	Legionellosis	8	8	100	112	95	72	71	268	216	171	154
	Respiratory syncytial virus (RSV)	1597	1340	17254	1	-	-	-	5669	-	-	-
	Tuberculosis	10	5	216	171	235	210	216	528	558	625	589
Sexually Transmissible Infections	Chlamydia	612	589	12277	9557	11662	11308	12473	25857	25300	27214	32466
	Gonorrhoea	254	219	4781	3761	3664	4106	4608	10230	7626	9861	11670
	LGV	1	1	17	7	18	33	20	29	36	44	69
Vaccine Preventable Diseases	Meningococcal Disease	1	4	15	5	7	8	11	36	23	22	59
	Mumps	1	0	13	1	3	46	21	26	6	56	59
	Pertussis	6	6	55	13	21	1263	2385	81	44	1400	6387
	Pneumococcal Disease (Invasive)	14	13	169	107	147	134	154	533	386	342	686
Vector Borne Diseases	Barmah Forest	2	1	54	39	56	98	31	89	111	271	63
	Dengue	5	4	126	21	1	76	182	170	4	78	460
	Malaria	1	0	37	8	2	18	26	42	8	25	73
	Ross River	3	10	191	495	457	1170	320	725	661	1990	596
Zoonotic Diseases	Leptospirosis	1	0	9	16	56	6	4	44	96	12	9
	Q fever	2	3	57	85	94	92	122	197	209	212	249

* 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.
- Surveillance data on COVID-19 can be found in the [NSW Respiratory Surveillance Report](#).
- 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.
- 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.