National Communicable Diseases Surveillance Report

Fortnight 08, 2021 Summary Notes for Selected Diseases

12 April to 25 April 2021

Infectious and congenital syphilis

Increases in infectious syphilis notifications are attributed to an on-going outbreak occurring in young Aboriginal and Torres Strait Islander people residing in northern and central Australia, continued increases among men who have sex with men (MSM) in urban areas of Victoria (Vic) and New South Wales (NSW), and increases in women (Indigenous and non-Indigenous) residing in urban areas of Vic, NSW, Queensland (Qld) and Western Australia (WA).

Outbreak in remote Australia

In January 2011, an increase of infectious syphilis notifications among young (15-29 years) Aboriginal and Torres Strait Islander people was identified in the North West region of Qld, following a steady decline at a national level in remote communities. Subsequent increases in infectious syphilis notifications were reported in the Northern Territory (NT) in 2013, WA in 2014 and South Australia (SA) in 2016, following sustained periods of low notification rates. The outbreak is of significant public health concern given the: elevated rates of infectious syphilis among women of child-bearing age, increasing the risk of congenital syphilis; and the concomitant risk of HIV transmission. For the latest information on the infectious syphilis outbreak and related national activities, refer to the Department's website.

Increases among MSM

Since 2010 increases in notifications of infectious syphilis have been reported in MSM, predominately 20-39 years of age, residing in urban areas of Vic and NSW.

Increases among women (Indigenous and non-Indigenous)

Since 2016, increases in notifications of infectious syphilis have been reported in women (Indigenous and non-Indigenous) aged predominately 20-39 years of age residing in urban areas of NSW, Vic, Qld and WA. As noted in the outbreak in remote Australia, increases in women of child-bearing age is of significant public health concern given the increased risk of congenital syphilis.

Syphilis response

On 23 March 2021, the Australian Health Protection Principal Committee (AHPPC) endorsed the *National strategic approach for responding to rising rates of syphilis in Australia 2021* (Strategic Approach) prepared through the Communicable Diseases Network Australia (CDNA) and BBV STI Standing Committee (BBVSS). The Strategic Approach builds on and intersects with existing national activities related to syphilis and provides specific focus for efforts towards rising rates of syphilis and adverse outcomes in Australia.

The CDNA and BBVSS are, in collaboration, developing priority public health actions, including those related to workforce and community engagement, to ensure progress is made towards reducing the incidence of syphilis and elimination of congenital syphilis in Australia. These actions will be provided to AHPPC for endorsement in the coming months.

For further information on national activities related to STIs, including syphilis, refer to the Department's website.

Legionellosis

In the past 12 months (26 April 2020 to 25 April 2021), there have been 544 cases of legionellosis reported to the National Notifiable Diseases Surveillance System (NNDSS), comprising 53.5% *Legionella longbeachae* (291/544) and 42.1% *Legionella pneumophila* (229/544). This is 1.3 times higher than the historical five-year mean (n=415.2), which comprised a greater proportion of *L. pneumophila* (56.4%) compared to *L. longbeachae* (40.7%) infections. Legionellosis notifications were reported in all jurisdictions of Australia in the past 12 months, although the distribution of species varied by jurisdiction (Figure 1 and Figure 2).

In the past fortnight (12 April 2021 to 25 April 2021), 20 cases of legionellosis were notified compared to 26 cases in the same reporting period in the previous year. Of the 20 cases reported in the past fortnight, 16 cases had a species reported, with 10 cases identified as *L. pneumophila* (63%) and six cases identified as *L. longbeachae* (38%). It is difficult to determine the extent to which the increase in legionellosis notifications is associated with increased testing of individuals with influenza-like symptoms or pneumonia in response to the COVID-19 pandemic over the past 12 months, or other factors.

Figure 1. Notifications of *Legionella longbeachae*, Australia, 1 January 2016 to 25 April 2021, by state or territory and month and year of notification

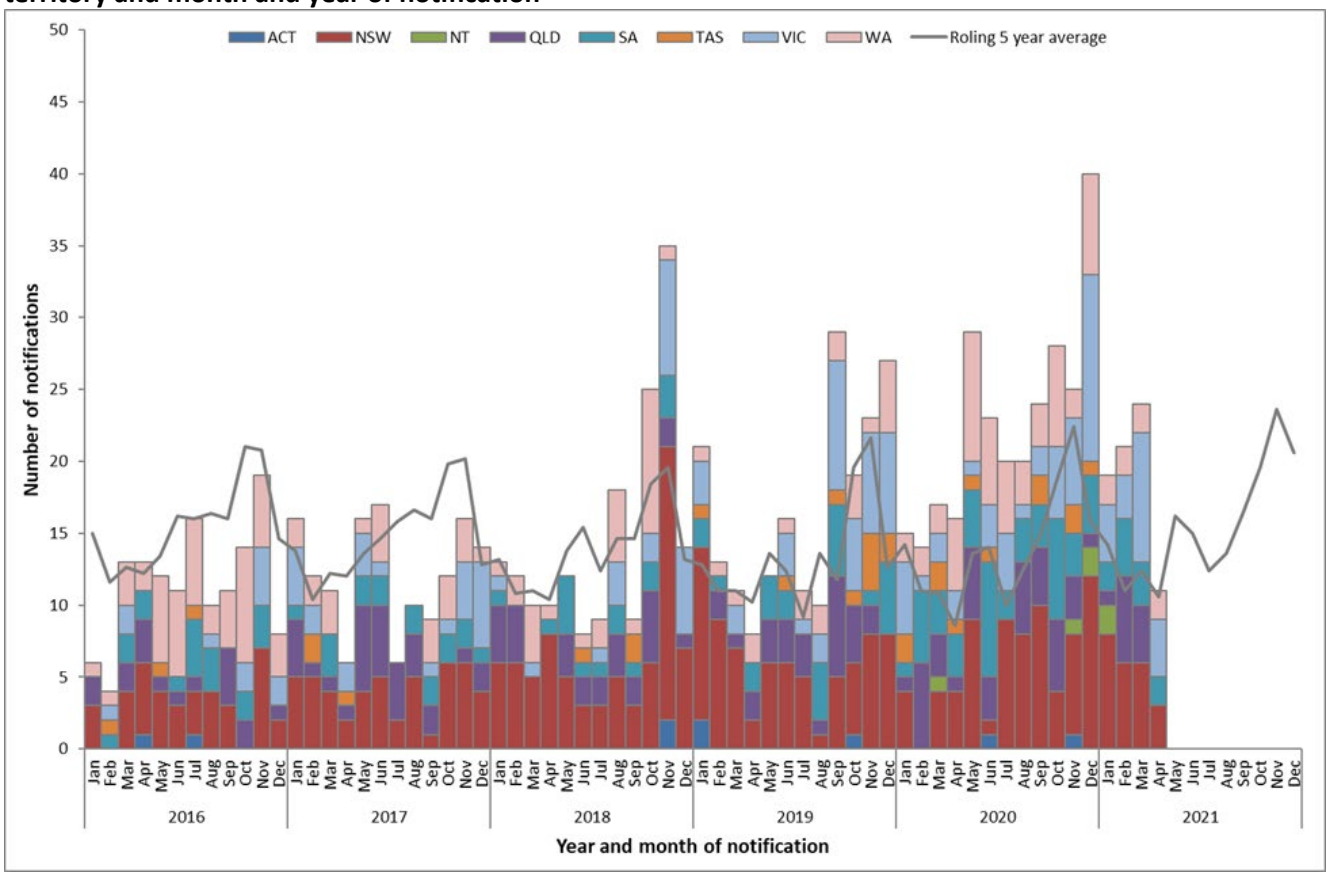
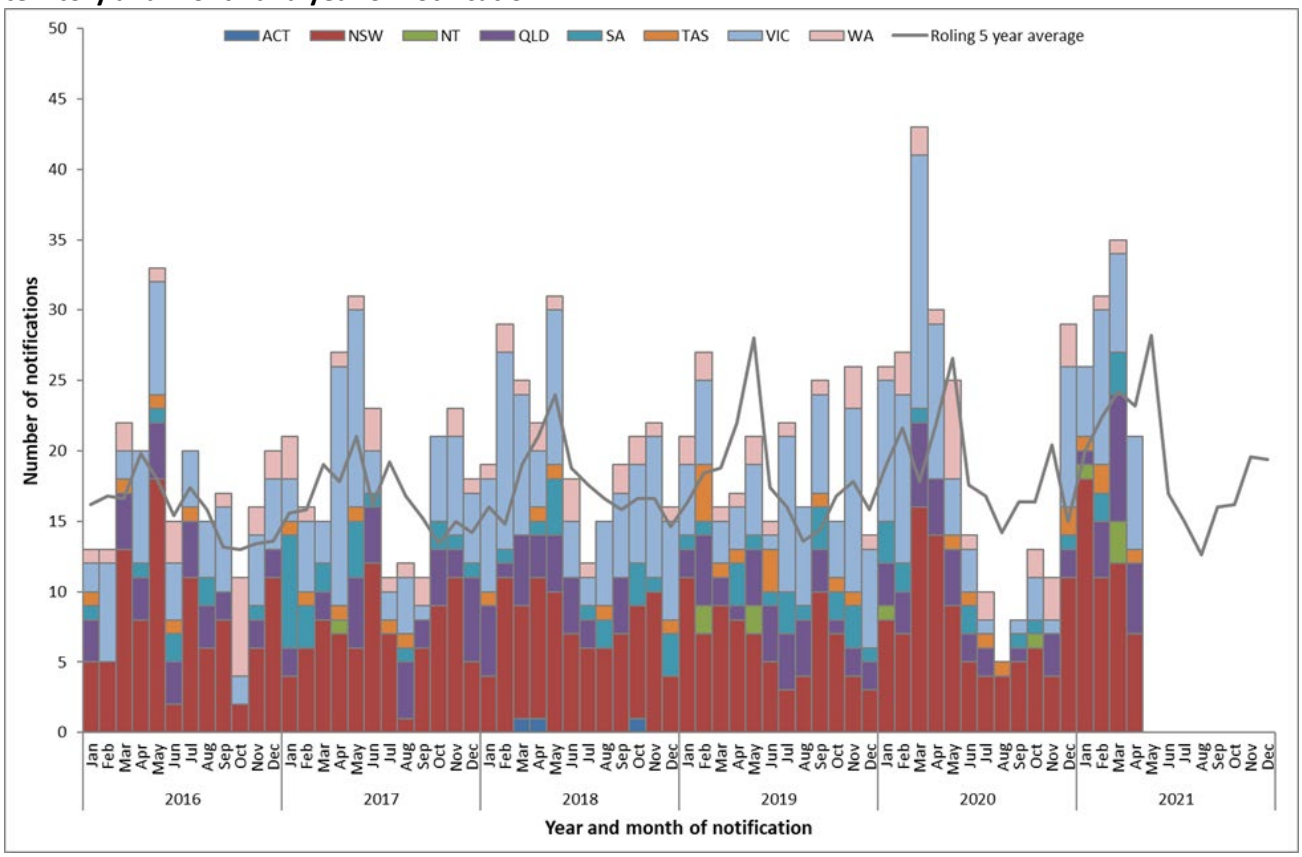


Figure 2. Notifications of *Legionella pneumophila*, Australia, 1 January 2016 to 25 April 2021, by state or territory and month and year of notification



Leptospirosis

In the past 12 months (26 April 2020 to 25 April 2021), there have been 162 cases of leptospirosis reported to the National Notifiable Diseases Surveillance System (NNDSS). This is higher than the mean number of cases reported for the historical five-year mean (n=115.6). In the past fortnight (12 April 2021 to 25 April 2021), 17 cases of leptospirosis were notified compared to three cases in the same reporting period in the previous year. In the past quarter (26 January 2021 to 25 April 2021), 86 cases of leptospirosis were notified compared to the quarterly rolling five year mean of 38.4 notifications. Of the 86 cases notified in the past quarter, the highest number of notifications occurred in Queensland (49/86, 57%), followed by New South Wales (22/86, 26%) and the Northern Territory (12/86, 14%). Increased mouse and rat populations following recent wet weather in eastern Australian may be a contributing factor leading to increased case notifications in some areas.

Interpretative Notes

Selected diseases are chosen each fortnight based on either exceeding two standard deviations from the 90 day and/or 365 day five year rolling mean or other disease issues of significance identified during the reporting period. All diseases reported are analysed by notification receive date. Data are extracted each Monday of a CDNA week.

Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.

[1]The past quarter (90 day) surveillance period includes the date range (26/01/2021 to 25/04/2021).

[2]The quarterly (90 day) five year rolling mean is the average of 5 intervals of 90 days up to 25/04/2021. The ratio is the notification activity in the past quarter (90 days) compared with the five year rolling mean for the same period.

[3]The past year (365 day) surveillance period includes the date range (26/04/2020 to 25/04/2021).

[4]The yearly (365 day) five year rolling mean is the average of 5 intervals of 365 days up to 25/04/2021. The ratio is the notification activity in the past year (365 days) compared with the five year rolling mean for the same period.

The five year rolling mean and the ratio of notifications compared with the five year rolling mean should be interpreted with caution. Changes in surveillance practice, diagnostic techniques and reporting may contribute to increases or decreases in the total notifications received over a five year period. Ratios are to be taken as a crude measure of current disease activity and may reflect changes in reporting rather than changes in disease activity.

ADT FN08/2021

Notification received date

Disease group	Disease name	Disease code	State or Territory								Totals for Australia				Historical 90 Day Period				Historical Yearly Period			
			ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This reporting period 12/04/2021 25/04/2021	Previous reporting Period 29/03/2021 11/04/2021	Same reporting period last year 12/04/2020 25/04/2020	Current year YTD 01/01/2021 25/04/2021	Past Quarter 26/01/2021 25/04/2021	Quarterly rolling 5 year mean	Ratio past quarter/5 year mean*	Exceeds quarterly rolling mean +2 SD by	Past Year 26/04/2020 25/04/2021	Yearly rolling 5 year mean 26/04/2015 25/04/2020	Ratio past year/5 year mean*	Exceeds yearly rolling mean +2 SD by
Bloodborne diseases	Hepatitis B (newly acquired)	039	-	-	-	3	-	-	-	-	3	1	6	26	17	38.2	0.4	-	107	152.6	0.7	-
	Hepatitis B (unspecified)	052	3	75	-	34	-	5	37	17	171	140	137	1,453	1,180	1,465.2	0.8	-	4,847	5,923.4	0.8	-
	Hepatitis C (newly acquired)	040	-	-	-	15	-	-	-	1	16	21	22	209	174	167.0	1.0	-	664	714.6	0.9	-
	Hepatitis C (unspecified)	053	1	101	4	95	1	4	38	46	290	251	216	2,316	1,828	2,492.6	0.7	-	7,327	9,698.6	0.8	-
	Hepatitis D	050	-	2	-	1	-	-	-	-	3	1	2	25	22	14.4	1.5	-	80	66.6	1.2	-
Gastrointestinal diseases	Botulism	045	-	-	-	-	-	-	-	-	-	-	-	1	1	0.2	5.0	-	2	1.2	1.7	-
	Campylobacteriosis	005	30	444	8	414	105	36	4	97	1,138	1,068	650	11,756	8,892	7,101.4	1.3	-	32,647	29,531.0	1.1	-
	Cryptosporidiosis	061	-	21	9	22	7	2	14	4	79	41	74	634	481	1,663.8	0.3	-	1,450	3,944.6	0.4	-
	Haemolytic uraemic syndrome (HUS)	055	-	-	-	-	-	-	1	-	1	-	-	4	3	3.8	0.8	-	14	16.0	0.9	-
	Hepatitis A	038	-	-	-	-	-	-	-	1	1	-	10	5	3	82.2	0.0	-	16	242.0	0.1	-
	Hepatitis E	051	-	-	-	-	-	-	-	-	-	-	-	-	-	18.4	-	-	4	49.0	0.1	-
	Listeriosis	018	-	-	-	-	-	-	-	1	1	1	1	15	10	21.0	0.5	-	44	68.8	0.6	-
	Paratyphoid	080	-	-	-	-	-	-	-	-	-	-	2	-	-	33.2	-	-	2	86.4	0.0	-
	STEC	054	-	6	-	1	5	-	6	2	20	21	10	218	174	142.2	1.2	-	526	481.6	1.1	-
	Salmonellosis	030	8	119	18	214	39	10	57	38	503	499	387	4,974	3,594	5,375.6	0.7	-	10,580	15,817.4	0.7	-
	Shigellosis	031	-	3	3	1	3	-	2	2	14	17	37	166	129	575.6	0.2	-	690	2,121.2	0.3	-
	Typhoid Fever	035	-	-	-	-	-	-	1	-	1	-	2	5	5	65.0	0.1	-	21	153.0	0.1	-
Quarantinable diseases	Avian influenza in humans (AIH)	076	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	COVID-19	081	-	102	52	34	53	-	13	38	291	157	532	1,373	996	1,377.0	0.7	-	23,022	1,379.2	16.7	15,474.8
	Cholera	008	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	1.4	-	-
	MERS-CoV	079	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Plague	025	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Rabies	028	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Severe acute respiratory syndrome (SARS)	071	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Smallpox	069	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Viral haemorrhagic fever (NEC)	036	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Yellow fever	041	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
Sexually transmissible infections	Chlamydial infection	007	60	1,104	31	875	191	52	31	375	2,719	2,572	2,848	26,382	20,455	26,394.2	0.8	-	85,235	99,983.6	0.9	-
	Donovanosis	010	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Gonococcal infection	011	14	396	29	205	62	11	70	107	894	841	951	8,451	6,504	7,581.6	0.9	-	26,982	28,224.8	1.0	-
	Syphilis < 2 years	066	3	46	16	23	8	-	59	37	192	176	204	1,614	1,261	1,151.8	1.1	-	5,136	4,500.4	1.1	-
	Syphilis > 2 years or unspecified duration	067	-	2	1	7	1	-	44	4	59	47	47	513	399	546.6	0.7	-	1,834	2,185.8	0.8	-
	Syphilis congenital	047	-	-	-	-	-	-	-	-	-	1	-	5	4	1.0	4.0	1.6	18	7.0	2.6	6.8
Vaccine preventable diseases	Diphtheria	009	-	-	-	-	-	-	-	-	-	-	1	1	1	2.0	0.5	-	6	8.0	0.8	-
	Haemophilus influenzae type b	012	-	-	-	-	-	-	-	-	-	1	-	7	6	4.0	1.5	-	22	19.0	1.2	-
	Influenza (laboratory confirmed)	062	-	6	4	18	-	1	9	1	39	29	162	253	194	14,564.4	0.0	-	1,429	166,058.2	0.0	-
	Measles	021	-	-	-	-	-	-	-	-	-	-	-	-	-	44.6	-	-	-	126.8	-	-
	Mumps	043	-	-	-	-	-	-	-	-	-	1	7	10	7	172.6	0.0	-	53	622.2	0.1	-
	Pertussis	024	1	3	-	6	1	-	9	1	21	12	213	175	147	3,075.2	0.0	-	1,060	15,509.6	0.1	-
	Pneumococcal disease (invasive)	065	1	16	1	8	7	2	12	3	50	46	25	327	263	261.2	1.0	-	1,072	1,900.4	0.6	-
	Poliovirus infection	026	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Rotavirus	077	-	10	1	11	15	1	NN	4	44	52	21	355	269	633.4	0.4	-	1,112	4,732.2	0.2	-
	Rubella	029	-	-	-	-	-	-	-	-	-	-	-	1	1	5.6	0.2	-	3	13.8	0.2	-
	Rubella congenital	046	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.2	-	-
	Tetanus	033	-	-	-	-	-	-	-	-	-	1	-	3	2	1.4	1.4	-	8	3.8	2.1	1.6
	Varicella zoster (chickenpox)	073	8	NN	1	1	12	-	17	14	53	65	59	478	381	720.8	0.5	-	2,254	3,612.0	0.6	-
	Varicella zoster (shingles)	074	13	NN	11	2	89	17	51	71	254	269	534	2,612	1,992	2,946.4	0.7	-	12,434	11,130.4	1.1	-
	Varicella zoster (unspecified)	075	3	NN	11	343	61	21	7	74	520	483	592	5,406	3,943	3,457.8	1.1	-	15,382	14,228.0	1.1	-
Vectorborne diseases	Barmah Forest virus infection	048	-	5	-	9	-	-	-	2	16	17	37	151	126	123.0	1.0	-	695	374.2	1.9	155.0
	Chikungunya virus infection	078	-	-	-	-	-	-	-	-	-	-	-	2	2	17.6	0.1	-	4	86.4	0.0	-
	Dengue virus infection	003	-	-	-	-	-	-	-	-	-	-	7	1	-	382.6	-	-	8	1,378.8	0.0	-
	Flavivirus infection (unspecified)	001	-	-	-	-	-	-	-	-	-	-	-	2	1	12.4	0.1	-	12	32.2	0.4	-
	Japanese encephalitis virus infection	059	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	1.2	-	-
	Malaria	020	-	-	-	-	-	-	-	-	-	3	4	12	11	93.6	0.1	-	58	346.0	0.2	-
	Murray Valley encephalitis virus infection	049	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	0.4	-	-
	Ross River virus infection	002	-	35	6	43	4	2	44	13	147	122	888	1,757	1,315	1,768.2	0.7	-	6,042	4,383.6	1.4	-
	West Nile/Kunjin virus infection	060	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	1.6	-	-
Zoonoses	Anthrax	058	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Australian bat lyssavirus infection	063	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Brucellosis	004	-	-	-	1	-	-	-	-	1	-	-	4	4	4.8	0.8	-	16	19.2	0.8	-
	Leptospirosis	017	-	8	-	9	-	-	-	-	17	10	3	99	86	38.4	2.2	24.6	162	115.6	1.4	-
	Lyssavirus infection (NEC)	064	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Ornithosis	023	-	-	-	-	-	-	-	-	-	-	2	6	1	3.6	0.3	-	61	19.2	3.2	27.6
	Q fever	027	-	5	-	15	-	-	-	-	20	16	24	168	144	136.6	1.1	-	470	542.2	0.9	-
	Tularaemia	070	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	2	-		2.0
Other bacterial infections	Legionellosis	015	-	7	-	3	-	-	6	4	20	21	26	198	165	109.2	1.5	-	544	415.2	1.3	17.3
	Leprosy	016	-	-	-	-	-	-	-	-	-	-	-	1	1	1.8	0.6	-	7	11.4	0.6	-
	Meningococcal disease (invasive)	022	-	-	-	2	1	-	-	2	5	2	4	24	19	43.0	0.4	-	77	260.0	0.3	-
	Tuberculosis	034	-	25	-	8	-	1	9	10	53	54	63	417	313	341.4	0.9	-	1,564	1,421.4	1.1	-
			145	2,541	206	2,423	665	165	541	969	7,656	7,059	8,810	72,615	55,526				245,805			

Footnotes:

* Ratio of the 90 day prior surveillance period to the past 90 day 5 year rolling mean, or ratio of the year period prior surveillance period to the year period 5 year rolling mean.

NN = Not Notifiable, NEC = Not Elsewhere Classified

The data in this report are reliant on the provision of data from states and territories to the Australian Government Department of Health. Backlogs in notifications at the state or territory level may contribute to delays in reporting to the NNDSS. Notifications for some high volume conditions are only uploaded quarterly by some jurisdictions, which can result in apparent large variability over time. The NNDSS is a dynamic dataset, with data in this report representing data available on **(27/04/2021)**. Data in this report are subject to retrospective revision and may vary from data reported in published NNDSS reports and reports of notification data by states and territories.