National Communicable Diseases Surveillance Report

Fortnight 04, 2021 Summary Notes for Selected Diseases

15 February to 28 February 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 non-Indigenous women 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, 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 non-Indigenous women

Since 2016, increases in notifications of infectious syphilis have been reported in non-Indigenous women 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.

Legionellosis

In the past 12 months (29 February 2020 to 28 February 2021), there have been 544 cases of legionellosis reported to the National Notifiable Diseases Surveillance System (NNDSS), comprising 51.3% Legionella longbeachae (279/544) and 44.3% Legionella pneumophila (241/544). This is 1.3 times higher than the historical five-year mean (n=403.6), which comprised a greater proportion of L. pneumophila (55.9%) compared to L. longbeachae (41.2%) 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 (15 February 2021 to 28 February 2021), 18 cases of legionellosis were notified compared to 24 cases in the same reporting period in the previous year. Of the 18 cases reported in the past fortnight, all cases had a species reported, with 13 cases identified as L. pneumophila (72%) and five cases identified as L. longbeachae (28%). 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 28 February 2021, by state or territory and month and year of notification

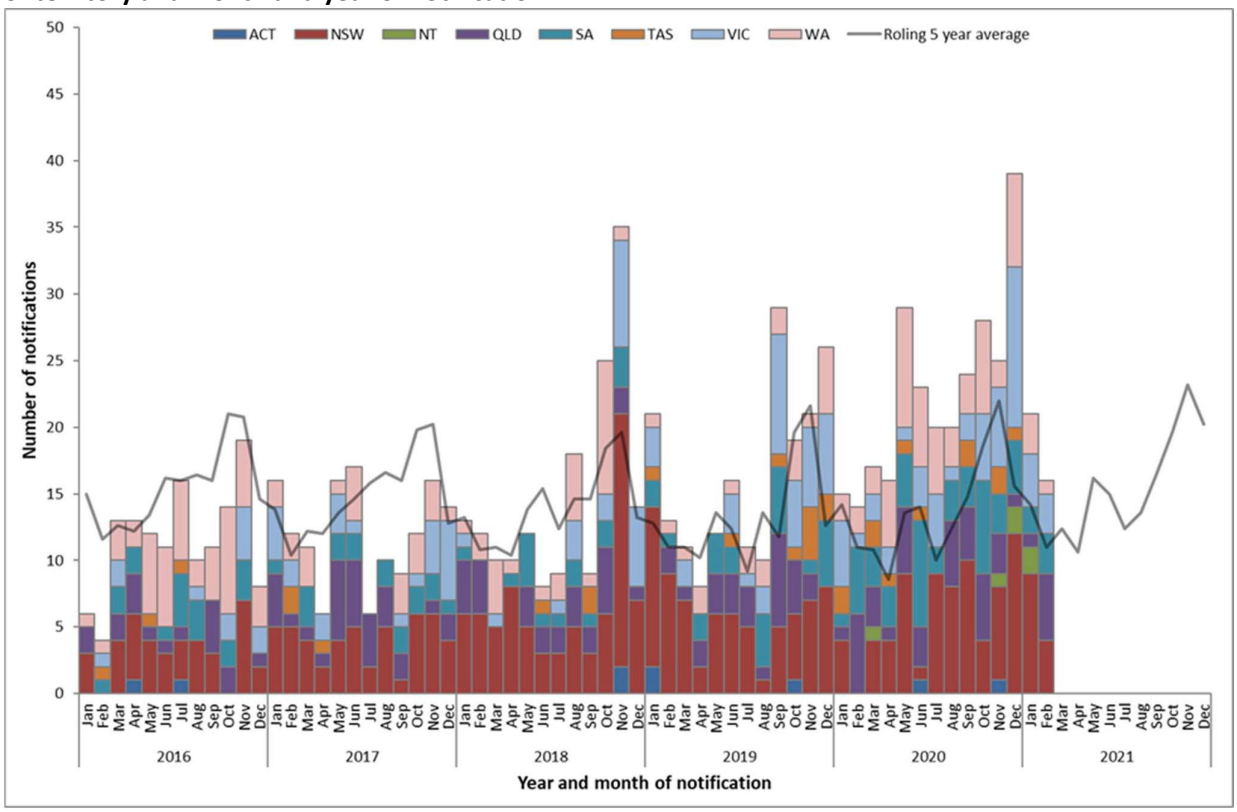
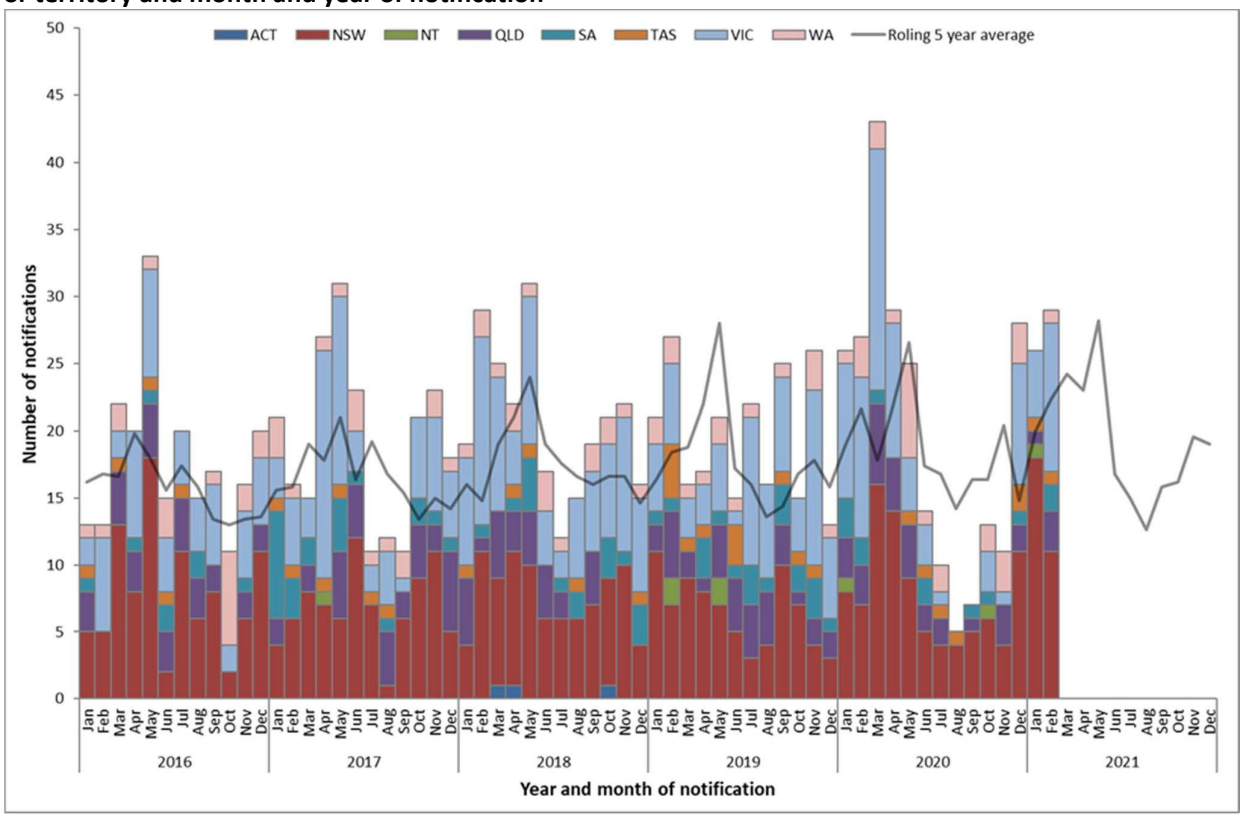


Figure 2. Notifications of *Legionella pneumophila*, Australia, 1 January 2016 to 28 February 2021, by state or territory and month and year of notification



Leptospirosis

In the past 12 months (29 February 2020 to 28 February 2021), there have been 119 cases of leptospirosis reported to the National Notifiable Diseases Surveillance System (NNDSS). This is slightly lower than the mean number of cases reported for the historical five-year mean (n=117.2). In the past fortnight (15 February 2021 to 28 February 2021), 9 cases of leptospirosis were notified compared to 14 cases in the same reporting period in the previous year. In the past quarter (1 December 2020 – 28 February 2021), 50 cases of leptospirosis were notified compared to the quarterly rolling five year mean of 29.2 notifications. Of the 50 cases notified in the past quarter, the highest number of notifications occurred in Queensland (26/50, 52%), followed by the Northern Territory (10/50, 20%) and New South Wales (8/50, 16%). 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 (01/12/2020 to 28/02/2021).

[2]The quarterly (90 day) five year rolling mean is the average of 5 intervals of 90 days up to 28/02/2021. 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 (29/02/2020 to 28/02/2021).

[4]The yearly (365 day) five year rolling mean is the average of 5 intervals of 365 days up to 28/02/2021. 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 FN04/2021

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 15/02/2021 28/02/2021	Previous reporting Period 01/02/2021 14/02/2021	Same reporting period last year 15/02/2020 28/02/2020	Current year YTD 01/01/2021 28/02/2021	Past Quarter 01/12/2020 28/02/2021	Quarterly rolling 5 year mean	Ratio past quarter/5 year mean*	Exceeds quarterly rolling mean +2 SD by	Past Year 29/02/2020 28/02/2021	Yearly rolling 5 year mean 01/03/2015 29/02/2020	Ratio past year/5 year mean*	Exceeds yearly rolling mean +2 SD by
Bloodborne diseases	Hepatitis B (newly acquired)	039	-	1	-	1	-	-	-	1	3	-	7	12	22	36.2	0.6	-	114	150.6	0.8	-
	Hepatitis B (unspecified)	052	3	63	-	29	3	5	37	18	158	174	271	648	1,007	1,349.0	0.7	-	4,756	5,988.0	0.8	-
	Hepatitis C (newly acquired)	040	1	1	-	17	2	-	1	1	23	29	32	104	151	176.2	0.9	-	650	723.2	0.9	-
	Hepatitis C (unspecified)	053	2	96	6	41	1	6	46	50	248	325	372	1,130	1,701	2,277.0	0.7	-	7,230	9,797.2	0.7	-
	Hepatitis D	050	-	5	-	-	1	-	-	1	7	3	3	14	22	14.6	1.5	-	72	67.6	1.1	-
Gastrointestinal diseases	Botulism	045	-	-	-	-	-	-	-	-	-	1	-	1	2	0.8	2.5	-	2	1.4	1.4	-
	Campylobacteriosis	005	37	533	14	451	128	36	251	101	1,551	1,646	1,600	6,648	9,783	8,586.8	1.1	-	31,450	29,392.8	1.1	-
	Cryptosporidiosis	061	2	82	7	27	2	1	4	6	131	81	286	392	491	1,280.2	0.4	-	1,933	4,031.0	0.5	-
	Haemolytic uraemic syndrome (HUS)	055	-	-	-	1	-	-	-	-	1	-	-	2	2	4.2	0.5	-	14	16.4	0.9	-
	Hepatitis A	038	-	-	-	1	-	-	-	-	1	-	9	3	3	74.6	0.0	-	56	241.4	0.2	-
	Hepatitis E	051	-	-	-	-	-	-	-	-	-	-	2	-	-	13.8	-	-	26	45.4	0.6	-
	Listeriosis	018	-	1	-	-	-	-	-	-	1	2	1	8	14	23.4	0.6	-	44	69.8	0.6	-
	Paratyphoid	080	-	-	-	-	-	-	-	-	-	-	10	-	-	34.2	-	-	19	86.2	0.2	-
	STEC	054	-	9	-	2	6	-	7	3	27	22	50	108	161	154.8	1.0	-	505	465.4	1.1	-
	Salmonellosis	030	11	150	21	236	17	13	58	48	554	586	1,223	2,738	3,713	5,169.6	0.7	-	10,530	16,124.6	0.7	-
	Shigellosis	031	-	5	6	4	1	-	2	3	21	21	199	90	137	632.8	0.2	-	963	2,082.4	0.5	-
	Typhoid Fever	035	-	-	-	1	-	-	-	-	1	1	20	2	3	54.0	0.1	-	52	151.6	0.3	-
Quarantinable diseases	Avian influenza in humans (AIH)	076	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	COVID-19	081	-	47	2	10	10	-	10	5	84	97	10	600	1,126	5.0	225.2	1,098.6	29,111	6.0	4,851.8	29,078.2
	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	54	1,204	43	981	266	55	26	487	3,116	3,201	5,040	12,441	19,068	25,006.8	0.8	-	84,474	100,145.6	0.8	-
	Donovanosis	010	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Gonococcal infection	011	8	382	35	255	76	9	109	116	990	1,069	1,568	4,341	6,371	7,397.2	0.9	-	27,660	27,905.6	1.0	-
	Syphilis < 2 years	066	5	39	9	20	10	-	58	28	169	199	214	767	1,157	1,117.6	1.0	-	5,057	4,424.0	1.1	-
	Syphilis > 2 years or unspecified duration	067	-	2	-	4	1	-	37	4	48	68	82	255	402	512.4	0.8	-	1,881	2,190.2	0.9	-
	Syphilis congenital	047	-	-	-	-	-	-	-	-	-	3	-	5	6	1.6	3.8	-	18	7.0	2.6	4.7
Vaccine preventable diseases	Diphtheria	009	-	-	-	-	1	-	-	-	1	-	-	1	3	2.4	1.3	-	9	7.6	1.2	-
	Haemophilus influenzae type b	012	-	-	-	-	-	-	-	-	-	1	-	2	3	5.2	0.6	-	18	19.4	0.9	-
	Influenza (laboratory confirmed)	062	1	1	1	9	-	-	2	5	19	30	3,588	118	185	11,823.6	0.0	-	7,994	165,432.2	0.0	-
	Measles	021	-	-	-	-	-	-	-	-	-	-	1	-	-	33.2	-	-	1	131.4	0.0	-
	Mumps	043	-	-	-	-	-	-	-	-	-	2	26	5	7	159.2	0.0	-	89	622.2	0.1	-
	Pertussis	024	1	1	1	4	2	-	6	3	18	34	380	88	133	4,136.0	0.0	-	2,081	15,780.2	0.1	-
	Pneumococcal disease (invasive)	065	-	14	1	8	7	-	4	4	38	26	45	133	242	288.6	0.8	-	1,034	1,895.6	0.5	-
	Poliovirus infection	026	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Rotavirus	077	-	7	1	12	7	-	NN	7	34	32	110	163	265	976.4	0.3	-	1,143	4,763.6	0.2	-
	Rubella	029	-	-	-	-	-	-	-	-	-	-	-	-	1	3.0	0.3	-	2	14.8	0.1	-
	Rubella congenital	046	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.2	-	-
	Tetanus	033	-	-	-	1	-	-	-	-	1	-	-	2	3	0.8	3.8	1.3	7	3.8	1.8	-
	Varicella zoster (chickenpox)	073	2	NN	1	1	10	1	10	22	47	57	126	225	428	839.0	0.5	-	2,401	3,585.4	0.7	-
	Varicella zoster (shingles)	074	19	NN	15	-	87	14	55	91	281	339	743	1,334	2,079	2,996.8	0.7	-	13,397	10,870.4	1.2	-
	Varicella zoster (unspecified)	075	8	NN	6	431	61	19	4	73	602	614	461	3,006	4,862	3,328.2	1.5	511.9	15,007	14,224.2	1.1	-
Vectorborne diseases	Barmah Forest virus infection	048	-	3	-	15	-	-	-	1	19	24	17	73	107	84.2	1.3	-	746	388.4	1.9	115.3
	Chikungunya virus infection	078	1	-	-	-	-	-	-	-	1	-	7	2	2	22.0	0.1	-	11	88.0	0.1	-
	Dengue virus infection	003	-	-	-	-	-	-	-	-	-	-	28	1	1	357.0	0.0	-	121	1,430.0	0.1	-
	Flavivirus infection (unspecified)	001	-	-	-	1	-	-	-	-	1	-	2	2	4	10.4	0.4	-	12	33.0	0.4	-
	Japanese encephalitis virus infection	059	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	1.2	-	-
	Malaria	020	-	-	-	-	-	-	1	-	1	3	23	7	11	95.6	0.1	-	101	342.2	0.3	-
	Murray Valley encephalitis virus infection	049	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.6	-	-
	Ross River virus infection	002	-	30	12	31	8	3	99	53	236	327	61	1,082	1,385	1,171.0	1.2	-	7,039	4,783.8	1.5	-
	West Nile/Kunjin virus infection	060	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	1.6	-	-
Zoonoses	Anthrax	058	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Australian bat lyssavirus infection	063	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Brucellosis	004	-	-	-	-	-	-	-	-	-	1	-	2	3	6.2	0.5	-	17	19.0	0.9	-
	Leptospirosis	017	-	1	5	3	-	-	-	-	9	14	5	44	50	29.2	1.7	9.4	119	117.2	1.0	-
	Lyssavirus infection (NEC)	064	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Ornithosis	023	-	-	-	-	-	-	-	-	-	1	1	4	13	5.0	2.6	0.9	63	18.8	3.4	33.9
	Q fever	027	-	8	-	13	1	-	-	-	22	13	25	68	92	140.0	0.7	-	440	547.0	0.8	-
	Tularaemia	070	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	2	-		2.0
Other bacterial infections	Legionellosis	015	-	5	-	3	3	-	6	1	18	30	24	95	169	102.6	1.6	15.8	544	403.6	1.3	46.5
	Leprosy	016	-	-	-	-	-	-	-	-	-	-	-	-	1	2.4	0.4	-	6	11.8	0.5	-
	Meningococcal disease (invasive)	022	-	-	-	-	-	-	1	1	2	2	5	9	16	51.0	0.3	-	77	262.8	0.3	-
	Tuberculosis	034	-	17	-	9	-	-	15	1	42	53	74	208	350	350.2	1.0	-	1,578	1,415.0	1.1	-
			155	2,707	186	2,622	711	162	849	1,134	8,526	9,131	16,751	36,983	55,757				260,676			

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 **(03/03/2021)**. 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.