National Communicable Diseases Surveillance Report

Fortnight 05, 2020 Summary Notes for Selected Diseases

29 February to 13 March 2020

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.

<u>Influenza</u>

In 2020 up to 13 March, there have been 16,813 laboratory-confirmed influenza cases reported to the National Notifiable Diseases Surveillance System (NNDSS). This is higher than the mean number of cases reported in the same period over the previous 5 years (n=9,202). However, the number of cases reported to the NNDSS in 2020 year to date remains lower than the number reported in the same period in 2019 (n=19,003).

The Department of Health closely monitors national influenza activity throughout the year, including during the inter-seasonal period. The Australian Influenza Surveillance Reports for 2019 are available on the Department's website.

Shigellosis

From 1 July 2018, the shigellosis surveillance case definition was changed to require notification of both confirmed and probable cases. This change in case definition is expected to result in an increase in notifications of shigellosis from 1 July 2018. Additionally, since 2014 there has been an increasing trend in national notifications of shigellosis. In the past quarter (15 December 2019 to 13 March 2020) there were 1,076 cases of shigellosis notified, which 2.2 times the quarterly rolling five year mean (n=498). Rates of shigellosis in Australia are higher amongst Aboriginal and Torres Strait Islander peoples compared with non-Indigenous populations. In 2018, the rate of shigellosis in Aboriginal and Torres Strait Islander peoples was 115.5 cases per 100,000 population, compared with 7.3 cases per 100,000 in non-Indigenous populations.

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.

¹The past quarter (90 day) surveillance period includes the date range (15/12/2019 to 13/03/2020).

²The quarterly (90 day) five year rolling mean is the average of 5 intervals of 90 days up to 13/03/2020. The ratio is the notification activity in the past quarter (90 days) compared with the five year rolling mean for the same period.

³The past year (365 day) surveillance period includes the date range (14/03/2019 to 13/03/2020).

⁴The yearly (365 day) five year rolling mean is the average of 5 intervals of 365 days up to 13/03/2020. 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.

										Notification received date												
AL	T FN05/2020	State or Ter						У			Totals for Australia				Historical 90 Day Period				Historical Yearly Period			
Disease group	Disease name	e e									This was autima	Previous	Same	Commont		Quartark		Exceeds		Yearly		Exceeds
		e coc	5	≥	-	Р	∢	SE	i.	⋖	This reporting period	reporting Period	reporting period last	Current year YTD	Past Quarter	Quarterly rolling	Ratio past	quarterly	Past Year	rolling 5 year	Ratio past	yearly
		seas	¥	NS	E	QId	SA	Tas	>	8			year			5 year	quarter/5 year mean*	rolling mean +2 SD		mean	year/5 year mean*	rolling mean +2 SD
		ä									29/02/2020 13/03/2020	15/02/2020 28/02/2020	01/03/2019 13/03/2019	01/01/2019	15/12/2019 13/03/2020	mean		by	14/03/2019 13/03/2020	14/03/2014 13/03/2019		by
Bloodborne diseases	Hepatitis B (newly acquired)	039	-	1	-	3	-	-	-	-	4	4	3		28	39.6	0.7	-	149	157.0	0.9	-
	Hepatitis B (unspecified) Hepatitis C (newly acquired)	052 040	1	74 1	-	41 9	- 2	5	1	16	140 10	244 30	232 23	1,026 128	1,198 165	1,369.8 166.2	0.9 1.0	-	5,589 809	6,132.4 700.4	0.9 1.2	-
	Hepatitis C (inewly acquired) Hepatitis C (unspecified)	053	- 6	118	10	97	-	4	- 8	41	284	323	368	1,576	1,871	2,320.6	0.8	-	8,275	10,030.2	0.8	-
	Hepatitis D	050	-	-	-	-	-	-	1	·	1	3	2	13	17	14.8	1.1	-	70	66.4	1.1	-
Gastrointestinal diseases	Botulism Campylobacteriosis	045 005	36	400	- 22	436	- 85	- 46	12	101	1,138	1,270	1,309	7,339	- 8,940	7,423.2	1.2	-	1 35,741	1.4 26,284.4	0.7 1.4	-
	Cryptosporidiosis	061	1	42	2	146	5		19	93	308	278	148	1,217	1,333	1,347.8	1.0	-	3,108	3,963.4	0.8	-
	Haemolytic uraemic syndrome (HUS) Hepatitis A	055 038	-	-	-	- 2	-	-	-	1	- 3	- 9	13	40	54	4.2 80.4	0.5	-	14 212	16.2 241.8	0.9	-
	Hepatitis E	051	-	4	-	2	-	1	-	1	8	1	3	16	18	13.6	1.3	-	57	46.4	1.2	-
	Listeriosis Paratyphoid	018 080	-	- 3	-	-	-	-	- 4	-	- 7	1	- 8	8 32	8 37	24.4 32.2	0.3	-	43 101	76.2 79.2	0.6 1.3	-
	STEC	054	-	7	-	-	15	-	1	4	27	49	22	200	237	107.2	2.2	-	714	349.6	2.0	-
	Salmonellosis Shigellosis	030	8	268 35	25 41	349 23	32 8	14	26 27	85 22	807 157	1,166 194	657 134	4,970 945	5,696 1,076	5,407.0 498.0	1.1 2.2	128.4	15,926 3,339	16,335.6 1,647.0	2.0	231.9
	Typhoid Fever	035		33	-	1	-	1	1	2	8	20	134		65	54.8	1.2	-	177	1,647.0	1.3	-
Quarantinable diseases	Avian influenza in humans (AIH)	076 081	-	- 120	-	- 45	- 16	- 5	-	- 0	237	- 10	=	- 262	-	=		262.0	-	-		262.0
	COVID-19 Cholera	008	- 1	128	-	- 45	-	-	- 33	-	-		-	- 262	262 -	0.2	-	262.0	262 2	1.4	1.4	- 262.0
	MERS-CoV	079	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Plague Rabies	025 028	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Severe acute respiratory syndrome (SARS)	071	-	-	-	-	-	-	-	•	-	-	-	-	-	-		-	-	-		-
	Smallpox Viral haemorrhagic fever (NEC)	069 036	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Yellow fever	041	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
Sexually transmissible infections	Chlamydial infection Donovanosis	007 010	75	979 -	111	1,016	214	16	-	421	2,832	3,705	4,148	16,950	19,670	23,971.8	0.8	-	96,973	96,144.0	1.0	-
	Gonococcal infection	010	18	318	36	290	48	5	1	166	882	1,160	1,383	6,395	7,615	6,504.2	1.2	-	33,110	24,267.8	1.4	-
	Syphilis < 2 years Syphilis > 2 years or unspecified duration	066 067	2	- 8	9	21 2	- 6	- 1	20 20	31	97 33	174 69	244 87	936 347	1,112 410	947.8 496.4	1.2 0.8	-	5,597 2,368	3,690.4 2,063.2	1.5 1.1	-
	Syphilis congenital	047	-	-	-	-	-	-	-	-	-	-	-	4	410	0.2	20.0	2.9	10	5.6	1.8	=
Vaccine preventable diseases	Diphtheria	009 012	-	-	-	1	-	-	-	- 1	1	-	1	2	2	2.0 4.2	1.0	-	7 22	6.8	1.0	1.1
	Haemophilus influenzae type b Influenza (laboratory confirmed)	062	22	- 974	39	- 1,545	234	- 26	- 294	160	3,294	3,406	4,000	16,813	18,989	9,201.8	2.1	-	312,817	18.6 116,782.2	1.2 2.7	40,991.6
	Measles	021	-	-	-	-	-	-	1	-	1	1	12	32	37	32.0	1.2	=	261	119.0	2.2	29.4
	Mumps Pertussis	043 024	- 8	2 183	-	61	- 22	-	1	11	9 286	17 358	8 436	66 1,935	76 2,461	155.6 4,021.8	0.5 0.6	-	198 11,451	616.2 16,025.6	0.3	-
	Pneumococcal disease (invasive)	065	-	15	-	8	7	-	8	6	44	41	59	270	352	244.0	1.4	29.5	2,162	1,779.0	1.2	-
	Poliovirus infection Rotavirus	026 077	- 3	- 16	- 2	- 24	- 19	-	- NN	12	- 76	- 86	92	836	1,242	710.8	1.7	278.4	6,447	4,030.4	1.6	-
	Rubella	029	-	-	-	-	-	-	-	-	- 1	-	4		1	5.2		-	15	14.4	1.0	-
	Rubella congenital Tetanus	046 033	-	-	-	-	-	-	-	-	-	-	-	- 1	- 1	0.6	1.7	-	- 2	0.2 4.0	- 0.5	-
	Varicella zoster (chickenpox)	073	12	NN	14	-	14	1	-	19	60	78	165	469	582	710.0	0.8	-	4,013	3,153.8	1.3	-
	Varicella zoster (shingles) Varicella zoster (unspecified)	074 075	22 9	NN NN	20	2 437	77 48	7 17	- 2	72 106	202 617	497 311	493 603	2,512 1,341	3,065 1,468	2,391.2 3,353.6	1.3 0.4	-	14,705 10,907	8,869.6 14,162.6	1.7 0.8	-
Vectorborne diseases	Barmah Forest virus infection	048	-	8	-	16	1	-	-	-	25	18	8		98	110.6	0.9	-	291	454.6	0.6	-
	Chikungunya virus infection Dengue virus infection	078 003	-	1 5	- 2	1 8	- 5		-	2	4 26	5 20	- 57	28 139	35 168	26.4 459.2	1.3 0.4	-	96 1,275	94.8 1,510.0	1.0 0.8	-
	Flavivirus infection (unspecified)	003	-	-	-	-	-	-	-	-	-	-	-	139	2	9.6	0.4	-	1,273	34.0	0.8	-
	Japanese encephalitis virus infection	059	-	- 4	-	-	-	-	- 1	-	-	-	- 10	1	1	0.4	2.5	-	4	1.0	4.0	0.6
	Malaria Murray Valley encephalitis virus infection	020 049	-	- 4	-	- 4	-	-	- 2	-	15 -	- 22	10	82	97	89.4	1.1	-	387	327.8 0.6	1.2	-
	Ross River virus infection	002	-	9	6	50	-		-	14	79	57	133	296	342	2,149.4	0.2	-	2,689	5,654.4	0.5	-
Zoonoses	West Nile/Kunjin virus infection Anthrax	060 058	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	1.4	1.4	-
	Australian bat lyssavirus infection	063	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		=
	Brucellosis Leptospirosis	004 017	-	-	-	2	-	-	-	- 1	2	- 3	- A	5 23	5 26	5.8 30.0	0.9	-	12 89	19.6 115.0	0.6	-
	Lyssavirus infection (NEC)	064	-	-	-	-	-	-	-	-	-	<u> </u>	-	-	-	-	0.3	-	-	-	0.8	-
	Ornithosis	023 027	-	- 3	-	- 15	-		-	- 1	- 19	1 14	- 33	1 102	125	4.4 133.4	0.7 0.9	-	19 525	21.2	0.9 1.0	-
	Q fever Tularaemia	027	-	- -	-	15 -	-	-	-		- 19	- 14	- 33	102	125	133.4	0.9	-	- 525	533.8	1.0	-
Other bacterial infections	Legionellosis	015	-	6	-	4	3	-	7	2	22	24	10		121	100.8	1.2	-	450	401.4	1.1	-
	Leprosy Meningococcal disease (invasive)	016 022	-	- 2	-	-	-		- 1	1	- 4	- 6	7	27	34	1.6 46.2	0.6 0.7	-	9 203	11.4 255.0	0.8	-
	Tuberculosis	034	-	21	-	12	-	-	18	8	59	63	57	267	335	324.0	1.0	-	1,522	1,371.2	1.1	-
Footnotes:		225	3,638	343	4,681	861	149	508	1,427	11,832	13,747	14,990	67,930	79,492				583,241				

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 (16/03/2020). 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.