National Communicable Diseases Surveillance Report

Fortnight 01, 2020 Summary Notes for Selected Diseases

01 January to 17 January 2020

Infectious 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.

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 (20 October 2019 to 17 January 2020) there were 783 cases of shigellosis notified, which 1.8 times the quarterly rolling five year mean (n=439). 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.

Influenza

In 2020 up to 17 January, there have been 2,829 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=1,453). 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=3,740).

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.

Measles

Measles cases in 2019 were higher in comparison to the number of cases reported in the previous 5 years, except in comparison to 2014. In the 2020 year to date, there have been 15 cases of measles reported to the NNDSS, which is the same when compared to the number of cases reported in the same period in 2019.

There has been a significant increase in measles cases worldwide, and significant outbreaks in the Asia-Pacific region.

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 (20/10/2019 to 17/01/2020).

[2]The quarterly (90 day) five year rolling mean is the average of 5 intervals of 90 days up to 17/01/2020. 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 (18/01/2019 to17/01/2020).

[4]The yearly (365 day) five year rolling mean is the average of 5 intervals of 365 days up to 17/01/2020. 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.

ADT FN01/2020

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 01/01/2020 17/01/2020	Previous reporting Period 18/12/2019 03/01/2020	Same reporting period last year 01/01/2019 17/01/2019	Current year YTD 01/01/2019 17/01/2020	Past Quarter 20/10/2019 17/01/2020	Quarterly rolling 5 year mean	Ratio past quarter/5 year mean*	Exceeds quarterly rolling mean +2 SD by	Past Year 18/01/2019 17/01/2020	Yearly rolling 5 year mean 18/01/2014 17/01/2019	Ratio past year/5 year mean*	Exceeds yearly rolling mean +2 SD by
Bloodborne diseases	Hepatitis B (newly acquired)	039	-	-	-	2	-	-	-	-	2	6	10	2	35	38.2	0.9	-	158	159.2	1.0	-
	Hepatitis B (unspecified)	052	4	78	-	40	1	2	52	24	201	156	225	201	1,172	1,372.8	0.9	-	5,617	6,157.0	0.9	-
	Hepatitis C (newly acquired)	040	1	2	-	10	2	-	-	3	18	30	38	18	227	172.0	1.3	23.5	776	707.0	1.1	-
	Hepatitis C (unspecified)	053	3	127	-	98	1	4	53	32	318	275	368	318	1,857	2,372.8	0.8	-	8,342	10,042.8	0.8	-
	Hepatitis D	050	-	1	-	2	2	-	-	-	5	5	5	5	16	17.0	0.9	-	71	65.8	1.1	-
Gastrointestinal diseases	Botulism	045	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	2	1.2	1.7	-
	Campylobacteriosis	005	41	530	12	540	165	73	435	187	1,983	1,545	2,159	1,983	10,187	7,701.2	1.3	-	36,134	25,737.8	1.4	380.0
	Cryptosporidiosis	061	3	45	3	38	8	1	53	31	182	107	135	182	749	780.4	1.0	-	2,716	3,927.2	0.7	-
	Haemolytic uraemic syndrome (HUS)	055	-	1	-	1	-	-	-	-	2	1	2	2	4	4.6	0.9	-	18	16.8	1.1	-
	Hepatitis A	038	-	3	1	2	-	-	6	1	13	11	8	13	62	57.4	1.1	-	254	241.0	1.1	-
	Hepatitis E	051	-	-	-	-	-	-	-	1	1	3	-	1	10	11.4	0.9	-	51	46.2	1.1	-
	Listeriosis	018	-	1	-	2	-	1	1	-	5	1	3	5	12	18.2	0.7	-	52	76.2	0.7	-
	Paratyphoid	080	-	3	-	1	-	-	-	2	6	7	5	6	23	18.6	1.2	-	113	75.6	1.5	20.1
	STEC	054	1	6	-	2	19	-	4	8	40	40	39	40	199	108.6	1.8	-	655	335.0	2.0	-
	Salmonellosis	030	9	205	20	295	63	8	166	109	875	722	892	875	4,029	4,019.0	1.0	-	14,741	16,386.4	0.9	-
	Shigellosis	031	3	70	14	30	18	-	41	22	198	129	179	198	783	439.0	1.8	-	3,179	1,571.8	2.0	331.1
	Typhoid Fever	035	-	2	-	1	-	-	1	1	5	9	12	5	31	28.6	1.1	-	194	131.8	1.5	-
Quarantinable diseases	Avian influenza in humans (AIH)	076	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Cholera	008	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	2	1.4	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	80	1,449	79	1,119	295	37	-	460	3,519	2,437	4,935	3,519	20,110	22,443.2	0.9	-	101,006	95,447.4	1.1	-
	Donovanosis	010	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.2	-	-
	Gonococcal infection	011	28	578	29	363	99	14	61	211	1,383	1,038	1,617	1,383	7,445	5,814.4	1.3	-	33,281	23,672.8	1.4	-
	Syphilis < 2 years	066	3	35	10	34	12	1	39	29	163	135	271	163	1,188	917.8	1.3	-	5,589	3,574.2	1.6	-
	Syphilis > 2 years or unspecified duration	067	-	4	1	8	4	1	70	14	102	58	110	102	530	481.2	1.1	-	2,485	2,052.0	1.2	124.9
	Syphilis congenital	047	-	1	-	-	-	-	1	-	2	-	-	2	4	1.4	2.9	0.8	7	5.8	1.2	-
Vaccine preventable diseases	Diphtheria	009	-	-	-	-	-	-	-	-	-	-	1	-	2	2.6	0.8	-	6	6.6	0.9	-
	Haemophilus influenzae type b	012	-	1	-	2	-	-	-	-	3	1	-	3	5	4.6	1.1	-	24	18.4	1.3	-
	Influenza (laboratory confirmed)	062	46	956	56	688	213	32	628	210	2,829	2,167	3,740	2,829	13,211	9,709.0	1.4	-	312,516	114,449.0	2.7	41,748.2
	Measles	021	-	10	-	2	-	-	1	2	15	7	15	15	73	22.8	3.2	24.0	283	137.4	2.1	-
	Mumps	043	-	4	-	3	1	-	-	-	8	12	9	8	46	141.6	0.3	-	167	617.8	0.3	-
	Pertussis	024	6	225	3	109	7	21	127	29	527	481	816	527	3,222	5,146.4	0.6	-	11,867	15,984.6	0.7	-
	Pneumococcal disease (invasive)	065	1	37	4	19	6	3	23	5	98	80	62	98	480	358.4	1.3	26.5	2,158	1,768.8	1.2	-
	Poliovirus infection	026	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Rotavirus	077	4	105	14	58	66	11	NN	14	274	359	149	274	2,456	1,081.4	2.3	687.3	6,193	4,061.0	1.5	-
	Rubella	029	-	-	-	-	-	-	-	-	-	-	1	-	-	2.0	-	-	22	13.6	1.6	0.3
	Rubella congenital	046	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.2	-	-
	Tetanus	033	-	-	-	1	-	-	-	-	1	-	-	1	1	1.0	1.0	-	3	3.8	0.8	-
	Varicella zoster (chickenpox)	073	27	NN	-	21	20	1	-	27	96	116	212	96	921	880.8	1.0	-	4,114	3,101.6	1.3	-
	Varicella zoster (shingles)	074	26	NN	24	143	109	12	1	112	427	477	659	427	3,391	2,286.2	1.5	-	14,403	8,640.2	1.7	-
	Varicella zoster (unspecified)	075	12	NN	-	293	51	22	-	73	451	243	787	451	2,195	3,451.8	0.6	-	12,490	14,056.4	0.9	-
Vectorborne diseases	Barmah Forest virus infection	048	-	1	1	9	-	-	-	-	11	5	6	11	51	81.0	0.6	-	258	489.2	0.5	-
	Chikungunya virus infection	078	-	1	-	1	-	-	-	1	3	5	2	3	22	31.4	0.7	-	79	95.2	0.8	-
	Dengue virus infection	003	-	12	1	6	4	-	-	13	36	29	71	36	258	307.4	0.8	-	1,430	1,556.2	0.9	-
	Flavivirus infection (unspecified)	001	-	-	-	-	-	-	-	-	-	1	-	-	4	5.2	0.8	-	14	34.0	0.4	-
	Japanese encephalitis virus infection	059	-	-	-	-	-	-	-	-	-	-	-	-	1	0.2	5.0	-	3	1.0	3.0	-
	Malaria	020	-	-	-	5	1	-	-	4	10	11	19	10	90	76.8	1.2	-	377	328.2	1.1	-
	Murray Valley encephalitis virus infection	049	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	0.6	-	-
	Ross River virus infection	002	-	7	1	34	-	2	-	9	53	48	97	53	369	987.2	0.4	-	2,943	5,737.6	0.5	-
	West Nile/Kunjin virus infection	060	-	-	-	-	-	-	-	-	-	-	-	-	1	0.2	5.0	-	2	1.6	1.3	-
Zoonoses	Anthrax	058	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Australian bat lyssavirus infection	063	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Brucellosis	004	-	-	-	-	-	-	-	-	-	-	-	-	3	5.6	0.5	-	10	20.2	0.5	-
	Leptospirosis	017	-	-	-	9	-	-	-	-	9	4	4	9	23	18.4	1.3	-	90	115.4	0.8	-
	Lyssavirus infection (NEC)	064	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
	Ornithosis	023	-	-	-	-	-	-	-	-	-	2	1	-	6	8.2	0.7	-	19	22.0	0.9	-
	Q fever	027	-	15	-	12	-	-	-	-	27	17	29	27	136	131.6	1.0	-	559	531.8	1.1	-
	Tularaemia	070	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-
Other bacterial infections	Legionellosis	015	-	3	-	2	3	1	6	1	16	16	31	16	122	110.6	1.1	-	427	399.8	1.1	-
	Leprosy	016	-	-	-	-	-	-	-	-	-	1	-	-	2	3.6	0.6	-	10	11.4	0.9	-
	Meningococcal disease (invasive)	022	-	3	-	4	-	-	-	1	8	7	11	8	37	65.0	0.6	-	208	252.8	0.8	-
	Tuberculosis	034	-	13	-	5	2	2	12	4	38	71	61	38	361	362.0	1.0	-	1,496	1,365.4	1.1	-
			298	4,534	273	4,014	1,172	249	1,781	1,640	13,963	10,875	17,796	13,963	76,162				587,614			

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 **(20/01/2020).** 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.