

Quarterly report

NATIONAL NOTIFIABLE DISEASES SURVEILLANCE SYSTEM, 1 APRIL TO 30 JUNE 2016

A summary of diseases currently being reported by each jurisdiction is provided in Table 1. There were 67,081 notifications to the National Notifiable Diseases Surveillance System (NNDSS) between 1 April and 30 June 2016 (Table 2). The notification rate of diseases per 100,000 population for each state or territory is presented in Table 3.

Table 1: Reporting of notifiable diseases by jurisdiction

Disease	Data received from:
Bloodborne diseases	
Hepatitis (NEC)	All jurisdictions
Hepatitis B (newly acquired)	All jurisdictions
Hepatitis B (unspecified)	All jurisdictions
Hepatitis C (newly acquired)	All jurisdictions except Queensland
Hepatitis C (unspecified)	All jurisdictions
Hepatitis D	All jurisdictions
Gastrointestinal diseases	
Botulism	All jurisdictions
Campylobacteriosis	All jurisdictions except New South Wales
Cryptosporidiosis	All jurisdictions
Haemolytic uraemic syndrome	All jurisdictions
Hepatitis A	All jurisdictions
Hepatitis E	All jurisdictions
Listeriosis	All jurisdictions
Paratyphoid	All jurisdictions
Shiga toxin/verotoxin-producing <i>Escherichia coli</i>	All jurisdictions
Salmonellosis	All jurisdictions
Shigellosis	All jurisdictions
Typhoid fever	All jurisdictions
Quarantinable diseases	
Avian influenza in humans	All jurisdictions
Cholera	All jurisdictions
Middle East respiratory syndrome coronavirus	All jurisdictions
Plague	All jurisdictions
Rabies	All jurisdictions
Severe acute respiratory syndrome	All jurisdictions
Smallpox	All jurisdictions
Viral haemorrhagic fever	All jurisdictions
Yellow fever	All jurisdictions
Sexually transmissible infections	
Chlamydia	All jurisdictions
Donovanosis	All jurisdictions
Gonococcal infection	All jurisdictions
Syphilis <2 years duration	All jurisdictions
Syphilis >2 years or unspecified duration	All jurisdictions
Syphilis - congenital	All jurisdictions

Table 1 continued: Reporting of notifiable diseases by jurisdiction

Disease	Data received from:
Vaccine preventable diseases	
Diphtheria	All jurisdictions
<i>Haemophilus influenzae</i> type b	All jurisdictions
Influenza (laboratory confirmed)	All jurisdictions
Measles	All jurisdictions
Mumps	All jurisdictions
Pertussis	All jurisdictions
Pneumococcal disease – invasive	All jurisdictions
Poliovirus infection	All jurisdictions
Rubella	All jurisdictions
Rubella - congenital	All jurisdictions
Tetanus	All jurisdictions
Varicella zoster (chickenpox)	All jurisdictions except New South Wales
Varicella zoster (shingles)	All jurisdictions except New South Wales
Varicella zoster (unspecified)	All jurisdictions except New South Wales
Vectorborne diseases	
Barmah Forest virus infection	All jurisdictions
Chikungunya virus infection	All jurisdictions except Australian Capital Territory
Dengue virus infection	All jurisdictions
Flavivirus infection (unspecified)	All jurisdictions
Japanese encephalitis virus infection	All jurisdictions
Kunjin virus infection	All jurisdictions
Malaria	All jurisdictions
Murray Valley encephalitis virus infection	All jurisdictions
Ross River virus infection	All jurisdictions
Zoonoses	
Anthrax	All jurisdictions
Australian bat lyssavirus infection	All jurisdictions
Brucellosis	All jurisdictions
Leptospirosis	All jurisdictions
Lyssavirus infection (NEC)	All jurisdictions
Ornithosis	All jurisdictions
Q fever	All jurisdictions
Tularaemia	All jurisdictions
Other bacterial infections	
Legionellosis	All jurisdictions
Leprosy	All jurisdictions
Meningococcal infection – invasive	All jurisdictions
Tuberculosis	All jurisdictions

NEC Not elsewhere classified.

Table 2: Notifications of diseases received by state and territory health authorities, 1 April to 30 June 2016, by date of diagnosis*

Disease	State or territory							Total 2nd quarter 2016	Total 1st quarter 2016	Total 2nd quarter 2015	Last 5 years mean 2nd quarter	Ratio	Year to date 2016	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas.	Vic.							
Bloodborne diseases														
Hepatitis (NEC)	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Hepatitis B (newly acquired) [†]	0	2	0	13	0	0	17	9	41	38	41.4	89.8	83	89.8
Hepatitis B (unspecified) [†]	22	666	32	284	78	13	537	244	1,876	1,501	1,583.2	3,166.6	3,458	3,166.6
Hepatitis C (newly acquired) [†]	4	3	1	0	8	4	26	29	75	104	107.6	222.0	164	222.0
Hepatitis C (unspecified) [†]	48	1,081	61	703	126	52	664	327	3,062	2,452	2,456.2	4,938.0	6,084	4,938.0
Hepatitis D	0	4	2	1	2	0	3	0	12	12	13.4	25.8	27	25.8
Gastrointestinal diseases														
Botulism	0	0	0	0	0	0	0	0	0	1	0.8	1.4	0	1.4
Campylobacteriosis	125	NN	111	1,625	608	207	1,752	759	5,187	5,006	4,031.8	8,732.4	11,109	8,732.4
Cryptosporidiosis	10	311	109	685	103	5	205	71	1,499	971	830.2	2,065.8	3,812	2,065.8
Haemolytic uraemic syndrome	0	0	0	0	0	1	0	0	1	4	3.6	9.2	5	9.2
Hepatitis A	0	9	0	4	2	0	6	2	23	28	36.2	102.4	78	102.4
Hepatitis E	0	1	0	3	0	0	0	1	5	6	10.4	23.2	20	23.2
Listeriosis	0	12	0	5	0	1	4	1	23	18	19.0	41.4	50	41.4
Paratyphoid	0	4	0	2	0	1	5	1	13	12	16.4	44.4	46	44.4
STEC ^s	0	8	0	3	31	0	7	6	55	35	27.0	60.4	115	60.4
Salmonellosis	78	1,067	245	1,209	461	75	929	451	4,515	4,044	3,252.2	8,117.2	11,059	8,117.2
Shigellosis	2	88	40	30	11	2	154	21	348	244	157.2	379.8	712	379.8
Typhoid fever	0	4	0	6	1	0	6	2	19	29	24.8	79.0	56	79.0
Quarantinable diseases														
Avian influenza in humans	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Cholera	0	0	0	0	0	0	0	0	0	1	2.2	2.6	0	2.6
Middle East respiratory syndrome coronavirus	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Plague	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Rabies	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Severe acute respiratory syndrome	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Smallpox	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Yellow fever	0	0	0	0	0	0	0	0	0	0	0.4	0.4	0	0.4

Table 2 continued: Notifications of diseases received by state and territory health authorities, 1 April to 30 June 2016, by date of diagnosis*

Disease	State or territory								Total 2nd quarter 2016	Total 1st quarter 2016	Total 2nd quarter 2015	Last 5 years mean 2nd quarter	Ratio	Year to date 2016	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA							
Sexually transmissible infections															
Chlamydia ^{¶¶}	362	6,672	663	5,794	1,418	446	1,154	3,077	19,586	18,620	16,560	20,160.0	1.0	38,238	42,224.6
Donovanosis	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.2
Gonococcal infection ^{¶¶}	39	1,818	437	938	332	23	1,751	834	6,172	5,584	4,560	3,800.2	1.6	11,782	7,669.8
Syphilis <2 years duration ^{¶¶}	5	186	41	160	21	1	271	68	753	776	631	450.2	1.7	1,541	896.6
Syphilis >2 years or unspecified duration ^{¶¶}	7	89	10	69	26	5	219	13	438	471	487	415.8	1.1	911	819.6
Syphilis – congenital	0	0	0	0	0	0	0	0	0	0	1	0.6	0.0	0	1.4
Vaccine preventable diseases															
Diphtheria	0	0	0	1	0	0	0	0	1	1	0	0.8	1.3	2	1.2
<i>Haemophilus influenzae</i> type b	0	1	0	1	1	0	2	0	5	4	4	4.8	1.0	9	7.6
Influenza (laboratory confirmed)	71	2,633	52	2,139	492	73	1,041	767	7,268	5,772	9,757	5,661.4	1.3	13,065	8,589.0
Measles	0	2	0	2	2	3	10	0	19	37	19	33.8	0.6	56	93.8
Mumps	0	12	18	11	5	1	4	137	188	331	99	61.2	3.1	519	115.4
Pertussis	99	2,014	54	463	271	9	653	236	3,799	5,766	4,180	4,456.6	0.9	9,666	10,051.6
Pneumococcal disease – invasive	7	146	10	77	33	17	111	39	440	177	401	459.8	1.0	622	676.6
Poliovirus infection	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Rubella	0	5	0	1	0	0	3	0	9	3	4	7.4	1.2	12	16.8
Rubella – congenital	0	0	0	0	0	0	0	0	0	0	0	0.2	0.0	0	0.2
Tetanus	0	0	0	1	0	0	0	0	1	3	1	0.8	1.3	4	2.0
Varicella zoster (chickenpox)	15	NN	14	88	79	22	235	137	590	589	548	470.8	1.3	1,181	908.8
Varicella zoster (shingles)	63	NN	97	18	547	78	520	370	1,693	1,767	1,601	1,251.8	1.4	3,475	2,518.2
Varicella zoster (unspecified)	51	NN	3	1,836	41	36	1,430	369	3,766	3,786	3,272	2,567.8	1.5	7,564	5,154.6
Vectorborne diseases															
Barmah Forest virus infection	0	9	1	86	0	0	0	3	99	141	187	539.0	0.2	240	1,202.0
Chikungunya virus infection	0	1	1	1	3	0	5	2	13	18	29	22.4	0.6	31	47.8
Dengue virus infection	7	122	38	135	29	15	139	179	664	729	427	398.2	1.7	1,400	986.4
Flavivirus infection (unspecified)	0	2	1	10	0	1	2	1	17	52	2	4.2	4.0	70	8.6
Japanese encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	0	0.4	0.0	0	1.0
Kunjin virus infection	0	0	0	0	0	0	0	0	0	0	0	0.4	0.0	0	0.4
Malaria	1	13	2	21	3	0	19	11	70	70	48	76.4	0.9	141	174.0
Murray Valley encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	1	1.6	0.0	0	3.6
Ross River virus infection	2	147	42	883	12	2	39	106	1,233	1,697	2,001	1,360.8	0.9	2,935	4,156.0

Table 2 continued: Notifications of diseases received by state and territory health authorities, 1 April to 30 June 2016, by date of diagnosis

Disease	State or territory								Total 2nd quarter 2016	Total 1st quarter 2016	Total 2nd quarter 2015	Last 5 years mean 2nd quarter	Ratio	Year to date 2016	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA							
Zoonoses															
Anthrax	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Australian bat lyssavirus infection	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0	0.2
Brucellosis	0	2	0	1	0	0	0	0	0	3	2	5.2	11.8	5	11.8
Leptospirosis	0	3	0	32	0	0	0	2	37	50	17	35.4	81.8	87	81.8
Lyssavirus infection (NEC)	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Ornithosis	0	1	0	0	0	0	0	0	1	2	2	11.4	22.4	3	22.4
Q fever	1	37	0	52	3	0	8	4	105	141	144	113.4	232.2	250	232.2
Tularaemia	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0	0.2
Other bacterial infections															
Legionellosis	1	36	0	11	7	5	17	22	99	83	100	103.4	194.4	182	194.4
Leptosy	0	1	0	2	0	0	1	0	4	4	3	3.4	4.8	8	4.8
Meningococcal infection – invasive**	0	15	1	8	6	0	15	1	46	43	48	47.8	84.4	91	84.4
Tuberculosis	8	99	9	42	17	2	86	28	291	320	304	290.6	603.6	611	603.6
Total	1,028	17,421	2,100	17,747	4,873	1,109	12,050	8,357	64,164	67,018	59,951			131,579	

* The date of diagnosis is the onset date or where the date of onset was not known, the earliest of the specimen collection date, the notification date, or the notification receive date. For hepatitis B (unspecified), hepatitis C (unspecified), leprosy, syphilis (> 2 years or unspecified duration) and tuberculosis, the public health unit notification receive date was used.

† Newly acquired hepatitis includes cases where the infection was determined to be acquired within 24 months prior to diagnosis. Queensland reports hepatitis C newly acquired under hepatitis unspecified.

‡ Unspecified hepatitis and syphilis includes cases where the duration of infection could not be determined or is greater than 24 months.

§ Infection with Shiga toxin/verotoxin-producing *Escherichia coli*.

|| Includes *Chlamydia trachomatis* identified from cervical, rectal, urine, urethral and throat samples, except for South Australia, which reports only cervical, urine and urethral specimens.

¶ The national case definitions for chlamydia, gonococcal and syphilis diagnoses include infections that may be acquired through a non-sexual mode (especially in children – e.g. perinatal infections, epidemic gonococcal conjunctivitis).

** Only invasive meningococcal disease is nationally notifiable. However, New South Wales and the Australian Capital Territory also report conjunctival cases.

NN Not notifiable

NEC Not elsewhere classified

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.

Table 3: Notification rates of diseases, 1 April to 30 June 2016, by state or territory. (Annualised rate per 100,000 population)*,†

Disease	State or territory								Aust.
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	
Bloodborne diseases									
Hepatitis (NEC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis B (newly acquired)‡	0.0	0.1	0.0	1.1	0.0	0.0	1.1	1.4	0.7
Hepatitis B (unspecified)§	22.5	35.0	52.4	23.8	18.4	10.1	36.2	37.7	31.5
Hepatitis C (newly acquired)‡	4.1	0.2	1.6	0.0	1.9	3.1	1.8	4.5	1.3
Hepatitis C (unspecified)§	49.1	56.7	99.8	58.8	29.7	40.3	44.7	50.5	51.5
Hepatitis D	0.0	0.2	3.3	0.1	0.5	0.0	0.2	0.0	0.2
Gastrointestinal diseases									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis	127.9	NN	181.6	136.0	143.1	160.3	118.0	117.2	128.3
Cryptosporidiosis	10.2	16.3	178.3	57.3	24.2	3.9	13.8	11.0	25.2
Haemolytic uraemic syndrome	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Hepatitis A	0.0	0.5	0.0	0.3	0.5	0.0	0.4	0.3	0.4
Hepatitis E	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.2	0.1
Listeriosis	0.0	0.6	0.0	0.4	0.0	0.8	0.3	0.2	0.4
Paratyphoid	0.0	0.2	0.0	0.2	0.0	0.8	0.3	0.2	0.2
STEC	0.0	0.4	0.0	0.3	7.3	0.0	0.5	0.9	0.9
Salmonellosis	79.8	56.0	400.8	101.2	108.5	58.1	62.5	69.6	75.9
Shigellosis	2.0	4.6	65.4	2.5	2.6	1.5	10.4	3.2	5.9
Typhoid fever	0.0	0.2	0.0	0.5	0.2	0.0	0.4	0.3	0.3
Quarantinable diseases									
Avian influenza in humans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cholera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East respiratory syndrome coronavirus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plague	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rabies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe acute respiratory syndrome	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Smallpox	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viral haemorrhagic fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sexually transmitted infections									
Chlamydia ^{,**}	370.3	350.3	1,084.7	484.8	333.8	345.3	77.7	475.1	329.4
Donovanosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gonococcal infection**	39.9	95.4	714.9	78.5	78.2	17.8	117.9	128.8	103.8
Syphilis < 2 years duration**	5.1	9.8	67.1	13.4	4.9	0.8	18.2	10.5	12.7
Syphilis > 2 years or unspecified duration ^{§,**}	7.2	4.7	16.4	5.8	6.1	3.9	14.7	2.0	7.4
Syphilis – congenital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vaccine preventable diseases									
Diphtheria	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
<i>Haemophilus influenzae</i> type b	0.0	0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.1
Influenza (laboratory confirmed)	72.6	138.2	85.1	179.0	115.8	56.5	70.1	118.4	122.2
Measles	0.0	0.1	0.0	0.2	0.5	2.3	0.7	0.0	0.3
Mumps	0.0	0.6	29.4	0.9	1.2	0.8	0.3	21.2	3.2
Pertussis	101.3	105.7	88.3	38.7	63.8	7.0	44.0	36.4	63.9
Pneumococcal disease – invasive	7.2	7.7	16.4	6.4	7.8	13.2	7.5	6.0	7.4
Poliovirus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella	0.0	0.3	0.0	0.1	0.0	0.0	0.2	0.0	0.2

Table 3 continued: Notification rates of diseases, 1 April to 30 June 2016, by state or territory. (Annualised rate per 100,000 population)*,†

Disease	State or territory								Aust.
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	
Rubella – congenital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tetanus	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Varicella zoster (chickenpox)	15.3	NN	22.9	7.4	18.6	17.0	15.8	21.2	14.6
Varicella zoster (shingles)	64.4	NN	158.7	1.5	128.8	60.4	35.0	57.1	41.9
Varicella zoster (unspecified)	52.2	NN	4.9	153.6	9.7	27.9	96.3	57.0	93.2
Vectorborne diseases									
Barmah Forest virus infection	0.0	0.5	1.6	7.2	0.0	0.0	0.0	0.5	1.7
Chikungunya virus infection	0.0	0.1	1.6	0.1	0.7	0.0	0.3	0.3	0.2
Dengue virus infection	7.2	6.4	62.2	11.3	6.8	11.6	9.4	27.6	11.2
Flavivirus infection (unspecified)	0.0	0.1	1.6	0.8	0.0	0.8	0.1	0.2	0.3
Japanese encephalitis virus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kunjin virus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malaria	1.0	0.7	3.3	1.8	0.7	0.0	1.3	1.7	1.2
Murray Valley encephalitis virus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ross River virus infection	2.0	7.7	68.7	73.9	2.8	1.5	2.6	16.4	20.7
Zoonoses									
Anthrax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australia bat lyssavirus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brucellosis	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Leptospirosis	0.0	0.2	0.0	2.7	0.0	0.0	0.0	0.3	0.6
Lyssavirus infection (NEC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ornithosis	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q fever	1.0	1.9	0.0	4.4	0.7	0.0	0.5	0.6	1.8
Tularaemia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other bacterial diseases									
Legionellosis	1.0	1.9	0.0	0.9	1.6	3.9	1.1	3.4	1.7
Leprosy	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.0	0.1
Meningococcal infection – invasive††	0.0	0.8	1.6	0.7	1.4	0.0	1.0	0.2	0.8
Tuberculosis	8.2	5.2	14.7	3.5	4.0	1.5	5.8	4.3	4.9

* The date of diagnosis is the onset date or where the date of onset was not known, the earliest of the specimen collection date, the notification date, or the notification receive date. For hepatitis B (unspecified), hepatitis C (unspecified), leprosy, syphilis (> 2 years or unspecified duration) and tuberculosis, the public health unit notification receive date was used.

† Rate per 100,000 of population. Annualisation Factor was 4.0

‡ Newly acquired hepatitis includes cases where the infection was determined to be acquired within 24 months prior to diagnosis. Queensland reports hepatitis C newly acquired under hepatitis C unspecified.

§ Unspecified hepatitis and syphilis includes cases where the duration of infection could not be determined or is greater than 24 months.

|| Infection with Shiga toxin/verotoxin-producing *Escherichia coli*.

¶ Includes *Chlamydia trachomatis* identified from cervical, rectal, urine, urethral and throat samples, except for South Australia, which reports only cervical, urine and urethral specimens.

** The national case definitions for chlamydia, gonococcal and syphilis diagnoses include infections that may be acquired through a non-sexual mode (especially in children – e.g. perinatal infections, epidemic gonococcal conjunctivitis).

†† Only invasive meningococcal disease is nationally notifiable. However, New South Wales and the Australian Capital Territory also report conjunctival cases.

NEC Not elsewhere classified.

NN Not notifiable.