

## Quarterly report

# NATIONAL NOTIFIABLE DISEASES SURVEILLANCE SYSTEM, 1 JANUARY TO 31 MARCH 2014

A summary of diseases currently being reported by each jurisdiction is provided in Table 1. There were 57,805 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification received date between 1 January to 31 March 2014 (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:
<b>Bloodborne diseases</b>	
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
<b>Gastrointestinal diseases</b>	
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
STEC, VTEC*	All jurisdictions
Salmonellosis	All jurisdictions
Shigellosis	All jurisdictions
Typhoid	All jurisdictions
<b>Quarantinable diseases</b>	
Cholera	All jurisdictions
Highly pathogenic avian influenza in humans	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
<b>Sexually transmissible infections</b>	
Chlamydial infection	All jurisdictions
Donovanosis	All jurisdictions
Gonococcal infection	All jurisdictions
Syphilis - congenital	All jurisdictions
Syphilis <2 years duration	All jurisdictions
Syphilis >2 years or unspecified duration	All jurisdictions

Table 1 continued: Reporting of notifiable diseases by jurisdiction

Disease	Data received from:
<b>Vaccine preventable diseases</b>	
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
Poliomyelitis	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
<b>Vectorborne diseases</b>	
Arbovirus infection (NEC)	All jurisdictions
Barmah Forest virus infection	All jurisdictions
Dengue virus infection	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
<b>Zoonoses</b>	
Anthrax	All jurisdictions
Australian bat lyssavirus	All jurisdictions
Brucellosis	All jurisdictions
Leptospirosis	All jurisdictions
Lyssavirus (NEC)	All jurisdictions
Ornithosis	All jurisdictions
Q fever	All jurisdictions
Tularaemia	All jurisdictions
<b>Other bacterial infections</b>	
Legionellosis	All jurisdictions
Leprosy	All jurisdictions
Meningococcal infection	All jurisdictions
Tuberculosis	All jurisdictions

\* Infections with Shiga-like toxin (verotoxin) producing *Escherichia coli* (STEC/VTEC).

NEC Not elsewhere classified.

Table 2: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2014, by date of diagnosis\*

Disease	State or territory										Total 1st quarter 2014	Total 4th quarter 2013	Total 1st quarter 2013	Last 5 years mean 1st quarter	Ratio	Year to date 2014	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA									
<b>Bloodborne diseases</b>																	
Hepatitis (NEC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Hepatitis B (newly acquired) <sup>†</sup>	0	11	1	17	4	1	16	7				57	40	47		55.8	1.0
Hepatitis B (unspecified) <sup>†</sup>	24	668	43	235	82	17	399	162				1,630	1,675	1,590		1,705.6	1.0
Hepatitis C (newly acquired) <sup>†</sup>	2	8	1	0	12	3	30	39				95	109	117		110.2	0.9
Hepatitis C (unspecified) <sup>†</sup>	43	885	48	649	82	61	497	226				2,491	2,532	2,432		2,614.8	1.0
Hepatitis D	0	1	0	5	0	0	4	0				10	13	15		9.8	1.0
<b>Gastrointestinal diseases</b>																	
Botulism	0	0	0	0	0	0	0	0				0	0	2		0.6	0.0
Campylobacteriosis	139	NN	75	1,380	360	253	1,953	606				4,766	4,400	3,481		4,303.0	1.1
Cryptosporidiosis	22	145	34	271	71	5	195	113				856	567	1,727		1,439.8	0.6
Haemolytic uraemic syndrome	0	3	0	1	2	1	2	0				9	6	4		4.4	2.0
Hepatitis A	2	27	1	16	5	0	26	8				85	33	69		65.4	1.3
Hepatitis E	0	6	0	1	0	0	2	0				9	8	15		14.4	0.6
Listeriosis	0	7	0	2	1	0	9	3				22	13	29		27.2	0.8
STEC, VTEC <sup>§</sup>	0	17	0	4	15	0	4	1				41	29	43		35.8	1.1
Salmonellosis	58	1,505	110	1,565	339	104	1,171	345				5,197	3,307	4,130		4,051.6	1.3
Shigellosis	10	77	23	45	11	0	125	25				316	161	144		174.4	1.8
Typhoid	0	14	0	11	3	0	13	3				44	35	68		49.6	0.9
<b>Quarantinable diseases</b>																	
Cholera	0	0	0	0	0	0	1	0				1	2	0		0.6	1.7
Highly pathogenic avian influenza in humans	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
Rabies	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
Smallpox	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
Yellow fever	0	0	0	0	0	0	0	0				0	0	0		0.0	0.0

Table 2 continued: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2014, by date of diagnosis\*

Disease	State or territory								Total 1st quarter 2014	Total 4th quarter 2013	Total 1st quarter 2013	Last 5 years mean 1st quarter	Ratio	Year to date 2014	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA							
<b>Sexually transmissible infections</b>															
Chlamydia infection <sup>¶¶</sup>	297	6,136	717	5,440	1,372	440	5,064	3,032	22,498	19,565	21,033	19,803.0	1.1	22,498	19,803.0
Donovanosis	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Gonococcal infection <sup>¶</sup>	50	1,240	450	763	215	19	903	595	4,235	3,486	3,837	3,025.4	1.4	4,235	3,025.4
Syphilis – congenital	0	0	0	0	0	0	0	0	0	1	1	1.4	0.0	0	1.4
Syphilis < 2 years duration <sup>¶</sup>	5	153	6	96	6	1	174	18	459	425	447	362.2	1.3	459	362.2
Syphilis > 2 years or unspecified duration <sup>¶¶</sup>	8	88	14	87	36	7	178	18	436	375	386	338.6	1.3	436	338.6
<b>Vaccine preventable diseases</b>															
Diphtheria	0	0	0	0	0	0	0	0	0	1	1	0.2	0.0	0	0.2
<i>Haemophilus influenzae</i> type b	0	0	1	2	0	0	0	0	3	4	3	3.8	0.8	3	3.8
Influenza (laboratory confirmed)	47	721	247	1,321	487	50	568	380	3,821	6,127	2,331	1,441.2	2.7	3,821	1,441.2
Measles	1	49	47	15	10	0	34	17	173	85	10	38.0	4.6	173	38.0
Mumps	0	30	1	16	4	2	4	6	63	40	72	45.0	1.4	63	45.0
Pertussis	46	482	17	542	110	32	750	348	2,327	3,071	3,620	7,168.8	0.3	2,327	7,168.8
Pneumococcal disease (invasive)	3	69	11	29	18	3	51	29	213	324	212	215.8	1.0	213	215.8
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Rubella	0	3	0	1	1	0	0	1	6	5	1	12.2	0.5	6	12.2
Rubella – congenital	0	0	0	0	0	0	0	0	0	1	0	0.0	0.0	0	0.0
Tetanus	0	1	0	0	0	0	0	0	1	0	3	1.8	0.6	1	1.8
Varicella zoster (chickenpox)	15	NN	36	44	73	5	211	84	468	648	374	372.6	1.3	468	372.6
Varicella zoster (shingles)	10	NN	57	16	501	67	378	350	1,379	1,348	1,206	968.0	1.4	1,379	968.0
Varicella zoster (unspecified)	50	NN	1	1,500	55	41	816	315	2,778	2,686	2,250	1,913.8	1.5	2,778	1,913.8
<b>Vectorborne diseases</b>															
Arbovirus infection (NEC)	0	2	0	13	0	0	0	0	15	4	5	3.4	4.4	15	3.4
Barmah Forest virus infection	0	57	7	244	0	0	2	21	331	442	1,423	746.4	0.4	331	746.4
Dengue virus infection	4	136	26	217	17	5	92	156	653	315	495	544.8	1.2	653	544.8
Japanese encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	0	0.2	0.0	0	0.2
Kunjin virus infection <sup>**</sup>	0	0	0	1	0	0	0	0	1	3	0	0.6	1.7	1	0.6
Malaria	2	28	3	24	2	0	19	13	91	82	138	110.8	0.8	91	110.8
Murray Valley encephalitis virus infection <sup>**</sup>	0	0	0	0	0	0	0	0	0	0	0	2.2	0.0	0	2.2
Ross River virus infection	0	113	188	448	18	12	70	776	1,625	939	1,352	1,987.6	0.8	1,625	1,987.6

Table 2 continued: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2014, by date of diagnosis

Disease	State or territory										Total 1st quarter 2014	Total 4th quarter 2013	Total 1st quarter 2013	Last 5 years mean 1st quarter	Ratio	Year to date 2014	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA									
<b>Zoonoses</b>																	
Anthrax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Australian bat lyssavirus	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2
Brucellosis	0	0	0	5	0	0	1	0	0	0	6	4	5	0	6	0.8	7.2
Leptospirosis	0	4	1	21	0	0	0	0	0	0	26	22	15	0	26	0.5	54.2
Lyssavirus (NEC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Ornithosis	0	4	0	1	0	0	4	2	0	0	11	15	7	0	11	0.8	14.0
Q fever	0	38	1	79	2	0	6	2	0	0	128	119	103	0	128	1.4	92.8
Tularaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
<b>Other bacterial infections</b>																	
Legionellosis	0	19	4	14	11	1	15	23	0	0	87	118	98	0	87	1.1	81.4
Leprosy	0	1	0	0	0	0	0	2	0	0	3	4	2	0	3	2.5	1.2
Meningococcal infection††	0	4	2	9	4	0	4	3	0	0	26	32	39	0	26	0.6	44.4
Tuberculosis	7	105	5	46	11	2	101	36	0	0	313	312	315	0	313	1.0	317.8
<b>Total</b>	<b>845</b>	<b>12,857</b>	<b>2,178</b>	<b>15,196</b>	<b>3,940</b>	<b>1,132</b>	<b>13,892</b>	<b>7,765</b>	<b>0</b>	<b>0</b>	<b>57,805</b>	<b>53,533</b>	<b>53,698</b>	<b>0</b>	<b>57,805</b>	<b>0.9</b>	<b>57.8</b>

\* 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. From 1 July 2013 case definition changed to exclude all ocular infections.

¶ The national case definitions for chlamydial, 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).

\*\* In the Australian Capital Territory, Murray Valley encephalitis virus infection and Kunjin virus infection are combined under Murray Valley encephalitis virus infection.

†† 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 January to 31 March 2014, by state or territory. (Annualised rate per 100,000 population)\*,†**

Disease	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
<b>Bloodborne diseases</b>									
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	0.6	1.7	1.5	1.0	0.8	1.1	1.1	1.0
Hepatitis B (unspecified)§	25.8	37.0	73.1	20.7	20.1	13.6	28.5	26.4	28.9
Hepatitis C (newly acquired)‡	2.1	0.4	1.7	0.0	2.9	2.4	2.1	6.3	1.7
Hepatitis C (unspecified)§	46.2	49.0	81.6	57.2	20.1	48.7	35.5	36.8	44.1
Hepatitis D	0.0	0.1	0.0	0.4	0.0	0.0	0.3	0.0	0.2
<b>Gastrointestinal diseases</b>									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis	149.4	NN	127.5	121.5	88.3	202.2	139.5	98.6	124.3
Cryptosporidiosis	23.6	8.0	57.8	23.9	17.4	4.0	13.9	18.4	15.2
Haemolytic uraemic syndrome	0.0	0.2	0.0	0.1	0.5	0.8	0.1	0.0	0.2
Hepatitis A	2.1	1.5	1.7	1.4	1.2	0.0	1.9	1.3	1.5
Hepatitis E	0.0	0.3	0.0	0.1	0.0	0.0	0.1	0.0	0.2
Listeriosis	0.0	0.4	0.0	0.2	0.2	0.0	0.6	0.5	0.4
STEC,VTEC¶	0.0	0.9	0.0	0.4	3.7	0.0	0.3	0.2	0.7
Salmonellosis	62.3	83.3	187.0	137.8	83.2	83.1	83.7	56.1	92.1
Shigellosis	10.7	4.3	39.1	4.0	2.7	0.0	8.9	4.1	5.6
Typhoid fever	0.0	0.8	0.0	1.0	0.7	0.0	0.9	0.5	0.8
<b>Quarantinable diseases</b>									
Cholera	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Human pathogenic avian influenza in humans	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
<b>Sexually transmitted infections</b>									
Chlamydial infection¶,***	319.2	339.5	1,218.8	479.1	336.7	351.6	361.8	493.2	398.7
Donovanosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gonococcal infection**	53.7	68.6	764.9	67.2	52.8	15.2	64.5	96.8	75.1
Syphilis – congenital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Syphilis < 2 years duration**	5.4	8.5	10.2	8.5	1.5	0.8	12.4	2.9	8.1
Syphilis > 2 years or unspecified duration§,***	8.6	4.9	23.8	7.7	8.8	5.6	12.7	2.9	7.7
<b>Vaccine preventable diseases</b>									
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Haemophilus influenzae</i> type b	0.0	0.0	1.7	0.2	0.0	0.0	0.0	0.0	0.1
Influenza (laboratory confirmed)	50.5	39.9	419.9	116.3	119.5	40.0	40.6	61.8	67.7
Measles	1.1	2.7	79.9	1.3	2.5	0.0	2.4	2.8	3.1
Mumps	0.0	1.7	1.7	1.4	1.0	1.6	0.3	1.0	1.1
Pertussis	49.4	26.7	28.9	47.7	27.0	25.6	53.6	56.6	41.2
Pneumococcal disease (invasive)	3.2	3.8	18.7	2.6	4.4	2.4	3.6	4.7	3.8
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella	0.0	0.2	0.0	0.1	0.2	0.0	0.0	0.2	0.1
Rubella – congenital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tetanus	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Table 3 continued: Notification rates of diseases, 1 January to 31 March 2014, by state or territory. (Annualised rate per 100,000 population)\*,†**

Disease	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Varicella zoster (chickenpox)	16.1	NN	61.2	3.9	17.9	4.0	15.1	13.7	12.2
Varicella zoster (shingles)	10.7	NN	96.9	1.4	122.9	53.5	27.0	56.9	36.0
Varicella zoster (unspecified)	53.7	NN	1.7	132.1	13.5	32.8	58.3	51.2	72.4
<b>Vectorborne diseases</b>									
Arbovirus infection (NEC)	0.0	0.1	0.0	1.1	0.0	0.0	0.0	0.0	0.3
Barmah Forest virus infection	0.0	3.2	11.9	21.5	0.0	0.0	0.1	3.4	5.9
Dengue virus infection	4.3	7.5	44.2	19.1	4.2	4.0	6.6	25.4	11.6
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	0.1	0.0	0.0	0.0	0.0	0.0
Malaria	2.1	1.5	5.1	2.1	0.5	0.0	1.4	2.1	1.6
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	0.0	6.3	319.6	39.5	4.4	9.6	5.0	126.2	28.8
<b>Zoonoses</b>									
Anthrax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australia bat lyssavirus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brucellosis	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.1
Leptospirosis	0.0	0.2	1.7	1.8	0.0	0.0	0.0	0.0	0.5
Lyssavirus (NEC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ornithosis	0.0	0.2	0.0	0.1	0.0	0.0	0.3	0.3	0.2
Q fever	0.0	2.1	1.7	7.0	0.5	0.0	0.4	0.3	2.3
Tularaemia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Other bacterial diseases</b>									
Legionellosis	0.0	1.1	6.8	1.2	2.7	0.8	1.1	3.7	1.5
Leprosy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.1
Meningococcal infection‡‡	0.0	0.2	3.4	0.8	1.0	0.0	0.3	0.5	0.5
Tuberculosis	7.5	5.8	8.5	4.1	2.7	1.6	7.2	5.9	5.5

\* 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. From 1 July 2013 case definition changed to exclude all ocular infections.

\*\* The national case definitions for chlamydial, 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).

†† In the Australian Capital Territory, Murray Valley encephalitis virus infection and Kunjin virus infection are combined under Murray Valley encephalitis virus infection.

‡‡ 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.