

Communicable diseases surveillance

Tables

National Notifiable Diseases Surveillance System

A summary of diseases currently being reported by each jurisdiction is provided in Table 1. There were 47,235 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification received date between 1 January and 31 March 2010 (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
STEC, VTEC	All jurisdictions
Salmonellosis	All jurisdictions
Shigellosis	All jurisdictions
Typhoid	All jurisdictions
Quarantinable diseases	
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
Sexually transmissible infections	
Chlamydial infection	All jurisdictions
Donovanosis	All jurisdictions
Gonococcal infection	All jurisdictions
Syphilis < 2 years duration	All jurisdictions
Syphilis > 2 years or unspecified duration	All jurisdictions except South Australia
Syphilis - congenital	All jurisdictions

Table 1: Reporting of notifiable diseases by jurisdiction, *continued*

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
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
Vectorborne diseases	
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
Zoonoses	
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
Other bacterial infections	
Legionellosis	All jurisdictions
Leprosy	All jurisdictions
Meningococcal infection	All jurisdictions
Tuberculosis	All jurisdictions

* Notifiable in South Australia as of 1 May 2008.

† Flavivirus (NEC) replaced Arbovirus (NEC) from 1 January 2004. Arbovirus (NEC) replaced Flavivirus (NEC) from 2008.

NEC Not elsewhere classified.

Table 2: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2010, by date of diagnosis*

Disease	State or territory								Total 1st quarter 2010†	Total 4th quarter 2009	Total 1st quarter 2009	Last 5 years mean 1st quarter	Ratio†	Year to date 2010	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA							
Bloodborne diseases															
Hepatitis (NEC)	0	0	0	0	0	0	0	0	0	0	0	0.4	0.0	0	0.4
Hepatitis B (newly acquired)	1	7	0	18	6	1	22	0	55	40	64.0	64.0	0.9	55	64.0
Hepatitis B (unspecified)	20	784	44	267	95	19	499	203	1,931	1,840	1,649.0	1,649.0	1.2	1,931	1,649.0
Hepatitis C (newly acquired)	2	7	NN	0	10	1	44	0	64	69	91.4	91.4	0.7	64	91.4
Hepatitis C (unspecified)	56	1,168	35	713	106	55	534	278	2,945	2,809	2,958.0	2,958.0	1.0	2,945	2,958.0
Hepatitis D	0	1	0	3	0	0	0	0	4	6	9.8	9.8	0.4	4	9.8
Gastrointestinal diseases															
Botulism	0	NN	0	0	0	0	0	0	0	0	1	0.6	0.0	0	0.6
Campylobacteriosis§	110	0	38	1,272	306	210	1,650	572	4,158	4,079	4,295.2	4,295.2	1.0	4,158	4,295.2
Cryptosporidiosis	1	128	26	133	18	35	133	48	522	2,860	1,501.6	1,501.6	0.3	522	1,501.6
Haemolytic uraemic syndrome	0	2	0	0	0	0	1	0	3	4	5.4	5.4	0.6	3	5.4
Hepatitis A	3	34	0	10	3	0	40	9	99	239	70	77.8	1.3	99	77.8
Hepatitis E	1	3	0	1	0	0	4	0	9	1	16	12.4	0.7	9	12.4
Listeriosis	0	16	0	2	1	1	12	1	33	21	29	22.2	1.5	33	22.2
STEC, VTEC	0	4	0	23	12	0	4	4	47	58	53	30.6	1.5	47	30.6
Salmonellosis	69	1,345	151	1,098	163	87	729	361	4,003	3,393	3,106.4	3,106.4	1.3	4,003	3,106.4
Shigellosis	2	25	21	40	9	0	33	33	163	118	216	203.6	0.8	163	203.6
Typhoid	0	10	1	6	1	0	6	4	28	35	37	30.4	0.9	28	30.4
Quarantinable diseases															
Cholera	0	0	0	0	0	0	0	0	0	0	2	1.0	0.0	0	1.0
Highly 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

Table 2: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2010, by date of diagnosis,* continued

Disease	State or territory							Ratio†	Year to date 2010	Last 5 years YTD mean					
	ACT	NSW	NT	Qld	SA	Tas	Vic				WA				
Sexually transmissible infections															
Chlamydia infection¶	318	4,672	636	4,992	1,029	511	4,108	2,463	18,729	15,201	15,665	13,242.2	1.4	18,729	13,242.2
Donovanosis	0	0	0	0	0	0	0	0	0	0	0	1.6	0.0	0	1.6
Gonococcal infection	14	629	413	404	79	12	457	326	2,334	1,912	2,245	2,127.6	1.1	2,334	2,127.6
Syphilis (all)	7	338	31	105	8	6	202	41	738	646	726	692.4	1.1	738.0	692.4
Syphilis <2 years duration	4	79	9	56	8	2	65	23	246	258	337	268.6	0.9	246	268.6
Syphilis >2 years or unspecified duration	3	259	22	49	NDP	4	137	18	492	388	389	423.8	1.2	492	423.8
Syphilis - congenital	0	0	0	0	0	0	0	1	1	1	2	2.8	0.4	1	2.8
Vaccine preventable diseases															
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	1	2	0	0	0	0	3	2	8	4.8	0.6	3	4.8
Influenza (laboratory confirmed)	3	0	3	174	31	11	57	42	321	707	470	361.2	0.9	321	361.2
Measles	0	6	1	1	0	0	5	1	14	9	78	27.4	0.5	14	27.4
Mumps	0	6	0	8	0	0	2	2	18	30	57	67.6	0.3	18	67.6
Pertussis	54	1,316	52	1,523	1,202	62	984	143	5,336	6,959	8,569	3,155.4	1.7	5,336	3,155.4
Pneumococcal disease (invasive)	4	68	8	35	15	2	45	26	203	327	204	217.8	0.9	203	217.8
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Rubella	0	7	0	3	0	0	6	0	16	2	8	6.8	2.4	16	6.8
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	1	0	1	0	3	1.4	0.7	1	1.4
Varicella zoster (chickenpox)	2	NN	10	1	79	0	17	44	153	272	349	231.0	0.7	153	231.0
Varicella zoster (shingles)	8	NN	30	5	250	2	147	172	614	651	676	376.0	1.6	614	376.0
Varicella zoster (unspecified)	18	NN	0	1,009	94	71	476	217	1,885	1,831	1,733	929.0	2.0	1,885	929.0
Vectorborne diseases															
Arbovirus infection (NEC)	0	0	0	2	0	0	1	0	3	4	14	10.8	0.3	3	10.8
Barmah Forest virus infection	1	81	41	266	11	0	13	36	449	293	569	588.4	0.8	449	588.4
Dengue virus infection	4	22	13	47	2	1	7	57	153	110	1,012	282.8	0.5	153	282.8
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	1	0	0	0	0	1	0	2	0.8	1.3	1	0.8
Malaria	0	16	4	41	3	1	16	16	97	95	135	194.2	0.5	97	194.2
Murray Valley encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	2	1.0	0.0	0	1.0
Ross River virus infection	12	382	130	697	89	28	157	78	1,573	784	1,640	1,977.8	0.8	1,573	1,977.8

Table 2: Notifications of diseases received by state and territory health authorities, 1 January to 31 March 2010, by date of diagnosis,* continued

Disease	State or territory								Total 1st quarter 2010†	Total 4th quarter 2009	Total 1st quarter 2009	Last 5 years mean 1st quarter	Ratio‡	Year to date 2010	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA							
Zoonoses															
Anthrax	0	1	0	0	0	0	0	0	0	0	0	0.4	2.5	1	0.4
Australian bat lyssavirus	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Brucellosis	0	2	2	1	0	0	0	0	0	5	8	11.4	0.4	5	11.4
Leptospirosis	1	5	2	8	0	0	0	1	14	17	66	49.8	0.3	17	49.8
Lyssavirus (NEC)	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Ornithosis	0	0	0	0	0	0	0	1	12	17	17	29.2	0.3	9	29.2
Q fever	0	35	0	26	2	0	2	2	67	69	95	100.4	0.7	67	100.4
Tularaemia	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Other bacterial infections															
Legionellosis	1	20	0	6	3	0	17	8	55	64	66	78.4	0.7	55	78.4
Leprosy	0	0	0	0	0	0	0	0	0	2	1	3.0	0.0	0	3.0
Meningococcal infection**	0	17	0	8	7	2	5	5	44	63	47	56.4	0.8	44	56.4
Tuberculosis	0	106	5	83	19	2	90	26	331	454	299	274.6	1.2	331	274.6
Total	712	11,263	1,698	13,034	3,653	1,120	10,534	5,221	47,235	42,536	50,293	39,329.5	1.2	47,235	39,329.45

* Date of diagnosis = true onset date, or where not available, the earliest of (i) specimen date, (ii) notification date, or (iii) notification receive date. Hepatitis B and C unspecified were analysed by the notification receive date.

† 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.

‡ Ratio = ratio of current quarter total to the mean of last 5 years for the same quarter. Note: Ratios for varicella zoster (chickenpox), varicella zoster (shingles) and varicella zoster (unspecified) are based on 3 years of data.

§ Not reported for New South Wales where it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.

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

¶ Includes *Chlamydia trachomatis* identified from cervical, rectal, urine, urethral, throat and eye samples, except for South Australia, which reports only genital tract specimens; the Northern Territory and Queensland, which exclude ocular specimens; and Western Australia, which excludes ocular and perinatal infections.

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

NEC Not elsewhere classified.

NN Not notifiable.

NDP No data provided.

Table 3: Notification rates of diseases, 1 January to 31 March 2010, 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)	1.1	0.4	0.0	1.6	1.5	0.8	1.6	0.0	1.0
Hepatitis B (unspecified)	22.8	44.2	78.3	24.2	23.4	15.1	36.8	36.3	35.3
Hepatitis C (newly acquired)	2.3	0.4	0.0	NN	2.5	0.8	3.2	0.0	1.2
Hepatitis C (unspecified)	63.8	65.8	62.3	64.7	26.1	43.8	39.4	49.7	53.9
Hepatitis D	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Gastrointestinal diseases									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis [†]	125.3	NN	67.6	115.5	75.4	167.1	121.6	102.3	76.0
Cryptosporidiosis	1.1	7.2	46.3	12.1	4.4	27.9	9.8	8.6	9.5
Haemolytic uraemic syndrome	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Hepatitis A	3.4	1.9	0.0	0.9	0.7	0.0	2.9	1.6	1.8
Hepatitis E	1.1	0.2	0.0	0.1	0.0	0.0	0.3	0.0	0.2
Listeriosis	0.0	0.9	0.0	0.2	0.2	0.8	0.9	0.2	0.6
STEC, VTEC [‡]	0.0	0.2	0.0	2.1	3.0	0.0	0.3	0.7	0.9
Salmonellosis	78.6	75.8	268.6	99.7	40.2	69.2	53.7	64.6	73.2
Shigellosis	2.3	1.4	37.4	3.6	2.2	0.0	2.4	5.9	3.0
Typhoid	0.0	0.6	1.8	0.5	0.2	0.0	0.4	0.7	0.5
Quarantinable diseases									
Cholera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Highly 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
Sexually transmissible infections									
Chlamydial infection [§]	362.2	263.2	1,131.4	453.1	253.6	406.7	302.7	440.4	342.5
Donovanosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gonococcal infection	15.9	35.4	734.7	36.7	19.5	9.5	33.7	58.3	42.7
Syphilis (all)	8.0	19.0	55.1	9.5	2.0	4.8	14.9	7.3	13.5
Syphilis <2 years duration	4.6	4.5	16.0	5.1	2.0	1.6	4.8	4.1	4.5
Syphilis >2 years or unspecified duration	3.4	14.6	39.1	4.4	NDP	3.2	10.1	3.2	9.0
Syphilis - congenital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Vaccine preventable diseases									
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	1.8	0.2	0.0	0.0	0.0	0.0	0.1
Influenza (laboratory confirmed)	3.4	0.0	5.3	15.8	7.6	8.8	4.2	7.5	5.9
Measles	0.0	0.3	1.8	0.1	0.0	0.0	0.4	0.2	0.3
Mumps	0.0	0.3	0.0	0.7	0.0	0.0	0.1	0.4	0.3
Pertussis	61.5	74.1	92.5	138.2	296.3	49.3	72.5	25.6	97.6
Pneumococcal disease (invasive)	4.6	3.8	14.2	3.2	3.7	1.6	3.3	4.6	3.7

Table 3: Notification rates of diseases, 1 January to 31 March 2010, by state or territory. (Annualised rate per 100,000 population), continued

Disease*	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Vaccine preventable diseases, continued									
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella	0.0	0.4	0.0	0.3	0.0	0.0	0.4	0.0	0.3
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	0.0	0.0	0.0	0.1	0.0	0.0
Varicella zoster (chickenpox)	2.3	NN	17.8	0.1	19.5	0.0	1.3	7.9	2.8
Varicella zoster (shingles)	9.1	NN	53.4	0.5	61.6	1.6	10.8	30.8	11.2
Varicella zoster (unspecified)	20.5	NN	0.0	91.6	23.2	56.5	35.1	38.8	34.5
Vectorborne diseases									
Arbovirus infection (NEC)	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.1
Barmah Forest virus infection	1.1	4.6	72.9	24.1	2.7	0.0	1.0	6.4	8.2
Dengue virus infection	4.6	1.2	23.1	4.3	0.5	0.8	0.5	10.2	2.8
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	0.0	0.9	7.1	3.7	0.7	0.8	1.2	2.9	1.8
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	13.7	21.5	231.3	63.3	21.9	22.3	11.6	13.9	28.8
Zoonoses									
Anthrax	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australian bat lyssavirus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brucellosis	0.0	0.1	3.6	0.1	0.0	0.0	0.0	0.0	0.1
Leptospirosis	1.1	0.3	3.6	0.7	0.0	0.0	0.0	0.2	0.3
Lyssavirus (NEC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ornithosis	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.2
Q fever	0.0	2.0	0.0	2.4	0.5	0.0	0.1	0.4	1.2
Tularaemia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other bacterial infections									
Legionellosis	1.1	1.1	0.0	0.5	0.7	0.0	1.3	1.4	1.0
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	0.0	1.0	0.0	0.7	1.7	1.6	0.4	0.9	0.8
Tuberculosis	0.0	6.0	8.9	7.5	4.7	1.6	6.6	4.6	6.1

* Rates are subject to retrospective revision.

† Not reported for New South Wales where it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.

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

§ Includes *Chlamydia trachomatis* identified from cervical, rectal, urine, urethral, throat and eye samples, except for South Australia, which reports only genital tract specimens; the Northern Territory and Queensland, which exclude ocular specimens; and Western Australia, which excludes ocular and perinatal infections.

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

NN Not notifiable.

NEC Not elsewhere classified.

NDP No data provided.

Laboratory Serology and Virology Reporting Scheme

There were 9,585 reports received by the Laboratory Virology and Serology Reporting Scheme (LabVISE) in the reporting period, 1 January to 31 March 2010 (Tables 4 and 5).

Table 4: Laboratory Virology and Serology reports, 1 January to 31 March 2010 and total reports for the year,* by state or territory†

	State or territory								This period 2010	This period 2009	Year to date 2010	Year to date 2009
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Measles, mumps, rubella												
Measles virus	–	–	–	1	2	–	5	–	8	39	8	39
Mumps virus	–	–	–	2	3	–	1	–	6	13	6	13
Rubella virus	–	3	–	1	1	–	4	–	9	4	9	4
Hepatitis viruses												
Hepatitis A virus	–	2	–	11	2	–	1	–	16	8	16	8
Hepatitis D virus	–	–	–	1	2	–	1	–	4	7	4	7
Hepatitis E virus	–	–	–	1	–	–	–	–	1	3	1	3
Arboviruses												
Ross River virus	–	8	24	228	84	6	4	1	355	400	355	400
Barmah Forest virus	–	3	–	49	16	–	1	–	69	106	69	106
Flavivirus (unspecified)	1	9	–	42	–	–	7	–	59	149	59	149
Adenoviruses												
Adenovirus not typed/pending	1	58	–	69	88	3	4	–	223	407	223	407
Herpesviruses												
Herpes virus type 6	–	–	–	–	–	–	1	–	1		1	
Cytomegalovirus	–	32	–	181	166	6	10	–	395	360	395	360
Varicella-zoster virus	–	23	–	543	240	3	2	–	811	752	811	752
Epstein-Barr virus	1	21	23	419	323	5	8	66	866	613	866	613
Other DNA viruses												
Parvovirus	–	2	–	9	52	–	10	–	73	66	73	66
Picornavirus family												
Rhinovirus (all types)	–	49	–	–	–	1	–	–	50	24	50	24
Enterovirus not typed/pending	–	5	–	6	7	–	1	–	19	33	19	33
Picornavirus not typed	–	–	–	–	–	2	–	–	2	4	2	4
Ortho/paramyxoviruses												
Influenza A virus	–	21	–	61	56	–	10	–	148	86	148	86
Influenza B virus	1	3	–	7	12	–	–	–	23	35	23	35
Newcastle disease virus	–	1	–	–	–	–	–	–	1		1	
Parainfluenza virus type 1	–	39	–	29	2	–	–	–	70	3	70	3
Parainfluenza virus type 2	–	6	–	7	5	–	–	–	18	14	18	14
Parainfluenza virus type 3	–	9	–	4	20	–	–	–	33	44	33	44
Respiratory syncytial virus	–	93	–	118	34	–	–	–	245	251	245	251
Other RNA viruses												
HTLV-1	–	–	–	–	17	–	–	–	17	83	17	83
Rotavirus	–	9	–	–	7	–	–	–	16	63	16	63

Table 4: Laboratory Virology and Serology reports, 1 January to 31 March 2010 and total reports for the year,* by state or territory† *continued*

	State or territory								This period 2010	This period 2009	Year to date 2010	Year to date 2009
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Norwalk agent	–	31	–	–	271	3	–	–	305	16	305	16
Other												
<i>Chlamydia trachomatis</i> not typed	1	156	4	2,152	728	14	11	2	3,068	2,376	3,068	2,376
<i>Chlamydia psittaci</i>	–	–	–	–	–	1	7	–	8	23	8	23
<i>Chlamydia</i> spp typing pending	–	5	–	–	–	–	–	–	5	2	5	2
<i>Chlamydia</i> species	–	1	–	–	–	–	–	–	1	5	1	5
<i>Mycoplasma pneumoniae</i>	1	5	5	42	115	6	92	10	276	253	276	253
<i>Coxiella burnetii</i> (Q fever)	–	1	–	10	17	–	3	–	31	58	31	58
<i>Rickettsia prowazeki</i>	–	–	–	–	1	–	–	–	1	1	1	1
<i>Rickettsia</i> - spotted fever group	–	1	–	4	5	–	–	–	10	38	10	38
<i>Streptococcus</i> group A	–	12	1	154	–	–	10	–	177	178	177	178
<i>Brucella</i> species	–	–	–	1	–	–	2	–	3	4	3	4
<i>Bordetella pertussis</i>	–	55	–	521	948	1	48	–	1,573	1,362	1,573	1,362
<i>Legionella pneumophila</i>	–	1	–	1	2	–	–	–	4	6	4	6
<i>Legionella longbeachae</i>	–	–	–	–	2	–	3	–	5	3	5	3
<i>Legionella</i> species	1	2	–	5	–	–	2	–	10	5	10	5
<i>Cryptococcus</i> species	–	1	–	8	6	–	–	–	15	9	15	9
<i>Leptospira</i> species	–	1	–	10	3	–	–	1	15	18	15	18
<i>Treponema pallidum</i>	–	48	–	346	133	–	4	–	531	488	531	488
<i>Entamoeba histolytica</i>	–	–	–	3	–	–	–	–	3	–	3	–
<i>Toxoplasma gondii</i>	–	–	–	–	5	–	–	–	5	7	5	7
<i>Echinococcus granulosus</i>	–	–	–	–	1	–	–	–	1	8	1	8
Total	7	716	57	5,046	3,376	51	252	80	9,585	8,427	9,585	8,427

* Data presented are for reports with reports dates in the current period.

† State or territory of postcode, if reported, otherwise state or territory of reporting laboratory.

– No data received this period.

Table 5: Laboratory Virology and Serology reports, 1 January to 31 March 2010,* by laboratory

State or territory	Laboratory	January 2010	February 2010	March 2010	Total
Australian Capital Territory	The Canberra Hospital	–	–	–	–
New South Wales	Institute of Clinical Pathology and Medical Research, Westmead	–	–	95	95
	New Children's Hospital, Westmead	60	50	103	213
	Repatriation General Hospital, Concord	–	–	–	–
	Royal Prince Alfred Hospital, Camperdown	–	–	–	–
	South West Area Pathology Service, Liverpool	41	59	61	161
Queensland	Queensland Medical Laboratory, West End	1,618	1,686	2,039	5,343
	Townsville General Hospital	–	–	–	–
South Australia	Institute of Medical and Veterinary Science, Adelaide	1,151	1,131	1,088	3,370
Tasmania	Northern Tasmanian Pathology Service, Launceston	14	16	15	45
	Royal Hobart Hospital, Hobart	–	–	–	–
Victoria	Australian Rickettsial Reference Laboratory	–	–	–	–
	Monash Medical Centre, Melbourne	–	–	–	–
	Royal Children's Hospital, Melbourne	–	–	66	66
	Victorian Infectious Diseases Reference Laboratory	68	49	47	164
Western Australia	PathWest Virology, Perth	–	–	–	–
	Princess Margaret Hospital, Perth	–	–	–	–
	Western Diagnostic Pathology	33	71	24	128
Total		2,985	3,062	3,538	9,585

* The complete list of laboratories reporting for the 12 months, January to December 2010, will appear in every report regardless of whether reports were received in this reporting period. Reports are not always received from all laboratories.

– No data received this period.

Additional reports

Australian childhood immunisation coverage

The Australian Childhood Immunisation Register (ACIR) commenced operation on 1 January 1996 and is now an important component of the Immunise Australia Program. It is administered and operated by Medicare Australia (formerly the Health Insurance Commission). The Register was established by transferring data on all children under the age of 7 years enrolled with Medicare to the ACIR.

Tables 1, 2 and 3 provide the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register (ACIR).

The data show the percentage of children fully immunised at 12 months of age for the cohort born between 1 October and 31 December 2008, at 24 months of age for the cohort born between 1 October and 31 December 2007, and at 5 years of age for the cohort born between 1 October and 31 December 2004 according to the National Immunisation Program Schedule. However from March 2002 to December 2007, coverage for vaccines due at 4 years of age was assessed at the 6-year milestone age.

For information about the Australian Childhood Immunisation Register see *Surveillance systems reported in CDI*, published in *Commun Dis Intell* 2008;32:134–135 and for a full description of the methodology used by the Register see *Commun Dis Intell* 1998;22:36–37.

Commentary on the trends in ACIR data is provided by the National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS). For further information please contact the NCIRS at telephone: +61 2 9845 1435, Email: brynleyh@chw.edu.au

'Fully immunised' at 12 months of age is defined as a child having a record on the ACIR of 3 doses of a diphtheria (D), tetanus (T) and pertussis-containing (P) vaccine, 3 doses of polio vaccine, 2 or 3 doses of PRP-OMP containing *Haemophilus influenzae type b* (Hib) vaccine or 3 doses of any other *Haemophilus influenzae type b* (Hib) vaccine, and 2 or 3 doses of comvax hepatitis B vaccine or 3 doses of all other hepatitis B vaccines. 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of 3 or 4 doses of a DTP-containing vaccine, three doses of polio vaccine, 3 or 4 doses of PRP-OMP containing *Haemophilus influenzae type b* (Hib) vaccine or 4 doses of any other *Haemophilus influenzae type b* (Hib) vaccine, 3 or 4 doses of comvax hepatitis B vaccine

or 4 doses of all other hepatitis B vaccines, and 1 dose of a measles, mumps and rubella-containing (MMR) vaccine. 'Fully immunised' at 5 years of age is defined as a child having a record on the ACIR of 4 or 5 doses of a DTP-containing vaccine, 4 doses of polio vaccine, and 2 doses of an MMR-containing vaccine.

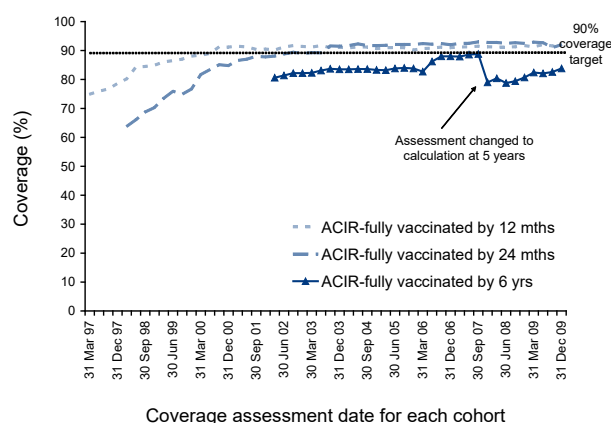
Immunisation coverage for 'fully immunised' at 12 months of age for Australia decreased slightly by 0.2 of a percentage point to 91.4% (Table 1). There were no important changes in coverage for any individual vaccines due at 12 months of age or by jurisdiction.

Immunisation coverage for 'fully immunised' at 24 months of age for Australia increased by 1 percentage point to 92.0 (Table 2). There were no important changes in coverage for any individual vaccines due at 24 months of age or by jurisdiction.

Immunisation coverage for 'fully immunised' at 5 years of age for Australia increased by 1.2 percentage points to sit currently at 83.8% (Table 3). However, 'fully immunised' coverage increased 2.1–2.2 percentage points in the Northern Territory and New South Wales and is now above 81% in all jurisdictions. These 2 jurisdictions also experienced similar increases in coverage for all individual vaccines due at 5 years of age.

Figure 1 shows the trends in vaccination coverage from the first ACIR-derived published coverage estimates in 1997 to the current estimates. There is a clear trend of increasing vaccination coverage over time for children aged 12 months, 24 months and 6 years (5 years from March 2008), although coverage for vaccines due at 4 years decreases sig-

Figure 1: Trends in vaccination coverage, Australia, 1997 to 31 December 2009, by age cohorts



nificantly due to the change in assessment age from 6 to 5 years. It should also be noted that, currently, coverage for the vaccines added to the NIP since 2003 (varicella at 18 months, meningococcal C con-

jugate at 12 months and pneumococcal conjugate at 2, 4, and 6 months) are not included in the 12 or 24 months coverage data respectively.

Table 1. Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 2008; assessment date 31 March 2010

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,258	24,814	887	15,241	4,896	1,691	17,861	7,428	74,076
Diphtheria, tetanus, pertussis (%)	93.5	92.2	90.9	92.0	91.4	93.3	92.9	90.0	92.1
Poliomyelitis (%)	93.4	92.2	90.8	92.0	91.4	93.3	92.8	89.9	92.0
<i>Haemophilus influenzae</i> type b (%)	93.5	92.0	93.1	91.8	90.9	93.1	92.5	89.9	91.9
Hepatitis B (%)	92.8	91.9	91.0	91.7	90.8	93.0	92.2	89.6	91.6
Fully immunised (%)	92.8	91.7	89.4	91.5	90.6	93.0	92.0	89.2	91.4
Change in fully immunised since last quarter (%)	-0.4	-0.4	+1.4	-0.3	-0.7	+0.5	+0.1	-0.1	-0.2

Table 2. Percentage of children immunised at 2 years of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 2007; assessment date 31 March 2010*

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,205	24,383	927	15,078	4,924	1,616	18,090	7,678	73,901
Diphtheria, tetanus, pertussis (%)	95.9	95.1	94.4	94.1	94.5	94.9	95.6	93.3	94.8
Poliomyelitis (%)	95.9	95.0	94.4	94.1	94.5	94.9	95.6	93.2	94.8
<i>Haemophilus influenzae</i> type b (%)	95.9	95.2	93.3	93.5	93.2	95.1	94.8	92.9	94.4
Measles, mumps, rubella (%)	94.9	93.6	94.3	93.7	93.5	94.4	94.6	92.4	93.8
Hepatitis B (%)	95.4	94.6	94.3	93.6	93.8	94.7	94.7	92.8	94.2
Fully immunised (%)	93.9	92.3	92.0	91.6	91.5	93.5	92.6	89.9	92.0
Change in fully immunised since last quarter (%)	+0.7	+0.6	+1.3	+2.0	+2.0	+0.7	+0.9	-0.2	+1.0

* The 12 months age data for this cohort were published in *Commun Dis Intell* 2010;33(2):151.

Table 3. Percentage of children immunised at 5 years of age, preliminary results by disease and state or territory for the birth cohort 1 October to 31 December 2004; assessment date 31 March 2010

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,122	21,923	776	13,501	4,467	1,495	16,366	6,736	66,386
Diphtheria, tetanus, pertussis (%)	87.3	83.7	84.7	83.1	81.6	85.2	88.0	83.3	84.6
Poliomyelitis (%)	87.4	83.7	84.7	82.9	81.6	85.2	87.9	83.2	84.5
Measles, mumps, rubella (%)	86.7	83.5	84.4	82.7	81.4	84.8	87.6	82.8	84.2
Fully immunised (%)	86.3	83.0	83.3	82.2	81.0	84.4	87.3	82.3	83.8
Change in fully immunised since last quarter (%)	+0.8	+2.3	+2.1	-0.1	+0.5	-1.8	+1.1	+1.4	+1.2

Meningococcal surveillance

John Tapsall, The Prince of Wales Hospital, Randwick, NSW, 2031 for the Australian Meningococcal Surveillance Programme.

The reference laboratories of the Australian Meningococcal Surveillance Programme report data on the number of laboratory confirmed cases confirmed either by culture or by non-culture based techniques. Culture positive cases, where a *Neisseria meningitidis* is grown from a normally sterile site or skin, and non-culture based diagnoses, derived from results of nucleic acid amplification assays and serological techniques,

are defined as invasive meningococcal disease (IMD) according to Public Health Laboratory Network definitions. Data contained in the quarterly reports are restricted to a description of the number of cases per jurisdiction, and serogroup, where known. A full analysis of laboratory confirmed cases of IMD is contained in the annual reports of the Programme, published in *Communicable Diseases Intelligence*. For more information see *Commun Dis Intell* 2009;33:82.

Laboratory confirmed cases of invasive meningococcal disease for the period 1 January to 31 March 2010, are included in this issue of *Communicable Diseases Intelligence* (Table 4).

Table 4: Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 January to 31 March 2010, by serogroup and state or territory

State or territory	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q1	YTD	Q1	YTD	Q1	YTD	Q1	YTD	Q1	YTD	Q1	YTD	Q1	YTD
Australian Capital Territory	10			0		0		0		0		0		0	
	09			0		0		0		0		0		0	
New South Wales	10			13		0		0		1		1		15	
	09			12		3		0		1		0		16	
Northern Territory	10			0		0		0		0		0		0	
	09			2		1		0		0		0		3	
Queensland	10			6		0		0		0		0		6	
	09			11		0		0		0		0		11	
South Australia	10			4		0		1		0		0		5	
	09			4		0		0		0		0		4	
Tasmania	10			1		0		0		0		1		2	
	09			0		0		0		0		0		0	
Victoria	10			3		0		1		1		0		5	
	09			5		1		0		0		2		8	
Western Australia	10			2		1		0		0		0		3	
	09			2		2		0		0		0		4	
Total	10			29		1		2		2		2		36	
	09	0		36		7		0		1		2		46	

Australian Sentinel Practices Research Network

The Australian Sentinel Practices Research Network (ASPREN) is a national surveillance system that is owned and operated by the Royal Australian College of General Practitioners and directed through the Discipline of General Practice at the University of Adelaide.

The network consists of general practitioners who report presentations on a number of defined medical conditions each week. ASPREN was established in 1991 to provide a rapid monitoring scheme for infectious diseases that can alert public health officials of epidemics in their early stages as well as play a role in the evaluation of public health campaigns and research of conditions commonly seen in general practice. Electronic data collection was established in 2006 and currently, further development of ASPREN is in progress to create an automatic reporting system.

The list of conditions is reviewed annually by the ASPREN management committee and an annual report is published. In 2009, four conditions are being monitored. They include influenza-like (ILI) illness, gastroenteritis and varicella infections (chickenpox and shingles). Definitions of these conditions are described in Surveillance systems reported in CDI, published in *Commun Dis Intell* 2010;34:82–83.

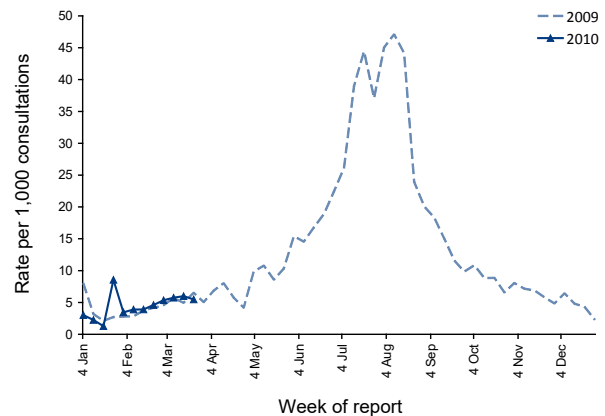
Data on influenza-like illness, gastroenteritis, chickenpox and shingles from 1 January to 31 March 2010 compared with 2009, are shown as the rate per 1,000 consultations in Figures 2, 3, 4 and 5, respectively.

Reporting period 1 January to 31 March 2010

Sentinel practices contributing to ASPREN were located in all jurisdictions other than the Northern Territory. A total of 98 general practitioners contributed data to ASPREN in the 1st quarter of 2010. Each week an average of 76 general practitioners provided information to ASPREN at an average of 7,334 (range 2,978 to 8,953) consultations per week and an average of 89 (range 29 to 120) notifications per week.

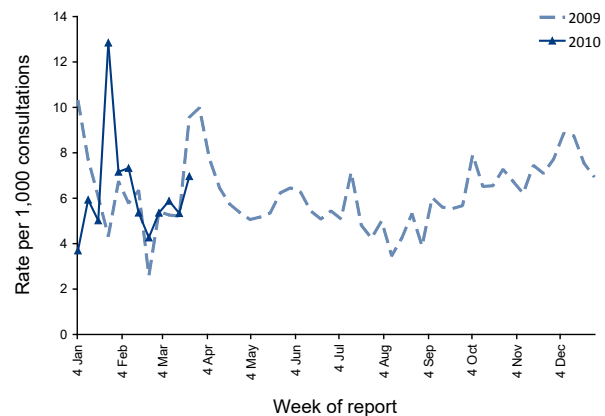
ILI rates reported from 1 January to 31 March 2010 were 1–9 cases per 1,000 consultations. The reported rates in January, February and March 2010 (1–9 cases per 1,000 consultations, 3–5 cases per 1,000 consultations and 5–6 cases per 1,000 consultations respectively) were relatively consistent compared with rates in the same reporting period in 2009 (2–8 cases per 1,000 consultations, 3–4 cases per 1,000 consultations and 5–7 cases per 1,000 consultations respectively) (Figure 2).

Figure 2: Consultation rates for influenza-like illness, ASPREN, 1 January 2009 to 31 March 2010, by week of report



During this reporting period, consultation rates for gastroenteritis ranged from 4 to 13 cases per 1,000 (Figure 3). This was slightly higher compared with the same reporting period in 2009 (3 to 10 cases per 1,000 consultations).

Figure 3: Consultation rates for gastroenteritis, ASPREN, 1 January 2009 to 31 March 2010, by week of report



Varicella infections were reported at a similar rate for the 1st quarter of 2010 compared with the same period in 2009. From 1 January to 31 March 2010, recorded rates for chickenpox were between 0 and 0.7 cases per 1,000 consultations (Figure 4).

In the 1st quarter of 2010, reported rates for shingles were between 0.3 and 1.9 cases per 1,000 consultations (Figure 5), slightly lower than the same reporting period in 2009 (0.3 to 2.6 cases per 1,000 consultations).

Figure 4: Consultation rates for chickenpox, ASPREN, 1 January 2009 to 31 March 2010, by week of report

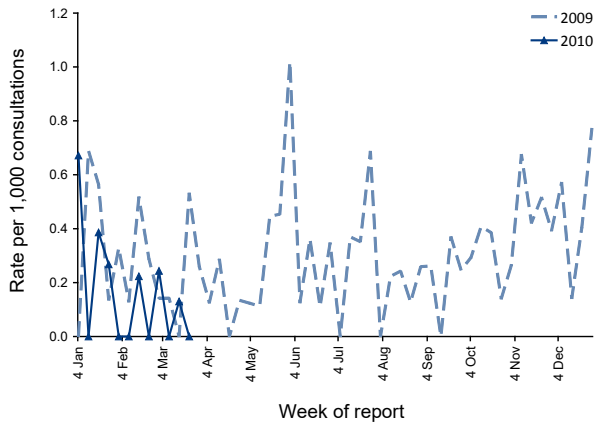


Figure 5: Consultation rates for shingles, ASPREN, 1 January 2009 to 31 March 2010, by week of report

