

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 49,583 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification received date between 1 July and 30 September 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 July to 30 September 2010, by date of diagnosis*

Disease	State or territory							Total 3rd quarter 2010†	Total 2nd quarter 2010	Total 3rd quarter 2009	Last 5 years mean 3rd quarter	Ratio‡	Year to date 2010	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	0.2
Hepatitis B (newly acquired)	1	11	1	16	2	2	15	8	56	57	65.0	0.9	187	202.6
Hepatitis B (unspecified)	36	760	35	278	75	11	403	196	1,794	1,856	1,706.8	1.1	5,587	4,969.4
Hepatitis C (newly acquired)	2	14	0	NN	8	1	22	17	64	94	98.6	0.6	254	294.6
Hepatitis C (unspecified)	61	1,107	48	690	82	75	638	241	2,942	3,079	2,920.4	1.0	8,991	8,736.6
Hepatitis D	0	3	0	7	0	0	3	0	13	7	9.6	1.4	24	28.2
Gastrointestinal diseases														
Botulism	0	0	0	0	0	0	0	0	0	0	0.2	0.0	0	1.0
Campylobacteriosis ^s	111	NN	36	1,217	447	146	1,126	545	3,628	3,382	3,695.2	1.0	11,204	11,619.0
Cryptosporidiosis	2	63	9	50	3	15	80	20	242	411	296.0	0.8	1,166	2,601.6
Haemolytic uraemic syndrome	0	1	0	1	0	0	1	0	3	1	2.4	1.3	7	11.8
Hepatitis A	0	16	1	7	1	3	29	3	60	48	66.0	0.9	210	232.6
Hepatitis E	0	4	0	2	0	0	2	0	8	11	6.0	1.3	30	25.6
Listeriosis	0	0	0	2	0	0	5	0	7	13	14.6	0.5	54	49.2
STEC, VTEC	0	4	0	4	5	0	3	2	18	11	16.6	1.1	62	69.0
Salmonellosis	25	570	107	398	171	37	449	265	2,022	2,936	1,500	1.5	8,991	6,550.8
Shigellosis	0	29	10	24	19	0	24	23	129	125	147.4	0.9	417	511.6
Typhoid	1	4	0	3	2	0	6	2	18	30	18.0	1.0	78	67.6
Quarantinable diseases														
Cholera	0	2	0	0	0	0	0	1	3	0	0.2	15.0	3	1.8
Highly pathogenic avian influenza in humans	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	0.0	0.0	0	0.0

Table 2: Notifications of diseases received by state and territory health authorities, 1 July to 30 September 2010, by date of diagnosis,* continued

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total 3rd quarter 2010†	Total 2nd quarter 2010	Total 3rd quarter 2009	Last 5 years mean 3rd quarter	Ratio†	Year to date 2010	Last 5 years YTD mean
Sexually transmissible infections															
Chlamydia infection†††	276	4,436	782	4,656	891	483	1,184	2,455	15,163	19,093	15,096	12,827.2	1.2	53,003	39,556.4
Donovanosis	0	0	0	1	0	0	0	0	1	0	0	1.0	1.0	1	4.2
Gonococcal infection**	10	556	557	486	63	3	415	357	2,447	2,610	1,696	1,803.0	1.4	7,401	6,107.8
Syphilis < 2 years duration**	2	61	7	41	7	0	40	16	174	273	346	282.6	0.6	746	846.4
Syphilis > 2 years or unspecified duration**	8	38	22	33	-	3	180	16	300	314	356	351.2	0.9	926	1,011.8
Syphilis - congenital**	0	0	0	1	0	0	0	0	1	1	1	1.0	1.0	3	7.0
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	4	0	3	0	0	1	0	8	6	2	5.2	1.5	17	15.2
Influenza (laboratory confirmed)	65	0	216	1,449	2,809	50	1,344	967	6,900	604	34,836	11,060.6	0.6	7,830	14,259.0
Measles	1	17	1	6	0	0	5	0	30	15	8	4.0	7.5	59	58.6
Mumps	0	6	0	5	1	0	4	1	17	24	34	81.4	0.2	59	220.8
Pertussis	113	1,849	92	2,306	1,861	59	1,511	478	8,269	5,248	6,516	3,813.6	2.2	19,054	10,007.6
Pneumococcal disease (invasive)	8	182	14	102	45	17	154	88	610	423	635	612.0	1.0	1,238	1,239.4
Polioyelitis	0	0	0	0	0	0	0	0	0	0	0	0.3	0.0	0	0.3
Rubella	0	2	0	2	0	0	9	0	13	12	7	11.4	1.1	40	30.8
Rubella - congenital	0	0	0	0	0	0	0	0	0	0	0	0.2	0.0	0	0.6
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0.4	0.0	1	2.2
Varicella zoster (chickenpox)	1	NN	25	153	83	5	61	154	482	319	452	478.5	1.0	1,073	1,080.8
Varicella zoster (shingles)	6	NN	27	28	244	44	94	150	593	680	636	450.8	1.3	2,045	1,373.3
Varicella zoster (unspecified)	24	NN	0	986	109	18	487	235	1,859	1,685	1,586	1,199.8	1.5	5,300	3,467.3
Vectorborne diseases															
Arbovirus infection (NEC)	0	0	0	8	0	0	3	0	11	1	4	4.6	2.4	15	22.2
Barmah Forest virus infection	0	32	7	157	5	1	4	13	219	382	270	310.2	0.7	1,052	1,398.0
Dengue virus infection	2	42	6	78	5	1	23	130	287	255	91	65.6	4.4	699	442.6
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	0	0	0	0	0	0	0	0	0	1	0	0.2	0.0	2	1.4
Malaria	1	46	1	22	3	0	23	10	106	97	149	156.6	0.7	303	511.2
Murray Valley encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	1.8
Ross River virus infection	0	69	73	271	47	1	34	57	552	1,908	832	591.6	0.9	4,067	3,699.2

Table 2: Notifications of diseases received by state and territory health authorities, 1 July to 30 September 2010, by date of diagnosis,* continued

Disease	State or territory							Total 3rd quarter 2010†	Total 2nd quarter 2010	Total 3rd quarter 2009	Last 5 years mean 3rd quarter	Ratio†	Year to date 2010	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic							
Zoonoses														
Anthrax	0	0	0	0	0	0	0	0	0	0	0.0	0.0	1	0.4
Australian bat lyssavirus	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Brucellosis	0	0	0	6	1	0	0	0	3	6	10.2	0.7	16	29.4
Leptospirosis	0	3	0	15	0	0	2	1	43	16	17.2	1.2	85	107.4
Lyssavirus (NEC)	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Ornithosis	0	1	0	0	0	0	3	0	8	18	29.2	0.1	23	92.0
Q fever	0	21	0	23	2	0	4	2	94	66	92.4	0.6	217	286.8
Tularaemia	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Other bacterial infections														
Legionellosis	2	16	2	9	5	1	13	14	84	74	68.8	0.9	205	229.6
Leprosy	0	0	0	0	0	0	1	1	2	1	1.8	1.1	6	7.0
Meningococcal infection††	1	25	2	14	7	1	13	9	58	86	115.0	0.6	173	236.8
Tuberculosis	5	69	5	83	9	4	106	33	299	349	303.4	1.0	908	839.2
Total	764	10,063	2,086	13,643	7,012	981	8,524	6,510	49,583	46,603	74,684		143,833	

* 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 Western Australia, exclude ocular infections.

** In the national case definitions for chlamydial, gonococcal and syphilis infections the mode of transmission cannot be inferred from the site of infection. Transmission (especially in children) may be by a non-sexual mode (e.g. perinatal infections, epidemic gonococcal conjunctivitis).

†† 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.

Table 3: Notification rates of diseases, 1 July to 30 September 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	0.6	1.8	1.5	0.5	1.6	1.1	1.4	1.0
Hepatitis B (unspecified)	41.0	42.8	62.3	25.2	18.5	8.8	29.7	35.0	32.8
Hepatitis C (newly acquired)	2.3	0.8	0.0	NN	2.0	0.8	1.6	3.0	1.5
Hepatitis C (unspecified)	69.5	62.4	85.4	62.6	20.2	59.7	47.0	43.1	53.8
Hepatitis D	0.0	0.2	0.0	0.6	0.0	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 [†]	126.4	NN	64.0	110.5	110.2	116.2	83.0	97.5	98.2
Cryptosporidiosis	2.3	3.5	16.0	4.5	0.7	11.9	5.9	3.6	4.4
Haemolytic uraemic syndrome	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1
Hepatitis A	0.0	0.9	1.8	0.6	0.2	2.4	2.1	0.5	1.1
Hepatitis E	0.0	0.2	0.0	0.2	0.0	0.0	0.1	0.0	0.1
Listeriosis	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.1
STEC, VTEC [‡]	0.0	0.2	0.0	0.4	1.2	0.0	0.2	0.4	0.3
Salmonellosis	28.5	32.1	190.4	36.1	42.2	29.4	33.1	47.4	37.0
Shigellosis	0.0	1.6	17.8	2.2	4.7	0.0	1.8	4.1	2.4
Typhoid	1.1	0.2	0.0	0.3	0.5	0.0	0.4	0.4	0.3
Quarantinable diseases									
Cholera	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.1
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 [§]	314.4	249.9	1,391.2	422.6	219.6	384.4	87.3	439.0	277.3
Donovanosis	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Gonococcal infection	11.4	31.3	990.9	44.1	15.5	2.4	30.6	63.8	44.7
Syphilis <2 years duration	9.1	2.1	39.1	3.0	-	2.4	13.3	2.9	5.9
Syphilis >2 years or unspecified duration	2.3	3.4	12.5	3.7	1.7	0.0	2.9	2.9	3.2
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	0.0	0.0	0.0	0.0	0.0	0.0
<i>Haemophilus influenzae</i> type b	0.0	0.2	0.0	0.3	0.0	0.0	0.1	0.0	0.1
Influenza (laboratory confirmed)	74.0	0.0	384.3	131.5	692.4	39.8	99.0	172.9	126.2
Measles	1.1	1.0	1.8	0.5	0.0	0.0	0.4	0.0	0.5
Mumps	0.0	0.3	0.0	0.5	0.2	0.0	0.3	0.2	0.3
Pertussis	128.7	104.2	163.7	209.3	458.7	47.0	111.4	85.5	151.2
Pneumococcal disease (invasive)	9.1	10.3	24.9	9.3	11.1	13.5	11.3	15.7	11.2
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 3: Notification rates of diseases, 1 July to 30 September 2010, by state or territory. (Annualised rate per 100,000 population), continued

Disease*	State or territory								
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aust
Vaccine preventable diseases, continued									
Rubella	0.0	0.1	0.0	0.2	0.0	0.0	0.7	0.0	0.2
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	0.0	0.0	0.0
Varicella zoster (chickenpox)	1.1	NN	44.5	13.9	20.5	4.0	4.5	27.5	13.0
Varicella zoster (shingles)	6.8	NN	48.0	2.5	60.1	35.0	6.9	26.8	16.1
Varicella zoster (unspecified)	27.3	NN	0.0	89.5	26.9	14.3	35.9	42.0	50.3
Vectorborne diseases									
Arbovirus infection (NEC)	0.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.2
Barmah Forest virus infection	0.0	1.8	12.5	14.3	1.2	0.8	0.3	2.3	4.0
Dengue virus infection	2.3	2.4	10.7	7.1	1.2	0.8	1.7	23.2	5.2
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	1.1	2.6	1.8	2.0	0.7	0.0	1.7	1.8	1.9
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	3.9	129.9	24.6	11.6	0.8	2.5	10.2	10.1
Zoonoses									
Anthrax	0.0	0.0	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	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.1
Leptospirosis	0.0	0.2	0.0	1.4	0.0	0.0	0.1	0.2	0.4
Lyssavirus (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	0.2	0.0	0.1
Q fever	0.0	1.2	0.0	2.1	0.5	0.0	0.3	0.4	1.0
Tularaemia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other bacterial infections									
Legionellosis	2.3	0.9	3.6	0.8	1.2	0.8	1.0	2.5	1.1
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Meningococcal infection	1.1	1.4	3.6	1.3	1.7	0.8	1.0	1.6	1.3
Tuberculosis	5.7	3.9	8.9	7.5	2.2	3.2	7.8	5.9	5.7

* 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 20,885 reports received by the Laboratory Virology and Serology Reporting Scheme (LabVISE) in the reporting period, 1 July to 30 September 2010 (Tables 4 and 5).

Table 4: Laboratory Virology and Serology reports, 1 July to 30 September 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	8	2	3	2	-	3	-	19	3	31	47
Mumps virus	-	-	-	2	5	-	1	-	8	9	17	39
Rubella virus	-	1	-	-	-	1	3	-	5	4	23	13
Hepatitis viruses												
Hepatitis A virus	-	-	1	7	1	-	1	1	11	11	45	39
Hepatitis D virus	-	-	-	1	5	-	-	1	7	-	13	14
Hepatitis E virus	-	-	-	-	-	-	-	1	1	2	4	5
Arboviruses												
Ross River virus	-	4	5	65	48	-	1	13	136	143	1,094	837
Barmah Forest virus	-	2	-	27	7	-	-	4	40	30	188	179
Dengue type 1	-	-	4	-	-	-	-	26	30	-	32	-
Dengue type 2	-	-	4	1	-	-	-	33	38	-	38	-
Dengue type 3	-	-	-	-	-	-	-	10	10	-	11	-
Dengue type 4	-	-	-	-	-	-	-	7	7	-	7	-
Dengue not typed	-	-	14	1	-	-	-	113	128	-	129	-
Kunjin virus	-	-	1	-	-	-	-	-	1	-	1	-
Flavivirus (unspecified)	1	18	-	25	1	-	18	-	63	36	183	207
Adenoviruses												
Adenovirus type 40	-	-	-	-	-	-	-	9	9	-	9	-
Adenovirus type 41	-	-	-	-	-	-	-	12	12	-	12	-
Adenovirus not typed/ pending	8	204	4	144	398	2	4	92	856	299	1,381	1,162
Herpes viruses												
Herpes virus type 6	-	1	-	-	-	-	-	1	2	1	4	2
Cytomegalovirus	4	86	-	155	146	5	10	-	406	198	1,126	834
Varicella-zoster virus	4	69	2	603	267	3	5	150	1,103	556	2,813	1,939
Epstein-Barr virus	1	15	41	312	279	1	14	114	777	424	2,333	1,584
Other DNA viruses												
<i>Molluscum contagiosum</i>	-	-	-	-	-	-	-	10	10	-	11	-
Contagious pustular dermatitis (Orf virus)	-	-	-	-	-	-	-	2	2	-	2	-
Parvovirus	-	1	4	51	47	-	17	6	126	48	287	170
Picornavirus family												
Rhinovirus (all types)	2	206	-	1	1,468	1	1	74	1,753	39	1,888	104
Enterovirus type 71 (BCR)	-	-	-	-	-	-	-	1	1	-	1	-
Enterovirus not typed/ pending	-	48	2	5	14	-	-	23	92	20	136	72
Picornavirus not typed	-	-	3	-	-	2	-	202	207	6	215	11
Ortho/paramyxoviruses												
Influenza A virus	6	130	14	286	2,287	3	77	169	2,972	2,959	3,336	6,179
Influenza A virus H1N1	-	3	-	-	-	2	-	2	7	90	7	96
Influenza A virus H3N2	-	-	1	-	-	-	-	34	35	3	35	4
Influenza B virus	-	15	1	36	76	1	3	220	352	126	413	268

Table 4: Laboratory Virology and Serology reports, 1 July to 30 September 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				
Ortho/paramyxoviruses, <i>cont'd</i>												
Newcastle disease virus	-	17	-	-	-	-	-	-	17	-	19	-
Parainfluenza virus type 1	-	4	-	6	56	-	-	10	76	12	177	23
Parainfluenza virus type 2	1	6	-	5	32	-	-	8	52	12	91	81
Parainfluenza virus type 3	-	81	-	38	278	-	1	111	509	157	585	320
Parainfluenza virus typing pending	-	-	-	-	-	1	-	-	1	1	1	2
Respiratory syncytial virus	2	421	2	99	737	19	2	350	1,632	572	3,088	2,516
Paramyxovirus (unspecified)	-	42	-	-	-	-	-	-	42	-	42	-
Other RNA viruses												
HTLV-1	-	-	-	-	19	-	-	2	21	-	66	142
Rotavirus	2	122	2	-	327	4	2	232	691	34	887	185
Calicivirus	-	-	7	-	-	-	-	218	225	-	226	-
Norwalk agent	-	43	-	-	302	-	-	-	345	46	924	78
Other												
<i>Chlamydia trachomatis</i> not typed	2	418	3	2,029	629	17	6	699	3,803	1,833	10,082	6,392
<i>Chlamydia pneumoniae</i>	-	-	-	-	-	-	-	2	2	3	33	9
<i>Chlamydia psittaci</i>	-	-	-	1	-	-	10	-	11	17	25	56
<i>Chlamydia</i> spp typing pending	-	18	-	-	-	-	-	-	18	10	31	16
<i>Chlamydia</i> species	-	-	-	-	-	-	3	-	3	1	5	8
<i>Mycoplasma pneumoniae</i>	1	11	16	66	239	2	103	214	652	249	1,207	823
<i>Mycoplasma hominis</i>	-	5	-	-	-	-	-	-	5	5	5	9
<i>Coxiella burnetii</i> (Q fever)	2	17	-	22	12	-	7	2	62	56	183	172
<i>Orientia tsutsuganushi</i>	-	-	-	1	-	-	1	2	4	-	4	-
<i>Rickettsia</i> - spotted fever group	-	4	-	15	-	1	-	2	22	23	61	99
<i>Rickettsia</i> spp - other	-	-	-	-	-	-	-	3	3	-	4	-
<i>Streptococcus</i> group A	-	7	-	179	-	-	51	1	238	164	640	479
<i>Brucella abortus</i>	-	-	-	-	2	-	-	-	2	-	2	1
<i>Brucella</i> species	-	1	-	10	-	-	-	-	11	2	15	11
<i>Bordetella pertussis</i>	4	51	-	831	1,496	-	126	101	2,609	620	5,775	3,554
<i>Legionella pneumophila</i>	-	1	-	4	2	-	8	2	17	6	29	26
<i>Legionella longbeachae</i>	-	-	1	-	-	-	-	8	9	1	17	11
<i>Legionella</i> species	-	2	-	2	-	-	5	2	11	9	33	22
<i>Cryptococcus</i> species	-	5	-	5	5	-	-	-	15	7	40	28
<i>Histoplasma capsulatum</i>	-	-	-	-	-	-	1	-	1	-	1	-
<i>Leptospira</i> species	-	-	-	6	3	-	-	-	9	8	33	33
<i>Treponema pallidum</i>	-	59	-	298	135	-	14	8	514	332	1,501	1,294
<i>Entamoeba histolytica</i>	-	-	-	2	-	-	-	2	4	5	10	6
<i>Toxoplasma gondii</i>	-	1	-	3	5	-	4	-	13	4	37	15
<i>Echinococcus granulosus</i>	-	-	-	-	3	-	3	4	10	-	15	14
Total	41	2,147	134	5,347	9,333	65	505	3,313	20,885	9,196	41,719	30,230

* Data presented are for reports with report 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 July to 30 September 2010,* by laboratory

State or territory	Laboratory	July 2010	August 2010	September 2010	Total
Australian Capital Territory	The Canberra Hospital	–	–	–	–
New South Wales	Institute of Clinical Pathology and Medical Research, Westmead	219	271	336	826
	New Children's Hospital, Westmead	189	125	200	514
	Repatriation General Hospital, Concord	–	–	–	–
	Royal Prince Alfred Hospital, Camperdown	19	30	32	81
	South West Area Pathology Service, Liverpool	176	111	132	419
Queensland	Queensland Medical Laboratory, West End	1,813	1,902	2,015	5,730
	Townsville General Hospital	–	–	–	–
South Australia	Institute of Medical and Veterinary Science, Adelaide	2,091	2,683	4,548	9,322
Tasmania	Northern Tasmanian Pathology Service, Launceston	14	26	17	57
	Royal Hobart Hospital, Hobart	–	–	–	–
Victoria	Australian Rickettsial Reference Laboratory	11	8	9	28
	Monash Medical Centre, Melbourne	–	–	–	–
	Royal Children's Hospital, Melbourne	86	59	74	219
	Victorian Infectious Diseases Reference Laboratory	66	63	86	215
Western Australia	PathWest Virology, Perth	942	1,115	1,255	3,312
	Princess Margaret Hospital, Perth	–	–	–	–
	Western Diagnostic Pathology	17	75	70	162
Total		5,643	6,468	8,774	20,885

* 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

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, 24 months and 5 years of age, for 3-month birth cohorts of children at the stated ages between 1 April and 30 June 2010. 'Fully immunised' refers to vaccines on the National Immunisation Program Schedule, but excludes rotavirus, pneumococcal conjugate, varicella, or meningococcal C conjugate vaccines, and is outlined in more detail below.

'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 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, 3 doses of polio vaccine, 3 or 4 doses of PRP-OMP containing Hib vaccine or 4 doses of any other 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.

A full description of the basic methodology used can be found in *Commun Dis Intell* 1998;22:36–37.

The National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases (NCIRS) provides commentary on the trends in ACIR data. For further information please contact NCIRS at: telephone +61 2 9845 1435, E-mail: brynleyh@chw.edu.au

The percentage of children 'fully immunised' at 12 months of age for Australia increased slightly by 0.2 percentage points to 91.7% (Table 1). There were no important changes in coverage for any individual vaccines due at 12 months of age or by jurisdiction.

The percentage of children 'fully immunised' at 24 months of age for Australia increased by 0.3 percentage points to 92.7 (Table 2). There were no important changes in coverage for any individual vaccines due at 24 months of age or by jurisdiction.

The percentage of children 'fully immunised' at 5 years of age for Australia decreased slightly by 0.5 percentage points, to sit currently at 89.1% (Table 3). There were no important changes in coverage for any individual vaccines due at 5 years of age or by jurisdiction.

The Figure 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 (till December 2007). This trend continued when the age of coverage calculation was changed from 6 years to 5 years in March 2008, and then increased further in the previous quarter as outlined in the previous report.

Table 1. Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 April to 30 June 2009; assessment date 30 September 2010

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,233	24,054	1,031	15,792	4,862	1,622	17,551	7,825	73,970
Diphtheria, tetanus, pertussis (%)	94.7	91.8	91.0	92.3	92.2	92.9	92.8	90.7	92.1
Poliomyelitis (%)	94.7	91.7	90.9	92.3	92.1	92.9	92.8	90.6	92.1
<i>Haemophilus influenzae</i> type b (%)	94.6	91.6	91.8	92.3	92.0	92.8	92.6	90.5	92.0
Hepatitis B (%)	94.2	91.5	90.7	92.1	91.7	92.8	92.3	90.3	91.8
Fully immunised (%)	94.2	91.4	90.5	92.1	91.6	92.7	92.2	90.3	91.7
Change in fully immunised since last quarter (%)	+2.0	+0.1	+0.2	+0.2	+0.3	+1.1	+0.1	+0.2	+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 April to 30 June 2008; assessment date 30 September 2010*

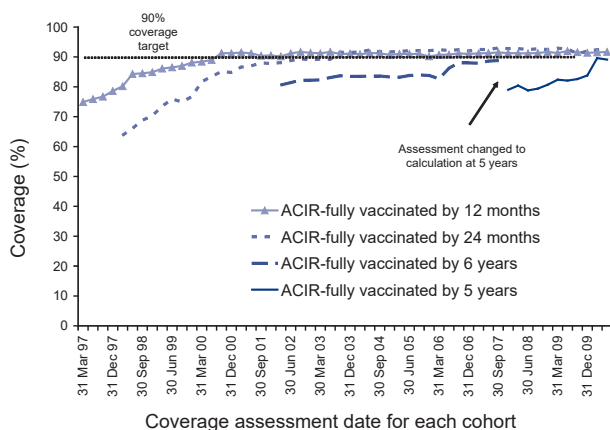
Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,160	23,847	944	15,723	4,813	1,589	17,323	7,840	73,239
Diphtheria, tetanus, pertussis (%)	97.2	95.0	96.7	94.8	94.6	95.0	95.7	94.2	95.1
Poliomyelitis (%)	97.1	94.9	96.6	94.8	94.6	95.0	95.6	94.2	95.0
<i>Haemophilus influenzae</i> type b (%)	96.8	95.1	92.7	94.8	94.6	95.1	95.4	93.5	94.9
Measles, mumps, rubella (%)	96.3	93.7	96.3	94.2	93.7	94.7	94.6	93.2	94.1
Hepatitis B (%)	96.1	94.5	96.5	94.3	94.2	95.0	95.1	93.5	94.6
Fully immunised (%)	94.9	92.4	92.0	92.8	92.4	93.8	93.4	90.3	92.6
Change in fully immunised since last quarter (%)	+1.1	-0.0	-1.5	+0.6	-0.0	+1.0	+0.3	-0.2	+0.2

* The 12 months age data for this cohort were published in *Commun Dis Intell* 2009;33(4):444.

Table 3. Percentage of children immunised at 5 years of age, preliminary results by disease and state or territory for the birth cohort 1 April to 30 June 2005; assessment date 30 September 2010

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,103	23,476	950	15,489	4,663	1,571	17,003	7,426	71,681
Diphtheria, tetanus, pertussis (%)	91.1	89.5	86.3	90.6	87.2	93.2	90.9	86.1	89.6
Poliomyelitis (%)	91.2	89.5	86.3	90.5	87.2	93.1	90.9	86.0	89.6
Measles, mumps, rubella (%)	91.1	89.3	85.8	90.6	87.1	93.3	90.7	86.0	89.5
Fully immunised (%)	90.7	89.0	85.4	90.0	86.7	92.7	90.4	85.3	89.1
Change in fully immunised since last quarter (%)	+1.7	-0.5	-2.0	-0.2	-0.4	+2.1	-0.7	-1.3	-0.5

Figure: Trends in vaccination coverage, Australia, 1997 to 30 April 2010, by age cohorts



Australian Sentinel Practices Research Network

The Australian Sentinel Practices Research Network (ASPREN) is a national surveillance system that is funded by the Commonwealth's Department of Health and Ageing, 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, web-based data collection was established in 2006.

In June 2010, ASPREN's laboratory ILI testing was implemented, allowing for viral testing of 25% of ILI

patients for a range of respiratory viruses including influenza A, influenza B and H1N1(2009).

The list of conditions is reviewed annually by the ASPREN management committee. In 2010, 4 conditions are being monitored. They include influenza-like illness (ILI), 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(1):83–84.

Reporting period 1 July to 30 September 2010

Sentinel practices contributing to ASPREN were located in all 8 jurisdictions in Australia. A total of 120 general practitioners contributed data to ASPREN in the 3rd quarter of 2010. Each week an average of 101 general practitioners provided information to ASPREN at an average of 9,821 (range 9,194–10,857) consultations per week and an average of 208 (range 149–292) notifications per week.

ILI rates reported from 1 July to 30 September 2010 averaged 14 cases per 1,000 consultations (range 9–19 cases per 1,000 consultations). The reported rates in July and August 2010 (10–11 cases per 1,000 consultations and 9–18 cases per 1,000 consultations, respectively) were significantly lower compared with rates in the same reporting period in 2009 (22–44 cases per 1,000 consultations and

21–45 cases per 1,000 consultations, respectively). ILI rates reported in September 2010 (15–19 cases per 1,000 consultations) were slightly higher than rates recorded in September 2009 (6–18 cases per 1,000 consultations) (Figure 1).

ILI swab testing commenced at the beginning of June 2010. The most commonly reported virus during this reporting period was influenza A H1N1(2009) (21% of all swabs performed), with rhinovirus the 2nd most commonly reported (9% of all swabs performed) (Figure 2). For the whole of

Figure 1: Consultation rates for influenza-like illness, ASPREN, 1 January 2009 to 30 September 2010, by week of report

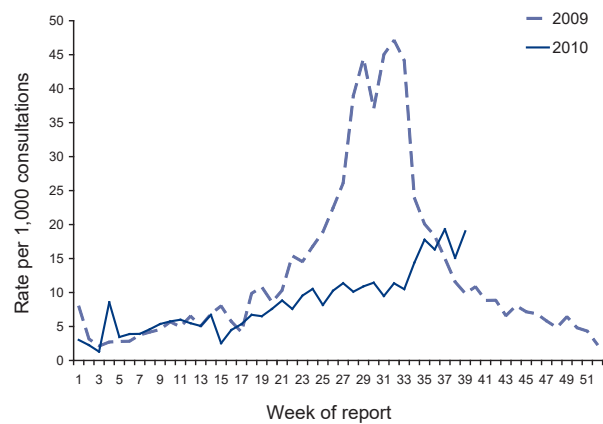
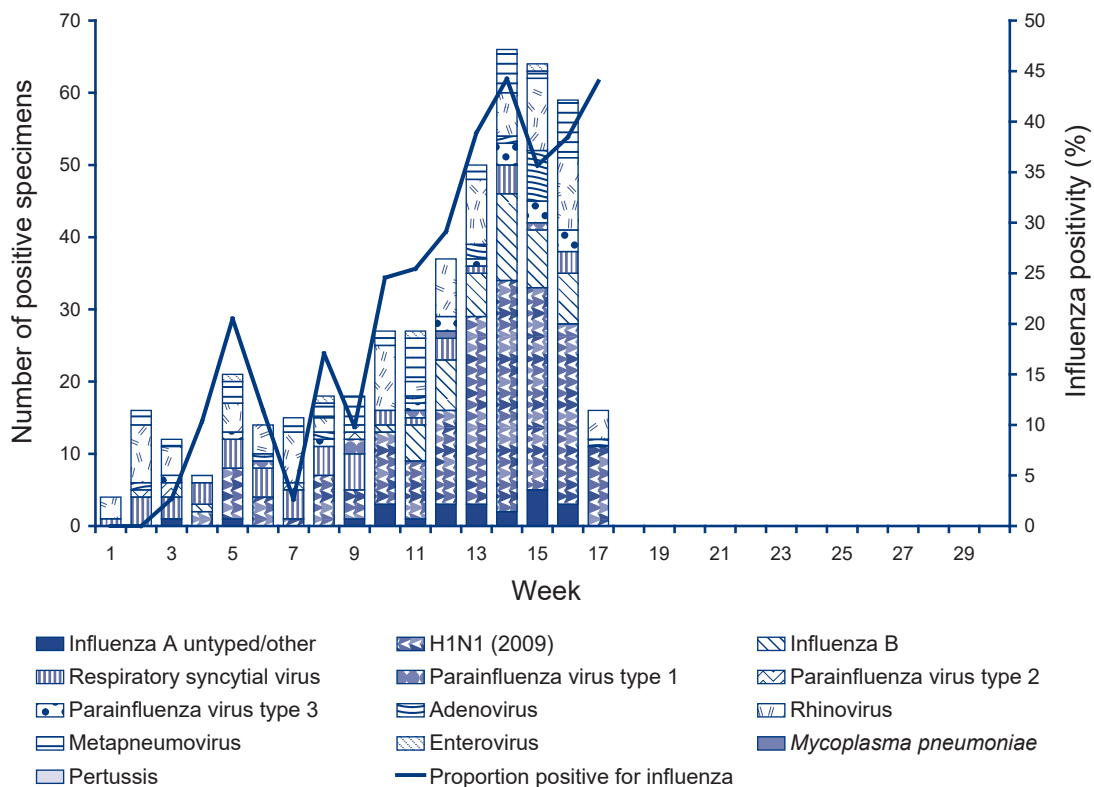


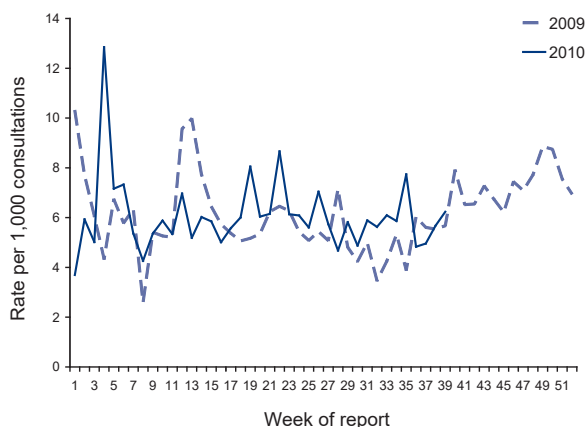
Figure 2: Influenza-like illness swab testing results, ASPREN, 1 June 2010 to 30 September 2010, by week of report



2010 to the end of week 39, 248 cases of influenza have been detected, the majority of these being H1N1(2009) (72% of all swabs performed) and the remainder were influenza B (19% of all swabs performed) and influenza A untyped or other (9% of all swabs performed).

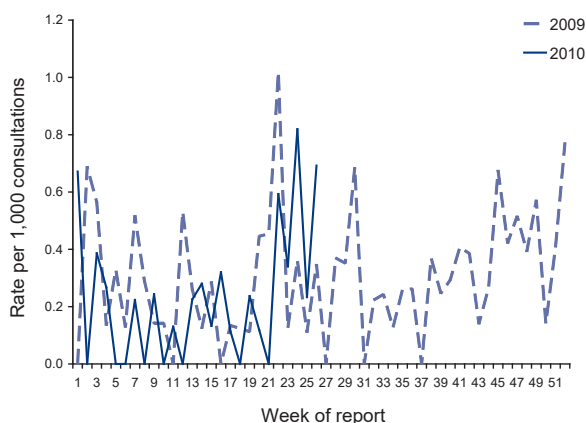
During this reporting period, consultation rates for gastroenteritis averaged 5.7 cases per 1,000 consultations (range 5–8 cases per 1,000, Figure 3). This was slightly higher compared with the same reporting period in 2009 where the average was 5.1 cases per 1,000 consultations (range 4–9 cases per 1,000).

Figure 3: Consultation rates for gastroenteritis, ASPREN, 1 January 2009 to 30 September 2010, by week of report



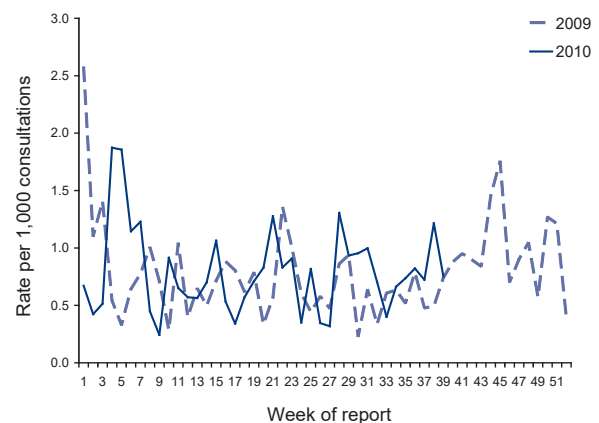
Varicella infections were reported at a slightly higher rate for the 3rd quarter of 2010 compared with the same period in 2009. From 1 July to 30 September 2010, recorded rates for chickenpox averaged 0.4 cases per 1,000 consultations (range 0.1–0.7 cases per 1,000 consultations, Figure 4).

Figure 4: Consultation rates for chickenpox, ASPREN, 1 January 2009 to 30 September 2010, by week of report



In the 3rd quarter of 2010, reported rates for shingles averaged 0.8 cases per 1,000 consultations (range 0.3–1.2 cases per 1,000 consultations, Figure 5), which was higher than the same reporting period in 2009 where the average shingles rate was 0.6 cases per 1,000 consultations (0.2–0.9 cases per 1,000 consultations).

Figure 5: Consultation rates for shingles, ASPREN, 1 January 2009 to 30 September 2010, by week of report



Gonococcal surveillance

Monica Lahra and John Tapsall, *The Prince of Wales Hospital, Randwick NSW 2031 for the Australian Gonococcal Surveillance Programme*

The Australian Gonococcal Surveillance Programme (AGSP) reference laboratories in the various states and territories report data on sensitivity to an agreed 'core' group of antimicrobial agents quarterly. The antibiotics currently routinely surveyed are penicillin, ceftriaxone, ciprofloxacin and spectinomycin, all of which are administered as single dose regimens and currently used in Australia to treat gonorrhoea. When *in vitro* resistance to a recommended agent is demonstrated in 5 per cent or more of isolates from a general population, it is usual to remove that agent from the list of recommended treatment.¹ Additional data are also provided on other antibiotics from time to time. At present all laboratories also test isolates for the presence of high level (plasmid-mediated) resistance to the tetracyclines, known as TRNG. Tetracyclines are however, not a recommended therapy for gonorrhoea in Australia. Comparability of data is achieved by means of a standardised system of testing and a program-specific quality assurance process. Because of the substantial geographic differences in susceptibility patterns in Australia, regional as well as aggregated data are presented. For more information see *Commun Dis Intell* 2010;34(1):82–83.

Reporting period 1 April to 30 June 2010

The AGSP laboratories received a total of 1,027 isolates in the 2nd quarter of 2010, which was an increase from the 796 isolates seen in the corresponding period in 2009. Of these, 1,011 remained viable for susceptibility testing. Of the total, 328 (32%) were from New South Wales, 232 (23%) from Victoria, 224 (22%) from Queensland, 93 (9%) from the Northern Territory, 87 (8.5%) from Western Australia and 52 (5%) from South Australia. There were 11 isolates from the Australian Capital Territory and no isolates from Tasmania. The number of isolates examined in this quarter in New South Wales, Queensland, South Australia and the Australian Capital Territory was increased, the number from Victoria was similar, and there was a decline in numbers examined in Western Australia and the Northern Territory.

Penicillins

In the 2nd quarter of 2010, 307 (30%) of all isolates examined were penicillin resistant by one or more mechanisms, which was proportionally similar to the 34% reported in the same quarter in 2009. One hundred and ninety-two (19%) were resistant by chromosomal mechanisms, (CMRP) and 115 (11%) were penicillinase-producing *Neisseria gonorrhoeae* (PPNG). When compared with the same quarter in 2009, the proportion of CMRP (14%) and PPNG (20%) were also similar.

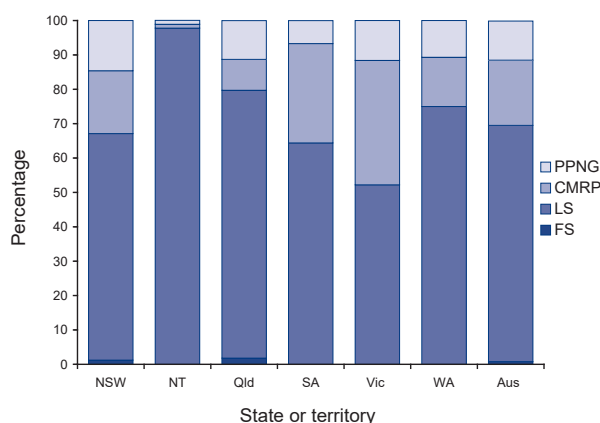
The proportion of all strains resistant to the penicillins by any mechanism ranged widely across all jurisdictions: Northern Territory 2.3%; Queensland 20%; Western Australia 25%; New South Wales 33%; South Australia 36% and Victoria 48%. There were 11 isolates from the Australian Capital Territory for this quarter and four were penicillin resistant. Of note, there was a decline in the proportion of penicillin resistance in New South Wales from the same quarter in 2009, from 49% to 33% in 2010. This decline was due to a reduction in CMRP from 30% to 18%.

Figure 1 shows the proportion of gonococci fully sensitive (MIC ≤ 0.03 mg/L), less sensitive (MIC 0.06–0.5 mg/L), CMRP (MIC ≥ 1 mg/L) or else PPNG aggregated for Australia and by state and territory. A high proportion of strains classified as PPNG or CMRP fail to respond to treatment with penicillins (penicillin, amoxycillin, ampicillin) and early generation cephalosporins.

Penicillin resistance due to CMRP predominated in isolates from Victoria (CMRP 36%: PPNG 12%), South Australia (CMRP 29%: PPNG 7%), New South Wales (CMRP 18%: PPNG 15%) and Western Australia (CMRP 14%: PPNG 11%). However,

PPNG were more prominent in Queensland (PPNG 11%: CMRP 9%). There was 1 CMRP and 1 PPNG detected in the Northern Territory, and in the Australian Capital Territory there were 2 CMRP and 2 PPNG.

Figure 1: Categorisation of gonococci isolated in Australia, 1 April to 30 June 2010, by penicillin susceptibility and state or territory



- FS Fully sensitive to penicillin, MIC ≤ 0.03 mg/L.
 LS Less sensitive to penicillin, MIC 0.06–0.5 mg/L.
 CMRP Chromosomally mediated resistant to penicillin, MIC ≥ 1 mg/L.
 PPNG Penicillinase producing *Neisseria gonorrhoeae*.

Ceftriaxone

Existing criteria: Decreased susceptibility to ceftriaxone (MIC range 0.06–0.12 mg/L)

Fifty-five isolates (5.4%) with decreased susceptibility to ceftriaxone (MIC range 0.06–0.12 mg/L) were detected nationally, which was a marked increase when compared with the same quarter in 2009 or the low numbers reported in previous years. There were 22 (6.7%) isolates in New South Wales, 12 (5.2%) in Victoria, 10 (22%) in South Australia, 9 (4%) in Queensland and one each from Western Australia, and the Australian Capital Territory.

This increase in gonococci showing decreased susceptibility to ceftriaxone was reported initially by the AGSP in the 1st quarter of 2010 when there were 62 isolates (6%) with MICs in the range 0.06–0.12 mg/L. This proportion remains similar nationally for the 2nd quarter of 2010.

New criteria: Decreased Susceptibility to ceftriaxone (MIC range 0.03–0.12 mg/L)

Whilst decreased susceptibility to ceftriaxone is yet to be associated with treatment failure in genital

infection, it is both increasing and of increasing concern globally. To better monitor this, the criteria for detecting gonococci with decreased susceptibility to ceftriaxone has been adjusted to include MIC \geq 0.03mg/L.²

In this quarter, data for ceftriaxone MIC \geq 0.03 mg/L were contributed from four jurisdictions (New South Wales; Queensland; Victoria and Western Australia) with 866 isolates examined. Using the new criteria (MIC range 0.03–0.12 mg/L), 164 isolates (19% of 866 gonococci) were detected. There were 72 (22%) in New South Wales, 48 (21%) in Victoria, 33 (15%) in Queensland and 11 (13%) in Western Australia.

From the 1st quarter of 2011 AGSP reports will report gonococci with a ceftriaxone MIC range 0.03–0.12mg/L as having decreased susceptibility.

Spectinomycin

All isolates were susceptible to this injectable agent.

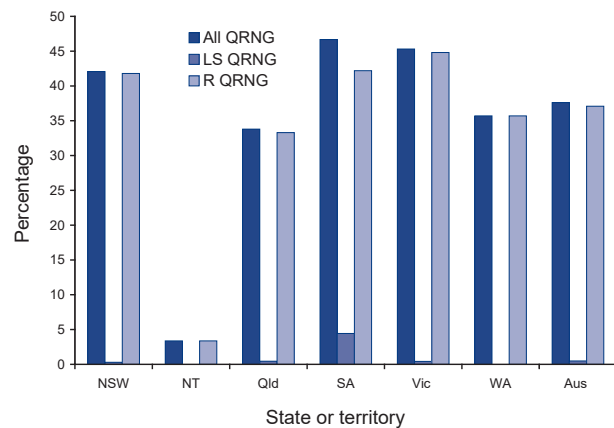
Quinolone antibiotics

Quinolone resistant *N. gonorrhoeae* (QRNG) are defined as those isolates with an MIC to ciprofloxacin equal to or greater than 0.06 mg/L. QRNG are further subdivided into less sensitive (ciprofloxacin MICs 0.06–0.5 mg/L) or resistant (MIC \geq 1 mg/L) groups.

There were a total of 380 (QRNG) in this quarter for 2010, representing 38% of all gonococci tested nationally. The proportion of QRNG was reduced when compared with the corresponding quarter in 2009: 44%, and 2008: 59%.

The majority of QRNG in the current period exhibit higher-level resistance (ciprofloxacin MICs \geq 1mg/L). QRNG were detected in all states and territories with the highest proportions in South Australia: 21 QRNG (47% of all isolates); Victoria: 105 QRNG (45% of all isolates); New South Wales 138 QRNG (42% of all isolates) (Figure 2). In Western Australia there were 30 QRNG (36%), and in Queensland there were 75 QRNG (34%). There were 8 QRNG isolates from the Australian Capital Territory, and three from the Northern Territory.

Figure 2: The distribution of quinolone resistant isolates of *Neisseria gonorrhoeae* in Australia, 1 April to 30 June 2010, by state or territory



LS QRNG Ciprofloxacin MICs 0.06–0.5 mg/L.

R QRNG Ciprofloxacin MICs \geq 1 mg/L.

High level tetracycline resistance

There were 218 (22%) high level tetracycline resistance (TRNG) detected nationally, which was proportionally unchanged from this same quarter in 2009 (165 TRNG: 21%). The highest proportions of TRNG in any jurisdiction were reported from the Northern Territory (37 TRNG: 42%), and the Australian Capital Territory (4 TRNG: 37%). The number and proportion in the other jurisdictions were New South Wales (83 TRNG: 25%); Western Australia (TRNG 18: 21%); Victoria (TRNG 36: 16%); South Australia (TRNG 7: 16%) and Queensland (TRNG 33: 15%)

Reference

1. Management of sexually transmitted diseases. World Health Organization 1997; Document WHO/GPA/TEM94.1 Rev.1 p 37.
2. University of New South Wales. The CDS Antibiotic Susceptibility Test. Available from: <http://web.med.unsw.edu.au/cdstest/>

HIV and AIDS surveillance

National surveillance for HIV disease is coordinated by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), in collaboration with State and Territory health authorities and the Commonwealth of Australia. Cases of HIV infection are notified to the National HIV Registry on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (Australian Capital Territory, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information. More detailed information on diagnoses of HIV infection and AIDS is published in the quarterly Australian HIV Surveillance Report, and annually in 'HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia, annual surveillance report'. The reports are available from the National Centre in HIV Epidemiology and Clinical Research, CFI Building, Cnr Boundary and West Streets, Darlinghurst NSW 2010. Internet: www.nchechr.unsw.edu.au Telephone: +61 2 9385 0900. Facsimile: +61 2 9385 0920. For more information see Commun Dis Intell 2010;34(1):84.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 October to 31 December 2009, are included in this issue of Communicable Diseases Intelligence (Tables 1 and 2).

Table 1: New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 October to 31 December 2009, by sex and state or territory of diagnosis

	Sex	State or territory								Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2009	This period 2008	YTD 2009	YTD 2008
HIV diagnoses	Female	0	11	0	2	5	1	6	6	31	28	139	137
	Male	1	83	2	47	10	0	67	11	221	208	909	864
	Not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total*	1	94	2	49	15	1	73	17	252	236	1,050	1,001
AIDS diagnoses [†]	Female	0	--	0	1	0	0	2	1	4	3	13	9
	Male	0	--	0	2	4	0	6	1	13	23	77	95
	Total*	0	--	0	3	4	0	8	2	17	26	90	104
AIDS deaths [†]	Female	0	--	0	0	0	0	0	0	0	0	2	1
	Male	0	--	0	0	0	0	1	0	1	10	7	25
	Total*	0	--	0	0	0	0	1	0	1	10	9	26

* Totals include people whose sex was reported as transgender.

† AIDS cases and deaths following AIDS occurring in New South Wales from January 2008 are not included.

Table 2: Number of new diagnoses of HIV infection since the introduction of HIV antibody testing 1985, and number of new diagnoses of AIDS and deaths following AIDS since 1981, cumulative to 31 December 2009, by sex and state or territory

	Sex	State or territory								Aust
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	36	1,010	30	355	125	17	465	263	2,301
	Male	283	14,480	158	3,251	1,066	127	6,012	1,396	26,773
	Not reported	0	228	0	0	0	0	22	0	250
	Total*	319	15,750	188	3,615	1,192	144	6,521	1,666	29,395
AIDS diagnoses [†]	Female	10	265	6	77	32	4	126	48	568
	Male	95	5,513	48	1,096	426	55	2,151	458	9,842
	Total*	105	5,796	54	1,175	459	59	2,290	508	10,446
AIDS deaths [†]	Female	7	138	1	43	20	2	66	30	307
	Male	73	3,597	33	679	280	34	1,449	301	6,446
	Total*	80	3,746	34	724	300	36	1,524	332	6,776

* Totals include people whose sex was reported as transgender.

† AIDS cases and deaths following AIDS occurring in New South Wales from January 2008 are not included.

Meningococcal surveillance

Monica Lahra and 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 cases confirmed by laboratory testing using culture and by non-culture based techniques. Culture positive cases, where *Neisseria meningitidis* is grown from a normally sterile site or skin lesions, and non-culture based diagnoses, derived from results of nucleic acid amplification assays (NAA) and serological techniques, are defined as invasive meningococcal disease (IMD) according to Public Health Laboratory Network definitions. Data contained in quarterly

reports are restricted to a description of the numbers of cases by jurisdiction and serogroup, where known. Some minor corrections to data in the Table may be made in subsequent reports if additional data are received. A full analysis of laboratory confirmed cases of IMD in each calendar year is contained in the annual reports of the Programme is published in *Communicable Diseases Intelligence*. For more information see *Commun Dis Intell* 2010;34:83.

Laboratory confirmed cases of invasive meningococcal disease for the period 1 April to 30 June 2010 and 1 July to 30 September 2010, are included in this issue of *Communicable Diseases Intelligence* (Tables 1 and 2).

Table 1: Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 April to 30 June 2010, by serogroup and state or territory

State or territory	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD	Q2	YTD
Australian Capital Territory	10			1	1	0	0	0	0	0	0	0	0	1	1
	09			3	3	0	0	0	0	0	0	0	0	3	3
New South Wales	10			8	21	2	2	0	0	1	2	1	2	12	27
	09			13	25	1	4	1	1	1	2	3	3	19	35
Northern Territory	10			0	0	0	0	0	0	0	0	0	0	0	0
	09			1	3	0	1	0	0	0	0	0	0	1	4
Queensland	10			17	23	1	1	0	0	1	1	0	0	19	25
	09			6	17	0	0	0	0	0	0	0	0	6	17
South Australia	10			6	10	0	0	0	1	0	0	0	0	6	11
	09			7	11	0	0	1	1	0	0	0	0	8	12
Tasmania	10			0	1	0	0	0	0	0	0	0	1	0	2
	09			1	1	0	0	0	0	0	0	0	0	1	1
Victoria	10			7	10	0	0	1	2	2	3	0	0	10	15
	09			5	10	0	1	0	0	0	0	0	2	5	13
Western Australia	10			2	5	0	1	1	1	0	0	0	0	3	7
	09			8	10	0	2	0	0	0	0	0	0	8	12
Total	10			41	71	3	4	2	4	4	6	1	3	51	88
	09			44	80	1	8	2	2	1	2	3	5	51	97

Table 2: Number of laboratory confirmed cases of invasive meningococcal disease, Australia, 1 July to 30 September 2010, by serogroup and state or territory

State or territory	Year	Serogroup													
		A		B		C		Y		W135		ND		All	
		Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD	Q3	YTD
Australian Capital Territory	10			1	2	0	0	0	0	0	0	0	0	1	2
	09			0	3	0	0	0	0	0	0	0	0	0	3
New South Wales	10			14	35	2	4	2	2	0	2	2	4	20	47
	09			24	49	3	7	2	3	2	4	0	3	31	66
Northern Territory	10			0	0	0	0	0	0	0	0	0	0	0	0
	09			0	3	0	1							0	4
Queensland	10			31	48	4	5	0	0	1	2	0	0	36	55
	09			19	36	0	0	1	1	0	0	2	2	22	39
South Australia	10			6	16	0	0	0	1	0	0	0	0	6	17
	09			4	15	0	0	1	2	0	0	0	0	5	17
Tasmania	10			0	1	0	0	0	0	0	0	0	1	0	2
	09			0	1	0	0	0	0	0	0	0	0	0	1
Victoria	10			12	32	0	0	0	2	0	3	0	0	12	37
	09			13	23	0	1					1	3	14	27
Western Australia	10			8	13	0	1	0	1	1	1	0	0	9	16
	09			6	16	0	2	1	1	0	0	0	0	7	19
Total	10			73	147	6	10	2	6	3	8	2	5	86	176
	09			66	146	3	11	5	7	2	4	3	8	79	176