

# 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 44,904 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification received date between 1 April and 30 June 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:
<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 <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:
<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) <sup>†</sup>	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

\* 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 April to 30 June 2010, by date of diagnosis\*

Disease	State or territory						Total 2nd quarter 2010†	Total 1st quarter 2010	Total 2nd quarter 2009	Last 5 years mean 2nd quarter	Ratio‡	Year to date 2010	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas							
<b>Bloodborne diseases</b>													
Hepatitis (NEC)	0	0	0	0	0	0	0	0	0	0.0	0	0	0.2
Hepatitis B (newly acquired)	0	7	3	14	5	1	15	11	66	71.0	126	137.6	
Hepatitis B (unspecified)	17	728	37	289	89	11	453	210	1,717	1,613.8	3,794	3,262.4	
Hepatitis C (newly acquired)	4	8	0	NN	5	7	52	20	100	99.6	190	196.8	
Hepatitis C (unspecified)	44	1,118	55	695	95	56	692	245	2,775	2,828.4	6,020	5,817.0	
Hepatitis D	0	0	0	2	0	0	3	0	13	8.8	9	18.6	
<b>Gastrointestinal diseases</b>													
Botulism	0	0	0	0	0	0	0	0	0	0.2	0	0	0.8
Campylobacteriosis§	102	NN	45	1,040	294	123	1,251	458	3,873	3,621.0	7,540	7,915.6	
Cryptosporidiosis	5	77	34	70	14	31	134	31	1,154	803.4	920	2,305.6	
Haemolytic uraemic syndrome	0	0	0	1	0	0	0	0	5	3.6	4	9.0	
Hepatitis A	0	13	0	12	0	1	14	8	166	89.0	150	166.6	
Hepatitis E	1	3	0	2	0	0	2	1	10	7.6	20	19.6	
Listeriosis	1	3	0	2	0	0	6	1	19	12.4	47	34.6	
STEC, VTEC	0	1	0	2	7	0	1	0	26	21.8	44	52.4	
Salmonellosis	32	894	163	715	150	46	531	333	2,222	2,070.8	6,936	5,175.2	
Shigellosis	2	22	25	20	10	3	15	27	168	160.8	287	364.2	
Typhoid	1	7	1	10	0	1	6	4	19	19.2	60	49.6	
<b>Quarantinable diseases</b>													
Cholera	0	0	0	0	0	0	0	0	1	0.6	0	1.6	
Highly pathogenic avian influenza in humans	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	
Rabies	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	
Smallpox	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	
Yellow fever	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 April to 30 June 2010, by date of diagnosis,\* continued**

Disease	State or territory								Total 2nd quarter 2010†	Total 1st quarter 2010	Total 2nd quarter 2009	Last 5 years mean 2nd quarter	Ratio†	Year to date 2010	Last 5 years YTD mean
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA							
<b>Sexually transmissible infections</b>															
Chlamydia infection¶	268	4,421	616	4,881	1,039	560	3,916	2,686	18,387	19,102	16,715	13,503.4	1.4	37,418	26,729.4
Donovanosis	0	0	0	0	0	0	0	0	0	0	1	1.6	0.0	0	3.2
Gonococcal infection	13	549	489	525	146	3	448	378	2,551	2,410	2,220	2,186.6	1.2	4,955	4,304.4
Syphilis < 2 years duration	2	60	17	48	9	2	41	26	205	297	338	294.2	0.7	503	563.4
Syphilis > 2 years or unspecified duration	3	49	26	50	NDP	2	161	10	301	310	357	334.0	0.9	611	659.8
Syphilis - congenital	0	0	0	1	0	0	0	0	1	1	0	3.4	0.3	2	6.0
<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	2	0	2	1	0	1	0	6	3	8	5.2	1.2	9	10.0
Influenza (laboratory confirmed)	9	0	28	263	45	14	140	89	588	332	11,713	2,837.4	0.2	919	3,198.8
Measles	0	2	0	2	1	0	1	9	15	14	9	27.2	0.6	29	54.6
Mumps	1	4	1	5	0	0	1	4	16	19	44	71.8	0.2	35	139.4
Pertussis	61	850	72	1,375	1,149	48	1,113	179	4,847	5,600	7,597	3,136.4	1.5	10,406	6,193.0
Pneumococcal disease (invasive)	8	132	11	76	36	10	110	32	415	209	400	413.2	1.0	623	629.0
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Rubella	1	1	0	1	0	0	5	3	11	16	8	12.6	0.9	27	19.4
Rubella - congenital	0	0	0	0	0	0	0	0	0	0	0	0.4	0.0	0	0.4
Tetanus	0	0	0	0	0	0	0	0	0	1	0	0.4	0.0	1	1.8
Varicella zoster (chickenpox)	1	NN	15	68	85	2	72	64	307	278	458	241.6	1.0	580	475.6
Varicella zoster (shingles)	5	NN	39	22	312	40	97	156	671	769	733	355.8	1.5	1,440	733.4
Varicella zoster (unspecified)	25	NN	2	938	78	19	385	225	1,672	1,805	1,697	893.2	1.5	3,457	1,825.4
<b>Vectorborne diseases</b>															
Arbovirus infection (NEC)	0	0	0	1	0	0	0	0	1	3	5	6.8	0.2	4	17.8
Barmah Forest virus infection	2	70	18	257	9	0	8	17	381	456	354	500.2	0.8	834	1,088.2
Dengue virus infection	7	20	9	57	4	2	18	118	235	157	193	93.8	2.5	391	376.6
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	1	0	0	0	0	0	1	1	0	0.4	2.5	2	1.2
Malaria	1	27	3	27	2	1	19	14	94	102	147	160.6	0.6	195	354.6
Murray Valley encephalitis virus infection	0	0	0	0	0	0	0	0	0	0	2	0.8	0.0	0	1.8
Ross River virus infection	4	420	64	1,070	87	6	148	63	1,862	1,645	1,526	1,132.4	1.6	3,502	3,110.2

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

Disease	State or territory								Total 2nd quarter 2010†	Total 1st quarter 2010	Total 2nd quarter 2009	Last 5 years mean 2nd quarter	Ratio‡	Year to date 2010	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	1	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	0.0
Brucellosis	0	0	0	3	0	0	0	0	3	5	9	8.0	0.4	8	19.2
Leptospirosis	0	3	0	36	0	0	1	1	41	21	49	40.2	1.0	62	90.2
Lyssavirus (NEC)	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
Ornithosis	0	2	0	0	1	3	0	0	6	11	17	33.6	0.2	17	62.8
Q fever	1	14	0	43	2	0	5	3	68	74	80	94.4	0.7	142	194.4
Tularaemia	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0.0
<b>Other bacterial infections</b>															
Legionellosis	0	23	0	15	5	1	26	6	76	62	99	82.6	0.9	138	160.8
Leprosy	0	0	0	1	0	0	1	0	2	1	0	2.2	0.9	3	5.2
Meningococcal infection**	0	13	0	20	5	1	14	3	56	44	63	65.4	0.9	100	121.8
Tuberculosis	2	75	5	61	13	2	106	21	285	305	272	262.6	1.1	587	537.4
<b>Total</b>	<b>623</b>	<b>9,618</b>	<b>1,779</b>	<b>12,722</b>	<b>3,698</b>	<b>996</b>	<b>10,012</b>	<b>5,456</b>	<b>44,904</b>	<b>48,510</b>	<b>57,448</b>			<b>93,148</b>	

\* 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.

NN Not notifiable.

NEC Not elsewhere classified.

NDP No data provided.

**Table 3: Notification rates of diseases, 1 April to 30 June 2010, 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	0.4	5.3	1.3	1.2	0.8	1.1	2.0	1.0
Hepatitis B (unspecified)	19.4	41.0	65.8	26.2	21.9	8.8	33.4	37.6	33.5
Hepatitis C (newly acquired)	4.6	0.5	0.0	NN	1.2	5.6	3.8	3.6	2.2
Hepatitis C (unspecified)	50.1	63.0	97.8	63.1	23.4	44.6	51.0	43.8	54.9
Hepatitis D	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.1
<b>Gastrointestinal diseases</b>									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis <sup>†</sup>	116.2	NN	80.1	94.4	72.5	97.9	92.2	81.9	89.7
Cryptosporidiosis	5.7	4.3	60.5	6.4	3.5	24.7	9.9	5.5	7.2
Haemolytic uraemic syndrome	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Hepatitis A	0.0	0.7	0.0	1.1	0.0	0.8	1.0	1.4	0.9
Hepatitis E	1.1	0.2	0.0	0.2	0.0	0.0	0.1	0.2	0.2
Listeriosis	1.1	0.2	0.0	0.2	0.0	0.0	0.4	0.2	0.2
STEC, VTEC <sup>‡</sup>	0.0	0.1	0.0	0.2	1.7	0.0	0.1	0.0	0.2
Salmonellosis	36.4	50.4	290.0	64.9	37.0	36.6	39.1	59.5	52.4
Shigellosis	2.3	1.2	44.5	1.8	2.5	2.4	1.1	4.8	2.3
Typhoid	1.1	0.4	1.8	0.9	0.0	0.8	0.4	0.7	0.5
<b>Quarantinable diseases</b>									
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
<b>Sexually transmissible infections</b>									
Chlamydial infection <sup>§</sup>	305.3	249.1	1,095.9	443.0	256.1	445.7	288.6	480.3	336.2
Donovanosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gonococcal infection	14.8	30.9	869.9	47.7	36.0	2.4	33.0	67.6	46.6
Syphilis <2 years duration	2.3	3.4	30.2	4.4	2.2	1.6	3.0	4.6	3.7
Syphilis >2 years or unspecified duration	3.4	2.8	46.3	4.5	0.0	1.6	11.9	1.8	5.5
Syphilis - congenital	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
<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	0.1	0.0	0.2	0.2	0.0	0.1	0.0	0.1
Influenza (laboratory confirmed)	10.3	0.0	49.8	23.9	11.1	11.1	10.3	15.9	10.8
Measles	0.0	0.1	0.0	0.2	0.2	0.0	0.1	1.6	0.3
Mumps	1.1	0.2	1.8	0.5	0.0	0.0	0.1	0.7	0.3
Pertussis	69.5	47.9	128.1	124.8	283.2	38.2	82.0	32.0	88.6
Pneumococcal disease (invasive)	9.1	7.4	19.6	6.9	8.9	8.0	8.1	5.7	7.6
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 April to 30 June 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	
<b>Vaccine preventable diseases, <i>continued</i></b>									
Rubella	1.1	0.1	0.0	0.1	0.0	0.0	0.4	0.5	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	26.7	6.2	21.0	1.6	5.3	11.4	8.3
Varicella zoster (shingles)	5.7	NN	69.4	2.0	76.9	31.8	7.1	27.9	18.2
Varicella zoster (unspecified)	28.5	NN	3.6	85.1	19.2	15.1	28.4	40.2	45.3
<b>Vectorborne diseases</b>									
Arbovirus infection (NEC)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Barmah Forest virus infection	2.3	3.9	32.0	23.3	2.2	0.0	0.6	3.0	7.0
Dengue virus infection	8.0	1.1	16.0	5.2	1.0	1.6	1.3	21.1	4.3
Japanese encephalitis virus infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kunjin virus infection	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
Malaria	1.1	1.5	5.3	2.5	0.5	0.8	1.4	2.5	1.7
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	4.6	23.7	113.9	97.1	21.4	4.8	10.9	11.3	34.0
<b>Zoonoses</b>									
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	0.3	0.0	0.0	0.0	0.0	0.1
Leptospirosis	0.0	0.2	0.0	3.3	0.0	0.0	0.1	0.2	0.7
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	0.2	2.4	0.0	0.0	0.1
Q fever	1.1	0.8	0.0	3.9	0.5	0.0	0.4	0.5	1.2
Tularaemia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Other bacterial infections</b>									
Legionellosis	0.0	1.3	0.0	1.4	1.2	0.8	1.9	1.1	1.4
Leprosy	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Meningococcal infection <sup>  </sup>	0.0	0.7	0.0	1.8	1.2	0.8	1.0	0.5	1.0
Tuberculosis	2.3	4.2	8.9	5.5	3.2	1.6	7.8	3.8	5.2

\* 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 10,640 reports received by the Laboratory Virology and Serology Reporting Scheme (LabWISE) in the reporting period, 1 April to 30 June 2010 (Tables 4 and 5).

**Table 4: Laboratory Virology and Serology reports, 1 April to 30 June 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				
<b>Measles, mumps, rubella</b>												
Measles virus	0	0	0	1	1	0	2	0	4	1	12	44
Mumps virus	0	0	0	1	2	0	0	0	3	4	9	30
Rubella virus	1	2	0	0	0	0	6	0	9	2	18	9
<b>Hepatitis viruses</b>												
Hepatitis A virus	0	0	0	11	3	0	0	4	18	6	34	28
Hepatitis D virus	0	0	0	1	1	0	0	0	2	4	6	14
Hepatitis E virus	0	1	0	1	0	0	0	0	2	–	3	3
<b>Arboviruses</b>												
Ross River virus	0	22	10	470	90	0	5	3	600	108	955	694
Barmah Forest virus	0	7	0	60	12	0	0	0	79	23	148	149
Flavivirus (unspecified)	0	15	0	38	0	0	8	0	61	13	120	171
<b>Adenoviruses</b>												
Adenovirus not typed/pending	0	87	0	74	125	0	2	0	288	222	510	863
<b>Herpesviruses</b>												
Herpes virus type 6	0	0	0	0	0	0	1	0	1	1	2	1
Cytomegalovirus	1	22	0	120	154	2	7	0	306	90	700	636
Varicella-zoster virus	0	42	0	502	285	6	8	1	844	303	1,655	1,383
Epstein-Barr virus	0	6	26	309	247	2	16	82	688	191	1,554	1,160
<b>Other DNA viruses</b>												
Parvovirus	0	2	0	21	45	0	16	0	84	29	157	122
<b>Picornavirus family</b>												
Rhinovirus (all types)	0	50	1	0	0	0	0	0	51	19	101	65
Enterovirus not typed/pending	0	1	0	3	13	1	0	0	18	5	37	52
Picornavirus not typed	0	0	0	0	0	6	0	0	6	–	8	5
<b>Ortho/paramyxoviruses</b>												
Influenza A virus	3	27	0	81	65	0	26	0	202	2,630	350	3,220
Influenza B virus	0	4	0	13	14	0	2	0	33	60	56	142
Newcastle Disease virus	0	1	0	0	0	0	0	0	1	–	2	–
Parainfluenza virus type 1	2	16	0	8	4	0	0	0	30	3	100	11
Parainfluenza virus type 2	0	7	0	9	5	0	0	0	21	24	39	69
Parainfluenza virus type 3	0	12	0	4	24	0	0	0	40	74	73	163
Respiratory syncytial virus	1	520	0	171	485	1	2	0	1,180	931	1,425	1,944

**Table 4: Laboratory Virology and Serology reports, 1 April to 30 June 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				
<b>Other RNA viruses</b>												
HTLV-1	0	0	0	1	24	0	0	0	25	13	42	142
Rotavirus	0	6	0	0	165	0	1	0	172	37	188	151
Norwalk agent	0	26	0	0	241	6	0	0	273	7	578	32
<b>Other</b>												
<i>Chlamydia trachomatis</i> not typed	2	85	1	2,067	782	19	10	0	2,966	918	6,033	4,559
<i>Chlamydia pneumoniae</i>	0	0	0	1	0	0	0	0	1	2	1	6
<i>Chlamydia psittaci</i>	0	0	0	2	0	1	2	0	5	5	13	39
<i>Chlamydia</i> spp typing pending	0	8	0	0	0	0	0	0	8	–	13	6
<i>Chlamydia</i> species	0	0	0	0	0	0	1	0	1	–	2	7
<i>Mycoplasma pneumoniae</i>	0	4	0	56	96	4	111	0	271	127	547	574
<i>Coxiella burnetii</i> (Q fever)	3	0	0	18	16	0	4	0	41	18	72	116
<i>Rickettsia prowazeki</i>	0	0	0	0	2	0	0	0	2	–	3	8
<i>Rickettsia</i> - spotted fever group	0	0	0	7	2	0	1	0	10	7	20	75
<i>Streptococcus</i> group A	0	9	0	176	0	0	41	0	226	84	402	315
<i>Brucella</i> species	0	0	0	1	0	0	0	0	1	1	4	9
<i>Bordetella pertussis</i>	0	15	0	451	910	1	185	1	1,563	529	3,136	2,934
<i>Legionella pneumophila</i>	0	0	0	1	4	1	2	0	8	8	12	20
<i>Legionella longbeachae</i>	0	0	0	0	2	0	1	0	3	3	8	10
<i>Legionella</i> species	0	3	0	8	0	0	0	0	11	4	21	13
<i>Cryptococcus</i> species	0	0	0	6	2	0	0	0	8	5	23	21
<i>Leptospira</i> species	0	0	0	8	1	0	0	0	9	2	24	25
<i>Treponema pallidum</i>	0	57	0	265	109	0	11	0	442	177	970	962
<i>Entamoeba histolytica</i>	0	0	0	2	0	0	1	0	3	1	6	1
<i>Toxoplasma gondii</i>	0	0	0	6	7	0	3	0	16	1	21	11
<i>Echinococcus granulosus</i>	0	0	0	0	2	0	2	0	4	3	5	14
<b>Total</b>	<b>13</b>	<b>1,057</b>	<b>38</b>	<b>4,974</b>	<b>3,940</b>	<b>50</b>	<b>477</b>	<b>91</b>	<b>10,640</b>	<b>6,695</b>	<b>20,218</b>	<b>21,028</b>

\* 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 April to 30 June 2010,\* by laboratory**

State or territory	Laboratory	April 2010	May 2010	June 2010	Total
Australian Capital Territory	The Canberra Hospital	–	–	–	–
New South Wales	Institute of Clinical Pathology and Medical Research, Westmead	–	–	–	–
	New Children's Hospital, Westmead	122	112	189	423
	Repatriation General Hospital, Concord	–	–	–	–
	Royal Prince Alfred Hospital, Camperdown	–	–	–	–
	South West Area Pathology Service, Liverpool	83	114	159	356
Queensland	Queensland Medical Laboratory, West End	1,677	1,832	1,800	5,309
	Townsville General Hospital	–	–	–	–
South Australia	Institute of Medical and Veterinary Science, Adelaide	1,009	1,303	1,623	3,935
Tasmania	Northern Tasmanian Pathology Service, Launceston	15	13	20	48
	Royal Hobart Hospital, Hobart	–	–	–	–
Victoria	Australian Rickettsial Reference Laboratory	–	–	–	–
	Monash Medical Centre, Melbourne	–	–	–	–
	Royal Children's Hospital, Melbourne	76	96	84	256
	Victorian Infectious Diseases Reference Laboratory	58	60	69	187
Western Australia	PathWest Virology, Perth	–	–	–	–
	Princess Margaret Hospital, Perth	–	–	–	–
	Western Diagnostic Pathology	25	47	54	126
<b>Total</b>		<b>3,065</b>	<b>3,577</b>	<b>3,998</b>	<b>10,640</b>

\* 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 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 January and March 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 three 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, 3 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.

A full description of the basic methodology used can be found in CDI 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, Email: brynleyh@chw.edu.au

The percentage of children 'fully immunised' at 12 months of age for Australia increased slightly by 0.1 of a percentage point to 91.5% (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 0.4 percentage points to 92.4 (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 increased considerably, by 5.8 percentage points, to sit currently at 89.6% (Table 3). There were important changes in coverage for all individual vaccines assessed at 5 years of age and for all jurisdictions. The increases by jurisdiction ranged from 1.7 percentage points in the Australian Capital Territory to 8 percentage points in Queensland. These are the greatest quarter to quarter increases in coverage for any vaccine and at any age milestone since the inception of the ACIR. These increases are most likely due to a combination of recent developments designed to improve the timeliness of pre-school vaccines. They were:

1. the change to the overdue rules, where 4 year olds are now overdue at 4 years and 1 month instead of 5 years,

**Table 1: Percentage of children immunised at 1 year of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 2009; assessment date 30 June 2010**

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,172	23,898	975	15,576	4,917	1,563	17,335	7,697	73,133
Diphtheria, tetanus, pertussis (%)	93.2	91.7	91.6	92.3	91.9	92.2	92.7	90.5	92.0
Poliomyelitis (%)	93.2	91.7	91.6	92.3	91.9	92.1	92.7	90.5	92.0
<i>Haemophilus influenzae</i> type b (%)	93.0	91.5	93.5	92.1	91.7	91.9	92.5	90.3	91.8
Hepatitis B (%)	92.3	91.4	91.5	92.0	91.4	91.9	92.2	90.3	91.6
Fully immunised (%)	92.2	91.3	90.3	91.9	91.3	91.7	92.1	90.1	91.5
Change in fully immunised since last quarter (%)	-0.6	-0.5	+0.9	+0.4	+0.7	-1.3	+0.1	+0.9	+0.0

**Table 2: Percentage of children immunised at 2 years of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 2008; assessment date 30 June 2010\***

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,188	24,333	972	15,823	4,940	1,619	17,966	8,019	74,860
Diphtheria, tetanus, pertussis (%)	95.8	94.9	96.7	94.5	94.7	94.7	95.4	93.9	94.9
Poliomyelitis (%)	95.7	94.9	96.6	94.5	94.6	94.6	95.4	93.8	94.8
<i>Haemophilus influenzae</i> type b (%)	95.4	95.1	94.6	94.3	94.4	94.6	95.1	93.2	94.7
Measles, mumps, rubella (%)	94.9	93.8	95.2	93.8	93.9	94.5	94.5	92.8	93.9
Hepatitis B (%)	95.1	94.5	96.1	94.0	94.3	94.2	94.7	93.2	94.3
Fully immunised (%)	93.8	92.5	93.4	92.2	92.5	92.8	93.0	90.5	92.4
Change in fully immunised since last quarter (%)	-0.1	+0.2	+1.4	+0.6	+1.0	-0.7	+0.4	+0.6	+0.4

\* The 12 months age data for this cohort were published in *Commun Dis Intell* 2009;34(3):360.

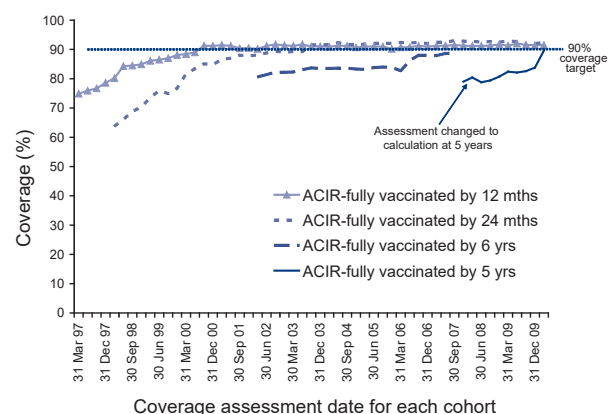
**Table 3: Percentage of children immunised at 5 years of age, preliminary results by disease and state or territory for the birth cohort 1 January to 31 March 2005; assessment date 30 June 2010**

Vaccine	State or territory								Aust
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,124	22,746	869	14,854	4,652	1,442	16,244	7,308	69,239
Diphtheria, tetanus, pertussis (%)	90.0	90.0	88.0	91.0	87.6	91.1	91.6	87.5	90.2
Poliomyelitis (%)	90.1	90.0	88.0	90.9	87.6	91.0	91.6	87.5	90.1
Measles, mumps, rubella (%)	89.2	89.8	87.7	90.7	87.5	91.0	91.4	87.1	89.9
Fully immunised (%)	89.0	89.5	87.3	90.2	87.2	90.6	91.2	86.6	89.6
Change in fully immunised since last quarter (%)	+2.7	+6.5	+4.1	+8.0	+6.1	+6.2	+3.9	+4.3	+5.8

- the accompanying reminder letter sent out by Medicare Australia informing parents of these changes, and
- individual jurisdictional efforts to follow-up overdue children in the cohort.

Also, since October 2009 it has been recommended that the 4th dose of DTPa vaccine can be given from 3½ years of age, instead of the previously recommended 4 years (<http://www.health.gov.au/internet/immunise/publishing.nsf/Content/atagi-meet41bulletin>).

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 to 5 years in March 2008, and then increased further in the last quarter as outlined above.

**Figure: Trends in vaccination coverage, Australia, 1997 to 31 March 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 April 2010, the Northern Territory's Tropical Influenza Surveillance Scheme became affiliated with ASPREN, being the last jurisdiction to complete the national picture. June 2010 saw ASPREN's long awaited laboratory ILI testing 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.*

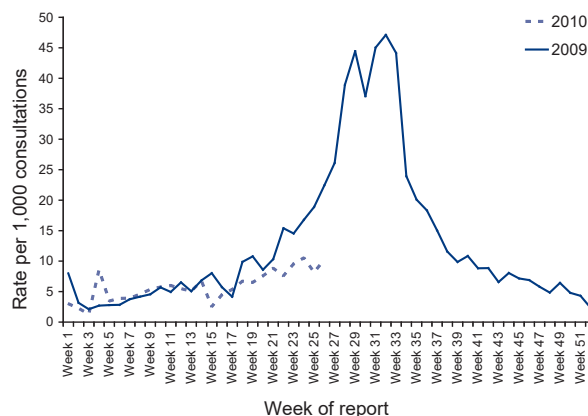
### Reporting period 1 April to 30 June 2010

Sentinel practices contributing to ASPREN were located in all 8 jurisdictions in Australia. A total of 111 general practitioners contributed data to ASPREN in the 2nd quarter of 2010. Each week an average of 87 general practitioners provided information to ASPREN at an average of 8,372 (range 6,996–9,378) consultations per week and an average of 125 (range 77–159) notifications per week.

ILI rates reported from 1 April to 30 June 2010 averaged 7 cases per 1,000 consultations (range 1–9 cases per 1,000 consultations). The reported rates in April, May and June 2010 (3–7 cases per 1,000 consultations, 7–9 cases per 1,000 consultations and 8–11 cases per 1,000 consultations

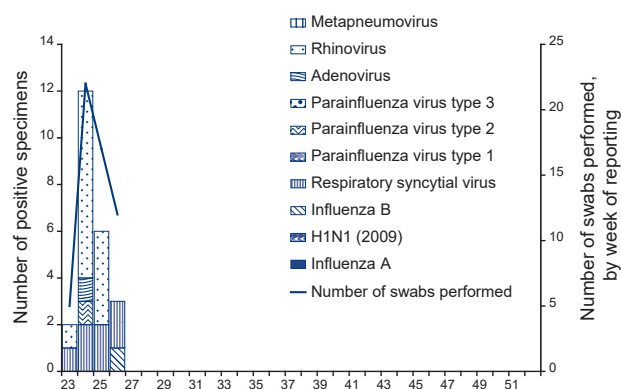
respectively) were slightly lower compared with rates in the same reporting period in 2009 (5–8 cases per 1,000 consultations, 9–15 cases per 1,000 consultations and 15–22 cases per 1,000 consultations respectively) (Figure 1).

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



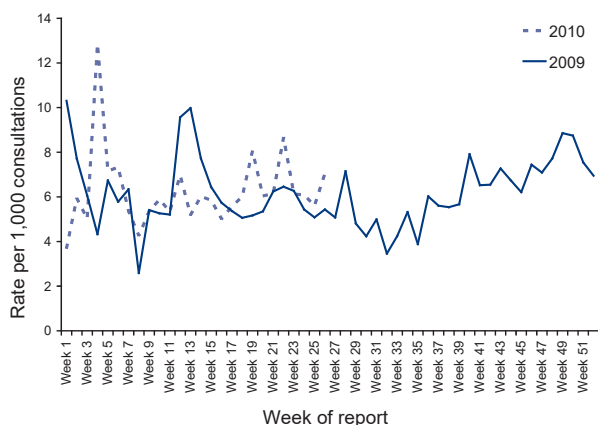
ILI swab testing commenced at the beginning of June 2010. The most commonly reported virus was rhinovirus (23% of all swabs performed), with respiratory syncytial virus the second most commonly reported (13% of all swabs performed) (Figure 2). To the end of week 26 2010, only 1 case of influenza has been detected, this being influenza B (untyped).

**Figure 2: Influenza-like illness swab testing results, ASPREN, June 2010, by week of report**

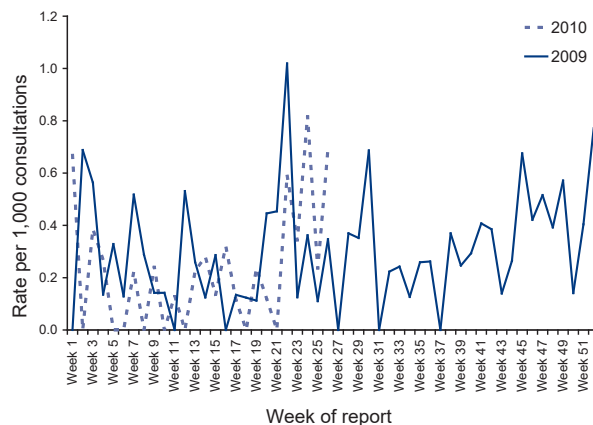


During this reporting period, consultation rates for gastroenteritis averaged 6.2 cases per 1,000 consultations (range 5–8 cases per 1,000, Figure 3). This was slightly lower compared with

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



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

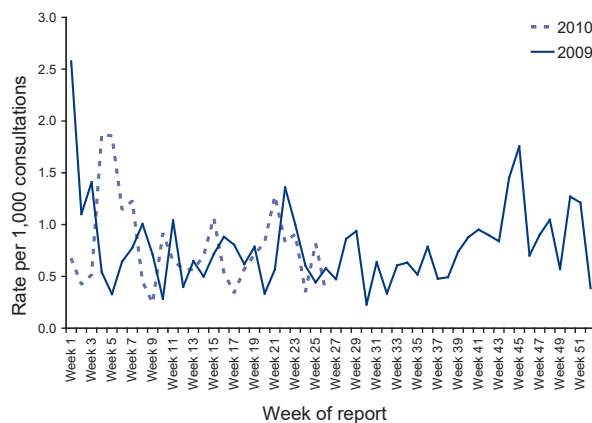


the same reporting period in 2009 when the average was 6.1 cases per 1,000 consultations (range 5–10 cases per 1,000 consultations).

Varicella infections were reported at a slightly higher rate for the 2nd quarter of 2010 compared with the same period in 2009. From 1 April to 30 June 2010, recorded rates for chickenpox averaged 0.3 cases per 1,000 consultations (range 0–0.8 cases per 1,000 consultations, Figure 4).

In the 2nd quarter of 2010, reported rates for shingles averaged 0.7 cases per 1,000 consultations (range 0.3–1.3 cases per 1,000 consultations, Figure 5), similar to the same reporting period in 2009 when the average shingles rate was also 0.7 cases per 1,000 consultations (0.3–1.4 cases per 1,000 consultations).

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



## Gonococcal surveillance

Monica Labra 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.<sup>1</sup> 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;34:82–83.

### Reporting period 1 January to 31 March 2010

The AGSP laboratories received a total of 1,056 isolates in this quarter of which 1,023 underwent susceptibility testing. This number is 181 more than the 875 isolates reported in this period in 2009. About 36% of this total was from New South Wales, 22% from Victoria, 17% from Queensland, 9% each from Western Australia and the Northern Territory and 6% from South Australia. A small number of isolates were also received from Tasmania and the Australian Capital Territory.

### Penicillins

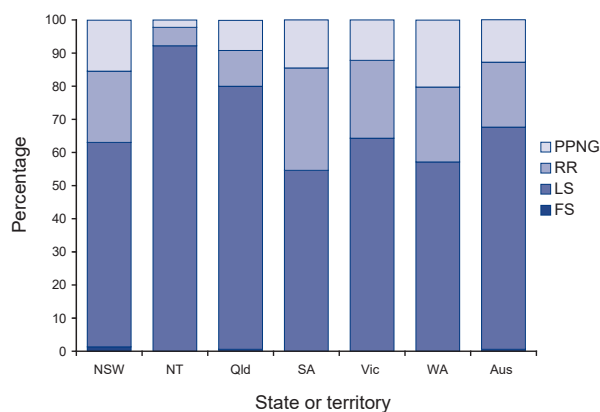
In this quarter 331 (32%) of all isolates examined were penicillin resistant by one or more mechanisms. One hundred and thirty-one (13%) were penicillinase producing *Neisseria gonorrhoeae* (PPNG) and 200 (20%) were penicillin resistant by chromosomal mechanisms, (CMRP). The proportion of all strains resistant to the penicillins by any mechanism ranged from 3.3% in locally-acquired disease in the Northern Territory to 46% in South Australia.

In the Northern Territory there were a further 4 cases of penicillin resistant gonococci (2 PPNG and 2 CMRP) that were acquired in South East Asia (Singapore, Korea, the Philippines, and Thailand).

In this quarter in 2009, 39% of isolates were penicillin resistant by any mechanism, part of a trend of a decrease in proportion of penicillin resistant by any mechanism from over the past few years (2008:45%; and 2007:39%). The decrease in penicillin resistant strains to below 2007 proportions was the result of decreased numbers of gonococci with chromosomally mediated resistance.

Figure 1 shows the proportions of gonococci fully sensitive (MIC  $\leq$  0.03 mg/L), less sensitive (MIC 0.06–0.5 mg/L), chromosomally mediated resistance (CMRP) (MIC  $\geq$  1 mg/L) and penicillinase producing aggregated for Australia and by state or territory. A high proportion of those strains classified as PPNG or else resistant by chromosomal mechanisms fail to respond to treatment with penicillins (penicillin, amoxycillin, ampicillin) and early generation cephalosporins.

**Figure 1: Categorisation of gonococci isolated in Australia, 1 January to 31 March 2010, by penicillin susceptibility and region**



- FS Fully sensitive to penicillin, MIC  $\leq$  0.03 mg/L.  
 LS Less sensitive to penicillin, MIC 0.06–0.5 mg/L.  
 RR Relatively resistant to penicillin, MIC  $\geq$  1 mg/L.  
 PPNG Penicillinase producing *Neisseria gonorrhoeae*.

The highest number of PPNG and CMRP were found in New South Wales where there were 81 CMRP (22%) and 58 PPNG (15%). Victoria had 54 (24%) CMRP and 28 (12%) PPNG. In Queensland there were 19 CMRP (11%) and 16 PPNG (9%). and in Western Australia there were 19 CMRP, (22.6%) and 17 PPNG (20%). In the same quarter in 2009 in both Queensland and

Western Australia, there were more CMRP isolates reported than PPNGs for this period. Five CMRP and 2 PPNG strains were found in the Northern Territory. There were 2 CMRP and 1 PPNG in the Australian Capital Territory and 3 CMRP and 1 PPNG reported from Tasmania. Of note was the increase in penicillin resistant strains in South Australia in this quarter, from 36.5% in 2009 to 46% in 2010 comprising 17 CMRP (31%) and 8 PPNG (15%). Corresponding proportions in 2008 were 70.7% CMRP and 5% PPNG.

### Ceftriaxone

Sixty-two isolates with decreased susceptibility to ceftriaxone (MIC range 0.06–0.12 mg/L) were detected nationally, 25 in New South Wales, 13 in Western Australia, 10 in South Australia, eight in Queensland, six in Victoria, and one in the Australian Capital Territory. This compares with 10 in the 1st quarter of 2009. This increase in the proportion of isolates with decreased susceptibility to ceftriaxone (MIC  $\geq$  0.06 mg/L) represents a microbiological warning regarding the raised MIC, which has yet to be reported to be associated with treatment failure in genital infection. It is possible that the increase is 'clonal' and parallels the increase in isolates for this quarter when compared with 2009.

### Spectinomycin

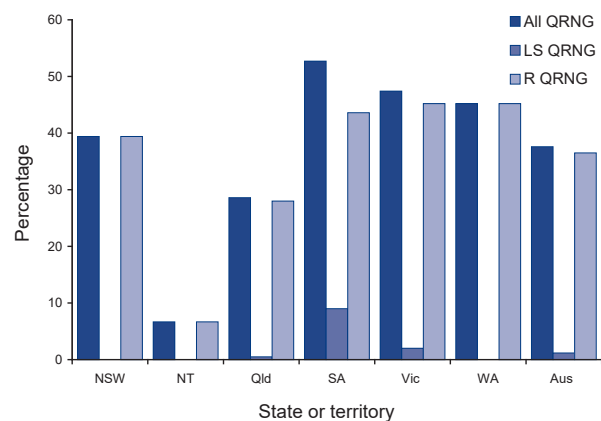
All isolates were susceptible to this injectable agent. This antibiotic is no longer available in Australia.

### Quinolone antibiotics

The total number (385) and proportion (38%) of quinolone resistant *N. gonorrhoeae* (QRNG) was lower than data reported in recent quarters, which reported high levels of resistance to this group of antibiotics. In the equivalent period in 2009, there were 397 (46%) QRNG, lower than in 2008 (415 QRNG: 35%). All but 12 of the 385 QRNG detected in this quarter had ciprofloxacin MICs of 1 mg/L or more and 294 had ciprofloxacin MICs of 4 mg/L or more. 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.

QRNG were present in all jurisdictions (Figure 2). The highest number of QRNG was found in New South Wales (148), which represented 39% of all isolates. In Victoria, 109 QRNG also represented a high (47%) proportion of all isolates there. There were 50 (29%) QRNG in Queensland and in Western Australia 38 (45%) QRNG. The 29 (52%) QRNG in South Australia was a small increase in number compared with the 23 (37%) QRNG in the same quarter in 2009, and parallels the increase in penicillin resistance also noted in that jurisdiction in this quarter. Six QRNG were detected in the Northern Territory, five in the Australian Capital Territory and none in Tasmania.

**Figure 2: The distribution of quinolone resistant isolates of *Neisseria gonorrhoeae* in Australia, 1 January to 31 March 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

Nationally, the number (203) and the proportion (20%) of high level tetracycline resistance (TRNG) detected increased when compared with the 2009 data (157 TRNG, 18%). TRNG were found in all states and territories except Tasmania, and elsewhere represented between 12% (Queensland) and 30% of isolates (Western Australia).

### Reference

1. Management of sexually transmitted diseases. World Health Organization 1997; Document WHO/GPA/TEM94.1 Rev.1 p 37.

## 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 3 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](http://www.nchechr.unsw.edu.au) Telephone: +61 2 9385 0900. Facsimile: +61 2 9385 0920. For more information see Commun Dis Intell 2010;34:84.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 April to 30 September 2009, are included in this issue of Communicable Diseases Intelligence (Tables 1, 2, 3 and 4).

**Table 1: New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 April to 30 June 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	1	11	2	9	2	1	6	3	35	49	76	78
	Male	5	81	3	56	10	7	66	14	242	219	454	456
	Not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total*	6	93	5	65	12	8	72	17	278	268	531	534
AIDS diagnoses	Female	0	--	0	0	0	0	0	1	1	4	9	6
	Male	0	--	0	1	3	0	14	2	20	26	64	72
	Total*	0	--	0	1	3	0	14	3	21	30	73	78
AIDS deaths	Female	0	--	0	0	0	0	0	1	1	1	2	1
	Male	0	--	0	0	0	0	2	0	2	5	6	15
	Total*	0	--	0	0	0	0	2	1	3	6	8	16

\* Totals include people whose sex was reported as transgender.

Dashes indicate that AIDS cases and deaths following AIDS diagnosed or occurring in NSW from January 2008 are not included.

**Table 2: Number of new diagnoses of HIV infection since the introduction of HIV antibody testing in 1985, and number of new diagnoses of AIDS and deaths following AIDS since 1981, cumulative to 30 June 2009, by sex and state or territory**

	Sex	State or territory								Aust
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	36	985	29	346	120	14	454	252	2,236
	Male	280	14,317	151	3,160	1,044	123	5,878	1,363	26,316
	Not reported	0	228	0	0	0	0	22	0	250
	Total*	316	15,561	180	3,515	1,165	137	6,376	1,622	28,872
AIDS diagnoses†	Female	10	265	6	76	32	4	124	46	563
	Male	95	5,513	48	1,093	419	55	2,131	455	9,809
	Total*	105	5,796	54	1,171	452	59	2,268	503	10,408
AIDS deaths‡	Female	7	138	1	43	20	2	66	29	306
	Male	73	3,597	33	679	280	34	1,446	301	6,443
	Total*	80	3,746	34	724	300	36	1,521	331	6,772

\* Totals include people whose sex was reported as transgender.

† AIDS cases diagnosed in New South Wales from January 2008 are not included.

‡ Deaths following AIDS occurring in NSW from January 2008 are not included.

**Table 3: New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 July to 30 September 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	14	1	8	0	1	5	4	33	30	109	108
	Male	3	81	4	51	12	4	66	22	243	200	697	656
	Not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total*	3	96	5	59	12	5	71	26	277	230	808	764
AIDS diagnoses	Female	0	--	0	0	0	0	0	1	1	4	9	6
	Male	0	--	0	1	3	0	14	2	20	26	64	72
	Total*	0	--	0	1	3	0	14	3	21	30	73	78
AIDS deaths	Female	0	--	0	0	0	0	0	1	1	1	2	1
	Male	0	--	0	0	0	0	2	0	2	5	6	15
	Total*	0	--	0	0	0	0	2	1	3	6	8	16

\* Totals include people whose sex was reported as transgender.

Dashes indicate that AIDS cases and deaths following AIDS diagnosed or occurring in NSW from January 2008 are not included.

**Table 4: Number of new diagnoses of HIV infection since the introduction of HIV antibody testing in 1985, and number of new diagnoses of AIDS and deaths following AIDS since 1981, cumulative to 30 September 2009, by sex and state or territory**

	Sex	State or territory								Aust
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	36	999	30	354	120	15	459	256	2,269
	Male	283	14,398	155	3,211	1,056	127	5,944	1,385	26,559
	Not reported	0	228	0	0	0	0	22	0	250
	Total*	319	15,657	185	3,574	1,177	142	6,447	1,648	29,149
AIDS diagnoses†	Female	10	265	6	76	32	4	124	47	564
	Male	95	5,513	48	1,094	422	55	2,145	457	9,829
	Total*	105	5,796	54	1,172	455	59	2,282	506	10,429
AIDS deaths‡	Female	7	138	1	43	20	2	66	30	307
	Male	73	3,597	33	679	280	34	1,448	301	6,445
	Total*	80	3,746	34	724	300	36	1,523	332	6,775

\* Totals include people whose sex was reported as transgender.

† AIDS cases diagnosed in New South Wales from January 2008 are not included.

‡ Deaths following AIDS occurring in NSW from January 2008 are not included.