Communicable Diseases Surveillance

Highlights

Communicable Diseases Surveillance consists of data from various sources. The National Notifiable Diseases Surveillance System (NNDSS) is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) is a sentinel surveillance scheme. The Australian Sentinel Practice Research Network (ASPREN) is a general practitioner-based sentinel surveillance scheme. In this report, data from the NNDSS are referred to as 'notifications' or 'cases', whereas those from ASPREN are referred to as 'consultations' or 'encounters' while data from the LabVISE scheme are referred to as 'laboratory reports'.

Vaccine preventable diseases

A total of 516 notifications were received in this reporting period; an increase on the previous reporting period (466) and the same period in 1998 (479). The number of measles notifications continued to decrease in this period (12) compared with the previous period (18). There was also a decrease in the overall year to date notifications of measles for 1999 (233) compared with 1998 (298). The number of Hib notifications remained fairly stable in this reporting period (3) compared with the previous period (6).

The number of pertussis notifications was higher in this period (469) compared with the previous period (432). An increase in the number of notified cases occurred in New South Wales (88), Victoria (178) and Western Australia (12). Overall, the year to date number of notifications remained lower for 1999 (4,005) than 1998 (6,153). Over the course of the year, the first peak in pertussis notifications was seen in the Australian Capital Territory in mid June, then New South Wales, Tasmania, Victoria and Queensland (Figure1). Notified cases of pertussis occurred primarily in those aged 10-14 years and older, and increases in the numbers of notified cases also occurred in the same age groups (Figure 2). For the last reporting period 84% of cases were in these age groups and for the year to date 85% of cases were in these age groups. The ratio of males to females was 1:1.4 where gender was reported for both the reported period and the year to date.

Figure 1. Notifications of pertussis, by State/Territory, and month of onset, 1999

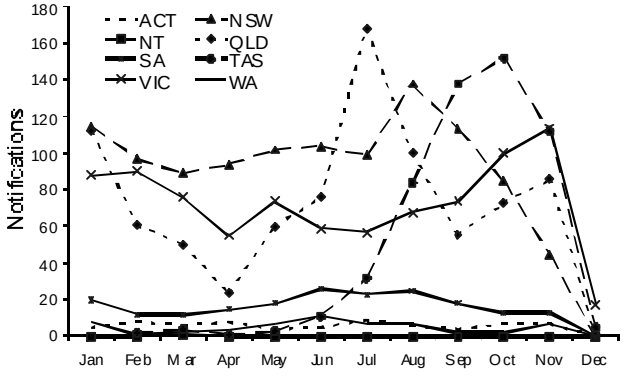
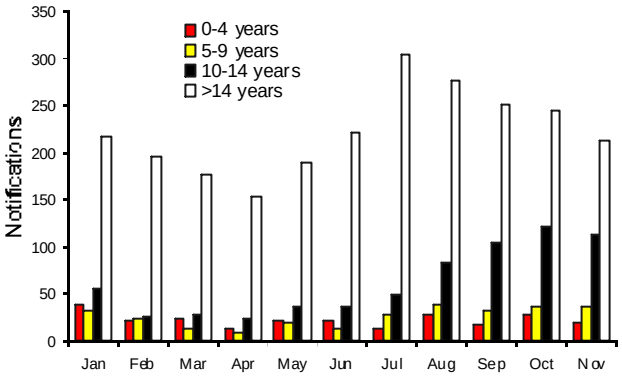


Figure 2. Notifications of pertussis, by age group and month of onset



Meningococcal infection

The number of meningococcal infection notifications remained steady in this reporting period (33) compared to the previous period (33). Overall, there was a decrease in the number of notifications from Victoria (11) and New South Wales (7). As previously noted, the overall year to date notifications (524) remained higher than for the year to date in 1998 (425). Notifications were highest in the 15-19 years (9; 27%) and 0-4 years (7; 21%) age groups. For the 22 cases for whom gender was reported, the male to female ratio was 1.8:1.

Vectorborne diseases

There were 91 notifications of Ross River virus received for this period, an increase from the previous reporting period (72) but less than for the same period in 1998 (237). An increase in case notifications from Victoria (8) and Western Australia (39) contributed to the increase in this period. In total 4,273 notifications have been received for the year to date, an increase of 55% compared to 1998 (2,771). This overall increase was due to a peak in May.

A total of 7 dengue notifications were received in this reporting period, an increase from the previous reporting period (1) but a 10-fold reduction from the same period last year (70). Overall the total number of notifications for the

year to date (176) was reduced from the previous year (502) which included an outbreak in the first half of 1998.

Zoonoses

There were 22 notifications of leptospirosis received in this reporting period, an increase of about 50% from the previous reporting period (12) and identical to the same period in 1998 (22). The year to date figures (323) were 80% higher than the previous year (180) and were markedly higher than any previous year. This increase was mostly associated with an increase in case notifications from Queensland in the first 6 months of the year. The peak number of notifications occurred in the 20-24 year age group.

Notifications of ornithosis increased in this reporting period (8) compared with the last reporting period (4). All 8 cases were from Victoria and the age range was from 21-69 years. Overall the total number of notifications of ornithosis for the year to date in 1999 (78) was 59% higher than the year to date notifications in 1998 (49).

Foodborne diseases

There were 11 cases of infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VEC) reported in this period; an increase from the previous reporting period (3). All these cases were reported from South Australia. Overall notifications for the year to date have increased in 1999 (34) from 1998 (9).

Three cases of haemolytic uraemic syndrome (HUS) have been reported in this period; an increase compared to one case in the previous reporting period. One case was reported from South Australia and 2 cases from Victoria. Overall the number of year to date notifications were similar for 1999 (16) and 1998 (13).

Please note: The reported outbreak of *Haemophilus influenzae* type b in June, referred to in the last issue of *CDI*; 23(12)328, was due to a reporting artifact and not in fact an outbreak. *CDI* was subsequently informed that the 12 cases reported had onset dates in previous years, but were reported in June 1999.

Tables

There were 5,062 notifications to the National Notifiable Diseases Surveillance System (NNDSS) in the four week period, 10 November to 7 December 1999 (Tables 1 and 2). The number of reports for selected diseases have been compared with historical data for corresponding periods in the previous three years (Figure 4).

There were 5,531 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the four week period, 4 November to 1 December 1999 (Tables 3 and 4).

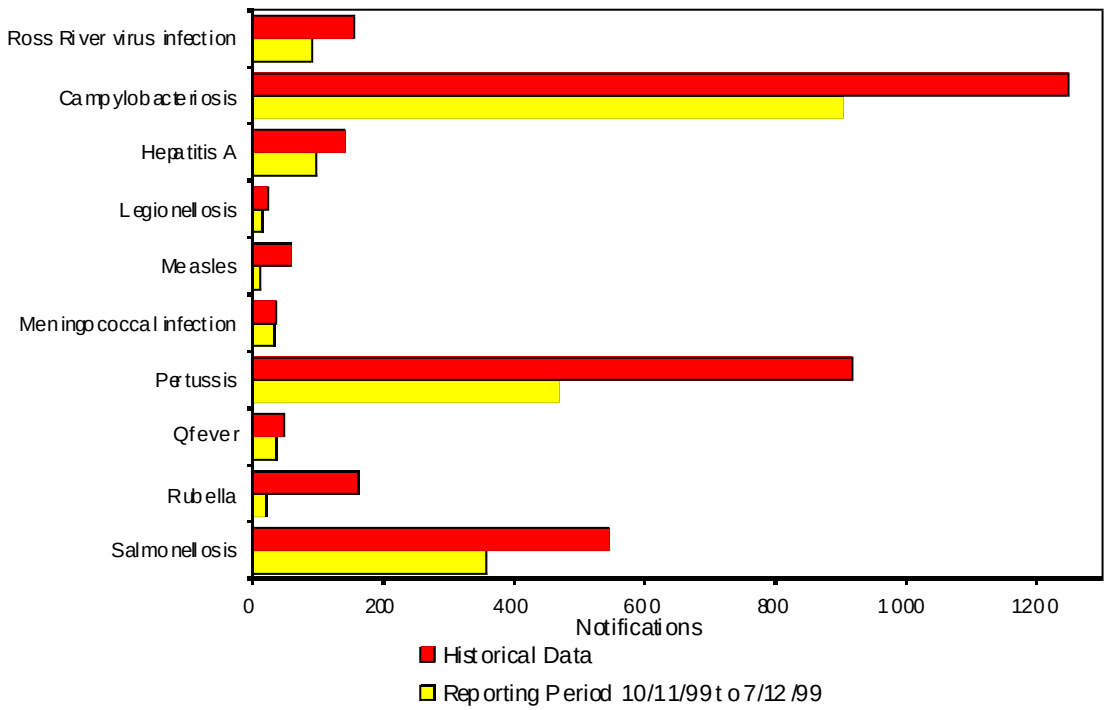
The Australian Sentinel Practice Research Network (ASPREN) data for weeks 45 to 48, ending 5 December 1999, are included in this issue of *CDI* (Table 5).

Table 1. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 10 November to 7 December 1999

Disease[1]	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999[2]	Year to date 1998
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
H. influenzae type b infection	0	0	0	2	1	0	0	0	3	6	39	35
Measles	0	1	2	1	1	2	4	1	12	18	233	298
Mumps	0	0	0	0	1	0	7	2	10	20	169	171
Pertussis	9	88	0	76	16	90	178	12	469	432	4,005	6,153
Rubella[3]	0	2	0	11	0	1	8	0	22	40	363	749
Tetanus	0	0	0	0	0	0	0	0	0	1	2	7

1. No notification of poliomyelitis has been received since 1978.
2. 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.
3. Includes congenital rubella.

Figure 4. Selected National Notifiable Diseases Surveillance System reports, and historical data[1]



1. The historical data are the averages of the number of notifications in the corresponding 4 week periods of the last 3 years and the 2 week periods immediately preceding and following those.

Table 2. Notifications of diseases received by State and Territory health authorities in the period 10 November to 7 December 1999

Disease[1,2,3]	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999[4]	Year to date 1998
Arbovirus infection (NEC)	0	0	0	0	0	0	0	0	0	9	71	67
Barmah Forest virus infection	0	3	1	19	0	0	0	5	28	36	596	526
Brucellosis	0	0	0	5	0	0	0	0	5	4	50	43
Campylobacteriosis[5]	25	-	14	221	194	45	270	135	904	1,617	11,817	12,414
Chancroid	0	0	0	0	0	0	0	0	0	0	0	1
Chlamydial infection (NEC)[6,7]	28	95	61	273	98	20	246	129	950	1,080	12,969	10,686
Cholera	0	0	0	0	0	0	0	0	0	0	3	4
Dengue	0	0	4	2	0	0	0	1	7	70	176	502
Donovanosis[7]	0	0	0	0	NN	0	0	0	0	1	17	31
Gonococcal infection[8]	1	82	104	87	11	3	87	60	435	493	5,273	5,028
Haemolytic uraemic syndrome[9]	NN	0	0	0	1	0	NN	0	1	1	16	13
Hepatitis A	0	10	15	9	9	0	37	18	98	122	1,515	2,445
Hepatitis B incident	0	2	8	1	3	0	3	6	23	23	277	251
Hepatitis B unspecified[10]	5	101	0	68	0	0	2	15	191	603	6,546	6,240
Hepatitis C incident	1	1	0	-	8	0	6	13	29	39	309	319
Hepatitis C unspecified[10]	14	329	11	255	88	21	288	58	1,064	1,612	19,115	18,096
Hepatitis (NEC)[11]	0	0	0	0	0	0	0	NN	0	2	20	17
Hydatid infection	0	NN	0	0	0	0	1	1	2	5	29	42
Legionellosis	0	0	0	6	4	0	3	2	15	27	234	252
Leprosy	0	0	0	0	0	0	0	0	0	0	5	2
Leptospirosis	0	7	0	3	0	0	9	3	22	22	323	180
Listeriosis	0	1	0	0	0	0	1	1	3	5	59	53
Malaria	3	3	7	11	3	1	5	5	38	43	670	670
Meningococcal infection	0	7	0	6	2	0	11	7	33	31	524	425
Ornithosis	0	NN	0	NN	0	0	8	0	8	16	78	49
Q Fever	0	10	0	25	0	0	1	1	37	53	479	540
Ross River virus infection	0	5	1	38	0	0	8	39	91	237	4,273	2,771
Salmonellosis (NEC)	5	48	15	142	20	7	83	38	358	580	6,832	7,294
Shigellosis[5]	0	-	5	5	3	0	8	4	25	47	527	580
SLTEC, VTEC[12]	NN	0	0	NN	11	0	NN	NN	11	0	34	9
Syphilis[13]	1	30	33	52	1	2	0	0	119	135	1,819	1,512
TTP[14]	0	0	0	0	0	0	0	0	0	1	0	1
Tuberculosis	1	21	4	4	0	1	0	8	39	82	773	911
Typhoid[15]	0	0	0	1	0	0	1	0	2	1	63	64
Yersiniosis (NEC)[5]	0	-	0	6	2	0	0	0	8	9	141	195

1. Diseases preventable by routine childhood immunisation are presented in Table 1.
2. For HIV and AIDS, see Tables 8, 9, 10 and 11.
3. No notifications have been received during 1999 for the following rare diseases: lymphogranuloma venereum, plague, rabies, yellow fever, or other viral haemorrhagic fevers.
4. 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.
5. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
6. WA: genital only.
7. Notifications from NSW have been received since September 1998, and were first reported in *CDI* in Issue 23(9).
8. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
9. Nationally reportable from August 1998.
10. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of testings being carried out.
11. Includes hepatitis D and E.
12. Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC) became nationally reportable in August 1998.
13. Includes congenital syphilis.
14. Thrombotic thrombocytopaenic purpura became nationally reportable in August 1998.
15. NSW, Qld: includes paratyphoid.

NN Not Notifiable.
NEC Not Elsewhere Classified.
- Elsewhere Classified.

Table 3. Virology and serology laboratory reports by State or Territory[1] for the reporting period 4 November to 1 December 1999, and total reports for the year

	State or Territory[1]								Total this period	Total reported in 1999[2,3]
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Measles, mumps, rubella										
Measles virus					1		2	1	4	181
Mumps virus							1	3	4	55
Rubella virus		4		67	1	1			73	144
Hepatitis viruses										
Hepatitis A virus			25	31	13		1	4	74	381
Hepatitis D virus				1	1				2	6
Arboviruses										
Ross River virus		11	13	148		1	1	11	185	1,354
Barmah Forest virus		2		36				1	39	165
Dengue not typed					1			2	3	55
Flavivirus (unspecified)			1	1					2	23
Adenoviruses										
Adenovirus type 3					1		1		2	32
Adenovirus type 5							2		2	6
Adenovirus type 7							1		1	4
Adenovirus type 19							1		1	3
Adenovirus type 40								9	9	76
Adenovirus not typed/pending		21		12	32		19	42	126	1,195
Herpes viruses										
Herpes virus type 6								1	1	12
Cytomegalovirus		37		106	49		29	14	235	1,177
Varicella-zoster virus		18	15	248	12		63	32	388	1,665
Epstein-Barr virus		29	14	550	106	1	13	17	730	2,339
Other DNA viruses										
Parvovirus		1		33	8		18	8	68	443
Picorna virus family										
Coxsackievirus A9		1	1						2	10
Coxsackievirus B1							1		1	1
Coxsackievirus B2		1				1			2	4
Coxsackievirus B4		1							1	3
Coxsackievirus B5		2					1		3	8
Echovirus type 3		2							2	2
Echovirus type 9		1					1		2	49
Echovirus type 11		20					1		21	172
Echovirus type 30		1	1						2	29
Poliovirus type 1 (uncharacterised)		5			1				6	28
Poliovirus type 2 (uncharacterised)		3							3	23
Poliovirus type 3 (uncharacterised)		3							3	10
Rhinovirus (all types)		54			6		4	6	70	487
Enterovirus type 71 (BCR)							3		3	20
Enterovirus not typed/pending		5	2	14			12	16	49	768
Ortho/paramyxoviruses										
Influenza A virus		9	1	142	25		14	15	206	1,835
Influenza B virus		1		13	8		7	1	30	267
Parainfluenza virus type 1		2		1			1		4	45
Parainfluenza virus type 2				2	4		1		7	110
Parainfluenza virus type 3		23	2	40	12		18	49	144	888
Respiratory syncytial virus		38	2	182	26	1	26	35	310	3,078

Table 3. Virology and serology laboratory reports by State or Territory[1] for the reporting period 4 November to 1 December 1999, and total reports for the year (continued)

	State or Territory[1]								Total this period	Total reported in 1999[2,3]
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Other RNA viruses										
HTLV-1								2	2	14
Rotavirus		61			75		52	50	238	2,204
Norwalk agent							2		2	70
Other										
Chlamydia trachomatis not typed		62	116	653	56		6	44	937	3,149
Chlamydia pneumoniae								1	1	2
Chlamydia psittaci							6		6	84
Chlamydia species		3		4					7	19
Mycoplasma pneumoniae		11	1	232	18		43	3	308	1,176
Coxiella burnetii (Q fever)		9	1	72					82	208
Streptococcus group A		9	47	193					249	315
Yersinia enterocolitica		1		1					2	11
Brucella species				5					5	8
Bordetella pertussis		5		258		1	42	2	308	763
Legionella longbeachae					1			2	3	43
Cryptococcus species		2							2	8
Leptospira species		2		20				3	25	49
Treponema pallidum		13	306	212					531	673
Entamoeba histolytica				2				1	3	5
Total	0	473	548	3,279	457	6	393	375	5,531	25,954

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.
2. In 1999, data from the Institute of Clinical Pathology & Clinical Research, Westmead were under reported up to September.
3. Totals comprise data from all laboratories. Cumulative figures are subject to retrospective revision, so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.

Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 4 November to 1 December 1999

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	90
	New Children's Hospital, Westmead	162
	Royal Prince Alfred Hospital, Camperdown	40
Queensland	Queensland Medical Laboratory, West End	4,019
	Townsville General Hospital	9
South Australia	Institute of Medical and Veterinary Science, Adelaide	454
Victoria	Monash Medical Centre, Melbourne	34
	Royal Children's Hospital, Melbourne	158
	Victorian Infectious Diseases Reference Laboratory, Fairfield	190
Western Australia	PathCentre Virology, Perth	284
	Princess Margaret Hospital, Perth	91
Total		5,531

Table 5. Australian Sentinel Practice Research Network reports, weeks 45 to 48, 1999

Week number	45		46		47		48	
Week ending on	14 November 1999		21 November 1999		28 November 1999		5 December 1999	
Doctors reporting	60		58		58		51	
Total encounters	7,243		6,631		6,913		5,941	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	31	4.3	23	3.5	20	2.9	17	2.9
Rubella	0	0.0	1	0.2	0	0.0	0	0.0
Measles	0	0.0	1	0.2	1	0.1	1	0.2
Chickenpox	11	1.5	9	1.4	14	2.0	13	2.2
New diagnosis of asthma	13	1.8	18	2.7	13	1.9	3	0.5
Post operative wound sepsis	10	1.4	3	0.5	7	1.0	2	0.3
Gastroenteritis	76	10.5	86	13.0	85	12.3	84	14.1

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The system coordinates the national surveillance of more than 40 communicable diseases or disease groups endorsed by the National Health and Medical Research Council (NHMRC). Notifications of these diseases are made to State and Territory health authorities under the provisions of their respective public health legislations. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination. For further information, see CDI 1999;23:55.

LabVISE is a sentinel reporting scheme. Twenty-one laboratories contribute data on the laboratory identification of viruses and other organisms. Data are collated and published in Communicable Diseases Intelligence every four weeks. These data should be interpreted with caution as the number and type of reports received is subject to a number of biases. For further information, see CDI 1999;23:58.

ASPREN currently comprises about 100 general practitioners from throughout the country. Up to 9,000 consultations are reported each week, with special attention to 12 conditions chosen for sentinel surveillance in 1999. CDI reports the consultation rates for seven of these. For further information, including case definitions, see CDI 1999;23:55-56.

Additional Reports

Gonococcal surveillance

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 on a quarterly basis. The antibiotics which are currently routinely surveyed are the penicillins, ceftriaxone, ciprofloxacin and spectinomycin, all of which are administered as single dose regimens. When in vitro resistance to a recommended agent is demonstrated in 5% or more of isolates, it is usual to reconsider the inclusion of that agent in current treatment schedules. 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 resistance to the tetracyclines. Tetracyclines are however not a recommended therapy for gonorrhoea. Comparability of data is achieved by means of a standardised system of testing and a programme-specific quality assurance process. Because of the substantial geographic differences in susceptibility patterns in Australia, regional as well as aggregated data are presented.

Reporting period 1 January to 31 March 1999

The AGSP laboratories examined a total of 937 isolates in this quarter. About 44% of this total was from New South Wales, 19% from Victoria, 14% from Queensland, 13% from the Northern Territory, 8% from Western Australia and 2% from South Australia. Isolates from other centres were few in number.

Penicillins

Figure 5 shows the proportions of gonococci fully sensitive (MIC ≤ 0.03 mg/L), less sensitive (MIC 0.06 - 1 mg/L), relatively resistant (MIC≥ 1 mg/L) or else penicillinase producing (PPNG) aggregated for Australia and by State and Territory. A high proportion of PPNG and relatively resistant strains fail to respond to treatment with penicillins (penicillin, amoxycillin, ampicillin) and early generation cephalosporins.

About 27% of all isolates were penicillin resistant by one or more mechanisms. The penicillin-resistant isolates comprised 35% of all isolates in New South Wales and Victoria and 15 - 20% of gonococci in Queensland and South Australia. In the Northern Territory and Western Australia, 4 - 6% of isolates were penicillin resistant.

The number of PPNG isolated across Australia (88) increased in this quarter compared to the corresponding period in 1998 (57). Most of the PPNG were found in Sydney (58) and Victoria (19). Sydney had the highest proportion of PPNG (14%). Acquisition data, where available, indicated a high proportion of cases in Sydney were acquired through local contact (ratio overseas to local acquisition = 1:4). These proportions were reversed in Melbourne, with South East Asian countries being the main source of acquisition. Only low numbers of PPNG were present in strains from Queensland, Western Australia and the Northern Territory.

Nearly twice as many isolates (161) were resistant to the penicillins by separate chromosomal mechanisms (CMRNG), maintaining a trend noted for some time. These CMRNG were again prominent in Sydney (95) and Melbourne (44).

Ceftriaxone and spectinomycin

All isolates in Australia were again susceptible to these injectable agents.

Quinolone antibiotics

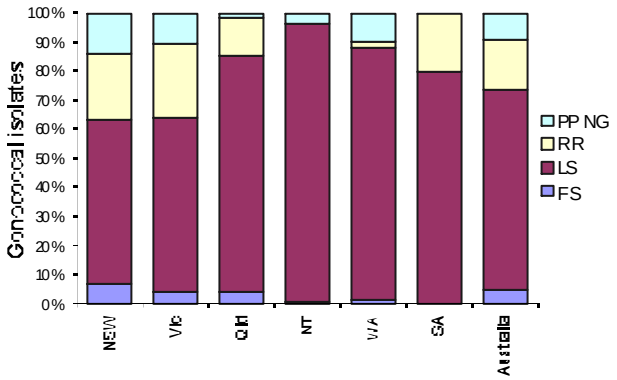
The total number (106) and proportion (11%) of all isolates with altered susceptibility to the quinolone group (QRNG) was substantially higher than the 62 QRNG in the same period in 1998. The QRNG were concentrated in New South Wales (80) and Victoria (18); together these accounted for 92% of all QRNG. Fifteen of the New South Wales and 4 of the Victorian QRNG exhibited high level resistance (MIC ciprofloxacin≥ 1 mg/L) and MICs ranged up to 16mg/L. The majority of QRNG were in males, locally acquired and in the MIC range 0.06 - 0.5 mg/L. QRNG were also present in Brisbane; representing 4% of strains. Single isolates of QRNG were found in the Northern Territory and Perth.

In the corresponding period in 1998, the 62 QRNG represented about 7% of all isolates.

High level tetracycline resistance (TRNG)

The number (95) and proportion (10%) of TRNG detected was almost double that reported for the first quarter of 1998. Most (68%) of the TRNG were found in Sydney where they represented 15% of strains. The 16 TRNG in Victoria and the 7 in Perth each accounted for 9% of

Figure 5. Categorisation of gonococci isolated in Australia by penicillin susceptibility and by region, 1 January to 31 March 1999



FS Fully sensitive to penicillin, MIC≤ 0.03 mg/L

LS Less sensitive to penicillin, MIC 0.06 - 0.5 mg/L

RR Relatively resistant to penicillin, MIC ≥1 mg/L

PPNG Penicillinase producing *Neisseria gonorrhoeae*

gonococci examined in those centres and the 6 in Queensland (4%). Darwin was the only other centre where TRNG were detected in this quarter.

Reference

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

Sentinel Chicken Surveillance Programme

Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin which cause the potentially fatal disease Australian encephalitis in humans. Currently 26 flocks are maintained in the north of Western Australia, seven in the Northern Territory, nine in New South Wales and ten in Victoria. The flocks in Western Australia and the Northern Territory are tested year round but those in New South Wales and Victoria are tested only from November to March, during the main risk season.

Results are coordinated by the Arbovirus Laboratory in Perth and reported bimonthly. For more information see CDI 1999;23:57-58

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Sentinel chicken serology was carried out for 18 of the 27 flocks in Western Australia in September and October 1999. There was one confirmed seroconversion to MVE virus in September from Paraburdoo in the Pilbara. In response to the unusually late activity of MVE virus in the north of Western Australia the Health Department of Western Australia issued a media warning in mid September to warn residents and visitors to the region of the on-going risk of disease. Additional health warnings were sent via the Regional Public Health Units to Aboriginal communities in the region.

Serum samples from six of the seven Northern Territory sentinel chicken flocks were tested in our laboratory in September and October 1999. There was one new, confirmed seroconversion to Kunjin virus at Howard Springs in September 1999.

Table 7. Flavivirus seroconversions in the Northern Territory sentinel chicken flocks in September and October 1999

Location	May 1999		June 1999			
	MVE	KUN	MVE	KUN	MVE/KUN	FLAVI
Howard Springs	1					
Leanyer		1		1	1	1
Beatrice Hill	3		2			
Tennant Creek	2					

MVE Antibodies to Murray Valley encephalitis virus detected by ELISA
KUN Antibodies to Kunjin virus detected by ELISA
MVE/KUN Antibodies to both MVE and KUN viruses detected by ELISA
FLAVI Antibodies to a flavivirus only (not MVE or KUN) detected by ELISA

Table 6. Flavivirus seroconversions in Western Australian sentinel chicken flocks in September and October 1999

Location	MVE	MVE/KUN	FLAVI	MVE	KUN	MVE/KUN	FLAVI
KIMBERLEY							
Kalumburu		1					
Derby				**2**		1	
Broome	2						
PILBARA							
Port Hedland	1						
Harding Dam*	2		1	2		1	1
Karratha						1	
Newman	2						
Onslow				1	**1**		
Exmouth				1			
GASCOYNE							
Carnarvon	1						

* 2 flocks of 12 chickens at these sites
MVE Antibodies to Murray Valley encephalitis virus detected by ELISA
KUN Antibodies to Kunjin virus detected by ELISA
MVE/KUN Antibodies to both MVE and KUN viruses detected by ELISA
FLAVI Antibodies to a flavivirus only (not MVE or KUN) detected by ELISA

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 Database on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (ACT, 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 and related diseases in Australia Annual Surveillance Report. The reports are available from the National Centre in HIV Epidemiology and Clinical Research, 376 Victoria Street, Darlinghurst NSW 2010. Telephone: (02) 9332 4648; Facsimile: (02) 9332 1837; http://www.med.unsw.edu.au/nchecr.

Table 8. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 May 1999, by sex and State or Territory of diagnosis

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
HIV diagnoses	Female	1	1	1	1	0	0	2	1	7	8	30	34
	Male	1	18	1	5	0	2	12	1	40	45	233	285
	Sex not reported	0	1	0	0	0	0	0	0	1	1	1	5
	Total[1]	2	20	2	6	0	2	14	2	48	54	264	324
AIDS diagnoses	Female	0	0	0	0	0	0	0	0	0	1	3	6
	Male	0	1	0	0	2	0	3	0	6	25	35	120
	Total[1]	0	1	0	0	2	0	3	0	6	26	38	126
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	1	2
	Male	0	2	0	0	1	0	0	0	3	13	35	59
	Total[1]	0	2	0	0	1	0	0	0	3	13	37	61

1. Persons whose sex was reported as transgender are included in the totals.

Table 9. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 May 1999, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	24	588	9	138	57	5	205	109	1,135
	Male	189	10,607	107	1,904	654	79	3,803	884	18,227
	Sex not reported	0	259	0	0	0	0	24	0	283
	Total [1]	213	11,473	116	2,049	711	84	4,045	996	19,687
AIDS diagnoses	Female	8	173	0	46	21	3	67	26	344
	Male	85	4,533	35	794	328	44	1,591	344	7,754
	Total [1]	93	4,718	35	842	349	47	1,665	372	8,121
AIDS deaths	Female	3	113	0	30	15	2	47	16	226
	Male	64	3,133	24	556	227	28	1,248	245	5,525
	Total [1]	67	3,254	24	588	242	30	1,301	262	5,768

1. Persons whose sex was reported as transgender are included in the totals.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 31 May 1999 as reported to 31 August 1999 and 1 to 31 July 1999, as reported to 31 October 1999, are included in this issue of CDI (Tables 8, 9, 10 and 11).

Please note: HIV and AIDS data for May 1999 are also included in this issue as well as the July data, as it was not previously presented.

Table 10. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 July 1999, by sex and State or Territory of diagnosis

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
HIV diagnoses	Female	0	3	0	1	0	1	3	0	8	15	43	54
	Male	1	30	0	8	1	0	13	3	56	49	333	382
	Sex not reported	0	0	0	0	0	0	0	0	0	0	1	5
	Total[1]	1	33	0	9	1	1	16	3	64	64	377	441
AIDS diagnoses	Female	0	1	0	1	0	0	0	0	2	3	5	10
	Male	0	2	0	3	1	0	1	0	7	31	52	181
	Total[1]	0	3	0	4	1	0	1	0	9	34	57	191
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	1	2	5
	Male	0	5	0	0	0	0	1	0	6	11	49	83
	Total[1]	0	5	0	0	0	0	1	0	6	12	52	88

1. Persons whose sex was reported as transgender are included in the totals.

Table 11. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 July 1999, by sex and State or Territory

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	24	592	9	140	57	6	210	111	1,149
	Male	189	10,661	107	1,922	656	79	3,826	891	18,331
	Sex not reported	0	258	0	0	0	0	24	0	282
	Total[1]	213	11,530	116	2,069	713	85	4,073	1,005	19,804
AIDS diagnoses	Female	8	174	0	47	23	3	67	26	348
	Male	86	4,550	35	798	342	44	1,596	344	7,795
	Total[1]	94	4,736	35	847	365	47	1,670	372	8,166
AIDS deaths	Female	3	114	0	30	15	2	47	16	227
	Male	65	3,141	24	557	228	28	1,251	245	5,539
	Total[1]	68	3,263	24	589	243	30	1,304	262	5,783

1. Persons whose sex was reported as transgender are included in the totals.

Serious Adverse Events Following Vaccination Surveillance Scheme

The Serious Adverse Events Following Vaccination Surveillance Scheme is a national surveillance scheme which monitors the serious adverse events that occur rarely following vaccination. More details of the scheme were published in CDI 1999:23;58.

Acceptance of a report does not imply a causal relationship between administration of the vaccine and the medical outcome, or that the report has been verified as to the accuracy of its contents.

It is estimated that 250,000 doses of vaccines are administered every month to Australian children under the age of six years.

Results for the reporting period 1 September to 30 November 1999

There were 19 reports of serious adverse events following vaccination for this reporting period (Table 12). Onset dates were from 1998 to 1999, the majority (90%) being in 1999. Reports were received from Australian Capital Territory (3), New South Wales (1), Northern Territory (2), Queensland (8), South Australia (2), Victoria (2) and Western Australia (1) for this period.

The most frequently reported events following vaccination were other reactions (5 cases, 26%) and convulsions (5 cases, 26%), followed by hypotonic/hyporesponsive episodes (3 cases, 16%), temperature of 40.5^{o}C or more (2 cases, 10.5%), ITP (2 cases, 10.5%), and persistent screaming (1 case, 5%). For one case the description of the adverse event was missing. Both cases of ITP were reported following MMR. One case occurred after the second dose of MMR and for the other case the dose was not reported.

The number of adverse events reported during this period continued to decline from the previous reporting period and was the lowest number reported in the previous two years. The greatest number of adverse events were associated with MMR (5 cases, 26%), and Diphtheria-Tetanus-Pertussis (DTP) either alone or in combination with other vaccines (8 cases, 42%).

Hospitalisation status following a reported adverse event was described for all but two cases and six were hospitalised (32%). Of those who were hospitalised five had recovered at the time of reporting. Overall there was incomplete information on recovery status on one case while all the other cases had recovered at the time of reporting.

Table 12. Adverse events following vaccination reported in the period 1 September to 30 November 1999[1]

Event	Vaccines										Reporting States or Territories	Total reports for this period[3]
	DTP	DTP/Hib	DTP/OPV/Hib	CDT/DTP/Hib	Hib	Hib/OPV/other	MMR	Hib/MMR	Hib/Hep B/MMR	Other[2]		
Persistent screaming			1								ACT	1
Hypotonic/Hyporesponsive		1	1			1	1				ACT, Qld	4
Temperature		1									Qld	1
Convulsions				1	1		1	1	1		NSW	5
ITP							2				Qld, WA	2
Other	1	2	1				1				SA, Vic, NT	5
Total	1	4	3	1	1	1	5	1	1	0		19

1. Events with onset dates from 1998 to1999 were reported in this period.
2. Includes influenza vaccination, DTPa, CDT, OPV, Hepatitis B vaccine, pneumococcal vaccination, BCG, ADT and rabies immunoglobulin (HRIG).
3. 1 child with an adverse event had no vaccine specified.