

# Communicable Diseases Surveillance

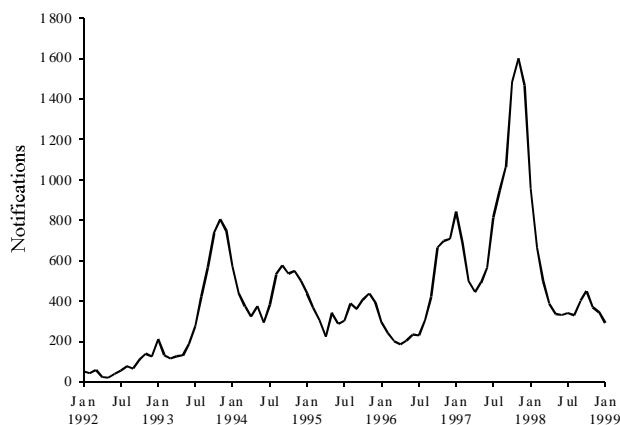
## Highlights

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*

Pertussis notifications remain low when compared with the peak in late 1997 and early 1998. The disease however has not disappeared and continues to be reported at a magnitude which is approximately that of the endemic years of 1995 and 1996 (Figure 1).

**Figure 1. Notifications of pertussis, Australia, 1992 to 1999, by month of onset**

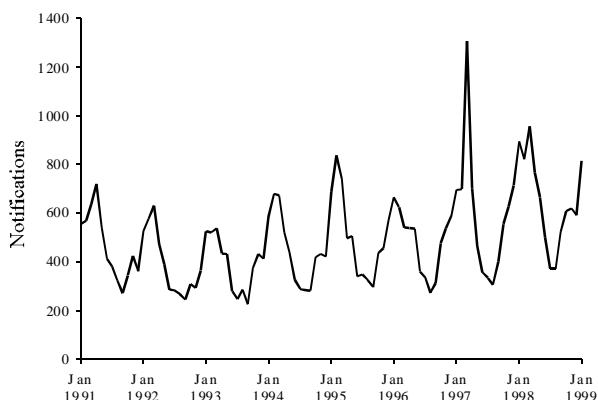


Although measles notifications for the country as a whole remain at a low level, an outbreak in Victoria in young adults is causing concern and is described elsewhere in this issue of *CDI*.

### *Arboviruses*

A higher number of notifications has been received for Ross River Virus infection for this reporting period than for the same period of last year. The relative number of notifications appears lower than historical data (Figure 2) because of the very high numbers reported for this period of 1996 and 1997.

**Figure 3. Notifications of salmonella, Australia, 1991 to 1999, by month of onset**

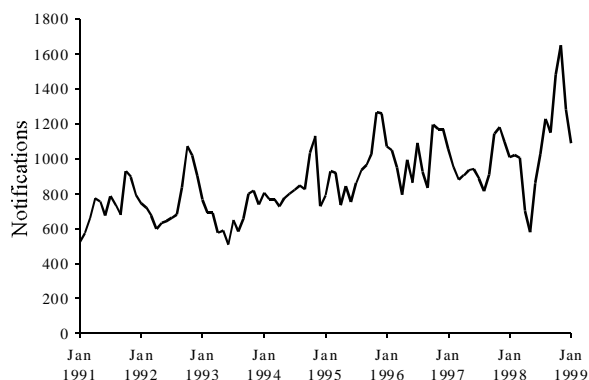


### *Gastrointestinal diseases*

Numbers of infections from Salmonella and Campylobacter continue at a high level. Campylobacteriosis regularly has the highest number of incident cases reported across Australia for any communicable disease, and that is without any reports from the most populous state, New South Wales.

Salmonellosis notifications show a marked seasonal pattern, with a peak in the warmer months of each year (Figure 3). A similar seasonal pattern is present, although less marked, for campylobacteriosis (Figure 4). Even in the low season, a large number of notifications is received for each condition.

**Figure 4. Notifications of campylobacter, Australia, 1991 to 1999, month of onset**



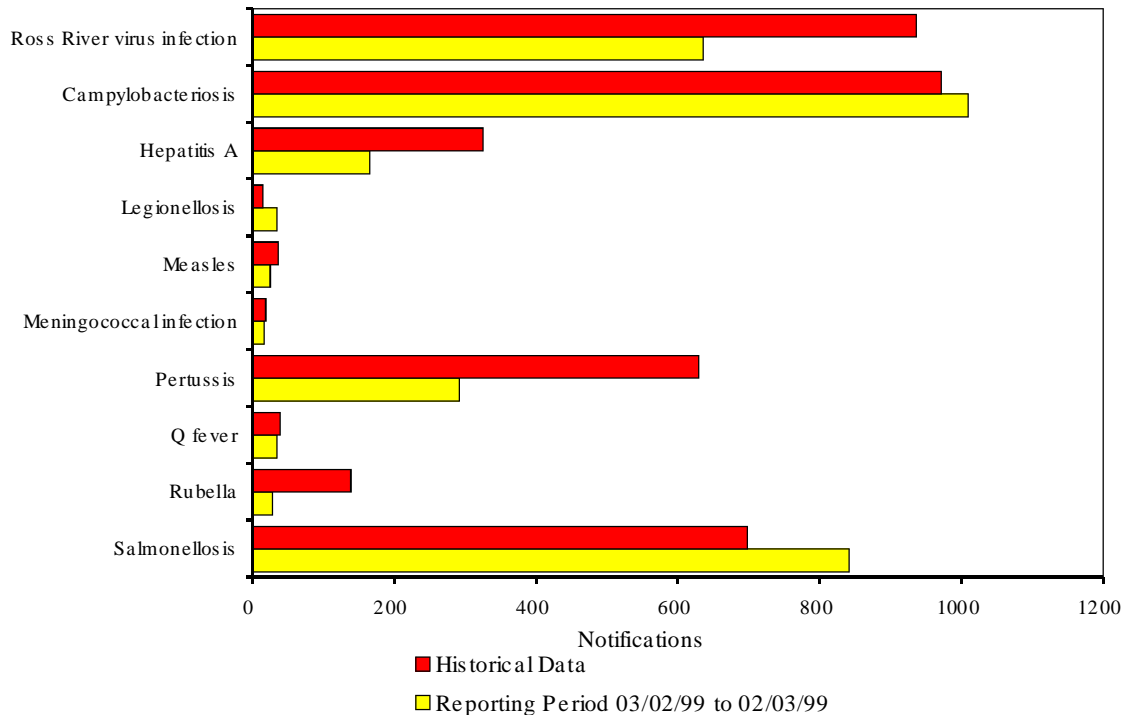
# Tables

There were 6,924 notifications to the National Notifiable Diseases Surveillance System (NNDSS) in the four week period, 3 February to 2 March 1999 (Tables 1 and 2). The numbers of reports for selected diseases have been compared with historical data for corresponding periods in the previous three years (Figure 2).

There were 1,438 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the four week period, 28 January to 24 February 1999 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 1 to 8, ending 28 February 1999, are included in this issue of *CDI* (Tables 5 & 6).

**Figure 2. Selected National Notifiable Diseases Surveillance System reports, and historical data<sup>1</sup>**



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 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 3 February to 2 March 1999**

Disease <sup>1,2</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	2	1	1	0	0	0	1	5	2	9	3
Measles	2	6	0	0	0	2	12	3	25	34	38	71
Mumps	0	3	0	1	1	0	4	3	12	18	17	30
Pertussis	9	89	0	93	17	1	79	4	292	918	681	2,161
Rubella <sup>3</sup>	6	2	1	11	0	0	7	1	28	59	59	126
Tetanus	0	0	0	0	0	0	0	0	0	1	0	2

NN. Not Notifiable

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.

**Table 2. Notifications of diseases received by State and Territory health authorities in the period 3 February to 2 March 1999**

Disease <sup>1,2,3,4</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998 <sup>5</sup>
Arbovirus infection (NEC)	0	0	0	2	0	0	20	0	22	6	43	12
Barmah Forest virus infection	0	28	0	26	0	0	2	2	58	56	103	117
Botulism	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	0	0	0	1	0	0	0	0	1	2	3	12
Campylobacteriosis <sup>6</sup>	24	-	22	356	165	28	322	93	1,010	1,099	2,307	2,182
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydial infection (NEC) <sup>7</sup>	4	NN	65	391	72	18	229	124	903	826	2,095	1,604
Cholera	0	1	0	0	0	0	0	0	1	1	1	1
Dengue	1	0	2	44	0	0	0	0	47	60	109	79
Donovanosis	0	NN	0	2	NN	0	0	0	2	12	5	14
Gonococcal infection <sup>8</sup>	0	88	114	88	9	2	70	60	431	397	925	803
Haemolytic uraemic syndrome <sup>9</sup>	NN	4	NN	0	1	0	NN	0	5	0	6	1
Hepatitis A	1	57	3	65	14	0	12	13	165	304	331	576
Hepatitis B incident	1	5	1	11	0	0	4	5	27	20	58	44
Hepatitis B unspecified <sup>10</sup>	5	164	0	91	0	1	131	15	407	581	867	1,192
Hepatitis C incident	4	2	0	-	5	0	0	10	21	14	61	32
Hepatitis C unspecified <sup>5,10</sup>	13	411	21	290	82	25	508	78	1,428	1,830	3,122	3,633
Hepatitis (NEC) <sup>11</sup>	0	1	0	0	0	0	0	NN	1	0	1	4
Hydatid infection	0	0	0	0	0	0	2	0	2	1	5	8
Legionellosis	0	10	1	6	5	1	11	1	35	24	56	36
Leprosy	0	0	0	0	0	0	0	0	0	1	0	1
Leptospirosis	0	2	0	26	2	0	2	0	32	11	65	26
Listeriosis	0	1	0	1	0	0	2	0	4	3	10	13
Malaria	2	18	0	66	3	0	9	0	98	70	160	122
Meningococcal infection	0	7	0	2	1	0	1	5	16	16	63	37
Ornithosis	0	NN	0	0	0	0	4	1	5	2	13	5
Q Fever	0	14	0	18	1	0	2	0	35	41	80	88
Ross River virus infection	1	114	37	323	13	2	114	32	636	267	1,117	524
Salmonellosis (NEC)	10	138	33	317	107	19	168	50	842	835	1,747	1,791
Shigellosis <sup>6</sup>	0	-	13	20	5	0	7	6	51	50	107	119
SLTEC, VTEC <sup>12</sup>	NN	0	NN	NN	2	0	NN	NN	2	1	7	3
Syphilis <sup>13</sup>	2	30	35	79	0	0	0	4	150	98	298	205
TTP <sup>14</sup>	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	2	54	2	10	0	1	26	3	98	121	210	226
Typhoid <sup>15</sup>	0	2	0	0	2	0	1	2	7	13	12	26
Yersiniosis (NEC) <sup>6</sup>	0	-	0	12	2	0	0	3	17	30	42	72

1. Diseases preventable by routine childhood immunisation are presented in Table 1.
2. For HIV and AIDS, see Tables 7 and 8.
3. 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.
4. No notifications have been received during 1999 for the following rare diseases: lymphogranuloma venereum, plague, rabies, yellow fever, or other viral haemorrhagic fevers.
5. Data from Victoria for 1998 are incomplete.
6. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
7. WA: genital only.
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 thrombocytopenic purpura became nationally reportable in August 1998.
  15. NSW, Qld: includes paratyphoid.
- NN Not Notifiable.  
 NEC Not Elsewhere Classified.  
 - Elsewhere Classified.

**Correction:** South Australian data were included with Western Australian data in the last issue of *CDI*.

**Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 28 January to 24 February 1999, and total reports for the year**

	State or Territory <sup>1</sup>								Total this period	Total reported in <i>CDI</i> in 1999	
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>Measles, mumps, rubella</b>											
Measles virus		1			1		1			3	10
Mumps virus							2	3		5	9
Rubella virus			1	4	1		1	1		8	16
<b>Hepatitis viruses</b>											
Hepatitis A virus		3	3	25	3			8		42	88
Hepatitis D virus				1						1	1
<b>Arboviruses</b>											
Ross River virus		6	25	127	11		12	10		191	314
Barmah Forest virus		1		7				2		10	22
Dengue type 3				2						2	22
Flavivirus (unspecified)				4			1			5	8
<b>Adenoviruses</b>											
Adenovirus type 2							2			2	5
Adenovirus type 3							2			2	9
Adenovirus type 37							2			2	2
Adenovirus type 40								1		1	13
Adenovirus not typed/pending		10		6	13		25	8		62	295
<b>Herpes viruses</b>											
Cytomegalovirus	1	14		31	34	1	25	3		109	249
Varicella-zoster virus		1	2	50	41		45	16		155	425
Epstein-Barr virus	2	22		79	88		22	18		231	621
<b>Other DNA viruses</b>											
Molluscum contagiosum								1		1	2
Contagious pustular dermatitis (Orf virus)		1						1		2	5
Parvovirus		1		10	3	1	7	7		29	81
<b>Picorna VIRUS family</b>											
Coxsackievirus A16							2			2	2
Echovirus type 9		2								2	16
Echovirus type 11		4								4	19
Echovirus type 30		1								1	14
Poliovirus type 1 (uncharacterised)		1				1				2	4
Poliovirus type 2 (uncharacterised)		1								1	9
Rhinovirus (all types)		4			1		1	2		8	82
Enterovirus not typed/pending	1	3	2	1			5	21		33	148
<b>Ortho/paramyxoviruses</b>											
Influenza A virus		1		2	21		8	1		33	169
Influenza A virus H3N2							1			1	1
Influenza B virus					2			3		5	20
Parainfluenza virus type 1				1						1	9
Parainfluenza virus type 2					2					2	7
Parainfluenza virus type 3				1	15		2	9		27	198
Respiratory syncytial virus		5		8	8		4	8		33	163

**Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 28 January to 24 February 1999, and total reports for the year (continued)**

	State or Territory <sup>1</sup>								Total this period	Total reported in <i>CDI</i> in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
<b>Other RNA viruses</b>										
Rotavirus		3			14		7	1	25	223
Norwalk agent							11		11	20
<b>Other</b>										
<i>Chlamydia trachomatis</i> not typed		10	8	78	40		6	53	195	556
<i>Chlamydia psittaci</i>							8		8	17
<i>Chlamydia</i> species				1			1		2	2
<i>Mycoplasma pneumoniae</i>		11	1	25	26		37	5	105	312
<i>Coxiella burnetii</i> (Q fever)		2		16	1		1		20	31
<i>Rickettsia</i> spp - other								2	2	2
<i>Bordetella pertussis</i>		4		29			16		49	115
<i>Legionella pneumophila</i>					1				1	4
<i>Legionella longbeachae</i>					2				2	17
<b>TOTAL</b>	4	112	42	508	328	3	257	184	1,438	4,357

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.

**Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 28 January to 24 February 1999**

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	26
	South West Area Pathology Service, Liverpool	69
Queensland	Queensland Medical Laboratory, West End	552
	Townsville General Hospital	15
South Australia	Institute of Medical and Veterinary Science, Adelaide	328
Victoria	Monash Medical Centre, Melbourne	30
	Royal Children's Hospital, Melbourne	86
	Victorian Infectious Diseases Reference Laboratory, Fairfield	144
Western Australia	PathCentre Virology, Perth	188
<b>TOTAL</b>		1,438

**Table 5. Australian Sentinel Practice Research Network reports, weeks 1 to 4, 1999**

Week number	1		2		3		4	
Week ending on	10 January 1999		17 January 1999		24 January 1999		31 January 1999	
Doctors reporting	49		48		47		50	
Total encounters	5,837		6,080		5,329		5,546	
Condition	Rate per 1,000		Rate per 1,000		Rate per 1,000		Rate per 1,000	
	Reports	encounters	Reports	encounters	Reports	encounters	Reports	encounters
Influenza	3	0.5	7	1.2	4	0.8	1	0.2
Rubella	2	0.3	0	0.0	0	0.0	1	0.2
Measles	0	0.0	0	0.0	0	0.0	0	0.0
Chickenpox	3	0.5	14	2.3	14	2.6	4	0.7
New diagnosis of asthma	10	1.7	9	1.5	7	1.3	4	0.7
Post operative wound sepsis	8	1.4	10	1.6	4	0.8	10	1.8
Gastroenteritis	55	9.4	60	9.9	45	8.4	49	8.8

**Table 6. Australian Sentinel Practice Research Network reports, weeks 5 to 8, 1999**

Week number	5		6		7		8	
Week ending on	7 February 1999		14 February 1999		21 February 1999		28 February 1999	
Doctors reporting	53		59		50		51	
Total encounters	6,865		7,418		6,275		6,363	
Condition	Rate per 1,000		Rate per 1,000		Rate per 1,000		Rate per 1,000	
	Reports	encounters	Reports	encounters	Reports	encounters	Reports	encounters
Influenza	8	1.2	3	0.4	13	2.1	20	3.1
Rubella	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0
Chickenpox	8	1.2	5	0.7	9	1.4	9	1.4
New diagnosis of asthma	3	0.4	9	1.2	6	1.0	9	1.4
Post operative wound sepsis	6	0.9	17	2.3	12	1.9	8	1.3
Gastroenteritis	59	8.6	65	8.8	69	11.0	61	9.6

*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 July to 30 September 1998

The AGSP laboratories examined 840 isolates of *Neisseria gonorrhoeae* for sensitivity to the penicillins, ceftriaxone, quinolones and spectinomycin and for high level resistance to the tetracyclines in the September quarter of 1998.

### Penicillins

Resistance to this group of antibiotics (penicillin, ampicillin, amoxycillin) shows considerable regional variation. Penicillin resistance was present in a high proportion of isolates examined in Melbourne (31%) and Sydney (56%). In Adelaide, Brisbane and Perth the proportion of penicillin-resistant strains was 22%, 17% and 4% respectively. A lower proportion of strains was resistant in the Northern Territory (2.3%). Figure 1 shows the proportion of isolates fully sensitive, less sensitive or relatively resistant to the penicillins by chromosomal mechanisms (CMRNG) and the proportion of penicillinase-producing gonococci (PPNG) in different regions and as aggregated data for Australia. penicillinase-producing gonococci and relatively resistant isolates usually fail to respond to therapy with the penicillins. Those in the fully sensitive and less sensitive categories (minimal inhibitory concentration - MIC  $\leq$  0.5 mg/L) usually respond to a regimen of standard treatment with the above penicillins.

There were 44 PPNG identified in this reporting period (5.2% of all isolates). These were distributed widely with 9 PPNG reported from Melbourne, 20 from Sydney, 4 from Perth, 8 from Brisbane, 2 from the Northern Territory and 1 from Adelaide. Infections with PPNG were acquired locally, but more frequently in South East Asian countries often visited by Australians. The Philippines, Thailand, Singapore, China, Indonesia, Vietnam, and Mexico were

among the countries where infections with PPNG were acquired.

Of relatively greater importance than PPNG were the 217 (26%) of all isolates resistant to the penicillins by separate chromosomal mechanisms. These so-called CMRNG were most often seen in Sydney (168 strains, 50%), Melbourne (35 strains, 25%), Brisbane (9 strains, 9%) and Adelaide (4 strains, 18%). One relatively resistant isolate was seen in the Northern Territory.

### Ceftriaxone and spectinomycin

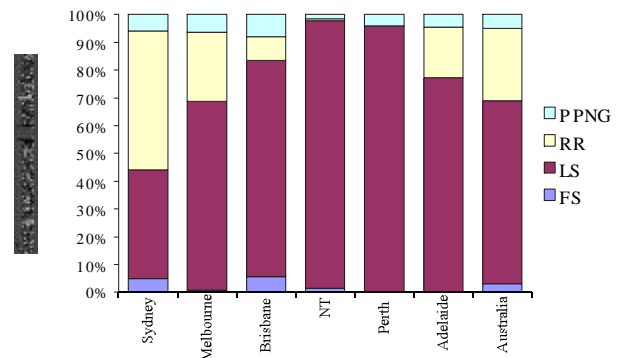
Although all isolates from all parts of Australia were sensitive to these injectable agents, a small number of isolates showed some decreased sensitivity to ceftriaxone.

### Quinolone antibiotics (Ciprofloxacin, norfloxacin and enoxacin)

Thirty-seven isolates (4.4%) throughout Australia had altered resistance to this group of antibiotics (QRNG) with 23 of these showing high level resistance. Twenty-two QRNG (6.5%) were detected in Sydney, 9 (6.3%) in Melbourne and 5 (5%) in Brisbane. QRNG were also detected in Canberra and Perth.

An increase in rates of isolation of QRNG was noted in

Figure 5. Penicillin resistance of gonococcal isolates for Australia and by region, 1 July to 30 September 1998



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*

AGSP reports in 1997. Additionally, the appearance of QRNG in locally acquired infections especially in Sydney but also in Melbourne was specifically mentioned. Local acquisition of high level resistance to quinolone antibiotics was seen again in Sydney and Melbourne in this quarter and additionally in this quarter in Perth and Brisbane. However, most of the infections with QRNG were acquired overseas. The countries identified as sources of acquisition included Singapore, Pakistan, Vietnam, New

Zealand, Thailand, the Philippines, Indonesia and China reflecting the wide dispersal of these strains.

In the corresponding period of 1997, 51 QRNG comprised 7.2% of all Australian isolates.

The quinolone agents are the oral agents most often used in centres where penicillins are ineffective. The appearance of quinolone resistance reduces options for successful treatment of gonorrhoea.

#### High level tetracycline resistance - 'TRNG'

Forty six TRNG were detected throughout Australia (5.5% of all strains) with isolates of this type again present in most centres. The highest number and proportion of TRNG was found in Sydney where the 27 TRNG represented 8% of all isolates. TRNG were also prominent in Perth (7 isolates, 7%) and Brisbane (7 isolates, 7%). Three TRNG were seen in Melbourne and single isolates of this type were present in Adelaide and the Northern Territory. There were 32 (4.5%) TRNG isolated in the corresponding period of 1997. Infections with TRNG were acquired in Indonesia, the Philippines, Thailand, Singapore and the USA. Local acquisition of TRNG was increasingly prominent in Sydney and also noted in other centres.

### 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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#### January to February 1999

Sentinel chicken serology was carried out for 25 of the 27 flocks in Western Australia in January and February 1999. There were a large number of seroconversions to flaviviruses in both the Kimberley and Pilbara flocks during this period. The increased flavivirus activity was a result of early, heavy wet season rainfall in the Kimberley region of Western Australia. To date, only one mild case of Kunjin virus infection from Kununurra has been reported.

The number of chickens for flavivirus antibodies by ELISA and the virus (or viruses) they were infected with, is shown in Table 1.

Serum samples from all of the seven Northern Territory sentinel chicken flocks were tested in our laboratory in January and February 1999. Seroconversions to flaviviruses were detected in serum samples from

**Table 1. Flavivirus seroconversions in Western Australian sentinel chicken flocks in January and February 1999**

Location	January '99			February '99		
	MVE	KUN	MVE/KUN	MVE	KUN	MVE/KUN
<b>Kimberley</b>						
Kalumburu	1					
Wyndham				2		
Kununurra	1		1	5		2
Halls Creek				1		
Fitzroy Crossing				6		
Derby <sup>1</sup>				8		2
Broome <sup>1</sup>				3	2	
<b>Pilbara</b>						
Karratha				1		1
Pardoo			1			

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 Kunjin viruses detected by ELISA.

Katherine, Tennant Creek and Gove in February 1999. These results are shown in Table 2.

There were no seroconversions to flaviviruses recorded in Victoria or New South Wales in January or February 1999.

**Table 2. Flavivirus seroconversions in Northern Territory sentinel chicken flocks in February 1999**

Location	Antibodies detected			
	MVE	KUN	MVE/ KUN	FLAVI only
Katherine	2		1	
Tennant Creek	4		4	
Gove		4		2

Flavi only Antibodies in serum competed only with flavivirus monoclonal in ELISA.

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, 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.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 31 October 1998, as reported to 31 January 1999, are included in this issue of CDI (Tables 7 and 8).

## 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

**Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 October 1998, 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	4	0	0	1	0	1	0	6	7	74	65
	Male	0	23	2	5	2	0	12	2	46	57	524	600
	Sex not reported	0	1	0	0	0	0	0	0	1	0	7	12
	Total <sup>1</sup>	0	28	2	5	3	0	13	2	53	64	605	678
AIDS diagnoses	Female	0	1	0	0	0	0	0	0	1	2	9	24
	Male	0	3	0	2	0	0	0	0	5	20	193	263
	Total <sup>1</sup>	0	4	0	2	0	0	0	0	6	22	202	287
AIDS deaths	Female	0	0	0	0	0	0	1	0	1	2	8	12
	Male	0	3	0	2	0	1	2	0	8	12	94	190
	Total <sup>1</sup>	0	3	0	2	0	1	3	0	9	14	102	203

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

**Table 8. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 October 1998, by sex and State or Territory**

		State or Territory								
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	21	571	8	131	55	4	198	99	1,087
	Male	183	10,456	101	1,856	642	77	3,720	868	17,903
	Sex not reported	0	260	0	0	0	0	24	0	284
	Total <sup>1</sup>	204	11,306	109	1,994	697	81	3,955	970	19,316
AIDS diagnoses	Female	8	166	0	45	20	2	65	23	329
	Male	83	4,476	32	775	325	43	1,562	337	7,633
	Total <sup>1</sup>	91	4,653	32	822	345	45	1,634	362	7,984
AIDS deaths	Female	2	113	0	30	15	2	47	16	225
	Male	62	3,078	24	538	222	28	1,226	241	5,419
	Total <sup>1</sup>	64	3,198	24	570	237	30	1,279	258	5,660

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