

Table 5. Australian Sentinel Practice Research Network reports, weeks 40 to 43, 1998.

Week number	40		41		42		43	
Week ending on	11 October 1998		18 October 1998		25 October 1998		1 November 1998	
Doctors reporting	51		57		54		54	
Total encounters	6157		7663		6589		7037	
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	25	4.1	31	4.0	22	3.3	20	2.8
Rubella	5	0.8	3	0.4	0	0.0	1	0.1
Measles	0	0.0	0	0.0	0	0.0	0	0.0
Chickenpox	6	1.0	14	1.8	10	1.5	14	2.0
Pertussis	4	0.6	1	0.1	2	0.3	8	1.1
HIV testing (patient initiated)	11	1.8	4	0.5	14	2.1	11	1.6
HIV testing (doctor initiated)	4	0.6	10	1.3	7	1.1	3	0.4
Td (ADT) vaccine	41	6.7	46	6.0	37	5.6	49	7.0
Pertussis vaccination	37	6.0	49	6.4	40	6.1	43	6.1
Reaction to pertussis vaccine	2	0.3	4	0.5	0	0.0	1	0.1
Ross River virus infection	3	0.5	3	0.4	0	0.0	0	0.0
Gastroenteritis	94	15.3	79	10.3	62	9.4	63	9.0

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 1998;22:4-5.

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 1998;22:8.

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 1998. CDI reports the consultation rates for all of these. For further information, including case definitions, see CDI 1998;22:5-6.

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 April to 30 June 1998

The AGSP laboratories examined 939 isolates of *Neisseria gonorrhoeae* for sensitivity to the penicillins, ceftriaxone, quinolones and spectinomycin and for high level resistance to the tetracyclines in the June quarter of 1998.

Penicillins

Resistance to this group of antibiotics (penicillin, ampicillin, amoxycillin) was present in a high proportion of isolates examined in Melbourne (36%) and Sydney (45%). In

Adelaide, Brisbane and Perth the proportion of penicillin-resistant strains was 12%, 11% and 6% respectively. A lower proportion of strains were resistant in the Northern Territory (2.3%). Figure 4 shows the proportion of isolates fully sensitive, less sensitive or relatively resistant to the penicillins by chromosomal mechanisms and the proportion of penicillinase-producing gonococci (PPNG) in different regions and as aggregated data for Australia. PPNG 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 ≤ 0.5 mg/L) usually respond to a regimen of standard treatment with the above penicillins.

There were 39 PPNG identified in this reporting period (4.2% of all isolates). These were distributed widely with 7 PPNG reported from Melbourne, 16 from Sydney, 7 from Perth, 6 from Brisbane and 3 from the Northern Territory. Infections with PPNG were acquired locally but more frequently in South East Asian countries often visited by Australians. The Philippines, Thailand, Singapore, China, Korea, Indonesia, Vietnam, and India were among the countries where infections with PPNG were acquired.

Of relatively greater importance than PPNG were the 194 (21%) of all isolates resistant to the penicillins by separate chromosomal mechanisms. These so called CMRNG were most often seen in Sydney (131 strains, 40%), Melbourne (50 strains, 32%), Brisbane (8 strains, 6%) and Adelaide (4 strains, 12%). 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 isolates (3.2%) throughout Australia had altered resistance to this group of antibiotics (QRNG) with 18 of these showing high level resistance. Eighteen QRNG (5%) were detected in Sydney, 8 (5%) in Melbourne and 4 (3%) in Brisbane. QRNG were not detected in other centres.

An increase in rates of isolation of QRNG was noted in AGSP reports in 1997. Additionally the appearance of QRNG in locally acquired infections especially in Sydney but also in Melbourne was specifically mentioned. Locally acquisition of high level resistance to quinolone antibiotics was seen again in Sydney in this quarter but was not confirmed in any other centre. Patients infected with QRNG overseas acquired the infections in Indonesia, China, Thailand, Vietnam and the Philippines.

In the corresponding period of 1997, 42 QRNG comprised 5.5% 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.

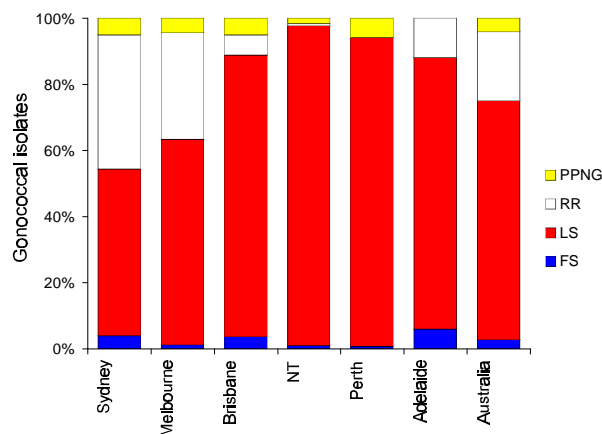
High level tetracycline resistance - "TRNG"

Forty TRNG were detected throughout Australia (4.3% 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 21 TRNG represented 6.5% of all isolates. TRNG were also prominent in Perth (7 isolates, 5.6%) and Brisbane (7 isolates, 5.4%). Three TRNG were seen in the Northern Territory and two in Melbourne. TRNG were acquired in India, the Philippines, Vietnam and Papua New Guinea. Local acquisition was increasingly prominent in Sydney.

Sentinel Chicken Surveillance

Figure 4. Penicillin resistance of gonococcal isolates for Australia and by region, 1 April to 30 June 1997



FS	Fully sensitive to penicillin, MIC 0.06 - 0.5 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 <i>Neisseria gonorrhoeae</i>

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 1998;22:7

AK Broom¹, J Azuolas², L Hueston³, JS Mackenzie⁴, L Melville⁵, DW Smith⁶ and PI Whelan⁷

1. Department of Microbiology, The University of Western Australia
2. Veterinary Research Institute, Victoria
3. Virology Department, Institute of Clinical Pathology and Medical Research, New South Wales
4. Department of Microbiology, The University of Queensland
5. Berrimah Agricultural Research Centre, Northern Territory
6. PathCentre, Western Australia
7. Department of Health and Community Services, Northern Territory

Sentinel chicken serology was carried out for 14 of the 27 flocks in Western Australia in September 1998, 22 of the

27 flocks in October 1998. There were no seroconversions in any of the flocks during either month, which is what we would expect at this time of the year.

Sentinel chickens from the Northern Territory were also tested in our laboratory for 5 of the 7 flocks, in September 1998. There were no new seroconversions during this time.

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, 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 30 June 1998, as reported to 30 September 1998, are included in this issue of CDI (Tables 6 and 7).

Childhood Immunisation Coverage

Table 8 and 9 provides the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register (ACIR).

The data show the percentage of children fully immunised at age 12 months for the cohort born between 1 April and 30 June 1997 and at age 24 months for the cohort born between 1 April and 30 June 1996 according to the Australian Standard Vaccination Schedule.

Table 6. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 30 June 1998, by sex and State or Territory of diagnosis.

									Totals for Australia				
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1998	This period 1997	Year to date 1998	Year to date 1997
HIV diagnoses	Female	0	1	0	0	2	0	0	1	4	4	37	37
	Male	0	24	2	7	2	0	9	3	47	51	334	371
	Sex not reported	0	0	0	0	0	0	0	0	0	0	8	10
	Total ¹	0	25	2	7	4	0	9	4	51	55	379	419
AIDS diagnoses	Female	0	0	0	0	1	0	0	0	1	1	6	16
	Male	0	8	0	0	2	0	3	0	13	24	95	165
	Total ¹	0	8	0	0	3	0	3	0	14	25	101	181
AIDS deaths	Female	0	0	0	0	1	0	1	0	2	1	4	8
	Male	0	4	0	4	1	0	1	0	10	19	46	126
	Total ¹	0	4	0	4	2	0	2	0	12	20	50	134

Table 7. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 30 June 1998, by sex and State or Territory.

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	22	553	7	128	54	4	194	89	1,051
	Male	183	10,345	98	1,828	635	77	3,706	860	17,732
	Sex not reported	0	262	0	0	0	0	25	0	287
	Total ¹	205	11,179	105	1,962	689	81	3,938	952	19,111
AIDS diagnoses	Female	8	159	0	45	20	2	64	23	321
	Male	82	4,382	32	766	324	41	1,543	337	7,507
	Total ¹	90	4,552	32	813	344	43	1,614	362	7,850
AIDS deaths	Female	2	112	0	28	15	2	46	16	221
	Male	62	3,053	23	533	220	27	1,209	241	5,368
	Total ¹	64	3,172	23	563	235	29	1,261	258	5,605

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

Table 8. Percentage of children immunised at 1 year of age, preliminary results by disease and State for the birth cohort 1 April to 30 June 1997; assessment date 30 June 1998.

Vaccine	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,099	22,029	903	12,472	4,670	1,573	15,433	6,207	64,386
DTP (%)	88.0	84.9	81.2	87.9	88.0	87.9	87.9	84.8	86.5
OPV (%)	87.7	84.7	80.5	87.7	88.3	88.0	88.0	85.0	86.4
Hib (%)	86.2	83.9	81.9	88.5	86.6	87.4	87.4	84.6	86.0
Fully Immunised (%)	85.0	82.3	76.0	85.8	85.3	86.2	86.2	83.2	84.3
Change in fully immunised since last quarter (%)	+4.0	+3.8	+16.8	+2.6	+6.0	+3.9	+3.2	+6.2	+4.1

Table 9. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 April to 30 June 1996; assessment date 30 June 1998.¹

Vaccine	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,088	22,170	905	12,430	4,747	1,580	15,443	6,675	65,038
DTP (%)	78.6	77.1	61.7	81.9	79.6	77.8	77.8	75.4	78.0
OPV (%)	84.0	81.7	70.7	87.8	84.6	85.8	86.9	77.2	83.8
Hib (%)	77.4	77.2	65.0	81.9	80.2	78.3	78.6	75.8	78.4
MMR (%)	84.7	81.2	71.5	87.9	82.1	84.7	85.0	78.5	83.2
Fully Immunised (%)¹	69.7	63.8	50.7	72.8	65.6	67.0	67.7	59.2	66.1
Change in fully immunised since last quarter (%)	+0.7	+1.5	+1.9	+4.5	+2.8	+3.6	+0.8	+4.4	+2.3

1. These data relating to 2 year old children should be considered as preliminary. The proportions shown as 'fully immunised' appear low compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.

Acknowledgment: These figures were provided by the Health Insurance Commission (HIC), to specifications provided by the Commonwealth Department of Health and Family Services. For further information on these figures or data on the Australian Childhood Immunisation Register please contact the Immunisation Section of the HIC: Telephone 02 6203 6185.