

were imported (the vector is exotic to the Northern Territory) (Figure 5).

There were 512 notifications of Ross River virus infection with an onset month of January 2000, which was an increase from December 1999 (242), but was similar to the figures for January last year (519) and for the mean for the last 5 years (558). The majority of notifications were in Queensland and Western Australia (81%). Sixty-seven per cent of all notifications were in the 20- 49 year age group with a male to female ratio of 0.9:1.

Other diseases

There were 22 notifications of legionellosis with an onset month of January 2000, with the majority being in Victoria (59%). This was similar to the notifications for December 1999 (15), January last year (24) and for the mean for the last 5 years (19). The age for the notifications ranged from 30 to 79 years and the male to female ratio was 2.6:1.

Tables

There were 7,514 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with an onset date in January 2000 (Tables 1 and 2) and 6,537 notifications in the 4 week period, 2 to 29 February 2000 (Tables 3 and 4). The number of reports for selected diseases have been compared with a 5 year mean, calculated using December to February data for the previous 5 years (Figure 6).

There were 1,559 reports received by the *CDI*/Virology and Serology Laboratory Reporting Scheme (LabWISE) in the 4 week period, 27 January to 23 February 2000 (Tables 5 and 6).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 4 to 7, ending 20 February 2000, are included in this issue of *CDI* (Table 7).

Table 1. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood vaccination, received by State and Territory health authorities in the period 1 to 31 January 2000, by date of onset

Disease ¹	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Jan 2000 ²	Total Dec 1999 ²	Total Jan 1999 ²	Last 5 years mean
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	1	0	1	0	0	0	1	3	3	4	5
Measles	0	2	0	2	0	0	4	0	8	4	10	82
Mumps	2	2	0	0	2	0	3	4	13	11	9	11
Pertussis	8	129	1	85	18	45	86	4	376	415	350	580
Rubella ³	0	4	0	6	1	0	5	1	17	17	27	191
Tetanus	0	0	0	1	0	0	0	0	1	0	0	1

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 1 to 31 January 2000, by date of onset

Disease ^{1,2,3}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total Jan 2000 ⁴	Total Dec 1999 ⁴	Total Jan 1999 ⁴	Last 5 years mean
Arbovirus infection (NEC)	0	0	0	0	0	0	3	0	3	0	18	9
Barmah Forest virus infection	0	15	1	26	0	0	3	5	50	38	57	59
Brucellosis	0	0	0	2	0	0	0	0	2	3	1	4
Campylobacteriosis ⁵	19	0	17	363	162	39	417	123	1,140	980	1,109	1,048
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydial infection (NEC) ⁶	19	201	73	360	78	26	231	147	1,135	936	1,049	757
Cholera	0	0	0	0	0	0	0	0	0	1	1	1
Dengue	0	3	17	22	1	0	0	4	47	23	31	33
Donovanosis	0	0	4	1	NN	0	0	0	5	0	4	5
Gonococcal infection ⁷	2	100	77	106	19	3	89	109	505	323	481	373
Haemolytic uraemic syndrome	NN	1	0	0	0	0	NN	0	1	2	1	3
Hepatitis A	0	29	14	13	7	0	29	28	120	98	128	234
Hepatitis B incident	2	6	5	3	1	0	4	7	28	33	30	23
Hepatitis B unspecified ⁸	2	256	0	59	0	3	129	76	525	446	568	503
Hepatitis C incident	2	3	0	0	3	0	3	2	13	26	24	12
Hepatitis C unspecified ⁸	20	556	12	294	66	32	374	126	1,480	1,311	1,577	1,203
Hepatitis (NEC) ⁹	0	0	0	0	0	0	0	NN	0	1	0	2
Hydatid infection	0	NN	0	0	0	0	2	0	2	4	2	3
Legionellosis	0	1	0	3	2	0	13	3	22	15	24	19
Leprosy	0	0	0	0	0	0	0	0	0	1	0	2
Leptospirosis	0	3	0	10	0	0	6	0	19	19	30	16
Listeriosis	0	2	1	2	1	0	1	3	10	5	6	7
Malaria	2	18	4	39	1	0	8	1	73	50	70	75
Meningococcal infection	0	19	0	4	1	3	15	4	46	43	39	25
Ornithosis	0	NN	0	NN	0	0	4	1	5	7	5	8
Q Fever	0	14	0	25	0	0	1	0	40	41	35	40
Ross River virus infection	1	31	40	277	15	0	10	138	512	242	519	558
Salmonellosis (NEC)	29	114	34	196	49	16	111	110	659	462	852	702
Shigellosis ⁵	0	0	11	8	3	0	7	11	40	30	50	64
SLTEC, VTEC ¹⁰	NN	0	0	NN	4	0	NN	NN	4	6	4	3
Syphilis ¹¹	0	56	17	49	0	1	0	2	125	85	163	135
Tuberculosis	1	30	2	9	0	2	0	4	48	71	95	121
Typhoid ¹²	0	5	0	0	0	0	1	1	7	6	7	10
Yersiniosis (NEC) ⁵	0	0	0	6	2	0	0	0	8	7	27	28

1. Diseases preventable by routine childhood vaccination are presented in Table 1 (by date of onset).

2. For HIV and AIDS, see Tables 8 and 9.

3. No notifications have been received during 2000 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. NT, Qld, SA, Vic and WA: includes gonococcal neonatal ophthalmia.

8. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of testings being carried out.

9. Includes hepatitis D and E.

10. Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC).

11. Includes congenital syphilis.

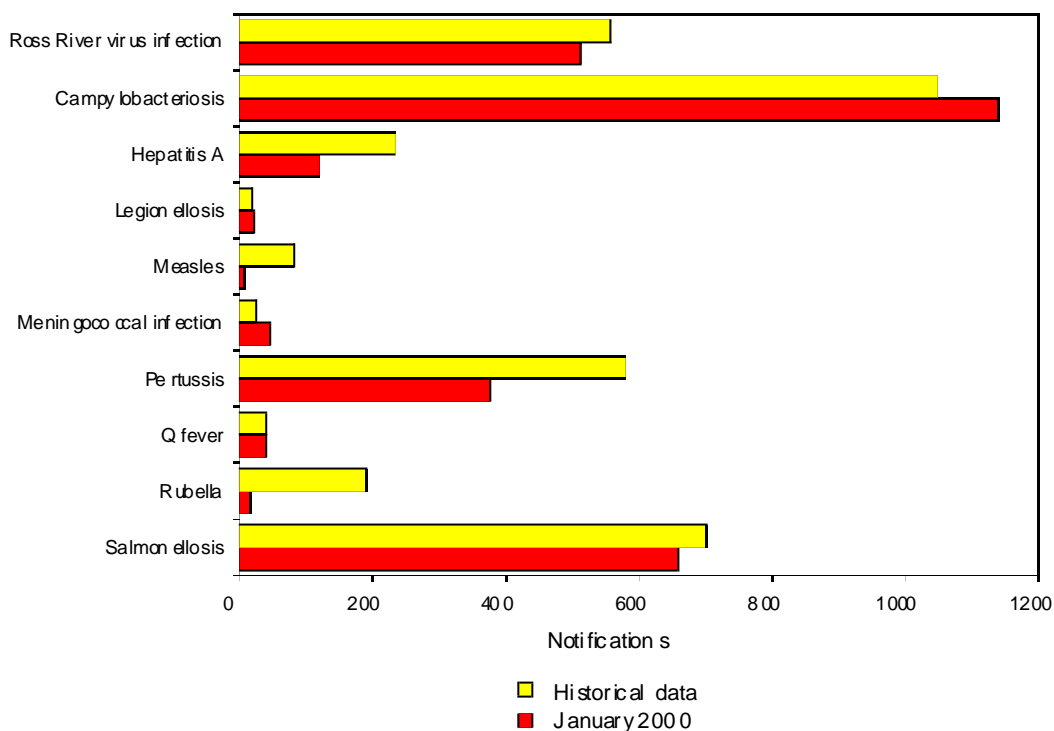
12. NSW, Qld: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

Figure 6. Selected diseases from the National Notifiable Diseases Surveillance System, and historical data,¹ by date of onset



1. The historical data are a 5 year mean, calculated using December to February data for the previous 5 years (1994/95 to 1998/99).

Table 3. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood vaccination, received by State and Territory health authorities in the period 2 to 29 February 2000, by date of report

Disease ¹	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2000 ²	This period 1999 ²	Year to date 2000 ²	Year to date 1999
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	1	0	0	0	0	0	1	2	4	4	8
Measles	1	2	0	5	0	0	1	0	9	14	20	21
Mumps	3	1	1	0	1	0	3	6	15	13	30	17
Pertussis	14	148	2	48	24	30	81	5	352	317	788	715
Rubella ³	0	3	0	3	0	0	4	0	10	25	33	54
Tetanus	0	0	0	1	1	0	0	0	2	0	2	0

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 4. Notifications of diseases received by State and Territory health authorities in the period 2 to 29 February 2000, by date of report

Disease ^{1,2,3}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2000 ⁴	This period 1999 ⁴	Year to date 2000 ⁴	Year to date 1999
Arbovirus infection (NEC)	0	0	0	0	0	0	7	0	7	22	9	43
Barmah Forest virus infection	0	13	0	25	0	0	3	8	49	64	97	113
Brucellosis	0	0	0	0	0	0	0	0	0	1	3	4
Campylobacteriosis ⁵	21	-	10	287	130	16	363	118	945	969	2,152	2,237
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydial infection (NEC) ⁶	25	161	64	328	83	31	288	162	1,142	1,039	2,404	2,053
Cholera	0	1	0	0	0	0	0	0	1	1	1	1
Dengue	0	1	15	29	1	0	1	4	51	8	93	69
Donovanosis	0	0	2	0	NN	0	0	0	2	2	5	5
Gonococcal infection ⁷	1	70	88	76	17	0	63	91	406	432	955	905
Haemolytic uraemic syndrome	NN	1	0	0	0	0	NN	0	1	5	2	5
Hepatitis A	0	14	9	18	6	0	18	30	95	159	220	310
Hepatitis B incident	1	5	0	4	1	0	1	3	15	29	52	58
Hepatitis B unspecified ⁸	6	217	0	54	0	2	11	93	383	513	996	1,041
Hepatitis C incident	1	2	0	-	8	0	1	10	22	24	46	50
Hepatitis C unspecified ⁸	25	583	13	246	87	31	307	149	1,442	1,581	3,126	3,191
Hepatitis (NEC) ⁹	0	0	0	0	0	0	0	NN	0	0	0	0
Hydatid infection	0	NN	0	2	0	0	1	0	3	1	5	4
Legionellosis	0	1	0	5	1	0	20	3	30	30	47	49
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	0	3	0	8	0	0	2	0	13	29	33	61
Listeriosis	0	0	0	3	2	0	1	0	6	2	15	8
Malaria	0	3	7	45	1	1	15	2	74	94	147	155
Meningococcal infection	0	9	1	2	0	0	4	5	21	14	77	53
Ornithosis	0	NN	0	NN	1	0	10	0	11	6	16	14
Q Fever	0	7	0	35	1	0	1	2	46	34	95	80
Ross River virus infection	0	36	29	274	34	0	40	153	566	632	1,062	1,086
Salmonellosis (NEC)	9	86	33	207	31	12	122	90	590	794	1,292	1,682
Shigellosis ⁵	0	-	7	8	2	1	8	11	37	38	77	91
SLTEC, VTEC ¹⁰	NN	0	0	NN	4	0	NN	NN	4	3	10	7
Syphilis ¹¹	1	40	18	59	0	0	0	5	123	145	276	286
Tuberculosis	1	23	11	11	0	0	0	1	47	65	106	132
Typhoid ¹²	0	3	0	1	0	0	3	0	7	9	17	13
Yersiniosis (NEC) ⁵	0	-	0	3	4	0	1	0	8	16	17	41

1. Diseases preventable by routine childhood vaccination are presented in Table 3 (by date of report).

2. For HIV and AIDS, see Tables 8 and 9.

3. No notifications have been received during 2000 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. NT, Qld, SA, Vic and WA: includes gonococcal neonatal ophthalmia.

8. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of testings being carried out.

9. Includes hepatitis D and E.

10. Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC).

11. Includes congenital syphilis.

12. NSW, Qld: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

Table 5. Virology and serology laboratory reports by State or Territory¹ for the reporting period 27 January to 23 February 2000, and total reports for the year²

	State or Territory ¹								This period 2000 ³	This period 1999 ³	Year to date 2000 ³	Year to date 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Measles, mumps, rubella												
Measles virus	0	0	0	0	0	0	2	0	2	2	8	6
Mumps virus	0	0	0	0	0	0	0	6	6	6	11	9
Rubella virus	0	0	0	0	0	0	1	0	1	7	7	11
Hepatitis viruses												
Hepatitis A virus	0	0	3	5	5	0	0	6	19	39	40	75
Arboviruses												
Ross River virus	1	4	17	75	24	0	0	62	183	162	341	290
Barmah Forest virus	0	0	2	19	0	0	0	4	25	6	46	26
Dengue not typed	0	1	14	1	0	0	0	25	41	1	88	8
Flavivirus (unspecified)	0	0	1	14	0	0	3	0	18	2	20	11
Adenoviruses												
Adenovirus type 1	0	1	0	0	0	0	0	0	1	1	1	1
Adenovirus type 3	0	0	0	0	2	0	0	0	2	4	5	6
Adenovirus type 4	0	0	0	0	1	0	0	0	1	2	1	4
Adenovirus type 40	0	0	0	0	0	0	0	6	6	1	9	7
Adenovirus not typed/pending	0	7	0	2	25	0	9	45	88	56	172	150
Herpes viruses												
Herpes virus type 6	0	0	0	0	0	0	0	1	1	0	2	0
Cytomegalovirus	1	10	0	24	47	2	9	12	105	72	206	176
Varicella-zoster virus	0	11	1	40	8	4	32	41	137	122	270	299
Epstein-Barr virus	0	5	1	83	80	1	6	25	201	153	388	411
Other DNA viruses												
Papovavirus group	0	0	0	0	0	0	0	4	4	0	4	0
Molluscum contagiosum	0	0	0	0	0	0	0	1	1	2	3	3
Parvovirus	1	0	0	0	0	0	12	20	33	33	57	65
Picornavirus family												
Rhinovirus (all types)	0	5	0	0	0	0	1	8	14	17	32	37
Enterovirus not typed/pending	0	1	1	3	0	0	9	24	38	52	85	99
Ortho/paramyxoviruses												
Influenza A virus	2	3	1	3	10	0	7	25	51	15	131	65
Influenza B virus	0	0	0	0	4	0	0	6	10	5	14	15
Parainfluenza virus type 1	0	2	0	0	0	0	0	3	5	3	13	5
Parainfluenza virus type 2	0	0	0	0	2	0	0	0	2		2	4
Parainfluenza virus type 3	0	0	0	0	9	2	0	9	20	18	54	79
Respiratory syncytial virus	2	7	1	8	1	0	8	27	54	44	98	84
Other RNA viruses												
HTLV-1	0	0	0	0	0	0	0	2	2	0	2	0
Rotavirus	1	11	0	0	17	2	3	1	35	30	89	91
Reovirus (unspecified)	0	1	0	0	0	0	0	0	1	0	1	0

Table 5. Virology and serology laboratory reports by State or Territory¹ for the reporting period 27 January to 23 February 2000, and total reports for the year² (continued)

	State or Territory ¹								This period 2000 ³	This period 1999 ³	Year to date 2000 ³	Year to date 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Other												
<i>Chlamydia trachomatis</i> not typed	5	25	25	90	37	1	4	82	269	231	518	462
<i>Chlamydia psittaci</i>	0	0	0	0	0	0	6	1	7	7	12	13
<i>Chlamydia</i> species	0	2	0	0	0	0	0	0	2	1	2	1
<i>Mycoplasma pneumoniae</i>	0	0	0	21	3	0	9	6	39	87	97	198
<i>Coxiella burnetii</i> (Q fever)	0	2	0	4	0	0	1	1	8	15	18	27
<i>Streptococcus</i> group A	0	6	8	25	0	0	0	0	39	0	80	0
<i>Bordetella pertussis</i>	0	3	0	10	3	0	25	1	42	39	119	93
<i>Legionella pneumophila</i>	0	0	0	0	0	0	1	0	1	5	1	8
<i>Legionella longbeachae</i>	0	0	0	0	0	0	0	3	3	1	9	9
<i>Leptospira</i> species	0	0	0	2	0	0	0	0	2	0	5	0
<i>Treponema pallidum</i>	0	1	11	24	0	0	0	1	37	0	87	0
<i>Entamoeba histolytica</i>	0	0	0	1	0	0	0	2	3	0	6	0
Total	13	108	86	454	278	12	148	460	1,559	1,241	3,154	2,848

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.
 2. From January 2000 data presented are for reports with report dates in the current period. Previously reports included all data received in that period.
 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.
- No data received this period.

Table 6. Virology and serology laboratory reports by contributing laboratories for the reporting period 27 January to 23 February 2000

State or Territory	Laboratory	This period	Total this period ²
Australian Capital Territory	The Canberra Hospital	0	0
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	49	182
	New Children's Hospital, Westmead	18	22
New South Wales	Repatriation General Hospital, Concord	0	0
	Royal Prince Alfred Hospital, Camperdown	19	24
	South West Area Pathology Service, Liverpool	0	0
Queensland	Queensland Medical Laboratory, West End	529	532
	Townsville General Hospital	7	8
South Australia	Institute of Medical and Veterinary Science, Adelaide	277	313
Tasmania	Northern Tasmanian Pathology Service, Launceston	6	9
	Royal Hobart Hospital, Hobart	0	0
Victoria	Monash Medical Centre, Melbourne	22	52
	Royal Children's Hospital, Melbourne	42	55
	Victorian Infectious Diseases Reference Laboratory, Fairfield	92	210
Western Australia	PathCentre Virology, Perth	468	505
	Princess Margaret Hospital, Perth	30	32
	Western Diagnostic Pathology	0	0
Total		1,559	1,944

1. The complete list of laboratories reporting for the 12 months, January to December 2000, will appear in every report from January 2000 regardless of whether reports were received in this reporting period. Reports are not always received from all laboratories.
2. Total reports include both reports for the current period and outstanding reports to date.

Table 7. Australian Sentinel Practice Research Network reports, weeks 4 to 7, 2000

Week number	4		5		6		7	
Week ending on	30 January 2000		6 February 2000		13 February 2000		20 February 2000	
Doctors reporting	63		65		66		65	
Total encounters	6,713		7,636		8,684		8,135	
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	10	1.5	10	1.3	13	1.5	16	2.0
Chickenpox	9	1.3	12	1.6	14	1.6	9	1.1
Gastroenteritis	76	11.3	65	8.5	95	10.9	74	9.1
Gastroenteritis with stool culture	11	1.6	17	2.2	14	1.6	13	1.6
ADT immunisations	54	8.0	44	5.8	64	7.4	74	9.1

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 2000;24:6.

LabVISE is a sentinel reporting scheme. Currently 17 laboratories contribute data on the laboratory identification of viruses and other organisms. This number may change throughout the year. 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 2000;24:10.

ASPREN currently comprises about 120 general practitioners from throughout the country. Between 7,000 and 8,000 consultations are reported each week, with special attention to 14 conditions chosen for sentinel surveillance in 2000. CDI reports the consultation rates for five of these. For further information, including case definitions, see CDI 2000;24:7-8.

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 quarterly. The antibiotics that are 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% or more of isolates from a general population, it is usual to remove that agent from the list of recommended treatments.¹ Additional data are also provided on other antibiotics from time to time. At present all laboratories also test isolates for the presence of high level (plasmid-mediated) resistance to the tetracyclines, known as TRNG. Tetracyclines are however not a recommended therapy for gonorrhoea in Australia. Comparability of data is achieved by means of a standardised system of testing and a 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 1999

The AGSP laboratories examined a total of 859 isolates in this quarter. About 40% of this total was from New South Wales, 20% each from Victoria and Queensland, 10% from the Northern Territory and Western Australia and 3% from South Australia. Isolates from other centres were few in number.

Penicillins

Figure 6 shows the proportions of gonococci fully sensitive ($MIC \leq 0.03$ mg/L), less sensitive ($MIC 0.06 - 0.5$ mg/L), relatively resistant ($MIC \geq 1$ mg/L) or 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.

Twenty per cent of all isolates were penicillin resistant by one or more mechanisms. The penicillin-resistant isolates