

Communicable Diseases Surveillance

Presentation of NNDSS data

In the March 2000 issue an additional summary table was introduced. Table 1 presents 'date of notification' data, which is a composite of three components: (i) the true onset date from a clinician, if available, (ii) the date the laboratory test was ordered, or (iii) the date reported to the public health unit. Table 2 presents the crude incidence of diseases by State or Territory for the current reporting month. Table 3 presents data by report date for information only. In Table 3 the report date is the date the public health unit received the report.

Table 1 now includes the following summary columns: total current month 2000 data; the totals for previous month 2000 and corresponding month 1999; a 5 year mean which is calculated using previous, corresponding and following month data for the previous 5 years (*Morb Mortal Wkly Rep*, 2000:49;139-146); year to date (YTD) figures; the mean for the year to date figures for the previous 5 years; and the ratio of the current month to the mean of the last 5 years.

Highlights for August, 2000

Communicable Disease Surveillance Highlights report on data from various sources, including the National Notifiable Diseases Surveillance System (NNDSS) and several disease specific surveillance systems that provide regular reports to Communicable Diseases Intelligence. These national data collections are complemented by intelligence provided by State and Territory communicable disease epidemiologists and/or data managers who have recently formed a Data Management Network. This additional information has enabled the reporting of more informative highlights each month.

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand and the CDI Virology and Serology Laboratory Reporting Scheme (LabVISE) is a 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'.

Three types of data are included in *National Influenza Surveillance, 2000*. These are sentinel general practitioner surveillance conducted by the Australian Sentinel Practice Research Network (ASPREN), the Department of Human Services (Victoria), the Department of Health (New South Wales) and the Tropical Influenza Surveillance Scheme, Territory Health Services (Northern Territory); laboratory surveillance data from the Communicable Diseases Intelligence Virology and Serology Laboratory Reporting Scheme (LabVISE); and the World Health Organization Collaborating Centre for Influenza Reference and Research; and absenteeism surveillance conducted by Australia Post. Data from ASPREN are referred to as 'consultations' or 'encounters'. For further information about these schemes, see *Commun Dis Intell* 2000;24:9-10.

In August 2000 the number of reports of some diseases has increased compared with their 5 year mean; these include incident hepatitis B (1.6), incident hepatitis C (2.2), chlamydial infection (1.5), malaria (1.5), legionellosis (1.5) and meningococcal infection (1.3).

Typhoid

There were four notifications of typhoid in August 2000 with three cases in New South Wales (29 year-old male, 29 year old female and a 36 year old male) and one case in Victoria (15 year old male).

Vaccine preventable diseases

All vaccine preventable diseases except mumps and pertussis had fewer reports this month than for the 5 year mean. The increase in the notification rate (1.1/100,000 population) for mumps was due to an increase in Western Australia (2.6/100,000 population) and New South Wales (1.9/100,000 population). The increase in the notification rate (34.6/100,000 population) (Figure 1) for pertussis was, as last month, due to an increase in the Australian Capital Territory (130.2/100,000 population) and New South Wales (64.6/100,000 population). Measles cases continued to be

at their lowest level since the national notification system began (Figure 2). Of the two cases in August 2000, one

Figure 1. Notification rate of pertussis, New South Wales, Australian Capital Territory and Australia, 1 January 1991 to 31 August 2000, by month of notification

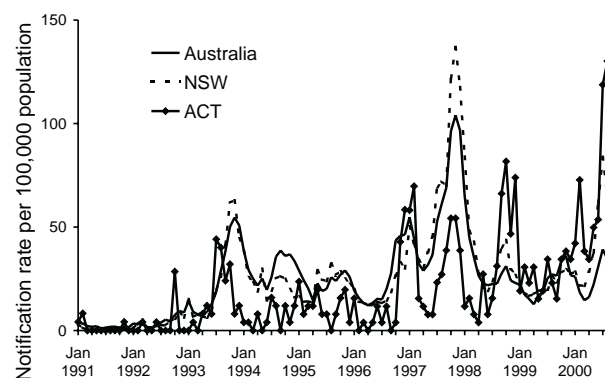


Figure 2. Notification rate of measles, Australia, 1 January 1991 to 31 August 2000, by month of notification

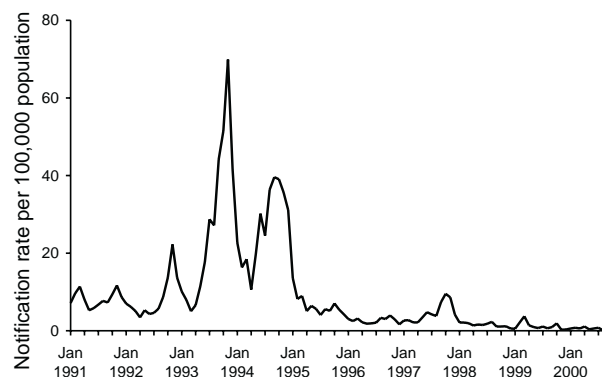
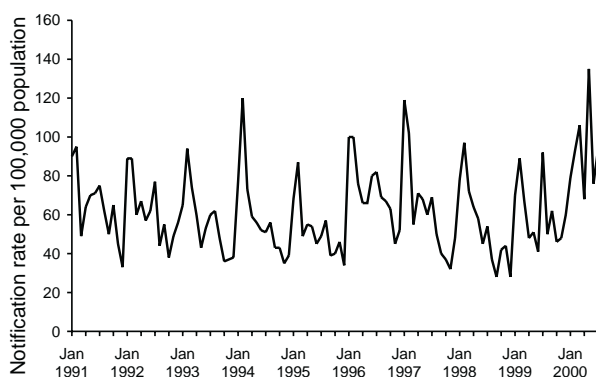


Figure 3. Notification rate of malaria, Australia, 1 January 1991 to 31 August 2000, by month of notification



each was reported in New South Wales (28 year-old male) and Western Australia (1 year-old female).

Malaria

There were 83 notifications of malaria in August 2000. The increase in the notification rate (5.3/100,000 population) (Figure 3) was due to an increase in the Northern Territory (56/100,000 population) and Queensland (14/100,000 population). Most cases were in the 15-34 age range (69%) and were mainly returning service personnel and students; all were imported.

Legionellosis

There were 18 notifications of legionellosis in August 2000. The increase in the notification rate (1.1/100,000 population) was due to an increase in South Australia (6.4/100,000 population).

Meningococcal infections

There were 74 notifications of meningococcal infection in August 2000 – a notification rate of 4.7/100,000 population (Figure 4). Of these cases, 34 per cent were under 5 years of age, 15 per cent were in the 5-14 year age range and 30 per cent were in the 15-24 age range. The serogroups were available for 40 cases; of these 53 per cent, 43 per cent and 5 per cent were serogroup B, C and Y respectively.

Influenza

There were 107 laboratory reports of influenza for August 2000, a decrease from 647 in August 1999, and a decrease from 185 in July 2000 (Figure 5). Of the laboratory reports received in August 2000 for weeks 31-35, 91 were influenza A and 29 were influenza B, with the weekly proportion of influenza B varying from 18 per cent to 38 per cent (Figure 6). The weekly percentage of influenza B has increased from the same period last year when it varied between 6 per cent and 16 per cent.

The percentages of Australia Post employees absent in August 2000 (weeks 31-35) for 3 or more consecutive days remained similar to last year and to the previous month, although there were some weekly fluctuations (Figure 7). All

Figure 4. Notification rate of meningococcal infection, Australia, 1 January 1991 to 31 August 2000, by month of notification

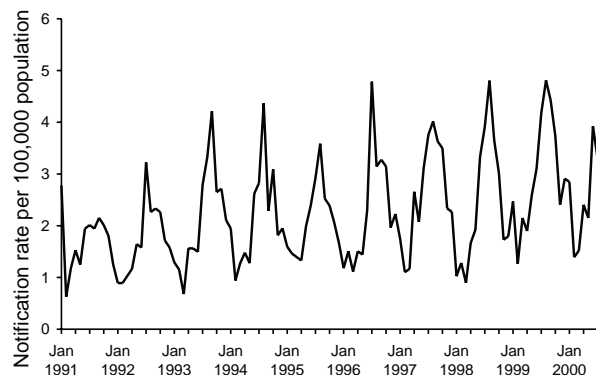
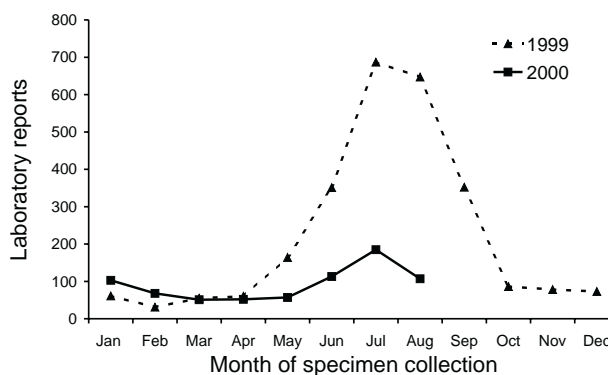


Figure 5. Laboratory reports of influenza, 1999 to 2000, by month of specimen collection



of the influenza surveillance schemes reported an increase in the rate of influenza-like illness consultations with the New South Wales Influenza Surveillance Scheme reporting the highest rate (32/1,000 consultations) in August 2000 (weeks 31-35; Figure 8).

Figure 6. Laboratory reports of influenza, Australia, week 36 1999 to week 35 2000, by week of specimen collection

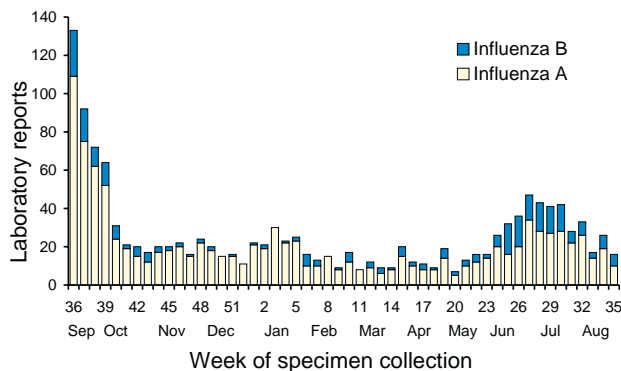


Figure 7. Absenteeism rates in Australia Post, 1999 and 2000 to 31 August

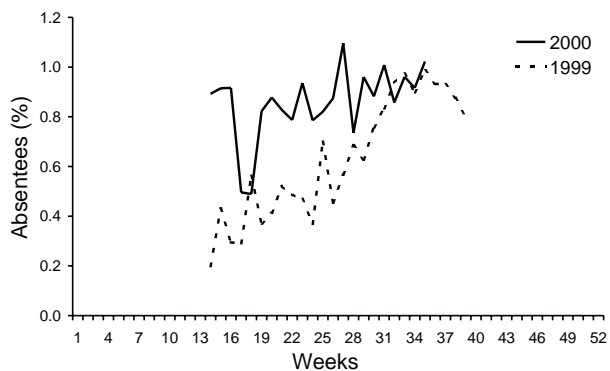
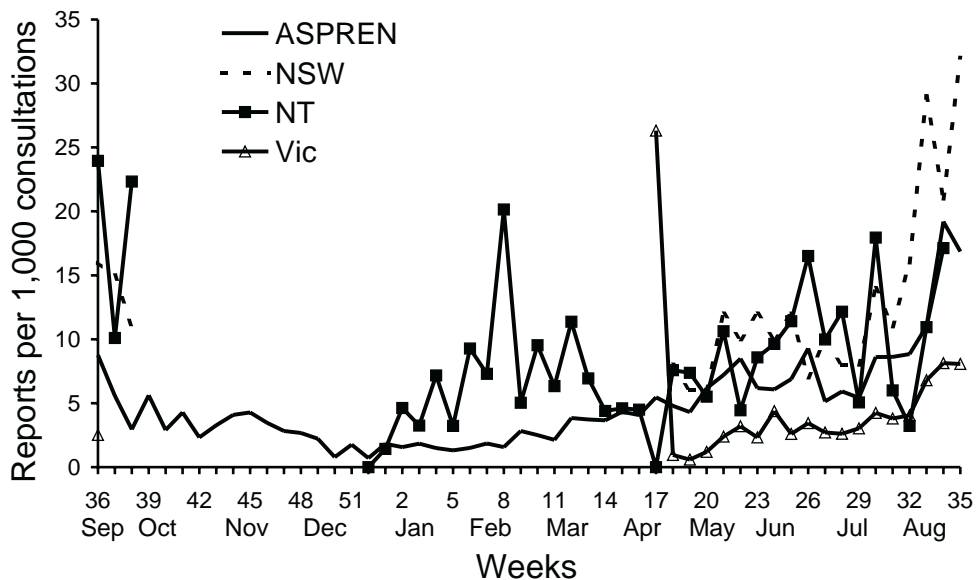


Figure 8. Sentinel general practitioner influenza consultation rates, week 36 1999 to week 35 2000, by scheme



Tables

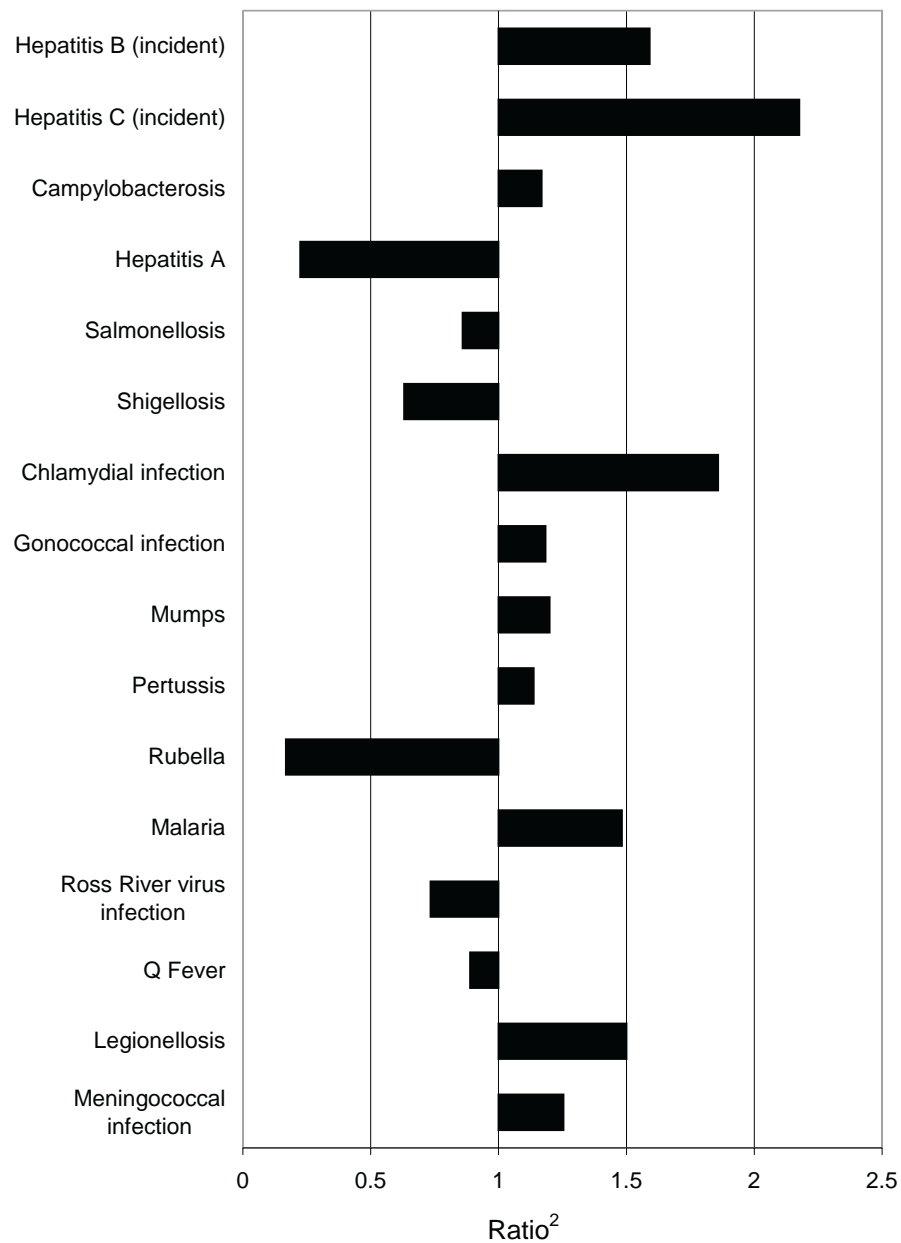
There were 6,499 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in August 2000 (Table 1). The crude incidence of diseases per 100,000 population for each State or Territory (Table 2) was included for the first time in the August issue of *Commun Dis Intell*. Data by date of report for August 2000, are included in this issue of *Commun Dis Intell* (Table 3). Figure 9 illustrates, for selected diseases, the ratio of their August 2000 totals to the mean of their July to September levels for 1995 to 1999.

There were 899 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the reporting period, 1 to 31 August 2000 (Tables 4 and 5).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 31 to 34, ending 27 August 2000, are included in this issue of *Commun Dis Intell* (Table 6).

Editorial note: Readers are reminded to use the ratios published with some caution (Figure 9, Table 1). As indicated in footnote 1 to Tables 1-3, totals comprise data from all States and Territories and are subject to retrospective revision. The July notification data shown in the last issue of *Commun Dis Intell* are those for reports received by States and Territories and sent to the NCDC by 10 August 2000. The July notification data shown for comparison with the August data in this September issue of *Commun Dis Intell* are those for all reports received and sent to NCDC as of 12 September 2000 when the August (and updated and revised July) notification data were extracted from the database. In view of the differences in the July data reported in this and the previous issue of *Commun Dis Intell* it is evident that a substantial number of July notifications have been submitted subsequent to the data extraction date for the August issue. These notifications have been included in the July comparison figures and the year-to-date figures in the September issue.

Figure 9. Selected¹ diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 31 August 2000 with historical data²



1. Selected diseases are chosen each calendar month according to current activity.
2. Ratio of current month total to mean of July to September data for the previous five years.

Table 1. Notifications of diseases received by State and Territory health authorities in the period 1 to 31 August 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total August 2000 ¹	Total July 2000 ¹	Total August 1999 ¹	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*	
Bloodborne																
Hepatitis B (incident)	0	6	0	4	4	1	14	6	35	41	18	22	260	186	1.6	
Hepatitis B (unspecified) ²	0	202	0	95	22	4	203	53	579	624	701	574	5,414	4,636	1.0	
Hepatitis C (incident)	0	21	0	0	8	0	3	5	37	67	35	17	350	128	2.2	
Hepatitis C (unspecified) ²	16	468	16	280	41	37	519	137	1,514	1,559	2,049	1,356	14,041	10,600	1.1	
Hepatitis D	0	5	0	0	0	0	0	0	5	0	1	1	15	11	5.0	
Gastrointestinal																
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
Campylobacteriosis ³	24	0	12	258	167	43	447	208	1,159	1,213	1,124	992	8,835	7,589	1.2	
Haemolytic uraemic syndrome	0	0	0	NN	0	0	0	NN	0	0	0	1	6	5	0.0	
Hepatitis A	0	9	2	10	6	0	4	3	34	60	144	152	619	1,564	0.2	
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.0	
Listeriosis	0	1	0	1	0	0	1	0	3	3	3	5	49	41	0.6	
Salmonellosis	5	54	15	91	20	2	62	49	298	319	328	347	4,352	4,718	0.9	
Shigellosis ³	0	0	5	9	1	0	7	7	29	33	29	46	330	472	0.6	
SLTEC,VTEC ⁴	0	0	0	0	2	0	0	0	2	2	3	1	22	9	2.0	
Typhoid	0	3	0	0	0	0	1	0	4	9	4	5	52	54	0.8	
Yersiniosis ³	0	0	1	6	0	0	1	0	8	8	11	15	55	165	0.5	
Quarantinable																
Cholera	0	0	0	0	0	0	0	0	0	0	1	0	1	3	-	
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Sexually transmissible																
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-	
Chlamydial infection ⁵	17	310	85	457	144	36	0	196	1,245	1,123	1,237	808	9,201	6,588	1.5	
Donovanosis	0	0	0	0	NN	0	0	0	0	1	3	4	11	30	0.0	
Gonococcal infection ⁶	0	46	89	87	30	0	80	100	432	470	481	365	4,280	3,144	1.2	
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Syphilis ⁷	2	62	8	71	0	0	0	5	148	185	179	143	1,252	1,154	1.0	

Table 1 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 31 August 2000, by date of notification[#]

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total August 2000 ¹	Total July 2000 ¹	Total August 1999 ¹	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Vaccine preventable															
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
<i>Haemophilus influenzae</i> type b	0	1	0	2	1	0	0	0	4	3	3	4	16	35	1.0
Measles	0	1	0	0	0	0	0	1	2	12	10	47	76	395	0.0
Mumps	0	10	0	0	1	0	3	4	18	26	18	15	154	115	1.2
Pertussis	34	345	1	43	48	2	70	4	547	620	430	481	3,194	3,275	1.1
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Rubella ⁸	0	16	0	2	0	0	9	1	28	23	49	167	148	948	0.2
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	5	3	-
Vectorborne															
Arbovirus infection NEC	0	0	0	0	0	0	2	0	2	1	0	2	63	43	1.0
Barmah Forest virus infection	0	13	1	23	0	0	0	0	37	33	29	33	415	552	1.1
Dengue	0	0	0	1	0	0	0	0	1	3	8	7	197	116	0.1
Malaria	1	14	9	41	4	0	10	4	83	94	50	56	734	542	1.5
Ross River virus infection	0	12	4	34	0	0	3	2	55	88	94	75	3,588	4,395	0.7
Zoonoses															
Brucellosis	0	0	0	5	0	0	0	0	5	0	10	4	12	22	1.3
Hydatid infection	0	NN	0	0	0	0	2	1	3	0	3	4	17	27	0.8
Leptospirosis	0	0	0	7	0	0	0	0	7	11	8	12	160	135	0.6
Ornithosis	0	NN	0	NN	2	0	2	0	4	6	6	5	51	49	0.8
Q fever	0	14	0	20	3	0	1	2	40	39	36	45	337	351	0.9
Other															
Legionellosis	0	4	0	4	8	0	0	2	18	18	13	12	361	138	1.5
Leprosy	0	0	0	0	0	0	0	0	0	0	0	1	3	5	0.0
Meningococcal infection	1	26	0	7	6	3	21	10	74	52	76	59	351	292	1.3
Tuberculosis	1	8	1	3	0	0	20	6	39	73	87	88	576	684	0.4
Total	101	1,651	249	1,561	518	128	1,485	806	6,499	6,819	7,281	5,971	59,603	53,224	

- 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.
- Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
- Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
- Infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VTEC).
- WA: genital only.
- NT, Qld, SA, Vic and WA: includes gonococcal neonatal ophthalmia.
- Includes congenital syphilis.

- Includes congenital rubella
- # Date of notification = a composite of three components: (i) the true onset date from a clinician, if available, (ii) the date the laboratory test was ordered, or (iii) the date reported to the public health unit.
- NN Not Notifiable.
- NEC Not Elsewhere Classified.
- Elsewhere Classified.
- * Ratio = ratio of current month total to mean of last 5 years calculated as described above.

Table 2. Crude incidence of diseases by State or Territory, 1 to 31 August 2000. (Rate per 100,000 population)

Disease ¹	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Bloodborne									
Hepatitis B (incident)	0.0	1.1	0.0	1.4	3.2	2.6	3.6	3.9	2.2
Hepatitis B (unspecified) ²	0.0	37.8	0.0	32.5	17.7	10.2	51.7	34.2	36.6
Hepatitis C (incident)	0.0	3.9	0.0	-	6.4	0.0	0.8	3.2	2.3
Hepatitis C (unspecified) ²	61.3	87.6	99.5	95.7	33.0	94.4	132.2	88.3	95.8
Hepatitis D	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Gastrointestinal									
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis ³	91.9	-	74.7	88.1	134.2	109.7	113.8	134.1	73.3
Haemolytic uraemic syndrome	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	0.0	1.7	12.4	3.4	4.8	0.0	1.0	1.9	2.2
Hepatitis E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Listeriosis	0.0	0.2	0.0	0.3	0.0	0.0	0.3	0.0	0.2
Salmonellosis	19.1	10.1	93.3	31.1	16.1	5.1	15.8	31.6	18.9
Shigellosis ³	0.0	-	31.1	3.1	0.8	0.0	1.8	4.5	1.8
SLTEC, VTEC ⁴	0.0	0.0	0.0	NN	1.6	0.0	0.0	NN	0.1
Typhoid	0.0	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Yersiniosis ³	0.0	-	6.2	2.0	0.0	0.0	0.3	0.0	0.5
Quarantinable									
Cholera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plague	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rabies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viral haemorrhagic fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow fever	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sexually transmissible									
Chancroid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlamydial infection ⁵	65.1	58.0	528.8	156.1	115.7	91.9	0.0	126.4	78.8
Donovanosis	0.0	0.0	0.0	0.0	NN	0.0	0.0	0.0	0.0
Gonococcal infection ⁶	0.0	8.6	553.7	29.7	24.1	0.0	20.4	64.5	27.3
Lymphogranuloma venereum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Syphilis ⁷	7.7	11.6	49.8	24.3	0.0	0.0	0.0	3.2	9.4
Vaccine preventable									
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Haemophilus influenzae</i> type b	0.0	0.2	0.0	0.7	0.8	0.0	0.0	0.0	0.3
Measles	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.1
Mumps	0.0	1.9	0.0	0.0	0.8	0.0	0.8	2.6	1.1
Pertussis	130.2	64.6	6.2	14.7	38.6	5.1	17.8	2.6	34.6
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubella ⁸	0.0	3.0	0.0	0.7	0.0	0.0	2.3	0.6	1.8
Tetanus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vectorborne									
Arbovirus infection NEC	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1
Barmah Forest virus infection	0.0	2.4	6.2	7.9	0.0	0.0	0.0	0.0	2.3
Dengue	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Malaria	3.8	2.6	56.0	14.0	3.2	0.0	2.5	2.6	5.3
Ross River virus infection	0.0	2.2	24.9	11.6	0.0	0.0	0.8	1.3	3.5

Table 2 (continued). Crude incidence of diseases by State or Territory, 1 to 31 August 2000. (Rate per 100,000 population)

Disease ¹	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Zoonoses									
Brucellosis	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.3
Hydatid infection	0.0	NN	0.0	0.0	0.0	0.0	0.5	0.6	0.2
Leptospirosis	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.4
Ornithosis	0.0	NN	0.0	NN	1.6	0.0	0.5	0.0	0.3
Q fever	0.0	2.6	0.0	6.8	2.4	0.0	0.3	1.3	2.5
Other									
Legionellosis	0.0	0.7	0.0	1.4	6.4	0.0	0.0	1.3	1.1
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	3.8	4.9	0.0	2.4	4.8	7.7	5.3	6.4	4.7
Tuberculosis	3.8	1.5	6.2	1.0	0.0	0.0	5.1	3.9	2.5
Total	386.8	309.0	1549.1	533.3	416.3	326.6	378.2	519.7	411.2

1. 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.
 2. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
 3. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
 4. Infections with Shiga-like toxin (verotoxin) producing *E. coli* (SLTEC/VTEC).
 5. WA: genital only.
 6. NT, Qld, SA, Vic and WA: includes gonococcal neonatal ophthalmia.
 7. Includes congenital syphilis.
 8. Includes congenital rubella.
- NN Not Notifiable.
 NEC Not Elsewhere Classified.
 - Elsewhere Classified.

Table 3. Notifications of diseases received by State and Territory health authorities in the period 1 to 31 August 2000, by date of report*

Disease ¹	State or Territory								Total this period	Year to date total
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Bloodborne										
Hepatitis B (incident)	0	6	0	4	6	1	13	8	38	267
Hepatitis B (unspecified) ²	5	263	0	102	25	6	203	68	672	5,568
Hepatitis C (incident)	0	37	0	-	16	1	3	7	64	366
Hepatitis C (unspecified) ²	22	563	27	293	62	36	519	170	1,692	14,328
Hepatitis D	0	3	0	0	0	0	0	0	3	13
Gastrointestinal										
Botulism	0	0	0	0	0	0	0	0	0	0
Campylobacteriosis ³	22	-	14	337	173	43	452	220	1,261	8,925
Haemolytic uraemic syndrome	0	NN	0	0	0	0	0	NN	0	6
Hepatitis A	0	14	1	7	6	0	3	8	39	649
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Listeriosis	0	1	0	0	0	0	0	0	1	48
Salmonellosis	6	59	16	89	18	2	78	57	325	4,503
Shigellosis ³	0	-	6	9	1	0	8	8	32	337
SLTEC, VTEC ⁴	0	0	0	0	1	0	0	0	1	24
Typhoid	0	3	0	0	0	0	2	0	5	56
Yersiniosis ³	0	-	1	8	0	0	1	0	10	57
Quarantinable										
Cholera	0	0	0	0	0	0	0	0	0	1
Plague	0	0	0	0	0	0	0	0	0	0
Rabies	0	0	0	0	0	0	0	0	0	0
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0
Sexually transmissible										
Chancroid	0	0	0	0	0	0	0	0	0	0
Chlamydial infection ⁵	17	349	106	475	152	29	0	216	1,344	9,242
Donovanosis	0	0	0	0	NN	0	0	0	0	12
Gonococcal infection ⁶	1	65	125	89	31	1	79	118	509	4,327
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0
Syphilis ⁷	3	76	27	83	1	1	0	8	199	1,301
Vaccine preventable										
Diphtheria	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> type b	0	2	0	2	1	0	0	0	5	17
Measles	0	1	0	1	0	0	3	1	6	79
Mumps	0	13	0	0	1	0	4	3	21	156
Pertussis	53	596	0	45	75	3	83	8	863	3,316
Poliomyelitis	0	0	0	0	0	0	0	0	0	0
Rubella ⁸	1	15	0	1	0	0	4	2	23	143
Tetanus	0	0	0	0	0	0	0	0	0	6
Vectorborne										
Arbovirus infection NEC	0	0	1	0	0	0	2	0	3	64
Barmah Forest virus infection	0	15	1	28	0	0	0	0	44	429
Dengue	0	1	2	0	1	0	0	0	4	218
Malaria	1	17	21	38	7	0	10	1	95	737
Ross River virus infection	0	18	6	28	2	1	4	10	69	3,789

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The system coordinates the national surveillance of close to 50 communicable diseases or disease groups endorsed by the National

Table 3 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 31 August 2000, by date of report*

Disease ¹	State or Territory								Total this period	Year to date total
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Zoonoses										
Brucellosis	0	0	0	4	0	0	0	0	4	12
Hydatid infection	0	NN	0	0	0	0	2	1	3	17
Leptospirosis	0	3	0	11	0	0	0	0	14	165
Ornithosis	0	NN	1	NN	2	0	3	1	7	60
Q fever	0	15	0	42	5	0	1	3	66	358
Other										
Legionellosis	0	5	0	3	8	0	4	2	22	363
Leprosy	0	0	0	0	0	0	0	0	0	4
Meningococcal infection	0	25	1	5	6	3	20	12	72	351
Tuberculosis	1	25	5	12	0	0	24	13	80	666
Total	132	2,190	361	1,716	600	127	1,525	945	7,596	60,980

1. 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.

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

3. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.

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

5. WA: genital only.

6. NT, Qld, SA, Vic and WA: includes gonococcal neonatal ophthalmia.

7. Includes congenital syphilis.

8. Includes congenital rubella.

* Date of report is the date the public health unit received the report.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 1 to 31 August 2000¹

State or Territory	Laboratory	This period	Total this period ²
Australian Capital Territory	The Canberra Hospital	-	-
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	221	249
	New Children's Hospital, Westmead	-	-
New South Wales	Repatriation General Hospital, Concord	-	-
	Royal Prince Alfred Hospital, Camperdown	29	34
	South West Area Pathology Service, Liverpool	-	-
Queensland	Queensland Medical Laboratory, West End	138	-
	Townsville General Hospital	-	-
South Australia	Institute of Medical and Veterinary Science, Adelaide	-	-
Tasmania	Northern Tasmanian Pathology Service, Launceston	26	29
	Royal Hobart Hospital, Hobart	-	-
Victoria	Monash Medical Centre, Melbourne	-	-
	Royal Children's Hospital, Melbourne	182	167
	Victorian Infectious Diseases Reference Laboratory, Fairfield	56	87
Western Australia	PathCentre Virology, Perth	-	-
	Princess Margaret Hospital, Perth	225	154
	Western Diagnostic Pathology	22	19
Total		899	739

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.

- Nil reports

Table 5. Virology and serology laboratory reports by State or Territory¹ for the reporting period 1 to 31 August 2000, and total reports for the year²

	State or Territory ¹								This period 2000	This period 1999	Year to date 2000 ³	Year to date 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
Measles, mumps, rubella												
Measles virus	-	1	-	-	-	-	3	-	4	2	33	135
Hepatitis viruses												
Hepatitis A virus	-	-	1	1	-	-	-	-	2	61	110	357
Arboviruses												
Ross River virus	-	-	-	2	-	-	-	-	2	149	1,091	1,368
Barmah Forest virus	-	-	1	6	-	-	1	-	8	13	117	164
Adenoviruses												
Adenovirus not typed/pending	-	12	-	-	-	-	10	8	30	112	655	733
Herpes viruses												
Cytomegalovirus	2	11	-	3	-	2	15	8	41	162	732	885
Varicella-zoster virus	-	5	-	9	-	1	6	3	24	292	867	1,408
Epstein-Barr virus	-	1	1	16	-	-	5	15	38	402	1,351	2,066
Other DNA viruses												
Parvovirus	-	-	-	-	-	-	5	-	5	80	207	407
Picornavirus family												
Echovirus type 7	-	2	-	-	-	-	-	-	2		30	1
Poliovirus type 3 (uncharacterised)	-	2	-	-	-	-	-	-	2	1	5	6
Rhinovirus (all types)	-	6	-	-	-	-	-	-	6	45	251	276
Enterovirus not typed/pending	-	-	-	-	1	-	3	-	4	99	581	557
Ortho/paramyxoviruses												
Influenza A virus	5	41	-	2	-	-	20	14	82	568	557	1,822
Influenza B virus	-	10	-	1	-	-	12	2	25	75	177	201
Parainfluenza virus type 1	-	-	-	-	-	-	-	3	3	4	212	34
Parainfluenza virus type 2	-	-	-	-	-	-	-	3	3	4	27	98
Parainfluenza virus type 3	1	2	-	-	-	-	2	12	17	127	146	451
Respiratory syncytial virus	1	22	-	8	-	17	44	140	232	724	2,299	2,711
Rotavirus	-	92	-	-	1	3	24	34	154	494	698	1,338
Other												
<i>Chlamydia trachomatis</i> not typed	2	28	4	27	-	5	3	2	71	725	2,031	3,123
<i>Chlamydia psittaci</i>	-	-	-	-	-	-	2	-	2	4	59	58
<i>Chlamydia</i> species	-	2	-	-	-	-	-	-	2	14	8	31
<i>Mycoplasma pneumoniae</i>	-	6	1	14	-	-	13	2	36	226	391	992
<i>Coxiella burnetii</i> (Q fever)	-	-	-	3	-	-	-	-	3	43	45	234
<i>Streptococcus</i> group A	-	1	-	1	-	-	14	-	16	132	235	413
<i>Brucella</i> species	-	-	-	1	-	-	-	-	1	3	5	9
<i>Bordetella pertussis</i>	-	8	-	2	-	-	47	-	57	209	374	914
<i>Legionella pneumophila</i>	-	-	-	-	-	-	3	-	3		29	15
<i>Leptospira</i> species	-	-	-	1	-	-	-	-	1	8	36	70
<i>Treponema pallidum</i>	-	1	9	13	-	-	-	-	23	305	485	814
Total	11	253	17	110	2	28	232	246	899	5,083	13,844	21,691

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. Australian Sentinel Practice Research Network reports, weeks 31 to 34, 2000

Week number	31		32		33		34	
Week ending on	6 August 2000		13 August 2000		20 August 2000		27 August 2000	
Doctors reporting	63		62		64		60	
Total encounters	7,882		7,574		7,813		7,774	
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	68	8.6	67	8.8	86	11.0	144	18.5
Chickenpox	9	1.1	9	1.2	10	1.3	12	1.5
Gastroenteritis	66	8.4	65	8.6	72	9.2	68	8.7
Gastroenteritis with stool culture	17	2.2	16	2.1	8	1.0	10	1.3
ADT immunisations	34	4.3	28	3.7	31	4.0	23	3.0

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 Commun Dis Intell 2000;24:6-7.

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 Commun Dis Intell monthly. 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 Commun Dis Intell 2000;24:10.

ASPREN currently comprises about 120 general practitioners from throughout the country, not all of whom report each week. Between 7,000 and 8,000 consultations are reported each week, with special attention to 14 conditions chosen for sentinel surveillance in 2000. Commun Dis Intell reports the consultation rates for five of these. For further information, including case definitions, see Commun Dis Intell 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 currently routinely surveyed are penicillin, ceftriaxone, ciprofloxacin and spectinomycin, all of which are administered as single dose regimens and currently used in Australia to treat gonorrhoea. When *in vitro* resistance to a recommended agent is demonstrated in 5 per cent or more of isolates from a general population, it is usual to remove that agent from the list of recommended treatment (Anon. *Management of sexually transmitted diseases. World Health Organization 1997; Document WHO/GPA/TEM94.1 Rev.1 p 37*). Additional data are also provided on other antibiotics from time to time. At present all laboratories also test isolates for the presence of high level (plasmid-mediated) resistance to the tetracyclines, known as TRNG. Tetracyclines are however not a recommended therapy for gonorrhoea in Australia. Comparability of data is achieved by means of a standardised system of testing and a program-specific quality assurance process. Because of the substantial geographic differences in susceptibility patterns in Australia, regional as well as aggregated data are presented.

Reporting period 1 April to 30 June 2000

The AGSP laboratories examined a total of 970 isolates in this quarter, little different from the 950 available in this period in 1999. About 34 per cent of this total was from New South Wales, 22 per cent from Victoria, 16 per cent from Queensland, 14 per cent from the Northern Territory, 11 per cent from Western Australia and 2.7 per cent from South Australia. Isolates from other centres were few.

Penicillins

Figure 10 shows the proportions of gonococci fully sensitive (MIC 0.03 mg/L), less sensitive (MIC 0.06 to 0.5 mg/L), relatively resistant to penicillins (MIC 1 mg/L) or else penicillinase-producing *Neisseria gonorrhoeae* (PPNG) aggregated for Australia and by State or Territory. A high proportion of PPNG and relatively resistant strains fail to respond to treatment with penicillins (penicillin, amoxicillin, ampicillin) and early generation cephalosporins.

About 17 per cent of all isolates were penicillin-resistant by one or more mechanisms – 7.6 per cent by penicillinase production and 9.3 per cent by chromosomal mechanisms (CMRNG). The penicillin-resistant isolates comprised about 28 per cent of all isolates in Queensland and about 20 per cent of all gonococci in New South Wales and South Australia, while 16 per cent of gonococci in Victoria and 13 per cent in Western Australia were penicillin-resistant. In the

Northern Territory only a single isolate out of 137 examined was penicillin-resistant.

The number of PPNG isolated in Australia (74) increased slightly in this quarter compared with the corresponding period in 1999 (65). The highest proportion of PPNG was found in isolates from Queensland (18%), Western Australia (11%), Victoria (8%) and South Australia (8%), whereas the number (15) and proportion (4.5%) of PPNG in New South Wales continued to decrease. No PPNG were present in the Northern Territory. Acquisition data on PPNG indicated local infection with these strains was occurring throughout Australia. South-East Asian countries remained the main source of external acquisition.

More isolates were resistant to the penicillins by separate chromosomal mechanisms (91). These CMRNG were especially prominent in New South Wales where 54 such isolates were detected. Queensland (15) and Victoria (16) were also prominent sources of CMRNG. Only one strain of this type was isolated in the Northern Territory.

Ceftriaxone and spectinomycin

Most isolates in Australia were again susceptible to these injectable agents. A small number of strains exhibited decreased ceftriaxone susceptibility.

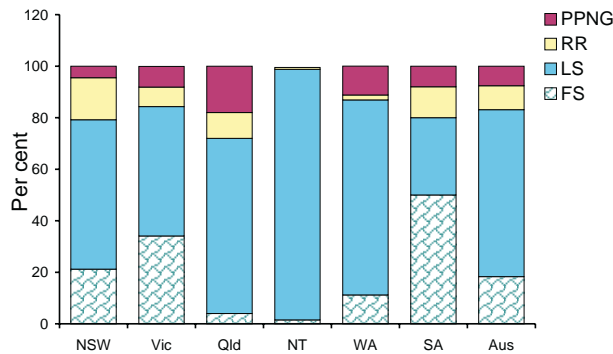
Quinolone antibiotics

Quinolone-resistant *N. gonorrhoeae* (QRNG) are defined as those isolates with an MIC to ciprofloxacin equal to or greater than 0.06 mg/L. QRNG are further subdivided into less sensitive (ciprofloxacin MICs 0.06 to 0.5 mg/L) or resistant (MIC 1 mg/L) groups. The distribution of QRNG in Australia in this quarter is shown in Figure 11.

For Australia as a whole the total number (183) and proportion (18.8%) of all *N. gonorrhoeae* isolates that were QRNG were again high and very similar to numbers and proportions seen in the corresponding quarter of 1999 (194 isolates, 20%). It was in the June quarter of 1999 that the numbers of QRNG increased substantially. In the current quarter the QRNG were widely dispersed and were present in all centres except the Northern Territory. High rates were maintained in New South Wales (27%) and Victoria (25%) and together these regions accounted for three-quarters of the QRNG isolated. QRNG were prominent also in South Australia (23% of isolates there), Queensland (14%) and Western Australian (13%). A single QRNG was detected in Tasmania.

Thirty-two of the New South Wales, 13 of the Victorian and all of the 21 Queensland QRNG isolates exhibited high level resistance (MIC ciprofloxacin 1 mg/L) and higher level QRNG were also seen in South Australia, Tasmania and Western Australia. Local acquisition became increasingly prominent and MICs ranged up to 16 mg/L. However, about 60 per cent of the QRNG were in the 'less sensitive' MIC range 0.06 to 0.5 mg/L and were found almost exclusively in males. Again the bulk of this group of isolates (96 of 110)

Figure 10. Gonococci isolated in Australia, 1 April to 30 June 2000, by penicillin-susceptibility and by region



FS fully sensitive to penicillin, MIC 0.03 mg/L
 LS less sensitive to penicillin, MIC 0.06 to 0.5 mg/L
 RR relatively resistant to penicillin, MIC = 1 mg/L
 PPNG penicillinase-producing *Neisseria gonorrhoeae*
 * includes Tasmania and the Australian Capital Territory

was found in New South Wales and Victoria and infections with them were mostly locally acquired. Gonococci acquired overseas were from such diverse sources as the United Kingdom, Denmark, Ireland, Indonesia, the Philippines, Papua New Guinea, Taiwan, China, Thailand and Vietnam.

High level tetracycline resistance (TRNG)

The number (79) and proportion (8.1%) of TRNG detected were higher than for the second quarter of 1999 (58; 6%). TRNG represented 22 per cent of isolates from Queensland, 13 per cent from Western Australia, and 5.5 per cent from New South Wales and Victoria. No TRNG were detected in South Australia, Tasmania or the Northern Territory.

Australian encephalitis: Sentinel Chicken Surveillance Programme

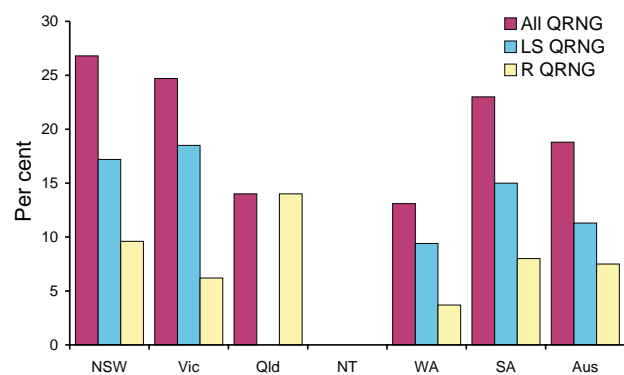
Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin which cause the potentially fatal disease Australian encephalitis in humans. Currently 29 flocks are maintained in the north of Western Australia, 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 Commun Dis Intell 2000;24:8-9.

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Figure 11. Quinolone-resistance of *N. Gonorrhoeae*, Australia, 1 April to 30 June 2000, by region



LS QRNG = less sensitive quinolone-resistant *N. gonorrhoeae* (Ciprofloxacin MICs 0.06 to 0.5 mg/L)
 R QRNG = fully resistant quinolone-resistant *N. Gonorrhoeae* (Ciprofloxacin MICs ³ 1 mg/L)

* includes Tasmania and the Australian Capital Territory

5. Department of Health and Community Services, Northern Territory

July/August 2000

Sentinel chicken serology was carried out for 27 of the 29 flocks in Western Australia in July and August 2000. Murray Valley encephalitis (MVE) activity was still detected in the Kimberley, Pilbara, Gascoyne and Midwest in these months, although the numbers of seroconversions have decreased. The extension of MVE virus activity this far into the dry season has not been observed in previous years. The number of chickens positive for flavivirus antibodies by ELISA at each site and the identity of the infecting virus(es) are shown in Table 7. A number of the later seroconversions have not yet been confirmed.

MVE virus antibodies were detected in chickens in the Murchison and Midwest regions of Western Australia for the first time this year. This is the furthest south the virus has ever been detected. A serological survey of domestic chickens located in these regions and areas further south and east, was carried out in August to determine the limit of MVE virus activity in Western Australia in 2000. The results will be published in a later edition of *Commun Dis Intell*. To date 11 cases of Australian encephalitis caused by MVE virus have been confirmed from Western Australia. In addition there have been several cases of non-encephalitic disease caused by Kunjin virus reported from Western Australia.

Serum samples from six of the seven Northern Territory sentinel chicken flocks were tested in our laboratory in July and August 2000. One new seroconversion to MVE virus was detected in July east of Darwin at Beatrice Hill Farm. Several media warnings have been issued by the Northern Territory Health Department and to date there have been four cases of Australian encephalitis caused by MVE virus and one case of Kunjin encephalitis confirmed from central Australia (Northern Territory and South Australia).

Table 7. Flavivirus seroconversions in Western Australian sentinel chicken flocks in July and August 2000

Region	Location*	July 2000				August 2000		
		MVE	MVE/ KUN	KUN	FLAVI	MVE	KUN	FLAVI
Kimberley	Kalumburu	1			1			
	Wyndham					1 [#]		
	Kununurra	1						
	Fitzroy Crossing	1				1		
	Derby**	1				1	1	2
	Lombadina	1			1			
	Bidjadjanga				1	2		
Pilbara	South Hedland	1						
	Harding Dam**	2				1	1	
	Pannawonica	5						
	Tom Price	1						
	Paraburdoo	1	1					
	Onslow	1		3				
Gascoyne	Carnarvon	3				2		
Midwest	Dongara	4					1	

* The location of most chicken flocks are illustrated in *Commun Dis Intell* 2000;24:8-9.

** Two flocks of 12 chickens at these sites,

This result has not yet been confirmed,

MVE Antibodies to Murray Valley encephalitis virus detected by ELISA.

KUN Antibodies to Kunjin virus detected by ELISA.

FLAVI Antibodies to flavivirus 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 (Australian Capital Territory, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available 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. Internet: <http://www.med.unsw.edu.au/nchechr>. Telephone: (02) 9332 4648. Facsimile: (02) 9332 1837.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 30 April 2000, as reported to 31 July 2000, are included in this issue of *Commun Dis Intell* (Tables 8 and 9).

Table 8. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 30 April 2000, by sex and State or Territory of diagnosis

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 2000	This period 1999	Year to date 2000	Year to date 1999
HIV diagnoses	Female	1	2	0	1	0	0	3	0	7	5	27	23
	Male	0	17	0	6	1	0	12	1	37	56	217	218
	Sex not reported	0	0	0	0	0	0	0	0	0	0	0	0
	Total ¹	1	19	0	7	1	0	15	1	44	61	245	241
AIDS diagnoses	Female	0	0	0	0	0	0	0	0	0	0	7	5
	Male	0	1	0	1	0	0	1	0	3	17	52	51
	Total ¹	0	1	0	1	0	0	1	0	3	17	59	56
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	1	3	1
	Male	0	2	0	2	0	0	1	0	5	4	25	40
	Total ¹	0	2	0	2	0	0	1	0	5	5	28	42

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 July 2000, by sex and State or Territory

		State or Territory								Australia
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	27	609	11	156	61	5	217	118	1,204
	Male	223	11,025	110	2,009	680	78	3,919	922	18,966
	Sex not reported	0	247	0	0	0	0	24	0	271
	Total ¹	250	11,901	121	2,172	741	83	4,174	1,044	20,486
AIDS diagnoses	Female	9	188	1	48	25	3	70	26	370
	Male	86	4,651	35	828	347	44	1,630	354	7,975
	Total ¹	95	4,851	36	878	372	47	1,708	382	8,369
AIDS deaths	Female	4	113	0	32	15	2	49	16	231
	Male	66	3,175	24	569	231	29	1,275	248	5,617
	Total ¹	70	3,296	24	603	246	31	1,330	265	5,865

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