

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 data by report date for information only. In Table 2 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 July, 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.

Figure 1 illustrates the July 2000 totals for selected diseases as ratios to the mean of their June to August levels for the previous 5 years.

Hepatitis B

There were 30 incident cases of hepatitis B infection in July 2000 - a notification rate of 1.9/100,000 population. Conversely, the notification rate of unspecified hepatitis B decreased from 30-40/100,000 population in previous years to 25.9/100,000 for this month.

Foodborne illness

There was an outbreak of *Salmonella* Ball in the Northern Territory in July 2000 but, to date, no common source has been identified. Eight cases this month is clearly higher than the background rate of *Salmonella* Ball in that region. The 'outbreak' cases have been restricted to eight in Darwin/Palmerston.

Shigella

Six of the 26 notifications in July 2000 were cases of *Shigella sonnei* biotype g in Victoria; five were in males aged between 20 and 40 years and one was of unspecified

gender. Between 27 and 36 cases of *S. sonnei* biotype g are notified in Victoria each year. In the first six-month period of this year, there were 12 cases of locally acquired *S. sonnei* biotype g, which was similar to the expected number. However, the antibiogram of faecal isolates was identical to that of the recent Sydney outbreak strain associated with gay men (see Special Report below). To prevent the spread of shigellosis, the Department of Human Services distributed targeted preventive advice to local sex-on-premises venues and through the gay press. Unlike in the other States, there was no recognised association with gay men in the nine cases of shigellosis in Western Australia in July 2000.

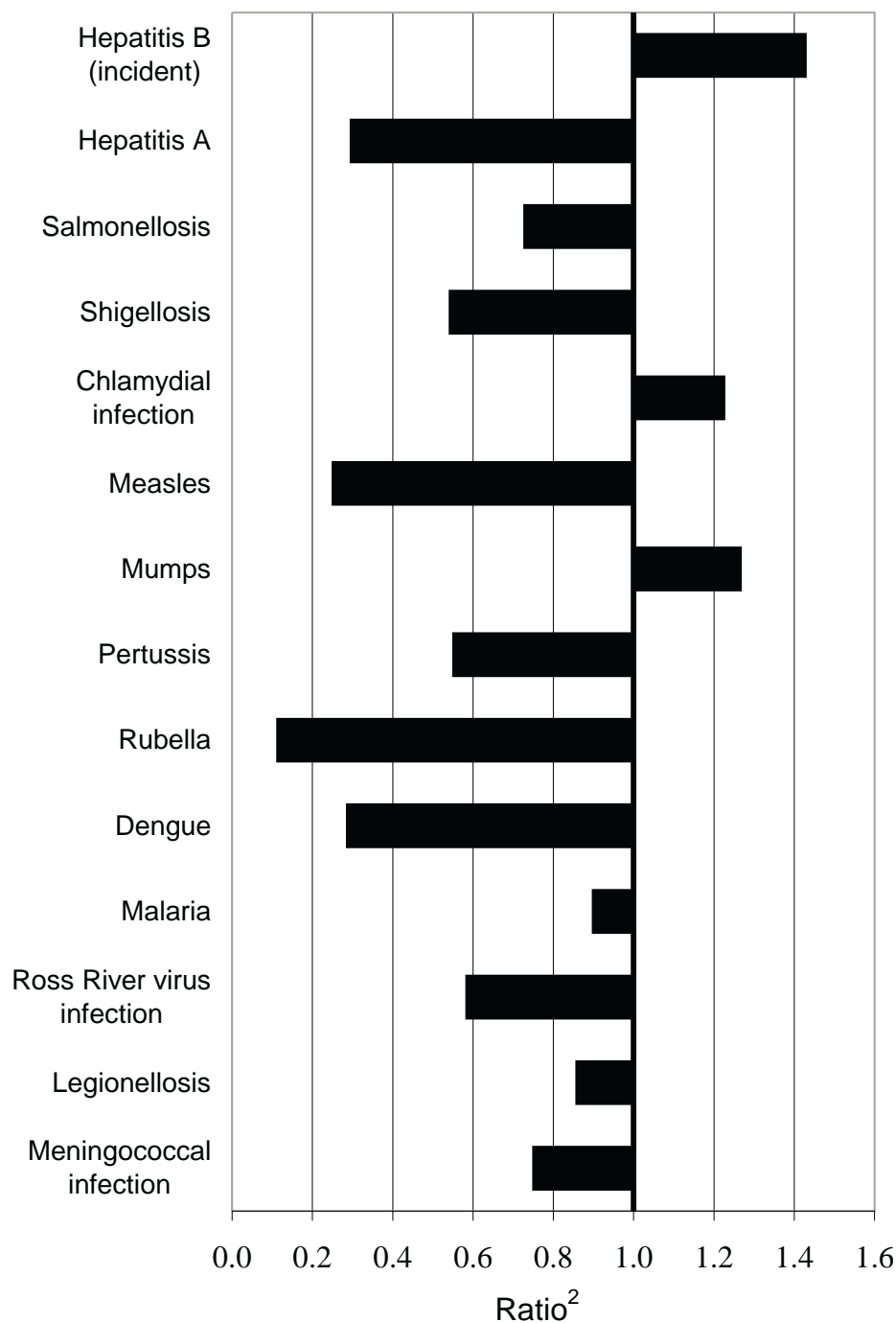
SLTEC/VTEC

There were two notifications in July 2000 from South Australia of Shiga-like toxin-producing *Escherichia coli* (SLTEC)/ verotoxigenic *Escherichia coli* (VTEC), one in a 15-year-old male and one in a 78-year-old female.

Typhoid

There were seven notifications of typhoid in July 2000 with five cases in New South Wales and two cases in Victoria. Two were associated with travel to Indonesia and five with

Figure 1. Selected¹ diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 to 31 July 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 June to August data for the previous five years

travel to India. Two of these cases (a mother and baby) were linked; both travelled to India but it is unknown whether their exposure was there or whether household transmission occurred (the mother was asymptomatic).

Vaccine Preventable Diseases

All vaccine preventable diseases except mumps had fewer reports this month than for the 5-year-mean for July: there were no reports of diphtheria, *Haemophilus influenzae* type b, poliomyelitis and tetanus.

Mumps

The increase in the notification rate (1.2/100,000 population) for mumps was due to five reports in the Australian Capital Territory (19.2/100,000 population), two male and three female. There was no obvious epidemiological linkage between these five cases.

Measles

Measles cases continue to be at their lowest level since the national notification system began (Figure 2). Of the eleven cases in July 2000, five were reported in Victoria, two each in Western Australian and New South Wales and one each in South Australia and Queensland. Of the Victorian cases, four were linked to a receptionist at a doctor's surgery; all had measles virus of identical genotypes. The fifth case had no link to others and the virus was of a different genotype. Four of the five cases were in adults aged between 18 and 30 years; the remaining case was an infant less than 1-year-old. Of the Western Australian cases, one was a 25-year-old Thai postgraduate student, and one was a 24-year-old Malaysian postgraduate student, both studying in Perth, and both independently infected in their countries of origin before returning from holidays on separate flights via Singapore. These cases required extended follow-up of contacts as both went to general practices and public hospitals (one admitted) before the diagnosis was recognised. No secondary cases have been reported. One New South Wales case was a student whose siblings in Japan had measles. The student had measles on arrival and then travelled as part of a tour-group around Australia. Follow-up of potential cases is occurring. An unvaccinated individual in Queensland acquired measles locally.

Pertussis

The crude notification rate of pertussis in July 2000 was 14.5/100,000 population - less than the notification rates for July in previous years (20-60/100,000 population). Notification rates increased in New South Wales and the Australian Capital Territory (24.0/100,000 and 46.0/100,000 respectively; Figure 3).

No deaths have been reported so far this year in Australia. Preschool-aged children (1-4 years old) and infants (<1 year old) had the highest rates of reported disease (Figure 4). According to New South Wales Health press releases regarding the recent increase in pertussis year to date, to the end of July 1,370 cases were reported in New South Wales compared with 1,414 for all of 1999, 2,312 for all of 1998, and 4,251 for all of 1997. They advised that:

- All parents and doctors should ensure all children are fully immunised against pertussis (doses are due at 2, 4, 6, and 18 months, and at 4 years of age).
- Persons with symptoms of pertussis should seek medical diagnosis.
- Pertussis cases are infectious to others for up to 3 weeks after onset. Treatment with erythromycin given within 3 weeks of onset should render cases non-infectious after 5 days. Cases should not attend preschool or school (or other settings where there are susceptible persons, especially young children) while infectious.
- Pertussis can be prevented among household contacts of infectious cases with erythromycin.
- The treatment of choice for cases and their household contacts is erythromycin 40 to 50 mg/kg per day in 4 divided doses up to 1 gram per day for 10 days.
- Doctors, laboratories and hospitals should notify suspected cases to the local public health unit.

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

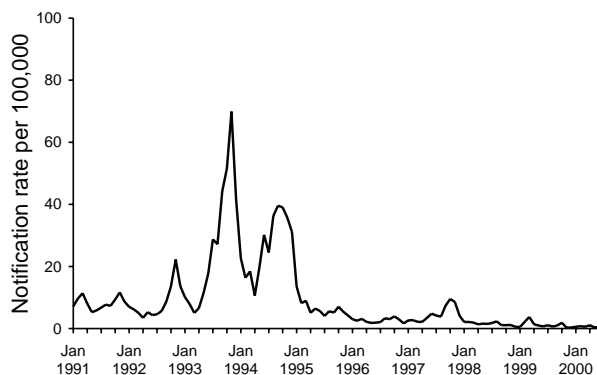


Figure 3. Notification rate of pertussis, New South Wales, Australian Capital Territory and Australia, 1 January 1991 to 31 July 2000, by month of notification

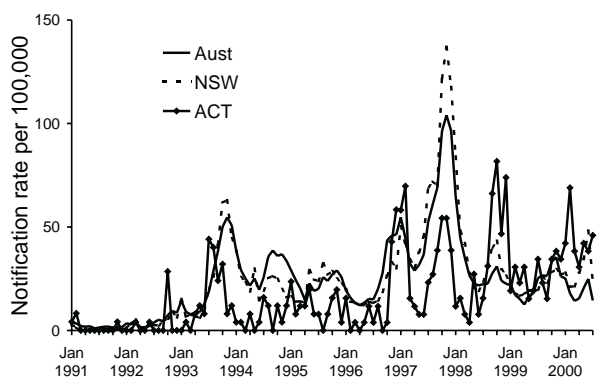
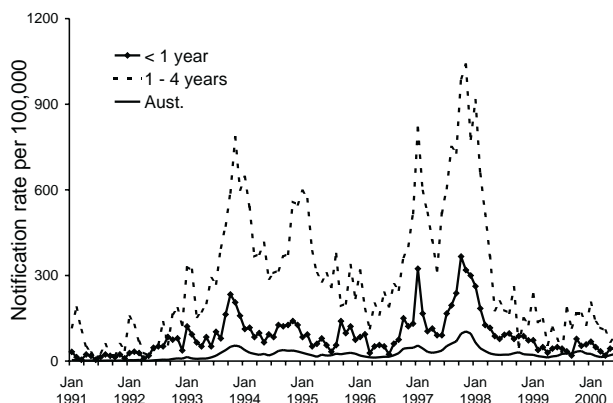


Figure 4. Notification rate of pertussis, Australia, 1 January 1991 to 31 July 2000, by month of notification



Encephalitis

The Health Department of Western Australia issued a press release warning people about the continued risk of mosquito-borne Australian Encephalitis in some northern regions of the State. This followed the worst recorded outbreak of the disease in Western Australia with 11 confirmed cases this season, two more than in the previous worst outbreak in 1993.

Legionellosis

In response to the increased number of legionella cases in Victoria, in June the Department of Human Services Working Party released a report entitled 'Legionnaires Disease: Managing the health risk associated with cooling towers'. The Victorian Government response to the report was released in July.

Meningococcal infections

There were 42 notifications of meningococcal infection in July 2000 - an incidence of 2.9/100,000 population (Figure 5). Of these cases, 17% were under 5 years of age, 21% were in the 5-14 year age group and 29% were in the 15-24 year age groups. The serogroups were available for 27 cases; of these 36%, 37% and 2% were serogroup B, C and W respectively. One sporadic case in Victoria involved an 18-year-old student for whom approximately 34 contacts were identified. The Communicable Disease Control Branch and Department of Human Services, Victoria, assessed the need for contacts to receive antibiotic chemoprophylaxis according to the National Health and Medical Research Council guidelines. Ten contacts were directed to metropolitan hospitals to receive medical assessment and antibiotic chemoprophylaxis.

Influenza

There were 183 laboratory reports of influenza for July 2000, a decrease from 687 in July 1999, but an increase from 111 in June 2000 (Figure 6). Of the laboratory reports received in July 2000 (weeks 27-30), 116 were influenza A and 55 were influenza B, with the weekly proportion of influenza B varying from 28% to 35% (Figure 7). The weekly percentage of influenza B has increased from the same period last year when it varied between 6% and 9%. Through the regular fortnightly teleconference of CDNANZ, the jurisdictions reported 82 laboratory confirmed influenza cases of which 48 were influenza A and 29 were influenza B.

Compared with June 2000, the percentage of Australia Post employees absent in July 2000 for 3 or more consecutive days was little changed (weeks 27-30, Figure 8). The Tropical influenza Surveillance Scheme (Northern Territory) reported the highest rate of influenza-like illness consultations (18/1,000 consultations) in July 2000 (weeks 27-30). In contrast, data from the Australian Sentinel Practice Research Network (ASPREN), New South Wales, Victoria and Northern Territory Sentinel Surveillance Schemes indicated that the influenza activities remained moderately low compared with last year (Figure 9).

Figure 5. Notification rate of meningococcal infection, Australia, 1 January 1991 to 31 July 2000, by month of notification

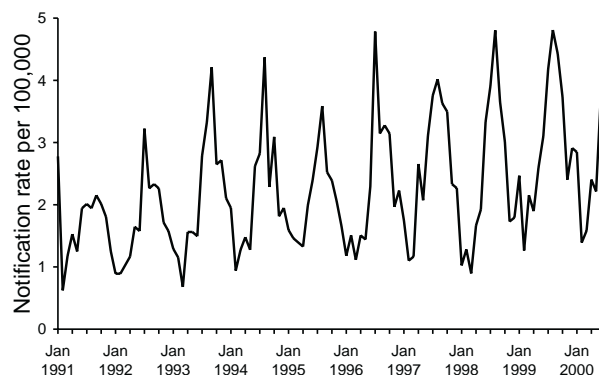


Figure 6. Laboratory reports of influenza, 1999 to 2000, by month of specimen collection

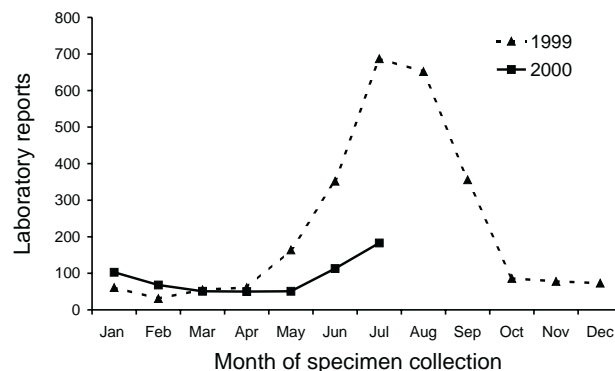


Figure 7. Laboratory reports of influenza, Australia, week 31 1999 to week 30 2000, by week of specimen collection

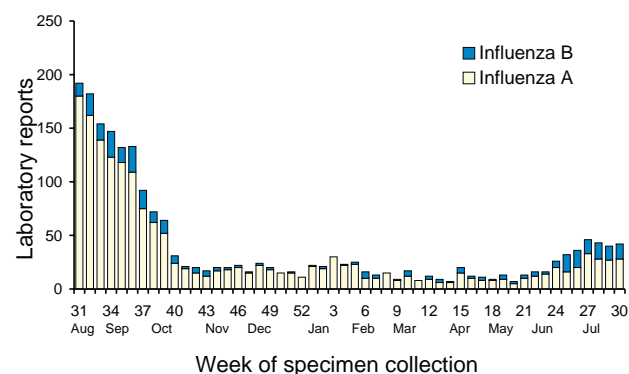


Figure 8. Absenteeism rates in Australia Post, 1999 and 2000 to July 31

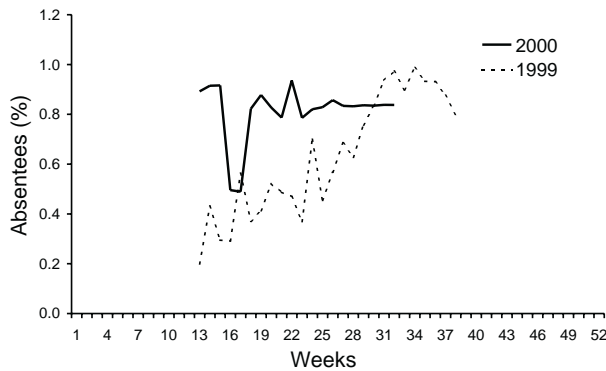
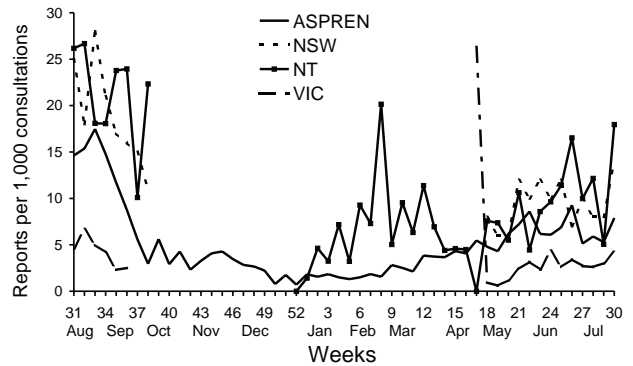


Figure 9. Sentinel general practitioner influenza consultation rates, week 31 1999 to week 30 2000, by scheme



**Special report from Rob Menzies, Senior Surveillance Officer, New South Wales Health Department:
Shigellosis outbreak among inner-Sydney men**

Shigellosis is relatively uncommon in New South Wales, with fewer than five isolates received each month for serotyping by ICPMR laboratory, Westmead Hospital. In the last few weeks, New South Wales Health investigated an outbreak of shigellosis among inner-Sydney gay men.

Local doctors and laboratories reported that an increase in *Shigella sonnei* serotype g infections began in March 2000. Over 80 cases were identified from early March 2000 until mid-June 2000, compared to 21 cases in all of 1997. Over 90% of cases have been males mostly thought to be gay men between 20 and 40 years. Interviews with cases identified casual sex at sex-on-premises-venues as a likely risk factor for infection.

In response, New South Wales Health developed a prevention plan that included an education campaign among gay men, increased awareness among local doctors, and advice to sex-on-premises-venues on improving infection control. The number of reported cases has since declined.

Editorial comment. At present Shigellosis is not reportable in NSW but may be identified following notification of 'foodborne disease' or 'gastroenteritis in an institution'. This outbreak was brought to the attention of the NSW Public Health Unit by vigilant general practitioners and laboratory staff.

Tables

There were 5,064 notifications to the National Notifiable Diseases Surveillance System (NNDSS) with a notification date in July 2000 (Table 1). Data by date of report for July 2000, are included in this issue of *Communicable Diseases Intelligence* (Table 3). The number of reports for selected diseases have been compared with a 5 year mean, calculated using June to August data for the previous 5 years (Figure 1).

There were 2,243 reports received by the CDI Virology and Serology Laboratory Reporting Scheme (LabVISE) in the reporting period, 1 to 31 July 2000 (Tables 4 and 5).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 26 to 30, ending 30 July 2000, are included in this issue of *Communicable Diseases Intelligence* (Table 6).

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 Public Health Partnership. 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 Communicable Diseases Intelligence 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. Communicable Diseases Intelligence reports the consultation rates for five of these. For further information, including case definitions, see Commun Dis Intell 2000;24:7-8.

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

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total July 2000 ¹	Total June 2000 ¹	Total July 1999 ¹	Last 5 years mean	Year to date 2000	Last 5 years YTD mean	Ratio*
Bloodborne															
Hepatitis B (incident)	0	2	0	10	6	1	7	4	30	33	24	21	209	165	1.4
Hepatitis B (unspecified) ²	1	99	0	62	6	3	180	58	409	698	765	570	4,541	4,082	0.7
Hepatitis C (incident)	0	2	0	-	3	0	3	7	15	31	25	15	245	109	1.0
Hepatitis C (unspecified) ²	15	259	9	240	22	24	447	138	1,154	1,666	1,871	1,366	12,017	9,226	0.8
Hepatitis D	0	0	0	0	0	0	0	0	0	2	6	2	9	10	0.0
Gastrointestinal															
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Campylobacteriosis ³	22	-	16	323	141	44	373	174	1,093	1,112	1,129	963	7,547	6,586	1.1
Haemolytic uraemic syndrome	NN	0	0	0	0	0	0	0	0	0	2	0	6	4	na
Hepatitis A	1	11	2	4	4	0	12	12	46	48	132	156	569	1,414	0.3
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0	2	na
Listeriosis	0	0	0	0	0	0	3	0	3	6	3	4	46	37	0.8
Salmonellosis	4	17	22	72	23	2	57	57	254	390	356	349	3,980	4,401	0.7
Shigellosis ³	1	-	2	3	1	0	10	9	26	40	45	48	297	435	0.5
SLTEC, VTEC ⁴	NN	0	0	NN	2	0	0	NN	2	1	2	1	20	8	2.0
Typhoid	0	5	0	0	0	0	2	0	7	2	9	4	45	50	1.8
Yersiniosis ³	0	-	0	8	0	0	0	0	8	3	12	15	47	151	0.5
Quarantinable															
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	1	3	na
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Rabies	0	0	0	0	0	0	0	0	0	1	0	0	1	0	na
Viral haemorrhagic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Sexually transmissible															
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0	0	1	na
Chlamydial infection ⁵	14	136	68	367	78	24	188	118	993	1,363	1,249	810	9,434	5,770	1.2
Donovanosis	0	0	0	1	NN	0	0	0	1	2	3	3	11	27	0.3
Gonococcal infection ⁶	1	35	83	76	14	0	58	76	343	508	411	368	3,716	2,768	0.9
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Syphilis ⁷	2	34	18	59	0	2	0	6	121	147	172	141	1,017	1,016	0.9

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

Disease	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total July 2000 ¹	Total June 2000 ¹	Total July 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	na
<i>Haemophilus influenzae</i> type b	0	0	0	0	0	0	0	0	0	4	3	5	10	31	0.0
Measles	0	2	0	1	1	0	5	2	11	8	17	44	69	347	0.3
Mumps	5	3	0	0	1	1	6	3	19	22	19	15	129	99	1.3
Pertussis	12	128	0	20	16	4	47	2	229	405	401	416	2,143	2,791	0.6
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na
Rubella ⁸	1	3	0	2	0	0	6	1	13	16	45	116	110	784	0.1
Tetanus	0	0	0	0	0	0	0	0	0	2	0	0	5	3	na
Vectorborne															
Arbovirus infection NEC	0	0	0	0	0	0	0	2	2	2	2	2	57	42	1.0
Barmah Forest virus infection	0	6	0	17	0	0	0	0	23	38	33	35	369	521	0.7
Dengue	0	0	0	2	0	0	0	0	2	7	1	7	195	111	0.3
Malaria	0	6	1	36	2	0	7	1	53	72	92	59	604	489	0.9
Ross River virus infection	1	15	1	29	3	1	6	14	70	180	81	120	3,493	4,315	0.6
Zoonoses															
Brucellosis	0	0	0	0	0	0	0	0	0	1	5	3	7	18	0.0
Hydatid infection	0	NN	0	0	0	0	0	1	1	0	4	5	18	23	0.2
Leptospirosis	0	1	0	4	0	0	1	0	6	13	15	13	147	126	0.5
Ornithosis	0	NN	0	NN	0	0	4	0	4	7	8	5	44	43	0.8
Q fever	0	3	0	19	0	0	3	3	28	30	36	45	279	312	0.6
Other															
Legionellosis	0	1	0	4	1	0	5	1	12	33	14	14	335	128	0.9
Leprosy	0	0	0	0	0	0	0	0	0	1	3	1	1	5	0.0
Meningococcal infection	0	18	0	6	5	0	8	5	42	60	66	56	270	229	0.8
Tuberculosis	2	9	0	0	0	0	26	7	44	49	94	84	475	603	0.5
Total	82	795	222	1,365	329	106	1,464	701	5,064	7,003	7,155	5,882	52,518	47,290	

- 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.
- na Not applicable.
- * 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, July 2000. (Rate per 100,000)

Disease ¹	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Bloodborne									
Hepatitis B (incident)	0.00	0.37	0.00	3.42	4.82	2.55	1.78	2.58	1.90
Hepatitis B (unspecified) ²	3.83	18.53	0.00	21.18	4.82	7.66	45.84	37.40	25.88
Hepatitis C (incident)	0.00	0.37	0.00	-	2.41	0.00	0.76	4.51	0.95
Hepatitis C (unspecified) ²	57.44	48.47	55.99	82.00	17.68	61.24	113.83	88.98	73.01
Hepatitis D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gastrointestinal									
Botulism	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campylobacteriosis ³	84.25	-	99.54	110.35	113.32	112.28	94.99	112.20	69.15
Haemolytic uraemic syndrome	NN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hepatitis A	3.83	2.06	12.44	1.37	3.21	0.00	3.06	7.74	2.91
Hepatitis E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Listeriosis	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.19
Salmonellosis	15.32	3.18	136.87	24.60	18.49	5.10	14.52	36.75	16.07
Shigellosis ³	3.83	-	12.44	1.02	0.80	0.00	2.55	5.80	1.64
SLTEC,VTEC ⁴	NN	0.00	0.00	NN	1.61	0.00	0.00	NN	0.13
Typhoid	0.00	0.94	0.00	0.00	0.00	0.00	0.51	0.00	0.44
Yersiniosis ³	0.00	-	0.00	2.73	0.00	0.00	0.00	0.00	0.51
Quarantinable									
Cholera	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plague	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rabies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Viral haemorrhagic fever	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yellow fever	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sexually transmissible									
Chancroid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chlamydial infection ⁵	53.61	25.45	423.06	125.39	62.69	61.24	47.88	76.09	62.83
Donovanosis	0.00	0.00	0.00	0.34	-	0.00	0.00	0.00	0.06
Gonococcal infection ⁶	3.83	6.55	516.38	25.97	11.25	0.00	14.77	49.01	21.70
Lymphogranuloma venereum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syphilis ⁷	7.66	6.36	111.99	20.16	0.00	5.10	0.00	3.87	7.66
Vaccine preventable									
Diphtheria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Haemophilus influenzae</i> type b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Measles	0.00	0.37	0.00	0.34	0.80	0.00	1.27	1.29	0.70
Mumps	19.15	0.56	0.00	0.00	0.80	2.55	1.53	1.93	1.20
Pertussis	45.96	23.96	0.00	6.83	12.86	10.21	11.97	1.29	14.49
Poliomyelitis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubella ⁸	3.83	0.56	0.00	0.68	0.00	0.00	1.53	0.64	0.82
Tetanus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vectorborne									
Arbovirus infection NEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.13
Barmah Forest virus infection	0.00	1.12	0.00	5.81	0.00	0.00	0.00	0.00	1.46
Dengue	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.13
Malaria	0.00	1.12	6.22	12.30	1.61	0.00	1.78	0.64	3.35
Ross River virus infection	3.83	2.81	6.22	9.91	2.41	2.55	1.53	9.03	4.43

Table 2 (continued). Crude incidence of diseases by State or Territory, July 2000. (Rate per 100,000)

Disease ¹	State or Territory								Australia	
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Zoonoses										
Brucellosis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydatid infection	0.00	NN	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.06
Leptospirosis	0.00	0.19	0.00	1.37	0.00	0.00	0.25	0.00	0.00	0.38
Ornithosis	0.00	NN	0.00	NN	0.00	0.00	1.02	0.00	0.00	0.25
Q fever	0.00	0.56	0.00	6.49	0.00	0.00	0.76	1.93	0.00	1.77
Other										
Legionellosis	0.00	0.19	0.00	1.37	0.80	0.00	1.27	0.64	0.00	0.76
Leprosy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meningococcal infection	0.00	3.37	0.00	2.05	4.02	0.00	2.04	3.22	0.00	2.66
Tuberculosis	7.66	1.68	0.00	0.00	0.00	0.00	6.62	4.51	0.00	2.78
Total	314.03	148.79	1,381.16	466.35	264.42	270.49	372.82	452.01	0.00	320.39

- 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.
- 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 July 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	2	0	11	7	2	11	6	39	221
Hepatitis B (unspecified) ²	2	176	0	61	24	4	182	73	522	4,764
Hepatitis C (incident)	1	3	0	-	7	0	4	10	25	264
Hepatitis C (unspecified) ²	22	416	20	250	55	29	449	150	1,391	12,496
Hepatitis D	0	0	0	0	0	0	0	0	0	9
Gastrointestinal										
Botulism	0	0	0	0	0	0	0	0	0	0
Campylobacteriosis ³	31	-	21	309	169	42	376	201	1,149	7,654
Haemolytic uraemic syndrome	NN	0	0	0	0	0	0	0	0	6
Hepatitis A	1	16	3	3	4	0	12	14	53	606
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Listeriosis	0	0	0	1	0	0	3	0	4	47
Salmonellosis	5	37	28	80	28	2	80	62	322	4,165
Shigellosis ³	1	-	7	5	1	0	11	12	37	309
SLTEC, VTEC ⁴	NN	0	0	NN	2	0	0	NN	2	23
Typhoid	0	4	0	0	0	0	2	0	6	50
Yersiniosis ³	0	-	0	8	0	0	0	0	8	47

Table 3 (continued). Notifications of diseases received by State and Territory health authorities in the period 1 to 31 July 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		
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	15	207	101	399	124	30	263	155	1,294	9,695
Donovanosis	0	0	0	1	NN	0	0	1	2	12
Gonococcal infection ⁶	0	53	132	109	45	0	63	100	502	3,806
Lymphogranuloma venereum	0	0	0	0	0	0	0	0	0	0
Syphilis ⁷	2	59	17	72	4	2	0	13	169	1,074
Vaccine preventable										
Diphtheria	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> type b	0	0	1	0	0	0	0	0	1	12
Measles	0	2	0	2	1	0	2	2	9	72
Mumps	7	5	0	0	3	1	7	3	26	133
Pertussis	21	309	0	28	28	4	62	6	458	2,407
Poliomyelitis	0	0	0	0	0	0	0	0	0	0
Rubella ⁸	0	4	0	3	0	0	6	2	15	115
Tetanus	0	0	0	0	1	0	0	0	1	6
Vectorborne										
Arbovirus infection NEC	0	0	0	1	0	0	0	2	3	58
Barmah Forest virus infection	0	8	0	13	0	0	0	2	23	381
Dengue	0	0	8	2	0	0	0	0	10	216
Malaria	1	6	4	35	3	0	8	1	58	616
Ross River virus infection	2	31	1	39	3	0	10	25	111	3,698
Zoonoses										
Brucellosis	0	0	0	0	0	0	0	0	0	8
Hydatid infection	0	NN	0	0	0	0	0	1	1	18
Leptospirosis	0	1	0	1	0	0	1	0	3	150
Ornithosis	0	NN	0	NN	0	0	9	0	9	53
Q fever	0	5	0	25	0	0	3	4	37	294
Other										
Legionellosis	0	1	0	4	1	0	8	3	17	341
Leprosy	0	0	1	0	0	0	0	0	1	2
Meningococcal infection	0	25	0	4	5	0	11	6	51	277
Tuberculosis	3	17	5	22	0	0	29	10	86	578
Total	114	1,387	349	1,488	515	116	1,612	864	6,445	54,684

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 State or Territory¹ for the reporting period 1 to 31 July 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	0	0	0	0	0	0	1	2	3	6	29	136
Mumps virus	0	0	0	0	1	0	0	2	3	2	34	32
Rubella virus	0	1	0	0	1	0	0	1	3	92	25	141
Hepatitis viruses												
Hepatitis A virus	0	0	1	3	4	0	0	6	14	97	108	296
Arboviruses												
Ross River virus	0	1	1	8	2	0	1	12	25	174	1,089	1,219
Barmah Forest virus	0	1	0	4	0	0	0	0	5	40	109	156
Dengue not typed	0	0	0	0	0	0	0	2	2	0	166	33
Murray Valley encephalitis virus	0	0	0	0	0	0	0	1	1	0	19	2
Kunjin virus	0	0	0	0	0	0	0	1	1	0	4	5
Flavivirus (unspecified)	0	0	0	1	0	0	0	0	1	0	38	17
Adenoviruses												
Adenovirus type 40	0	0	0	0	0	0	0	6	6	11	75	44
Adenovirus type 41	0	0	0	0	0	0	0	1	1	0	1	0
Adenovirus not typed/pending	0	11	0	1	40	0	2	26	80	85	622	623
Herpes viruses												
Cytomegalovirus	1	11	1	11	30	2	11	4	71	121	691	724
Varicella-zoster virus	1	12	1	27	10	0	6	37	94	310	842	1,116
Epstein-Barr virus	0	6	1	25	43	0	4	27	106	480	1,312	1,666
Other DNA viruses												
Contagious pustular dermatitis (Orf virus)	0	0	0	0	0	0	0	1	1	0	7	6
Parvovirus	0	1	0	0	3	0	11	21	36	124	202	332
Picornavirus family												
Coxsackievirus A16	0	1	0	0	0	0	0	0	1	2	4	14
Rhinovirus (all types)	0	16	0	0	1	0	0	16	33	45	242	231
Enterovirus not typed/pending	0	0	0	2	0	0	10	24	36	75	576	459
Ortho/paramyxoviruses												
Influenza A virus	4	43	0	3	58	0	8	6	122	627	467	1,256
Influenza A virus H3N2	0	0	0	0	0	0	0	1	1	5	2	28
Influenza B virus	2	23	0	0	25	0	6	4	60	55	150	126
Parainfluenza virus type 1	0	1	0	2	17	0	0	9	29	7	209	30
Parainfluenza virus type 2	0	0	0	0	2	0	0	1	3	11	24	94
Parainfluenza virus type 3	0	3	0	0	7	0	0	10	20	116	129	324
Respiratory syncytial virus	4	164	0	28	74	10	62	463	805	955	2,068	2,000
Other RNA viruses												
Rotavirus	4	90	0	0	51	1	1	43	190	306	543	844
Other												
<i>Chlamydia trachomatis</i> not typed	2	25	6	71	35	1	3	74	217	855	1,954	2,404
<i>Chlamydia psittaci</i>	0	0	0	0	0	0	6	1	7	6	57	55
<i>Mycoplasma pneumoniae</i>	0	1	0	15	7	1	28	6	58	235	354	768
<i>Coxiella burnetii</i> (Q fever)	0	0	0	1	0	0	4	4	9	96	41	191
<i>Streptococcus</i> group A	0	2	8	14	0	0	14	0	38	207	219	281
<i>Yersinia enterocolitica</i>	0	1	0	0	0	0	0	0	1	0	9	8
<i>Bordetella pertussis</i>	0	4	0	3	5	0	29	2	43	383	317	705
<i>Legionella pneumophila</i>	0	0	0	0	0	0	11	1	12	0	26	15
<i>Legionella longbeachae</i>	0	0	0	0	1	0	0	1	2	1	37	20

Table 4 (continued). Virology and serology laboratory reports by State or Territory¹ for the reporting period 1 to 31 July 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				
<i>Cryptococcus</i> species	0	0	0	0	1	0	0	0	1	0	9	6
<i>Leptospira</i> species	0	0	0	3	0	0	0	0	3	46	35	62
<i>Treponema pallidum</i>	0	1	20	33	40	0	0	1	95	343	462	509
<i>Entamoeba histolytica</i>	0	0	0	0	0	0	1	0	1	2	10	3
<i>Toxoplasma gondii</i>	0	0	0	0	1	0	0	0	1	0	8	5
<i>Echinococcus granulosus</i>	0	0	0	0	1	0	0	1	2	0	16	0
Total	18	419	39	255	460	15	219	818	2,243	5,920	13,341	16,986

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 5. Virology and serology laboratory reports by contributing laboratories for the reporting period 1 to 31 July 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	176	195
	New Children's Hospital, Westmead	179	108
New South Wales	Repatriation General Hospital, Concord	-	-
	Royal Prince Alfred Hospital, Camperdown	58	78
	South West Area Pathology Service, Liverpool	-	-
Queensland	Queensland Medical Laboratory, West End	311	284
	Townsville General Hospital	7	13
South Australia	Institute of Medical and Veterinary Science, Adelaide	456	297
Tasmania	Northern Tasmanian Pathology Service, Launceston	14	18
	Royal Hobart Hospital, Hobart	-	-
Victoria	Monash Medical Centre, Melbourne	-	3
	Royal Children's Hospital, Melbourne	116	78
	Victorian Infectious Diseases Reference Laboratory, Fairfield	104	92
Western Australia	PathCentre Virology, Perth	389	246
	Princess Margaret Hospital, Perth	427	300
	Western Diagnostic Pathology	6	10
Total		2,243	1,722

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 6. Australian Sentinel Practice Research Network reports, weeks 26 to 30, 2000

Week number	26		27		28	
Week ending on	2 July 2000		9 July 2000		16 July 2000	
Doctors reporting	66		61		61	
Total encounters	7,544		7,392		7,423	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	70	9.3	38	5.1	44	5.9
Chickenpox	13	1.7	11	1.5	11	1.5
Gastroenteritis	51	6.8	60	8.1	71	9.6
Gastroenteritis with stool culture	6	0.8	11	1.5	10	1.3
ADT immunisations	36	4.8	30	4.1	24	3.2

Table 6 (continued). Australian Sentinel Practice Research Network reports, weeks 26 to 30, 2000

Week number	29		30	
Week ending on	23 July 2000		30 July 2000	
Doctors reporting	64		64	
Total encounters	8,115		7,882	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	44	5.4	63	8.0
Chickenpox	8	1.0	11	1.4
Gastroenteritis	64	7.9	70	8.9
Gastroenteritis with stool culture	10	1.2	14	1.8
ADT immunisations	23	2.8	32	4.1

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% or more of isolates from a general population, it is usual to remove that agent from the list of recommended treatment (Anonymous. 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 January to 31 March 2000

The AGSP laboratories examined a total of 938 isolates in this quarter, virtually the same number as in this period in 1999. About 38% of this total was from New South Wales, 22% from Victoria, 16% from Queensland, 11% from the Northern Territory, 8% from Western Australia and 4% from South Australia. There were few isolates from other centres.

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) and 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 will fail to respond to treatment with penicillins (penicillin, amoxicillin, ampicillin) and early generation cephalosporins.

About 22% of all isolates were penicillin-resistant by one or more mechanisms – 10% by penicillinase production and 12% by chromosomal mechanisms (CMRNG). The penicillin-resistant isolates comprised about half the isolates in South Australia and about a quarter of all isolates in New South Wales and Queensland, while about 15% of gonococci in Victoria and Western Australia were penicillin-resistant. In the Northern Territory, 2% of isolates were penicillin-resistant.

The number of PPNG isolated across Australia (91) increased slightly in this quarter compared with the corresponding period in 1999 (88). However the distribution of PPNG has altered. The highest proportion of PPNG was

found in isolates from South Australia (24%), Queensland (15%) and Western Australia (14%) whereas the number (34, 14) and proportion (9.4%, 6.8%) of PPNG in New South Wales and Victoria respectively decreased. A single PPNG was isolated in the Northern Territory. Acquisition data on PPNG indicated a high rate of local acquisition throughout Australia. South-East Asian countries were the main source of external acquisition.

More isolates were resistant to the penicillins by separate chromosomal mechanisms (119). These CMRNG were especially prominent in New South Wales (21%) and South Australia (24%) with substantial proportions also in Queensland (8%) and Victoria (10%). Only one strain of this type was isolated in the Northern Territory.

Ceftriaxone and spectinomycin

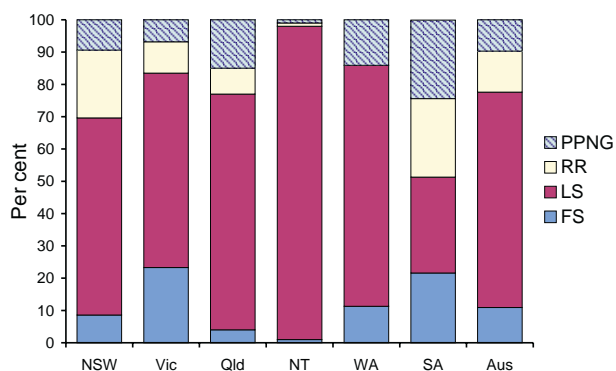
All isolates in Australia were again susceptible to these injectable agents, with the exception of one strain with decreased ceftriaxone susceptibility.

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 subdivided into less sensitive (ciprofloxacin MICs 0.06 to 0.5 mg/L) or resistant (MIC 1 mg/L) groups.

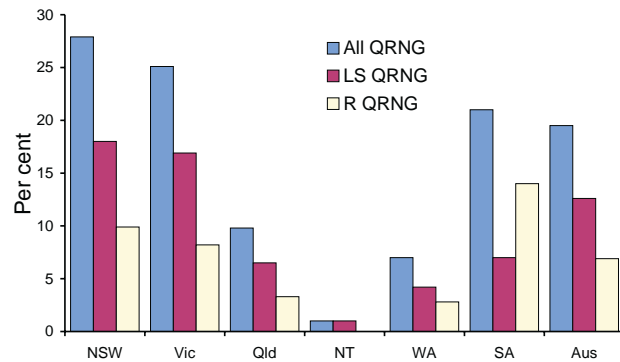
The total number (183) and proportion (20%) of all QRNG was again high and much increased over the first quarter of 1999 (106 isolates, 11%) (Figure 11). QRNG were present in all centres except Tasmania and the Australian Capital Territory. High rates were maintained in New South Wales (28%) and Victoria (25%) and together these regions accounted for 85% of QRNG isolated. QRNG were prominent also in South Australia (21% of isolates) and Queensland (10%). Of Western Australian isolates,

Figure 10. Gonococci isolated in Australia, 1 January to 31 March 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*

Figure 11. Quinolone-resistance of *N. gonorrhoeae*, 1 January to 31 March 2000, Australia, 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 \geq 1 mg/L)

7% were QRNG and a single QRNG was isolated in the Northern Territory. Thirty-six of the New South Wales and 17 of the Victorian QRNG exhibited high level resistance (MIC ciprofloxacin \geq 1 mg/L) and higher level QRNG were also seen in Queensland, South Australia and Western Australia. Local acquisition became increasingly prominent and MICs ranged up to 16mg/L. However about two thirds of the QRNG were in the 'less sensitive' MIC range 0.06 to 0.5 mg/L and were found exclusively in males. Again the bulk of this group of isolates (101 of 118) was found in New South Wales and Victoria and infections with them were locally acquired.

High level tetracycline resistance (TRNG)

The number (89) and proportion (9.4%) of TRNG detected were similar to those noted for the first quarter of 1999. TRNG represented 19% of gonococci from South Australia, 14% of isolates from Queensland and Western Australia, 9% from New South Wales and 8% from Victoria. A single TRNG was isolated in the Northern Territory.

Adverse Events Following Immunisation Surveillance Scheme

Adverse Events data collected by both the Serious Adverse Events Following Vaccination Surveillance Scheme (SAEFVSS) for children and the Adverse Drug Reaction Scheme for children and adults are included in this report. This is a change from previous reports that have only included adverse events data collected by the SAEFVSS. Adverse events are classified as described in the Australian Immunisation Handbook 7th edition in which more details of the reporting of adverse events following immunisation can be found. (National Health and Medical Research Council. The Australian Immunisation Handbook. 7th ed. Canberra: Australian Government Publishing Services, 2000).

Acceptance of a report does not imply a causal relationship between the administration of the vaccine and the reported

outcome, or that the report has been verified as to the accuracy of its contents.

It is estimated that 250,000 doses of vaccines are administered every month to Australian children under the age of 6 years.

Result for the reporting period 1 January to 30 June 2000

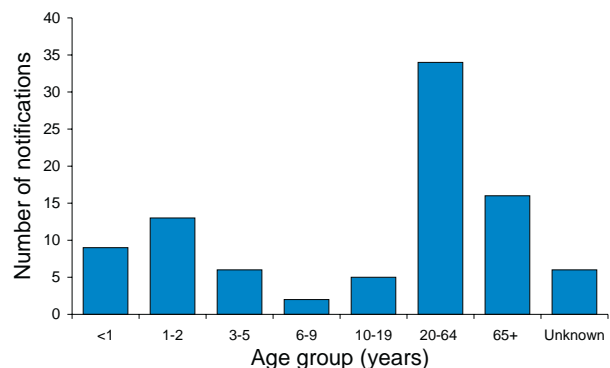
For this 6 months reporting period 164 notifications of adverse events following immunisation were received. These did not include notifications from the SAEFVSS in New South Wales. The most frequent sources were medical practitioners (38%), pharmaceutical companies (22%), and State/Territory Health Departments (20%), with the remainder from pharmacists (4%) and others (3%). Excluding nine notifications for which the reporting State/Territory was unknown, notifications for this period were received from the Australian Capital Territory (1%), New South Wales (22.5%), Northern Territory (8%), Queensland (14%), South Australia (13%), Tasmania (3%), Victoria (32%), and Western Australia (6%).

Of the 164 notifications, the assessed association with immunisation was certain (30%), probable (7%), possible (49%) and unknown (13%). Most certain associations were local reactions.

Most of the 164 notifications occurred in the 20 to 64 year age group (41%) followed by those under 10 years (32%) and those over 64 years (15%). Of the 53 notifications for those under 10 years, most were under 6 years, with 28% in those less than 1 year and 60% in those aged between 1 and 5 years (Figure 12). Most notifications were related to the administration of one vaccine only (78%).

For each of the 164 notifications, the severity was reported for 32% and the outcome for 72%. Of the 52 reports of severity, 65% required a doctor's visit, 29% needed hospitalisation and two were reported as 'life-threatening'. These two reports included a report from Queensland of thrombocytopenia within 1 week of MMR immunisation in a 15-month-old, and a report from Victoria of meningitis within 1 day of hepatitis B immunisation in a 13-year-old.

Figure 12. Notifications of adverse events following immunisation, 1 January to 30 June 2000, by age group



Of the 118 reports with a reported outcome, 65% had recovered, 33% had not recovered completely by the time of notification, and there were three deaths. The deaths, reported from Tasmania and Victoria, occurred within 1 day of the birth-dose of hepatitis B immunisation in a child of 2 days, within 1 week of immunisation with OPV plus DTP and Hib in a 15-month-old, and within 1 week of cholera immunisation in a 28-year-old. There were no notifications associated with OPV alone. The cholera vaccine was not the oral vaccine.

Each notification was associated with one or more adverse events. In total there were 184 adverse events reported for this period. The most frequently reported were other reactions (31%), local reaction (28%), rash (15%) and fever of over 40.5°C (9%) (Figure 13). Other reactions included headache, myalgia, gastrointestinal symptoms (such as nausea, vomiting and diarrhoea) and vasovagal type symptoms (such as hyperventilation, paraesthesia and palpitations). The most serious adverse events notified included anaphylactoid reaction (1%), meningitis (0.5%), seizure or convulsion (2%) and thrombocytopenia (0.5%) and the three reported deaths (2%).

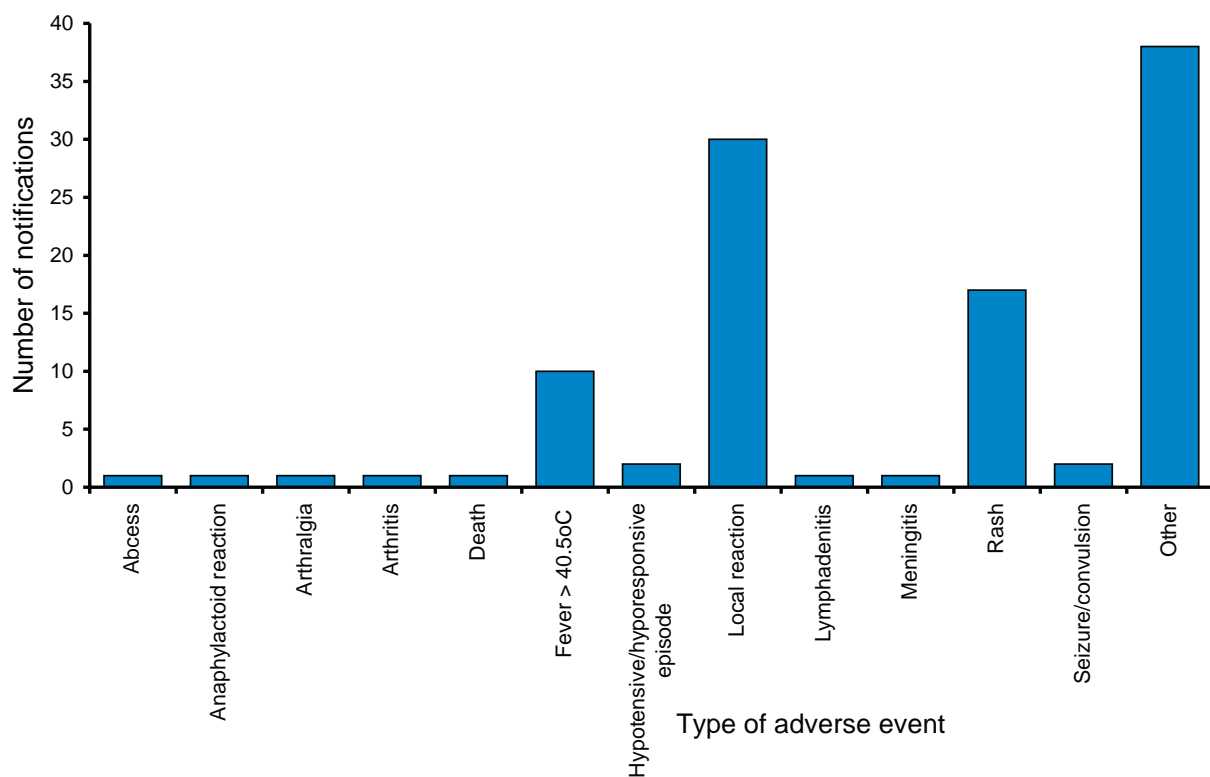
For 22% of encounters, more than one vaccine was administered. It was not possible to know which vaccine was associated with any adverse event other than local reactions; hence any adverse event was counted for each vaccine. In total there were 215 adverse events associated with the different vaccines administered. Most adverse events were reported following the administration of Influenza vaccines (22%), Diphtheria Tetanus Pertussis

(DTP) vaccines (15%), and Measles Mumps Rubella (MMR) vaccine (8%). Adverse events associated with the DTP vaccines were mostly associated with the acellular DTP vaccines as whole cell DTP vaccines are no longer widely used. Most adverse events associated with Influenza, DTP, and MMR vaccines occurred when they were used alone.

Dose information was recorded for 60 administered vaccines. Most adverse events with DTP vaccines were associated with dose 4 (11/17, 65%); the dose was unspecified for an additional 15 reports. The dose was not recorded for any influenza vaccines but is likely to have been dose 1 as the recommendation for influenza immunisation mostly applies to adults over 65 years who require one dose each year. Adverse events with MMR vaccines were evenly divided between the first (4/9, 44%) and second (5/9, 56%) doses; the dose was unspecified for an additional nine reports.

Editorial statement. The Australian Immunisation Handbook (7th edition, Appendix 6) defines vaccination as 'the administration of a vaccine: if vaccination is successful it results in immunity' and immunisation as 'the process of inducing immunity to an infectious agent by administering a vaccine'. An Adverse Event Following Immunisation (AEFI) is defined by the Australian Immunisation Handbook (7th edition, page 22) as 'a serious uncommon or unexpected event following immunisation. Such an event may or may not be caused by the vaccine or may occur by chance after immunisation'. The use of the term AEFI is a change (from Adverse Event Following Vaccination) and is consistent with World Health Organization terminology.

Figure 13. Notifications by reported adverse event following immunisation, 1 January to 30 June 2000, by type of adverse event



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 medical practitioner 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 31 March 2000, as reported to 30 June 2000, are included in this issue of Commun Dis Intell (Tables 7 and 8).

Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 March 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	0	0	0	2	0	0	2	2	6	9	20	18
	Male	0	8	1	12	5	0	15	2	43	68	157	161
	Sex not reported	0	1	0	0	0	0	0	0	1	0	3	0
	Total ¹	0	9	1	14	5	0	17	4	50	77	180	179
AIDS diagnoses	Female	0	0	0	0	0	0	0	0	0	4	7	5
	Male	0	3	0	1	1	0	5	1	11	12	43	34
	Total ¹	0	3	0	1	1	0	5	1	11	16	50	39
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	3	0
	Male	0	2	0	0	0	0	3	0	5	9	18	36
	Total ¹	0	2	0	0	0	0	3	0	5	9	21	37

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 March 2000, by sex and State or Territory

		State or Territory								Australia
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	26	607	11	155	61	5	214	118	1,197
	Male	223	10,987	110	2,002	679	79	3,907	920	18,907
	Sex not reported	0	249	0	0	0	0	24	0	273
	Total ¹	249	11,863	121	2,164	740	84	4,159	1,042	20,422
AIDS diagnoses	Female	9	188	1	48	25	3	69	26	369
	Male	86	4,648	35	824	347	44	1,624	351	7,959
	Total ¹	95	4,848	36	874	372	47	1,701	379	8,352
AIDS deaths	Female	4	113	0	32	15	2	49	16	231
	Male	66	3,172	24	567	231	29	1,273	248	5,610
	Total ¹	70	3,293	24	601	246	31	1,328	265	5,858

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