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CONTENTS

ARTICLES	Page
Annual Report of the National Notifiable Diseases Surveillance System, 1992	466
OVERSEAS BRIEFS	488
COMMUNICABLE DISEASES SURVEILLANCE	488

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DEPARTMENT OF
HEALTH, HOUSING,
LOCAL GOVERNMENT AND
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COMMUNICABLE DISEASES NETWORK-AUSTRALIA
A National Network for Communicable Diseases Surveillance

ANNUAL REPORT OF THE NATIONAL NOTIFIABLE DISEASES SURVEILLANCE SYSTEM, 1992 - PART 1

(Robert Hall, AIDS/Communicable Diseases Branch, Department of Health, Housing, Local Government and Community Services, for the Communicable Diseases Network - Australia)

Selected diseases are notifiable to State and Territory health authorities under public health legislation in each jurisdiction. Since 1924 these data have been collected by the Commonwealth Department of Health and its successors to form a national picture of communicable disease epidemiology. Annual compilations of these statistics have been made since 1917, and these have been summarised previously¹ and are available on computer disk². Since *CDI* began in 1978, it has published reports of notifiable diseases, and an annual report was prepared for the 1991 data³.

The National Notifiable Diseases Surveillance System (NNDSS) was established under the auspices of the Communicable Diseases Network - Australia in 1990. The list of 44 diseases notifiable under the NNDSS was adopted from recommendations of the National Health and Medical Research Council (NHMRC) in June 1992⁴. Not all States and Territories adopted this list in 1992, and national rates for each disease have been adjusted accordingly (Table 1 and see below).

Interpretation

Surveillance of HIV infection and AIDS is conducted by the National Centre for HIV Epidemiology and Clinical Research and results for HIV infection or AIDS are not presented here. There are systems additional to the NNDSS for surveillance of tuberculosis and malaria (the Mycobacterial Disease Surveillance Scheme and the Australian Malaria Register). The surveillance case definitions and procedures adopted by those systems are not necessarily the same as those used in the NNDSS so the results presented here must be regarded as approximate only.

The data presented here must be interpreted with caution for several reasons. The proportion of all cases which is notified is not known with certainty for any disease, and is likely to vary between diseases, between States and Territories and over time. It is believed that serious or rare diseases are more likely to be notified than common diseases without serious clinical or public health consequences. Each State or Territory health authority determines the criteria under which notifications are accepted. The NHMRC has recommended uniform case definitions⁵, but there is as yet no uniformity in case definitions or methods of ascertainment of notifiable diseases across Australia. This is a particularly important consideration for conditions notified on the basis of laboratory diagnosis, where diagnostic tests may not discriminate between incident (new) and prevalent (current or old) cases. States and Territories have different requirements for sources of notifications which may be clinicians, hospitals and/or laboratories. Administrative arrangements vary between States and

Territories, some accepting notifications to local or regional offices and others to central offices, and the differing practices may affect notification delay. There are differing emphases placed by the States and Territories on laboratory notification. Laboratory notification, being more efficient, results in much higher numbers of notified cases of laboratory-diagnosed conditions.

Some States and Territories accept and compile notifications for NNDSS diseases which are not legally notifiable within the State or Territory. In these circumstances, the proportion of all cases notified may differ from when a disease is legally required to be notified.

Because surveillance case definitions and sources of notifications vary, comparisons between States and Territories may not be justifiable. Similarly, comparisons with previous years must also be made cautiously, since changes over time may be due to changes other than in disease incidence. There have been significant changes to legislation, administrative structures and procedures in several States and Territories since 1990, with improvements in communicable diseases surveillance systems and increases in notifications received.

Data management

Data were contributed by States and Territories to the NNDSS at the AIDS/Communicable Diseases Branch of the Department of Health, Housing, Local Government and Community Services in Canberra. Data were supplied in a standard format on computer disk or via modem. Each fortnight, data were supplied for notifications received during the entire year from 1 January 1992 until the last day of the current reporting period. Each fortnight's data superseded all previous reports, allowing States and Territories to edit and correct reports contributed in previous periods.

For each case notified, States and Territories provided a unique identifying numeric code, the disease and the date of notification to the relevant health authority. Each record could also contain age, sex and postcode of residence of the case, Aboriginality, date of onset of the disease, whether the disease was confirmed or not and the fortnight of reporting to the NNDSS.

Reports were compiled into the national database each fortnight. Records without valid data in the compulsory fields (identifier, disease and date of notification) were deleted. For some diseases there were significant differences in the surveillance case definitions adopted by the NNDSS and the State or Territory and, where appropriate, these were recoded to NNDSS disease categories.

Table 1. Status in 1992 of National Notifiable Diseases as recommended by the NHMRC in June 1992, by State or Territory

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA
Arbovirus infection (NEC) ¹								
Ross River virus infection ²		-			-	-		
Dengue ²		-			-	-		-
Botulism ³		-	NN	NN	NN			NN
Brucellosis								
Campylobacteriosis ^{2,3}		-						
Chancroid		NN			NN			
Chlamydial infection (NEC) ⁴		NN						
Cholera								
Diphtheria								
Donovanosis		NN			NN	NN		
Gonococcal infection ⁵								
<i>Haemophilus influenzae</i> type b infection ^{2,6}								NN
Hepatitis A								
Hepatitis B								
Hepatitis C ²					NN			NN
Hepatitis (NEC) ²								NN
HIV infection ^{2,7}								
Hydatid infection								
Legionellosis ²								
Leprosy								
Leptospirosis								
Lymphogranuloma venereum		NN			NN			NN
Listeriosis ²			NN		NN			
Malaria								
Measles ²								
Meningococcal infection								
Mumps			NN	NN	NN	NN		NN
Ornithosis		NN						
Pertussis ²								
Plague						NN		
Poliomyelitis								
Q fever								
Rabies ²		NN						
Rubella ⁸								
Salmonellosis (NEC)								
Shigellosis ³		-						
Syphilis								
Tetanus				NN				
Tuberculosis								
Typhoid ⁹								
Viral haemorrhagic fever (NEC) ^{2,10}								
Yellow fever								
Yersiniosis (NEC) ^{2,3}		-						

1. NSW, SA, Tas: includes Ross River virus and dengue. WA: includes dengue.
 2. Notifiable in the ACT from 9 June 1992.
 3. NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.
 4. SA, WA: trachoma only. ACT: trachoma only until 9 June 1992.
 5. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
 6. SA: only as 'bacterial meningitis'; meningococcal infection is separately notified; Tas: only as 'non-meningococcal meningitis'; Vic: epiglottitis and meningitis only.

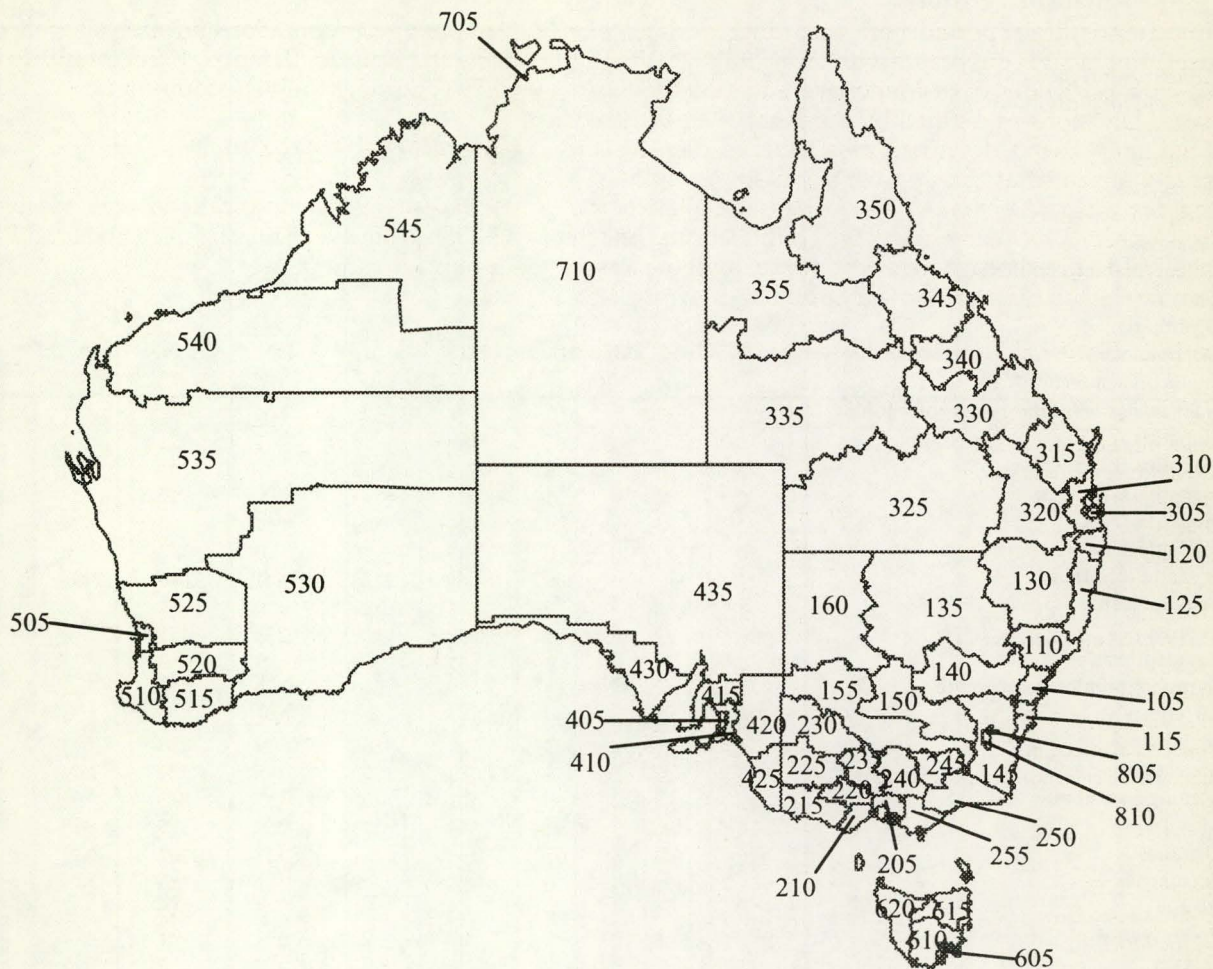
7. SA: AIDS and ARC only. ACT: AIDS only until 9 June 1992.
 8. NT, Tas, WA: CRS only.
 9. ACT, NSW and Vic: includes paratyphoid.
 10. SA and WA: Marburg, Ebola and Lassa fevers only.
 Tas: Marburg, Ebola, Crimean-Congo and Lassa fevers only.
 NN Not notifiable.
 - Elsewhere classified.
 NEC Not elsewhere classified.

The data set was closed in May 1993 to allow for delays in notification. Data on onset dates presented here include cases notified from 1 January 1993 to 30 May 1993 with onset dates in 1992. These are provisional data and are clearly identified as such in the text and figures. All other data (primarily geographical, age and sex distributions) presented here refer solely to

cases notified in 1992, and include some cases with onset dates in 1991.

Data from each State and Territory were referred to the contributing health authority for verification. Duplicates (defined as records with identical disease, notification date, age, sex, postcode, Aboriginality and onset date) were deleted. The resulting data set may

Figure 1. ABS Statistical Divisions



Number	Statistical Division	Number	Statistical Division	Number	Statistical Division
Australian Capital Territory		Queensland continued		Victoria	
805	Canberra	315	Wide Bay-Burnett	205	Melbourne
810	Australian Capital Territory - balance	320	Darling Downs	210	Barwon
New South Wales		325	South West	215	Western District
105	Sydney	330	Fitzroy	220	Central Highlands
110	Hunter	335	Central West	225	Wimmera
115	Illawarra	340	Mackay	230	Mallee
120	Richmond-Tweed	345	Northern	235	Loddon-Campaspe
125	Mid-North Coast	350	Far North	240	Goulburn
130	Northern	355	North West	245	Ovens-Murray
135	North Western	South Australia		250	East Gippsland
140	Central West	405	Adelaide	255	Gippsland
145	South Eastern	410	Outer Adelaide	Western Australia	
150	Murrumbidgee	415	Yorke and Lower North	505	Perth
155	Murray	420	Murray Lands	510	South West
160	Far West	425	South East	515	Lower Great Southern
Northern Territory		430	Eyre	520	Upper Great Southern
705	Darwin	435	Northern	525	Midlands
710	Northern Territory - balance	Tasmania		530	South Eastern
Queensland		605	Greater Hobart	535	Central
305	Brisbane	610	Southern	540	Pilbara
310	Moreton	615	Northern	545	Kimberley
		620	Mersey-Lyell		

therefore differ from those prepared by the States and Territories.

Time trends are reported here according to dates of onset, and include only cases with onset in 1992. Where possible, postcodes of residence were mapped to Statistical Divisions as defined by the Australian Bureau of Statistics (ABS)⁶ for small area analysis (Figure 1). Rates were calculated using the populations enumerated for Australia, States, Territories and Statistical Divisions in the 1991 census by the ABS. National rates have been adjusted, where appropriate, by the exclusion of relevant State or Territory populations from the

denominator for diseases not notifiable in all States and Territories.

Data storage, preparation and analysis were performed using the EpiInfo, Paradox, Excel, MapInfo and QuatroPro packages on microcomputer.

Overall notifications

A total of 59,156 notifications was received by the NNDSS for the year 1992 from all States and Territories (Table 2).

Table 2. National Notifiable Diseases, 1992, by State or Territory¹

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	AUSTRALIA
Arbovirus infection (NEC)	0	25	57	199	0	1	21	0	303
Ross River virus infection	2	311	236	4154	72	-	141	714	5630
Dengue	0	1	11	336	1	-	17	-	366
Botulism	0	-	NN	NN	NN	0	0	NN	0
Brucellosis	0	2	0	25	0	0	2	0	29
Campylobacteriosis	35	-	380	3065	2138	444	2066	1007	9135
Chancroid	1	NN	0	1	NN	0	1	2	5
Chlamydial infection (NEC)	39	NN	608	3239	900	356	1151	0	6293
Cholera	0	0	0	1	1	0	0	1	3
Diphtheria	0	0	11	0	0	0	0	3	14
Donovanosis	0	NN	37	17	NN	NN	0	24	78
Gonococcal infection	9	480	583	620	165	9	228	814	2908
<i>Haemophilus influenzae</i> type b infection	10	217	4	84	60	5	121	NN	501
Hepatitis A	22	949	155	461	95	15	343	69	2109
Hepatitis B	76	3083	54	1514	18	54	115	305	5219
Hepatitis C	110	4041	91	3196	1	111	1262	NN	8812
Hepatitis (NEC)	1	24	0	26	5	1	13	NN	70
Hydatid infection	0	5	0	13	1	2	13	4	38
Legionellosis	0	91	1	32	22	1	14	24	185
Leprosy	1	4	3	0	0	0	3	5	16
Leptospirosis	0	19	1	34	5	4	91	5	159
Lymphogranuloma venereum	0	NN	0	0	NN	0	3	NN	3
Listeriosis	0	16	NN	6	2	0	14	0	38
Malaria	26	121	30	332	32	12	121	38	712
Measles	59	790	34	127	154	8	220	33	1425
Meningococcal infection	3	117	12	36	19	9	68	28	292
Mumps	2	21	NN	NN	NN	NN	0	NN	23
Ornithosis	1	NN	0	2	18	0	66	7	94
Pertussis	9	195	1	208	67	27	140	92	739
Plague	0	0	0	0	0	NN	0	0	0
Poliomyelitis	0	0	0	0	0	0	0	0	0
Q fever	0	203	0	301	11	0	24	4	543
Rabies	0	NN	0	0	0	0	0	0	0
Rubella	590	279	0	720	114	0	2107	0	3810
Salmonellosis (NEC)	19	815	370	1492	348	133	776	661	4614
Shigellosis	3	-	220	88	86	4	90	203	694
Syphilis	11	891	659	687	92	0	39	316	2695
Tetanus	0	2	1	NN	0	1	4	6	14
Tuberculosis	12	403	32	136	61	13	202	111	970
Typhoid	1	28	0	10	5	0	0	6	50
Viral haemorrhagic fever (NEC)	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0
Yersiniosis (NEC)	0	-	11	332	172	2	43	7	567
Total	1042	13133	3602	21494	4665	1212	9519	4489	59156

1. Further information on the 1992 notification status for each disease in each of the States and Territories is detailed in the footnotes for Table 1.

NN Not notifiable.

- Elsewhere classified.

NEC Not elsewhere classified.

There was an increase of 34% in the numbers of notifications compared with 1991 (44,155). This was the second year of substantial increase in the number of notifications of notifiable diseases, after several years without major change (Figure 2).

Queensland provided 36.3% of all reports, making it the major contributor. New South Wales provided 22.2%, Victoria 16.1%, and the other States and Territories less than 10% each (Figure 3).

The crude annual rate of all notifiable diseases in 1992 Australia-wide was 351.1 notifications per 100,000 population, an increase of 38% from 1991. The same pattern of variation between States and Territories was apparent in 1992 as in 1991. The Northern Territory

had the highest annual rate of notifications with 2,047.3 per 100,000 population and Victoria had the lowest rate with 224.3 per 100,000 (Table 3 and Figure 4).

The rates in the Australian Capital Territory, The Northern Territory and Queensland were greater than the overall rate for Australia, probably due in part to differences in notification practices.

The highest adjusted annual rate of notification for any disease was for hepatitis C with 63.6 notifications per 100,000 population at risk. This was followed by chlamydial infection with 56.6 per 100,000 population, campylobacteriosis with 54.2 per 100,000 and Ross River virus infection with 36.4 per 100,000 (Table 3). None of these diseases is uniformly notifiable in Aus-

Table 3. National Notifiable Diseases, annual rate per 100,000 population, 1992, by State or Territory¹

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia ²
Arbovirus infection (NEC)	0	0.44	32.40	6.69	0	0.22	0.49	0	1.80
Ross River virus infection	0.71	5.43	134.14	139.56	5.14	-	3.32	45.01	36.45
Dengue	0	0.02	6.25	11.29	0.07	-	0.40	-	2.17
Botulism	0	-	NN	NN	NN	0	0	NN	0
Brucellosis	0	0.03	0	0.84	0	0	0.05	0	0.17
Campylobacteriosis	12.49	-	215.99	102.97	152.69	98.11	48.69	63.48	54.22
Chancroid	0.36	NN	0	0.03	NN	0	0.02	0.13	0.05
Chlamydial infection (NEC)	13.92	NN	345.58	108.82	64.27	78.67	27.12	0	56.62
Cholera	0	0	0	0.03	0.07	0	0	0.06	0.02
Diphtheria	0	0	6.25	0	0	0	0	0.19	0.08
Donovanosis	0	NN	21.03	0.57	NN	NN	0	1.51	0.99
Gonococcal infection	3.21	8.37	331.37	20.83	11.78	1.99	5.37	51.32	17.26
<i>Haemophilus influenzae</i> type b infection	3.57	3.79	2.27	2.82	4.28	1.10	2.85	NN	2.97
Hepatitis A	7.85	16.56	88.10	15.49	6.78	3.31	8.08	4.35	12.52
Hepatitis B	27.13	53.79	30.69	50.86	1.29	11.93	2.71	19.23	30.98
Hepatitis C	39.26	70.50	51.72	107.37	0.07	24.53	29.74	NN	63.57
Hepatitis (NEC)	0.36	0.42	0	0.87	0.36	0.22	0.31	NN	0.46
Hydatid infection	0	0.09	0	0.44	0.07	0.44	0.31	0.25	0.23
Legionellosis	0	1.59	0.57	1.08	1.57	0.22	0.33	1.51	1.10
Leprosy	0.36	0.07	1.71	0	0	0	0.07	0.32	0.09
Leptospirosis	0	0.33	0.57	1.14	0.36	0.88	2.14	0.32	0.94
Lymphogranuloma venereum	0	NN	0	0	NN	0	0.07	NN	0.03
Listeriosis	0	0.28	NN	0.20	0.14	0	0.33	0	0.25
Malaria	9.28	2.11	17.05	11.15	2.29	2.65	2.85	2.40	4.23
Measles	21.06	13.78	19.33	4.27	11.00	1.77	5.18	2.08	8.46
Meningococcal infection	1.07	2.04	6.82	1.21	1.36	1.99	1.60	1.77	1.73
Mumps	0.71	0.37	NN	NN	NN	NN	0	NN	0.22
Ornithosis	0.36	NN	0	0.07	1.29	0	1.56	0.44	0.85
Pertussis	3.21	3.40	0.57	6.99	4.78	5.97	3.30	5.80	4.39
Plague	0	0	0	0	0	NN	0	0	0
Poliomyelitis	0	0	0	0	0	0	0	0	0
Q fever	0	3.54	0	10.11	0.79	0	0.57	0.25	3.22
Rabies	0	NN	0	0	0	0	0	0	0
Rubella	210.60	4.87	0	24.19	8.14	0	49.65	0	22.61
Salmonellosis (NEC)	6.78	14.22	210.30	50.12	24.85	29.39	18.29	41.67	27.39
Shigellosis	1.07	-	125.05	2.96	6.14	0.88	2.12	12.80	6.24
Syphilis	3.93	15.54	374.57	23.08	6.57	0	0.92	19.92	16.00
Tetanus	0	0.03	0.57	NN	0	0.22	0.09	0.38	0.08
Tuberculosis	4.28	7.03	18.19	4.57	4.36	2.87	4.76	7.00	5.76
Typhoid	0.36	0.49	0	0.34	0.36	0	0	0.38	0.30
Viral haemorrhagic fever (NEC)	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0
Yersiniosis (NEC)	0	-	6.25	11.15	12.28	0.44	1.01	0.44	3.37
Total	371.93	229.11	2047.34	722.10	333.15	267.82	224.32	283.00	351.13

1. Further information on the 1992 notification status for each disease in each of the States and Territories is detailed in the footnotes.

2. Adjusted annual rate.

Figure 2. Total notifications, 1983-1992, by year

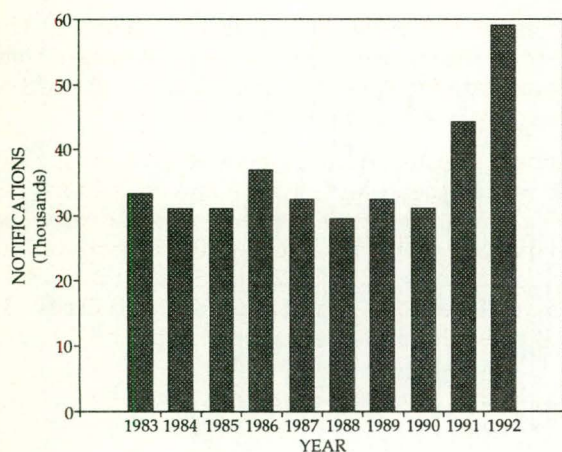


Figure 3. Total notifications, 1992, by State or Territory

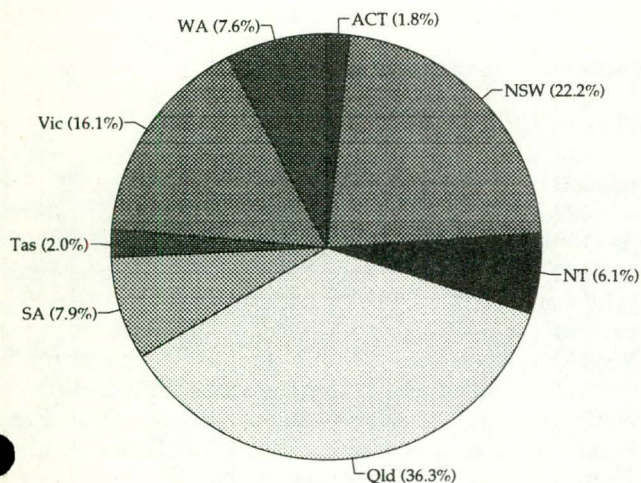
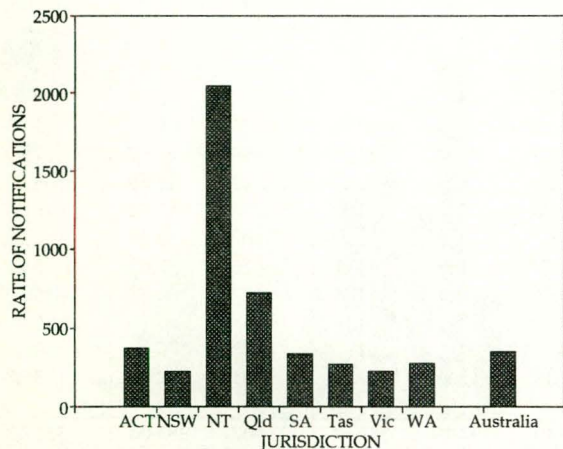


Figure 4. Rate of total notifications per 100,000 population, 1992, by State or Territory



tralia and these rates are adjusted, by excluding State and Territory populations where these diseases were not notifiable from the populations at risk. There was wide variability in the disease and State specific rates, with syphilis in the Northern Territory having the highest rate, at 374.6 notifications per 100,000 population.

No cases were notified for botulism, plague, poliomyelitis, rabies, quarantinable viral haemorrhagic fevers or yellow fever.

A date of onset was recorded in all but seven notifications. A total of 3.9% of the recorded dates of onset was before 1 January 1992 and these cases have been excluded from the analysis of onset dates. Within the notifications with an onset date recorded as being in 1992 (including provisional records of notifications made to 30 May 1993) there was no clear seasonal trend in onset dates. There was a mean of 4,909 notifications with onset dates recorded each month (Figure 5). The highest number of notifications with onset dates in any month was in March, with 5,981 onset dates, and the lowest was in July with 4,174 notifications.

Interestingly, there was a periodicity of total notifications according to onset date when analysed by day of onset. There were markedly fewer notifications with dates of onset on weekends (Figure 6).

The delay in notification was calculated from the date of onset to the date of report. For 586 notifications (1.0%) the date of onset was recorded as after the date of report, and these notifications were excluded from this analysis. For notification delays between 0 and 365 days the mean delay was 18.5 days. Notification delay was one week or less in 62.1% of cases, and 4 weeks or less in 87.2% of cases (Figure 7).

A valid age was recorded for 98.2% of all notifications. The age group most frequently recorded was the 20-24 years age group, with 14.0% of notifications where age was recorded, followed by the 25-29 years (12.9%), 0-4 years (12.7%) and the 30-34 years (12.2%) age groups.

Figure 5. Total recorded onset dates, 1992, by month

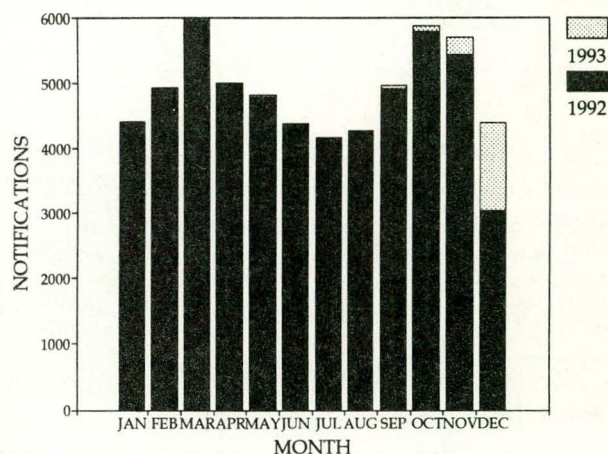


Figure 6. Total recorded onset dates, 1992, by day

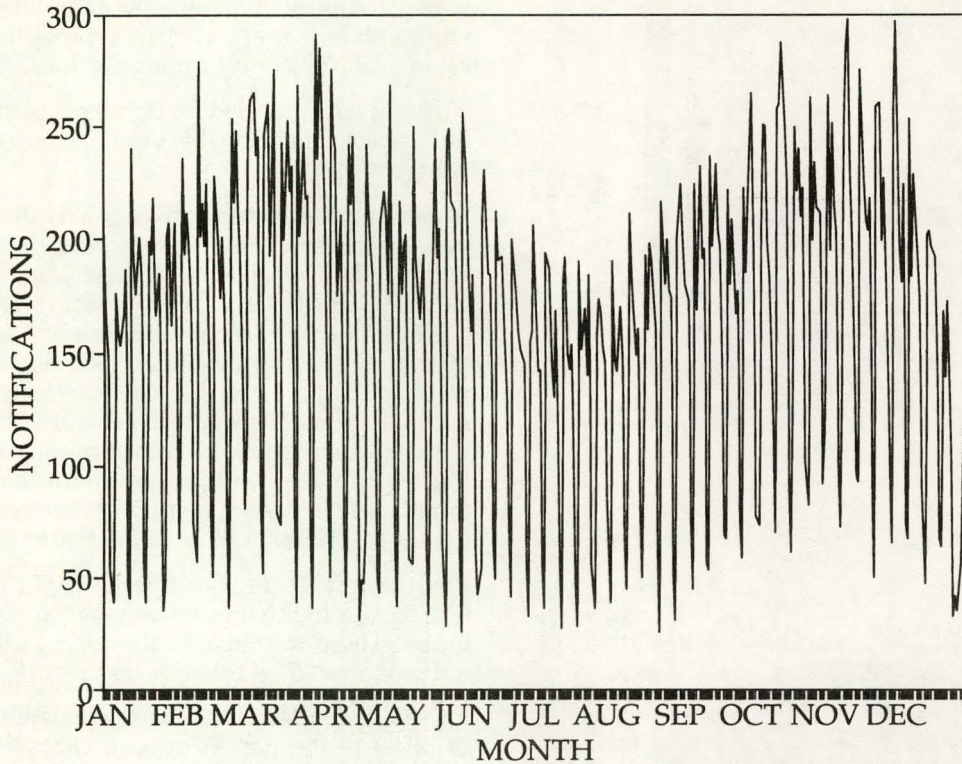
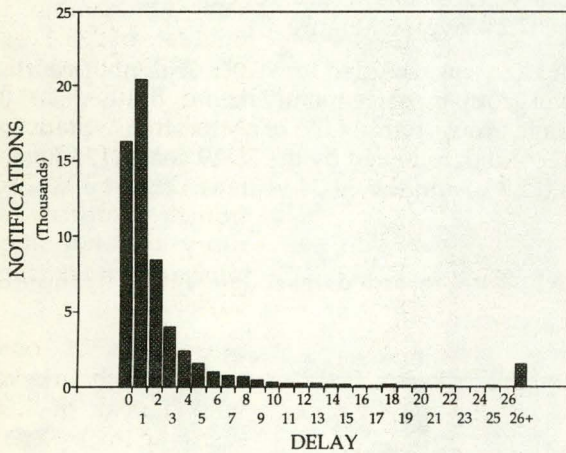


Figure 7. Notification delay in weeks, 1992



Sex was recorded for 97.1% of all notifications; 53.1% of the total were recorded as males and 44.0% as females.

The rest of this report describes individual notifiable diseases in the order presented in Table 1. Diseases up to measles are in this issue of *CDI*; the remainder will be published in next fortnight's issue.

Arbovirus infection (not elsewhere classified)

There were 303 notifications of arbovirus (not elsewhere classified) made in 1992, and 308 cases with

onset dates in 1992 were recorded to 30 May 1993. The adjusted annual rate of notification (1.8 notifications per 100,000 population) was higher than in 1991 (1.2 per 100,000), but considerably lower than previous years (11.8 per 100,000 in 1990). The fall since the late 1980s probably reflects a greater precision in the recording of Ross River virus infection and dengue as separate entities in most States and Territories since 1991. Data from New South Wales and South Australia include Ross River virus infection and dengue in this category. There was a marked seasonality with 56 cases having onset in February and eight in June (Figure 8).

Figure 8. Notifications of arbovirus (not elsewhere classified) infection with onset in 1992, by month of onset

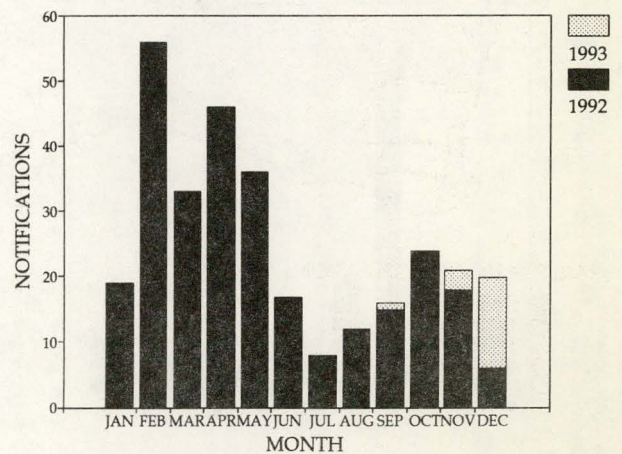
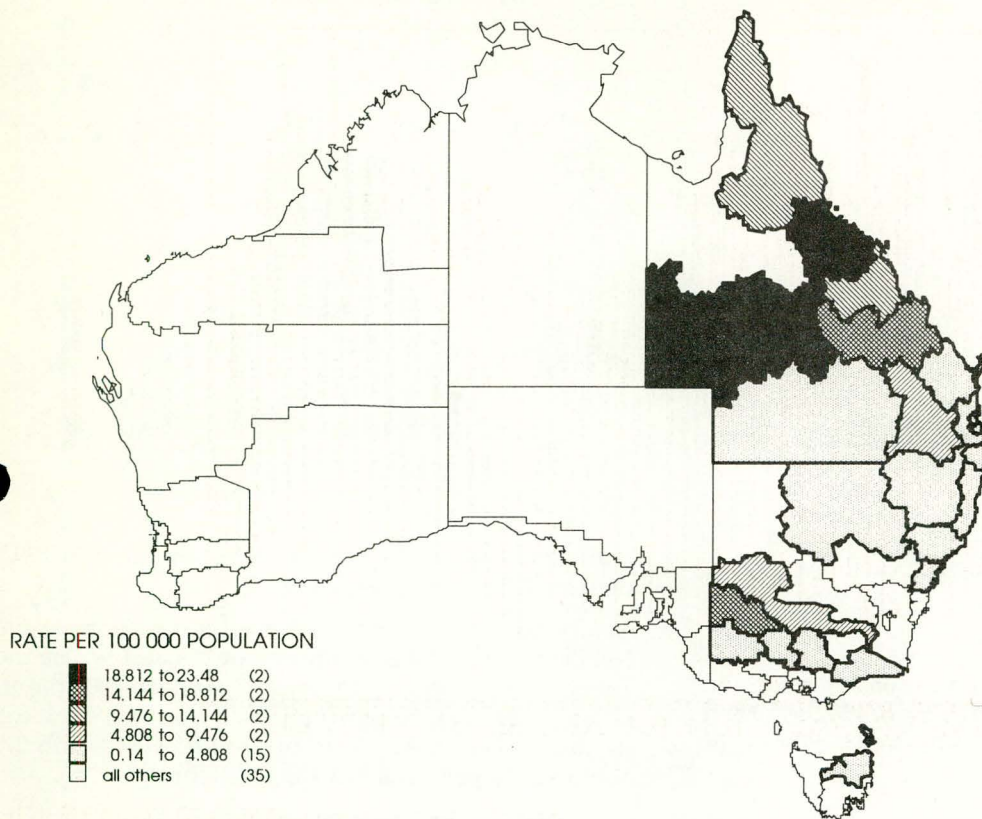


Figure 9. Annual rate of notifications of arbovirus (not elsewhere classified) infection per 100,000 population, 1992, by Statistical Division of residence

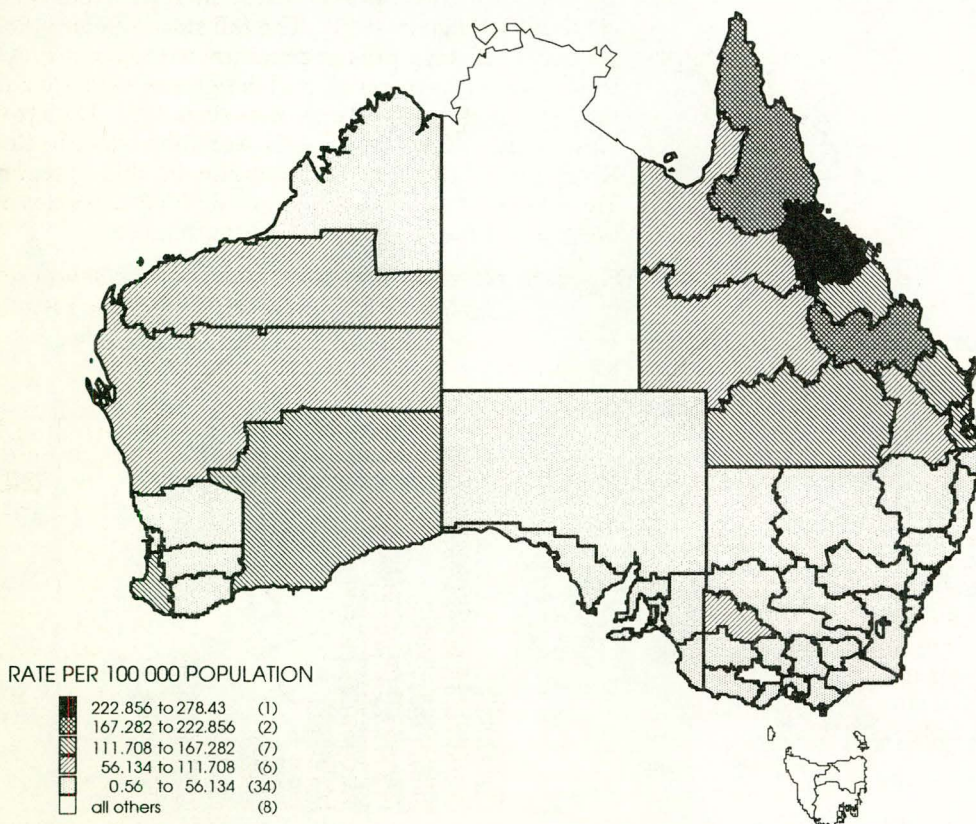


Locations of cases by Statistical Division of residence were predominantly in the eastern States (Figure 9).

Ross River virus infection

Ross River virus infection was notified for 5,630 cases in 1992, and 5,516 cases with onset in 1992 were notified to 30 May 1993. The adjusted annual rate of notification was 36.4 per 100,000 population, an increase from 22.9 per 100,000 in 1991. Queensland contributed 4,154 notifications made in 1992 for an annual rate of 139.6 per 100,000. The Northern Territory contributed 236 notifications for a rate of 134.1 per 100,000.

Figure 10. Annual rate of notifications of Ross River virus per 100,000 population, 1992, by Statistical Division of residence



Ross River virus infection occurred over most of the country with a maximum annual rate of 278.4 cases per 100,000 population being notified in the Northern Statistical Division of Queensland (Figure 10). Data from the Northern Territory did not allow allocation to Statistical Divisions.

Seasonality of onset was strongly marked with a peak of 1,602 cases with onset in March falling to a low of 123 cases in July (Figure 11).

There was a slight predominance of females (female/male ratio 1.12/1) and there was a bell-shaped age distribution of cases. The peak incidence of notified cases was in females in the 35-39 years age group with

Figure 11. Notifications of Ross River virus with onset in 1992, by month of onset

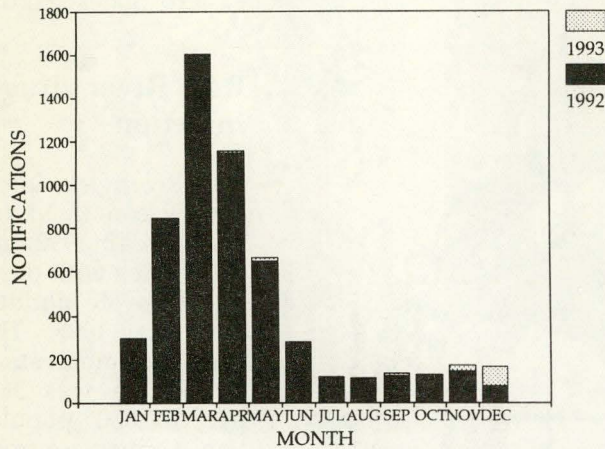
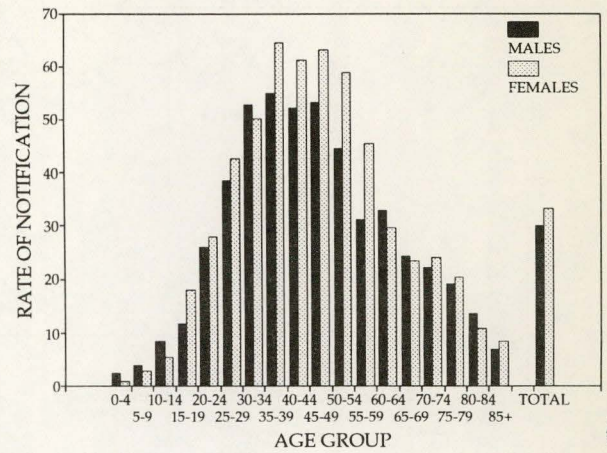


Figure 12. Annual rate of notifications of Ross River virus infection per 100,000 population, 1992, by age group and sex



64.5 notifications per 100,000 population (Figure 12).

Dengue

Dengue activity in 1992 increased to 366 cases notified in 1992 and 373 cases with onset dates in 1992 recorded to 30 May 1993. The overall adjusted incidence of

notified cases was 2.2 per 100,000 population in 1992, up from 0.3 per 100,000 in 1991.

Nearly all the notifications were for residents of the Northern Statistical Division of Queensland, where the annual rate of notifications was 172.0 per 100,000 population. The Far North Statistical Division had the second highest annual rate of notified cases with 2.5 notifications per 100,000 residents (Figure 13).

Figure 13. Annual rate of notifications of dengue per 100,000 population, 1992, by Statistical Division of residence

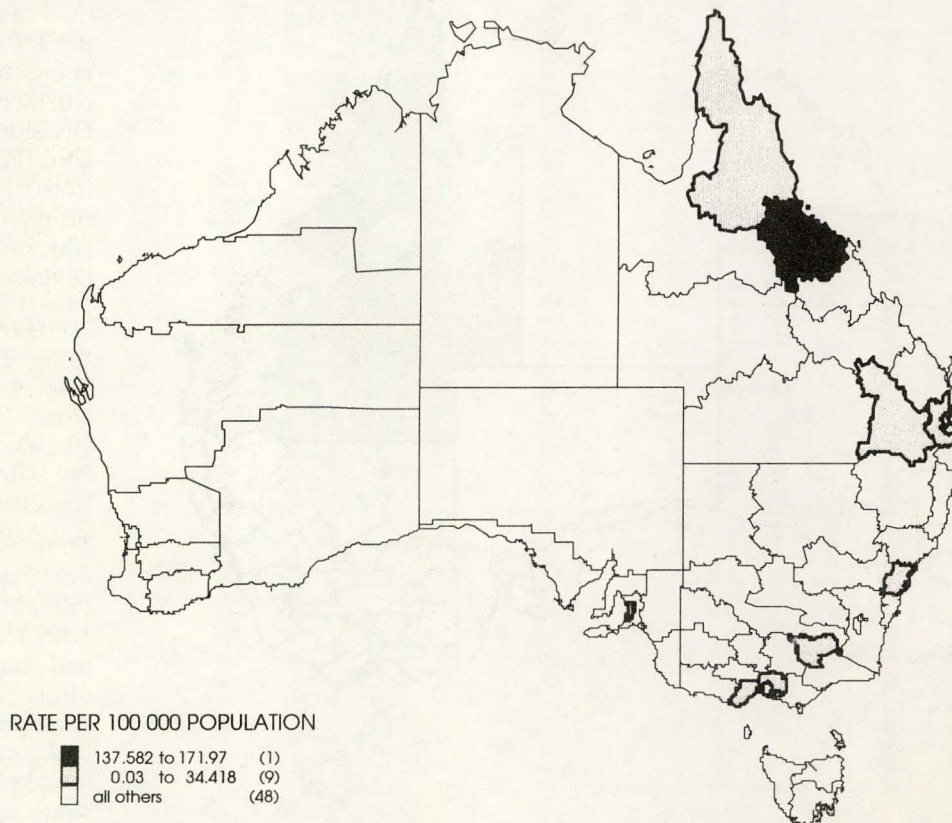
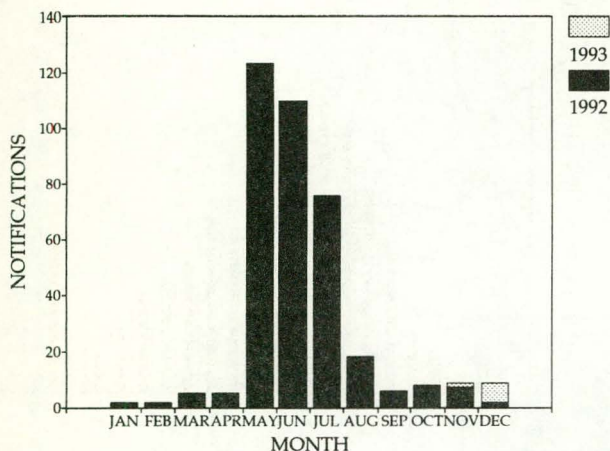


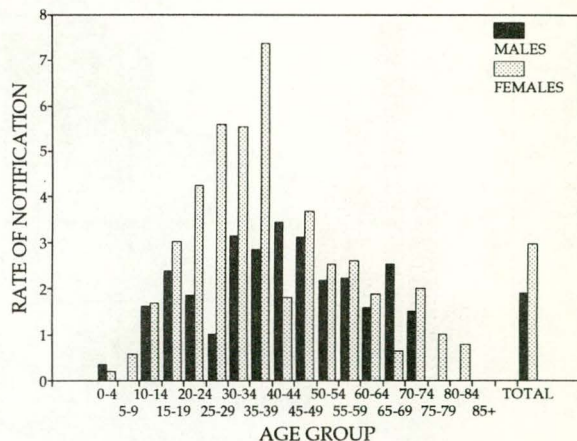
Figure 14. Notifications of dengue with onset in 1992, by month of onset



There was a marked increase in cases with onset dates recorded in May (123 cases, from 5 cases in April) falling to 6 cases in November (Figure 14).

The female/male ratio of cases was 1.61/1 with the peak adjusted incidence (of 7.4 per 100,000) in females in the 35-39 years age group (Figure 15).

Figure 15. Annual rate of notifications of dengue per 100,000 population, 1992, by age group and sex



Brucellosis

Twenty-nine notifications of brucellosis were received in 1992 and there were 33 cases with onset in 1992 notified to 30 May 1993. There was no apparent seasonal trend. The female/male ratio was 0.47/1. Twenty-five of the 29 cases were reported from Queensland where the annual rate of notified cases reached 29.2 per 100,000 residents in the Central West

Figure 16. Annual rate of notifications of brucellosis per 100,000 population, 1992, by Statistical Division of residence

Statistical Division (Figure 16).

Campylobacteriosis

There were 9,135 cases of campylobacteriosis notified in 1992 and 9,087 cases were recorded as having onset in 1992 to 30 May 1993. The annual rate was 54.2 notified cases per 100,000 population making it the third highest rate of notification of notifiable disease. (Campylobacteriosis in New South Wales was only notifiable as 'food-borne disease' or 'gastroenteritis in an institution'.)

There was a peak of cases with onset dates in October, when 1,019 notified cases occurred. The lowest number of cases occurred in April (595

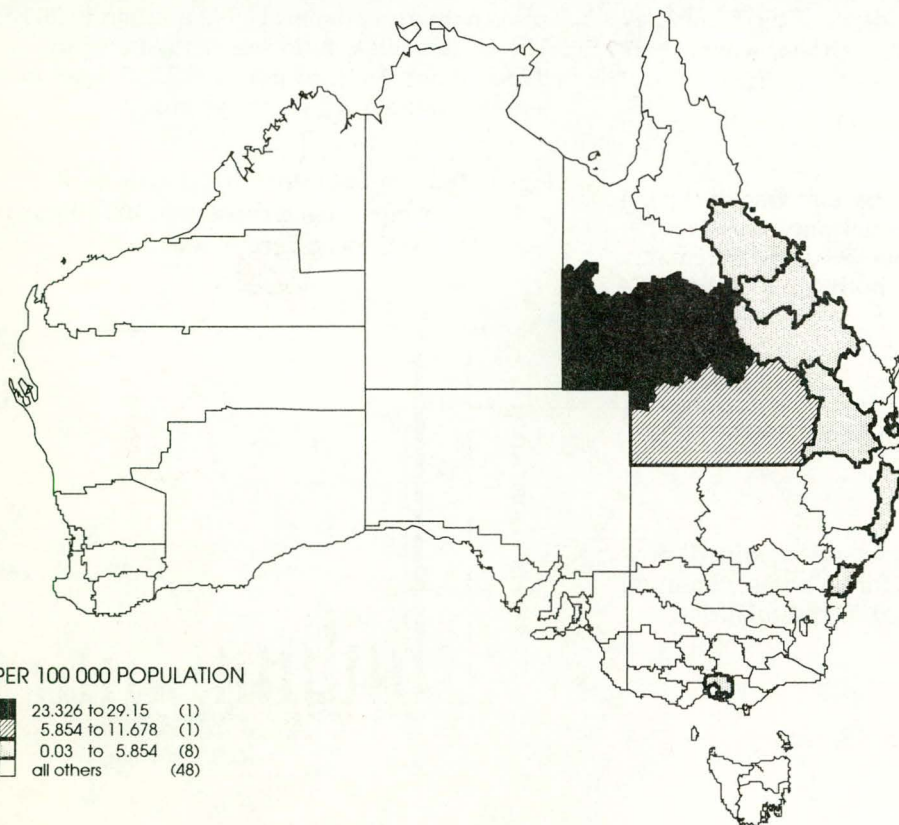
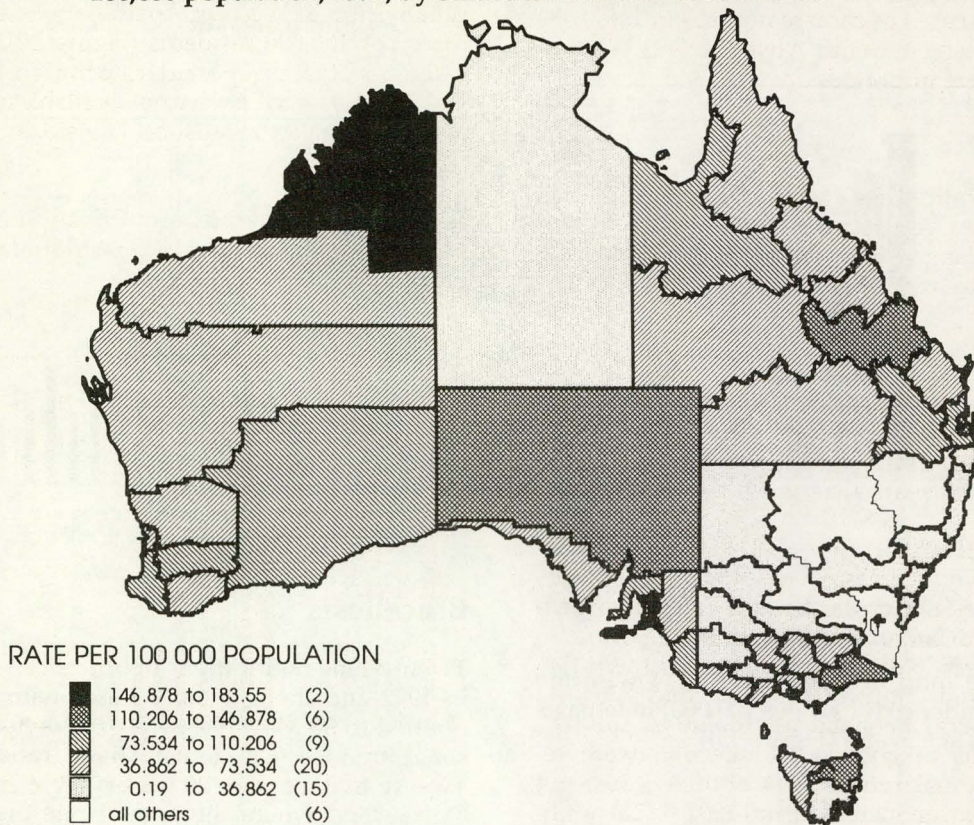


Figure 17. Annual rate of notifications of campylobacteriosis per 100,000 population, 1992, by Statistical Division of residence



cases). There was marked geographical variation in the incidence of campylobacteriosis, with the highest annual rate being recorded in residents of the Kimberley Statistical Division of Western Australia, where there were 182.2 cases per 100,000 population (Figure 17).

In Tasmania the number of cases fell from 729 cases in 1991 to 444 cases in 1992.

As in 1991, the peak incidence by age was in the 0-4 years age group, where the annual rate was 234.9 per 100,000 for males and 184.7 per 100,000 for females. There was a secondary peak in both sexes in the 20-24 years age group (Figure 18).

Chancroid

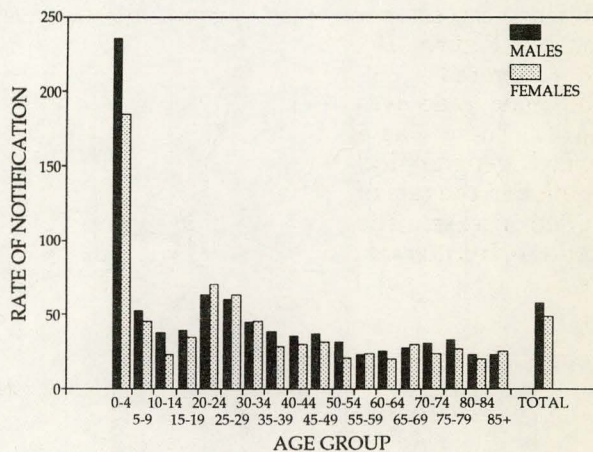
Five cases of chancroid were notified in 1992.

Chlamydial infection

Chlamydial infection (not elsewhere classified) was notified in 1992 for 6,293 cases for an adjusted annual rate of 56.6 notified cases per 100,000 population.

Chlamydial infection had the second highest adjusted incidence of any notifiable disease. There were 5,922 cases with onset dates in 1992 notified to 30 May 1993. The female/male ratio was 2.19/1 and the peak incidence of notified infection was 252.5 cases per 100,000 females in the 20-24 years age group.

Figure 18. Annual rate of notifications of campylobacteriosis per 100,000 population, 1992, by age group and sex



Cholera

There were three cases of cholera notified in 1992, one each from Queensland, South Australia and Western Australia. All were imported.

Diphtheria

Fourteen cases of diphtheria were notified in 1992, 11 from the Northern Territory and three from Western Australia. Ages ranged from the 5-9 to the 45-49 years age groups. There were eight cases reported in 1991.

Donovanosis

There were 78 cases of donovanosis notified in 1992. The female/male ratio was 1.57/1. The peak adjusted annual incidence of notified cases was 5.0 per 100,000 females in the 15-19 years age group.

Gonococcal infection

Gonococcal infection includes both sexually transmissible disease and other forms of infection due to *Neisseria gonorrhoeae*. Notifications in the Northern Territory, Queensland, South Australia and Victoria included gonococcal neonatal ophthalmia. In 1992, 2,908 notifications of gonococcal infection were received for an annual rate of 17.4 notified cases per 100,000 population, an increase from 1991 (2,530 notifications and an annual rate of 15.0 per 100,000). A total of 2,829 cases was recorded with onset dates in 1992 to 30 May 1993. There was no apparent seasonal trend.

The peak incidence of notified cases was in males in the 20-24 years age group, with an annual rate of 77.9 notified cases per 100,000 (Figure 19). The overall female/male ratio was 0.38/1. There was a marked geographical variation in the rate of notified disease. The Northern Territory re-

ported an annual rate of 331.4 notified cases per 100,000 population. The annual rate in the Kimberley Statistical Division in Western Australia was 1,562.1 notified cases per 100,000 residents (Figure 20). Postcodes of residence of cases reported from the Northern Territory and South Australia were not available and cases could not be allocated to Statistical Divisions.

Figure 19. Annual rate of notifications of gonococcal infection per 100,000 population, 1992, by age group and sex

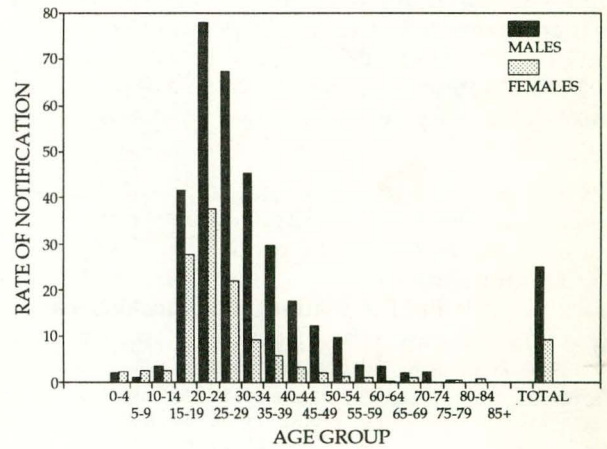
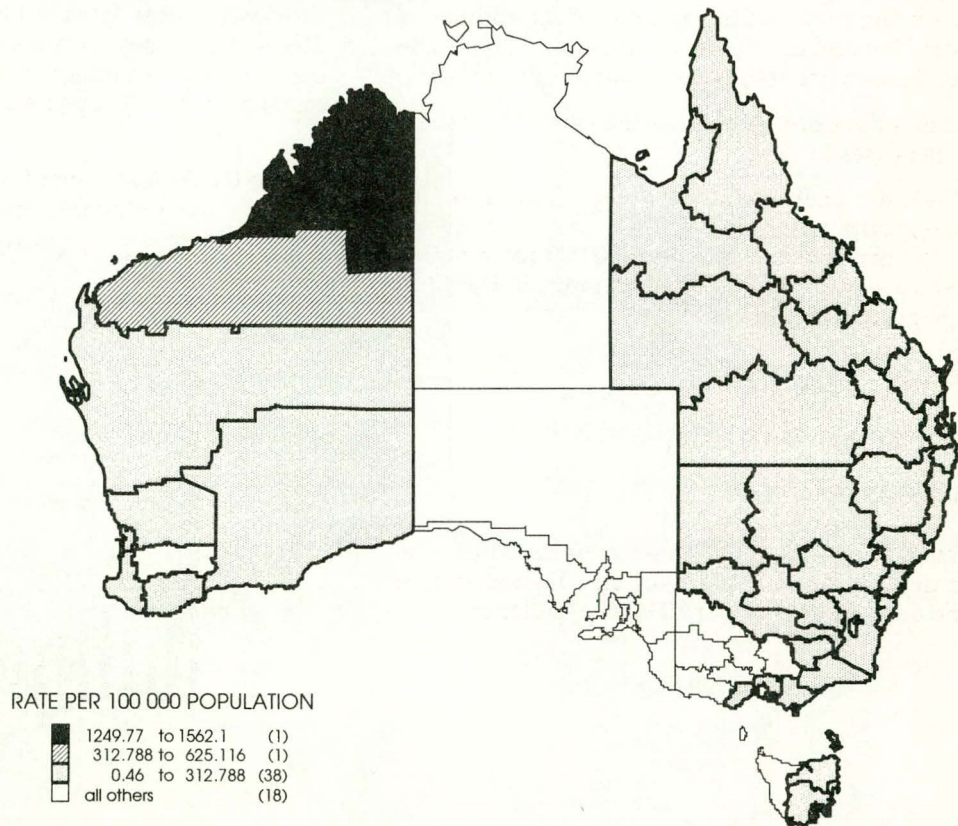


Figure 20. Annual rate of notifications of gonococcal infection per 100,000 population, 1992, by Statistical Division of residence



Haemophilus influenzae type b infection

Haemophilus influenzae type b (Hib) infection was notifiable in South Australia as 'bacterial meningitis' and Hib infections were extracted from the data set, in Tasmania as 'non-meningococcal meningitis' and in Victoria as disease causing epiglottitis and meningitis only. The disease was not notifiable in the Northern Territory or Western Australia, but reports were accepted in the Northern Territory and are included here. A total of 501 notifications of *Haemophilus influenzae* type b (Hib) infection was received during 1992 for an overall adjusted annual rate of 3.0 per 100,000 population. This compares with 549 notifications received in 1991 and a rate of 3.5 per 100,000 population. To 30 May 1993, there had been 493 cases notified with onset dates in 1992. Notifications ranged from a low of 23 with onset dates in April to a high of 67 with onset dates in July (Figure 21)

There was a high degree of geographical variation in notified incidence, with comparatively high rates reported from the South Eastern (7.82 notified cases per 100,000 population) and the Northern (6.62 notified cases per 100,000 population) Statistical Divisions in New South Wales. The disease was not notifiable in Western Australia, but a single case was notified (in Victoria) with a postcode of residence in the Pilbara

Statistical Division in Western Australia. Postcodes from the Northern Territory could not be allocated to Statistical Divisions (Figure 22).

Figure 21. Notifications of *Haemophilus influenzae* type b infection with onset in 1992, by month of onset

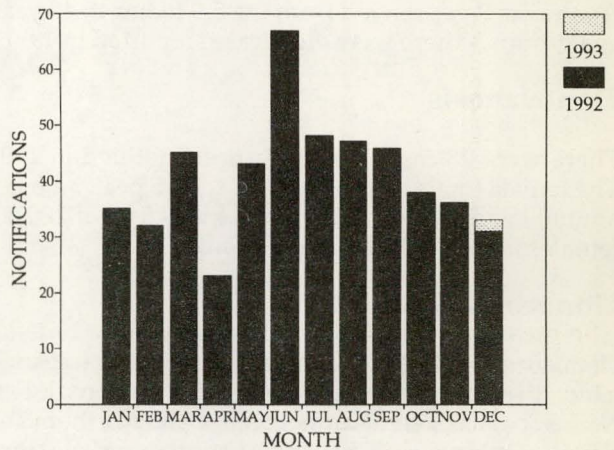


Figure 22. Annual rate of notifications of *Haemophilus influenzae* type b infection per 100,000 population, 1992, by Statistical Division of residence

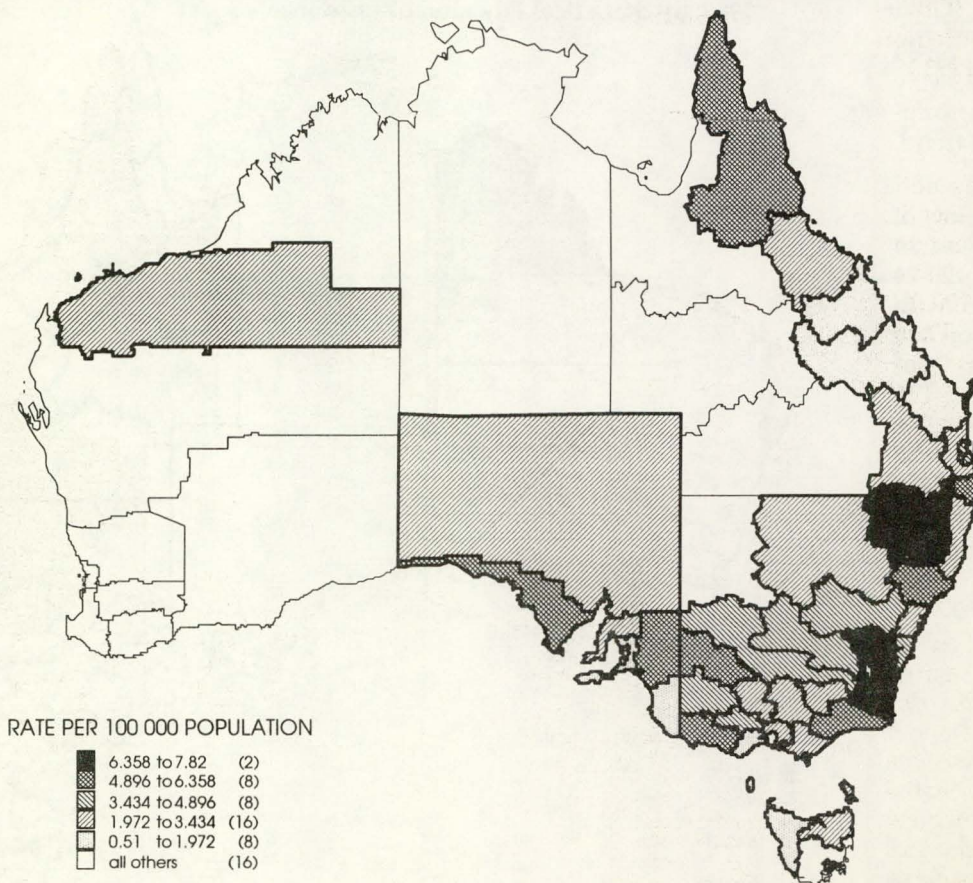
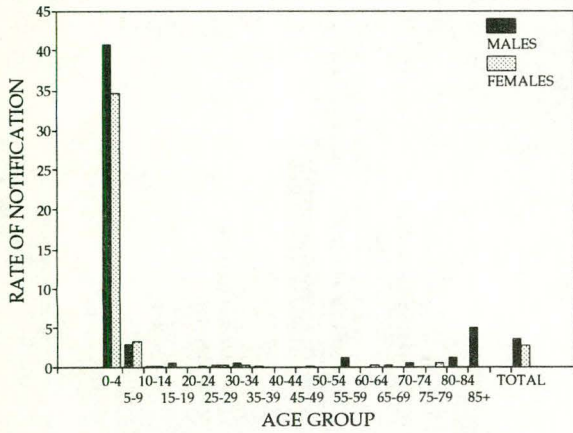


Figure 23. Annual rate of notifications of *Haemophilus influenzae* type b infection per 100,000 population, 1992, by age group and sex



The great majority (86.2%) of cases were recorded as being in the 0-4 years age group, with annual adjusted rates of notified cases being 40.7 per 100,000 males and 34.7 per 100,000 females in this age group (Figure 23). The proportion of all cases aged less than one year was 25.7%. The overall female/male ratio was 0.80/1.

The first Hib vaccine (PRP-D, suitable for children from the age of 18 months) was marketed from April 1992 and PRP-OMP vaccine (suitable for infants from the age of 2 months) was marketed from December 1992. (Other Hib vaccines were not available until 1993.)

Hepatitis A

Hepatitis A was notified for 2,109 cases in 1992 to give an annual rate of notified disease of 12.5 per 100,000 population. There were 2,126 cases notified to 30 May 1993 with onset dates in 1992. There was no marked seasonality of onset dates, with 208 onset dates recorded in March and 142 in July (Figure 24).

Annual rates of notification varied across the country, with 79.5 notified cases per 100,000 residents of the North Western Statistical Division of New South Wales and 68.0 per 100,000 residents

of the South West Statistical Division of Queensland (Figure 25).

There was a bimodal distribution of ages with peaks in the 5-9 and 25-29 years age groups (Figure 26). The primary peak for males was especially pronounced, with 33.6 notified cases per 100,000 males in this age group during the year. The overall female/male ratio was 0.56/1.

Figure 24. Notifications of hepatitis A with onset in 1992, by month of onset

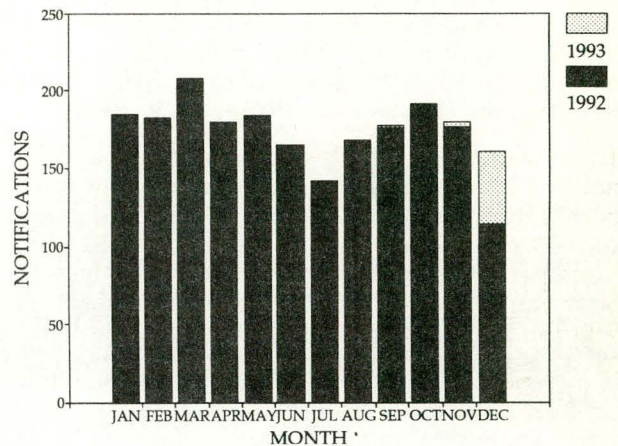


Figure 25. Annual rate of notifications of hepatitis A per 100,000 population, 1992, by Statistical Division of residence

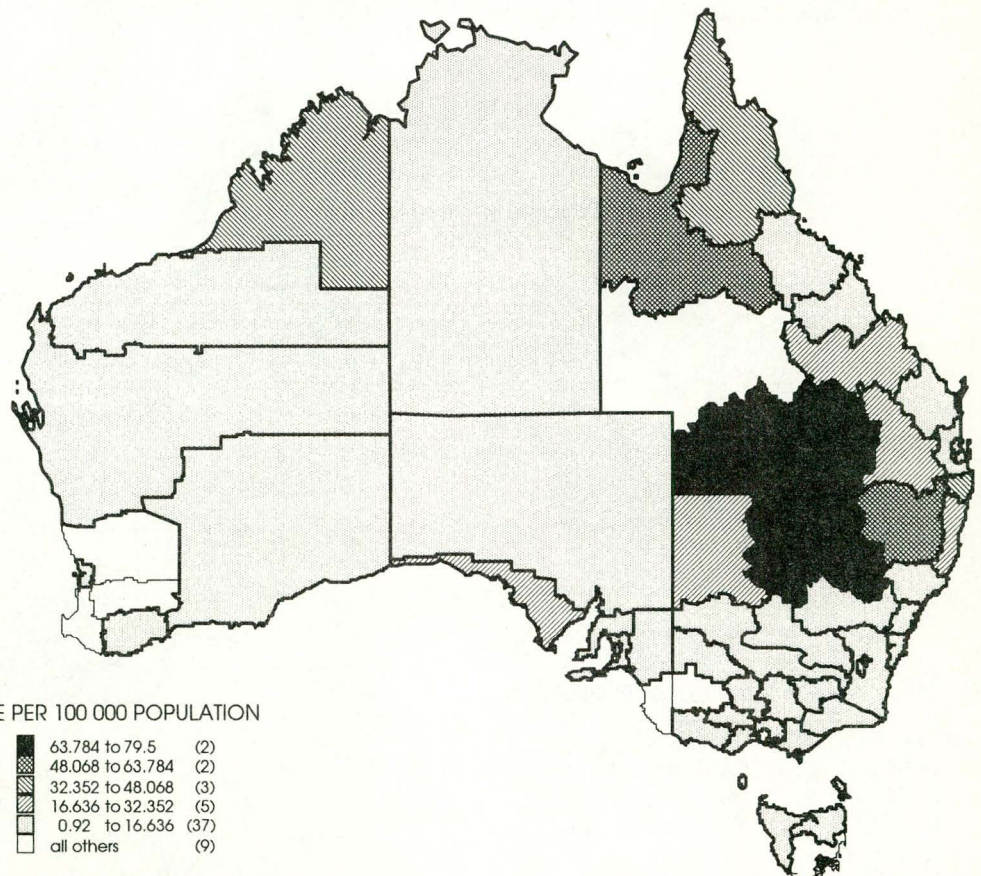


Figure 26. Annual rate of notifications of hepatitis A per 100,000 population, 1992, by age group and sex

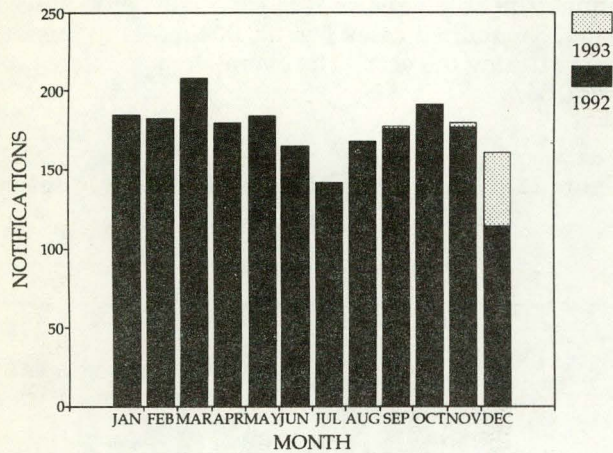
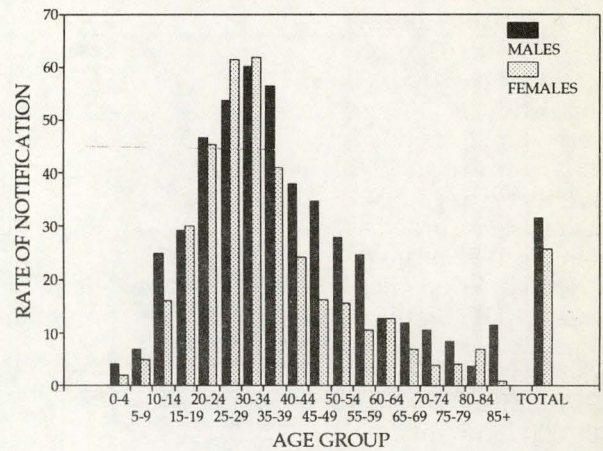


Figure 28. Annual rate of notifications of hepatitis B per 100,000 population, 1992, by age group and sex



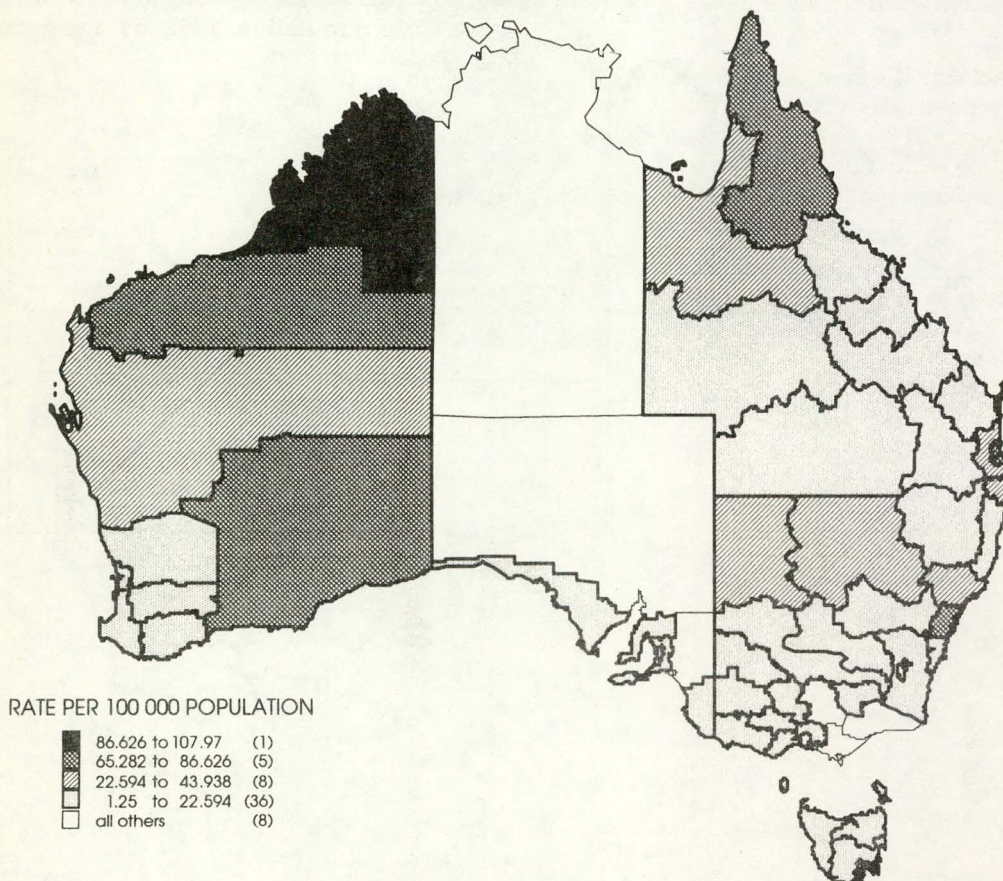
Hepatitis B

There were 5,219 notifications of hepatitis B received in 1992. A total of 5,238 cases was notified to 30 May 1993 with onset dates in 1992. The annual rate of notifications received in 1992 was 31.0 per 100,000 population, an increase of 43% from 1991 (when the annual rate of hepatitis B notifications was 21.7 per 100,000 population). There was no apparent seasonality of onset of notified cases. The data do not indicate whether the

notifications refer to incident or prevalent cases and care must be exercised in interpretation.

Hepatitis B did not occur with uniform incidence across the country. There was an annual rate of notified cases of 108.0 per 100,000 residents in the Kimberley Statistical Division in Western Australia. There were also comparatively high rates in the Pilbara (72.1 notifications per 100,000 residents) and South Eastern (77.4 notifications per 100,000 residents) Statistical Divisions of Western Australia and in the Far North Statistical

Figure 27. Annual rate of notifications of hepatitis B per 100,000 population, 1992, by Statistical Division of residence



Division of Queensland (73.3 notifications per 100,000 residents) (Figure 27). Data from the Northern Territory were in a form which did not allow allocation of postcodes of residence of cases to Statistical Divisions.

The peak incidence was in the 30-34 years age group, for both males and females, with annual rates of 6.2 notifications per 100,000 males and 61.8 notifications per 100,000 females in this age group. Rates of notified cases increased from the 0-4 years age group to the 30-34 years age group. The rates fell at older age groups, but more gradually in males than in females (Figure 28). The overall female/male ratio was 0.83/1.

Hepatitis C

Hepatitis C was notified at the highest adjusted annual rate of any notifiable disease in 1992, with 63.6 notifications per 100,000 population. There were 8,812 notifications received in 1992 and there were 8,527 with onset recorded as being in 1992 received to 30 May 1993. There were 4,116 notifications in 1991 for an adjusted annual rate of 29.7 notified cases per 100,000 population. However, it is not possible from these data to distinguish incident from prevalent cases. It is likely that the majority were prevalent cases and the data must therefore be interpreted with caution.

There was a gradual rise in the numbers of cases with dates of onset recorded through the year. It is probable that this is a reflection not of a true increase, but of an increase in testing activity.

Hepatitis C was not notifiable in Western Australia, and the Northern Territory postcodes could not be allocated to Statistical Divisions. In the eastern States, higher incidences of notification were reported for residents of coastal areas by the New South Wales and Queensland border, and from the Far North Statistical Division of Queensland (Figure 29).

The incidence of notified hepatitis C rose steeply after the 15-19 years age group to peak in the 30-34 years age group (232.8 per 100,000 males and 138.3 per 100,000 females in this age group) (Figure 30). The overall female/male ratio was 0.61/1.

Figure 29. Annual rate of notifications of hepatitis C per 100,000 population, 1992, by Statistical Division of residence

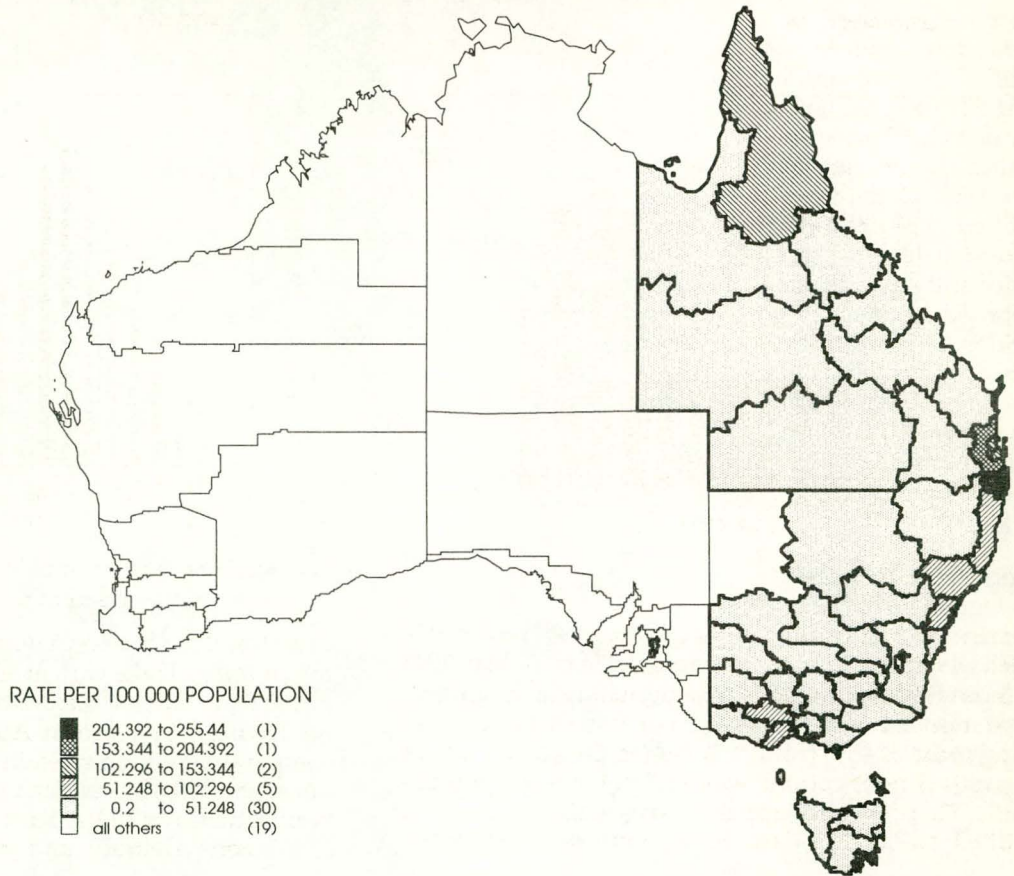
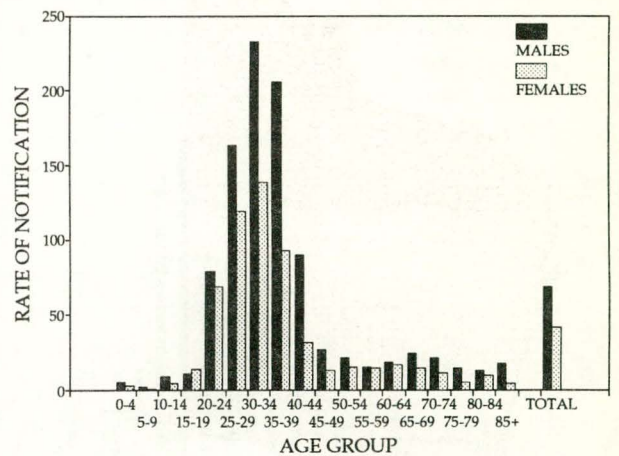
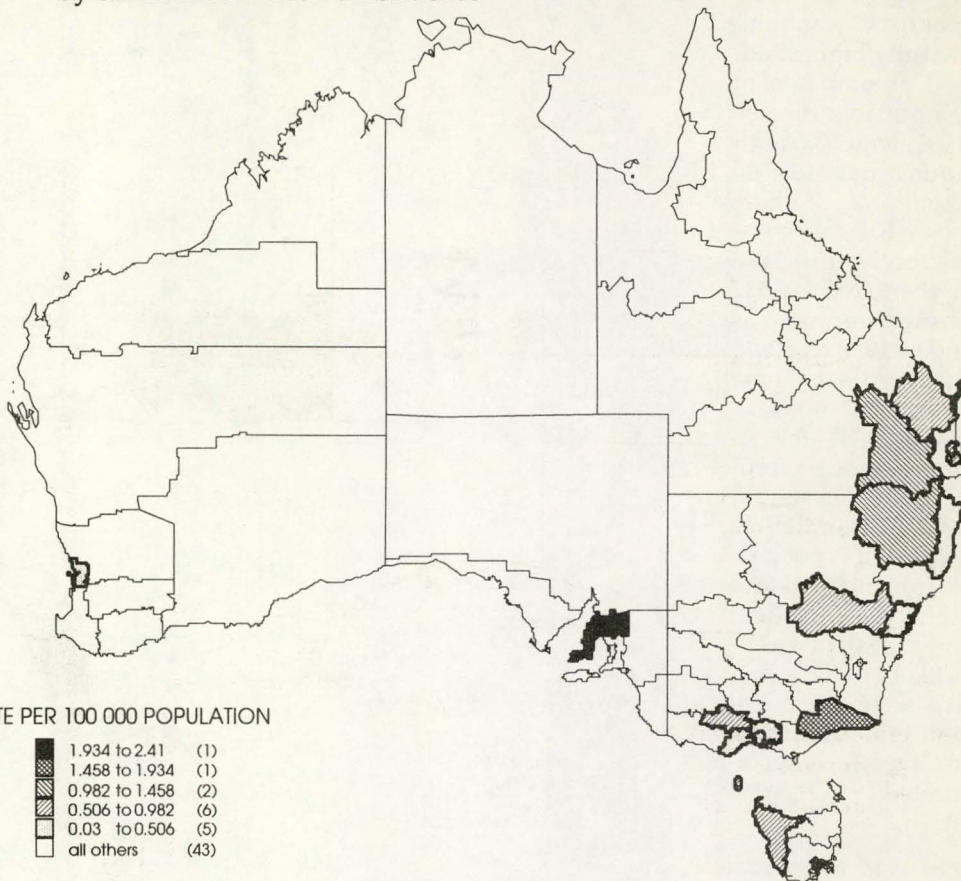


Figure 30. Annual rate of notifications of hepatitis C per 100,000 population, 1992, by age group and sex



Hydatid infection Figure 31. Annual rate of notifications of hydatid infection per 100,000 population, 1992, by Statistical Division of residence

Thirty-eight cases of hydatid infection were notified in 1992 and a further five cases with 'onset' in 1992 were reported to the end of May 1993. Of the cases notified in 1992, 19 were females, 18 were males and sex was not recorded in one. The incidence of notified cases was higher in residents of Statistical Divisions on the east coast (Figure 31).



Legionellosis

There were 185 cases of legionellosis notified in 1992 and 189 cases were reported to 30 May 1993 with onset dates recorded as being in 1992.

The female/male ratio of cases notified in 1992 was 0.42/1, and the peak incidence was in males in the 70-74 years age group with 8.03 notifications per 100,000 population (Figure 32).

There was a marked peak of cases with onset dates recorded in April 1992 (Figure 33) due to an outbreak in south-west Sydney.

Figure 32. Annual rate of notifications of legionellosis per 100,000 population, 1992, by age group and sex

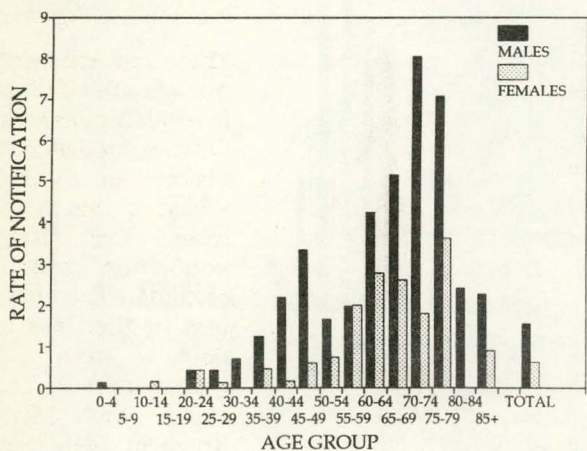


Figure 33. Notifications of legionellosis with onset in 1992, by month of onset

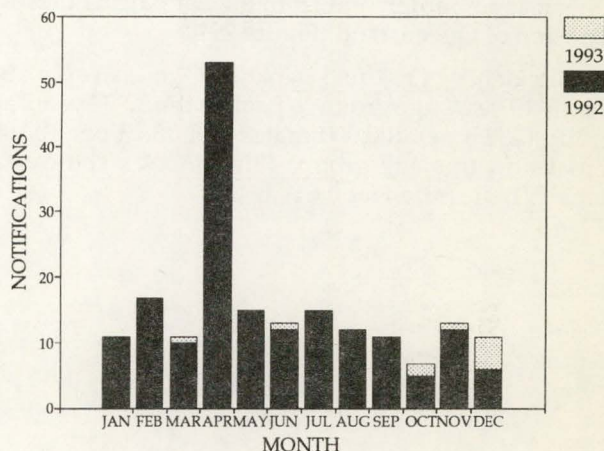
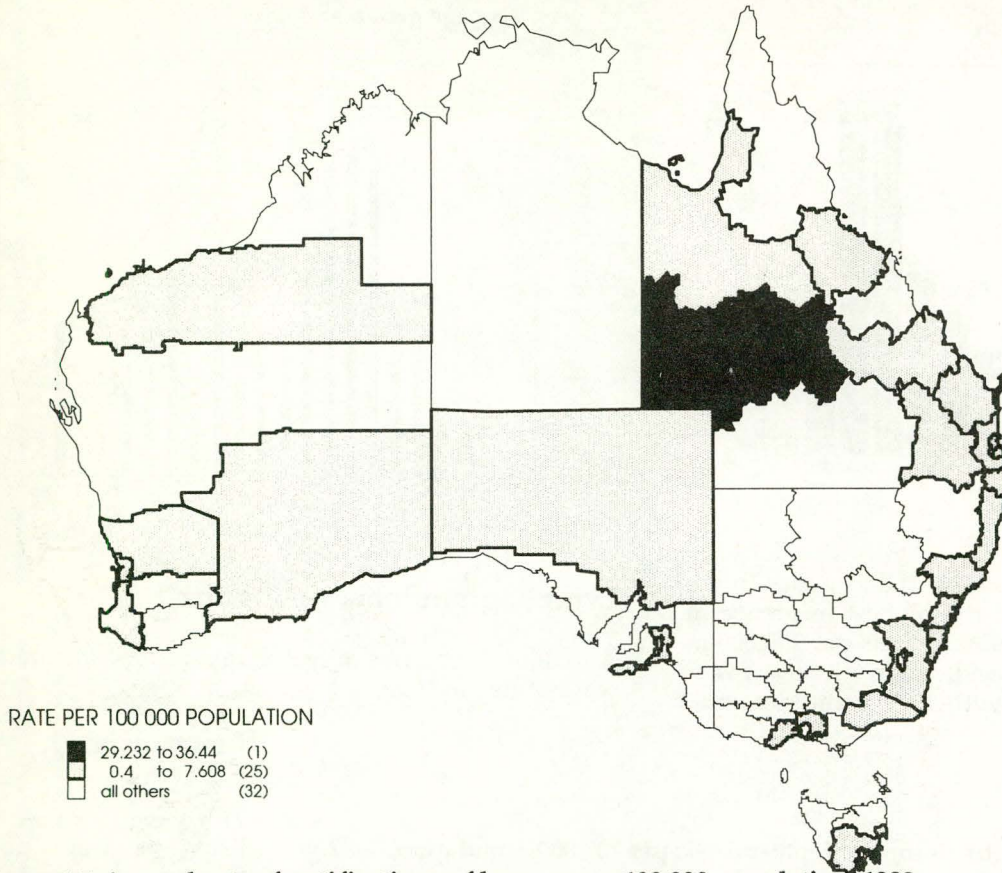


Figure 34. Annual rate of notifications of legionellosis per 100,000 population, 1992, by Statistical Division of residence



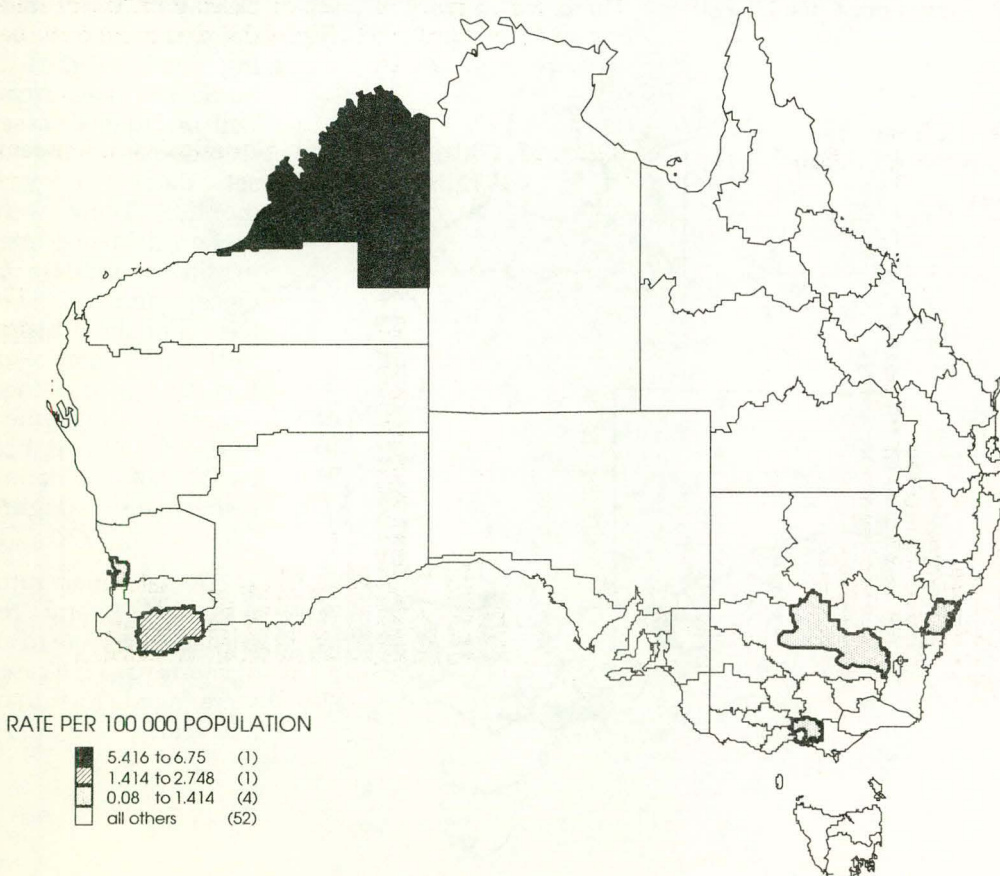
Despite this, the highest rate of notified legionellosis was recorded in residents of the South West Statistical Division of Queensland (Figure 34).

Leprosy

There was a total of 16 cases of leprosy notified in 1992, and 17 cases were notified to the end of May with recorded 'onset' in 1992. The highest incidence of notified leprosy was in residents of the Kimberley Statistical Division of Western Australia, with 6.75 notifications per 100,000 (Figure 35).

The female/male ratio was 0.33/1, and males in the 25-29 years age group had the highest incidence of notified disease.

Figure 35. Annual rate of notifications of leprosy per 100,000 population, 1992, by Statistical Division of residence

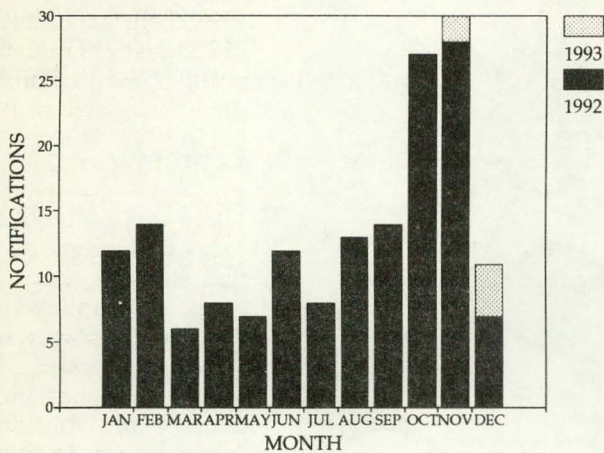


Leptospirosis

Leptospirosis was notified for 159 cases in 1992, with 162 cases with recorded onset dates in 1992 notified to 30 May 1993. Notifications peaked in November (Figure 36).

There was a concentration of notified disease in residents of Western District Statistical Division in Victoria, where a rate of 51.2 cases per 100,000 population was recorded. The disease was notified for residents from the Queensland coast, along the Murray River in New South Wales and Victoria, and rural areas of Tasmania, South Australia, and south-

Figure 36. Notifications of leptospirosis with onset in 1992, by month of onset



west Western Australia (Figure 37).

The female/male ratio was 0.14/1, and males in the 35-39 years age group had the highest incidence of notified disease, with 3.59 notifications per 100,000 in that age group. The peak incidence in females was in the 55-59 years age group with 1.15 notifications per 100,000 (Figure 38).

Figure 38. Annual rate of notifications of leptospirosis per 100,000 population, 1992, by age group and sex

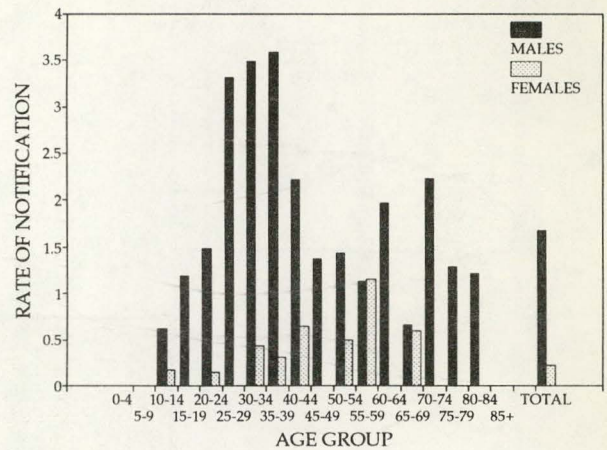
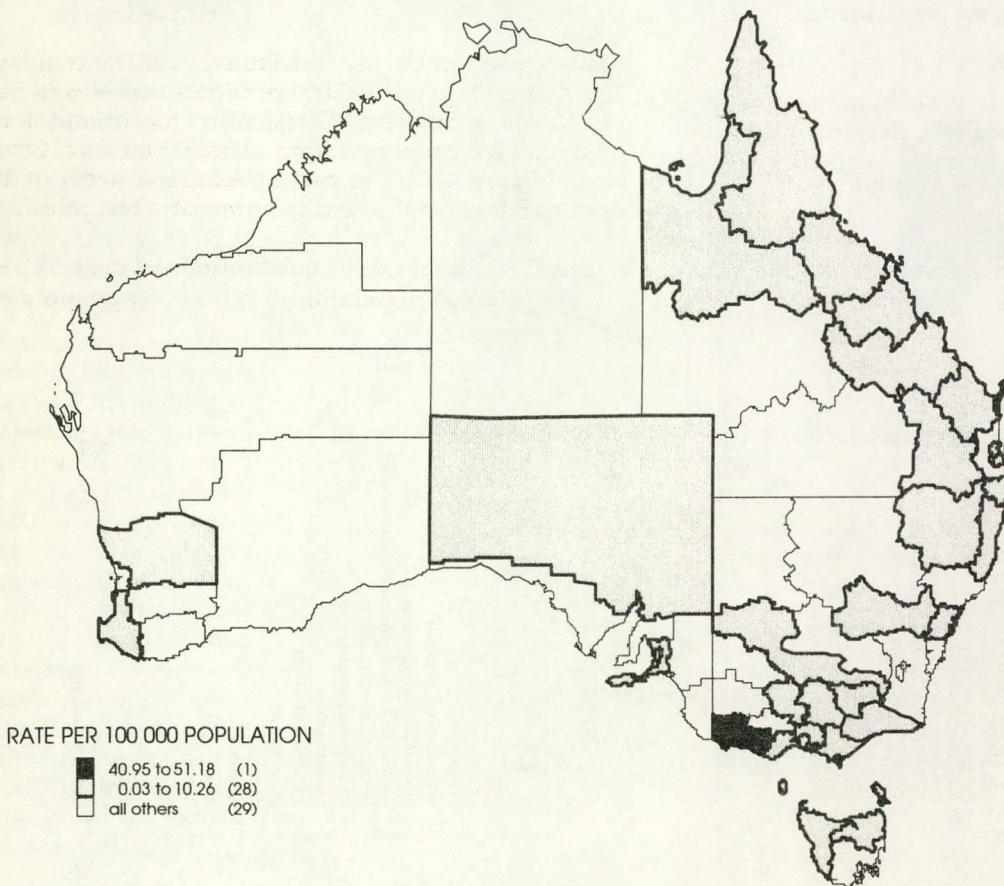


Figure 37. Annual rate of notifications of leptospirosis per 100,000 population, 1992, by Statistical Division of residence



Lymphogranuloma venereum

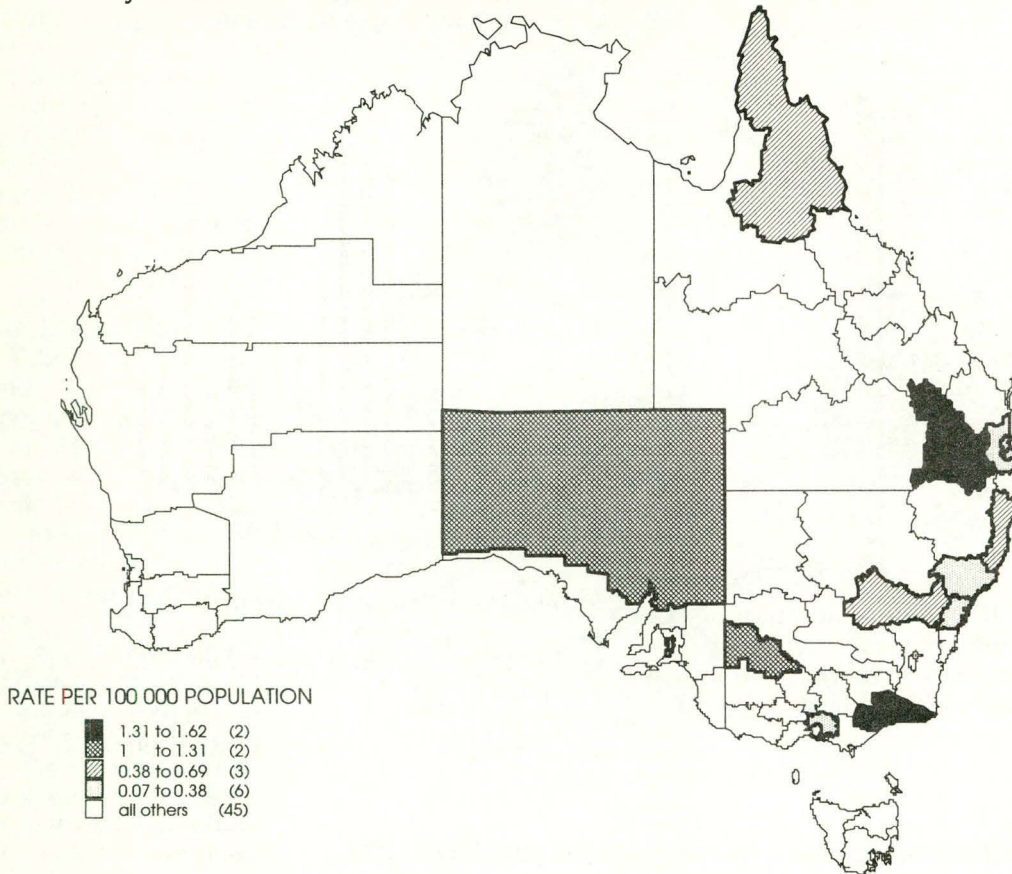
A total of three cases of lymphogranuloma venereum was notified in 1992.

Listeriosis

Thirty-eight cases of listeriosis were notified in 1992, and 37 cases were notified to 30 May 1993 with onset dates recorded as being in 1992. There was no clear seasonal trend with one to seven cases recorded as having onset dates in each month. There were higher incidence rates in the south-east of Queensland and in the East Gippsland Statistical Division of Victoria with incidences of notified cases of 1.62 and 1.55 per 100,000 population respectively (Figure 39).

The female/male ratio was 0.94/1 and recorded ages were in all age groups. Five cases were aged less than one year.

Figure 39. Annual rate of notifications of listeriosis per 100,000 population, 1992, by Statistical Division of residence



There were 712 cases of malaria notified to the NNDSS in 1992 and by the end of May 1993 there was a total of 728 cases of malaria notified with onset dates recorded as being in 1992. The rate of notified infection was 4.2 cases per 100,000 population. There was a distinct seasonal trend with more cases being notified in the late summer than in other months (Figure 40).

There was a preponderance of males, the female/male ratio being 0.39/1. The highest recorded age and sex specific rate was in males in the 25-29 years age group with 14.6 notified cases per 100,000. For females the highest rate as in the 15-19 years age group with 5.3 cases per 100,000 (Figure 41).

Malaria

This discussion refers only to malaria notified to the NNDSS. The Australian Malaria Register conducts more complete surveillance for malaria; the Registry's methods are given in the Report for 1991.

Malaria was not evenly distributed over the country. The highest rate per 100,000 residents was 40.6 in the Far Northern Statistical Division in Queensland, and high rates were reported from adjacent Statistical Divisions (Figure 42). The part of Australia north of 19 degrees S is generally held to be 'malaria receptive'.

Figure 40. Notifications of malaria with onset in 1992, by month of onset

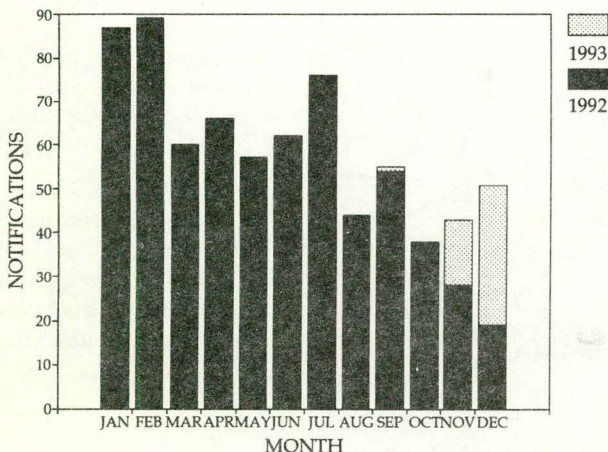


Figure 41. Annual rate of notifications of malaria per 100,000 population, 1992, by age group and sex

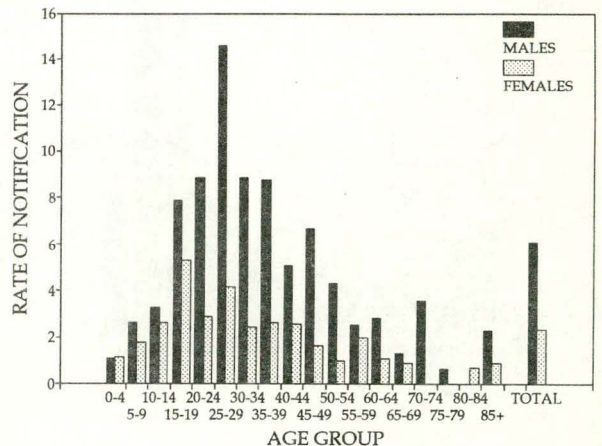
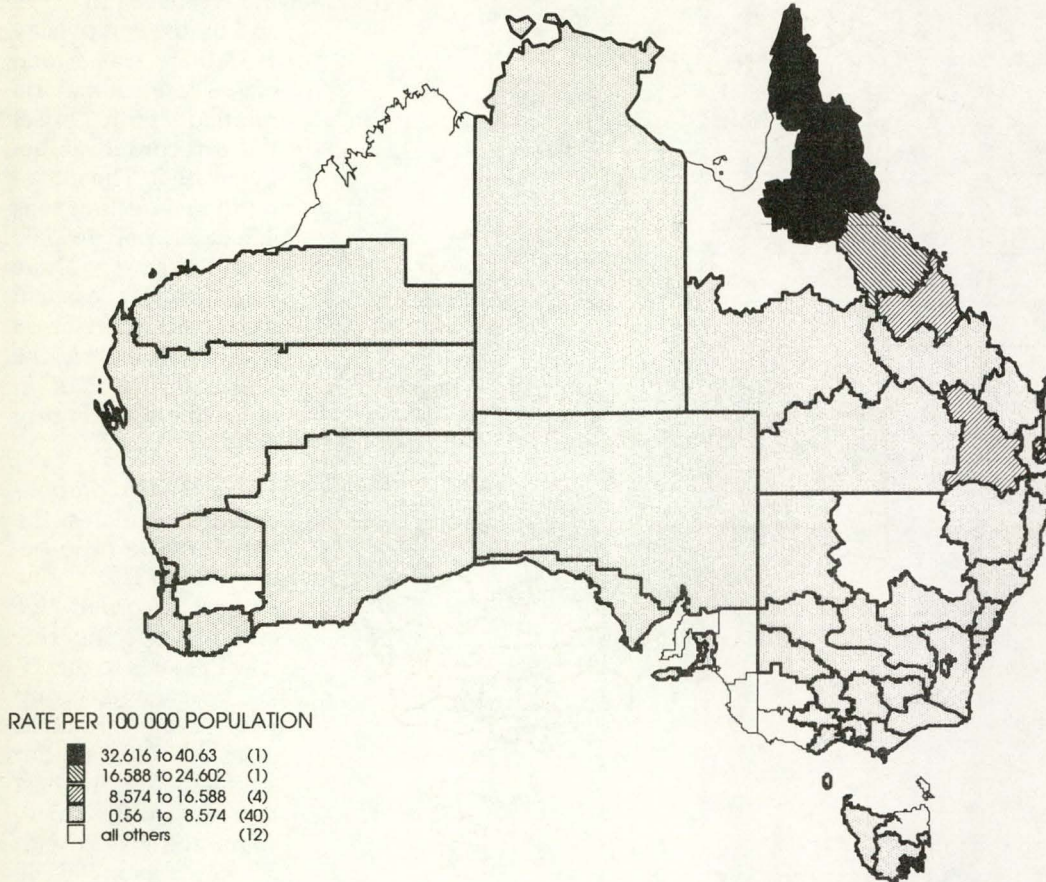


Figure 42. Annual rate of notifications of malaria per 100,000 population, 1992, by Statistical Division of residence



The female/male ratio was 1.1/1, and the age and sex specific annual rate of notified disease shows a single peak for both sexes with a maximum in the 0-4 years age group (46.4 per 100,000 in this age group for females and 38.7 per 100,000 for males, Figure 44).

The overall annual rate of cases notified in 1992 was 8.5 per 100,000 population. There were 1,425 notifications received during the year and there were 1,407 cases with onset dates recorded as being in 1992 notified to 30 May 1993. There was a fairly even distribution of rates of notified cases across Australia, with the exception of the Far West Statistical Division of New South Wales where the annual rate was 184.6 per 100,000 residents, six times higher than the

next highest rate (29.1 per 100,000 in the Murraylands Statistical Division in South Australia, Figure 45).

Measles

The year 1992 was an epidemic year for measles, with an increase in cases from August-September (Figure 43).

Figure 43. Notifications of measles with onset in 1992, by month of onset

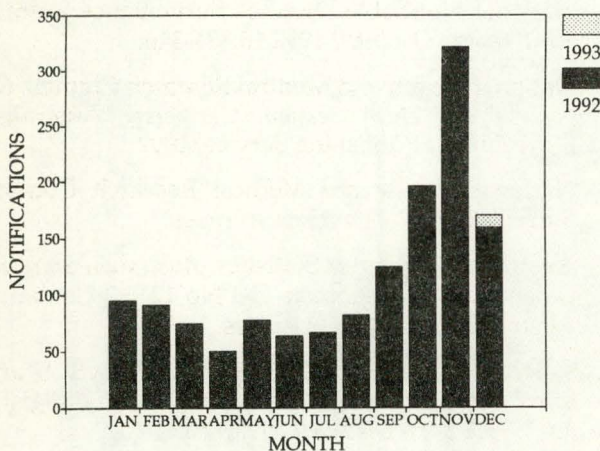


Figure 44. Annual rate of notifications of measles per 100,000 population, 1992, by age group and sex

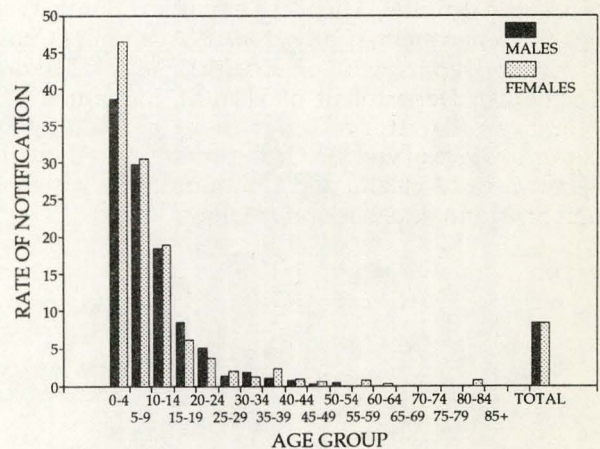
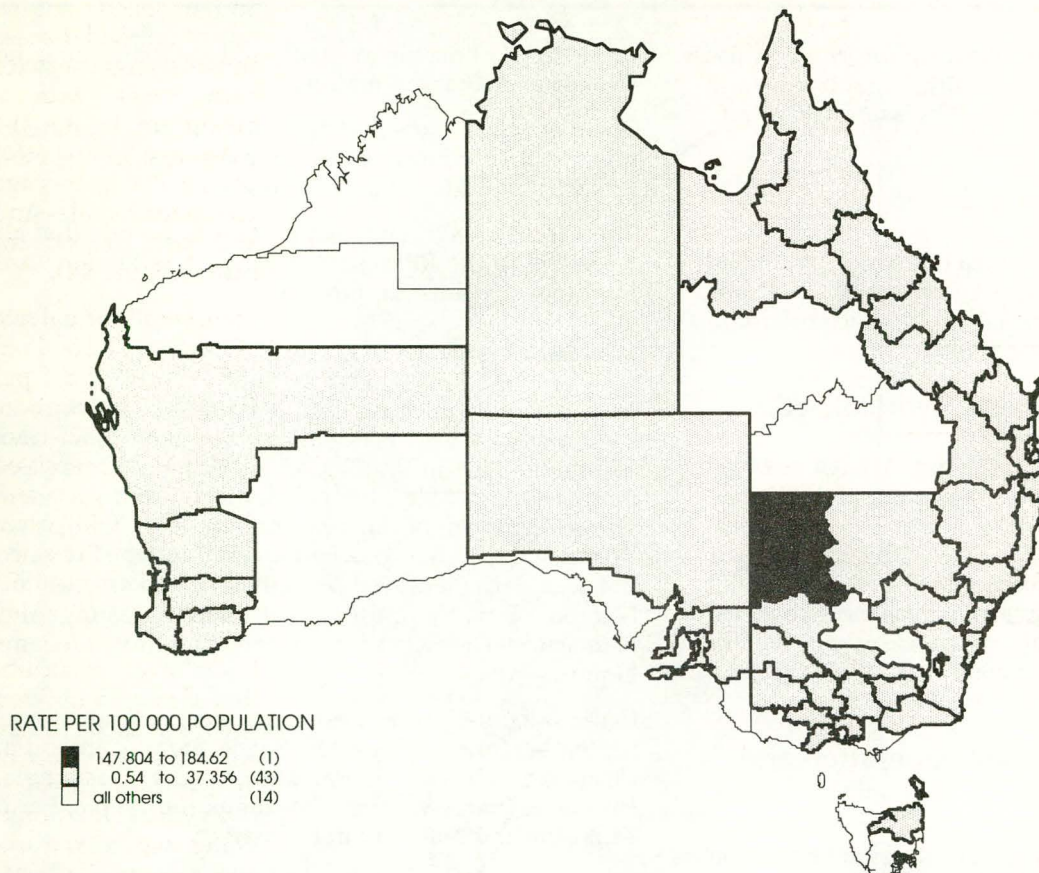


Figure 45. Annual rate of notifications of measles per 100,000 population, 1992, by Statistical Division of residence



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OVERSEAS BRIEFS

In the last two weeks, the following information has been supplied by the World Health Organization and the United States' Centers for Disease Control and Prevention.

Influenza in New Zealand

Localised outbreaks of influenza continued over most of the North Island in August. Influenza B became more common than influenza A H₃N₂ which predominated in the early part of the season.

Influenza in the Northern Hemisphere

Unusual summer cases of influenza A have been reported recently from the United States and the United Kingdom. In the United States, there were three outbreaks in August-September caused by influenza A H₃N₂. Sporadic cases are common in each summer in the United States, but outbreaks such as those reported are rare. In the United Kingdom, the cases reported for July, August and September were also caused by influenza A H₃N₂.

Diphtheria in the Russian Federation and Ukraine

The epidemic of diphtheria in the Russian Federation and Ukraine is continuing. In the first seven months of this year, there were 4685 cases and 106 deaths in the Russian Federation and 1462 cases and 41 deaths in Ukraine. In the Russian Federation, the highest incidence rates, ranging from 8.7 to 17 per 100,000 population, have been in the St Petersburg, Kaliningrad, Orlovskaja and Moscow areas. Although the majority of cases have been in adults, the incidence rate has also been very high in preschool and school chil-

dren. In Ukraine, the most affected areas are Kiev, the Crimea and Kharkov regions.

There are clear signs that the epidemic is spreading to neighbouring countries including Azerbaijan, Belarus, Kazakhstan, Uzbekistan and Poland.

The World Health Organization recommends that all travellers to the Russian Federation and Ukraine are immunised against diphtheria.

Cholera Update

Newly cholera infected areas are Kampot Province in Cambodia, Distrito Federal, Espirito Santo State and Sao Paulo State in Brazil, Camayagua and Omoa Departments in Honduras, Jinotega and Madriz Departments in Nicaragua, Kapisa and Nangarhar Provinces in Afghanistan and Kahammouane Province in Laos. Areas removed from the infected areas list are Nampula City, Nampula Province and Inhassunge and Namacurra Districts in Zambezia Province, Mozambique.

Cases of cholera have been reported for August and September from Afghanistan, Belize, Brazil, Cambodia, Costa Rica, Djibouti, El Salvador, Ghana, Guatemala, Honduras, Laos, Malaysia, Mozambique, Nepal, Peru, Tajikistan and the Russian Federation.

Fifteen cases from Nepal and 12 cases from Bangladesh (reported for January to May this year) were laboratory confirmed cases of *Vibrio cholerae* O139. Pakistan has also reported cases of *V. cholerae* O139 (and O1) cases, from North West Frontier, Punjab and Sind Provinces.

Yellow Fever Update

Barra do Corda Municipio in Maranhao State, Brazil has recently been declared yellow fever infected.

COMMUNICABLE DISEASES SURVEILLANCE

Virology and Serology Reporting Scheme

There were 1978 reports received in the CDI Virology and Serology Reporting Scheme this fortnight (Tables 10, 11 and 12).

- There were 34 reports of **measles** this fortnight, 13 from Queensland, 12 from New South Wales, 7 from Victoria and one each from the ACT and Western Australia. Ages ranged from 2 months to 27 years. Four diagnoses were by antigen detection, 4 by fourfold changes in titre and the rest were by IgM.
- **Rubella** was reported for 40 patients this fortnight. Included was a 3 month old male with clinical

congenital infection. Both cord blood from his day of birth in May and a blood sample taken in August were IgM and IgG positive. His mother had been exposed to rubella in early pregnancy and had an equivocal IgM at about 2 months gestation. This is the second congenital rubella infection reported to the CDI this year. Reports of rubella infection in 6 pregnant women have also been received this year.

- There were 19 reports of **Ross River virus** this fortnight, bringing the total for the year to 1597. All were presumptive (IgM). Specimen collection dates were in September. New South Wales and Western Australia reported one case each and the remainder were from Queensland.

- The 4 reports of **Barmah Forest virus** were all presumptive (IgM). Specimen collection dates were in September. There was one each from the Northern Territory and Western Australia and 2 from Queensland.
- The 2 **untyped dengue** reports were both presumptive, as were 3 of the **untyped flavivirus** reports. One untyped flavivirus was confirmed. The patient was a 43 year old male from the Ingham area in Queensland. The specimen collection was in July.
- **Echovirus type 11** isolates were reported for 6 patients, 2 from New South Wales, one from South Australia and 3 from Western Australia. Meningitis was the reported symptom for 4 and respiratory tract infection for one. One patient was aged 8 years and the remainder were all under the age of one year. There have now been 83 reports of this virus this year, more than for any year since 1986-87, when there was a summer peak of reports and a total of 369 cases reported from July 1986 to June 1987. This year, cases have been reported from the ACT, New South Wales, Queensland, South Australia, Victoria and Western Australia. There have been 50 reports for males and 32 for females (one unknown). Most (52) have been under the age of 5 years. CSF isolates and/or meningitis was reported for 37 patients, other CNS symptoms, SIDS and cardiac symptoms for one each, and respiratory symptoms for 21.
- Two reports of **poliovirus** causing meningitis were received this fortnight. One was a type 1 isolate from a CSF sample from a 34 year old female patient. The other was a type 3 faeces isolate from a 4 month old female. Both isolates are being further investigated.
- There were 170 reports of **influenza**, 73 of **untyped influenza A** (13 isolations, 19 antigen detections, 2 IgM, 4 fourfold changes, 35 single high titres), 5 of influenza A H₃N₂ (one antigen detection and 4 isolations, A/Shanghai/24/90-like), 71 reports of **influenza B** (20 isolations including 9 reported as B/Panama/45/90-like, 12 antigen detections, 10 IgM, 3 fourfold changes, 26 single high titres) and one isolate of untyped influenza. Seven influenza A reports and 5 influenza B reports were for patients aged over 65 years.

One of the untyped influenza A reports this fortnight was of a postmortem lung isolate. The patient was a 53 year old male from Western Australia.

- There have been 457 reports of influenza B so far this year, slightly more than by this time in 1991, the last year in which influenza B predominated (Figure 1). Influenza A reports are peaking much later than usual, but at a much lower level than in 1992, the last year in which influenza A predominated in Australia (Figure 2).

Figure 1. Influenza B laboratory reports, 1991 and 1993, by month of specimen collection

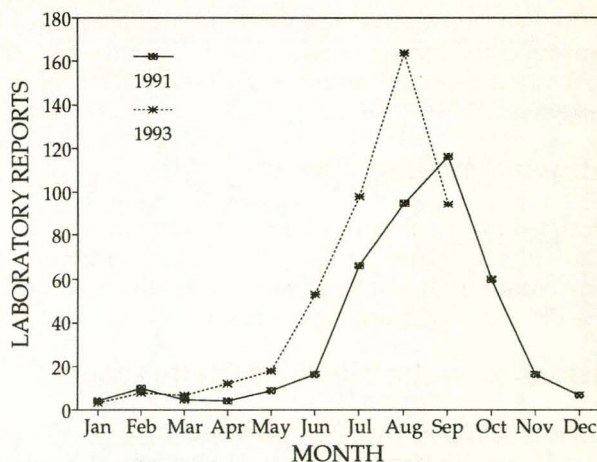


Figure 2. Influenza A laboratory reports, 1992 and 1993, by month of specimen collection

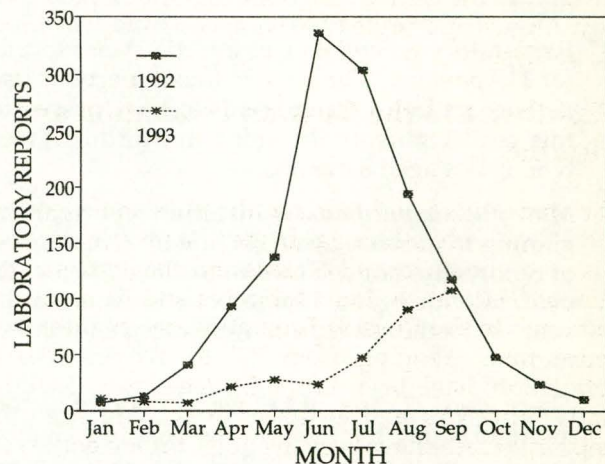


Figure 3. Parainfluenza virus type 3 laboratory reports, 1988-92 average and 1993, by month of specimen collection

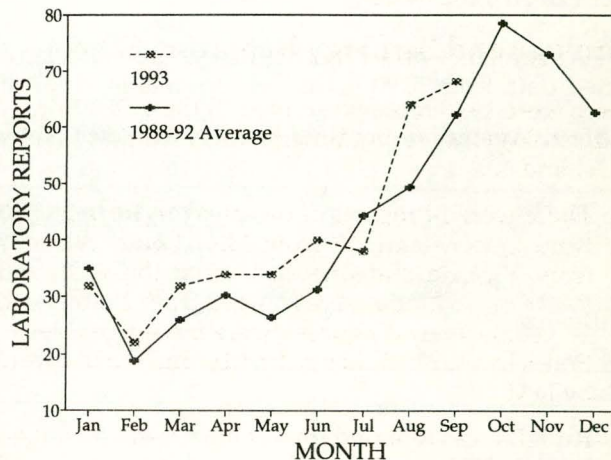


Figure 4. Respiratory syncytial virus laboratory reports, 1988-92 average and 1993, by month of specimen collection

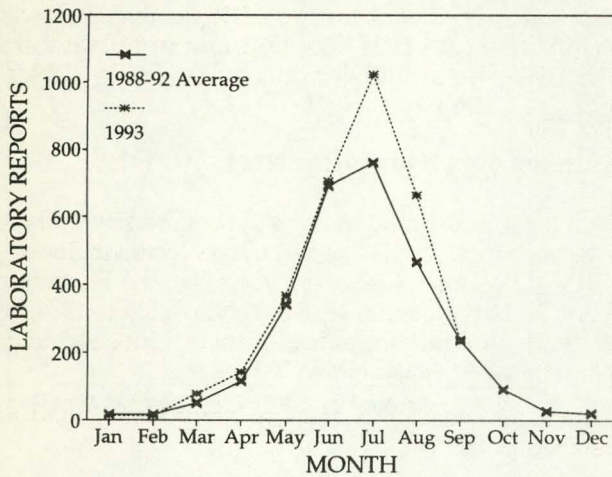
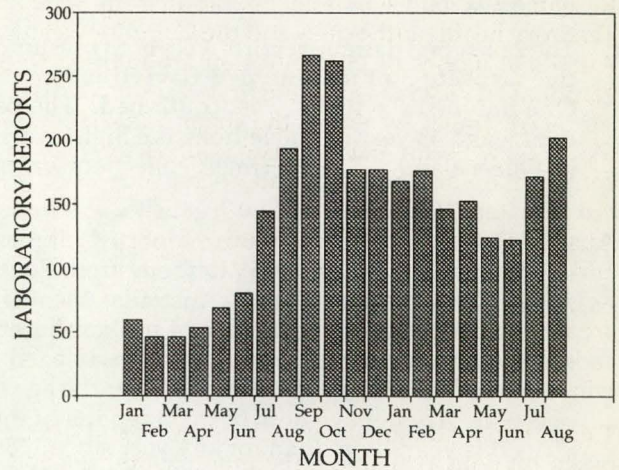
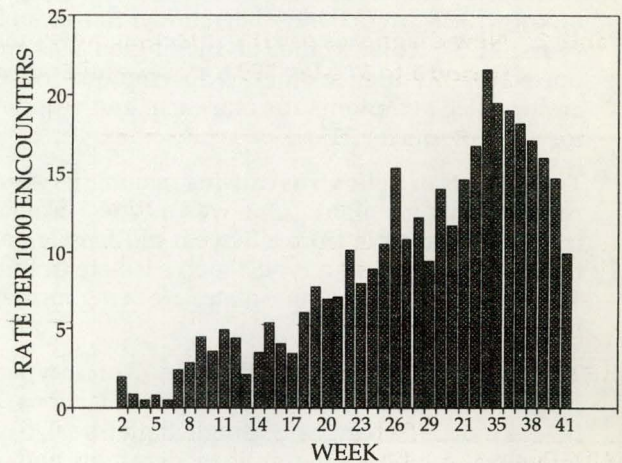


Figure 5. *Mycoplasma pneumoniae* laboratory reports, January 1992 to August 1993, by month of specimen collection



- Reports of **parainfluenza virus type 3** have begun to increase and show their usual spring seasonal peak (Figure 3). There were 61 reports this fortnight.
- **Respiratory syncytial virus** infection was reported for 147 patients. The peak in these infections usually occurs in July, and seems to have passed for this year (Figure 4). Included this fortnight were twin males aged 3 months.
- ***Mycoplasma pneumoniae*** infection reports are beginning to increase again (Figure 5). The number of reports has not declined to the levels before the peak last spring, so a large peak is expected this year. A total of 68 reports were received this fortnight.
- There were 22 cases of **Q fever** reported this fortnight, bringing the total for the year to 385, more than for any year since 1982. There were 13 males in the age range 9 to 55 years and 7 females in the age range one to 46 years. One male patient was described as a cattle driver.

Figure 6. ASPREN influenza reports, rate per 1000 encounters, 1993, by week



Australian Sentinel Practice Research Network

The Australian Sentinel Practice Research Network collected data from 5790 patient encounters in Week 40

and from 4936 patient encounters in Week 38 (Table 1). The rate of reporting of influenza has declined over the last few weeks. It reached a peak in August this year (Figure 6), the same time that influenza B laboratory reports peaked.

Table 1. Australian Sentinel Practice Research Network, Weeks 40 and 41 1993

Condition	Week 40, to 3 October 1993		Week 41, to 10 October 1993	
	Reports	Rate per 1000 encounters	Reports	Rate per 1000 encounters
Influenza	85	14.7	49	9.9
Measles	0	0	1	0.2
Rubella	5	0.9	2	0.4
Pertussis	0	0	2	0.4
Genital herpes	3	0.5	1	0.2
Gastroenteritis	86	14.9	64	13.0

HIV and AIDS Surveillance

National surveillance for HIV disease is coordinated by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), in collaboration with State and Territory health authorities and the Commonwealth of Australia. Cases of HIV infection are notified to the National HIV Database on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (ACT, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information. More detailed information on diagnoses of HIV infection and AIDS is published in the quarterly Australian

HIV Surveillance Report, available from the National Centre in HIV Epidemiology and Clinical Research, 376 Victoria Street, Darlinghurst NSW 2010. Telephone: (02) 332 4648 Facsimile: (02) 332 1837.

HIV and AIDS diagnoses and AIDS deaths reported to 30 June 1993 for 1 to 31 May 1993, and cumulative to 31 May 1993, are included in this issue of CDI (Tables 2 and 3).

Sterile Sites Surveillance (LabDOSS)

Data for this fortnight have been provided by 6 laboratories. A total of 233 reports have been included - ICPMR, Westmead 143, Nambour General Hospital 3, Royal Hobart Hospital 18, Royal North Shore Hospital 39, Sullivan and Nicolaides Partners, Queensland 14, Woden Valley Hospital, ACT 16.

Organisms reported 5 or more times from blood are detailed in Table 4.

Uncommon isolates reported this fortnight were: coryneform (CDC group A5 1, Group F2 1, Oerskovia-like organism 1), *Rothia dentocariosa* 1, *Brevibacterium* species 1, CDC EO-3 group gram negative rod 1.

Table 2. New diagnoses of HIV infection, new diagnoses of AIDS and deaths from AIDS occurring in the period 1 to 31 May 1993, by sex and State or Territory in which diagnosis was made

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA			
										This Period 1993	This Period 1992	Year to Date 1993	Year to Date 1992
HIV Diagnoses	Female	0	3	0	2	0	0	1	0	6	7	36	43
	Male	0	47	1	12	7	0	11	6	84	103	445	536
	Sex not reported	0	0	0	0	0	0	0	0	0	2	7	12
	Total ¹	0	51	1	14	7	0	12	6	91	113	491	593
AIDS Diagnoses	Female	0	1	0	1	0	0	1	0	3	0	9	3
	Male	0	7	0	1	3	0	8	0	19	19	180	132
	Total ¹	0	8	0	2	3	0	9	0	22	19	189	135
AIDS Deaths	Female	0	1	0	0	1	0	1	0	3	0	8	9
	Male	0	21	0	5	0	0	12	0	38	43	186	211
	Total ¹	0	23	0	5	1	0	13	0	42	44	195	221

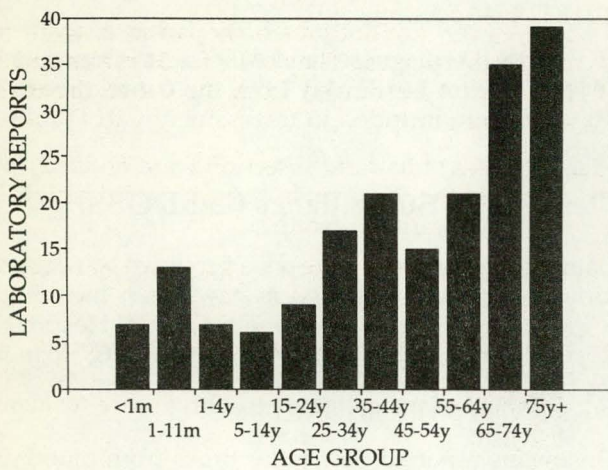
1. Persons whose sex was reported as transsexual are included in the totals.

Table 3. Cumulative diagnoses of HIV infection, AIDS and deaths from AIDS since the introduction of HIV antibody testing to 31 May 1993, by sex and State or Territory

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	AUSTRALIA
HIV Diagnoses	Female	10	480	6	70	36	3	127	41	773
	Male	137	9078	67	1198	505	65	2839	617	14506
	Sex not reported	0	2028	0	2	0	0	64	0	2094
	Total ¹	147	11594	73	1273	541	68	3037	659	17392
AIDS Diagnoses	Female	2	86	0	16	11	2	20	9	146
	Male	48	2395	16	348	160	24	883	183	4057
	Total ¹	50	2486	16	365	171	26	906	192	4212
AIDS Deaths	Female	2	48	0	11	4	1	10	3	79
	Male	36	1524	9	241	97	13	617	121	2658
	Total ¹	38	1575	9	253	101	14	629	124	2743

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

Figure 7. LabDOSS blood isolates, by age group



Other blood isolates not included in Table 4 were:

Gram positive: *Bacillus* species 1, *Corynebacterium jeikeium* 1, *Corynebacterium xerosis* 1, *Enterococcus faecalis* 4, *Staphylococcus epidermidis* 4, *Streptococcus* group A 1, *Streptococcus* group B 1 (term neonate), *Streptococcus* group G 1, *Streptococcus 'milleri'* 2, *Streptococcus sanguis* 1, *Streptococcus salivarius* 1, *Lactobacillus casei* 1.

Gram negative: *Acinetobacter johnsonii* 1, *Acinetobacter* species 1, *Aeromonas hydrophila* 1, *Enterobacter cloacae* 3, *Enterobacter agglomerans* 1, *Enterobacter* species 1, *Flavobacterium indologenes* 1, *Flavobacterium oryzihabitans* 1), *Gemella haemolysans* 1, *Haemophilus influenzae* type b 3 (epiglottitis in a 6 year old female, pneumonia in a 75 year old male), *Kingella kingae* 1, *Klebsiella oxytoca* 1, *Moraxella osloensis* 1, *Proteus mirabilis* 2, *Proteus vulgaris* 1, *Pseudomonas* species 1, *Serratia marcescens* 4, *Xanthomonas maltophilia* 1.

Table 4. LabDOSS reports of blood isolates, by organism and clinical information

Organism	Clinical Information						Risk Factors					Total ¹	Total reported this year
	Bone/joint	Lower respiratory	Endocarditis	Gastrointestinal	Urinary Tract	Skin	Surgery	Immunosuppressed	IV line	Hospital acquired	Neonatal		
<i>Staphylococcus aureus</i>	3	3	3	1		8	5	7	6			37 ²	601 ³
<i>Staphylococcus coagulase negative</i>	2	2		5			1	3	29	1	1	42	240
<i>Streptococcus pneumoniae</i>		4						1				6	135
<i>Escherichia coli</i>		3			10	1	2	6	3			26	616
<i>Klebsiella pneumonia</i>				2		2	1	2	3		2	9	98
<i>Pseudomonas aeruginosa</i>		1		1			3	2	3			8	146

1. Only organisms with 5 or more reports are included in this table.
2. 10 MRSA.
3. 75 MRSA.

Table 5. LabDOSS meningitis reports, by organism and age group

Organism	Age group							Total	Total reported this year
	1-11 months	1-4 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years		
<i>Enterobacter aerogenes</i>						1		1	3
<i>Escherichia coli</i>				1				1	1
<i>Neisseria meningitidis</i>		3 ¹						3	26 ³
<i>Propionibacterium acnes</i>					1			1	1
<i>Haemophilus influenzae</i> type b	1							1	28
<i>Cryptococcus neoformans</i> <i>var neoformans</i>				1 ²				1	14
<i>Staphylococcus aureus</i>	1							1	7
<i>Staphylococcus coagulase negative</i>		1						1	4

1. Group C 2.
2. HIV positive.
3. Group C 8.

Anaerobes: *Actinomyces israelii* 1, *Bacteroides fragilis* 3, *Bacteroides* species 1, *Bacteroides thetaiomicron* 1, *Clostridium tertium* 1, *Clostridium septicum* 1, *Clostridium* species 1, *Peptostreptococcus* species 1, *Prevotella buccalis* 1.

Fungi: *Candida parapsilosis* 1, *Candida albicans* 4.

Mycobacteria: *Mycobacterium avium* 1, *Mycobacterium intracellulare* 1.

There were 20 blood isolates from patients aged less than one year and 74 from patients aged over 65 years (Figure 7).

CSF isolates and meningitis reports

There were 11 reports of CSF isolates and/or meningitis this fortnight (Table 5).

Isolates from sites other than blood or CSF

Peritoneal dialysate: *Moraxella* species 1, *Staphylococcus epidermidis* 1, *Bacillus* species 1, *Staphylococcus coagulase* negative 3, *Streptococcus viridans* 2, MRSA 1.

Joint fluid: *Staphylococcus aureus* 4.

Other: *Staphylococcus aureus* 4, *Streptococcus viridans* 1, *Candida parapsilosis* 1, *Acinetobacter* species 1, *Escherichia coli* 1, *Neisseria sicca* 1, *Pseudomonas aeruginosa* 1, *Serratia* species 1, *Staphylococcus coagulase* negative 2.

National Notifiable Diseases Surveillance System, 19 September to 2 October 1993

There were 1,806 reports received this period (Tables 6, 7 and 8, and Figure 11).

- Fifty cases of **Ross River virus infection** were notified this period. There were 26 males and 24 females. Ages recorded ranged from the 15-19 to the 85-89 years age groups. Cases were reported from statistical divisions in northern New South Wales, much of rural Queensland, East Gippsland in Victoria, the Pilbara and Perth in Western Australia.
- There were 40 notifications of **dengue** received, for a total for the year to date of 675 notified cases. Of these reports, 17 were for males and 23 were for females. Ages reported ranged from the 5-9 to the 60-64 years age groups. Onset dates were recorded as April (one), May (6), June (31) and July (2). The cases were recorded in residents of Townsville and surrounding areas and Cairns.
- There was a single case of **brucellosis** in a male in the 70-74 years age group.
- Thirty-eight cases of **gonococcal infection** were notified. There were 23 males and 15 females, aged between the 5-9 and the 75-79 years age groups.
- **Haemophilus influenzae type b infection** was reported for 11 cases, to bring the total for the year to date to 333, compared with 385 for the equivalent period last year (Figure 8). These notifications were

for 7 males and 4 females. Six of the cases were aged less than one year and all were less than 5 years. There were no apparent clusters.

- Sixty-seven notifications of **hepatitis A** were received this period. They were for 34 males and 33 females. Ages ranged from the 0-4 to the 85-89 years age group.
- Two cases of **hydatid infection** were notified, in a female in the 30-34 years age group and a male in the 45-49 years age group.
- There was a single case of **legionellosis** notified for a male in the 40-44 years age group.
- Seven cases of **leptospirosis** were reported; all were males. Ages ranged between the 25-29 and the 45-49 years age groups. Three were residents of Cairns.
- There was a single notification of **listeriosis**, in a female in the 65-69 years age group.
- Nine reports of **malaria** were received, for 7 males and 2 females. Ages ranged between the 15-19 and the 60-64 years age groups.
- There were 206 notifications of **measles** received, to bring the total for the year to 2,079 (Figure 9). Of these notifications, 103 were for males, 102 were for females and in one the sex was not recorded. Twelve cases were aged less than one year, and the mean age was 11.9 years. There were 34 apparent clusters in separate postcode areas with 2 to 15 cases each.
- There were 26 notifications of **meningococcal infection**; half were males and half females. Nine cases had recorded ages in the 0-4 years age group; the oldest case was in the 90-94 years age group. There were no apparent clusters.

Figure 8. Haemophilus influenzae type b infection notifications, January 1992 to September 1993, by month of onset and age group

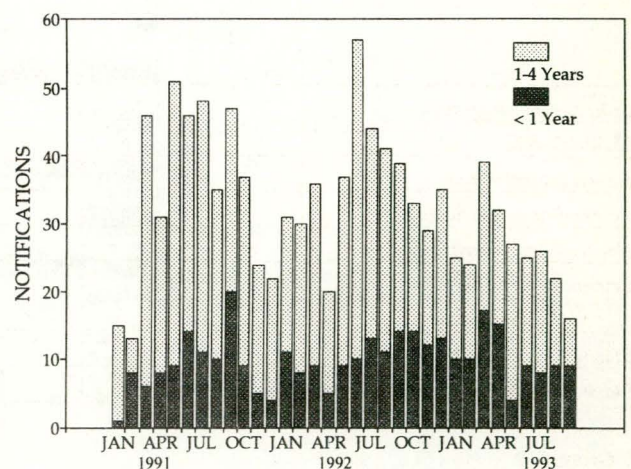


Figure 9. Measles notifications, January 1992 to September 1993, by month of onset

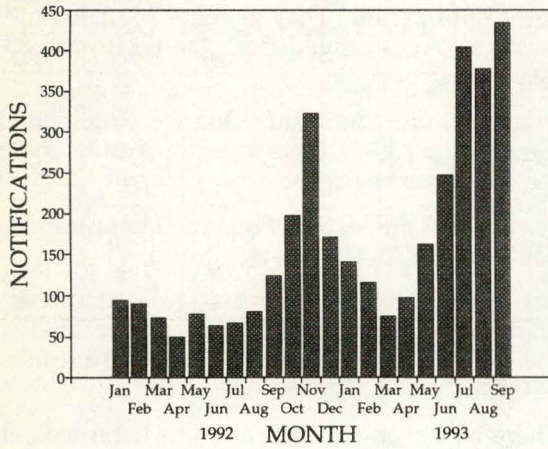
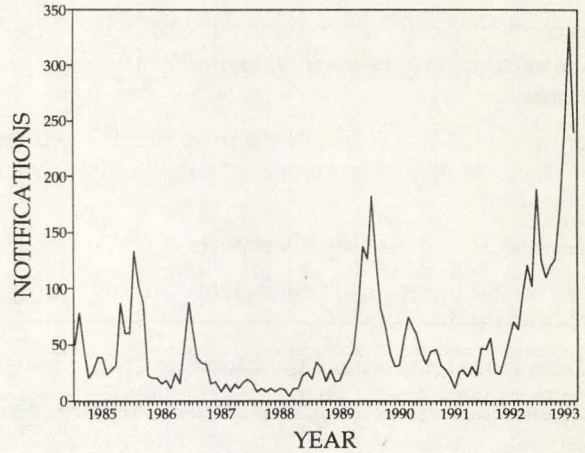


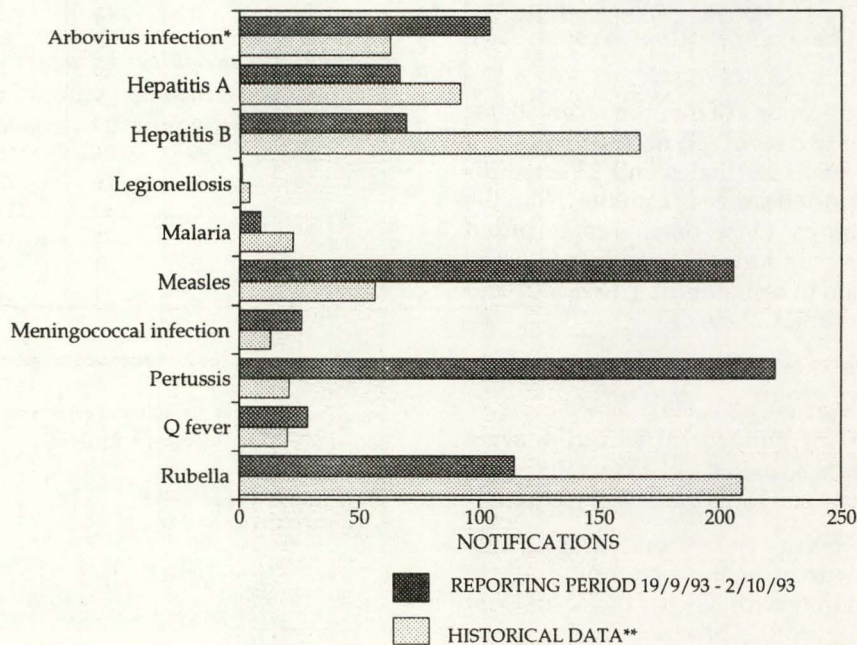
Figure 10. Pertussis notifications, January 1985 to September 1993, by month of onset



- There were 223 cases of **pertussis** notified to bring the total for the year to 1,725 (Figure 10). Eight cases were aged less than one year, 33 were aged less than 5 years and ages ranged up to the 90-94 years age group. There were 37 apparent clusters of 2 to 7 cases each in separate postcode areas.
- There were 29 notifications of **Q fever**, 25 for males and 4 for females. Ages ranged from the 15-19 to the 75-79 years age groups.
- There were 115 notifications of **rubella** received, 74 males and 40 females. The mean age was 24.1 years and there were 14 reports for females in the 15-44 years age group. There were 19 apparent clusters of 2 to 4 cases each in separate postcode areas.

- There were 32 notifications of **syphilis** received this period. Half were for males and half for females. Two cases were aged less than one year.
- There were 28 notifications of **tuberculosis**, 20 males and 8 females. Onset dates were recorded as June (1), July (5), August (3) and September (18). An onset date was not recorded for one case. Ages ranged from the 0-4 to the 75-79 years age groups.
- There was a single case of **typhoid** notified, for a male resident in the Sydney statistical division in the 25-29 years age group.

Figure 11. Selected National Notifiable Diseases Surveillance System reports, and historical data **



* Includes Ross River virus and Dengue

** The historical data are the averages of the number of notifications in 6 previous 2-week reporting periods: the corresponding periods of the last 2 years and the periods immediately preceding and following those.

Table 6. Notifiable Diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation for the reporting period 19 September to 2 October 1993

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA ¹			
									This Period 1993	This Period 1992	Year to Date 1993	Year to Date 1992
Diphtheria	0	0	0	0	0	0	0	0	0	0	44	12
<i>Haemophilus influenzae b</i> infection ²	2	2	0	4	0	1	2	0	11	13	333	385
Measles	19	111	0	13	2	42	17	2	206	56	2079	709
Mumps	0	0	NN	NN	0	NN	0	2	2	0	10	18
Pertussis	4	60	0	27	67	1	58	6	223	24	1725	377
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0
Rubella ³	6	5	0	46	22	0	17	19	115	329	2109	1015
Tetanus	0	0	0	NN	0	0	0	0	0	0	7	10

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. NT, Tas: CRS only.
NN Not Notifiable.

Table 7. Other Notifiable Diseases¹, for the reporting period 19 September to 2 October 1993

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA ²			
									This Period 1993	This Period 1992	Year to Date 1993	Year to Date 1992
Arbovirus infection (NEC) ³	0	0	NN	15	0	0	0	0	15	2	469	231
Ross River virus infection	0	2	1	43	-	NN	1	3	50	107	5002	5190
Dengue	0	-	0	40	-	NN	0	NN	40	0	675	268
Campylobacteriosis ⁴	13	-	3	53	80	19	66	28	262	339	5831	6169
Chlamydial infection (NEC) ⁵	0	NN	2	51	0	4	33	25	115	250	4934	4880
Donovanosis	0	NN	0	2	NN	NN	0	1	3	1	48	62
Gonococcal infection ⁶	0	3	1	19	0	0	3	12	38	111	2155	2221
Hepatitis A	2	15	3	41	0	0	5	1	67	94	1479	1578
Hepatitis B	7	1	0	50	0	1	0	11	70	175	1741	3975
Hepatitis C	16	1	7	70	0	10	145	65	314	336	5392	6511
Hepatitis (NEC)	0	0	0	0	0	0	3	NN	3	1	58	46
Legionellosis	0	0	0	0	0	0	1	0	1	6	125	155
Leptospirosis	0	1	0	4	1	1	0	0	7	5	122	90
Listeriosis	0	0	NN	1	0	0	0	0	1	2	34	30
Malaria	1	6	0	0	0	1	0	1	9	21	464	584
Meningococcal infection	1	5	1	6	0	1	5	7	26	8	254	210
Ornithosis	0	NN	0	0	1	0	0	0	1	1	65	71
Q fever	0	12	0	17	0	0	0	0	29	16	654	384
Salmonellosis (NEC)	2	16	9	13	11	4	12	19	86	116	3522	3738
Shigellosis ⁴	0	-	5	2	0	1	5	3	16	27	579	484
Syphilis	0	12	2	16	0	0	0	2	32	116	1728	2036
Tuberculosis	0	9	0	1	6	1	6	5	28	44	697	647
Typhoid ⁷	0	1	0	0	0	0	0	0	1	0	26	41
Yersiniosis (NEC) ⁴	0	-	0	9	5	0	1	0	15	14	352	469

1. For HIV and AIDS, see Tables 2 and 3. For rarely notified diseases, see Table 7.
2. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.
3. SA, Tas: includes Ross River virus and dengue. WA: includes dengue.

4. NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.
5. WA: genital only.
6. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
7. NSW and Vic: includes paratyphoid.
NN Not Notifiable.
NEC Not Elsewhere Classified.
- Elsewhere Classified.

Table 8. Rarely Notified Diseases¹ for the reporting period 19 September to 2 October 1993

DISEASES	Total This Period	Reporting States or Territories	Year to Date 1993
Botulism	0		
Brucellosis	1	NSW	15
Chancroid	0		1
Cholera	0		2
Hydatid infection	2	Qld 1, Vic 1	20
Leprosy	0		9
Lymphogranuloma venereum	0		1
Plague	0		0
Rabies	0		0
Yellow fever	0		0
Other viral haemorrhagic fevers	0		0

1. Fewer than 50 cases of each of these diseases were notified each year during the period 1987 to 1992.

Table 9. Laboratory reports by State or Territory¹ for the reporting period 23 September to 6 October 1993, historical data², and total reports for the year

	State or Territory ¹								Total this fortnight	Historical data ²	Total reported this year
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
MEASLES, MUMPS, RUBELLA											
Measles virus	1	12		13			7	1	34	11.5	290
Mumps virus		2						1	3	1.0	59
Rubella virus	1	13		17	5		2	2	40	29.3	772
HEPATITIS VIRUSES											
Hepatitis A virus		2		10	2		2		16	20.2	448
Hepatitis B virus	3	17		25	4		24	16	89	88.0	2,022
Hepatitis C virus	9	2		36	89	29	2	81	248	96.7	3,452
Hepatitis D virus				1					1	1.3	43
ARBOVIRUSES											
Ross River virus		1		17				1	19	12.8	1,695
Barmah Forest virus			1	2				1	4	4.2	175
Dengue not typed								2	2	1.0	105
Flavivirus (unspecified)		1		3					4	1.8	106
ADENOVIRUSES											
Adenovirus type 1					3	1			4	4.7	70
Adenovirus type 2		3							3	8.8	99
Adenovirus type 3		7			3	1	2		13	5.2	199
Adenovirus type 4							1		1	3.5	62
Adenovirus type 5					1				1	2.0	27
Adenovirus type 7					1				1	.2	8
Adenovirus type 8							2		2	2.5	20
Adenovirus not typed/pending		4		5	32		8	28	77	42.3	1,020
HERPES VIRUSES											
Herpes simplex virus type 1		9		47	20	4	32	30	142	127.8	3,296
Herpes simplex virus type 2	1	35		75	26	3	35	64	239	170.0	4,035
Herpes simplex not typed/pending	7	25		2			4	6	44	36.8	569
Cytomegalovirus		8		32			21	14	75	67.7	1,353

Table 9. Laboratory reports by State or Territory¹ for the reporting period 23 September to 6 October 1993, historical data², and total reports for the year, continued

	State or Territory ¹								Total this fortnight	Historical data ²	Total reported this year
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
Varicella-zoster virus		5		17	7		5	4	38	29.0	789
Epstein-Barr virus		7	1	8	15		3	13	47	57.7	1,416
OTHER DNA VIRUSES											
Molluscum contagiosum								2	2	.3	8
Parvovirus		1			1		2		4	4.5	101
PICORNA VIRUS FAMILY											
Coxsackievirus A9		1		1					2	2.2	55
Coxsackievirus B1		2							2	.2	71
Coxsackievirus B3							1		1	.0	15
Coxsackievirus B4		1							1	.5	6
Coxsackievirus B5	3	2							5	1.2	43
Coxsackievirus B6	1								1	.0	2
Echovirus type 5					1				1	.0	2
Echovirus type 6		1							1	1.2	3
Echovirus type 9	1								1	1.8	50
Echovirus type 11		2			1			3	6	.5	87
Echovirus type 15					1				1	.0	3
Echovirus type 30							2		2	.2	46
Poliovirus type 1 (uncharacterised)		4							4	1.8	46
Poliovirus type 2 (uncharacterised)						1			1	1.5	30
Poliovirus type 3 (uncharacterised)		1							1	1.2	28
Rhinovirus (all types)	1	9		15		1	25	3	54	25.8	634
Enterovirus not typed/pending		4		8			4	8	24	17.5	618
ORTHO/PARAMYXOVIRUSES											
Influenza A virus		3		5	32		12	21	73	27.8	342
Influenza A virus H3N2		1					4		5	.8	21
Influenza B virus		3	4	3	19		24	18	71	28.7	462
Influenza virus - typing pending								1	1	.5	4
Parainfluenza virus type 1							1		1	2.2	27
Parainfluenza virus type 2					2		3	1	6	3.0	122
Parainfluenza virus type 3	2	7		6	9		8	29	61	26.8	463
Parainfluenza virus typing pending						1			1	2.0	41
Respiratory syncytial virus		5		11	39	11	39	42	147	151.2	3,277
OTHER RNA VIRUSES											
HIV-1								3	3	2.5	53
Rotavirus	13	14			33	4	13	19	96	202.2	1,771
Calici virus		1							1	1.8	10
Norwalk agent							3		3	.8	19
Small virus (like) particle		1							1	3.7	36
OTHER											
<i>Chlamydia trachomatis</i> not typed	3	23		19	9	4	13	29	100	141.8	2,366
<i>Chlamydia psittaci</i>							2		2	4.7	65
<i>Chlamydia</i> spp typing pending								1	1	.0	8
<i>Mycoplasma pneumoniae</i>		15		36	1		14	2	68	70.5	1,642

Table 9. Laboratory reports by State or Territory¹ for the reporting period 23 September to 6 October 1993, historical data², and total reports for the year, continued

	State or Territory ¹								Total this fortnight	Historical data ²	Total reported this year
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
<i>Coxiella burnetii</i> (Q fever)		15		4	2			1	22	10.2	437
<i>Streptococcus</i> group A		1		13					14	.0	239
<i>Brucella</i> species				1					1	.2	11
<i>Bordetella pertussis</i>				1			19		20	.0	223
<i>Bordetella</i> species		2		14					16	1.0	189
<i>Toxoplasma gondii</i>							3		3	1.7	48
TOTAL	46	272	6	447	358	60	342	447	1,978	1,570.3	35,854

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

2. The historical data are the averages of the numbers of reports in 6 previous 2 week reporting periods: the corresponding periods of the last 2 years and the periods immediately preceding and following those.

Table 10. Laboratory reports by clinical information for the reporting period 23 September to 6 October 1993

	Meningitis	Other CNS	Congenital	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	Total
MEASLES, MUMPS, RUBELLA												
Measles virus				3			11	1			19	34
Mumps virus		1									2	3
Rubella virus			1				15		1		23	40
HEPATITIS VIRUSES												
Hepatitis A virus						7					9	16
Hepatitis B virus					2	9					78	89
Hepatitis C virus						30					218	248
Hepatitis D virus						1						1
ARBOVIRUSES												
Ross River virus							1		6		12	19
Barmah Forest virus									2		2	4
Dengue not typed											2	2
Flavivirus (unspecified)											4	4
ADENOVIRUSES												
Adenovirus type 1				3	1							4
Adenovirus type 2					2						1	3
Adenovirus type 3				6	1			1			5	13
Adenovirus type 4								1				1
Adenovirus type 5				1								1
Adenovirus type 7				1								1
Adenovirus type 8								2				2
Adenovirus not typed/pending				37	20			6			14	77

Table 10. Laboratory reports by clinical information for the reporting period 23 September to 6 October 1993, continued

	Meningitis	Other CNS	Congenital	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	Total
HERPES VIRUSES												
Herpes simplex virus type 1				5			71	6		45	15	142
Herpes simplex virus type 2							74			128	37	239
Herpes simplex not typed/pending				1			22	1		7	13	44
Cytomegalovirus	1	1	1	47	1						24	75
Varicella-zoster virus		1					25				12	38
Epstein-Barr virus				5		1	1				40	47
OTHER DNA VIRUSES												
Molluscum contagiosum							1				1	2
Parvovirus							2				2	4
PICORNA VIRUS FAMILY												
Coxsackievirus A9											2	2
Coxsackievirus B1					1						1	2
Coxsackievirus B3											1	1
Coxsackievirus B4											1	1
Coxsackievirus B5	1				1		1				2	5
Coxsackievirus B6				1								1
Echovirus type 5											1	1
Echovirus type 6				1								1
Echovirus type 9											1	1
Echovirus type 11	4			1							1	6
Echovirus type 15											1	1
Echovirus type 30	2											2
Poliovirus type 1 (uncharacterised)	1			1							2	4
Poliovirus type 2 (uncharacterised)				1								1
Poliovirus type 3 (uncharacterised)	1											1
Rhinovirus (all types)				47			1				6	54
Enterovirus not typed/pending	2			14							8	24
ORTHO/PARAMYXOVIRUSES												
Influenza A virus		1		35	1						36	73
Influenza A virus H ₃ N ₂				5								5
Influenza B virus	1			43			1				26	71
Influenza virus - typing pending				1								1
Parainfluenza virus type 1				1								1
Parainfluenza virus type 2				5							1	6
Parainfluenza virus type 3				54							7	61
Parainfluenza virus typing pending				1								1
Respiratory syncytial virus				136							11	147
OTHER RNA VIRUSES												
HIV-1											3	3
Rotavirus					95						1	96
Calici virus											1	1
Norwalk agent					3							3
Small virus (like) particle					1							1

Table 10. Laboratory reports by clinical information for the reporting period 23 September to 6 October 1993, continued

	Meningitis	Other CNS	Congenital	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	Total
OTHER												
<i>Chlamydia trachomatis</i> not typed										64	36	100
<i>Chlamydia psittaci</i>				2								2
<i>Chlamydia</i> spp typing pending				1								1
<i>Mycoplasma pneumoniae</i>				33							35	68
<i>Coxiella burnetii</i> (Q fever)		1		1							20	22
<i>Streptococcus</i> group A				2					3		9	14
<i>Brucella</i> species											1	1
<i>Bordetella pertussis</i>				19							1	20
<i>Bordetella</i> species				7							9	16
<i>Toxoplasma gondii</i>											3	3
TOTAL	13	5	2	521	129	48	226	18	12	244	760	1978

Table 11. Laboratory reports by contributing laboratories for the reporting period 23 September to 6 October 1993

STATE OR TERRITORY	LABORATORY	REPORTS
Australian Capital Territory	Woden Valley Hospital, Canberra	40
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	226
	Royal Alexandra Hospital for Children, Camperdown	17
Queensland	Queensland Medical Laboratory, West End	388
	State Health Laboratory, Brisbane	95
South Australia	Institute of Medical & Veterinary Science, Adelaide	355
Tasmania	Royal Hobart Hospital, Hobart	57
Victoria	Microbiological Diagnostic Unit, University of Melbourne	13
	Monash Medical Centre, Melbourne	19
	Royal Children's Hospital, Melbourne	123
	Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital	190
Western Australia	Princess Margaret Hospital, Perth	138
	State Health Laboratory Services, Perth	317
TOTAL		1978