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Communicable Diseases Intelligence

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Contents:

Editor
Dr Robert Hall

OVERSEAS BRIEFS

1. CHOLERA IN SOUTH AMERICA

The World Health Organisation has supplied the following details of the cholera outbreak in South America as at 12 April 1991:

Peru: 126,175 cases with 45,284 hospitalisations and 873 fatalities (to 5 April 1991).

Colombia: 49 cases and no fatalities, all from Narino department (to 9 April 1991).

Ecuador: 1,427 cases (289 confirmed) and 24 fatalities from the provinces of El Oro, Guayas, Loja and Los Rios (to 4 April 1991).

- The Bulletin is compiled and distributed by the Communicable Diseases Section, Communicable Diseases and Social Health Branch, Telephone: (062) 89 1555, Department of Community Services and Health.
- Contributions are solicited, and do not preclude later publication elsewhere.

- Figures given may be subject to revision.

SCRUB TYPHUS FOCUS IN THE NORTHERN TERRITORY

(Bart Currie (Menzies School of Health Research, Darwin), Liam O'Connor (Fremantle Hospital, Western Australia), Frank Rhodes, Peter Whelan (NT Department of Health and Community Services, Darwin), David Pritchard (NT Department of Primary Industries and Fisheries, Darwin), Phil Bell (NT Conservation Commission, Darwin), Brian Dwyer (Fairfield Hospital, Victoria))

Two cases of scrub typhus (*Rickettsia tsutsugamushi*) have been confirmed in visitors to Litchfield Park, Northern Territory (approximately 70km S of Darwin).

The infections were acquired in August and October 1990, with incubation periods of 9 and 11 days. Both patients developed eschars, and both showed a greater than four-fold rise in titres to scrub typhus specific antigen on paired serology. One of the cases became unwell after leaving the NT and developed near fatal multisystem complications.

There have been extensive studies in north Queensland, Papua New Guinea and elsewhere on the clinical and epidemiological aspects of scrub typhus[1-5]. After an incubation period averaging around 12 days, swinging fevers and constitutional symptoms are accompanied, within a week, by lymphadenopathy and a maculopapular rash in over half of the cases. An evolving eschar is often present. Neurological complications may be fatal and include delirium, convulsions and encephalitis. Respiratory, cardiovascular and renal systems can also be involved. Mortality without antirickettsial antibiotics is around 5% overall, but is up to 25% in previously debilitated patients. Tetracyclines or chloramphenicol are considered appropriate therapy, and response is usually within 48 hours.

Differences in virulence between strains of *R tsutsugamushi* are observed. Weil-Felix serology shows rising titres to OXK antigen in only half of cases, and was negative in the one of these two cases tested. Testing with *R tsutsugamushi* specific antigen on paired specimens is therefore often necessary for confirming the diagnosis.

The vector in Australia for scrub typhus is the mite *Leptotrombidium deliense*, and a number of native mammals act as reservoirs[5]. The distribution of the vector and the disease is characteristically patchy. In north Queensland most of the circumscribed foci ('mite islands') have been rainforest areas, while in Asia foci are often 'scrub' (mixed vegetation in a previously cleared area).

Scrub typhus has not generally been considered to be endemic in the Northern Territory, although a small number of possible cases have been reported previously[4]. The distribution of *L deliense* within Australia has to date included Western Australia but not the Northern Territory. Following the two recent cases of scrub typhus a trapping expedition to Litchfield Park collected numbers of confirmed *L deliense* from several native mammal species (confirmed R Domrow). Litchfield Park was only opened in 1986, and includes accessible rainforest. The number of visiting tourists has increased from 5 000 in 1986 to 130 000 in 1990.

Tourists leaving the NT and their medical practitioners need to be aware of the possibility of scrub typhus, as the institution of appropriate therapy may be life saving. With tourist numbers increasing, and with expansion of military exercises occurring, the distribution of both vector and *Rickettsia* needs clarification. it is possible that the vector could be widespread in suitable habitats across the top of the Northern Territory. People visiting potential foci of infection can use DEET* containing insect repellents; permethrin impregnated clothing should be considered for those working in areas of transmission.

*N,N-diethyl-m-toluamide (DEET) is one of the most commonly used components of commercially available insect repellents. An article and associated comment on the use and toxicity of DEET appeared in CDI 89/23.

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ROSS RIVER VIRUS DISEASE IN VICTORIA DURING THE SUMMERS OF 1988/89 AND 1989/90

(Based on a report by Dr J Wolstenholme, Secretary, Victorian Arbovirus Task Force, Health Department of Victoria)

Introduction

In the summer of 1988/89 above average rainfall throughout much of Victoria was followed by an increase in mosquito breeding and reports of more than 700 cases of Ross River virus disease (RRVD, often referred to as epidemic polyarthritis). This represented the highest reporting of RRVD in recent years (Figure 1). In the following summer (1989/90) only 34 cases were reported and these were largely distributed along the Murray river. Figure 2 displays the case reports for the two summers in each region.

Figure 1. Ross River virus reports Fairfield Hospital, Victoria 1982 - February 1991.

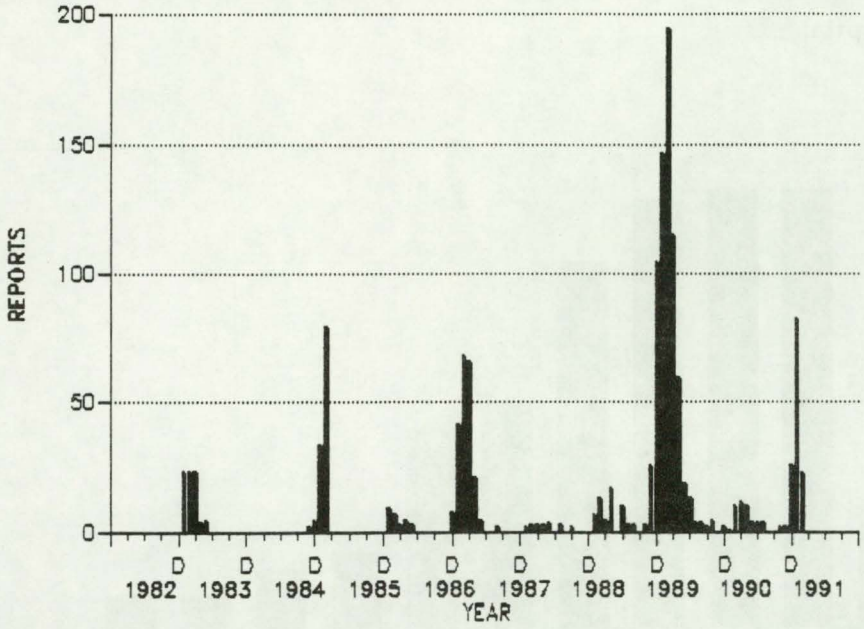
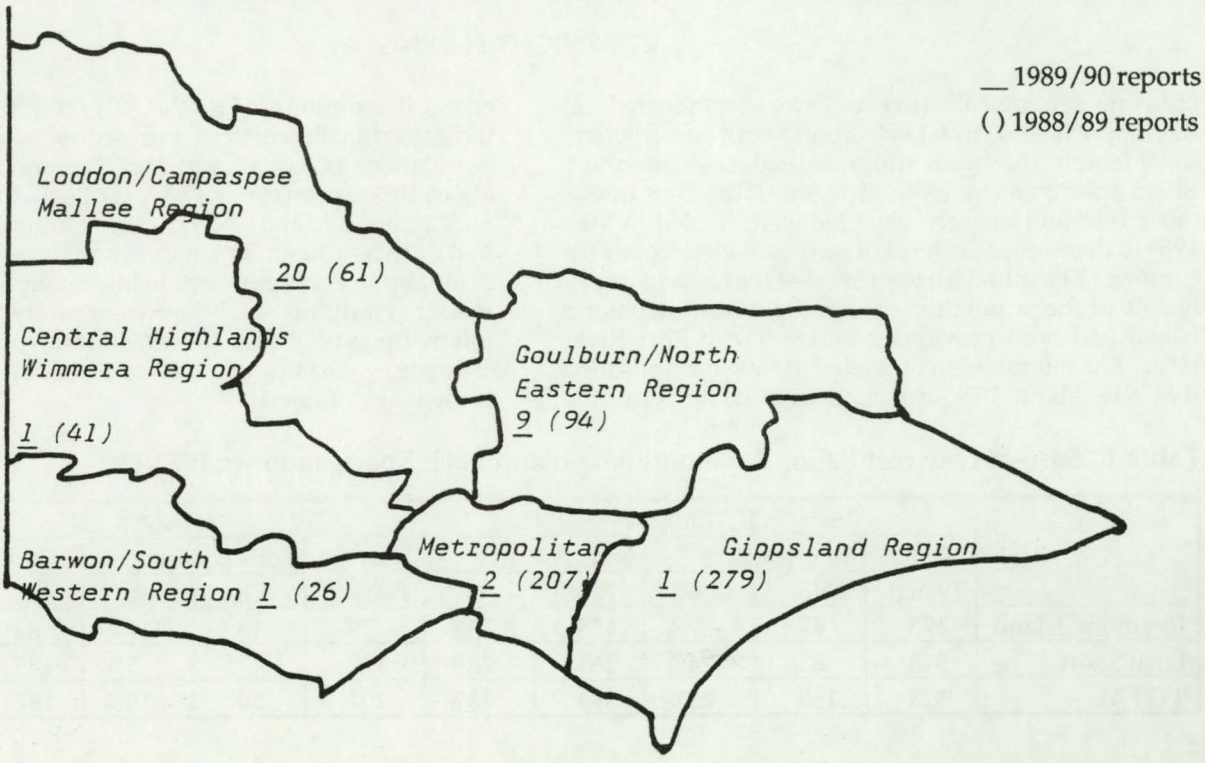


Figure 2. Distribution of Ross River virus reports by region for the summers of 1988/89 and 1989/90.



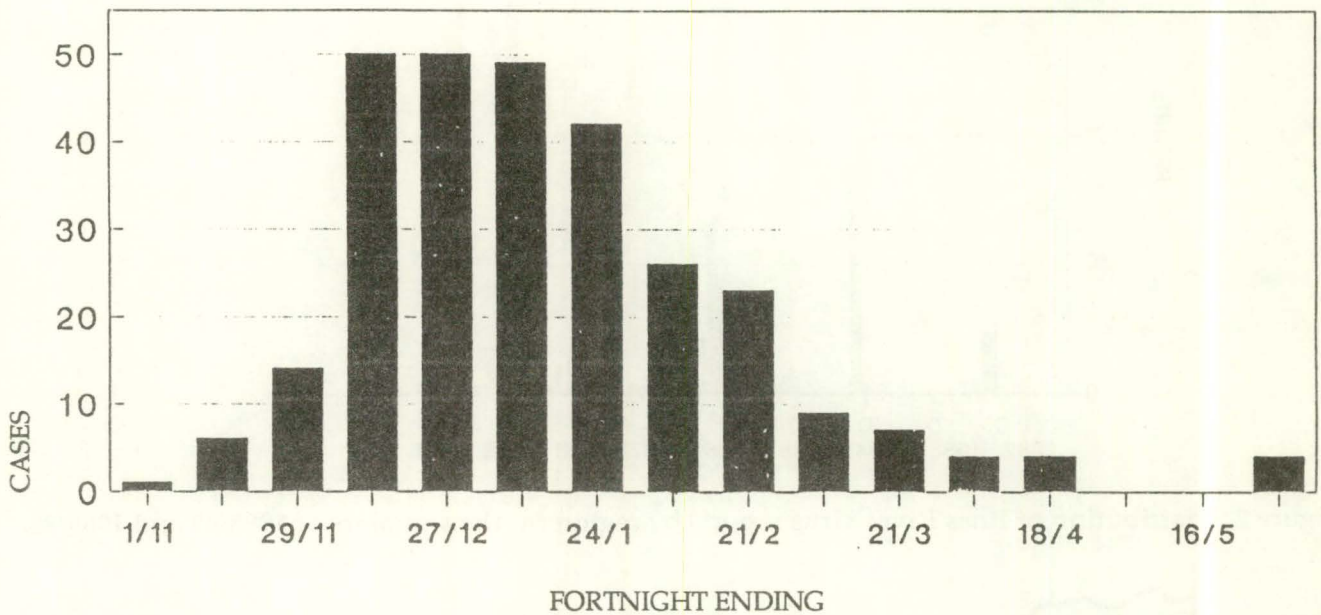
The majority of the cases reported for the 1988/89 summer were from the Gippsland lakes area (279/700) and followed three to four weeks after heavy rainfall in the salt-marsh areas produced plagues of the vicious man-biting mosquito *Aedes camptorhynchus*. A study into some aspects of the epidemiology of RRVD in the Gippsland lakes area was instituted in October 1988; it included:

1. a serological survey of residents in selected areas
2. monitoring of host-seeking mosquito activity
3. attempted isolation of arboviruses from the mosquitoes collected in 2.
4. a serological survey of domestic/wild animals in selected areas to detect natural hosts of Ross River virus.

Methods and Results

The outbreak was followed by analysing the results of blood specimens submitted to Fairfield Hospital for RRv serology (Fairfield Hospital tested over 90% of the human specimens taken for RRV in the State over the 1988/89 summer). During December 1988 and January 1989 almost 100 cases per month were recorded. Cases tapered off in February, particularly later in the month, and by mid April few cases were seen (Figure 3).

Figure 3. RRVD cases (IgM positive) by fortnight from Gippsland, summer 1988/89 - reported by Fairfield Hospital.



Human serological surveys were conducted at Raymond Island and Loch Sport, both areas where considerable mosquito nuisance had been reported. Blood specimens were taken from volunteers in October 1988 and the sero-negative were re-bled in May 1989 to determine the level of sero-conversion over the summer. The initial survey revealed that approximately 25% of the population of Loch Sport and Raymond Island had been previously infected with Ross River virus. Questionnaires completed at this time indicated that only about 10% of respondents could recall the classical symptoms of RRVD. The repeat sero-survey indicated that the collective sero-conversion rate for the populations of Loch Sport and Raymond Island was about 10% (approximately 5% for Loch Sport and 17% for Raymond Island). Repeat questionnaires indicated that of this number 30% had experienced the classical symptoms. As pre-pubertal children appear to suffer milder symptoms[1] and they were rarely tested in the follow-up survey then the 30% is likely to be an over-estimate. Details of the sero-survey results are presented in Table 1.

Table 1. Sero-survey results for Raymond Island and Loch Sport, summer 1988/89.

	OCTOBER 1988					MAY 1989				
	No. Tested	Sero-positive		Sero-negative		No. Tested	Sero-positive		Sero-negative	
		No.	%	No.	%		No.	%	No.	%
Raymond Island	175	47	27%	128	73%	75	13	17%	62	87%
Loch Sport	348	83	24%	265	76%	132	7	5%	125	93%
TOTAL	**523**	**130**	**25%**	**393**	**75%**	**207**	**20**	**10%**	**187**	**90%**

Mosquito (adult) monitoring was based on collections taken in carbon-dioxide baited light traps operated by various officers (local municipal councils, Department of Agriculture, Health Department). *Aedes camptorhynchus*, a salt-marsh breeding mosquito, was by far the most prevalent. This species accounted for 98% of the approximately 124,091 mosquitoes collected. *Ae camptorhynchus* was the only species collected in ad-hoc man-biting collections (day-time and evening) at a number of sites in Gippsland, including Loch Sport and Raymond Island. Four isolates of RRV were made from *Ae camptorhynchus* and confirmed by virus neutralisation tests[2].

The serological survey of domestic/wild animals resulted in 249 blood specimens being collected from 8 species groups. The results are presented in Table 2 and indicate the broad range of vertebrates that can be infected with RRv. The relatively high sero-positivity for kangaroos is consistent with the view that macropods are an important natural host of RRv.

Table 2. Sero-survey results for RRv in domestic/wild animals, Gippsland, summer 1988/89.

	SPECIES	NUMBER TESTED	NUMBER POSTIVE	% POSITIVE
WILD	KANGAROO	38	28	74
	HOG DEER	22	4	18
	PIG	15	5	33
	FOX	5	3	60
	RABBIT	3	0	0
	DUCK	1	0	0
DOMESTIC	HORSES	102	50	48
	DOGS	63	4	6
	TOTAL	**249**	**94**	**38%**

Summer 1989/90

Low rainfall throughout Victoria during the 1989/90 summer was associated with few reports of Ross River Virus disease. There were 34 cases reported as IgM positive. Most cases occurred in the Murray valley where it is known that significant breeding of the inland vector of RRV, *Culex annulirostris*, can occur in swampy areas created by the inefficient management of irrigation water.

References

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2. Campbell J, Aldred J, Davis G. Isolation of Ross River virus from *Aedes camptorhynchus*. *MJA* 1989;**150**:602-4

AUSTRALIAN HIV SURVEILLANCE REPORT VOLUME 7, NUMBER 2 (31 JANUARY 1991)

The National Centre in HIV Epidemiology and Clinical Research reports that as of 31 January 1991 a total of 17,842 diagnoses of HIV infection and 2,457 cases of AIDS had been reported in Australia.

For the most recent period, 1 January to 31 January 1991 31 new cases of AIDS and 47 new diagnoses of HIV infection were reported.

The following tables provide more detailed information on a State/Territory basis.

Readers should note that cumulative figures are subject to retrospective revision, which may result in apparent discrepancies between the number of new cases for the cuuent 4 week period and the increment in the cumulative figures from the previous report.

Table 1. New diagnoses of AIDS and deaths from AIDS occurring in the period 1-31 January 1991, by sex and State/Territory in which diagnoses was made.

STATE/ TERRITORY	CASES			DEATHS		
	Male	Female	Total	Male	Female	Total
ACT	1	0	1	0	0	0
NSW	12	1	13	15	0	15
NT	0	0	0	0	0	0
QLD	1	0	1	5	1	6
SA	1	0	1	2	0	2
TAS	1	0	1	1	0	1
VIC	8	2	10	4	0	4
WA	4	0	4	1	0	1
TOTAL	**28**	**3**	**31**	**28**	**1**	**29**

Table 2. Cumulative cases of AIDS and deaths from AIDS by sex and State/Territory in which diagnosis was made, to 31 January 1991.

STATE/ TERRITORY	CASES			DEATHS		
	Male	Female	Total	Male	Female	Total
ACT	31	1	32	20	0	20
NSW	1491	46	1537	941	29	970
NT	5	0	5	3	0	3
QLD	180	7	187	114	6	120
SA	85	3	88	42	1	43
TAS	13	1	14	6	1	7
VIC	465	12	477	259	5	264
WA	110	7	117	65	3	68
TOTAL	**2380**	**77**	**2457**	**1450**	**45**	**1495**

Table 3. New diagnoses of HIV infection, period 1-31 January 1991, and cumulative since the introduction of HIV antibody testing to 31 January 1991, by sex and State/Territory.

STATE/ TERRITORY	JANUARY 1991[1]			CUMULATIVE TO 31 JANUARY 1991			
	Male	Female	Total	Male	Female	Sex Unknown	Total
ACT	1	0	1	15	0	97	112
NSW[2]	-	-	-	10208	624	2287	13119
NT	1	1	2	55	5	0	60
QLD	10	1	11	960	38	0	998
SA[3]	-	-	-	333	27	0	360
TAS	1	0	1	50	3	0	53
VIC	24	0	24	2468	75	0	2543
WA	8	0	8	566	31	0	597
TOTAL	**45**	**2**	**47**	**14655**	**803**	**2384**	**17842**

1. Dashes indicate counts unavailable.

2. Cumulative counts to 31 December 1990. NSW Department of Health has estimated that after making allowance for possible duplicate counting, the total number of HIV diagnoses in NSW is 10324 (see NSW Public Health Bulletin, Volume 2, Number 2, February 1991).

3. Cumulative counts to 18 May 1990.

AUSTRALIAN HIV SURVEILLANCE, SUPPLEMENTARY REPORT - JANUARY 1991

The following two tables have been taken from the Australian HIV Surveillance Report, Volume 7, Supplement 1 (January 1991).

The Australian HIV Surveillance Report is produced by the National Centre in HIV Epidemiology and Clinical Research on a monthly basis. Quarterly supplements appear in January, April, July and October. Subscription is free, and can be obtained by witting to:

The Editor

Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

376 Victoria Street

Darlinghurst NSW 2010

Australia

Tel: (02) 332 4648

Fax: (02) 332 1837

International prefix: (612)

Survival following AIDS

Table 1 shows the number of people diagnosed with AIDS in six-month periods since 1982, the proportion presumed still living on the basis of no death notification having been received at 31 December 1990, and the proportion who are known to have died within one year and two years of AIDS diagnosis.

Table 1. Survival following the diagnosis of AIDS by six-month period of diagnosis.

Calendar Period of Diagnosis		Cases	Alive 31 Dec 1990	% Alive	% Mortality within 1 year	% Mortality within 2 years
1982	Jul - Dec	1	0	0.0	100.0	100.0
1983	Jan - Jun	1	0	0.0	100.0	100.0
	Jul - Dec	5	0	0.0	80.0	100.0
1984	Jan - Jun	7	0	0.0	85.7	100.0
	Jul - Dec	39	3	7.7	66.7	84.6
1985	Jan - Jun	62	2	3.2	61.3	80.7
	Jul - Dec	58	8	13.8	53.4	75.8
1986	Jan - Jun	93	11	11.8	65.6	80.7
	Jul - Dec	133	12	9.0	63.9	82.7
1987	Jan - Jun	181	16	8.8	48.1	71.9
	Jul - Dec	188	23	12.2	36.2	67.6
1988	Jan - Jun	222	61	27.5	31.1	62.2
	Jul - Dec	298	92	30.9	30.2	65.8
1989	Jan - Jun	263	123	46.8	35.7	53.2
	Jul - Dec	305	178	58.4	37.4	41.7
1990	Jan - Jun	270	194	71.9	28.1	-
	Jul - Dec	255	235	92.2	-	-
	TOTAL	2381	958	40.2	-	-

The National HIV Surveillance Committee is in the process of obtaining dates of last medical contact for people not reported to have died following the diagnosis of AIDS. This information will allow people to be classified as either known to have died, known to be living at a specified date, or lost to follow-up.

Annual summary of AIDS cases by year

Table 2 provides a summary of the characteristics of AIDS cases by year from 1982-1990. There has been a relative stabilisation in the number of new cases of AIDS diagnosed over the past three years. The average age at diagnosis shows no clear pattern in either males or females.

The proportion of new cases in New South Wales increased again in 1990 after declining in successive years from 1986. Other States and Territories in which the proportion of AIDS cases is increasing are the Australian Capital Territory, the Northern Territory and Queensland.

Table 2. Characteristics of AIDS cases 1982-1990 by year. Number of cases, mean age and percent of total cases for each year by sex, State/Territory, exposure category and initial AIDS-defining condition.

DESCRIPTION	1982	1983	1984	1985	1986	1987	1988	1989	1990
TOTAL CASES	1	6	46	120	226	369	520	568	525
Mean Age:									
Males	52	38	33	37	39	37	37	38	38
Females	0	0	45	44	53	41	30	35	38
Males (%)	100	100	97.8	90.8	96.9	95.9	97.3	97.7	97.9
State/Territory (%)									
ACT	0.0	0.0	0.0	0.0	0.9	0.8	1.5	1.6	1.9
NSW	100	50.0	65.2	70.8	70.8	66.1	60.8	58.5	63.8
NT	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.2	0.4
QLD	0.0	0.0	10.9	10.0	5.3	6.2	6.9	7.9	8.6
SA	0.0	0.0	0.0	1.7	2.2	2.4	4.2	4.9	2.7
TAS	0.0	0.0	0.0	0.8	0.0	0.5	0.0	1.1	0.8
VIC	0.0	50.0	17.4	9.2	15.9	20.9	21.9	20.4	17.7
WA	0.0	0.0	6.5	5.8	4.9	3.0	4.6	5.5	4.2
Exposure Category (%):									
Male homosexual/bisexual contact	100	66.7	64.7	76.3	82.8	84.0	88.6	86.9	86.1
Male Homosexual/bisexual contact and ID use	0.0	33.3	2.0	0.8	4.6	2.1	3.1	2.6	1.5
ID use (female & heterosexual male)	0.0	0.0	0.0	0.0	0.8	0.5	2.1	2.1	1.1
Heterosexual contact	0.0	0.0	19.6	10.7	5.0	5.0	1.4	1.6	1.5
Haemophilia/coagulation disorder	0.0	0.0	3.9	0.8	0.8	1.6	1.4	1.8	2.1
Blood transfusion/ components/tissue recipients	0.0	0.0	9.8	9.2	5.0	4.7	1.2	1.4	1.5
Mother with/at risk for HIV infection	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.2	0.6
Other/undetermined	0.0	0.0	0.0	1.5	0.8	2.1	1.9	3.5	5.5
AIDS-Defining Cond'n (%):									
Pneumocystis carinii pneumonia (PCP)	100	66.7	38.6	40.7	37.3	41.4	40.4	35.6	28.2
Kaposi's sarcoma (KS) - skin	0.0	0.0	20.5	21.2	15.1	16.4	14.2	13.7	7.5
PCP and other (not KS)	0.0	0.0	11.4	3.4	10.7	7.8	9.3	6.9	9.0
HIV encepalopathy	0.0	0.0	0.0	0.0	0.4	1.1	2.4	4.0	4.9
Other	0.0	33.3	29.5	34.7	36.5	33.3	33.7	39.8	50.4

The exposure category of AIDS cases remains overwhelmingly male homosexual/bisexual contact. The proportion of cases in other individual exposure categories appears to be stable over the last few years.

Since the 1987 revision of the AIDS cases definition, HIV encephalopathy has increased as a proportion of AIDS-defining conditions, to a level of 4.9% in 1990. There has been a substantial drop during 1990 in the proportion of AIDS diagnoses based only on Kaposi's sarcoma, compared with the preceding several years.

GONOCOCCAL SURVEILLANCE - AUSTRALIA, 1 OCTOBER - 31 DECEMBER 1990

(Contributed by the Australian Gonococcal Surveillance Programme - AGSP. Co-ordinator, Dr JW Tapsall, The Prince of Wales Hospital, Sydney, NSW 2031)

There are two notable features in this report on the penicillin sensitivity of gonococci isolated throughout Australia in the three months 1 October to 31 December, 1990.

Firstly, the total number of strains isolated, 363, represents only 72% of the 507 strains examined in the corresponding quarter in 1989 and the 506 gonococci reported in the December 1988 quarter. This reduction in numbers of gonococci isolated confirms a trend noted in the previous two reports.

Secondly, strains resistant to the penicillins, by mechanisms other than penicillinase production, continue to be isolated in some centres. In the previous quarter, 41 of 414 isolates were of this type. In this quarter 40 such strains were detected amongst the 363 gonococci isolated. Again, in this quarter, these strains were seen in Adelaide, Melbourne and Sydney and in each of these centres were seen in equal numbers to PPNG. These strains have penicillin MIC's> 1.0 mg/L. Their importance lies in the fact that treatment failures occur with penicillin-based regimens in a significant proportion of cases. Table 1. provides additional information on levels of intrinsic resistance in those three centres with larger numbers of isolates. These data also indicate a continuing trend towards increased levels of chromosomally-mediated intrinsic resistance to the penicillins, a trend observed now over a considerable period.

There were 48 infections with PPNG reported in Australia in this quarter, about the same number as in the previous quarter but considerably less than the 78 cases seen in the corresponding period in 1989. In the September quarterly report (CDI 15/2, 29 January 1991) it was noted that for the first time in a considerable period imported cases of PPNG outnumbered locally acquired infections. This is again the case in this period with 27 infections with PPNG being acquired outside Australia and 9 through local contact. (Data on acquisition were unavailable in 12 cases).

Table 1. Penicillin sensitivity of isolates of *N gonorrhoeae* 1 October - 31 December 1990.

CENTRE	Percentage of Isolates		
	Sensitive	Less Sensitive	PPNG
BRISBANE	21 (13)	58 (63)	7.4 (4.7)
SYDNEY	9 (1.3)	46 (47.4)	19.6 (24.5)
MELBOURNE	1.3 (2)	48.6 (49.3)	13.1 (14.8)

Sensitive, MIC = 0.004 - 0.016 mg/L

Less Sensitive, MIC = 0.06 - 0.25 mg/L

PPNG = Penicillinase-producing *N. gonorrhoeae*

CDI REPORTING SCHEME

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTS

There were 1312 reports processed for latest period (27 March to 9 April 1991).

The NSW Department of Health has reported a case of rabies. The patient, a 10 year old female Vietnamese migrant, was admitted to hospital in December 1990 and subsequently died (about 4 weeks later) of an undiagnosed encephalitic condition. She had moved to Austrtalia about 5 years ago after having spent the previous 2 years in Hong Kong. The most likely place of infection is considered to have been Vietnam although the parents had no recollection of her having being bitten by an animal. While the incubation period of rabies is typically 2 to 8 weeks, periods of greater than a year have been reported.

Preliminary investigations have revealed that the patient had no significant animal contact in Australia she had no pets and there were no animals kept at the school she attended.

As a precautionary measure the NSW Department of Health is considering offering post exposure prophylactic vaccine to close contacts of the patient. It is notable that while person to person tranmission of rabies is theoretically possible it has never been reported.

A recent editorial in The Lancet[1] reviewed lengthy incubation of rabies and work performed by Smith et al[2] on strain speciation. Analysis of viruses from three patients with rabies (incubation periods presuptively considered to be 11 months, 4 years, 6 years) revealed these viruses were different from strains isolated from rabid American skunks, foxes and bats. However, the three strains were not distinguishable from street viruses orignating from or near Mexico, Laos or the Philippines, the country of origin of the three patients. Futher virological investigation is being performed for this Australian case.

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1. Editorial *Lancet* **337** p822-23. April 6 1991.

2. Smith JS, Fishbein DB, Rupprecht CE, Clark K. Unexplained rabies in three immigrants in the United States: a virologic invesigation. *N Engl J Med* 1991;**324**:205-11.

Q fever was reported on 15 occasions during the period, the majority (8) from New South Wales. Ages ranged from 17 to 55 years and exposure details were supplied for 2; both meatworkers.

Ross River virus infection was reported on 140 occasions. On a state by state basis case numbers were:

Queensland (majority from Townsville (55) and Cairns (16))	91
Western Australia	15
New South Wales	12
South Australia (underestimated)	8
Northern Territory	7
Victoria	5
Australian Capital Territory	2

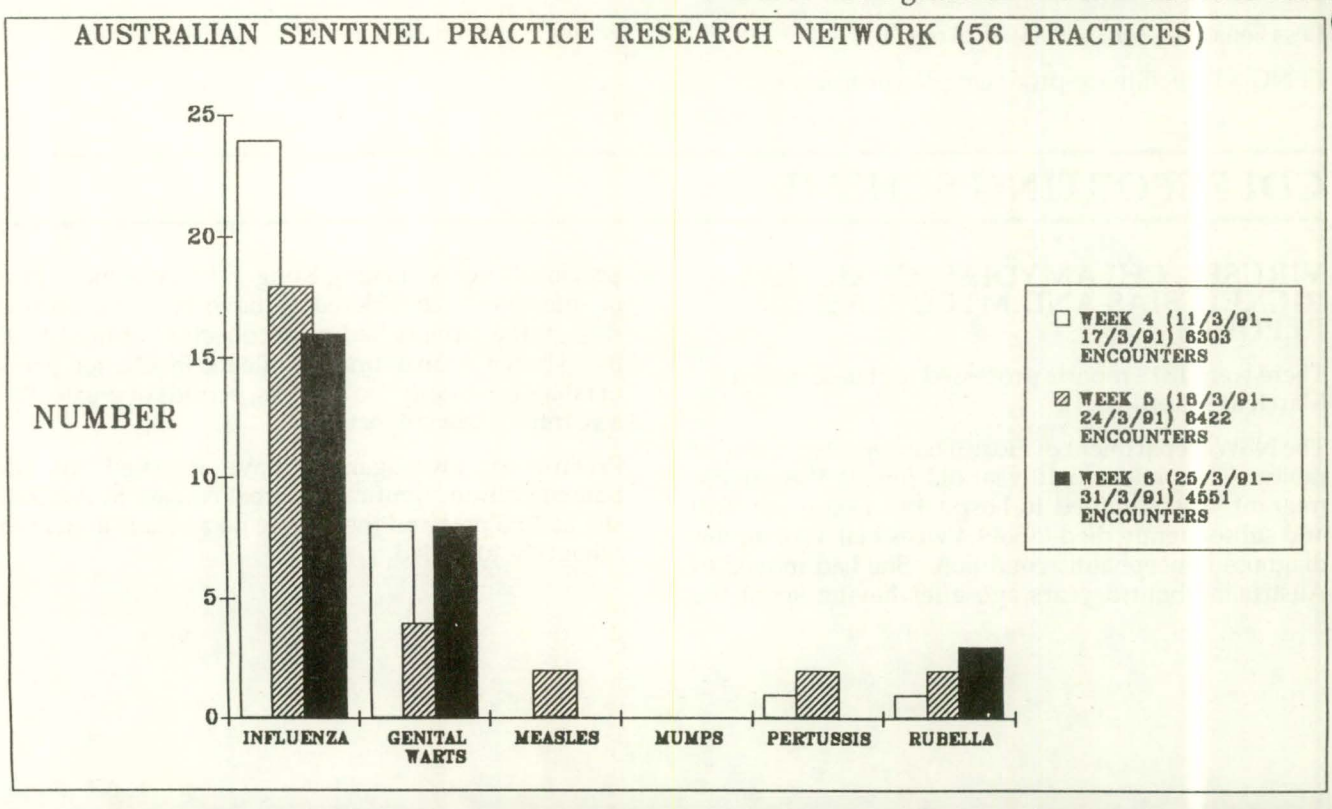
A case of **melioidosis** has been reported from the south-west of Western Australia. The 47 year old man was from a rural area east of Perth and was admitted to the Sir Charles Gairdner Hospital with localised pulmonary melioidosis. The disease was diagnosed by culturing *Pseudomonas pseudomallei* from fluid aspirated from a lung mass. The indirect haemagglutination (IHA) test for melioidosis was negative. Further details will be provided in an article to be published in CDI 15/9.

A fatality due to **Australian encephalitis** has been reported from the north-west of Western Australia. The patient was a 16 month old girl from an Aboriginal community in the Kimberly district. Serology confirmed the presence of specific IgM against Murray Valley Encephalitis virus.

Although the community is located in a semi-arid area in the north of the state, the recent unusually heavy wet season is likely to have produced breeding conditions for *Culex* and *Aedes* spp. of mosquitoes favourable enough to enhance virus activity. Previous serological surveys have indicated a high level of exposure to AE viruses in the community, without clinical infection.

Two reports of **dengue virus** were received - a 25 year old female who had visited Indonesia and a 64 year old male from Cairns whose infection was locally acquired.

Cytomegalovirus was isolated from a 1 day old male with severe jaundice infection. The infant was premature at 30 weeks gestation. His twin died at 16 weeks



AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 27/03/91 TO 9/04/91

CODE 019 - FAIRFIELD HOSPITAL, MELBOURNE (VIC)
CODE 065 - STATE HEALTH LABORATORY SERVICES, PERTH (WA)
CODE 066 - PRINCESS MARGARET HOSPITAL, PERTH (WA)
CODE 110 - INSTITUTE OF MEDICAL & VETERINARY SCIENCE, ADELAIDE (SA)
CODE 111 - ROYAL CHIDLDRENS HOSPITAL, MELBOURNE (VIC)
CODE 112 - INSTITUTE OF CLINICAL PATHOLOGY & MEDICAL RESEARCH, WESTMEAD (NSW)
CODE 113 - PRINCE HENRY/PRINCE OF WALES HOSPITALS, SYDNEY (NSW)
CODE 114 - ROYAL ALEXANDRA HOSPITAL FOR CHILDREN, CAMPERDOWN (NSW)
CODE 115 - STATE HEALTH LABORATORY, BRISBANE (QLD)
CODE 116 - WODEN VALLEY HOSPITAL, GARRAN (ACT)

		019	065	066	110	111	112	113	114	115	116	TOTAL
0100	ADENOVIRUS NOT TYPED	4	2	7	4	11	0	6	0	10	0	44
0101	ADENOVIRUS TYPE 1	1	0	0	1	0	1	0	3	0	0	6
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	3	0	0	1	0	1	0	0	0	0	5
0104	ADENOVIRUS TYPE 4	3	0	0	0	0	0	0	0	0	0	3
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	1	0	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	0	0	2	0	0	0	0	0	0	2
0122	ADENOVIRUS TYPE 22	1	0	0	0	0	0	0	0	0	0	1
0126	ADENOVIRUS TYPE 26	1	0	0	0	0	0	0	0	0	0	1
0132	ADENOVIRUS TYPE 32	0	0	0	1	0	0	0	0	0	0	1
0135	ADENOVIRUS TYPE 35	2	0	0	0	0	0	0	0	0	0	2
0146	ADENOVIRUS TYPE 46	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	3	0	0	0	0	0	0	3	0	0	6
0203	INFLUENZA B VIRUS	0	0	0	3	0	0	0	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	1	2	0	0	0	0	0	0	3
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	1	3	1	1	0	0	3	0	9
0303	PARAINFLUENZA VIRUS TYPE 3	3	0	2	1	6	1	0	2	7	0	22
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	1	0	0	0	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	2	0	2	0	1	2	0	1	8	0	16
0500	RHINOVIRUS (ALL TYPES)	10	2	0	0	5	0	2	1	2	0	22
0600	MYCOPLASMA PNEUMONIAE	2	0	0	2	4	2	1	0	0	0	11
0700	ORNITHOSIS-PSITTACOSIS	9	0	0	0	0	1	1	0	0	1	12
0809	COXSACKIEVIRUS A9	2	0	0	0	0	0	0	0	0	0	2
0902	COXSACKIEVIRUS B2	2	0	0	1	0	1	0	0	0	0	4
0904	COXSACKIEVIRUS B4	1	0	0	0	0	4	0	1	0	0	6
0905	COXSACKIEVIRUS B5	1	0	0	0	0	0	6	0	0	0	7
1001	ECHOVIRUS TYPE 1	0	0	0	0	0	1	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	1	0	0	0	0	0	0	0	0	0	1
1017	ECHOVIRUS TYPE 17	0	0	0	1	0	0	0	0	0	0	1
1018	ECHOVIRUS TYPE 18	1	0	0	0	0	0	0	0	0	0	1
1022	ECHOVIRUS TYPE 22	3	0	0	0	0	0	0	0	0	0	3
1033	ECHOVIRUS TYPE 33	0	0	0	1	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	2	0	0	0	2
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	1	0	0	0	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	3	0	1	0	0	0	0	4
1200	MUMPS VIRUS	0	0	0	0	0	1	0	0	0	1	2
1300	HERPES VIRUS GROUP - NOT TYPED	8	1	0	0	0	0	1	0	0	0	10
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	3	2	0	0	11	0	3	2	8	29
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	17	5	0	9	3	6	0	0	15	0	55
1303	VARICELLA-ZOSTER VIRUS	10	3	0	2	0	2	0	0	0	0	17
1306	HERPES SIMPLEX TYPE 1	70	33	0	22	1	4	9	0	30	0	169
1307	HERPES SIMPLEX TYPE 2	84	61	0	22	0	9	13	0	22	0	211
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	1	0	0	0	0	0	1
1401	COXIELLA BURNETII	2	0	0	1	0	8	0	0	4	0	15
1502	PICORNIA VIRUS - NOT TYPED = E	0	8	0	0	0	0	7	0	10	0	25
1514	MOLLUSCUM CONTAGIOSUM	0	1	0	0	0	0	0	0	0	0	1
1521	MEASLES VIRUS	6	3	0	0	6	0	0	0	0	0	15
1522	RUBELLA VIRUS	5	1	0	0	0	0	0	0	0	1	7
1532	HEPATITIS B ANTIGEN	19	16	0	1	1	19	9	0	26	4	95
1535	HEPATITIS A ANTIBODY	7	9	0	2	0	0	3	0	2	0	23
1536	HEPATITIS C VIRUS	0	5	0	0	0	0	0	0	0	0	5
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	0	40	0	28	1	12	0	0	0	5	86
1556	CMV - CYTOMEGALOVIRUS	85	2	9	3	1	1	0	1	17	0	119
1563	CORONAVIRUS	0	0	0	0	0	2	0	0	0	0	2
1564	ROTAVIRUS	0	0	8	9	9	1	3	0	0	0	30
1565	CALICI VIRUS	0	0	0	0	0	2	0	0	0	0	2
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	7	0	25	2	0	0	34
9906	BARMAH FOREST VIRUS	0	0	0	0	0	0	1	0	2	0	3
9990	AUSTRALIAN ENCEPHALITIS	0	0	0	0	0	0	0	0	1	0	1
9992	ROSS RIVER VIRUS	5	22	0	8	0	2	12	0	91	0	140
9994	SMALL VIRUS (LIKE) PARTICLE	1	0	0	0	0	1	0	0	0	0	2
9995	DENGUE NOT TYPED	0	1	0	0	0	0	0	0	1	0	2
9997	KUNJIN VIRUS	0	0	0	0	0	0	0	0	1	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	3	0	0	0	0	0	0	0	0	0	3
TOTAL		378	218	33	133	58	100	101	17	254	20	1312

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 27/03/91 TO 9/04/91

NSW: ICPMR; PHH/POW; RACH; ST GEORGE HOSP, KOGARAH; ROYAL NEWCASTLE HOSP.
VIC: FAIRFIELD; RCH; MDU, UNI MELB.
QLD: STATE LAB, BRIS; TOOWOOMBA PATH LAB; ROYAL BRIS HOSP; DR TB LYNCH, PATHOLOGIST, ROCKHAMPTON.
WA: STATE LAB, PERTH; PMH.
SA: IMVS.
TAS: ROYAL HOBART HOSP; DIAGNOSTIC SERVICES, LAUNCESTON; LAUNCESTON GEN HOSP; DIAGNOSTIC SERVICES, HOBART; HOBART PATH; MERSEY GEN HOSP, LATROBE.
ACT: WVH.

		NSW	VIC	QLD	WA	SA	ACT	TOTAL
0100	ADENOVIRUS NOT TYPED	6	15	10	9	4	0	44
0101	ADENOVIRUS TYPE 1	4	1	0	0	1	0	6
0102	ADENOVIRUS TYPE 2	1	0	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	1	3	0	0	1	0	5
0104	ADENOVIRUS TYPE 4	0	3	0	0	0	0	3
0111	ADENOVIRUS TYPE 11	1	0	0	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	0	0	0	2	0	2
0122	ADENOVIRUS TYPE 22	0	1	0	0	0	0	1
0126	ADENOVIRUS TYPE 26	0	1	0	0	0	0	1
0132	ADENOVIRUS TYPE 32	0	0	0	0	1	0	1
0135	ADENOVIRUS TYPE 35	0	2	0	0	0	0	2
0146	ADENOVIRUS TYPE 46	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	3	3	0	0	0	0	6
0203	INFLUENZA B VIRUS	0	0	0	0	3	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	0	1	2	0	3
0302	PARAINFLUENZA VIRUS TYPE 2	1	1	3	1	3	0	9
0303	PARAINFLUENZA VIRUS TYPE 3	3	9	7	2	1	0	22
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	0	1	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	3	3	8	2	0	0	16
0500	RHINOVIRUS (ALL TYPES)	3	15	2	2	0	0	22
0600	MYCOPLASMA PNEUMONIAE	3	6	0	0	2	0	11
0700	ORNITHOSIS-PSITTACOSIS	2	9	0	0	0	1	12
0809	COXSACKIEVIRUS A9	0	2	0	0	0	0	2
0902	COXSACKIEVIRUS B2	1	2	0	0	1	0	4
0904	COXSACKIEVIRUS B4	5	1	0	0	0	0	6
0905	COXSACKIEVIRUS B5	6	1	0	0	0	0	7
1001	ECHOVIRUS TYPE 1	1	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	1	0	0	0	0	1
1017	ECHOVIRUS TYPE 17	0	0	0	0	1	0	1
1018	ECHOVIRUS TYPE 18	0	1	0	0	0	0	1
1022	ECHOVIRUS TYPE 22	0	3	0	0	0	0	3
1033	ECHOVIRUS TYPE 33	0	0	0	0	1	0	1
1100	POLIOVIRUS NOT TYPED	2	0	0	0	0	0	2
1101	POLIOVIRUS TYPE 1	1	0	0	0	0	0	1
1102	POLIOVIRUS TYPE 2	1	0	0	0	3	0	4
1200	MUMPS VIRUS	1	0	0	0	0	1	2
1300	HERPES VIRUS GROUP - NOT TYPED	1	8	0	1	0	0	10
1301	HERPES SIMPLEX VIRUS - NOT TYP	14	0	2	5	0	8	29
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	6	20	15	5	9	0	55
1303	VARICELLA-ZOSTER VIRUS	2	10	0	3	2	0	17
1306	HERPES SIMPLEX TYPE 1	13	71	30	33	22	0	169
1307	HERPES SIMPLEX TYPE 2	22	84	22	61	22	0	211
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	1
1401	COXIELLA BURNETII	8	2	4	0	1	0	15
1502	PICORNIA VIRUS - NOT TYPED = E	7	0	10	8	0	0	25
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	1	0	0	1
1521	MEASLES VIRUS	0	12	0	3	0	0	15
1522	RUBELLA VIRUS	0	5	0	1	0	1	7
1532	HEPATITIS B ANTIGEN	28	20	26	16	1	4	95
1535	HEPATITIS A ANTIBODY	3	7	2	9	2	0	23
1536	HEPATITIS C VIRUS	0	0	0	5	0	0	5
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	12	1	0	40	28	5	86
1556	CMV - CYTOMEGALOVIRUS	2	86	17	11	3	0	119
1563	CORONAVIRUS	2	0	0	0	0	0	2
1564	ROTAVIRUS	4	9	0	8	9	0	30
1565	CALICI VIRUS	2	0	0	0	0	0	2
1599	ENTEROVIRUS TYPING PENDING	27	7	0	0	0	0	34
9906	BARMAH FOREST VIRUS	1	0	2	0	0	0	3
9990	AUSTRALIAN ENCEPHALITIS	0	0	1	0	0	0	1
9992	ROSS RIVER VIRUS	14	5	91	22	8	0	140
9994	SMALL VIRUS (LIKE) PARTICLE	1	1	0	0	0	0	2
9995	DENGUE NOT TYPED	0	0	1	1	0	0	2
9997	KUNJIN VIRUS	0	0	1	0	0	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	0	3	0	0	0	0	3
TOTAL		218	436	254	251	133	20	1312

NOTE: DIRECT COMPARISION BETWEEN STATES IS NOT POSSIBLE SINCE:
- SOME STATES HAVE MORE THAN ONE CONTRIBUTING LABORATORY; AND
- INTERSTATE REFERRRALS OCCUR REGULARLY.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1

PERIOD 27/03/91 TO 9/04/91

1. CODE 00, 99 ..... - NO ILL OR DATA
2. CODE 01, 02, 11, 12 - RESPIRATORY
3. CODE E3 ..... - ENCEPHALITIS
4. CODE M3 ..... - MENINGITIS
5. CODE 04 ..... - PARALYSIS
6. CODE 05, 13 ..... - CNS OTHER UNSPEC
7. CODE 07, 49 - GASTRO INTESTINAL
8. CODE 17, 47 - HEPATIC
9. CODE 19 ... - CVS
10. CODE 89 ... - URINARY TRACCT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	2	10	0	0	0	24	0	0	0	0	36
0101	ADENOVIRUS TYPE 1	0	2	0	0	0	3	0	0	0	0	5
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	0	1	0	1	0	1	0	0	0	0	3
0111	ADENOVIRUS TYPE 11	1	0	0	0	0	0	0	0	0	0	1
0116	ADENOVIRUS TYPE 16	0	2	0	0	0	0	0	0	0	0	2
0122	ADENOVIRUS TYPE 22	0	1	0	0	0	0	0	0	0	0	1
0132	ADENOVIRUS TYPE 32	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	3	0	0	0	2	0	0	0	0	5
0203	INFLUENZA B VIRUS	0	3	0	0	0	0	0	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	3	0	0	0	0	0	0	0	0	3
0302	PARAINFLUENZA VIRUS TYPE 2	0	9	0	0	0	0	0	0	0	0	9
0303	PARAINFLUENZA VIRUS TYPE 3	2	19	0	0	0	0	0	0	0	0	21
0399	PARAINFLUENZA VIRUS TYPING PEN	0	1	0	0	0	0	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	15	0	0	0	0	0	0	0	0	15
0500	RHINOVIRUS (ALL TYPES)	0	16	0	0	1	1	0	0	0	0	18
0600	MYCOPLASMA PNEUMONIAE	1	10	0	0	0	0	0	0	0	0	11
0700	ORNITHOSIS-PSITTACOSIS	2	3	0	0	0	1	1	1	0	0	8
0809	COXSACKIEVIRUS A9	0	0	0	2	0	0	0	0	0	0	2
0902	COXSACKIEVIRUS B2	0	0	1	2	0	0	0	1	0	0	4
0904	COXSACKIEVIRUS B4	1	2	0	0	0	1	0	0	0	0	4
0905	COXSACKIEVIRUS B5	0	0	0	1	0	6	0	0	0	0	7
1001	ECHOVIRUS TYPE 1	0	0	0	0	0	1	0	0	0	0	1
1017	ECHOVIRUS TYPE 17	0	0	0	0	0	1	0	0	0	0	1
1022	ECHOVIRUS TYPE 22	0	2	0	0	1	0	0	0	0	0	3
1033	ECHOVIRUS TYPE 33	0	0	0	0	0	1	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	2	0	0	0	0	2
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	1	0	0	0	0	1
1102	POLIOVIRUS TYPE 2	0	2	0	0	0	1	0	0	0	0	3
1200	MUMPS VIRUS	1	0	0	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	1	0	0	0	1	5	7
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	0	1	1	0	0	0	0	0	11	14
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	23	5	1	0	0	0	2	0	0	0	31
1303	VARICELLA-ZOSTER VIRUS	3	0	0	1	0	0	0	0	0	12	16
1306	HERPES SIMPLEX TYPE 1	3	14	0	0	0	0	1	1	2	99	120
1307	HERPES SIMPLEX TYPE 2	1	0	0	0	0	0	0	0	0	94	95
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	0	1
1401	COXIELLA BURNETII	6	1	0	0	0	0	1	0	0	0	8
1502	PICORNIA VIRUS - NOT TYPED = E	0	5	0	3	2	13	0	0	0	1	24
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	0	0	0	0	0	0	1	1
1521	MEASLES VIRUS	3	0	0	0	0	0	0	0	0	11	14
1522	RUBELLA VIRUS	0	0	1	0	0	0	0	0	0	1	2
1532	HEPATITIS B ANTIGEN	50	0	0	0	0	0	45	0	0	0	95
1535	HEPATITIS A ANTIBODY	9	0	0	0	0	1	11	0	0	0	21
1536	HEPATITIS C VIRUS	5	0	0	0	0	0	0	0	0	0	5
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	7	1	0	0	0	0	0	0	0	0	8
1556	CMV - CYTOMEGALOVIRUS	8	19	0	0	0	1	8	2	4	0	42
1563	CORONAVIRUS	0	0	0	0	0	2	0	0	0	0	2
1564	ROTAVIRUS	0	0	0	0	0	30	0	0	0	0	30
1565	CALICI VIRUS	0	0	0	0	0	2	0	0	0	0	2
1599	ENTEROVIRUS TYPING PENDING	1	2	0	1	0	26	0	0	1	0	31
9992	ROSS RIVER VIRUS	55	2	0	0	0	0	1	0	0	5	63
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	2	0	0	0	0	2
9995	DENGUE NOT TYPED	0	0	0	0	0	0	0	0	0	1	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	2	0	0	0	0	0	0	0	0	0	2
TOTAL		187	154	4	12	5	125	70	5	8	241	811

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 27/03/91 TO 9/04/91

12. CODE 10 - EYE
13. CODE 59 - GENITAL
14. CODE 39 - ENDOCRINE/SALIVARY GL.
15. CODE 38 - RETICULO-ENDOTHELIAL
16. CODE 29 - MUSCLE/JOINT
17. CODE 69 - CONGENTIAL
18. CODE P8 - PUO
19. CODE G8 - FEVER/MALAISE
20. CODE 09 - OTHER
21. CODE A1 - SIDS

		12	13	14	15	16	17	18	19	20	21	TOTAL
0100	ADENOVIRUS NOT TYPED	3	0	0	0	0	0	1	1	3	0	8
0101	ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	0	1
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	1	0	0	2
0104	ADENOVIRUS TYPE 4	3	0	0	0	0	0	0	0	0	0	3
0126	ADENOVIRUS TYPE 26	0	0	0	0	0	0	0	0	1	0	1
0135	ADENOVIRUS TYPE 35	0	0	0	0	0	0	0	0	2	0	2
0146	ADENOVIRUS TYPE 46	0	0	0	0	0	0	0	0	1	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	0	1	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	1	0	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	2	1	1	4
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	0	0	4	0	0	4
0904	COXSACKIEVIRUS B4	0	0	0	0	0	0	0	0	1	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	0	0	0	0	1	0	0	1
1018	ECHOVIRUS TYPE 18	0	0	0	0	0	0	0	1	0	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
1200	MUMPS VIRUS	0	0	0	0	0	0	0	0	1	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	0	0	0	0	3	0	3
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	14	0	1	0	0	0	0	0	0	15
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	6	5	0	0	2	6	5	0	24
1303	VARICELLA-ZOSTER VIRUS	0	1	0	0	0	0	0	0	0	0	1
1306	HERPES SIMPLEX TYPE 1	11	33	0	0	0	0	0	0	5	0	49
1307	HERPES SIMPLEX TYPE 2	0	110	0	0	0	0	0	0	6	0	116
1401	COXIELLA BURNETII	0	0	0	0	1	0	0	4	2	0	7
1521	MEASLES VIRUS	0	0	0	0	0	0	1	0	0	0	1
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	5	0	5
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	1	1	0	2
1541	CHLAMYDIA TRACHOMATIS - UNSPEC	1	77	0	0	0	0	0	0	0	0	78
1556	CMV - CYTOMEGALOVIRUS	0	1	0	1	0	2	1	7	65	0	77
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	3	0	3
9906	BARMAH FOREST VIRUS	0	0	0	0	2	0	0	1	0	0	3
9990	AUSTRALIAN ENCEPHALITIS	0	0	0	0	0	0	0	1	0	0	1
9992	ROSS RIVER VIRUS	0	0	0	0	64	0	2	5	6	0	77
9995	DENGUE NOT TYPED	0	0	0	0	0	0	1	0	0	0	1
9997	KUNJIN VIRUS	0	0	0	0	1	0	0	0	0	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	0	0	0	0	1	0	0	0	0	0	1
TOTAL		19	236	6	7	69	2	8	39	112	1	499