



# COMMUNICABLE DISEASES INTELLIGENCE

ISSN 0725-3141 VOLUME 16 NUMBER 19 21 September 1992

## CONTENTS

### ARTICLES

Page

Tuberculosis Notification Rates, Australia, 1991	398
The Distribution of <i>Aedes aegypti</i> in Queensland, 1990 to 30 June 1992	400
Ross River Virus Disease and Barmah Forest Virus Disease Notifications, Victoria, Summer 1991-1992	404
HIV Surveillance Report, 31 July 1992	406
HIV Infections in Australia, Distributions by Age and Sex and Exposure Category	407

### OVERSEAS BRIEFS

409

### CDI NOTICE TO READERS

409

### COMMUNICABLE DISEASES SURVEILLANCE

409

**Editor:** Robert Hall

**Editorial Staff:** Jenny Hargreaves, Ponnuthurai Anura, Lenore Cupitt, Michelle Wood and Barbara Jenkins.

*CDI* is produced fortnightly by:  
Communicable Diseases Section  
Department of Health, Housing and Community Services  
GPO Box 9848 Canberra ACT 2601  
Fax: (06) 289 7802 Telephone: (06) 289 1555

Contributions covering any aspect of communicable diseases are invited. Publication does not preclude authors from arranging publication of their material elsewhere.

Opinions expressed in *CDI* are those of the authors and not necessarily those of the Department of Health, Housing and Community Services or other Communicable Diseases Network - Australia affiliates. Figures given may be subject to revision.

Parts of *CDI* are also available on the *CDI* Bulletin Board System, accessible with a computer, communications software and a modem on (06) 281 6695.

Consent for copying in all or part can be obtained from:  
Manager, AGPS Press  
Australian Government Publishing Service,  
PO Box 84, Canberra ACT 2600



**DEPARTMENT OF  
HEALTH, HOUSING AND  
COMMUNITY SERVICES**

**COMMUNICABLE DISEASES NETWORK-AUSTRALIA**  
**A National Network for Communicable Diseases Surveillance**

## TUBERCULOSIS NOTIFICATION RATES, AUSTRALIA, 1991

(David Cheah for the Communicable Disease Network - Australia)

### Introduction

In 1991, the surveillance system for tuberculosis was revised under the auspices of the Communicable Disease Network - Australia. All State and Territory health departments agreed to supply data on all cases of notified tuberculosis in a standardised format based on a program in Epi Info<sup>1</sup>. These records were sent to the Communicable Diseases Section of the Department of Health, Housing and Community Services at Canberra on a periodic basis. The data were checked for duplication before analysis.

### Methods

The database sought the following details on each new case of notified tuberculosis:

- A core dataset which consisted of unique identifier code for the case, disease code for the notification, postcode of residence, sex, date of birth, Aboriginality, date of onset of the disease, date of report of disease and confirmation by laboratory.
- A supplementary dataset which consisted of ethnicity, country of birth, length of Australian residence, pathogen, sites of disease, diagnostic method, medications at the time of notification, BCG vaccination status, HIV status and whether the case was a relapsed case.

The case definition for the different categories of tuberculosis remain unchanged from those used in previous analysis<sup>2</sup>. Cases were recorded to the end of 1991 with the final case number not finalised until June 1992 to ensure complete accounting of cases by the State and Territory health departments.

### Results

Analysis was not performed on medications at time of notification, BCG status and HIV status because of incomplete data.

**Table 1. Notification rates<sup>1</sup> for new cases of tuberculosis<sup>2</sup>, Australia, 1986 to 1991, by year**

Year	Cases	Rate <sup>1</sup>	% Change in rate from previous year
1986	863	5.39	
1987	868	5.34	-0.9
1988	925	5.59	+4.7
1989	902	5.36	-4.1
1990	979	5.73	+6.9
1991	903	5.21	-9.1

1. Rate per 100,000 population per year.

2. MTb complex (not including bovis-BCG).

There were 903 new cases of tuberculosis notified in Australia, a decrease of 7.8% from the 1990 figure of 979 cases. This gives a rate of 5.21 per 100,000 for the year, compared with 5.73 per 100,000 in 1990 (Table 1). The rate for new cases of tuberculosis has remained fairly constant during the last five years in Australia<sup>3</sup>.

New South Wales has the highest proportion of cases (42.9% of total) and ACT the lowest (Table 2). Victoria, South Australia, Western Australia, Tasmania, Northern Territory and the ACT reported a decline in cases compared with 1991, with the Northern Territory showing the greatest decrease (51.7%). Two states, New South Wales and Queensland, reported increases in the number of cases.

**Table 2. Notification rates<sup>1</sup> for new cases of tuberculosis by State or Territory, Australia, 1991**

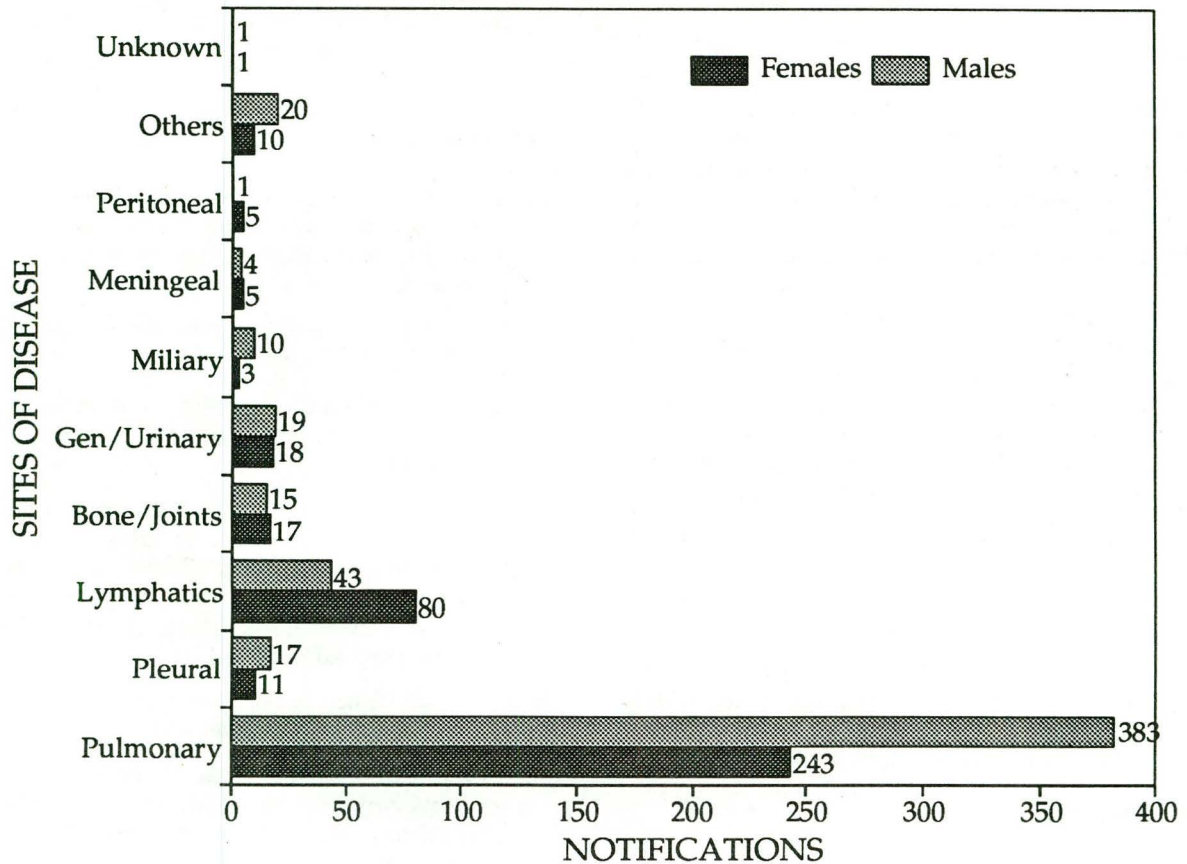
State or Territory	Cases Notified	Rate <sup>1</sup>	% Change in Rate from previous year
NSW	388	6.58	+10.8
Vic	226	5.1	-12.4
Qld	99	3.33	+4.1
SA	61	4.19	-29.1
WA	83	4.98	-31.0
Tas	9	1.95	-19.1
NT	29	18.26	-52.1
ACT	8	2.73	-29.3
AUSTRALIA	903	5.21	-9.1

1. Rate per 100,000 population per year.

**Table 3. Notifications of new cases of tuberculosis Australia, 1991, by sex and age group**

Age Group	Female	Male	Total
0-4	17	20	37
5-14	19	14	33
15-24	53	42	95
25-34	82	77	159
35-44	56	68	124
45-54	41	53	94
55-64	28	70	98
65-74	48	67	115
>75	43	78	121
Unknown	10	17	27
Total	397	506	903

Figure. Tuberculosis cases, Australia, 1991, by sex and sites of disease



In 1991, 44% of notified cases of tuberculosis occurred in females and 56% in males (Table 3). The 25 to 34 year age group accounted for 17.6% of total cases (159 cases) whereas 13.4% of total cases occurred in the greater than 75 years age group (121 cases). Males predominated in the greater than 65 years age group, accounting for 61.5% of cases, whilst females accounted for 38.5% of cases.

Pulmonary or pleural site accounted for 67.7% of all the cases. Lymphatic site was the most common extrapulmonary site, accounting for 55.9% of all cases. Males predominated in pulmonary disease whilst females predominated in lymphatic disease (Figure).

Ninety per cent of the notifications included information on culture positivity. Of these, 74.7% were bacteriologically positive (Table 4). The rates of culture positivity ranged from 54.1% in South Australia to 92.1% in Victoria.

Sixty-six percent of cases were foreign born, whilst 34% were Australian born (Table 5). The proportion of foreign born cases has declined slightly from 1990, where 70.4% of total cases were foreign born.

Table 4. Percentage of culture positive cases of tuberculosis by State or Territory, Australia, 1991

State or Territory	Culture Positive	Culture Negative	Unknown	% of Cases Culture Positive <sup>1</sup>
NSW	231	89	68	72.2
Vic	197	17	12	92.1
Qld	67	32	0	67.7
SA	33	28	0	54.1
WA	45	28	10	61.6
Tas	8	1	0	88.9
NT	21	8	0	72.4
ACT	5	3	0	62.5
<b>AUSTRALIA</b>	<b>607</b>	<b>206</b>	<b>90</b>	<b>74.7</b>

1. Of cases with known results.

Table 5. Notification of new cases of tuberculosis, by place of birth, Australia, 1991

Birthplace	Cases	% of Total	Rate <sup>1</sup>
Australia	307	34	2.3
Overseas <sup>2</sup>	596	66	15.1

1. Rate per 100,000 population per year.

2. Birthplace denominators were obtained from the Australian Bureau of Statistics.

In 1991, 47 cases of notified tuberculosis were recorded as Aborigines, with 44.7% (21 cases) occurring in the Northern Territory.

## Discussion

The analysis of tuberculosis notifications for 1991 indicates that the rates of notified disease have been stable since the mid 1980s. The lack of increase in notifications is encouraging when compared with the United States, which has shown increases since the mid 1980s, accounting for more than 28,000 'excess' cases since 1985<sup>4</sup>. The majority of cases of tuberculosis in Australia occurred in immigrants, with 66% of all reported cases being in foreign born persons, giving an estimated rate of 15.1 per 100,000. This is a decrease from 1990, when 70.4% of all reported cases were foreign born<sup>5</sup>. In the United States, foreign born notifications account for only 22% of all reported cases but the rate of tuberculosis in the foreign born population is 124 per 100,000<sup>6</sup>.

The site of disease and age groups of notified cases has not changed markedly since 1990. Seventy-five per cent of cases were bacteriologically confirmed in 1991 compared with 61.7% in 1985<sup>7</sup>.

Further characterisation of the disease pattern is indicated for the other 'at risk' groups in the community, for example the homeless, those in institutions and those with HIV infection.

## Acknowledgments

Dr Michael Levy, NSW Department of Health; Dr Anil Patel, Patrick Derhy, Queensland Department of Health; Dr Jonathan Streeton, Melbourne; Prue Morris, Health Department Victoria; Dr Jag Gill, Western Australian Health Department; Dr Ral Antic, Dr Andrew

Thornton, South Australian Health Commission; Dr Vicki Krause, Northern Territory Department of Health and Community Services, Dr Robert Scott, Sr Elaine Collett, ACT Board of Health; and Dr A Misrachi, Dr Tony Watson, Tasmanian Department of Health.

## References

1. Dean AD, Dean JA, Burton JH, Dicker RC. *Epi Info, version 5: a word processing, database, and statistic program for epidemiology on microcomputers*. Atlanta: Centers for Disease Control, 1990.
2. Tuberculosis briefs 1 - notification rates. *Comm Dis Intell* 1991;15:267-269.
3. Cheah D. Tuberculosis notification rates, Australia - final data for 1986 to 1990. *Comm Dis Intell* 1991;16:234-235.
4. Centers for Disease Control. National action plan to combat multidrug-resistant tuberculosis. Meeting the challenge of multidrug-resistant tuberculosis: summary of a conference. Management of persons exposed to multidrug-resistant tuberculosis. *MMWR* 1992;41(No. RR-11).
5. Tuberculosis briefs 2 - an analysis by country of birth. *Comm Dis Intell* 1991;15:440-442.
6. Centers for Disease Control. Tuberculosis among foreign-born persons entering the United States: recommendations of the Advisory Committee for Elimination of Tuberculosis. *MMWR* 1990;39(No. RR-18).
7. Commonwealth Department of Health. *Tuberculosis Statistics for year ended 31 December 1985*. Canberra: Australian Government Publishing Service. 1986.

---

## THE DISTRIBUTION OF *AEDES AEGYPTI* IN QUEENSLAND, 1990 TO 30 JUNE 1992

---

(David P Sinclair, Medical Entomologist, Environmental Health Unit, Peninsula and Torres Strait Regional Health Authority, Cairns, Queensland)

### Introduction

The vector of the dengue virus in Australia, *Aedes aegypti*, is known to occur only in Queensland, and its distribution in that State has been the subject of various papers<sup>1</sup>. The present distribution of the mosquito is of concern, due to the recent dengue 1 and dengue 2 epidemic centred in Townsville (February to July 1992), and the occurrence of dengue cases in Cairns and Thursday Island (May and June 1992).

### Materials and Methods

The results of surveys to detect *Aedes aegypti* larvae, conducted by representatives from Queensland Health, the Queensland Institute of Medical Research,

and local authorities, over the period 1 January 1990 to 30 June 1992, were compiled.

### Results

*Aedes aegypti* was found breeding at 59 township and island locations (Table 1). The northern-most was Saibai Island in the Torres Strait (3 kilometres south of the Papua New Guinea mainland), the western-most was Mount Isa, and the southern-most was Roma (Figure). In addition, *Aedes aegypti* adults (but not larvae) were collected in the townships of Cardwell and Mission Beach, and identified by the author. A number of persons identified the larval material collected during the surveys so there is a slight possibility that some larvae were incorrectly identified as *Aedes aegypti*.

Table. Locations positive for *Aedes aegypti* breeding in Queensland, 1 January 1990 to 30 June 1992

LOCAL AUTHORITY AREA	TOWNSHIP	SUBURB(S)	SURVEY DATE(S)	LOCAL AUTHORITY AREA	TOWNSHIP	SUBURB(S)	SURVEY DATE(S)			
Belyando	Clermont		20.2.92	Gladstone	Gladstone		1991			
Boulia	Boulia		1.6.91	Hinchinbrook	Ingham		29-30.7.91			
Bowen	Bowen		12.7.91				15.4.92			
			May 92	Johnstone	Innisfail		15.8.90			
	Collinsville		May 92	Livingstone	Malborough		1991			
	Queens Beach		April 92	Mackay City	Mackay	South Mackay	20.5.91			
Burdekin	Ayr		4.3.92			West Mackay	20.5.91			
	Home Hill		21.8.91	Mareeba	Mareeba		26-28.9.90			
Cairns City	Cairns	Bungalow	6.4.90	McKinlay	Julia Creek		29.5.91			
			9.4.90	Mt. Isa City	Mt. Isa		2-3.6.91			
		Cairns North	June 92	Mt. Morgan	Mt. Morgan		1991			
		Edge Hill	24.7.91	Mulgrave	Cairns	Bayview Heights	23.4.90			
			May 92				May 92			
			June 92				Freshwater	23.4.90		
		Manoora	May 92				May 92			
			June 92				Redlynch	May 92		
		Manunda	June 92				Stratford	May 92		
		Parramatta Pk.	17.4.90				Gordonvale	23.4.90		
			May 92				Trinity Beach	23.4.90		
			June 92				Peak Downs	Capella	15-23.2.90	
		Westcourt	17-18.4.90				Richmond	Richmond		28.5.92
		June 92	Rockhampton				Rockhampton		15-23.2.90	
Whitfield	June 92	Roma Town	Roma					June 92		
Cardwell	Cardwell		June 92				Sarina	Sarina Beach		28.5.92
	Mission Beach		June 92				Thuringowa	Townsville	Kirwan	22.5-29.6.92
	Tully		May 92	Condon	22.5-29.6.92					
Cloncurry	Cloncurry		30.5.91	Cordelia Estate	22.5-29.6.92					
			19.5.91	Rasmussen	22.5-29.6.92					
Dalrymple	Charters Towers		1990	Torres	Badu Is.		24-26.9.90			
	Mingela		1990			Coconut Is.	6.5.91			
			12.12.91			Darnley Is.	1-3.3.90			
			17.12.91				27-28.8.91			
	Pentland		May 92			Duaun Is.	27.9.90			
			20.3.91			Hammond Is.	30.7-5.8.90			
	May 92	Horn Is.	30.7-5.8.90							
Ravenswood		1990	Mabuiag Is.			19-20.8.91				
Douglas	Mossman		April-May 92			Moa Is.	21-24.9.90			
	Newell		April-May 92			Murray Is.	3.10.90			
	Port Douglas		17.3.92			Prince of Wales Is.	30.7-5.8.90			
			April-May 92			Saibai Is.	27.4-14.5.90			
	Wonga Beach		April-May 92			Sue Is.	6.5.91			
Duaringa	Duaringa		15-23.2.90			Thursday Is.	28.4-1.5.90			
Emerald	Emerald		15-23.2.90		30.7-5.8.90					
Etheridge	Georgetown		July 91		11-13.12.90					
Flinders	Hughendon		21.3.91		4-6.12.91					

Table. Locations positive for *Aedes aegypti* breeding in Queensland, 1 January to 30 June 1992, continued

LOCAL AUTHORITY AREA	TOWNSHIP	SUBURB(S)	SURVEY DATE(S)	LOCAL AUTHORITY AREA	TOWNSHIP	SUBURB(S)	SURVEY DATE(S)		
Torres	Thursday Is.		19-20.5.92	Townsville City	Townsville	Melton Hill	16.6.90		
			4-30.6.92			Mundingburra	1990		
	Yam Is.	22-23.4.91				1.11.91			
	Yorke Is.		6.10.90				4.11.91		
		4-6.2.91				6.11.91			
Townsville City	Townsville	Aitkenvale	9.5-30.6.92						9.5-30.6.92
		Belgian Gardens	1990				Murray	9.5-30.6.92	
			9.5-30.6.92				Mysterton	9.5-30.6.92	
		Cranbrook	26.2.91				North Ward	1990	
			9.5-30.6.92					14.10.91	
		Currajong	19.7.90					9.5-30.6.92	
			27.2.91				Ooonooba	9.5-30.6.92	
			9.5-30.6.92				Pallarenda	9.5-30.6.92	
		Douglas	9.5-30.6.92				Pimlico	30.10.91	
		Garbutt	1990			9.5-30.6.92			
			9.5-30.6.92		Railway Estate	9.5-30.6.92			
			30.10.91		Rosslea	9.5-30.6.92			
		Gulliver	9.5-30.6.92		South Townsville	9.5-30.6.92			
		Heatley	9.5-30.6.92		Vincent	9.5-30.6.92			
Hermit Park	1990		West End	9.5-30.6.92					
	9.5-30.6.92		Wulguru	9.5-30.6.92					
Hyde Park	27.2.91		Magnetic Is.	9.5-30.6.92					
	9.5-30.6.92								
	9.5-30.6.92		Whitsunday	Proserpine	5.6.91				
	9.5-30.6.92		Winton	Winton	31.5.91				

## Discussion

The most recent map of the distribution of *Aedes aegypti* in Queensland was published in 1984<sup>2</sup>. The main differences between that map and the one presented here are an extension of the western-most mainland distribution from Cloncurry to Mount Isa (a distance of approximately 110 kilometres), negative survey results for Mornington Island, and a reduction in the southern-most distribution from Dirranbandi north north-east to Roma (a distance of approximately 230 kilometres).

These and other distributional differences may be imaginary, as they may reflect the relatively limited number of larval surveys completed in Queensland for the time period involved.

## Acknowledgements

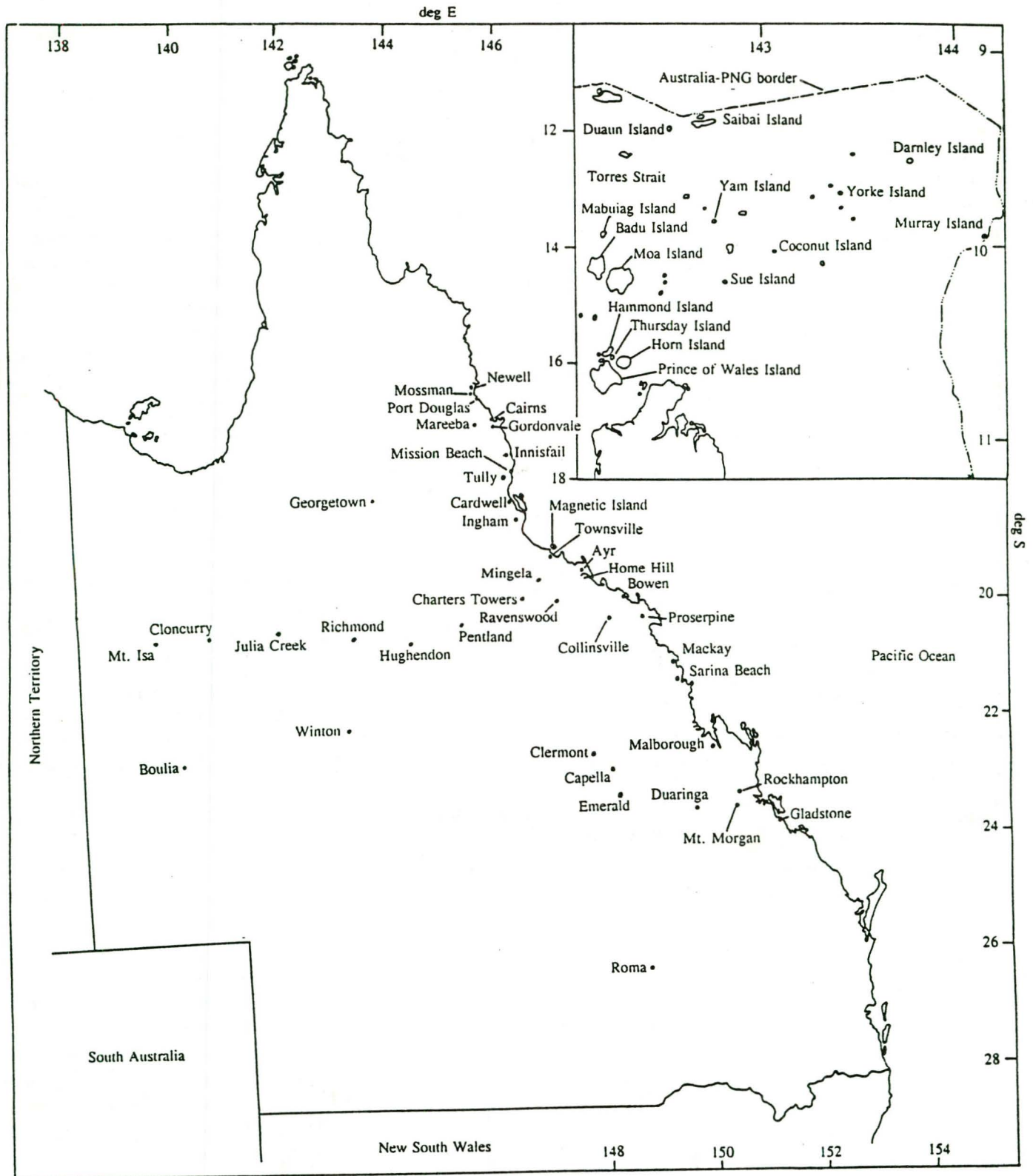
The results of various *Aedes aegypti* larval surveys were kindly supplied by Dr Pippi Mottram, Medical Entomologist, Queensland Health (for Queensland south from Sarina Beach), Dr Brian Kay, Medical Entomolo-

gist, Queensland Institute of Medical Research (certain Townsville surveys and some townships to the west), and numerous Environmental Health Officers and a vector control officer from both Queensland Health and local government authorities.

## References

- Lee, DJ, Hicks, MM, Griffiths, M, Debenham, ML, Bryan, JH, Russell, RC, *et al.* Genus *Aedes*, subgenera *Scutomyia*, *Stegomyia*, *Verrallina*. In: ML Debenham (ed), *The Culicidae of the Australian Region*. Commonwealth Department of Health, School of Public Health and Tropical Medicine, Monograph Series, Entomology Monograph No.2. Canberra: Australian Government Publishing Service. 1987.
- Kay, BH, Barker-Hudson, P, Stallman, ND, Wiemers, MA, Marks, EN, Holt, PJ, *et al.* Dengue fever: reappearance in Northern Queensland after 26 years. *Med J Aust* 1984;140:264-8.

Figure. The distribution of *Aedes aegypti* breeding in Queensland, 1 January 1990 to 30 June 1992<sup>1</sup>



1. Note that Queens Beach, Wonga Beach and Trinity Beach are not marked on the map, due to their close proximity to Bowen, Mossman and Cairns, respectively.

## ROSS RIVER VIRUS DISEASE AND BARMAH FOREST VIRUS DISEASE NOTIFICATIONS, VICTORIA, SUMMER 1991-1992

(Nadia Marcon, Environmental Health Officer, Health Department Victoria, reprinted from Victorian Arbovirus Task force Buzzword, Number 6, July 1992)

### Ross River Virus Disease

A total of 133 cases of Ross River virus disease were notified for the summer of 1991-92, compared to 478 cases (Table 1) notified to the Health Department Victoria for the previous summer (1990-91).

Two thirds of this summer's cases were acquired in Region 3 (Loddon/Campaspe/Mallee area) and Region 5 (Gippsland area), and the highest rate of infection occurred in Region 3.

There was a peak in cases between January and May 1992 (12.9%) (see Table 2) with the largest number of cases recorded for March, later than the January peak which occurred in the 1990-91 season.

Age-specific incidence rates of Ross River virus disease (Figure) were highest in the 40-49 age group. In 1990-91, the highest rates were recorded for the 30-39 year age group.

This decrease in case numbers of Ross River virus disease could be attributed to below average rainfall throughout Victoria this summer. The number of cases in Region 3 can be traced to mosquito breeding in surplus irrigation water.

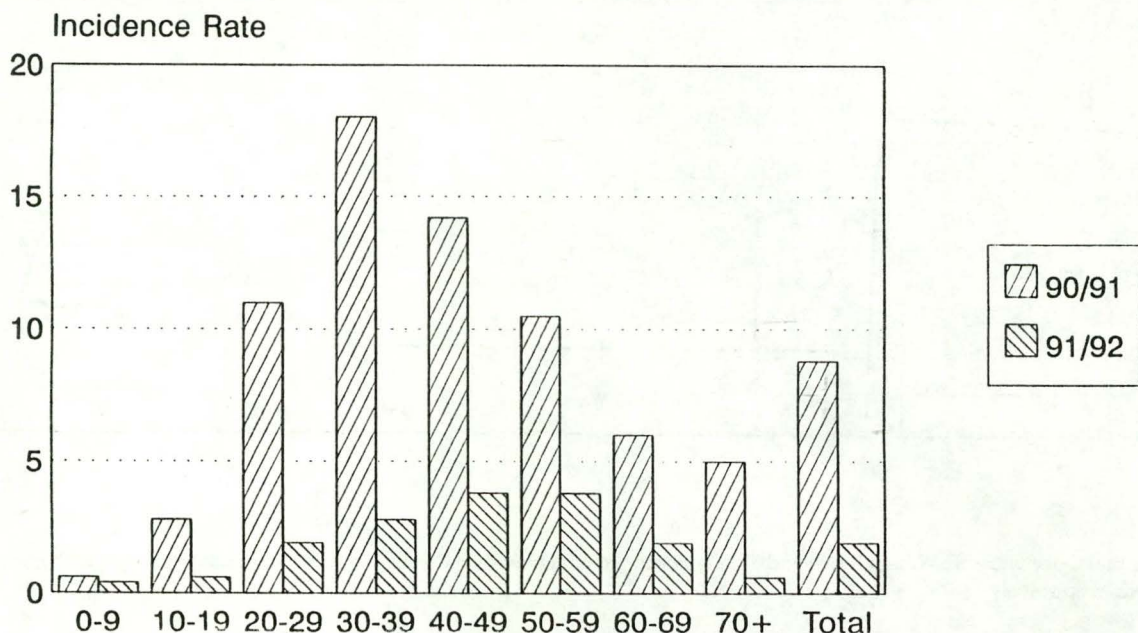
Detailed location information for the notified cases is presented in Table 3. Twenty-three per cent of cases were acquired outside Victoria, and 54% of those were acquired in the Riverina area of New South Wales.

Table 1. Ross river virus disease notifications, Victoria, 1990-91 and 1991-92 summers, by Region of acquisition

Region		1990-1991			1991-1992		
Number	Name	Number	Percentage	Rate <sup>1</sup>	Number	Percentage	Rate <sup>1</sup>
0	Outside Victoria	148	31.0		31	23.3	
1	Barwon/South Western	0	0	0	3	2.3	<1.0
2	Central Highlands/Wimmera	7	1.5	3.9	2	1.5	1.1
3	Loddon/Campaspe/Mallee	208	43.5	84.5	69	51.9	16.4
4	Goulburn/North Eastern	53	11.1	21.8	6	4.5	2.0
5	Gippsland	45	9.4	20.4	20	15.0	7.7
6, 7, 8	Metropolitan	8	1.6	<1.0	2	1.5	0
Unknown		9	1.9				
Total		478	100	7.3	133	100	1.5

1. Cases per 100,000 population

Figure. Ross River virus disease notifications, Victorian residents, incidence rates per 100,000 population, by age group, 1990-91 and 1991-92 summers



**Table 2. Ross River virus disease notifications, Victoria, 1990-91 and 1991-92 summers, by month of onset**

Month of Onset	1990-91		1991-92	
	Number	Percentage	Number	Percentage
July	4	0.8	0	0
August	1	0.2	2	1.5
September	3	0.6	3	2.3
October	8	1.7	1	0.8
November	6	1.3	7	5.3
December	72	15.1	7	5.3
January	196	41.0	21	15.8
February	88	18.4	21	15.8
March	33	6.9	29	21.8
April	40	8.4	26	19.5
May	17	3.6	16	0
June	10	2.1	0	0
Total	478	100	133	100

**Table 3. Ross River virus disease notifications, Victoria, 1991-92, by location of acquisition**

Location	Number of Cases	Location	Number of Cases	Location	Number of Cases
Outside Victoria		TOTAL (B/SW)	3	Kyabram	2
Albury, NSW	1	Central Highlands/Wimmera		Shepparton East	1
Balranald, NSW	1	Ballarat	1	Violet Town	2
Barham, NSW	1	Pomona	1	TOTAL	6
Barram, NSW	1	TOTAL	2	Gippsland	
Bribie Island, Qld	1	Loddon/Campaspe/Mallee		Bairnsdale	5
Buronga, NSW	4	Appin South	1	Eagle Point	1
Casuarina, NT	1	Cabarita	1	Lake Tyers	1
Curlwaa, NSW	1	Cardross	1	Lake Tyers Beach	1
Dareton, NSW	2	Carisbrook	1	Lakes Entrance	1
Euston, NSW	1	Cohuna	1	Lindenow	1
Fraser Island, Qld	1	Colignan	1	Loch	1
Gol Gol, NSW	1	Echuca	1	Mallacoota	1
Merimbula, NSW	1	Irymple	8	Metung	3
Queensland, nfs <sup>1</sup>	2	Kerang	2	Mossiface	1
Trentham Cliffs, NSW	1	Merbein	3	Nowa Nowa	1
Warwick, Qld	1	Mildura	41	Orbost	1
Wentworth, NSW	3	Nichols Point	1	Paynesville	1
Unknown	4	Red Cliffs	5	Venus Bay	1
TOTAL	28	Robinvale	2	TOTAL	20
Barwon/South Western		Swan Hill	1	Metropolitan	
Heywood	1	TOTAL	70	Balnarring	1
Koroit	1	Goulburn/North Eastern		Hastings	1
Port Fairy	1	Cobram	1	TOTAL	2

1. nfs not further specified

**Table 4. Barmah Forest virus disease notifications Victoria, summer 1991-92, by Region and location of acquisition**

Region of Acquisition		Number (location)	Percentage
Number	Name		
0	Outside Victoria	1 (Gol Gol, NSW)	6.7
2	Central Highlands/Wimmera	1 (Nhill)	6.7
3	Loddon/Campaspe/Mallee	12 (Mildura 11, Irymple 1)	80.0
5	Gippsland	1 (Painesville)	6.7
TOTAL		15	100

**Table 5. Barmah Forest virus disease notifications, Victoria, summer 1991-92, by month of onset**

Month of Onset	Number of cases	Percentage
January	2	13.3
February	0	0
March	5	33.3
April	6	40.0
May	2	13.3
TOTAL	15	100

### Barmah Forest Virus Disease

Barmah forest virus is a distinctive alphavirus which appears likely to emerge as a common human infection and pathogen in tropical and temperate Australia. Clinically the disease is often mistaken for Ross River virus disease and patients with symptoms but no positive test for Ross River virus disease should be tested for Barmah Forest virus disease.

During this summer period the Health Department Victoria was notified of 15 cases (Table 4) of Barmah Forest virus disease. Twelve (80%) of these cases were acquired in Region 3 (Loddon-Campaspe/mallee), which also had the highest number of Ross River virus infections recorded this summer.

Only 1 case was acquired outside Victoria. Five cases had onset in March, and six in April (Table 5).

## AUSTRALIAN HIV SURVEILLANCE REPORT, VOLUME 8 NUMBER 7

The National Centre in HIV Epidemiology and Clinical Research reports that as of 30 June 1992, a total of 16,337 diagnoses of HIV infection and 3,368 cases of AIDS had been reported in Australia. For the period 1 June to 30

June 1992, 3 new cases of AIDS and 93 new diagnoses of HIV infection were reported.

The following tables provide more detailed information on a State/Territory basis (Tables 1 and 2).

**Table 1. New diagnoses of AIDS and deaths from AIDS occurring during the period 1 June to 30 June 1992 and cumulative to 30 June 1992, by sex and State/Territory in which diagnosis was made**

State/ Territory	June 1992		Cumulative to 30 June 1992					
	Total Cases <sup>1</sup>	Total Deaths <sup>1</sup>	Cases			Deaths		
			Male	Female	Total	Male	Female	Total
ACT	0	0	41	2	43	28	1	29
NSW <sup>2</sup>	1	11	1,966	63	2,031	1,289	39	1,329
NT	0	1	11	0	11	6	0	6
Qld	0	1	258	9	267	172	7	179
SA	2	1	128	7	135	74	2	76
Tas	0	0	18	1	19	13	1	14
Vic	0	13	683	14	699	485	9	495
WA	0	0	155	8	163	96	3	99
Total	3	27	3,260	104	3,368	2,163	62	2,227

1. All males unless otherwise specified.

2. Four persons (2 NSW, 2 Victoria) whose sex was reported as transsexual are included in the total cumulative cases. Two of those persons (1 New South Wales, 1 Victoria) have died (1 in June 1992) and are included in the total cumulative deaths.

**Table 2. Number of new diagnoses of HIV infection in the period 1 June to 30 June 1992, and cumulative diagnoses since the introduction of HIV antibody testing to 30 June 1992, by sex and State/Territory**

State/ Territory	June 1992	Cumulative to 30 June 1992			
	Total <sup>1</sup>	Male	Female	Sex not reported	Total <sup>4</sup>
ACT	1	131	7	0	138
NSW <sup>2</sup>	53	8,518	438	2,032	10,993
NT	0	59	6	0	65
Qld	10	1,110	55	0	1,169
SA	5	463	33	0	496
Tas	0	60	3	0	63
Vic	23	2,636	105	65	2,813
WA	1	566	33	0	600
<b>Total<sup>3</sup></b>	<b>93</b>	<b>13,543</b>	<b>680</b>	<b>2,097</b>	<b>16,337</b>

1. All males unless otherwise specified.

2. Total for NSW of June includes 6 persons whose sex was not reported and 3 females.

3. Total for June includes 6 persons whose sex was not reported and 3 females.

4. Seventeen persons (5 New South Wales, 4 Queensland, 7 Victoria and 1 Western Australia) whose sex was reported as transsexual are included in the total.

The cumulative figures are subject to retrospective revision, so there may be discrepancies between the number of new cases for the reporting month and the

increment in the cumulative figure from the previous report.

## HIV INFECTIONS IN AUSTRALIA: DISTRIBUTIONS BY AGE AND SEX AND BY EXPOSURE CATEGORY

(Based on Australian HIV Surveillance Report, Volume 8, Supplement 3, July 1992)

The National Centre in HIV Epidemiology and Clinical Research has compiled the following data on exposure category and age and sex distribution of persons diagnosed with HIV in Australia.

As at 30 June 1992, exposure category had been recorded for 9,678 of the 16,337 cases of HIV infection that have been diagnosed (59.2%). Of these, 82.4% had male homosexual/bisexual contact, 5.2% had heterosexual contact and 5.3% had injecting drug use as the recorded exposure category. A total of 4.2% had 'haemophilia/coagulation disorder' or 'receipt of blood transfusion, blood components or tissue': 3.5% of cases

in adults/adolescents and 74% of cases in children (Table 1).

Of the total of 16,337 cases diagnosed to the end of June 1992 in Australia, 13,543 (82.9%) were known to be in males. A total of 29.1% of cases have occurred in persons in the age group 20-29 years, and 27.3% in the age group 30-39 years (Table 2).

Excluding persons whose sex was not reported and persons whose sex was reported as transsexual, there were 1,404 new diagnoses of HIV infection from 1 July 1990 to 30 July 1992, and 1,309 new diagnoses from 1 July 1991 to 30 June 1992.

**Table 1. New diagnoses of HIV infection for which exposure category was reported, by sex and exposure category, cumulative to 30 June 1992 and for two previous 12 month periods**

EXPOSURE CATEGORY	1 July 1990 to 30 June 1991		1 July 1991 to 30 June 1992		Cumulative to 30 June 1992 <sup>1</sup>			
	Male	Female	Male	Female	Male	Female	Total	%
<b>Adults/adolescents (13 years and older at diagnosis)</b>								
Male homosexual/bisexual contact	828	-	717	-	7,974	-	7,974	82.4
Male homosexual/bisexual contact and injecting drug use	28	-	29	-	262	-	262	2.7
Injecting drug use	44	10	42	8	365	125	511	5.3
Heterosexual	5	3	12	3	37	30	69	0.7
Not further specified	39	7	30	5	328	95	442	4.6

Table 1. New diagnoses of HIV infection for which exposure category was reported, by sex and exposure

EXPOSURE CATEGORY	1 July 1990 to 30 June 1991		1 July 1991 to 30 June 1992		Cumulative to 30 June 1992 <sup>1</sup>			
	Male	Female	Male	Female	Male	Female	Total	%
Heterosexual contact:	68	44	81	36	309	186	500	5.2
Sex with injecting drug user	1	1	1	3	3	6	9	
Sex with bisexual male	-	1	-	6	-	9	9	
From Pattern-II country	1	0	5	5	14	8	22	
Sex with person from Pattern-II country	1	3	5	1	6	4	10	
Sex with person with medically-acquired HIV	0	0	0	1	0	2	2	
Sex with HIV-infected person, exposure not specified	2	1	3	3	7	4	11	
Not further specified	63	38	67	17	279	153	437	
Haemophilia/coagulation disorder	1	0	4	0	190	2	192	2.0
Receipt of blood transfusion, blood components, or tissue	14	4	5	4	90	56	146	1.5
<b>Total Adults/Adolescents</b>	<b>983</b>	<b>58</b>	<b>878</b>	<b>48</b>	<b>9,190</b>	<b>369</b>	<b>9,585</b>	<b>99.1</b>
<b>Children (under 13 years at diagnosis of HIV)</b>								
Mother with/at risk for HIV infection	2	2	4	1	14	9	24	0.2
Haemophilia/coagulation disorder	2	0	0	0	51	0	51	0.5
Receipt of blood transfusion, blood components, or tissue	1	0	0	0	12	4	18	0.2
<b>Total Children</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>77</b>	<b>13</b>	<b>93</b>	<b>0.9</b>
<b>TOTAL</b>	<b>988</b>	<b>60</b>	<b>882</b>	<b>49</b>	<b>9,267</b>	<b>382</b>	<b>9,687</b>	<b>100</b>
<b>OTHER/UNDETERMINED<sup>2</sup></b>	<b>318</b>	<b>38</b>	<b>351</b>	<b>27</b>	<b>4,276</b>	<b>298</b>	<b>6,642</b>	

1. Seventeen persons (5 NSW, 4 Queensland, 7 Victoria, 1 Western Australia) whose sex was reported as transsexual are included in the cumulative total column.

2. Other/undetermined cases was excluded from the calculation of the percentage of cases attributed to each exposure category.

Table 2. New diagnoses of HIV infection by sex and age group, cumulative to 30 June 1992, and for two previous 12 month periods

AGE GROUP (YEARS)	1 July 1990 to 30 June 1991		1 July 1991 to 30 June 1992		Cumulative to 30 June 1992 <sup>1</sup>			
	Male	Female	Male	Female	Male	Female	Total <sup>2</sup>	%
0-2	4	2	7	3	39	13	54	0.3
3-12	4	0	3	0	69	3	74	0.5
0-12	8	2	10	3	108	16	128	0.8
13-19	23	3	18	2	311	33	352	2.1
20-29	484	38	409	35	4,375	266	4,751	29.1
30-39	418	25	405	20	4,213	138	4,455	27.3
40-49	223	11	226	7	1,887	43	1,969	12.0
50-59	67	4	69	4	525	20	551	3.4
60+	16	2	21	3	145	34	180	1.1
Unknown	67	13	75	2	1,979	130	3,951	24.2
<b>TOTAL</b>	<b>1,306</b>	<b>98</b>	<b>1,233</b>	<b>76</b>	<b>13,543</b>	<b>680</b>	<b>16,337</b>	<b>100</b>

1. Seventeen persons (5 NSW, 4 Queensland, 7 Victoria, 1 Western Australia) whose sex was reported as transsexual are included in the cumulative total column.

2. Cumulative total column includes the 2,097 persons whose sex was not reported.

## OVERSEAS BRIEFS

In the last two weeks, the following information has been supplied by the World Health Organization.

### Cholera Update

Newly infected areas are Regencies within the East Nusa Tenggara, Lampung and North Sulawesi Provinces of Indonesia. Districts within Gaza, Sofala and Zambezia Provinces in Mozambique, and Regencies within Java Barat, Kalimantan Selatan, Maluku and

Sumatera Provinces within Indonesia, have been removed from the list of infected areas.

Mongolia and Romania have reported their first cases in recent times, in July and August respectively. Other countries reporting cases for July and August are Angola, Argentina, Belize, Bolivia, Brazil, Cambodia, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Iraq, Malawi, Mozambique, Nepal, Nicaragua, Panama, Peru, Tuvalu and Venezuela.

## CDI NOTICE TO READERS

### A Case of Transfusion-Transmitted Malaria

A clarification is required for the article 'A Case of Transfusion-Transmitted Malaria', published in *CDI* 1992;16:364-365. The affected woman was a patient of

Dr John Stickland of Ballarat, Victoria, who with Dr Anthony Roberts and Mrs Voi Williams, has submitted a letter to the *Medical Journal of Australia* regarding the case.

## COMMUNICABLE DISEASES SURVEILLANCE

### Laboratory Reporting Schemes

There were 2,188 reports received in the *CDI* Virology and Serology Reporting Scheme this fortnight (Tables 6, 7 and 8), and 285 sterile sites reports for LabDOSS (Table 2). This fortnight we welcome the Northern Tasmanian Pathology Service at Launceston General Hospital as a contributor to the Laboratory Reporting Schemes.

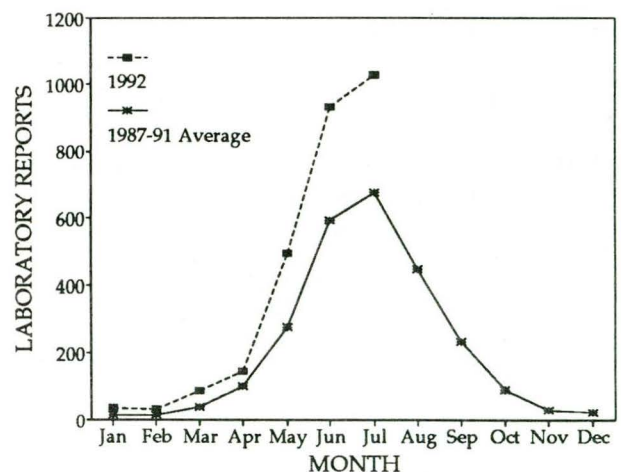
- There were 143 reports of influenza this fortnight. A total of 115 were untyped influenza A (26 isolations, 22 antigen detections and 88 serological diagnoses - 76 single high titres, 7 four-fold changes, 5 IgM), 12 of influenza A H<sub>3</sub>N<sub>2</sub> (12 isolations and 11 antigen detections), 2 of influenza A H<sub>1</sub>N<sub>1</sub> (1 by isolation and antigen detection and 1 single high titre) and 14 of influenza B (2 isolations, and 12 serological diagnoses - 11 single high titres, 1 four-fold change).

Thirty-five reports of untyped influenza A this fortnight were in persons over the age of 65 years, as were 1 report of influenza A H<sub>1</sub>N<sub>1</sub> and 1 report of influenza B. This brings the year's total for persons over the age of 65 years to 233.

Most reports this fortnight were from Queensland, South Australia and Western Australia. One case of meningitis was reported, in a 29 year old male.

- ed • Respiratory syncytial virus was report for a total of 208 patients this fortnight, bringing the total for the year to 3,172, more than for any year since the

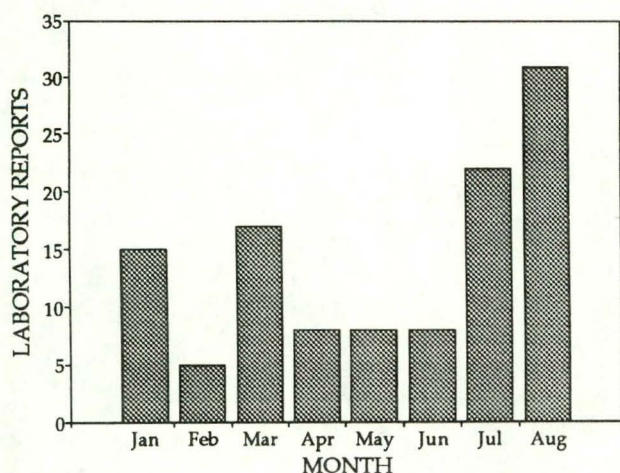
Figure 1. Respiratory syncytial virus laboratory reports, 1992 and 1987-91 average, by month of specimen collection



Reporting Schemes began. (A total of 144 reports have been contributed this year by laboratories that are new to the Scheme, however, there have still been more than 400 more reports this year than in 1990, the year in which the most reports had been received prior to this year.) Patients this fortnight included a female aged less than 1 year who also had *Streptococcus pneumoniae* isolated from blood, and a male aged less than 1 year who had both *S. pneumoniae* and *Haemophilus influenzae* isolated from blood.

- There were 262 reports of **rotavirus** this fortnight. The number of reports of this virus this year has been about the same as the average for recent years. One patient this fortnight had both rotavirus and other small virus-like particles identified in faeces samples.
- A total of 112 reports of *Mycoplasma pneumoniae* infection were received this fortnight, bringing the total for the year to 620. Forty-seven reports were from New South Wales and 43 were from Queensland. Encephalitis was the reported symptom for a 11 year old male, who had high titres in CSF and serum.
- Fourteen reports of **measles** were received this fortnight. Nine were from South Australia.
- **Mumps** was reported for 5 patients. Meningitis was the reported symptom for a 42 year old female.
- There were 24 reports of **rubella** this fortnight, bringing the total for August to 31, more than for any month since November last year (Figure 2). Most were from laboratories in Western Australia and Queensland, and most (16) were in males. There were, however, 6 reports in females of reproductive age (24 years, 28 years, 34 years, 38 years, 40 years, 40 years).

Figure 2. Rubella laboratory reports, 1992, by month of specimen collection



- **Ross River virus** infection was reported for 25 patients this period. Three were from New South Wales laboratories (specimen collection dates July and August), and 22 from Queensland (mainly July and August).
- There were a further 39 reports of **dengue 2**. All were from the Townsville area and had specimen collection dates in June or July.
- Two reports of untyped **flavivirus** were received. One was reported to be probably **Japanese encephalitis virus**, but this is awaiting confirmation. The patient was a 34 year old Korean resident who

had travelled in South-east Asia before coming to Australia. The reported symptom was encephalitis, and the diagnosis was made by demonstration of IgM.

This is only the second report of Japanese encephalitis virus that has been made to the CDI Laboratory Reporting Schemes. The other was in 1982, and was a 20 year old person who had encephalitis following a trip to Bali. Only a further 2 cases of Japanese encephalitis are known to have been diagnosed in Australia. The virus is endemic in Asia and parts of the Western Pacific.

- There were 135 reports of **hepatitis B**. Included was a 27 year old female who was diagnosed in pre-surgery screening.
- **Hepatitis C** was reported for 132 patients. A history of injecting drug use was reported for 18 patients, 1 patient was a haemophiliac, 1 had a history of alcohol and amphetamine use, 1 had tattoos covering his body, and 1 was diagnosed following a needle stick injury.
- There were 107 reports of **cytomegalovirus** infection. Included were 10 HIV positive patients (1 also with *Campylobacter* and *Mycobacterium avium* complex infections), 5 with a history of transplant (2 heart-lung, 3 renal), 1 who was pregnant, and primary infections were reported in a father (31 years) and daughter (2 years) pair. Four congenital infections were reported, and cardiac symptoms were reported for a 48 year old male patient.
- **Varicella-zoster virus** infection was reported for 24 patients, including 12 in Queensland and 8 in Western Australia. Meningitis and encephalitis were reported for a 78 year old female patient, who had IgM to the virus in a CSF sample.
- **Q fever** was reported for 15 patients, all males aged between 18 years and 46 years. Most were from rural areas of New South Wales and Queensland, and two were described as meatworkers.
- **Syphilis** was reported for 20 patients. Included was a pregnant female, aged 19 years.
- A case of *Plasmodium malariae* infection was reported in a male in the 15 to 24 years age group. The patient was from West Irian and had been fishing illegally in the Torres Strait.
- There were 3 cases of *Haemophilus influenzae* type b infection reported. Epiglottitis was the reported symptom for 2, females in the age group 1 to 4 years and 5 to 14 years (blood isolates), and CNS symptoms were reported for the third, a male in the age group 1 to 4 years (CSF isolate).
- One report of **methicillin-resistant *Staphylococcus aureus*** was received. The patient was a male over the age of 75 years with septic arthritis, and the organism was isolated from joint fluid and blood.

**Table 1. Australian Sentinel Practice Research Network, Weeks 36 and 37, 1992**

Condition	Week 36, to 6 September 1992		Week 37, to 13 September 1992	
	Reports	Rate per 1000 encounters	Reports	Rate per 1000 encounters
Influenza	84	12.0	55	10.7
Measles	0	0	0	0
Mumps	0	0	0	0
Rubella	3	0.4	3	0.6
Pertussis	0	0	1	0.2
Genital herpes	6	0.9	3	0.6
Gastroenteritis	89	12.7	62	12.1

- Bone/joint disease was also the reported symptom for a male in the 65 to 74 years age group who was reported as having a *Corynebacterium Group A* infection. The organism was isolated from joint fluid.

**Australian Sentinel Practice Research Network**

The Australian Sentinel Practice Research Network collected data from 6,988 patient encounters in Week 36 and 5,126 patient encounters in Week 37 (Table 1). The rate of reporting of influenza has continued to fall. Gastroenteritis continues to be reported at a rate of between 7 and 13 reports per 1,000 encounters, as for the each week since the end of May.

**Rubella Outbreak In Victoria**

Victoria is currently experiencing an outbreak of rubella with 314 cases notified up to 10 September 1992 compared to 181 cases for the whole year in 1991. Approximately one-third of these notifications have laboratory confirmation of the diagnosis. Anecdotal

evidence suggests that the true number of cases may be much higher as a number of medical practitioners have not notified cases they have seen.

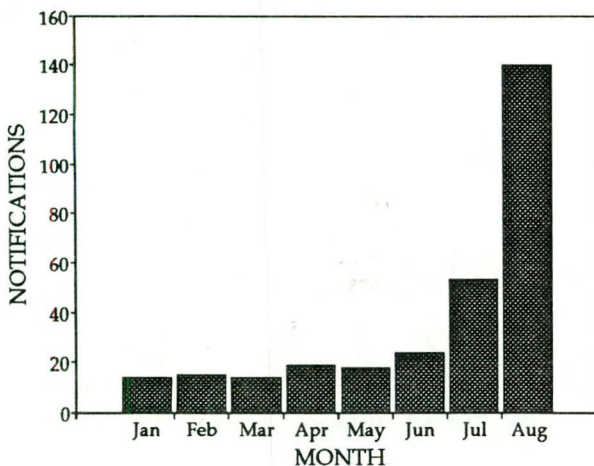
Most cases have had month of onset in August, reflecting the the large increase in notifications noted in that month (Figure 3).

Males outnumber females in the age groups 10-19, 20-29 and 30-39 years (Figure 4) with the overall male:female ratio being approximately 2:1.

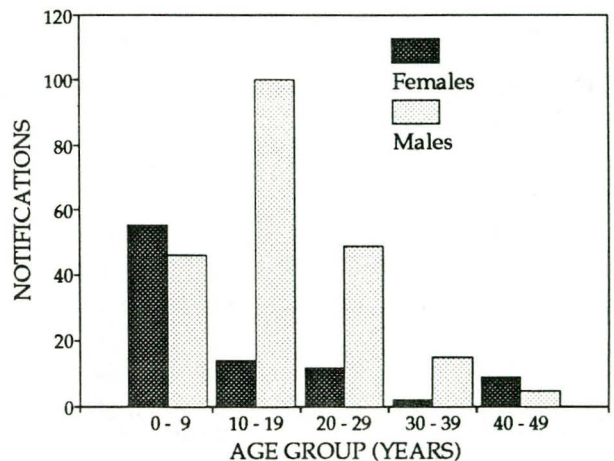
The overall notification rate has been 7.1 cases per 100,000 (compared to 4.1 cases per 100,000 in 1991). This has varied from 1.2/100,000 in Region 1 (Barwon/South Western) to 26.3/100,000 in Region 4 (Goulburn/North Eastern)(Figure 6). Country municipalities showing high notification rates have been Ballan (132/100,000) and Donald (280/100,000) in Region 2 (Central Highlands/Wimmera); Mildura City and Shire (40/100,000) in Region 3 (Loddon/Campaspe/Mallee); and Nathalia (646/100,000) and Numurkah (311/100,000) in Region 5 (Gippsland).

(John Carnie, Infectious Diseases Unit, Health Department Victoria)

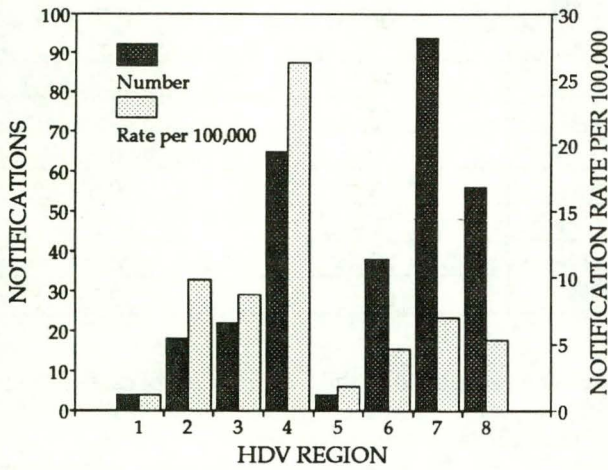
**Figure 3. Rubella notifications, Victoria, 1992, by month of onset**



**Figure 4. Rubella notifications, Victoria, 1992, by age group and sex**



**Figure 5. Rubella notifications, Victoria, 1992, cases and rates per 100,000 population, by Region<sup>1</sup>**



1. Regions 1 to 5 are explained in the text. Regions 6, 7 and 8 are the Metropolitan region.

**Sterile Sites Surveillance (LabDOSS)**

Data for August have been provided by nine laboratories, and Dr TB Lynch, Pathologist, Rockhampton is a new addition to the LabDOSS system.

A total of 285 reports have been included for this report (Royal Prince Alfred 54, Liverpool Hospital 70, Concord Hospital 44, Royal North Shore Hospital 63, Northern Tasmania Pathology Service 16, Central Queensland Pathology Laboratory 2, Nambour Hospital 14, Toowoomba Hospital 9 and TB Lynch Pathologists Rockhampton 13).

- Sixty-six isolates of *Staphylococcus aureus* were reported during this period. Of these, nine isolates were further identified as methicillin resistant *Staphylococcus aureus* (MRSA) and were reported by three laboratories (Liverpool Hospital 2, Concord Hospital 6 and Nambour Hospital 1). Eight isolates were obtained from patients aged between 70 and 90 years.
- Liverpool Hospital reported a case of enteric fever in a 12 year old female. *Salmonella Typhi* was isolated from a blood sample of this patient.
- Two cases of *Plasmodium vivax* were reported in males aged 31 years and 36 years, following travel to the Solomon Islands.

Organisms reported 5 or more times from blood are detailed in Table 2. Other blood isolates not included in Table 3 are:

**Gram positive:** 2 *Streptococcus* Group G, 2 *Streptococcus milleri*, 1 *Streptococcus viridans*, 3 *Streptococcus sanguis*, 1 *Corynebacterium* Group JK, 1 *Corynebacterium* species, 1 *Staphylococcus saprophyticus*, 1 *Enterococcus* species.

**Gram negative:** 3 *Klebsiella* species, 1 *Klebsiella oxytoca*, 1 *Enterobacter aerogenes*, 3 *Enterobacter cloacae*, 1 *Enterobacter* species, 2 *Serratia marcescens*, 3 *Proteus mirabilis*, 3 *Proteus vulgaris*, 1 *Xanthomonas maltophilia*, 1 *Citrobacter freundii*, 1 *Citrobacter* species, 1 *Aeromonas hydrophila*, 2 *Pseudomonas* species, 2 *Neisseria meningitidis*, 1 *Salmonella* species.

**Anaerobes:** 1 *Bacteroides* species, 1 *Bacteroides thetai*, 1 *Clostridium* species.

**Fungi:** 2 *Candida* species, 1 *Candida albicans*.

**Table 2. LabDOSS reports of blood isolates for August 1992**

Organism	Total <sup>1</sup>	Clinical Information						Risk Factors				
		Lower respiratory	Endocarditis	Gastrointestinal	Urinary Tract	Bone/Joint	Skin	Surgery	Immunosuppressed	IV line	Perinatal	Neonatal
<i>Staphylococcus aureus</i>	54	2	2	1		4	13	5	12	6		
<i>Staphylococcus epidermidis</i>	25			1			5	2	4	13		4
<i>Staphylococcus coagulase negative</i>	5		1	1		1		1	1	1		
<i>Streptococcus pneumoniae</i>	23	12					1		1			
<i>Enterococcus faecalis</i>	9			2	2		1	2	2	1		1
<i>Escherichia coli</i>	48	1		7	14		1	6	15			
<i>Bacteroides fragilis</i>	5			2			1					
<i>Haemophilus influenzae</i> type b	5	1		1	1				1			
<i>Klebsiella pneumoniae</i>	8	1			3		1		1			
<i>Pseudomonas aeruginosa</i>	9	1		2	1		1	3	1	3		2

1. Only organisms with 5 or more reports are included in this table.

### CSF Isolates and Meningitis Reports

There were 15 reports of meningitis during this period. *Haemophilus influenzae* type b was isolated from a 2 year old male child. There was an isolate of *Klebsiella pneumoniae* reported from a 54 year old female following surgery for multiple trauma injury. *Neisseria meningitidis* was isolated from 2 cases. One isolate was from a 2 year old male and other isolate was from a 22 year old immunocompromised female who later died. One *Staphylococcus aureus* was reported in a 4 month old immunodeficient infant. There were 4 cases of *Streptococcus pneumoniae* reported from patients whose ages ranged from 34 to 84 years. Immunodeficiency was reported as the risk factor for 2 cases. The 84 year old male (no risk factor) died. *Streptococcus epidermidis* was reported in a 25 year old female following shunt surgery. *Streptococcus viridans* was reported in a 28 year old female following shunt surgery. A *Streptococcus* Group B isolate was reported from 42 year old female following delivery. *Cryptococcus neoformans* was isolated from 2 immunocompromised males, aged 32 and 53. *Actinobacillus urea* was reported from a 58 year old male with a skull fracture.

### Isolates from Sites other than Blood or CSF

**Peritoneal dialysate:** 3 *Staphylococcus aureus* isolates were reported during this period; chronic ambulatory peritoneal dialysis was the risk factor for 2 of these. *Staphylococcus epidermidis* was reported from 7 cases, all with chronic ambulatory peritoneal dialysis as the reported risk factor. *Escherichia coli* was reported in a 65 year old male with peritoneal dialysis.

**Joint fluid:** 7 *Staphylococcus aureus* reported from 5 males and 2 females whose ages ranged from 28 to 64 years. *Staphylococcus epidermidis* was isolated from a 24 year old male with synovitis in both knees. *Enterococcus faecalis* was reported from a 55 year old female with a fractured femur. *Neisseria gonorrhoea* was reported from 17 year old female with septic arthritis.

- **Pleural fluid:** 1 *Klebsiella pneumoniae* from a 69 year old male following oesophagus rupture, 1 alpha-haemolytic *Streptococcus* from a 89 year old female with plural effusion, and 2 *Serratia marcescens* isolates, from a 56 year old male and an 81 year old female following surgery.
- **Other:** *Streptococcus* Group B and *Bacteroides* species were isolated from tissues around renal stone of a female patient. *Enterococcus cloacae* was reported from a 32 year old male with granuloma following the removal of plate in the humerus. *Staphylococcus aureus* was isolated from the anterior chamber fluid of 30 year old male with endophthalmitis. *Pseudomonas aeruginosa* isolated from the bile fluid of a 69 year old male.

### National Notifiable Diseases Reports 23 August to 5 September 1992

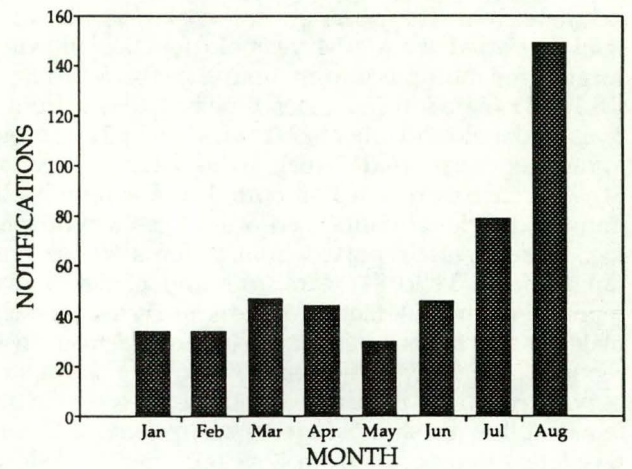
A total of 1,822 reports of notifiable diseases was received during this period and all were in a format suitable for analysis.

- There were 88 reports of **Ross River virus infection**, 13 males, 15 females and sex not recorded in 60 cases. Reports were from widespread areas of Queensland and Western Australia, with onset dates primarily in June and August.
- There were 20 reports of **dengue** this period, all of these were from Townsville and surrounds, and dates of onset were recorded as June and August.
- A single notification of **diphtheria** was reported in a female in the 5-10 years age group. This brings the total this year to 12 notifications.
- There were 74 notifications of **gonococcal infection** received this period. Of these reports, 56 were in males, 17 in females and the sex was not recorded in one. Two cases were reported in persons under the age of 15 years.
- There were 12 notifications of ***Haemophilus influenzae* type b infection**, bringing the total to date this year to 339. Five were in males and 7 were in females. Two cases were aged less than 1 year and 9 cases were aged less than 5 years. There was an apparent cluster of 2 cases in the same postcode area, both cases having the same date of onset.
- Six cases of **legionellosis** were notified, for a total this year of 139. They were in a male and 5 females, all in the 50-69 years age groups. Two cases occurred within 3 days of each other in adjacent postcode areas.
- There were 8 cases of **leptospirosis** notified. All were males between the ages of 15 and 55 years and all were from rural areas.
- There was a single notification of **listeriosis** in a female in the 60-65 years age group.
- There were 31 cases of **measles** notified, bringing the total to date to 581. Ten were in males and 11 were in females. Four were aged less than 1 year, 3 were in the 10-14 years age group, 3 in the 15-19 years age group and 1 was in the 20-24 years age group. The mean age was 8 years. There were 4 apparent clusters with 2 cases each with onset dates separated by intervals of 0 to 12 days within 2 postcode areas.
- Eleven notifications of **meningococcal infection** were received, bringing the total so far this year to 178. Six cases were in males and 5 were in females, with ages ranging between the 0-4 and the 50-54 years age groups. In Queensland there has been an increase in the activity of type B disease, and 2 epidemiologically related cases were associated with a visiting sporting team from New Zealand. A case of type C (not yet recorded in the National

Notifiable Diseases System) was reported from the Cairns area (information supplied by John Sheridan, the Tropical Centre for Disease Control, Cairns, Queensland Health).

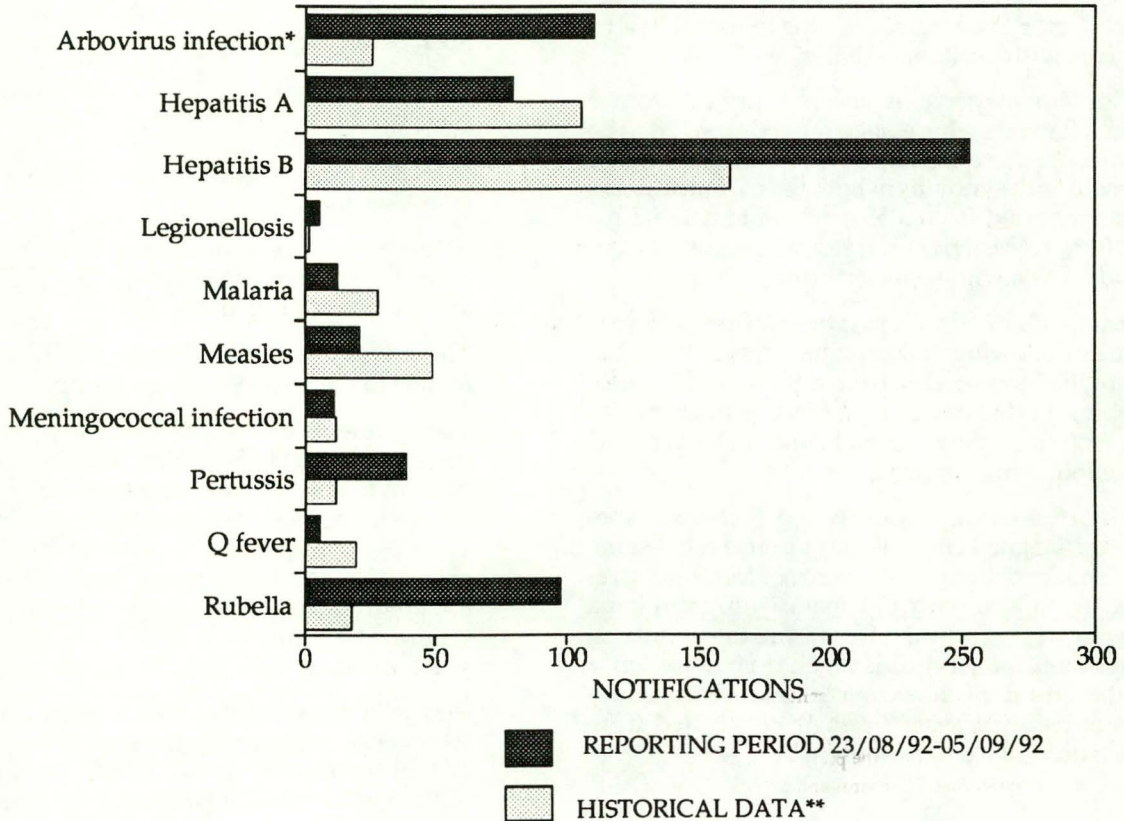
- There were 37 notifications of **pertussis** this period, for a total so far this year of 314. Of these notified cases, 18 were in males and 19 were in females. Six were aged less than 1 year and 15 were aged less than 5 year. There were 5 apparent clusters with 2, 3 and 4 cases each in the same postcode areas over 5 to 33 day intervals.
- **Q fever** was notified on 6 occasions for a total this year of 312 notifications. Five were males and 1 was female, all but 1 being from rural areas.
- There was a further increase in the notification of **rubella**, with 98 reports received this period. Most of these reported cases had onset dates in August (Figure 6). There were 81 reports received last period. Reports were mainly from rural Victoria with 14 apparent clusters of 2 to 11 cases each in different, mostly adjoining postcode areas. Of the 98 cases, 70 were males, 27 were female, and sex was not recorded in 1 case. Ten cases were in females between the ages of 15 and 44, the mean age for sexes combined was 19 years.

Figure 6. Rubella notifications, 1992, by month of onset



- A single case of **tetanus** was recorded, in a male in the 40-45 years age group, bringing the total this year to 9 notified cases.

Figure 7. Selected National Notifiable Diseases Reports, and historical data \*\*



\* Includes Ross River virus and Dengue

\*\* The Historical data are the averages of the number of notifications in 3 previous 2-week reporting periods: the corresponding period of the last year and the periods immediately preceding and following that.

**Table 3. Diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation for the reporting period 23 August to 5 September 1992**

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA <sup>1</sup>			
									This Period 1992	This Period 1991	Year to Date 1992	Year to Date 1991
Diphtheria	0	0	1	0	0	0	0	0	1	0	12	5
Measles	0	3	0	2	1	0	8	7	21	36	581	842
Mumps	0	0	NN	NN	NN	NN	0	NN	0	NN	15	NN
Pertussis	0	4	0	15	0	10	3	7	39	14	314	244
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0
Rubella <sup>2</sup>	1	3	0	16	0	0	78	0	98	12	474	288
Tetanus	0	0	0	NN	0	0	0	1	1	1	9	6

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, WA: CRS only; ACT, NSW, Qld: rubella only; SA, Vic: rubella and CRS.  
NN Not Notifiable.

**Table 4. Other Notifiable Diseases<sup>1</sup>, for the reporting period 23 August to 5 September 1992**

DISEASES	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA <sup>2</sup>			
									This Period 1992	This Period 1991	Year to Date 1992	Year to Date 1991
Arbovirus infection (NEC) <sup>3</sup>	0	0	NN	3	0	0	0	0	3	3	262	173
Ross River virus infection	0	-	2	77	-	NN	1	8	88	29	4990	3319
Dengue	0	-	0	20	-	NN	0	NN	20	1	243	41
Campylobacteriosis <sup>4</sup>	0	-	13	97	33	15	61	44	263	331	5375	5493
Chlamydial infection (NEC)	0	NN	24	98	0	12	36	0	170	143	3891	2780
Donovanosis	0	NN	0	0	NN	NN	0	4	4	3	58	46
Gonococcal infection <sup>5</sup>	0	4	20	9	0	0	3	38	74	109	1943	1682
Haemophilus influenzae type b <sup>6</sup>	0	3	NN	2	0	0	7	NN	12	27	339	362
Hepatitis A	1	12	7	36	0	0	22	2	80	140	1373	1212
Hepatitis B	2	70	0	87	0	3	88	3	253	174	4379	2577
Hepatitis C	8	91	3	190	NN	13	63	NN	368	207	5675	2373
Hepatitis (NEC)	0	0	0	1	0	0	1	NN	2	0	47	229
HIV infection <sup>7</sup>	0	4	0	0	3	3	0	1	11	5	198	25
Legionellosis	0	1	0	0	4	0	0	1	6	1	139	75
Leptospirosis	0	0	0	4	0	0	3	1	8	5	78	95
Listeriosis	0	0	NN	0	NN	0	1	0	1	2	26	27
Malaria	1	1	0	9	0	0	2	0	13	17	535	571
Meningococcal infection	0	4	1	3	0	0	2	1	11	12	179	183
Ornithosis	0	NN	0	0	0	0	4	0	4	6	62	78
Q fever	0	0	0	4	0	0	1	1	6	21	312	470
Salmonellosis (NEC)	1	8	10	20	5	1	26	24	95	141	3494	4150
Shigellosis <sup>4</sup>	0	-	8	4	2	0	1	5	20	35	437	659
Syphilis	0	16	28	20	0	0	2	22	88	102	1764	1363
Tuberculosis	2	4	1	5	3	0	21	3	39	35	582	358
Typhoid <sup>8</sup>	0	0	0	0	0	0	0	0	0	0	38	52
Yersiniosis <sup>4</sup>	0	-	1	9	0	1	5	1	17	9	436	381

1. For rarely notified diseases, see Table 5.

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. NSW, SA, Tas: includes Ross River virus and dengue. WA: includes dengue.

4. NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.

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. More complete data on new diagnoses of HIV infections are presented in the monthly *Australian HIV Surveillance Report*.

8. NSW and Vic: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

**Table 5. Rarely Notified Diseases<sup>1</sup> for the reporting period 23 August to 5 September 1992**

DISEASES	Total this period	Reporting States or Territories	Year to date 1992
Botulism			0
Brucellosis			15
Cholera			3
Chancroid			3
Hydatid infection			27
Leprosy	2	Qld 1, Vic 1	11
Lymphogranuloma venereum	1	Vic	3
Plague			0
Rabies			0
Yellow fever			0
Other viral haemorrhagic fevers			0

1. Fewer than 50 cases of each of these diseases were notified each year during the period 1986 to 1991.

**Table 6. Laboratory reports by State or Territory of reporting laboratory for the reporting period 26 August to 8 September 1992, historical data<sup>1</sup>, and total reports for the year**

	STATE OR TERRITORY OF REPORTING LABORATORY							Total this fortnight	Historical data <sup>1</sup>	Total reported this year
	ACT	NSW	Qld	SA	Tas	Vic	WA			
<b>MEASLES, MUMPS, RUBELLA</b>										
Measles virus			1	9		2	2	14	10.5	113
Mumps virus		2	2	1				5	1.0	35
Rubella virus		1	7	1		4	11	24	9.0	156
<b>HEPATITIS VIRUSES</b>										
Hepatitis A virus		7	3	2		5		17	16.2	239
Hepatitis B virus	1	40	52	2		18	22	135	98.7	1,627
Hepatitis C virus	3	1	37	53			38	132	30.7	1,594
Hepatitis D virus			2					2	.7	36
<b>ARBOVIRUSES</b>										
Ross River virus		3	21				1	25	21.0	1,176
Barmah Forest virus			4				1	5	.7	195
Dengue type 2			39					39	.2	208
Dengue not typed			4					4	4.7	64
Flavivirus (unspecified)			1				1	2	1.0	27
<b>ADENOVIRUSES</b>										
Adenovirus type 1						1		1	2.3	65
Adenovirus type 2		3				2		5	6.2	74
Adenovirus type 3		1						1	3.8	28
Adenovirus type 4		2				1		3	1.3	14
Adenovirus type 5						1		1	.8	19
Adenovirus type 8						3		3	.7	17
Adenovirus type 10						1		1	.3	3
Adenovirus type 19						1		1	.2	19
Adenovirus type 46						1		1	.0	1
Adenovirus not typed/pending	1	16	21	18		17	8	81	37.2	754
<b>HERPES VIRUSES</b>										
Herpes simplex virus type 1		10	51	9		35	15	120	127.5	2,470
Herpes simplex virus type 2		31	78	10		33	44	196	158.3	3,072
Herpes simplex not typed/pending	5	15	4			2	2	28	40.8	624

Table 7. Laboratory reports by State or Territory of reporting laboratory for the reporting period 26 August to 8 September 1992 historical data<sup>1</sup>, and total reports for the year continued

	STATE OR TERRITORY OF REPORTING LABORATORY							Total this fortnight	Historical data <sup>1</sup>	Total reported this year
	ACT	NSW	Qld	SA	Tas	Vic	WA			
Cytomegalovirus		15	41			37	14	107	76.0	1,370
Varicella-zoster virus	1	3	12			1	8	25	21.2	449
Epstein-Barr virus	2	13	71	16		7	6	115	47.5	1,134
Herpes virus group - not typed				1				1	4.0	36
OTHER DNA VIRUSES										
Parvovirus						4		4	.7	105
PICORNA VIRUS FAMILY										
Coxsackievirus B1						1		1	.0	15
Coxsackievirus B3							1	1	.7	8
Coxsackievirus B5		1		1				2	1.2	29
Echovirus type 6							3	3	.7	82
Echovirus type 9	1					3	3	7	.2	160
Echovirus type 14		2						2	.2	7
Poliovirus type 1 (uncharacterised)		2				1		3	1.8	45
Poliovirus type 2 (uncharacterised)		1						1	1.7	38
Poliovirus type 3 (uncharacterised)		2						2	1.7	26
Poliovirus type 1 (vaccine strain)		1						1	.0	2
Poliovirus type 2 (vaccine strain)		1						1	.0	1
Poliovirus type 3 (vaccine strain)		1						1	.0	1
Rhinovirus (all types)	1	6	7			16	5	35	27.7	456
Enterovirus type 71 (BCR)		1				1		2	1.5	15
Enterovirus not typed/pending		9	12	1		7	9	38	18.0	656
ORTHO/PARAMYXOVIRUSES										
Influenza A virus		5	47	34		5	24	115	7.8	920
Influenza A virus H <sub>1</sub> N <sub>1</sub>			1	1				2	.2	6
Influenza A virus H <sub>3</sub> N <sub>2</sub>		5	7					12	4.2	165
Influenza B virus			2	7			5	14	20.3	97
Parainfluenza virus type 1	1		2	2		3	1	9	4.0	277
Parainfluenza virus type 3		9	10	2		4	9	34	15.3	331
Respiratory syncytial virus	3	57	42	39	5	37	25	208	264.2	3,245
OTHER RNA VIRUSES										
HIV-1							2	2	3.0	21
Rotavirus		115	56	61	3	5	22	262	193.3	1,163
Astrovirus		2						2	1.7	11
Calici virus		2						2	1.5	20
Small virus (like) particle		3						3	3.0	46
OTHER										
<i>Chlamydia trachomatis</i> - A-K			4					4	1.2	8
<i>Chlamydia trachomatis</i> not typed	1	11	55	28		9	29	133	137.2	1,874
<i>Chlamydia psittaci</i>						3		3	2.8	77
<i>Chlamydia</i> species				1				1	.0	1
<i>Mycoplasma pneumoniae</i>		47	43	8		14		112	14.8	694
<i>Mycoplasma hominis</i>				1				1	.0	4
<i>Coxiella burnetti</i> (Q fever)		8	6	1				15	9.5	183
<i>Streptococcus</i> group A			9					9	.0	31
<i>Streptococcus</i> species			9					9	.0	9
<i>Yersinia enterocolitica</i>			1					1	.0	2

**Table 7. Laboratory reports by State or Territory of reporting laboratory for the reporting period 26 August to 8 September 1992 historical data<sup>1</sup>, and total reports for the year continued**

	STATE OR TERRITORY OF REPORTING LABORATORY							Total this fortnight	Historical data <sup>1</sup>	Total reported this year
	ACT	NSW	Qld	SA	Tas	Vic	WA			
<i>Brucella</i> species			1					1	.0	6
<i>Bordetella pertussis</i>			2					2	.0	6
<i>Bordetella</i> species			3					3	.0	5
<i>Leptospira hardjo</i>			3					3	.0	7
<i>Leptospira</i> species			4					4	.0	9
<i>Treponema pallidum</i>		4	16					20	.0	76
<i>Toxoplasma gondii</i>			3			1		4	.0	12
<b>TOTAL</b>	20	458	796	309	8	286	311	2,188	1,462.2	26,571

1. 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 8. Laboratory reports by clinical information for the reporting period 26 August to 8 September 1992**

	Encephalitis	Meningitis	Other CNS	Congenital	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	Total
<b>MEASLES, MUMPS, RUBELLA</b>													
Measles virus								12				2	14
Mumps virus	1											4	5
Rubella virus					1			12				11	24
<b>HEPATITIS VIRUSES</b>													
Hepatitis A virus							11					6	17
Hepatitis B virus							47					88	135
Hepatitis C virus						1	49	1				81	132
Hepatitis D virus							1					1	2
<b>ARBOVIRUSES</b>													
Ross River virus								2		8		15	25
Barmah Forest virus												5	5
Dengue type 2							1	1		1		36	39
Dengue not typed				1								3	4
Flavivirus (unspecified)	1									1			2
<b>ADENOVIRUSES</b>													
Adenovirus type 1					1								1
Adenovirus type 2					2	1						2	5
Adenovirus type 3						1							1
Adenovirus type 4					1				2				3
Adenovirus type 5					1								1
Adenovirus type 8									3				3
Adenovirus type 10									1				1
Adenovirus type 19									1				1
Adenovirus type 46						1							1
Adenovirus not typed/pending	1	2			45	14		1	6			12	81



Table 8. Laboratory reports by clinical information for the reporting period 26 August to 8 September 1992, continued

	Encephalitis	Meningitis	Other CNS	Congenital	Respiratory	Gastrointestinal	Hepatic	Skin	Eye	Muscle/joint	Genital	Other/unknown	Total
<i>Chlamydia</i> species					1								1
<i>Mycoplasma pneumoniae</i>	1				77							34	112
<i>Mycoplasma hominis</i>												1	1
<i>Coxiella burnetti</i> (Q fever)			3									12	15
<i>Streptococcus</i> group A					3							6	9
<i>Streptococcus</i> species					4							5	9
<i>Yersinia enterocolitica</i>						1							1
<i>Brucella</i> species												1	1
<i>Bordetella pertussis</i>					1							1	2
<i>Bordetella</i> species					2							1	3
<i>Leptospira hardjo</i>												3	3
<i>Leptospira</i> species												4	4
<i>Treponema pallidum</i>											1	19	20
<i>Toxoplasma gondii</i>												4	4
TOTAL	6	16	5	4	581	283	114	221	23	13	232	690	2188

Table 9. Laboratory reports by contributing laboratories for the reporting period 26 August to 8 September 1992

STATE	LABORATORY	REPORTS
Australian Capital Territory	Woden Valley Hospital, Canberra	20
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	208
	Prince Henry/Prince of Wales Hospitals, Sydney	83
	Royal Alexandra Hospital for Children, Camperdown	55
	South West Area Pathology Service, Liverpool	70
	Tamworth Laboratory, New England Pathology	42
Queensland	Dr TB Lynch, Pathologist, Rockhampton	191
	Queensland Medical Laboratory, West End	293
	State Health Laboratory, Brisbane	312
South Australia	Institute of Medical & Veterinary Science, Adelaide	309
Tasmania	Northern Tasmanian Pathology Service, Launceston General Hospital	8
Victoria	Fairfield Hospital, Melbourne	205
	Microbiological Diagnostic Unit, University of Melbourne	9
	Royal Children's Hospital, Melbourne	72
Western Australia	Princess Margaret Hospital, Perth	75
	State Health Laboratory Services, Perth	236
TOTAL		2188