ISSN 0725 - 3141

Communicable Diseases Intelligence

Bulletin number 90/20
Issue date: 8 October 1990

Contents:

Editor Dr Robert Hall

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME:

In this period (13 September to 26 September 1990) there were 1645 reports processed.

There were 21 reports of Q fever (6 females, 15 males) received for the period, 19 from the State Health Laboratory in Brisbane (SHLB). All were in the 15 to 51 year age range and exposure details were provided for seven patients; all being meatworkers.

Influenza A (not sub-typed) was reported on 20 occasions. The majority (15) of the reports were from the Princess Margaret Hospital (WA). This represents a small increase in influenza activity but not sufficient to indicate that an epidemic has started. In August and September 1989 there were 147 and 166 reports of influenza A (not sub-typed), and 113 and 137 reports of influenza B respectively. The 1989 epidemic started in June-July.

- 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.
- Material appearing in the Bulletin is subject to Commonwealth copyright, which is administered by the Australian Government Publishing Service.
- Figures given may be subject to revision.

There were 27 reports of dengue received for the period, 26 from the SHLB. Nine cases occured on Thursday island, of which 8 were identified as dengue 1. It is likely that a number of the Queensland cases were associated with the recent outbreak in Townsville, Cairns and the Torres Strait (first reported in CDI 90/15).

JC virus (one of the polyomaviruses) was identified from the brain biopsy of a 58-year-old male with progressive multifocal leukoencephalopathy, a rare subacute and progressive demyelinating disease of the CNS that appears in immunosuppressed adults. The patient had been diagnosed in May as suffering from non-Hodgkins lymphoma.

NON-VIRAL PATHOGEN REPORTS.

Tables summarising 1990 non-viral pathogen reports (January to June) are included in this issue of CDI after the virus tables. Data are presented in two tables for each reporting period - by contributing laboratory and by source of the sample - and are grouped according to collection date of sample. As only approximately 250 reports are received for each month, data have been grouped by three monthly periods. Frequency of publication of summary tables will increase when this is warranted by an increased number of reports received.

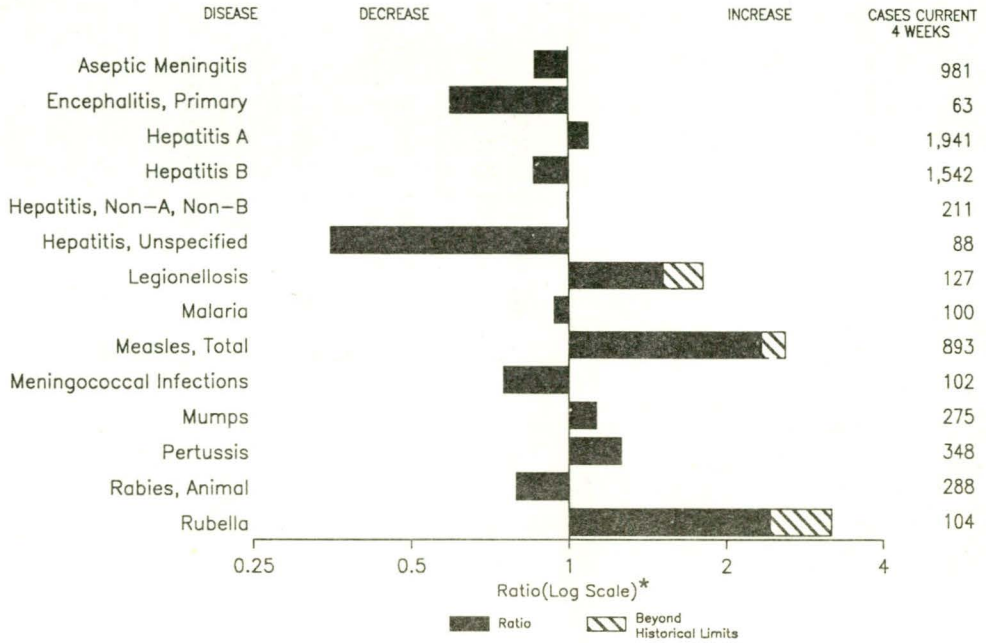
REPORTING OF NOTIFIABLE DISEASES SURVEILLANCE DATA.

Notifiable diseases surveillance should direct specific public health interventions and identify the temporal trends of diseases. In the past, Australian notifiable diseases data has been presented in a tabular format, on a four weekly basis, in the **Communicable Diseases Intelligence (CDI)**. To present the temporal trends of notification incidence in a more useful manner, it is now proposed to supplement this table with a graphical representation of past and present data in **CDI**.

The Centers for Disease Control (CDC), in its publication, **Morbidity and Mortality Weekly Report (MMWR)**, regularly produces a graph of "Notifiable Disease Reports" (see Figure 1.). This graph compares the totals of four weeks of notifications, for thirteen selected diseases, with historical data. Diseases with elevated reports are shown with bars to the right and diseases with lowered reports are bars to the left. The graph is conceptually difficult, with the ratios plotted on a semi-log scale and shading on the bars indicating the amount of the report in excess of a 95% limit.

The following graph has been reproduced from the **Morbidity and Mortality Weekly Report** August 24, 1990.

Figure 1. Notifiable disease reports, comparison of 4-week totals ending August 18, 1990, with historical data - United States



*Ratio of current 4-week total to mean of 15 4-week totals (from comparable, previous, and subsequent 4-week periods for past 5 years).

There are several important considerations in formulating a similar graph for the presentation of Australian data.

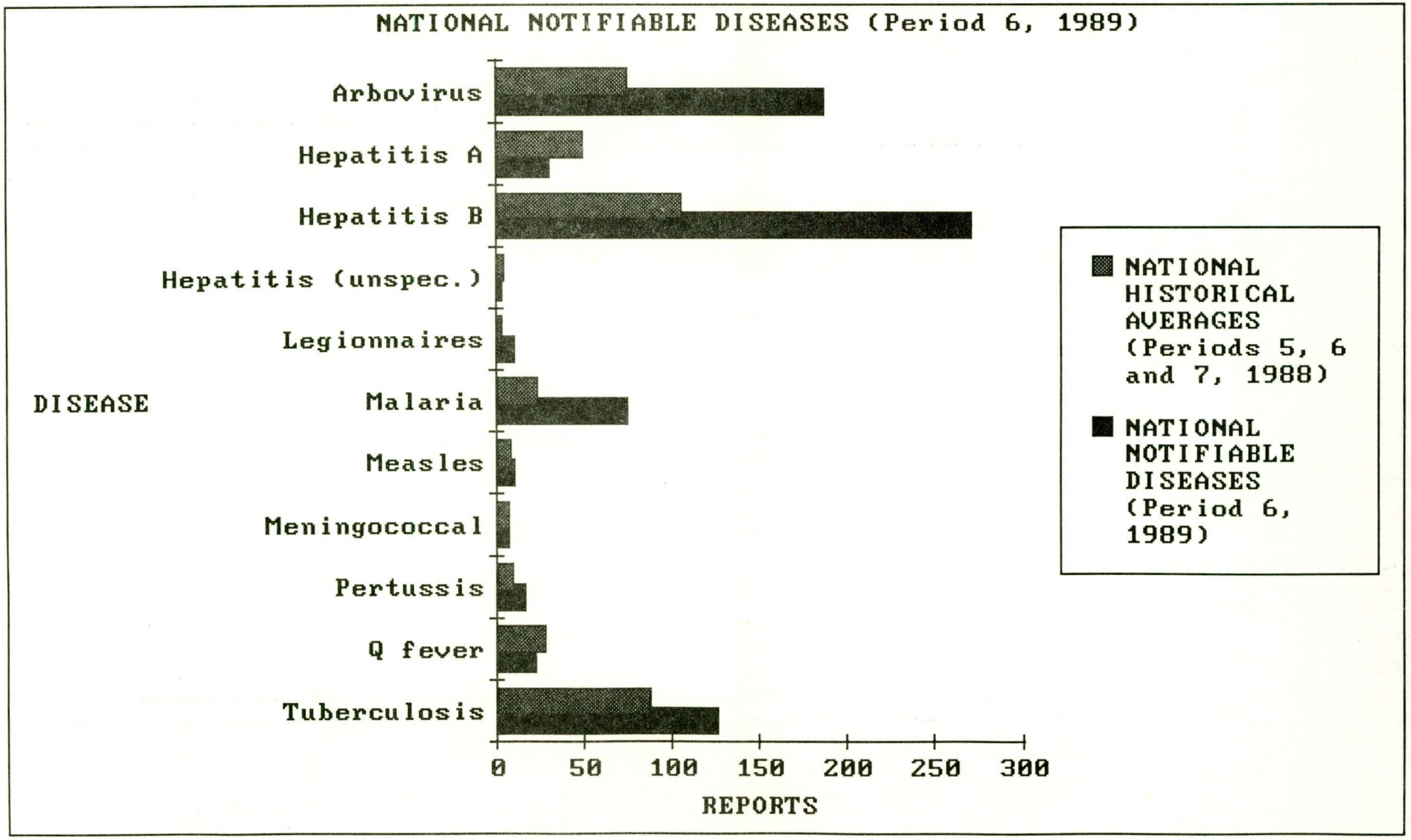
For a graph to be effective, it should be easy to understand. In **CDI** it is proposed to present the data in a simplified horizontal bar-chart format. Each bar will represent data from the previous notification period. The horizontal axis will show the absolute numbers of notifications and a contrasting bar will indicate the historical comparison data.

In the near future it is proposed to develop a national database of two weekly notifications. Increasing the reporting frequency should allow more precise notification analysis, but there will be difficulties in determining valid comparison data.

As the two weekly data are collated, one approach could be to use the aggregated means of the corresponding notification periods as the reference "expected number of cases". One initial drawback of this approach would stem from the small size of the historical comparison data.

During the initial period of the two weekly data collection, epidemics will tend to inflate the mean of the historical comparison figures. Any real elevation in the current notification incidence will tend to be obscured.

Figure 2. National Notifiable Diseases (Period 6, 1989)



Furthermore, the use of the "mean", as a measure of central tendency, is particularly susceptible to extreme fluctuations in the data. This might result from epidemics or from aberrations in reporting practices.

Therefore, an alternative approach is proposed. This method should clearly delineate current epidemics by minimising the influence of outbreaks which occured during the period of historical data collection.

The comparison data would be derived from the past averages of the two weekly reporting periods, for the three month interval surrounding the current period. Since the current reporting period will always be at the centre of the reference interval, the historical data will differ for each new reporting period. As such, the comparison will be made against a "running average". By taking a three month interval, aberrations in the current period will appear more prominent, than if the comparison were made against a shorter time interval.

Another important consideration is the choice of diseases to be included in the graph. To keep the figure readable, only a limited number of the notifiable diseases should be included. These diseases should be chosen because for their relatively high prevalence, their uniform reporting across States and Territories, and their importance to public health control strategies.

As an example of such a format, Figure 2. was constructed using data from the national notifiable diseases reports for 1988 and 1989. Notifications from the existing reporting interval 21/5/89 - 17/6/89 (period 6) are compared, for each disease, with the average number of reports from periods 5, 6 and 7 of the previous year. Please note that some of the diseases represented are not "notifiable" in all States and Territories. The notification system is based on State and Territory laws which require medical practitioners to report specified infectious diseases. Such a passive reporting system is fraught with under-reporting. Case counts from the notification system cannot provide a complete tally of disease incidence and they are unlikely to be from statistically representative samples.

Despite these limitations, temporal changes in the reported number of cases can adequately reflect trends, as long as the underlying reporting mechanism does not vary unpredictably. Although the list of notifiable diseases has varied between different States and Territories, there has been no indication that the quality of reporting has varied unpredictably.

As a joint initiative between the Commonwealth, States and Territories the computerised transmission of notifiable diseases reports, to the Communicable Diseases Section (CDCSH), is being introduced. These data will be concatenated for further analysis and data presentation as a part of the "Communicable Diseases Network - Australia".

Figure 3. Notifiable Diseases: ACT, SA, WA (Period 6, 1990)

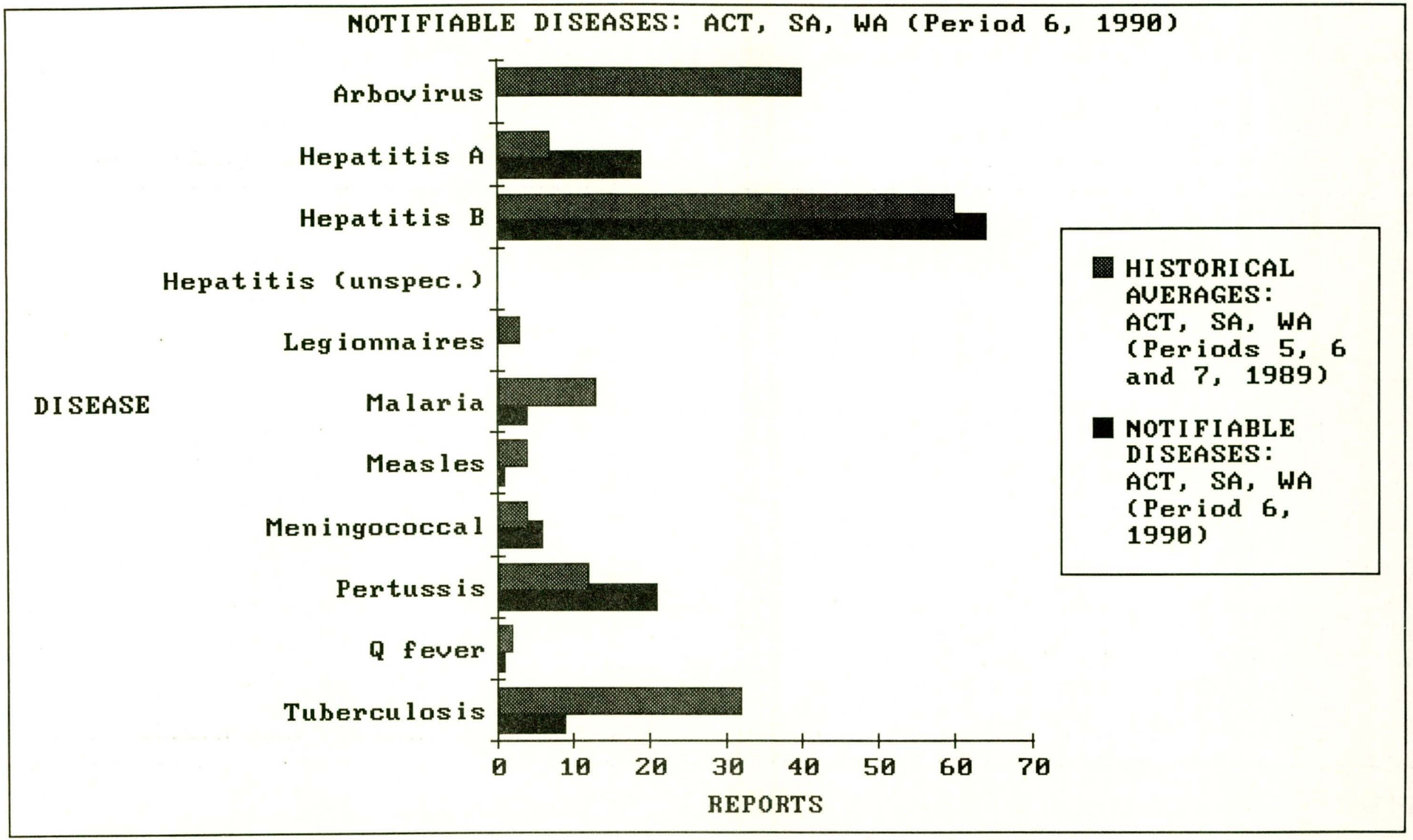


Figure 3. presents some preliminary notifiable diseases figures from this computerised transmission of data. It uses the previous format, for the 6th notification period (21/5/90 - 17/6/90), with data transmitted by the ACT, SA and WA as "Epi Info, version 5" files.

The Communicable Diseases Section would value any comments on the usefulness of the proposed graph. Suggestions relating to the figure's validity and methodology would be most welcome.

Reference:

Stroup DF, Williamson GD, Herndon JL Detection of aberrations in the occurrence of notifiable diseases surveillance data. **Statistics in Medicine** 1989;8:323-329

AUSTRALIAN HIV SURVEILLANCE REPORT: 13 JULY 1990

The National Centre in HIV Epidemiology and Clinical Research reports that as at 7 September 1990, a total of 2040 cases of AIDS had been reported in Australia.

For the most recent reporting period, 14 July to 10 August (weeks 29-32), 22 new cases of AIDS were reported in Australia.

Table 1: New cases of AIDS and deaths from AIDS for the period 14 July to 10 August (weeks 29 - 32) 1990, by sex and State/Territory in which diagnosis was made.

State/ Territory	CASES			DEATHS		
	Male	Female	Total	Male	Female	Total
ACT	0	0	0	0	0	0
NSW	8	1	9	18	0	18
NT	1	0	1	0	0	0
QLD	2	0	2	0	0	0
SA	2	0	2	0	0	0
TAS	0	0	0	0	0	0
VIC	8	0	8	0	0	0
WA	0	0	0	0	0	0
Total	21	1	22	18	0	18

Table 2: Cumulative cases of AIDS and deaths from AIDS by sex and State/Territory where diagnosis was made, to 10 August 1990

State/ Territory	CASES			DEATHS		
	Male	Female	Total	Male	Female	Total
ACT	26	0	26	18	0	18
NSW	1235	35	1270	795	24	819
NT	4	0	4	2	0	2
QLD	140	6	146	90	4	94
SA	65	2	67	35	1	36
TAS	10	1	11	5	1	6
VIC	411	10	421	212	5	217
WA	88	7	95	49	3	52
Total	1979	61	2040	1206	38	1244

Table 3: Number of new diagnoses of HIV infection in the period 14 July to 10 August (weeks 29 - 32), 1990 and cumulative since the introduction of HIV antibody testing to 10 August 1990, by sex and State/Territory of notification.

State/ Territory	1990# Weeks 29 - 32			Cumulative to 10 August 90			
	M	F	TOTAL	M	F	NK	TOTAL
ACT	0	0	0	8	0	97	105
NSW+	-	-	-	5250	293	2766	8309
NT	2	0	2	51	3	0	54
QLD	7	1	8	884	35	0	919
SA*	-	-	-	333	27	0	360
TAS	0	0	0	47	3	0	50
VIC	29	2	31	2350	66	0	2416
WA	11	1	12	519	29	0	548
Total	49	4	53	9442	456	2863	12761

NK Sex not known

\# Dashes indicate that counts were unavailable for the period

\+ Cumulative to 30 June 1989; see 23 March 1990 Report for further details

* Cumulative to 18 May 1990.

A RECENT OUTBREAK OF MEASLES IN THE PORT STEPHENS AREA OF NEW SOUTH WALES

(T Miles, J James, Hunter Area Health Service)

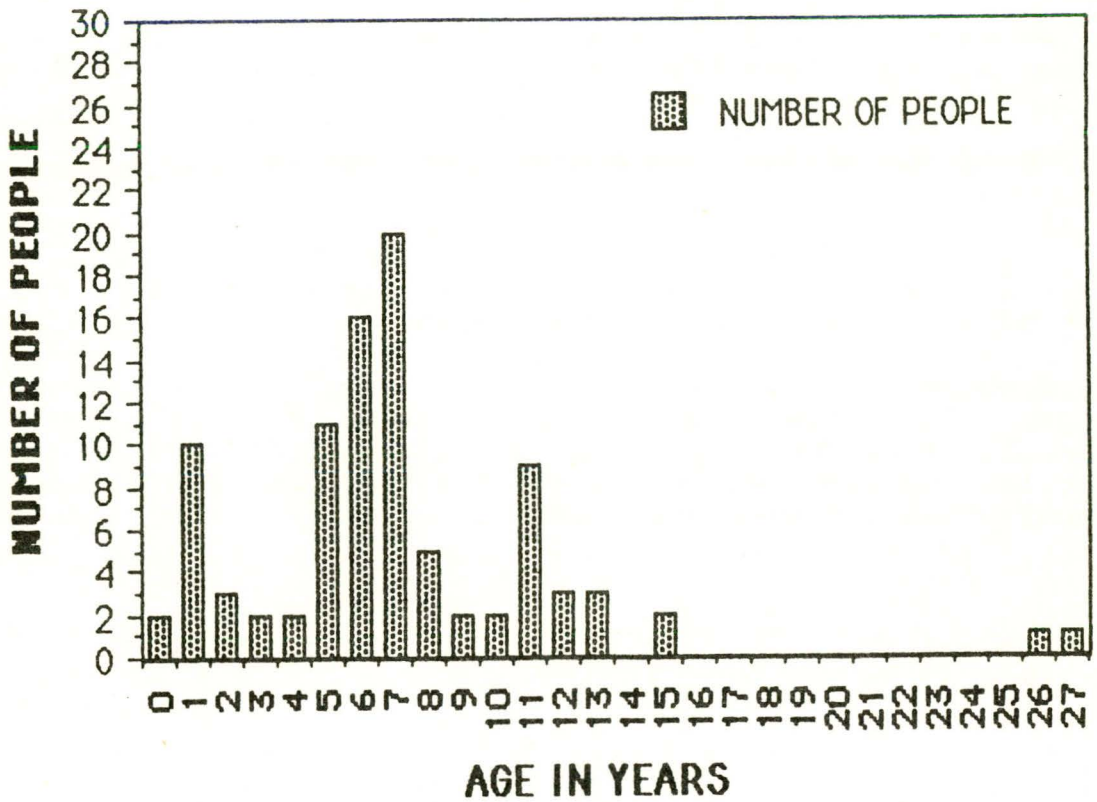
On Friday 24th August 1990, Dr Steve de Lyall, a Raymond Terrace general practitioner, reported to Dr Bert Evans that he and his four partners had diagnosed eight cases of measles in the preceding week. Dr Evans is a Newcastle paediatrician with responsibility for the co-ordination of immunisation services in the Hunter region. After consultation with the Medical Officer of Health, Dr John Stephenson, an investigation was commenced. Responsibility for the collection of relevant data was given to the Public Health Medicine Registrar, Dr Thais Miles.

Raymond Terrace is a town of 9422 people in the Port Stephens Shire, situated 24km from Newcastle. Children less than 10 years constitute 20.6 percent of this population; comparable estimates for the Hunter region and for NSW are 15.0 and 14.9 percent respectively.

A list of children reported to have measles was prepared from information provided by local general practitioners and local schools. The parents were either visited or telephoned and a comprehensive data sheet completed for each confirmed case.

From July 1990 to 21 September 1990, 98 people with a positive clinical diagnosis of measles have been identified in the Port Stephens area. Their age distribution is shown in Figure 4. below. Serological confirmation of the diagnosis has been obtained for 4 children to date.

Figure 4: Age distribution of people with measles



The categorisation of the 98 people with respect to immunisation status is shown in Table 4, together with the reasons for such classification. Efforts are currently being made to obtain information relating to the 26 children identified as "under review" so that these may be re-allocated to the first two categories where possible.

Table 4: Categorisation of immunisation status of 98 children

Immunised	
Prior to outbreak; documentary evidence supplied	20
During prodrome; documentary evidence supplied	8
Not immunised	
Parental statement accepted	30
Immunisation claimed without evidence	14
Under review	
Immunisation claimed	9
Parents unsure	17

The fact that a relatively high number of children with a valid diagnosis of measles had been previously immunised has prompted a concurrent examination of the vaccine cold chain in the Hunter region. The year and place of immunisation for each of the 20 children can be seen in Table 5. Although there is a peak in 1985 and 1986, suggesting a possible problem at that time, it must also be noted that not all of these children were vaccinated in Raymond Terrace, and therefore a local problem is unlikely. It has also been estimated that the total number of vaccine failures is about the same as the expected number of unsuccessful seroconversions under particular assumptions.

During data collection procedures, the opportunity was taken to inform the public of the investigation and to promote the importance of vaccination through school networks and the local media. Additional vaccination clinics in the Port Stephens area are being carried out. Invaluable assistance has been provided by local general practitioners, councils and community health centres.

Port Stephens has traditionally sponsored active immunisation campaigns with a relatively high level of community acceptance. However, it is evident from this investigation that parental memory of vaccination is often inaccurate and that adequate documentation of immunisation if frequently lacking.

Table 5: Year and place of immunisation for 20 children

Year of Immunisation	Number of Children	Place of Immunisation
1983	3	H-1 N-2
1984	3	RT-1 H-1 U-1
1985	6	RT-2 H-2 N-1 U-1
1986	6	RT-2 H-2 U-2
1987	1	N-1
1988	0	
1989	1	RT-1

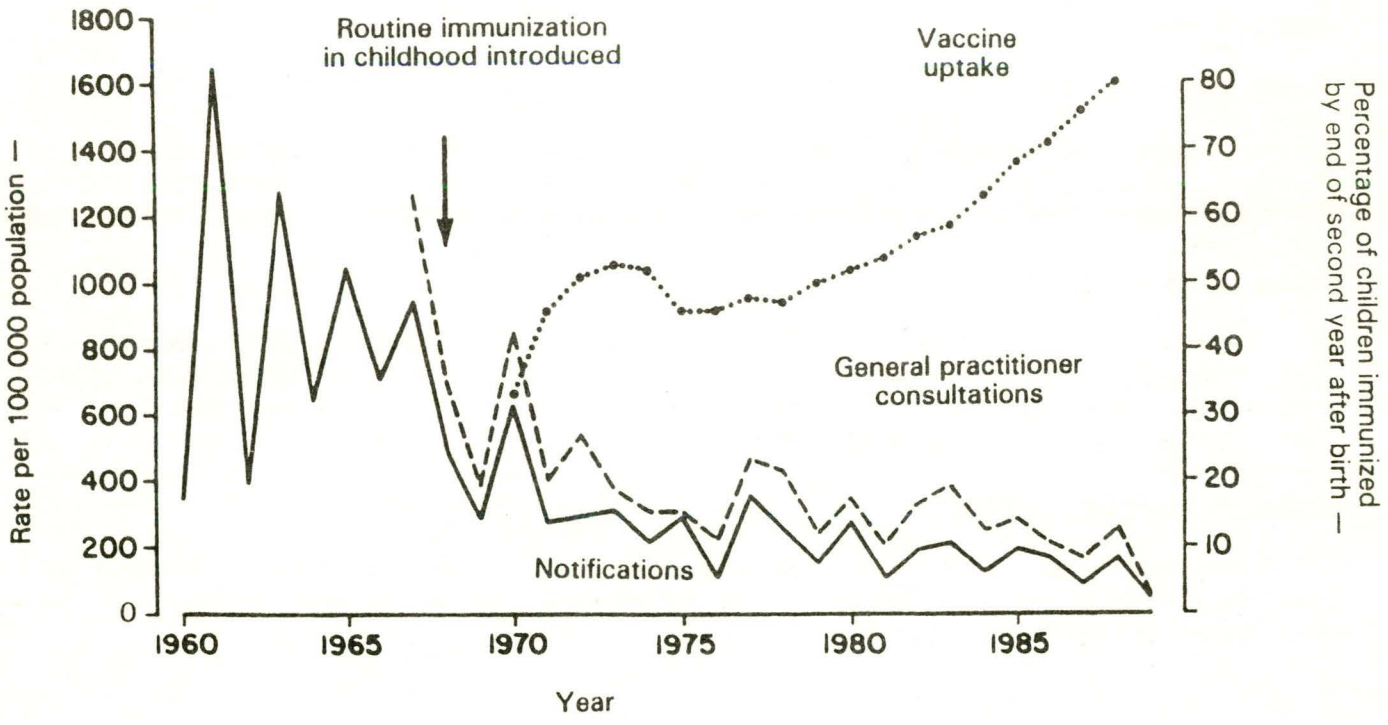
where: RT = Raymond Terrace and Port Stephens
H = elsewhere in Hunter
N = elsewhere in NSW
U = unknown

MEASLES - SURVEILLANCE IN ENGLAND AND WALES, 1960-1989

(Based on WER 34:263:24 August 1990)

The notification rate of measles per 100 000 population over the past 30 years in the United Kingdom; the general practitioner (GP) consultation rate for measles since the late 1960s; and the proportion of children immunized against measles by the end of the second year after birth, since the early 1970s, is shown in Figure 5 below.

Figure 5: Surveillance of measles, England and Wales, 1960-1989



In 1990 both the rate of notification and the GP consultation rate for measles have been lower than ever before. Eighty per cent of children in England and Wales have now been immunized against measles by the end of the second year after birth.

FURTHER CASES OF INVASIVE MENINGOCOCCAL INFECTION IN THE KATANNING AREA OF WESTERN AUSTRALIA

(C Watson, J Gill, Disease Control Branch, Health Department of Western Australia)

In March 1990 we reported a cluster of cases of invasive meningococcal infection in the Katanning area of WA (CDI March 1990). The cluster of cases prompted us to immunise about 1,200 preschool and primary school children in the Katanning area with meningococcal vaccine.

Since that time there have been further cases of invasive meningococcal infection in the same area, two from the town of Katanning and two from neighbouring towns. Three of the recent cases have been Group C infections (as were all the confirmed cases earlier this year), but one of the cases, from Kojonup, was identified as Group W-135.

The very high incidence of meningococcal disease has been of great concern to local residents and Health Department officials alike. The cases represent a yearly incidence of almost 1 per 1,000 for the Katanning area, about 100 times greater than the rest of the state.

Background

In February 1990 two children (one eighteen months and one eight years old) from the Katanning area died from invasive meningococcal disease. A sister of the older child also became very ill and was presumptively diagnosed as having a meningococcal infection although this was not confirmed in the laboratory. Two months previously, at the end of 1989, a male shearer from Katanning was diagnosed with meningococcal meningitis.

Recent cases

Case 1 (July 1990)

This eighteen-month-old baby girl from Katanning developed a high fever with headache which was diagnosed as meningococcal meningitis. She was treated and recovered.

Case 2 (August 1990)

A six-month-old baby girl from Wagin (about 50km north of Katanning) was diagnosed as having meningococcal meningitis. No organism was cultured but gram-negative cocci were observed in the CSF. She was treated and recovered.

Case 3 (August 1990)

A nineteen-year-old man from Katanning presented with signs of meningococcal septicaemia. The organism isolated was Group C. He was treated and recovered.

Case 4 (August 1990)

On the same day as Case 3 presented, a 26-year-old shearer from near Kojonup (about 50km west of Katanning) developed meningococcal septicaemia and shock. He was flown to Perth by air ambulance but died about 12 hours later. The organism isolated was Group W-135.

In all of the above cases, the immediate contacts were promptly treated with prophylactic rifampicin.

Commentary

We have no explanation to offer for this unusual concentration of cases of meningococcal meningitis in the Katanning area. The incidence rate is about 100 times that of the rest of the state for the same period.

Although the collection and testing of throat swabs has little or no direct value in an outbreak of invasive meningococcal disease, such a survey was undertaken during September 1990 in order to gather data on the pattern of meningococcal carriage in Katanning and surrounding towns. We will also examine the distribution of different groups of meningococci and evaluate antibiotic resistance.

ENCEPHALITIS ACQUIRED IN FIJI

(Contributed by M J Ferson, Public Health Unit, and P W Robertson, Microbiology Department, The Prince of Wales Hospital; Eastern Sydney Area Health Service NSW)

On 1 December, 1989, an 8-year-old caucasian boy, resident in Fiji for ten months, was transferred to the Prince of Wales Children's Hospital with a provisional diagnosis of encephalitis. One week prior to transfer he had presented with fever, sore throat, vomiting and signs of dehydration but no other significant physical findings.

When examined the day before transfer he had an erythematous rash on the palms, soles and buttocks. He was afebrile, had slight conjunctival injection and was felt to have increased deep tendon reflexes in the right upper and lower limbs, mild papilloedema, but no neck stiffness. In view of these clinical findings, the high prevalence of dengue fever in Fiji at that time, and the fact that the patient's parents had been diagnosed with this infection two to three weeks prior to this illness, a provisional diagnosis of dengue encephalitis was made.

At the Prince of Wales Children's Hospital, the full blood count was essentially normal and biochemical tests showed only elevated liver enzyme levels: an aspartate transaminase (AST) level of 135U/1 (normal range: 5-35) and alanine transaminase (ALT) of 214U/1 (5-35).

The cerebrospinal fluid contained 90 red cells, 4 mononuclear cells and one polymorphonuclear leukocyte per cubic millimetre, with normal protein and glucose levels. A computer tomographic brain scan was normal and electroencephalograph showed mold asymmetric posterior slow wave activity.

Blood was taken on the 1st and 7th December for serological examination. Rubella HAI titres, performed in parallel, were both 80, whilst a rubella IgM enzyme immunoassay test (Rubetek M/AC, Flow Laboratories) was negative on the first sample and positive on the second sample. The flavivrus group HI titre showed seroconversion from <20 to 160, and IgM antibodies against Dengue viruses 1-4 were detected in the second specimen. In view of the implied dual diagnoses of rubella and dengue fever, the serum specimens were retested for rubella antibody using a different IgM enzyme immunoassay (Rubella Enzygnost, Behring). Both sera proved positive with this test, and demonstrated a falling optical density, suggesting declining IgM antibody levels.

We are unaware of any antigenic cross-reactivity between the rubella and dengue viruses. However, it has been shown that rubella IgM enzyme immunoassays may remain positive for several months after rubella infection. Thus, it seems most likely that the illness described above was dengue fever, and that the patient had also suffered rubella infection some weeks or months beforehand.

CDI Editorial Comment

The recent dengue epidemic in Fiji commenced in about September 1989 and by early November, around the time when the patient was likely to have contracted dengue, about 1000 cases had been reported. Unfortunately neither the dengue serotypes nor rubella are included in the Infectious Diseases Notifications routinely fowarded to the Department of Community Services and Health from the Republic of Fiji.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 13/09/90 TO 26/09/90

CODE 018 - MICROBIOL DIAG UNIT, UNI MELB (VIC)
CODE 019 - FAIRFIELD HOSP (VIC)
CODE 065 - STATE HEALTH LAB (WA)
CODE 066 - PRINCESS MARGARET HOSP (WA)
CODE 110 - INST OF MED & VET SCIENCE (SA)
CODE 111 - ROYAL CHILDRENS HOSP (VIC)
CODE 112 - INST CLINICAL PATH & MED RES (NSW)
CODE 113 - PRINCE HENRY/PRINCE OF WALES HOSP (NSW)
CODE 114 - ROYAL ALEXAND RA CHILDRENS HOSP (NSW)
CODE 115 - STATE HEALTH LAB (QLD)
CODE 116 - WODEN VALLEY HOSP (ACT)

		018	019	065	066	110	111	112	113	114	115	116	TOTAL
0100	ADENOVIRUS NOT TYPED	0	0	3	7	0	3	2	0	0	13	0	28
0101	ADENOVIRUS TYPE 1	0	0	0	0	2	0	2	0	0	0	0	4
0102	ADENOVIRUS TYPE 2	0	0	0	0	1	0	1	0	0	0	0	2
0103	ADENOVIRUS TYPE 3	0	0	0	0	1	0	1	0	0	0	0	2
0104	ADENOVIRUS TYPE 4	0	1	0	0	1	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	0	0	0	0	0	2	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	6	0	2	0	0	0	8
0201	INFLUENZA A VIRUS	0	0	5	16	1	0	0	2	0	6	0	30
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	0	0	0	1	6	0	0	0	6	0	13
0299	INFLUENZA VIRUS - TYPING PENDI	0	0	0	0	0	2	0	0	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	0	1	0	2	0	0	0	0	0	1	0	4
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	0	0	1	1	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	1	0	0	0	2	2	0	1	2	0	8
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	0	0	0	3	0	0	0	0	0	3
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	27	1	127	115	21	3	1	0	10	1	306
0500	RHINOVIRUS (ALL TYPES)	0	1	1	1	0	9	2	2	0	0	1	17
0600	MYCOPLASMA PNEUMONIAE	0	5	1	0	6	0	3	0	0	5	1	21
0700	ORNITHOSIS-PSITTACOSIS	0	2	1	0	1	0	0	0	0	1	0	5
0816	COXSACKIEVIRUS A16	0	0	0	0	0	0	1	0	0	0	1	2
0902	COXSACKIEVIRUS B2	0	0	0	0	0	0	1	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	0	0	0	0	0	1	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	2	0	0	0	0	2
1025	ECHOVIRUS TYPE 25	0	0	0	0	0	0	0	0	1	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	0	0	0	0	0	0	0	1	0	0	1
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	2	0	0	0	0	2
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	0	1	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	0	5	0	0	0	0	5
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	4	0	0	0	0	0	0	0	0	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	1	0	3	0	0	19	0	0	1	2	26
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	2	5	0	18	1	0	0	0	30	0	56
1303	VARICELLA-ZOSTER VIRUS	0	4	5	0	2	0	6	0	1	3	0	21
1306	HERPES SIMPLEX TYPE 1	0	34	36	0	29	0	3	0	2	52	0	156
1307	HERPES SIMPLEX TYPE 2	0	39	74	0	32	0	16	0	0	46	0	207
1399	HERPES VIRUS TYPING PENDING	0	0	3	0	0	3	0	0	0	0	0	6
1401	COXIELLA BURNETII	0	0	0	0	0	0	2	0	0	20	0	22
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	7	0	0	0	0	0	0	3	0	10
1521	MEASLES VIRUS	0	3	0	0	0	0	0	0	0	3	1	7
1522	RUBELLA VIRUS	0	0	0	0	3	0	0	1	0	4	0	8
1532	HEPATITIS B ANTIGEN	0	7	7	0	20	0	31	9	0	33	0	107
1535	HEPATITIS A ANTIBODY	0	1	4	0	4	0	1	0	0	0	0	10
1536	HEPATITIS C VIRUS	0	0	6	0	0	0	0	0	0	0	1	7
1541	CHLAMYDIA A - C. TRACHOMATIS	16	0	39	1	32	0	16	0	0	24	4	132
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	1	0	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	0	34	2	11	1	2	7	0	3	56	0	116
1564	ROTAVIRUS	0	4	1	17	48	0	27	27	3	0	0	127
1571	ENTEROVIRUS TYPE 71 (BCR)	0	1	0	0	0	0	0	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	2	0	8	0	0	0	10
9721	HTLV-1	0	0	1	0	0	0	0	0	0	0	0	1
9906	BARMAH FOREST VIRUS	0	0	0	0	0	0	0	0	0	3	0	3
9992	ROSS RIVER VIRUS	0	0	0	0	0	0	0	1	0	98	0	99
9993	ASTROVIRUS	0	0	0	0	0	0	1	0	1	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	1	0	0	0	0	1
9995	DENGUE	0	0	1	0	0	0	0	0	0	26	0	27
9997	KUNJIN VIRUS	0	0	0	0	0	0	0	0	0	1	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL		16	168	207	185	320	61	162	53	13	448	12	1645

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 13/09/90 TO 26/09/90

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	2	3	13	10	0	0	28
0101	ADENOVIRUS TYPE 1	2	0	0	0	2	0	4
0102	ADENOVIRUS TYPE 2	1	0	0	0	1	0	2
0103	ADENOVIRUS TYPE 3	1	0	0	0	1	0	2
0104	ADENOVIRUS TYPE 4	0	1	0	0	1	0	2
0105	ADENOVIRUS TYPE 5	2	0	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	1	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	2	6	0	0	0	0	8
0201	INFLUENZA A VIRUS	2	0	6	21	1	0	30
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	6	6	0	1	0	13
0299	INFLUENZA VIRUS - TYPING PENDI	0	2	0	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	0	1	1	2	0	0	4
0302	PARAINFLUENZA VIRUS TYPE 2	0	1	0	0	1	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	3	3	2	0	0	0	8
0399	PARAINFLUENZA VIRUS TYPING PEN	0	3	0	0	0	0	3
0400	RESPIRATORY SYNCYTIAL VIRUS (R	4	48	10	128	115	1	306
0500	RHINOVIRUS (ALL TYPES)	4	10	0	2	0	1	17
0600	MYCOPLASMA PNEUMONIAE	3	5	5	1	6	1	21
0700	ORNITHOSIS-PSITTACOSIS	0	2	1	1	1	0	5
0816	COXSACKIEVIRUS A16	1	0	0	0	0	1	2
0902	COXSACKIEVIRUS B2	1	0	0	0	0	0	1
0905	COXSACKIEVIRUS B5	1	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	2	0	0	0	0	0	2
1025	ECHOVIRUS TYPE 25	1	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	1	0	0	0	0	0	1
1101	POLIOVIRUS TYPE 1	2	0	0	0	0	0	2
1102	POLIOVIRUS TYPE 2	1	0	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	5	0	0	0	0	0	5
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	4	0	0	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	19	1	1	3	0	2	26
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	3	30	5	18	0	56
1303	VARICELLA-ZOSTER VIRUS	7	4	3	5	2	0	21
1306	HERPES SIMPLEX TYPE 1	5	34	52	36	29	0	156
1307	HERPES SIMPLEX TYPE 2	16	39	46	74	32	0	207
1399	HERPES VIRUS TYPING PENDING	0	3	0	3	0	0	6
1401	COXIELLA BURNETII	2	0	20	0	0	0	22
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	3	7	0	0	10
1521	MEASLES VIRUS	0	3	3	0	0	1	7
1522	RUBELLA VIRUS	1	0	4	0	3	0	8
1532	HEPATITIS B ANTIGEN	40	7	33	7	20	0	107
1535	HEPATITIS A ANTIBODY	1	1	0	4	4	0	10
1536	HEPATITIS C VIRUS	0	0	0	6	0	1	7
1541	CHLAMYDIA A - C. TRACHOMATIS	16	16	24	40	32	4	132
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	1	0	1
1556	CMV - CYTOMEGALOVIRUS	10	36	56	13	1	0	116
1564	ROTAVIRUS	57	4	0	18	48	0	127
1571	ENTEROVIRUS TYPE 71 (BCR)	0	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	8	2	0	0	0	0	10
9721	HTLV-1	0	0	0	1	0	0	1
9906	BARMAH FOREST VIRUS	0	0	3	0	0	0	3
9992	ROSS RIVER VIRUS	1	0	98	0	0	0	99
9993	ASTROVIRUS	2	0	0	0	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	1	0	0	0	0	0	1
9995	DENGUE	0	0	26	1	0	0	27
9997	KUNJIN VIRUS	0	0	1	0	0	0	1
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	0	0	1	0	0	0	1
TOTAL		228	245	448	392	320	12	1645

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 13/09/90 TO 26/09/90

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	1	12	0	0	0	9	0	0	0	0	22
0101	ADENOVIRUS TYPE 1	0	2	0	0	0	1	0	0	0	0	3
0102	ADENOVIRUS TYPE 2	0	2	0	0	0	0	0	0	0	0	2
0103	ADENOVIRUS TYPE 3	1	1	0	0	0	0	0	0	0	0	2
0104	ADENOVIRUS TYPE 4	0	2	0	0	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	1	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	5	0	0	0	2	0	0	0	0	7
0201	INFLUENZA A VIRUS	3	20	0	0	2	1	0	0	0	0	26
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	11	0	0	0	0	0	0	0	0	11
0299	INFLUENZA VIRUS - TYPING PENDI	0	2	0	0	0	0	0	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	0	3	0	0	0	0	0	0	0	0	3
0302	PARAINFLUENZA VIRUS TYPE 2	0	2	0	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	7	0	0	0	0	0	0	0	0	7
0399	PARAINFLUENZA VIRUS TYPING PEN	0	2	0	0	0	0	0	0	0	0	2
0400	RESPIRATORY SYNCYTIAL VIRUS (R	7	296	0	0	0	0	0	1	0	1	305
0500	RHINOVIRUS (ALL TYPES)	0	14	0	0	0	1	0	0	0	0	15
0600	MYCOPLASMA PNEUMONIAE	3	15	0	0	0	0	0	0	0	1	19
0700	ORNITHOSIS-PSITTACOSIS	1	3	0	0	0	0	0	0	0	0	4
0816	COXSACKIEVIRUS A16	0	0	0	0	0	0	0	0	0	2	2
0902	COXSACKIEVIRUS B2	0	0	0	0	1	0	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	0	0	0	1	0	0	0	0	0	1
1011	ECHOVIRUS TYPE 11	0	1	0	0	0	1	0	0	0	0	2
1025	ECHOVIRUS TYPE 25	0	1	0	0	0	0	0	0	0	0	1
1028	ECHOVIRUS TYPE 28 = RHINO VIRU	0	1	0	0	0	0	0	0	0	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	3	0	0	0	0	3
1300	HERPES VIRUS GROUP - NOT TYPED	1	0	0	0	0	0	0	0	0	3	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	2	1	1	0	0	0	0	0	0	11	15
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	15	4	0	0	1	1	1	0	0	0	22
1303	VARICELLA-ZOSTER VIRUS	2	1	0	0	0	0	0	1	0	13	17
1306	HERPES SIMPLEX TYPE 1	3	13	0	0	0	0	0	0	1	107	124
1307	HERPES SIMPLEX TYPE 2	1	0	0	0	0	0	0	0	0	108	109
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	4	4
1401	COXIELLA BURNETII	7	1	0	0	0	0	0	0	0	0	8
1502	PICORNIA VIRUS - NOT TYPED = E	2	1	0	0	1	2	0	0	0	1	7
1521	MEASLES VIRUS	2	0	1	0	0	0	0	0	0	2	5
1522	RUBELLA VIRUS	1	1	0	0	0	0	0	0	0	2	4
1532	HEPATITIS B ANTIGEN	39	1	0	0	0	0	60	0	0	0	100
1535	HEPATITIS A ANTIBODY	2	0	0	0	0	0	7	0	0	0	9
1536	HEPATITIS C VIRUS	2	0	0	0	0	0	5	0	0	0	7
1541	CHLAMYDIA A - C. TRACHOMATIS	12	1	0	0	0	0	0	0	2	1	16
1555	PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	1	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	11	26	0	1	0	3	11	2	5	1	60
1564	ROTAVIRUS	2	0	0	0	0	124	0	0	0	0	126
1571	ENTEROVIRUS TYPE 71 (BCR)	0	0	0	0	0	0	0	0	0	1	1
1599	ENTEROVIRUS TYPING PENDING	0	1	0	0	0	6	0	0	0	0	7
9721	HTLV-1	1	0	0	0	0	0	0	0	0	0	1
9906	BARMAH FOREST VIRUS	1	0	0	0	0	0	0	0	0	0	1
9992	ROSS RIVER VIRUS	33	2	0	0	0	0	1	0	0	3	39
9993	ASTROVIRUS	0	0	0	0	0	2	0	0	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	1	0	0	0	0	1
9995	DENGUE	10	1	0	0	0	0	0	0	0	1	12
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	1	0	0	0	0	0	0	0	0	0	1
TOTAL		166	457	2	1	7	160	85	4	8	262	1152

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 13/09/90 TO 26/09/90

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	2	0	0	0	1	0	0	3	0	0	6
0101	ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	1	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	0	1
0201	INFLUENZA A VIRUS	0	0	0	1	0	0	0	3	0	0	4
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	0	0	0	0	0	0	2	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	0	1	0	0	0	0	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	0	0	1	0	1
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	0	0	0	0	0	1	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	0	1	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	1	1	0	2
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	1	1	0	2
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	0	0	1	0	0	1
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	1	2
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	0	0	0	0	2	2
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	10	0	0	0	0	0	0	1	0	11
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	20	2	1	0	1	6	4	0	34
1303	VARICELLA-ZOSTER VIRUS	0	1	0	0	0	0	0	1	2	0	4
1306	HERPES SIMPLEX TYPE 1	6	22	0	0	0	0	2	0	2	0	32
1307	HERPES SIMPLEX TYPE 2	1	97	0	0	0	0	0	0	0	0	98
1399	HERPES VIRUS TYPING PENDING	0	2	0	0	0	0	0	0	0	0	2
1401	COXIELLA BURNETII	0	0	0	0	1	0	1	12	0	0	14
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	0	0	3	3
1521	MEASLES VIRUS	0	0	0	0	0	0	0	1	1	0	2
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	1	3	0	4
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	7	0	7
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	0	1	0	1
1541	CHLAMYDIA A - C. TRACHOMATIS	2	113	0	0	0	0	0	0	1	0	116
1556	CMV - CYTOMEGALOVIRUS	0	3	0	2	2	4	0	7	36	2	56
1564	ROTAVIRUS	0	1	0	0	0	0	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	1	0	0	0	0	0	0	2	0	0	3
9906	BARMAH FOREST VIRUS	0	0	0	0	2	0	0	0	0	0	2
9992	ROSS RIVER VIRUS	0	0	0	2	29	0	2	9	18	0	60
9995	DENGUE	0	0	0	1	1	0	1	7	5	0	15
9997	KUNJIN VIRUS	0	0	0	0	1	0	0	0	0	0	1
TOTAL		12	249	20	9	38	4	7	60	86	8	493

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE
NON-VIRAL PATHOGEN IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

SAMPLE COLLECTION DATE: JANUARY TO MARCH 1990

CODE 019 - FAIRFIELD HOSPITAL, MELBOURNE
CODE 112 - INSTITUTE OF CLINICAL PATHOLOGY & MEDICAL RESEARCH, WESTMEAD
CODE 115 - STATE HEALTH LABORATORITY, BRISBANE
CODE 116 - WODEN VALLEY HOSPITAL, GARREN
CODE HOB - HOBART PATHOLOGY LABORATORY
CODE LDS - DIAGNOSTIC SERVICES LTD, LAUNCESTON
CODE RHH - ROYAL HOBART HOSPITAL
CODE TPL - TOOWOOMBA PATHOLOGY LABORATORY

		019	112	115	116	HOB	LDS	RHH	TPL	TOTAL
AS00	ASPERGILLUS SPECIES	0	6	0	0	2	0	0	0	8
BR01	BRUCELLA ABORTUS	0	0	4	0	0	0	0	0	4
CA00	CANDIDA SPECIES	0	0	127	0	10	0	0	1	138
CM00	CAMPYLOBACTER SPECIES	0	0	0	0	29	0	0	0	29
CM01	CAMPYLOBACTER JEJUNI	0	0	0	0	0	28	0	2	30
CR00	CRYPTOCOCCUS SPECIES	0	14	0	0	0	0	0	0	14
CT00	CRYPTOSPORIDIUM SPECIES	0	0	0	0	0	5	0	18	23
EA01	ENTAMOEBA HISTOLYTICA	0	0	1	0	1	0	1	0	3
EC01	ECHINOCOCCUS GRANULOSUS	0	0	1	0	0	0	0	0	1
EP00	EPIDERMIDOPHYTON SPECIES	0	0	1	0	1	0	0	2	4
ES01	ESCHERICHIA COLI	0	0	0	0	1	0	0	0	1
GI01	GIARDIA LAMBLIA	0	0	0	0	12	7	0	9	28
HI01	HISTOLYTICA CAPSULATUM	0	2	0	0	0	0	0	0	2
KL00	KLEBSIELLA SPECIES	0	0	0	0	0	0	0	1	1
LE01	LEGIONELLA PNEUMOPHILA	0	4	0	2	0	0	0	0	6
LS00	LEPTOSPIRA SPECIES	0	0	1	0	0	0	0	0	1
LS04	LEPTOSPIRA POMONA	0	6	5	0	0	0	0	0	11
LS05	LEPTOSPIRA AUTUMNALIS	0	0	1	0	0	0	0	0	1
LS06	LEPTOSPIRA GRIPPOTYPHOSA	0	1	0	0	0	0	0	0	1
LS07	LEPTOSPIRA HARDJO	0	2	1	0	0	0	0	0	3
MI00	MICROSPORUM SPECIES	0	0	1	0	9	0	0	2	12
MY01	MYCOBACTERIUM TUBERCULOSIS	0	0	0	0	0	1	0	0	1
NE01	NEISSERIA GONORRHOEAE	0	0	0	0	2	0	0	0	2
NE02	NEISSERIA MENINGITIDIS	0	0	0	0	0	0	0	1	1
PA01	PASTEURELLA MULTOCIDA	0	0	0	0	3	0	0	0	3
PL01	PLASMODIUM FALCIPARUM	0	0	67	0	0	0	0	0	67
PL02	PLASMODIUM VIVAX	0	0	75	0	0	0	0	0	75
SA00	STAPHYLOCOCCUS SPECIES	0	0	0	0	3	0	0	0	3
SE00	STREPTOCOCCUS SPECIES	0	20	0	0	3	0	0	0	23
SH04	SHIGELLA SONNEI	0	0	0	0	0	0	0	1	1
SL00	SALMONELLA SPECIES	0	0	0	0	0	0	0	3	3
SL01	SALMONELLA TYPHI	0	4	1	0	0	0	0	0	5
SR01	STRONGYLOIDES STERCORALIS	0	0	0	0	1	0	0	0	1
TC01	TRICHOMONAS VAGINALE	0	0	3	0	8	0	0	0	11
TI00	TRICHOPHYTON SPECIES	0	0	18	0	33	0	0	4	55
TP01	TOXPLASMA GONDI	10	4	2	0	0	0	0	0	16
TR01	TREPONEMA PALLIDUM	0	0	174	0	0	0	0	0	174
YE01	YERSINIA ENTEROCOLITICA	0	0	0	0	0	0	0	2	2
TOTAL		10	63	483	2	118	41	1	46	764

NB: NUMBERS MAY CHANGE AT A LATER DATE AS A RESULT OF LATE REPORTING

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

NON-VIRAL PATHOGEN IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS
SAMPLE COLLECTION DATE: JANUARY TO MARCH 1990

BL - WHOLE BLOOD; BR - BRONCHIAL WASHINGS OR ASPIRATE; CS - CERESROSPINALFLUID;
EY - EYE; FA - FAECAES/RECTUM; GE - GENITAL SWAB; LE - LEUCOCYTES;
NA - NASOPHARYNGEAL SWAB; PD - PERITONEAL DIALYSIS FLUID; PF - PERICARDIAL,
PLEURAL OR JOINT FLUID; PU - PUS; SA - SALIVA; SK - SKIN; SM - SERUM;
SP - SPUTUM; SS - SKIN SCRAPINGS; TH - THROAT; UR - URINE;

POSTMORTEM OR BIOPSY SPECIMENS: MB - BLOOD, BONE MARROW ; MD - DIGESTIVE TRACT;
MH - HEART; MK - KIDNEY; ML - LIVER; MN - BRAIN, SPINAL CORD; MP - LUNGS
MR - RESPIRATORY TRACT; MS - SPLEEN, LYMPH NODES; MO - OTHER POSTMORTEM/BIOPSY
SPECIMEN

	BL	CS	FA	GE	NA	PU	SK	SM	SP	TH	UR	OT	MN	TOTAL
AS00 ASPERGILLUS SPECIES	0	0	0	0	0	0	1	6	0	0	0	1	0	8
BR01 BRUCELLA ABORTUS	0	0	0	0	0	0	0	4	0	0	0	0	0	4
CA00 CANDIDA SPECIES	0	0	3	106	1	0	17	0	5	4	1	1	0	138
CM00 CAMPYLOBACTER SPECIES	0	0	29	0	0	0	0	0	0	0	0	0	0	29
CM01 CAMPYLOBACTER JEJUNI	0	0	30	0	0	0	0	0	0	0	0	0	0	30
CR00 CRYPTOCOCCUS SPECIES	0	5	0	0	0	0	0	9	0	0	0	0	0	14
CT00 CRYPTOSPORIDIUM SPECIES	0	0	23	0	0	0	0	0	0	0	0	0	0	23
EA01 ENTAMOEBA HISTOLYTICA	0	0	1	0	0	0	0	2	0	0	0	0	0	3
EC01 ECHINOCOCCUS GRANULOSUS	0	0	0	0	0	0	0	1	0	0	0	0	0	1
EP00 EPIDERMIDOPHYTON SPECIES	0	0	0	0	0	0	2	0	0	0	0	2	0	4
ES01 ESCHERICHIA COLI	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GI01 GIARDIA LAMBLIA	0	0	28	0	0	0	0	0	0	0	0	0	0	28
HI01 HISTOLYTICA CAPSULATUM	0	0	0	0	0	0	0	2	0	0	0	0	0	2
KL00 KLEBSIELLA SPECIES	1	0	0	0	0	0	0	0	0	0	0	0	0	1
LE01 LEGIONELLA PNEUMOPHILA	0	0	0	0	0	0	0	6	0	0	0	0	0	6
LS00 LEPTOSPIRA SPECIES	0	0	0	0	0	0	0	1	0	0	0	0	0	1
LS04 LEPTOSPIRA POMONA	0	0	0	0	0	0	0	11	0	0	0	0	0	11
LS05 LEPTOSPIRA AUTUMNALIS	0	0	0	0	0	0	0	1	0	0	0	0	0	1
LS06 LEPTOSPIRA GRIPPOTYPHOSA	0	0	0	0	0	0	0	1	0	0	0	0	0	1
LS07 LEPTOSPIRA HARDJO	0	0	0	0	0	0	0	3	0	0	0	0	0	3
MI00 MICROSPORUM SPECIES	0	0	0	0	0	0	10	0	0	0	0	2	0	12
MY01 MYCOBACTERIUM TUBERCULOSIS	0	0	0	0	0	0	0	0	1	0	0	0	0	1
NE01 NEISSERIA GONORRHOEAE	0	0	0	2	0	0	0	0	0	0	0	0	0	2
NE02 NEISSERIA MENINGITIDIS	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PA01 PASTEURELLA MULTOCIDA	0	0	0	0	0	3	0	0	0	0	0	0	0	3
PL01 PLASMODIUM FALCIPARUM	67	0	0	0	0	0	0	0	0	0	0	0	0	67
PL02 PLASMODIUM VIVAX	75	0	0	0	0	0	0	0	0	0	0	0	0	75
SA00 STAPHYLOCOCCUS SPECIES	3	0	0	0	0	0	0	0	0	0	0	0	0	3
SE00 STREPTOCOCCUS SPECIES	3	0	0	0	0	0	0	20	0	0	0	0	0	23
SH04 SHIGELLA SONNEI	0	0	1	0	0	0	0	0	0	0	0	0	0	1
SL00 SALMONELLA SPECIES	0	0	3	0	0	0	0	0	0	0	0	0	0	3
SL01 SALMONELLA TYPHI	0	0	0	0	0	0	0	5	0	0	0	0	0	5
SR01 STRONGYLOIDES STERCORALIS	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TC01 TRICHOMONAS VAGINALE	0	0	0	11	0	0	0	0	0	0	0	0	0	11
TI00 TRICHOPHYTON SPECIES	0	0	0	0	0	0	51	0	0	0	0	4	0	55
TP01 TOXPLASMA GONDI	0	0	0	0	0	0	0	15	0	0	0	0	1	16
TR01 TREPONEMA PALLIDUM	0	0	0	0	0	0	0	174	0	0	0	0	0	174
YE01 YERSINIA ENTEROCOLITICA	0	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL	150	6	121	119	1	3	81	261	6	4	1	10	1	764

NB: NUMBERS MAY CHANGE AT A LATER DATE AS A RESULT OF LATE REPORTING

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE
NON-VIRAL PATHOGEN IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

SAMPLE COLLECTION DATE: APRIL TO JUNE 1990

CODE 019 - FAIRFIELD HOSPITAL, MELBOURNE
CODE 112 - INSTITUTE OF CLINICAL PATHOLOGY & MEDICAL RESEARCH, WESTMEAD
CODE 115 - STATE HEALTH LABORATORITY, BRISBANE
CODE 116 - WODEN VALLEY HOSPITAL, GARREN
CODE 400 - DR TB LYNCH, PATHOLOGIST, ROCKHAMPTON
CODE HOB - HOBART PATHOLOGY LABORATORY
CODE LDS - DIAGNOSTIC SERVICES LTD, LAUNCESTON
CODE TPL - TOOWOOMBA PATHOLOGY LABORATORY

		019	112	115	116	400	HOB	LDS	TPL	TOTAL
AS00	ASPERGILLUS SPECIES	0	3	1	0	0	4	0	0	8
BO01	BORDETELLA PERTUSSIS	0	0	0	1	0	0	0	0	1
BR01	BRUCELLA ABORTUS	0	1	1	0	0	0	0	0	2
CA00	CANDIDA SPECIES	0	0	127	0	0	2	0	0	129
CM00	CAMPYLOBACTER SPECIES	0	0	0	0	0	18	0	0	18
CM01	CAMPYLOBACTER JEJUNI	0	0	0	0	0	0	29	12	41
CR00	CRYPTOCOCCUS SPECIES	0	4	1	0	0	0	0	0	5
CT00	CRYPTOSPORIDIUM SPECIES	0	0	0	0	0	0	0	2	2
EC01	ECHINOCOCCUS GRANULOSUS	0	0	2	0	0	0	0	0	2
EP00	EPIDERMIDOPHYTON SPECIES	0	0	1	0	0	6	0	1	8
ES01	ESCHERICHIA COLI	0	0	0	0	0	0	0	5	5
GI01	GIARDIA LAMBLIA	0	0	3	0	0	6	7	9	25
HI01	HISTOLYTICA CAPSULATUM	0	1	0	0	0	0	0	0	1
LE01	LEGIONELLA PNEUMOPHILA	0	2	1	0	0	0	0	0	3
LS00	LEPTOSPIRA SPECIES	0	0	2	0	0	0	0	0	2
LS02	LEPTOSPIRA CANICOLA	0	0	1	0	0	0	0	0	1
LS03	LEPTOSPIRA ICTEROHAEMORRHAGIAE	0	0	1	0	0	0	0	0	1
LS04	LEPTOSPIRA POMONA	0	5	4	0	0	0	0	0	9
LS05	LEPTOSPIRA AUTUMNALIS	0	0	1	0	0	0	0	0	1
LS06	LEPTOSPIRA GRIPPOTYPHOSA	0	0	2	0	0	0	0	0	2
LS07	LEPTOSPIRA HARDJO	0	3	5	0	0	0	0	0	8
MI00	MICROSPORUM SPECIES	0	0	2	0	0	5	0	2	9
NE01	NEISSERIA GONORRHOEAE	0	0	0	0	0	1	0	3	4
PA00	PASTEURELLA SPECIES	0	0	0	0	0	1	0	0	1
PL00	PLASMODIUM SPECIES	0	0	2	0	0	0	0	0	2
PL01	PLASMODIUM FALCIPARUM	0	0	55	0	0	0	0	0	55
PL02	PLASMODIUM VIVAX	0	0	111	0	0	0	0	0	111
SA00	STAPHYLOCOCCUS SPECIES	0	0	0	0	0	3	0	1	4
SE00	STREPTOCOCCUS SPECIES	0	22	0	0	0	2	0	4	28
SH04	SHIGELLA SONNEI	0	0	0	0	0	0	0	1	1
SL00	SALMONELLA SPECIES	0	0	0	0	10	0	0	10	20
SL01	SALMONELLA TYPHI	0	1	0	0	0	0	0	0	1
SL02	SALMONELLA PARATYPHI	0	0	0	0	1	0	0	0	1
TC01	TRICHOMONAS VAGINALE	0	0	3	0	0	6	0	1	10
TI00	TRICHOPHYTON SPECIES	0	0	7	0	1	20	0	1	29
TP01	TOXPLASMA GONDI	14	8	0	0	0	0	0	0	22
TR01	TREPONEMA PALLIDUM	0	0	128	0	0	0	0	2	130
TT01	TRICHURIS TRICHIURA	0	0	1	0	0	0	0	0	1
TOTAL		14	50	462	1	12	74	36	54	703

NB: NUMBERS MAY CHANGE AT A LATER DATE AS A RESULT OF LATE REPORTING

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

NON-VIRAL PATHOGEN IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS
SAMPLE COLLECTION DATE: APRIL TO JUNE 1990

BL - WHOLE BLOOD; BR - BRONCHIAL WASHINGS OR ASPIRATE; CS - CERESROSPINALFLUID;
EY - EYE; FA - FAECAES/RECTUM; GE - GENITAL SWAB; LE - LEUCOCYTES;
NA - NASOPHARYNGEAL SWAB; PD - PERITONEAL DIALYSIS FLUID; PF - PERICARDIAL,
PLEURAL OR JOINT FLUID; PU - PUS; SA - SALIVA; SK - SKIN; SM - SERUM;
SP - SPUTUM; SS - SKIN SCRAPINGS; TH - THROAT; UR - URINE;

POSTMORTEM OR BIOPSY SPECIMENS: MB - BLOOD, BONE MARROW ; MD - DIGESTIVE TRACT;
MH - HEART; MK - KIDNEY; ML - LIVER; MN - BRAIN, SPINAL CORD; MP - LUNGS
MR - RESPIRATORY TRACT; MS - SPLEEN, LYMPH NODES; MO - OTHER POSTMORTEM/BIOPSY
SPECIMEN

	BL	CS	FA	GE	LE	PU	SK	SM	SP	SS	TH	OT	TOTAL
AS00 ASPERGILLUS SPECIES	0	0	0	0	0	0	1	3	0	0	0	4	8
BO01 BORDETELLA PERTUSSIS	0	0	0	0	0	0	0	1	0	0	0	0	1
BR01 BRUCELLA ABORTUS	0	0	0	0	0	0	0	2	0	0	0	0	2
CA00 CANDIDA SPECIES	0	0	1	102	2	2	12	0	5	0	5	0	129
CM00 CAMPYLOBACTER SPECIES	0	0	18	0	0	0	0	0	0	0	0	0	18
CM01 CAMPYLOBACTER JEJUNI	0	0	41	0	0	0	0	0	0	0	0	0	41
CR00 CRYPTOCOCCUS SPECIES	0	1	0	0	0	0	0	4	0	0	0	0	5
CT00 CRYPTOSPORIDIUM SPECIES	0	0	2	0	0	0	0	0	0	0	0	0	2
EC01 ECHINOCOCCUS GRANULOSUS	0	0	0	0	0	0	0	2	0	0	0	0	2
EP00 EPIDERMIDOPHYTON SPECIES	0	0	0	0	0	0	7	0	0	0	0	1	8
ES01 ESCHERICHIA COLI	5	0	0	0	0	0	0	0	0	0	0	0	5
GI01 GIARDIA LAMBLIA	0	0	25	0	0	0	0	0	0	0	0	0	25
HI01 HISTOLYTICA CAPSULATUM	0	0	0	0	0	0	0	1	0	0	0	0	1
LE01 LEGIONELLA PNEUMOPHILA	0	0	0	0	0	0	0	3	0	0	0	0	3
LS00 LEPTOSPIRA SPECIES	0	0	0	0	0	0	0	2	0	0	0	0	2
LS02 LEPTOSPIRA CANICOLA	0	0	0	0	0	0	0	1	0	0	0	0	1
LS03 LEPTOSPIRA ICTEROHAEMORRHAGIAE	0	0	0	0	0	0	0	1	0	0	0	0	1
LS04 LEPTOSPIRA POMONA	0	0	0	0	0	0	0	9	0	0	0	0	9
LS05 LEPTOSPIRA AUTUMNALIS	0	0	0	0	0	0	0	1	0	0	0	0	1
LS06 LEPTOSPIRA GRIPPOTYPHOSA	0	0	0	0	0	0	0	2	0	0	0	0	2
LS07 LEPTOSPIRA HARDJO	0	0	0	0	0	0	0	8	0	0	0	0	8
MI00 MICROSPORUM SPECIES	0	0	0	0	0	0	7	0	0	0	0	2	9
NE01 NEISSERIA GONORRHOEAE	0	0	0	3	0	0	0	0	0	0	1	0	4
PA00 PASTEURELLA SPECIES	0	0	0	0	0	1	0	0	0	0	0	0	1
PL00 PLASMODIUM SPECIES	2	0	0	0	0	0	0	0	0	0	0	0	2
PL01 PLASMODIUM FALCIPARUM	55	0	0	0	0	0	0	0	0	0	0	0	55
PL02 PLASMODIUM VIVAX	111	0	0	0	0	0	0	0	0	0	0	0	111
SA00 STAPHYLOCOCCUS SPECIES	4	0	0	0	0	0	0	0	0	0	0	0	4
SE00 STREPTOCOCCUS SPECIES	6	0	0	0	0	0	0	22	0	0	0	0	28
SH04 SHIGELLA SONNEI	0	0	1	0	0	0	0	0	0	0	0	0	1
SL00 SALMONELLA SPECIES	0	0	20	0	0	0	0	0	0	0	0	0	20
SL01 SALMONELLA TYPHI	0	0	0	0	0	0	0	1	0	0	0	0	1
SL02 SALMONELLA PARATYPHI	0	0	1	0	0	0	0	0	0	0	0	0	1
TC01 TRICHOMONAS VAGINALE	0	0	0	10	0	0	0	0	0	0	0	0	10
TI00 TRICHOPHYTON SPECIES	0	0	0	0	0	0	26	0	0	1	0	2	29
TP01 TOXPLASMA GONDI	0	0	0	0	1	0	0	21	0	0	0	0	22
TR01 TREPONEMA PALLIDUM	0	0	0	0	0	0	0	130	0	0	0	0	130
TT01 TRICHURIS TRICHIURA	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	183	1	110	115	3	3	53	214	5	1	6	9	703

NB: NUMBERS MAY CHANGE AT A LATER DATE AS A RESULT OF LATE REPORTING