



Communicable Diseases Intelligence

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1484 reports were processed during this period.

Six cases of Q fever (5 males, 1 female) were reported during this period. Ages ranged from 19 years to 64 years of age. No occupational exposure details were provided. As occupational exposure details are of epidemiological importance, doctors requesting serological tests for Q fever from laboratories contributing to the CDI are asked to provide this information on the pathology request.

Herpes simplex type 2 was again isolated from skin lesions from a 2-month-old male infant with post-natal herpes encephalitis (previously isolated from a November 1988 sample). He died in late January.

Echovirus type 30 activity observed in 1988 continues into the new year with 26 isolates being reported for January 1989 (VIC, 17; WA, 5; NSW, 4). The total isolates for 1988 reached 203 (VIC, 179; WA, 13; NSW, 10; SA, 1).

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DENGUE FEVER UPDATE

An outbreak of dengue fever in French Polynesia was reported in the last issue of the CDI (CDI 89/3). More recently, the World Health Organization's regional office in Suva, Fiji has advised that 1868 clinically diagnosed cases have been reported from French Polynesia since late 1988. There have been no reports of dengue haemorrhagic fever or deaths from the disease. Serology has confirmed dengue type 1 infection in 303 of 664 specimens tested.

The South Pacific Commission has also advised of several outbreaks in the South Pacific basin. A dengue type 2 epidemic was reported from Palau and Yap (Western Pacific) in April and May 1988. The San Juan, Puerto Rico Laboratories of the Centers for Disease Control have reported that cases in Palau are believed to have occurred as early as January 1988. Four fatalities were reported from this epidemic.

The illness in most confirmed cases was classical dengue fever. Of 56 laboratory-confirmed cases, 98% reported fever, 94% headache, 75% chills, 71% nausea/vomiting, and 54% myalgias. Haemorrhagic manifestations were observed in 21% of confirmed patients and ranged from mild petechial rash to severe upper gastrointestinal haemorrhage.

The South Pacific Commission has also reported that a dengue type 1 epidemic began in Kiribati in November 1988, with 3000 cases notified in December of that year. Sporadic cases (type unknown) have occurred in Fiji. An epidemic of dengue type 3 has also been reported from New Caledonia. No other details are available.

A case of dengue has also been reported recently by a Canberra medical practitioner. The patient (adult female, age unknown) had recently returned from Noumea, New Caledonia. She developed an illness which consisted of severe muscle aches and pains, headaches and relative bradycardia. The illness was bi-phasic in nature and accompanied by a macular rash. Her platelet counts remained at high levels and the patient did not develop any signs of dengue haemorrhagic fever. At the time CDI went to press, serology test results were not available.

CDI Editorial Comment

Dengue fever is a mosquito-borne viral disease transmitted by *Aedes* spp. A major vector of the disease is *Aedes aegypti*, which is prevalent in parts of northern Australia. The mosquito is a container breeder and is usually associated with human habitation.

Despite the presence of the vector, diagnoses of dengue fever in Australia are relatively rare. Reports of dengue received under the CDI virus reporting scheme totalled 10, 14 and 11 in 1986, 1987 and 1988 respectively. The current reports of dengue activity from several areas in the South Pacific basin serve to highlight the need to take a travel history whenever a communicable disease is being considered in the differential diagnosis of a disease.

In addition, persons who are planning overseas trips, and who intend to visit areas where vector-borne diseases occur, should be counselled on means of avoiding mosquito bites. Such self-help measures include the use of mosquito nets if sleeping in non-airconditioned accommodation, the use of 'knockdown' sprays or coils to kill mosquitoes indoors, and the wearing of light coloured clothing (long dresses or long sleeved shirts buttoned at the wrist and long trousers). Dark coloured clothing attracts mosquitoes as do perfume, cologne and after-shave lotion.

In addition, the use of an effective insect repellent is advisable. N,N-Diethyl-meta-toluamide (DEET) is the most effective of the currently available mosquito repellents. Products containing up to 20% DEET should be considered as a first line prophylactic measure. In the rare cases where DEET causes dermatological or systemic adverse reactions, products containing ethylhexanediol are recommended.

ROSS RIVER VIRUS INFECTION IN WESTERN QUEENSLAND

(Contributed by Dr J M H Gillett and Dr G W Steel, Murilla Medical Practice Pty Ltd, Miles, Queensland).

Epidemic polyarthrititis - a disease caused by infection with an alphavirus, Ross River virus - was first described in 1928 (1). The presenting symptoms of the disease vary from arthralgia, rash and occasional fever to lethargy and a feeling of depression (2). Whilst the incubation time of the disease varies from three to twenty-one days (3), the symptoms of arthralgia and lethargy can persist for some months; patients have complained of symptoms up to twenty-one months after the initial infection (4).

The town of Miles is situated on the Western Darling Downs and has an average rainfall of twenty-four inches. The mosquito vectors of Ross River virus (*Aedes* and *Culex* species) have been found in the district.

As arthralgia, lethargy and depression are very common presentations within the Murilla Medical Practice, it was decided to conduct a survey to estimate the extent of infection with Ross River virus within the practice.

Method: All patients who presented at the practice in January 1987, regardless of symptoms, were requested to undergo a voluntary blood test. There was 90% compliance; 338 patients were tested. Specimens were tested by a private pathology laboratory using an ELISA test to estimate the IgG and IgM titres against Ross River virus.

The following diagnostic criteria were used:

- . current infection: IgG > 40 and IgM > 40;
- . past infection: IgG ≥ 40 and IgM ≤ 40;

Results: Using the above diagnostic criteria, thirteen persons attending the practice during January 1987 were diagnosed as having current infection with Ross River virus (Table 1) and an additional 170 persons showed evidence of past infection (Table 2).

Table 1: Current and past infection with Ross River virus, Murilla Medical Practice, Miles, Queensland - January 1987

Sex	Number Tested	Current infection	Past infection
Female	206	9	97
Male	132	4	73
TOTAL	338	13	170

Table 2: Age distribution of IgG positive persons, Murilla Medical Practice, Miles, Queensland, January 1987

Age	Number IgG Positive	Number Tested	% IgG Positive
0 - 20	16	47	34.0
21 - 30	28	67	41.7
31 - 40	21	52	40.4
41 - 50	25	45	55.6
51 - 60	27	42	64.3
61 - 70	34	48	70.8
70 +	32	37	86.5
TOTAL	183	338	58.3

If one assumes that the IgM antibody remains positive for up to 6 months, this would indicate a seroconversion rate of about ten per cent per annum. This probably reflects the high mosquito population in the summer months and should not be assumed to be a yearly rate.

Of the 338 persons attending the Murilla Medical Practice in January 1987, 183 (58%) were IgG positive to Ross River virus. The seropositivity rate for males was slightly higher than for females. A rise in seropositivity rate with age was observed with over 85% of the 70+ age group seropositive indicating increased lifetime exposure risk with age (see Table 2). This trend was also seen in a New South Wales survey with an overall seropositivity rate of 43% observed for the North Western Plains area (5). (Editorial note: These rates are not directly comparable. When antibody prevalence rates vary according to age, direct comparison is only possible between groups with comparable age distributions.)

Discussion: Ross River virus is endemic in the Western Darling Downs. When patients residing or holidaying in Ross River virus endemic areas present with symptoms of arthralgia, lethargy and depression, a differential diagnosis of epidemic polyarthrititis should be considered.

CDI Editorial Comment

The Department of Community Services and Health has prepared a draft handbook on epidemic polyarthrititis to provide information to medical practitioners. Topics covered are:

- . mosquito vectors;
- . vertebrate host range;
- . seasonal/geographical distribution;
- . demographic features;
- . clinical features;
- . differential diagnosis;
- . investigations;
- . management; and
- . prevention.

In addition, a patient information sheet is also available (see Appendix to CDI 88/4).

Copies of the draft handbook and the patient information sheet can be obtained from:

The Editor
Communicable Diseases Intelligence
Department of Community Services and Health
PO Box 9848
CANBERRA ACT 2601

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AEDES ALBOPICTUS INFESTATION IN USA - QUARANTINE IMPLICATIONS

Aedes albopictus, commonly known as the Asian tiger mosquito, is a known vector of all serotypes of dengue fever (1,2). It is a competent vector of yellow fever virus (3), Ross River virus (4), Japanese encephalitis (5), the California encephalitis group of viruses (6), Rift Valley fever virus (7) and other viruses (8). In addition it is known to be capable of transovarial transmission of at least 15 viruses including dengue fever and Japanese encephalitis (8).

Ae. albopictus is diurnal, and is an aggressive biter which can bite several times before the effect of the initial bite is felt. In urban situations *Ae. albopictus* is a container breeder, and prefers shaded areas. In rural areas it breeds in water-containing tree or rock holes. The eggs can withstand long periods of dessication (9). Some strains are capable of diapause ie a delay in egg hatching following exposure of pupae or adults to short day length intervals thus allowing it to overwinter the colder climates. (Although hibernal dormancy occurs in the egg stage, the photoperiodically sensitive stages are the pupae and adults) (10). It is normally found in Madagascar, Asia, Japan, Korea and Northern China.

In the United States, breeding populations of *Ae. albopictus* mosquitoes were first detected in several tyre dumps in Houston, Harris County, Texas, in August 1985 (11). Following the initial report of this infestation, surveillance measures were implemented to determine the distribution of the mosquito in USA.

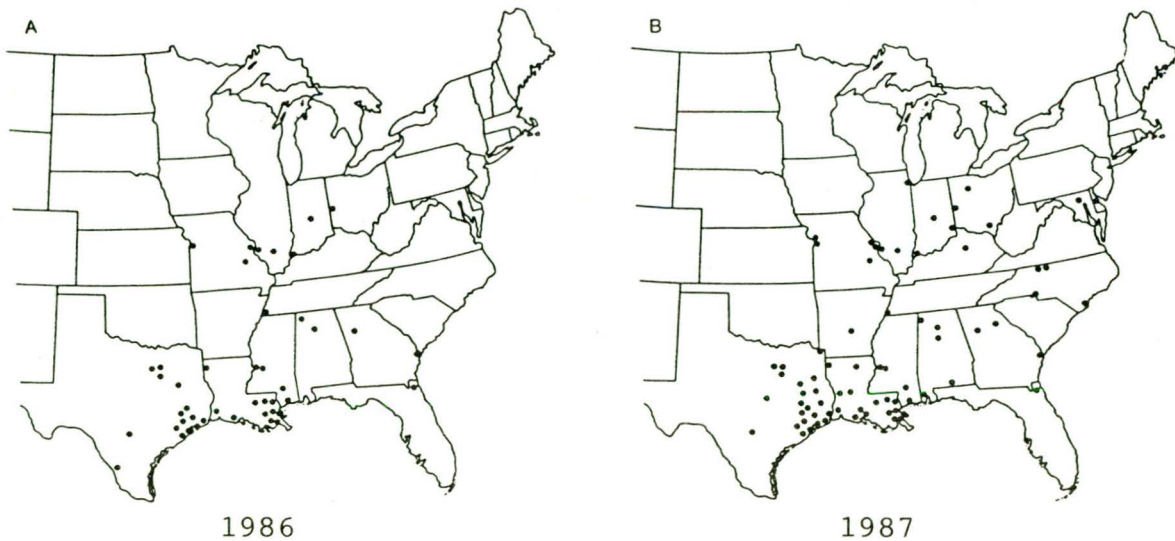
Between August 1985 and July 1986 further infestations were identified in Texas, Louisiana, Tennessee, Mississippi and Florida (4). By October 1986 *Ae. albopictus* has been detected in one or more counties in 12 states (12). A 1987 survey detected infestations in an additional 5 states, the northernmost being Chicago, Illinois (13,14). (See Table 1 and Figure 1).

Table 1: *Ae. albopictus* infected counties reported to CDC by state/local agencies - USA, 1986 - 1 October 1987.

State	County	1986*	1987*	State	County	1986*	1987*
AL	Colbert	+		MS	Forrest	+	
	Covington	?	+		Harrison	+	+
	Cullman	+	+		Hinds	+	+
	Jefferson	-	+		Warren	+	
	Mobile	-	+	MO	Clay	-	+
AR	Grant	+			Jackson	+	+
					St. Charles	+	+
CA	Alameda	-	±		St. Louis	+	+
DE	Kent	?	+	Washington	+		
				NC	New Hanover	?	+
Rockingham	?	+					
Stokes	?	+					
Mecklenburg	?	+					
GA	Chatham	+	+	OH	Darke	±	±
	Clarke	?	+		Hancock	-	±
	Fulton	+			Jackson	-	+
IL	Cook	-	+	TN	Shelby	+	+
	Jefferson	+			TX	Anderson	+
	St. Clair	+		Angelina		?	+
IN	Dearborn	-	+	Bell		?	+
	Marion	+	+	Bexar		+	+
	Vanderburgh	+	+	Bowie		+	
KY	Fayette	-	+	Brazoria		+	+
				Chambers		+	+
LA	Caddo	+	+	Coryell		?	+
	Calcasieu	+	+	Dallas		+	+
	East Baton Rouge	+	+	Ellis		+	+
	Iberia	+	+	Fort Bend		+	+
	Jefferson	+	+	Galveston		+	+
	Lafayette	?	+	Harris		+	+
	Orleans	+	+	Houston		?	+
	Ouachita	-	+	Jefferson		+	+
	Plaquemines	+		Liberty		+	+
	Rapides	?	+	Montgomery		+	+
	St. Bernard	+		Orange	?	+	
	St. Charles	+	+	Rusk	?	+	
	St. Tammany	+		San Jacinto	+	+	
	Tangipahoa	+		Tarrant	+	+	
	Vermilion	+	+	Tyler	?	+	
Vernon	?	+	Walker	?	+		
MD	Baltimore (City)	?	+	Webb	±	-	

* "+" = positive; "-" = negative; "±" = positive, but population was eradicated or area became negative without treatment; "?" = unknown, not surveyed; (blank) = no data for this season.

Figure 1: Distribution of *Ae. albopictus* in the United States
- 1986 and 1987.



It has been accepted that the introduction of *Ae. albopictus* probably resulted from the importation of shipments of used tyres from northern Asia (10). Examination of US customs records for 1985 & 1986 showed that large numbers of used tyres were imported; 96% of those from *Ae. albopictus*-infested countries originated in Japan and Korea. The destinations of these tyres were widespread including 11 out of 12 states known to be infested. Larvae of *Ae. albopictus* and other mosquitoes were detected in imported used tyres which were examined at the port of Seattle between October and December 1986 (15).

The abundance and distribution of the infestation in Harris County in 1986 suggested that the foci had been established for some time, although no *Ae. albopictus* mosquitoes were detected in a survey of used tyres in 1980.

However comparison of the 1986 and 1987 surveys also indicates expansion of the species rather than pre-existing foci, since several counties that were negative for *Ae. albopictus* in 1986 were positive in 1987.

In addition to direct importation of *Ae. albopictus* from overseas, intra- and interstate transport of used tyres within the US has been shown to contribute to the spread of *Ae. albopictus* colonies (14).

The North American strain of *Ae. albopictus* has been shown to have a similar photoperiodic response to the northern Asian populations. This response is related to the capability of mosquitoes to enter diapause (10). It is thought that these properties may be limiting its southern spread - there have not yet been any infestations reported from southern Texas or southern Florida; the most southern colonies have been found around 29-30 north latitude (16).

Attempts to eliminate *Ae. albopictus* in the US have met with only limited success. Following unsuccessful attempts at mosquito control using insecticides in Jacksonville, Florida, local ordinances were invoked to restrict tyre dumps, and tyre

haulers are now required to be licensed, bonded and provide reports on the processing of their tyres (17). From 1 January 1988 US import regulations have required all used tyres casings imported from Asia be certified dry, clean and free of insects (12).

Ae. albopictus has recently been introduced into Brazil (4), and reintroduced (along with *Ae. aegypti*) into the Pacific island republic of Palau. Although there have not been any reports of disease outbreaks associated with the introduction of *Ae. albopictus* into USA or Brazil, Palau recently experienced an epidemic of dengue fever type 2 (18).

Australia also imports large quantities of used tyres from Asia, some from areas where *Ae. albopictus* is endemic. The potential exists for the introduction of arboviral diseases such as dengue fever into Australia. *Ae. aegypti*, the only vector of dengue fever known to be found in Australia, is only found in the northern parts of the country. Strains of *Ae. albopictus* similar to that introduced into the US have the potential to colonise other areas of Australia.

Consequently, Australian quarantine requirements concerning the importation of new and used tyres have been strengthened (19). The main elements of the new requirements are as follows:

Used tyres:

1. The inner and outer walls of used tyres must be scrubbed to remove all foreign material prior to importation into Australia.
2. Tyres must be free of viable mosquito eggs.
3. Tyres must be dry.
4. Containers are not to be unloaded or released until cleared by Quarantine. Except for the purposes of fumigation, they are not to be opened before quarantine clearance is obtained.
5. All containers must be fumigated in accordance with procedures approved by the Department of Primary Industries and Energy, as a condition of quarantine clearance. Fumigation can be carried out overseas at the time containers are loaded, or on arrival.
 - Where carried out overseas, the consignment must be accompanied by an appropriate fumigation certificate.
 - Where carried out on arrival, fumigation must be performed by a licensed pest control operator, under Quarantine direction.
6. Quarantine clearance must be provided on production of an appropriate fumigation certificate and subject to any additional plant quarantine requirements.
7. Random inspections of consignments will be carried out to ensure the conditions in paragraphs 1-3 above have been met, and appropriate treatment ordered in cases where non-compliance is detected.

New tyres:

8. New tyres which are not wrapped must be accompanied by a declaration from the exporter to the effect that they have been stored under cover and meet the requirements of paragraphs 2 and 3 above. Where this declaration is not or cannot be given, they will be treated in the same way as used tyres.

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AIDS UPDATE - UNITED KINGDOM: 1982 - DECEMBER 1988

(Based on CDR, 89/01, page 4, 6 January 1989)

To 31 December 1988, 1982 cases of AIDS meeting the surveillance case definition for AIDS have been reported to the PHLS Communicable Disease Surveillance Centre. The distribution of those cases by country and region of report (Table 1) and by risk category (Table 2) are shown below:

TABLE 1: AIDS cases by country and region of report

	Cases	Deaths
ENGLAND		
Northern	48	30
Yorkshire	46	28
Trent	41	19
East Anglia	24	15
N W Thames	793	395
N E Thames	369	200
S E Thames	204	108
S W Thames	65	40
Wessex	47	26
Oxford	43	23
South Western	39	26
West Midlands	35	22
Mersey	30	18
North Western	79	50
Channel Islands	1	-
WALES	34	20
SCOTLAND	75	35
NORTHERN IRELAND	9	4
TOTALS	1982	1059

TABLE 2: AIDS cases by risk category

Risk Group	Number of Cases			Number of Deaths
	Male	Female	Total	
Homosexual/Bisexual	1634	-	1634	863
IV drug user	28	11	39	21
Homosexual/Bisexual male IV drug user	31	-	31	15
Blood transfusion recipient*	146	16	162	106
Heterosexual activity#	48	28	76	32
Child of at risk /infected parent	9	10	19	8
None of the above	20	1	21	14
TOTAL	1916	66	1982	1059

* Includes cases with haemophilia (126 males, 1 female, 81 deaths).

This includes 53 persons (38 males, 15 females, 19 deaths) presumed to have been infected abroad.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 2/2/89 TO 15/2/89

- | | |
|------------------------------|-----------------------------------|
| 1. CODE 019 - FAIRFIELD(VIC) | 5. CODE 112 - ICPMR(NSW) WVH(ACT) |
| 2. CODE 065 - STATE LAB(WA) | 6. CODE 113 - PHH POW(NSW) |
| 3. CODE 110 - IMVS(SA) | 7. CODE 114 - RAHC(NSW) |
| 4. CODE 111 - RCH(VIC) | 8. CODE 115 - STATE LAB(QLD) |

	019	065	110	111	112	113	114	115	TOTAL
0100 ADENOVIRUS NOT TYPED	0	3	0	0	0	5	0	8	16
0101 ADENOVIRUS TYPE 1	1	0	0	2	1	0	0	0	4
0102 ADENOVIRUS TYPE 2	1	2	0	5	0	1	0	0	9
0103 ADENOVIRUS TYPE 3	2	2	0	0	0	0	0	0	4
0104 ADENOVIRUS TYPE 4	0	0	0	1	0	0	0	0	1
0105 ADENOVIRUS TYPE 5	1	2	0	0	1	0	0	0	4
0119 ADENOVIRUS TYPE 19	0	0	0	0	1	0	0	0	1
0137 ADENOVIRUS TYPE 37	0	2	0	0	0	0	0	0	2
0199 ADENOVIRUS TYPING PENDING	3	0	0	10	3	1	0	0	17
0201 INFLUENZA A VIRUS	0	1	0	0	0	0	0	0	1
0206 INFLUENZA A H1N1	0	0	0	0	1	0	0	0	1
0301 PARAINFLUENZA VIRUS TYPE 1	0	0	0	1	0	0	0	0	1
0302 PARAINFLUENZA VIRUS TYPE 2	0	0	4	0	0	0	0	1	5
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	10	12	2	1	1	6	32
0400 RESPIRATORY SYNCYTIAL VIRUS (R	3	2	0	1	0	1	1	0	8
0500 RHINOVIRUS (ALL TYPES)	11	2	0	12	1	0	0	7	33
0600 MYCOPLASMA PNEUMONIAE	7	9	26	16	9	0	0	0	67
0700 CRNITHOSIS-PSITTACOSIS	3	0	0	0	0	1	0	0	4
0816 COXSACKIEVIRUS A16	0	0	1	0	0	0	0	0	1
0904 COXSACKIEVIRUS B4	0	0	0	4	0	0	0	0	4
0905 COXSACKIEVIRUS B5	0	0	0	1	0	0	0	0	1
1004 ECHOVIRUS TYPE 4	3	2	2	0	0	0	0	0	7
1006 ECHOVIRUS TYPE 6	0	1	0	0	0	0	0	0	1
1009 ECHOVIRUS TYPE 9	2	5	12	4	0	0	0	0	23
1022 ECHOVIRUS TYPE 22	1	0	0	0	0	0	0	0	1
1025 ECHOVIRUS TYPE 25	0	0	0	0	1	0	0	0	1
1027 ECHOVIRUS TYPE 27	0	1	0	0	0	0	0	0	1
1030 ECHOVIRUS TYPE 30	18	3	0	7	6	0	0	0	34
1100 POLIOVIRUS NOT TYPED	0	2	0	9	0	1	0	0	12
1102 POLIOVIRUS TYPE 2	1	0	0	0	3	0	0	0	4
1103 POLIOVIRUS TYPE 3	0	0	0	0	2	0	0	0	2
1104 POLIOVIRUS - MIXED VACCINAL ST	1	0	0	0	0	0	0	0	1
1200 MUMPS VIRUS	0	0	0	0	3	1	0	0	4
1300 HERPES VIRUS GROUP - NOT TYPED	2	0	0	0	0	2	0	0	4
1301 HERPES SIMPLEX VIRUS - NOT TYP	2	5	0	0	85	0	1	0	93
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	1	4	18	0	0	6	7	0	36
1303 VARICELLA-ZOSTER VIRUS	5	7	0	1	9	1	0	2	25
1306 HERPES SIMPLEX TYPE 1	63	25	35	0	7	13	0	20	163
1307 HERPES SIMPLEX TYPE 2	57	35	37	0	54	25	0	29	237
1399 HERPES VIRUS TYPING PENDING	0	0	3	8	0	0	0	0	11
1401 COXIELLA BURNETI	0	0	1	0	5	0	0	0	6
1502 PICORNIA VIRUS - NOT TYPED = E	0	5	0	0	0	4	0	15	24
1522 RUBELLA VIRUS	9	0	2	1	0	0	0	0	12
1532 HEPATITIS B ANTIGEN	19	19	10	0	32	4	0	37	121
1535 HEPATITIS A ANTIBODY	1	2	2	0	3	0	0	1	9
1541 CHLAMYDIA A - C. TRACHOMATIS	19	49	52	1	16	2	0	23	162
1555 PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	0	1	0	0	1
1556 CMV - CYTOMEGALOVIRUS	27	10	2	4	5	4	4	7	63
1562 REOVIRUS (ALL TYPES)	0	0	0	0	1	0	0	0	1
1564 ROTAVIRUS	2	11	0	0	0	3	0	0	16
1566 NORWALK AGENT	0	0	0	2	0	0	0	0	2
1599 ENTEROVIRUS TYPING PENDING	0	0	0	9	0	10	1	0	20
9992 ROSS RIVER VIRUS	72	98	0	0	0	1	0	0	171
TOTAL	337	309	217	111	251	88	15	156	1484

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 2/2/89 TO 15/2/89

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

	1	2	3	4	6	7	8	9	10	11	TOTAL
0100 ADENOVIRUS NOT TYPED	2	5	0	0	0	8	0	0	0	0	15
0101 ADENOVIRUS TYPE 1	0	2	0	0	0	1	0	0	0	0	3
0102 ADENOVIRUS TYPE 2	0	6	0	0	0	2	0	0	0	0	8
0103 ADENOVIRUS TYPE 3	1	0	0	0	0	2	0	0	0	0	3
0105 ADENOVIRUS TYPE 5	1	1	0	0	0	2	0	0	0	0	4
0119 ADENOVIRUS TYPE 19	0	0	0	0	0	1	0	0	0	0	1
0137 ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	7	0	1	0	0	0	0	0	0	8
0201 INFLUENZA A VIRUS	0	1	0	0	0	0	0	0	0	0	1
0301 PARAINFLUENZA VIRUS TYPE 1	0	1	0	0	0	0	0	0	0	0	1
0302 PARAINFLUENZA VIRUS TYPE 2	0	5	0	0	0	0	0	0	0	0	5
0303 PARAINFLUENZA VIRUS TYPE 3	2	26	0	0	0	0	0	0	0	0	28
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	8	0	0	0	0	0	0	0	0	8
0500 RHINOVIRUS (ALL TYPES)	0	29	0	0	0	0	0	1	0	0	30
0600 MYCOPLASMA PNEUMONIAE	2	57	0	0	0	0	0	0	0	1	60
0700 ORNITHOSIS-PSITTACOSIS	1	2	0	0	0	0	0	0	0	0	3
0816 COXSACKIEVIRUS A16	0	0	0	0	0	0	0	0	0	1	1
0904 COXSACKIEVIRUS B4	0	1	0	2	1	0	0	0	0	0	4
0905 COXSACKIEVIRUS B5	0	0	0	1	0	0	0	0	0	0	1
1004 ECHOVIRUS TYPE 4	1	0	0	3	0	1	0	0	0	0	5
1006 ECHOVIRUS TYPE 6	0	0	0	0	0	1	0	0	0	0	1
1009 ECHOVIRUS TYPE 9	0	8	0	9	0	2	0	0	0	0	19
1022 ECHOVIRUS TYPE 22	1	0	0	0	0	0	0	0	0	0	1
1025 ECHOVIRUS TYPE 25	0	0	0	1	0	0	0	0	0	0	1
1027 ECHOVIRUS TYPE 27	0	0	0	0	0	1	0	0	0	0	1
1030 ECHOVIRUS TYPE 30	3	5	0	24	0	0	0	0	0	1	33
1100 POLIOVIRUS NOT TYPED	1	4	1	0	0	2	0	0	0	0	8
1102 POLIOVIRUS TYPE 2	0	2	0	0	0	0	0	0	0	0	2
1103 POLIOVIRUS TYPE 3	0	2	0	0	0	0	0	0	0	0	2
1104 POLIOVIRUS - MIXED VACCINAL ST	0	1	0	0	0	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	0	0	0	0	0	2	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	19	1	0	0	0	0	0	0	0	12	32
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	6	2	2	0	0	0	0	0	0	1	11
1303 VARICELLA-ZOSTER VIRUS	4	0	1	0	0	0	0	0	0	17	22
1306 HERPES SIMPLEX TYPE 1	0	7	0	1	0	0	0	0	1	108	117
1307 HERPES SIMPLEX TYPE 2	0	0	1	0	0	0	0	0	0	61	62
1399 HERPES VIRUS TYPING PENDING	0	1	0	1	0	0	0	0	0	6	8
1401 COXIELLA BURNETI	3	0	0	0	0	0	0	0	0	0	3
1502 PICORNIA VIRUS - NOT TYPED = E	0	7	0	0	2	13	0	0	0	0	22
1522 RUBELLA VIRUS	0	0	0	0	0	0	0	0	0	11	11
1532 HEPATITIS B ANTIGEN	50	0	0	0	0	1	65	0	0	1	117
1535 HEPATITIS A ANTIBODY	1	0	0	0	0	0	8	0	0	0	9
1541 CHLAMYDIA A - C. TRACHOMATIS	10	1	0	0	0	0	0	0	0	0	11
1556 CMV - CYTOMEGALOVIRUS	6	11	0	0	1	0	2	0	5	0	25
1562 REOVIRUS (ALL TYPES)	0	0	0	0	0	1	0	0	0	0	1
1564 ROTAVIRUS	0	0	0	0	0	16	0	0	0	0	16
1566 NORWALK AGENT	0	1	0	0	0	0	0	0	0	0	1
1599 ENTEROVIRUS TYPING PENDING	0	2	0	4	0	9	0	0	0	0	15
9992 ROSS RIVER VIRUS	42	0	0	0	0	0	0	0	0	32	74
TOTAL	157	206	5	47	4	63	75	1	6	254	818

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 2/2/89 TO 15/2/89

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

	12	13	14	15	16	17	18	19	20	21	TOTAL
0100 ADENOVIRUS NOT TYPED	1	0	0	0	0	0	0	0	0	0	1
0101 ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	0	0	1	1
0102 ADENOVIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
0103 ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	0	1
0104 ADENOVIRUS TYPE 4	0	0	0	0	0	0	0	0	0	1	1
0137 ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	4	0	0	0	0	0	0	0	4	1	9
0206 INFLUENZA A HINI	0	0	0	0	0	0	1	0	0	0	1
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	0	4	0	0	4
0500 RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	1	1	1	3
0600 MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	1	2	4	0	7
0700 ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	0	0	1	0	0	1
1004 ECHOVIRUS TYPE 4	0	0	0	0	0	0	1	0	1	0	2
1009 ECHOVIRUS TYPE 9	0	0	0	0	0	0	0	2	2	0	4
1030 ECHOVIRUS TYPE 30	0	0	0	0	0	0	0	1	0	0	1
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	0	4	4
1102 POLIOVIRUS TYPE 2	0	0	0	0	0	0	1	0	0	1	2
1200 MUMPS VIRUS	0	0	2	0	0	0	0	1	1	0	4
1300 HERPES VIRUS GROUP - NOT TYPED	0	2	0	0	0	0	0	0	0	0	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	1	59	0	0	0	0	0	0	1	0	61
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	14	3	0	0	0	3	5	0	25
1303 VARICELLA-ZOSTER VIRUS	0	1	0	0	0	0	0	1	1	0	3
1306 HERPES SIMPLEX TYPE 1	2	40	0	0	0	0	0	2	2	0	46
1307 HERPES SIMPLEX TYPE 2	0	175	0	0	0	0	0	0	0	0	175
1399 HERPES VIRUS TYPING PENDING	0	3	0	0	0	0	0	0	0	0	3
1401 COXIELLA BURNETI	0	0	0	0	0	0	0	1	2	0	3
1502 PICORNA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	0	2	0	2
1522 RUBELLA VIRUS	0	0	0	0	0	0	0	0	1	0	1
1532 HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	4	0	4
1541 CHLAMYDIA A - C. TRACHOMATIS	0	151	0	0	0	0	0	0	0	0	151
1555 PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	0	0	0	1	0	0	1
1556 CMV - CYTOMEGALOVIRUS	1	2	0	0	1	6	0	13	14	1	38
1566 NORWALK AGENT	0	0	0	0	0	0	1	0	0	0	1
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	4	5
9992 ROSS RIVER VIRUS	0	0	0	0	91	0	0	5	1	0	97
TOTAL	11	433	16	3	92	6	5	39	47	14	666