



# Communicable Diseases Intelligence

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1196 reports were processed during this period.

Thirteen cases (12 males, 1 female) of Q fever were reported through the CDI reporting scheme during this period. Except for one case in a 3-year-old boy, ages ranged from 20 to 54 years. An additional two male cases of Q fever were reported by Dr Lynch, Pathologist, of Rockhampton. No occupational exposure details were provided for any of the cases.

IgM to dengue types 1 and 2 was identified in the serum of a 26-year-old woman from Timor with a four day history of fever.

A further 18 cases of echovirus type 30 were reported during this period, including isolation from the faeces of one patient following renal transplant.

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OVERSEAS BRIEF: DENGUE TYPE 3 IN NEW CALEDONIA

In CDI 89/4 (p2) mention was made of an outbreak of dengue type 3 in New Caledonia, but no details were available.

CDI has now been advised that this epidemic started in January 1989; 1769 clinical cases have been recorded by 26 sentinel posts. The virus was isolated from 61 patients during January, and from 115 patients during the first 2 weeks of February. Two deaths have been confirmed and a further 5-10 deaths are suspected.

It is estimated that the total number of cases in the epidemic so far has reached 10,000 (ie. 8% of the population).

SEVERE IMPORTED PLASMODIUM FALCIPARUM INFECTION: A CASE REPORT  
(Contributed by Dr Marion Woods, Specialist in Infectious Diseases; Sue Dubow, RN Communicable Diseases Officer and Chris Noonan, RN Research Officer, Communicable Diseases Centre, Royal Darwin Hospital, Northern Territory.)

Five days following his return to Australia from an 18 day overseas visit to Papua New Guinea, (Port Moresby and Mt Hagen) a 41-year-old male, who is a resident of the Northern Territory, presented to a Community Health Centre with fever, sweating, headache, vomiting, epigastric pain and mild diarrhoea. This improved initially.

Four days following his first symptoms, the patient became jaundiced, developed dark urine, neck stiffness and altered sensorium. A malaria film indicated *Plasmodium falciparum*. He was admitted to the Regional hospital.

The patient had taken regular chloroquine prophylaxis, commenced as prescribed, 2 tablets weekly for 3 weeks prior to departure. He did not take pyrimethamine/dapsone (Maloprim).

He was treated with two doses of quinine 600 mgs IV four hours apart, one dose of rolitetracycline 275 mgs IV and one dose of cefotaxime 1 gm IV.

The following tests were carried out on cerebrospinal fluid:

- . Microscopic examination:
  - 15 x 10<sup>9</sup> white cells/L;
  - 9 x 10<sup>9</sup> red blood cells/L; and
  - no bacteria;
  - india ink wet mount - negative;
- . latex agglutination test for bacterial and cryptococcal antigen - negative;
- . culture after 48 hours - no growth.

The next day, following further deterioration including loss of consciousness, he was evacuated by Aerial Medical Service to the Intensive Care Unit at the Royal Darwin Hospital.

On examination, the patient was semi-conscious responding to painful stimuli. His temperature was 39°C, blood pressure 150/100, pulse 120 and respiration rate 30. He was jaundiced and had basilar crepitations and neck stiffness with no focal neurological signs.

Phenobarbitone 300 mgs IMI was given on admission to Intensive Care as prophylaxis against seizure activity.

He was treated with IV quinine at a dose of 10 mg per kg per 8 hours for 3 days. He was then changed to oral quinine 600 mgs TDS for 7 days. He received IV clindamycin 900 mgs every 8 hours for 7 days.

On day four, he received 3 sulfadoxine/pyrimethamine (Fansidar) tablets.

He was given primaquine 22.5 mg/day for 14 days after completion of quinine treatment.

The patient recovered fully.

Blood films were as follows:

DAY	HAEMOGLOBIN (g/L)	WCC (x 10 <sup>9</sup> /L)	PLATELETS (x 10 <sup>9</sup> /L)	PARASITES (/uL)
1	143	14.7	62	28,000
2	129	12.2	84	3,700
3	111	9.9	118	3,200
4				few

A blood film taken on discharge showed a few non-viable parasites. Follow up of this is to be carried out by the Regional Hospital.

CDI Editorial Comment

There is no drug that is completely safe and effective for prophylaxis against malaria. Selection of malaria chemoprophylaxis is made on the basis of a risk-benefit analysis, and is complicated by increasing prevalence of drug resistant malaria.

When making a risk assessment, doctors prescribing malaria prophylaxis need to consider:

- . the country being visited and the the prevalence of drug resistance in the area;
- . the type of accommodation;
- . the length of stay;
- . the amount of unprotected exposure to mosquitoes between dawn and dusk.

While a person who is only visiting cities and is staying in airconditioned hotels may have a low risk of exposure to malaria, someone visiting rural areas, staying in village accommdation, and participating in outside activities at night would have a high risk of coming into contact with infected mosquitoes in endemic areas.

In addition to appropriate chemoprophylaxis, travellers can and should take precautions against being bitten by mosquitoes. These include:

- . the use of mosquito nets if sleeping in non-airconditioned accommodation;
- . the use of 'knockdown' sprays or mosquito coils to kill mosquitoes;
- . wearing light clothing with long sleeves and long trousers at or after dusk;
- . avoidance of perfume, cologne and after shave as these attract mosquitoes;
- . using effective insect repellants on both skin and clothing as mosquitoes can bite through cloth (repellants containing N,N.-Diethyl-toluamide (DEET) are recommended); and
- . the use of a vapourising mat containing a pyrethroid at night.

The National Health and Medical Research Council advises that malaria risk exists throughout the year in the whole of Papua New Guinea [1]. Chloroquine resistant malaria is present in PNG and some failures with antifolate drugs have been reported.

In high risk situations in areas with chloroquine-resistant malaria such as PNG, both chloroquine and Maloprim are recommended.

#### REFERENCES

1. NH&MRC. Malaria Guidelines for Medical Practitioners (in press).

#### USE OF PARENTERAL QUINIDINE FOR TREATMENT OF MALARIA

Following the publication of an article on clinical complications of falciparum malaria [1], Dr Frank Shann of the Royal Children's Hospital, Melbourne, has written to the CDI pointing out that:

'in the case reported, administration of parenteral anti-malarial therapy was delayed because no quinine for injection was available. Parenteral quinidine is at least as active against *P.falciparum* as quinine (MMWR 1985;34:371), and it is widely available in Australia because of its use as an antiarrhythmic.'

In addition, Dr Shann has recommended a review on severe and complicated malaria, compiled by the World Health Organization and published as a supplement to the Transactions of the Royal Society of Tropical Medicine and Hygiene [2].

#### REFERENCES

1. Hanna J. Clinical complications of *P. falciparum* infection. CDI 1988;88/18:2-4.
2. Severe and complicated malaria. World Health Organization Malaria Action Programme. Trans R Soc Trop Med Hyg 1986;80 (Supl.);3-50. (Published erratum appears in Trans R Soc Trop Med Hyg 1986;80:571.

AIDS SURVEILLANCE AUSTRALIA 1988

From 1 January to 31 December 1988, 438 cases of AIDS fulfilling the criteria of case definition were reported to the National Health and Medical Research Unit in AIDS Epidemiology and Clinical Research. The distribution of those patients by State or Territory of notification (Table 1), by age group (Table 2), by risk category (Table 3) and by clinical presentation (Table 4) are shown below. As previously stated the clinical classification of infection with HIV produced by CDC in Atlanta was adopted in Australia on 1 January 1988 and data is reported using that classification.

TABLE 1: AIDS patients by State or Territory of notification

<u>STATE/ TERRITORY</u>	<u>CASES</u>			<u>DEATHS</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
NSW	246	7	253	42	0	42
VIC	104	3	107	15	0	15
QLD	28	0	28	7	0	7
WA	21	1	22	1	0	1
SA	19	0	19	5	0	5
NT	0	0	0	0	0	0
TAS	0	0	0	0	0	0
ACT	9	0	9	3	0	3
	427	11	438	73	0	73

TABLE 2: AIDS patients by age group

<u>AGE (YEARS)</u>	<u>CASES</u>			<u>DEATHS</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 9	1	1	2	0	0	0
10 - 19	3	1	4	0	0	0
20 - 29	92	4	96	12	0	12
30 - 39	174	3	177	23	0	23
40 - 49	110	0	110	22	0	22
50 - 59	38	1	39	12	0	12
60 +	9	1	10	4	0	4
	427	11	438	73	0	73

TABLE 3: AIDS patients by risk category

<u>RISK GROUP</u>	<u>CASES</u>	<u>DEATHS</u>
Homosexual/Bisexual	397	69
IV drug user:	(17)	(2)
. Homosexual/Bisexual IV drug user	9	1
. Heterosexual IV drug user	1	0
. Sexuality not stated	7	1
Blood transfusion recipient	6	0
Person with haemophilia	5	0
Heterosexual transmission	8	1
Under investigation	3	1
None of the above	2	0
	438	73

TABLE 4: AIDS patients by clinical presentation\*

<u>INITIAL DISEASE REPORTED</u>	<u>CASES</u>	<u>DEATHS</u>
GROUP IV:		
B: Neurological disease	11	3
C: Secondary infectious diseases	326	49
D: Secondary cancers	76	14
E: Other conditions	5	2
BC: Neurological disease + infectious diseases	2	0
BD: Neurological disease + cancers	1	1
CD: Infectious diseases + cancers	<u>17</u>	<u>4</u>
	438	73

\* The data in Table 4 include presumptive (clinical) diagnosis.

ERADICATING THE TYPHOID CARRIER STATE

(Based on Epidemiologic Notes and Reports 1989;13:26-8)

Currently, there are more than 200 individuals on California's Typhoid Carrier Registry. There are probably many more undetected carriers, especially among immigrants from hyperendemic areas of the world. Identified carriers are routinely asked to sign a 'typhoid carrier agreement', promising - among other things - not to handle any food which might be consumed by anyone not in the immediate family and to report to the local public health department any change in address or occupation.

Often carriers wish to terminate their carrier state, sometimes because they seek employment in a sensitive occupation but, more often, because they want to eliminate the stigma they feel as a 'carrier'. During the past two decades or so, a number of important papers have been published on the success that can be achieved (70% or more) with a variety of oral agents (ampicillin, amoxicillin, trimethoprim/sulfamethoxazole, quinolones, etc.) that generally need to be administered for protracted periods. Also success has been reported after 15 days treatment with intravenous ampicillin. Many cures have occurred despite gall bladder disease, including the presence of stones and the absence of gall bladder function.

Since chronic carriers excrete *S. typhi* intermittently (and relapses have been reported as long as 24 months after completing therapy), some of the 'cures' reported in these studies may have relapsed after publication. However, when relapses occur, this tends to happen within the first several months after completing therapy. While the results of the above studies are difficult to compare since study designs were different, the study populations were small, and information on co-existing gall bladder disease was not routinely provided, there has clearly been a good deal of success in attempting to eradicate the typhoid carrier state medically. Although cholecystectomy alone can cure the chronic carrier in 70-80% of cases, not all carriers can tolerate or want surgery. (If

Table 1: Selected studies on elimination of the typhoid carrier state

Researcher	Treatment	Subjects	Results
Simon & Miller, 1966 [1]	Ampicillin, 75-100mg/kg/day in divided doses for approximately 28 days.	15 chronic carriers, 11 of whom were documented biliary tract carriers and 5 with gallstones.	All 15 became stool culture-negative during therapy and 13 (87%) remained so 7-54 months (average 24 months) after continuous follow up observation. 67% had side effects from ampicillin, but none were so severe that subjects had to discontinue therapy.
Phillips, 1971 [2]	Ampicillin, 4g daily in divided doses for 90 days.	12 chronic typhoid carriers. No attempt was made to differentiate between biliary and non-biliary excretors.	9 (75%) were apparently cured after an 18 month follow-up.
Kaye et al, 1967 [3]	Ampicillin, 4-6gm daily and probenecid 2gm daily (to boost ampicillin levels) for 9 to 42 days.	24 chronic carriers.	Cure rate of 50%. When excluding those taking ampicillin for less than 28 days, the cure rate increases to 60%.
Scioli et al, 1972 [4]	Ampicillin, 1gm IV q 8h for 15 days.	19 typhoid carriers, including 5 with gallstones.	All subjects became stool culture-negative and remained so during 16-24 months follow up. One patient developed a skin rash that disappeared after treatment with antihistamines and 2 suffered moderate diarrhoea for several days.
Pichler et al, 1973 [5]	Trimethoprim/sulfamethoxazole, 160 and 800mg respectively, bid, for 3 months.	88 carriers: 40 with <i>S. typhi</i> 48 with <i>S. paratyphi B</i> .	While some success was reported, the article was not clear on exactly what per cent of the typhoid cases completed the course of treatment and, at 12 months of follow-up, what per cent had cleared infection. 29 experienced adverse reactions (mostly nausea, vomiting, glossitis) during treatment. Dr Pichler reported a 61% cure rate with Trimethoprim/sulfamethoxazole on 2 years follow-up (personal communication).

Table 1: Selected studies on elimination of the typhoid carrier state (continued)

Researcher	Treatment	Subjects	Results
Nolan and White, 1978 [6]	Amoxicillin trihydrate, 2gm po, tid, for 28 days.	15 chronic enteric carriers.	9/10 who could tolerate the full amoxicillin regimen were cured (12 month follow-up). Of the 5 who took only half the above amoxicillin dosage (because of gastrointestinal symptoms), only 2 were cured. The overall cure rate was 73% (11/15).
Ferreccio et al, 1988 [7]	Ciprofloxacin, 750mg po q 12h for 28 days.	12 relatively young carriers (mean age 32 years). At least 2 had existing biliary disease but the existence of such disease was not routinely sought.	11/12 (92%) were cured. One individual stopped therapy at 10 days, and another at 15 days, because of suspected adverse reactions (urticaria in 1 and diminishing haemoglobin in another); both were cured, nonetheless. There were possible adverse reactions in several others (gastrointestinal bleeding, nausea, vomiting, Candida vaginitis, and 3 had a drop in haemoglobin), but these others continued therapy.
Gotuzzo et al, 1988 [8]	Norfloxacin, 400mg po q 12h for 28 days.	23 chronic carriers, most of whom had gallstones.	18/23 (78%) were clear of infection on follow-up 1 year later. No drug related signs or symptoms were reported but one subject had mild, transient elevation of serum aspartate amino transferase.

cholecystectomy is performed, however, it ought to be carried out under appropriate antibiotic coverage.) Some have argued that evidence of gall bladder disease radiographically (e.g., existence of gallstones or biliary dysfunction) merits consideration of elective surgery (even without symptoms), regardless of typhoid carriage, in order to prevent future bouts of life-threatening cholecystitis, cholangitis and other complications. Cholecystectomy of asymptomatic carriers with diseased gall bladders could provide the ancillary benefit of eradicating the typhoid carrier state. However, these studies indicate that the carrier state can be eradicated, often without surgery.

A brief summary of the selected articles on elimination of the typhoid carrier state is presented in Table 1.

#### REFERENCES

1. Simon HJ, Miller RC. Ampicillin Treatment of chronic typhoid carriers. N Engl J Med 1966; 274:807-15.
2. Phillips WE. Treatment of chronic carriers with ampicillin. JAMA 1971;217: 913-15.
3. Kaye D, Merselis Ja Jr, Connolly S, Hook EW. Treatment of chronic enteric carriers of Salmonella typhosa with ampicillin. Ann NY Acad Sci 1967; 145:429-35.
4. Scioli C, Fiorentino F, Sasso G. Treatment of Salmonella typhi carriers with intravenous ampicillin. J Infect Dis 1972;125:170-3.
5. Pichler H, Knothe H, Spitzky KH, et al. Treatment of chronic carriers of Salmonella typhi and Salmonella paratyphi B with trimethoprim/sulfamethoxazole. J Infect Dis 1973;128(Suppl):S743-4.
6. Nolan CM, White PC Jr. Treatment of typhoid carriers with amoxicillin. JAMA 1978;239:2352-4.
7. Ferreccio C, Morris JG Jr, Valdivieso C, et al. Efficacy of ciprofloxacin in the treatment of chronic typhoid carriers. J Infect Dis 1988;157:1235-9.
8. Gotuzzo E, Fuerra JG, Benacente L, et al. Use of norfloxacin to treat chronic typhoid carriers. J Infect Dis 1988;157:1221-5.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIPAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES  
BASED ON DATE OF REPORTING

PERIOD 16/3/89 TO 29/3/89

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| 1. CODE 019 - FAIRFIELD(VIC)        | 5. CODE 112 - ICPMR(NSW) WVH(ACT) |
| 2. CODE 065 - STATE LAB(WA) PMH(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	2	2	9	4	1	1	11	30
0101 ADENOVIRUS TYPE 1	2	2	0	0	1	0	0	0	5
0102 ADENOVIRUS TYPE 2	2	1	0	0	0	0	0	0	3
0103 ADENOVIRUS TYPE 3	1	0	1	0	0	0	0	0	2
0104 ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	0	1
0106 ADENOVIRUS TYPE 6	0	0	1	0	0	0	0	0	1
0135 ADENOVIRUS TYPE 35	1	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	1	0	0	2	0	1	0	0	4
0201 INFLUENZA A VIRUS	1	0	0	0	0	0	1	0	2
0203 INFLUENZA B VIRUS	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	1	0	0	0	0	4	5
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	0	7	1	0	0	3	11
0400 RESPIRATORY SYNCYTIAL VIRUS (R	1	0	0	2	3	0	0	2	8
0500 RHINOVIRUS (ALL TYPES)	5	2	4	5	1	0	0	10	27
0600 MYCOPLASMA PNEUMONIAE	7	0	12	2	17	0	0	0	38
0700 ORNITHOSIS-PSITTACOSIS	5	0	0	0	2	0	0	0	7
0809 COXSACKIEVIRUS A9	0	0	0	0	1	0	0	0	1
0904 COXSACKIEVIRUS B4	0	2	0	0	0	0	0	0	2
1004 ECHOVIRUS TYPE 4	0	0	2	0	0	0	0	0	2
1006 ECHOVIRUS TYPE 6	0	2	0	0	0	0	0	0	2
1009 ECHOVIRUS TYPE 9	1	2	2	0	1	0	0	0	6
1011 ECHOVIRUS TYPE 11	0	1	0	0	0	0	0	0	1
1014 ECHOVIRUS TYPE 14	0	0	0	0	1	0	0	0	1
1022 ECHOVIRUS TYPE 22	0	0	0	0	1	0	0	0	1
1030 ECHOVIRUS TYPE 30	6	6	4	0	1	1	0	0	18
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	3	0	0	3
1102 POLIOVIRUS TYPE 2	0	0	1	0	1	0	0	0	2
1200 MUMPS VIRUS	1	0	0	0	1	0	0	0	2
1300 HERPES VIRUS GROUP - NOT TYPED	0	1	0	0	17	0	0	2	20
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	1	0	37	89	0	2	0	129
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	4	11	3	2	0	1	0	21
1303 VARICELLA-ZOSTER VIRUS	7	0	0	1	6	0	1	0	15
1306 HERPES SIMPLEX TYPE 1	52	22	15	0	2	10	0	28	129
1307 HERPES SIMPLEX TYPE 2	61	30	21	0	45	21	0	28	206
1399 HERPES VIRUS TYPING PENDING	1	0	0	3	0	0	0	1	5
1401 COXIELLA BURNETI	1	0	1	0	10	0	0	0	12
1502 PICORHIA VIRUS - NOT TYPED = E	0	1	0	0	0	5	0	14	20
1501 RUBELLA VIRUS	2	0	1	0	0	0	0	0	3
1532 HEPATITIS B ANTIGEN	14	20	15	1	31	7	0	10	98
1535 HEPATITIS A ANTIBODY	1	2	1	0	2	0	1	1	8
1541 CHLAMYDIA A - C. TRACHOMATIS	12	30	18	0	29	0	0	11	100
1556 CMV - CYTOMEGALOVIRUS	27	6	1	2	2	0	0	8	46
1564 ROTAVIRUS	0	18	3	2	5	1	1	1	31
1566 NORWALK AGENT	1	0	0	0	0	0	0	0	1
1599 ENTEROVIRUS TYPING PENDING	0	0	0	4	0	7	3	0	14
9992 ROSS RIVER VIRUS	94	46	5	0	0	0	0	4	149
9995 DENGUE	0	1	0	0	0	0	0	0	1
TOTAL	308	202	122	81	277	57	11	138	1196

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 16/3/89 TO 29/3/89

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

	1	2	3	4	5	6	7	8	10	11	TOTAL
0100 ADENOVIRUS NOT TYPED	2	9	0	0	0	0	16	0	0	0	27
0101 ADENOVIRUS TYPE 1	0	2	0	0	0	0	2	0	0	0	4
0102 ADENOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	0	1
0103 ADENOVIRUS TYPE 3	0	1	0	0	0	0	0	0	0	0	1
0104 ADENOVIRUS TYPE 4	0	1	0	0	0	0	0	0	0	0	1
0106 ADENOVIRUS TYPE 6	0	1	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	1	0	0	0	0	0	0	1	0	2
0201 INFLUENZA A VIRUS	1	0	0	1	0	0	0	0	0	0	2
0203 INFLUENZA B VIRUS	0	1	0	0	0	0	0	0	0	0	1
0301 PARAINFLUENZA VIRUS TYPE 1	0	0	0	0	0	0	0	0	0	1	1
0302 PARAINFLUENZA VIRUS TYPE 2	0	5	0	0	0	0	0	0	0	0	5
0303 PARAINFLUENZA VIRUS TYPE 3	0	11	0	0	0	0	0	0	0	0	11
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	7	0	0	0	0	0	0	0	0	7
0500 RHINOVIRUS (ALL TYPES)	0	26	0	0	0	0	0	0	0	1	27
0600 MYCOPLASMA PNEUMONIAE	3	22	0	0	0	0	0	0	0	0	25
0700 ORNITHOSIS-PSITTACOSIS	0	6	0	0	0	0	0	0	0	0	6
0809 COXSACKIEVIRUS A9	0	0	1	0	0	0	0	0	0	0	1
0904 COXSACKIEVIRUS B4	0	0	0	1	0	0	1	0	0	0	2
1004 ECHOVIRUS TYPE 4	0	1	0	0	0	0	0	1	0	0	2
1006 ECHOVIRUS TYPE 6	0	0	0	0	0	0	1	0	0	0	1
1009 ECHOVIRUS TYPE 9	1	1	0	1	0	1	2	0	0	0	6
1011 ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	0	1	0	1
1014 ECHOVIRUS TYPE 14	0	0	0	0	0	0	1	0	0	0	1
1022 ECHOVIRUS TYPE 22	1	0	0	0	0	0	0	0	0	0	1
1030 ECHOVIRUS TYPE 30	1	1	0	11	0	0	1	0	0	1	15
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	3	0	0	0	3
1102 POLIOVIRUS TYPE 2	0	1	0	1	0	0	0	0	0	0	2
1200 MUMPS VIRUS	1	0	0	0	0	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	2	0	0	0	0	0	0	0	4	6
1301 HERPES SIMPLEX VIRUS - NOT TYP	26	8	0	1	0	0	0	0	1	43	79
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	2	0	0	0	1	1	0	0	0	0	4
1303 VARICELLA-ZOSTER VIRUS	3	0	1	1	0	0	0	0	0	9	14
1306 HERPES SIMPLEX TYPE 1	4	10	0	0	0	0	0	0	0	81	95
1307 HERPES SIMPLEX TYPE 2	5	0	0	0	0	0	0	0	0	58	63
1399 HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	2	3
1401 COXIELLA BURNETI	4	0	0	0	0	0	0	0	0	0	4
1502 PICORNIA VIRUS - NOT TYPED = E	0	7	0	0	0	0	12	0	1	0	20
1522 RUBELLA VIRUS	0	0	0	0	0	0	0	0	0	2	2
1532 HEPATITIS B ANTIGEN	47	0	0	0	0	0	0	40	0	0	87
1535 HEPATITIS A ANTIBODY	1	0	0	0	0	0	0	6	0	0	7
1541 CHLAMYDIA A - C. TRACHOMATIS	16	0	0	0	0	0	0	0	0	0	16
1556 CMV - CYTOMEGALOVIRUS	2	11	0	0	0	1	0	1	5	0	20
1564 ROTAVIRUS	0	0	0	0	0	0	30	0	0	0	30
1566 NORWALK AGENT	0	0	0	0	0	0	0	0	0	1	1
1599 ENTEROVIRUS TYPING PENDING	0	1	0	1	0	0	8	0	0	0	10
9992 ROSS RIVER VIRUS	39	3	0	0	0	0	1	0	0	12	55
TOTAL	159	141	2	18	1	3	78	48	9	215	674

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 16/3/89 TO 29/3/89

- |                                      |                             |
|--------------------------------------|-----------------------------|
| 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 - SIOS          |

	12	13	14	15	16	18	19	20	21	TOTAL
0100 ADENOVIRUS NOT TYPED	3	0	0	0	0	0	0	0	0	3
0101 ADENOVIRUS TYPE 1	0	0	0	0	0	0	1	0	0	1
0102 ADENOVIRUS TYPE 2	0	0	0	0	0	0	1	1	0	2
0103 ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	1
0135 ADENOVIRUS TYPE 35	0	0	0	0	0	0	0	1	0	1
0199 ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	2	0	0	2
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	1	0	0	1
0600 MYCOPLASMA PNEUMONIAE	0	11	0	0	0	1	1	0	0	13
0700 ORNITHOSIS-PSITTACOSIS	0	0	0	0	0	1	0	0	0	1
1006 ECHOVIRUS TYPE 6	0	0	0	0	0	0	1	0	0	1
1030 ECHOVIRUS TYPE 30	0	0	0	1	0	0	0	1	1	3
1200 MUMPS VIRUS	0	0	0	1	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	14	0	0	0	0	0	0	0	14
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	47	0	0	0	0	3	0	0	50
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	11	1	2	1	1	1	0	17
1303 VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	1	0	0	1
1306 HERPES SIMPLEX TYPE 1	3	29	0	0	0	0	0	2	0	34
1307 HERPES SIMPLEX TYPE 2	0	141	0	0	0	0	0	2	0	143
1399 HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	1	0	0	2
1401 COXIELLA BURNETI	0	0	0	0	0	1	5	2	0	8
1522 RUBELLA VIRUS	0	0	0	0	0	0	1	0	0	1
1532 HEPATITIS B ANTIGEN	0	0	0	0	0	0	3	8	0	11
1535 HEPATITIS A ANTIBODY	0	0	0	0	0	0	1	0	0	1
1541 CHLAMYDIA A - C. TRACHOMATIS	1	83	0	0	0	0	0	0	0	84
1556 CMV - CYTOMEGALOVIRUS	0	3	0	0	0	1	5	17	0	26
1564 ROTAVIRUS	0	0	0	0	0	0	0	1	0	1
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	2	0	2	4
9992 ROSS RIVER VIRUS	0	0	0	0	88	4	2	0	0	94
9995 DENGUE	0	0	0	0	0	1	0	0	0	1
TOTAL	8	329	11	3	90	10	32	36	3	522



DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Malaria	4	3	5	2	4		1	9	28	239
Measles	2	NN	7			NN	NN		9	67
Meningococcal infections	2		4	2		NN	2	1	11	61
Non-specific urethritis	614	NN		NN	NN	NN	7	NN	621	2120
Ornithosis			79						79	217
Pertussis (whooping cough)	1	2	NN	6		NN		NN	9	83
Plague										
Poliomyelitis										
Q fever	5		13						18	235
Rabies						NN		NN		
Salmonella infections	69	4	59	36	19	5	23		215	2235
Shigella infections	8	2	12	6	5	1	11		45	401
Smallpox										
Syphilis	44	2	10	5	1		33		95	1233
Tetanus										2
Trachoma		NN	NN		1	NN	NN		1	144
Tuberculosis (all forms)	12	21	3		12		1	2	51	671
Typhoid fever	4				1				5	30
Typhus (all forms)			1						1	5
Vibrio parahaemolyticus infection		NN	NN			NN		NN		2
Yellow fever										
Yersinia infections	6		NN	6		NN		NN	12	119

NN - Not notifiable

(Note: Data collected under the National Diseases Returns may bear little or no correlation to that collected under the CDI laboratory scheme. Whilst the latter is a sampling program, the Notifiable Diseases data is dependent upon voluntary reporting by medical practitioners etc.)