Communicable Diseases Intelligence

Bulletin number 81/21

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Contents:

VIRUS REPORTING SCHEME - A total of 807 reports were received this period. They suggest a decline in respiratory infections (131 reports compared with 165, 216 and 209 for the previous three periods), with decreases noted for influenza virus (13 compared with 30, 38, and 66), respiratory syncytial virus (37 compared with 58,96 and 84) and rhinovirus (16 compared with 22, 20 and 22) infections. However, of the M. pneumoniae reports (25 compared with 15,16 and 18), 15 were from the Institute of Clinical Pathology and Medical Research (ICPMR), Sydney.

Reports of interest include:

- Antibody against Epstein-Barr virus was detected by immunofluorescence at the ICPMR, Sydney, in a 63 year old male presenting with encephalomyelitis with anterior horn cell dysfunction.

- Mumps virus was isolated by Fairfield Hospital, Melbourne, from the placenta, kidneys and adrenal glands of 12-16 week fetus that had been spontaneously aborted. The 26 year old mother presented with a typical mumps infection with gland involvement and meningitis.

- Dengue fever has been diagnosed in the wife of a staff member at the Australian High Commission, Port Moresby, Papua New Guinea.

- Fairfield Hospital, Melbourne, reported malaria in two travellers returning from the Solomon Islands. A 38 year old female developed vivax malaria five weeks following her return. She had been, and still was taking Maloprim chemoprophylaxis. The second case was a 50 year old male who developed falciparum malaria while still taking chloroquine.

The following four reports are included in the virus tables of CDI 81/20, but because of space problems they could not be included in the text.

- An arbovirus B infection, a retrospective clinical diagnosis of a MVE/kunjin encephalitis, was reported by the State Health Laboratory, Brisbane, in a 12 year old girl from Croydon, north Queensland.

(continued on page 6)

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EPIDEMIC POLYARTHRITIS AND ROSS RIVER (RR) VIRUS INFECTION

(Contributed by J.R.E. Fraser, Department of Medicine, University of Melbourne).

Information on the epidemiology, geography and clinical features of epidemic polyarthritis has accrued in recent years. Increased travel, overseas sources of infection[1] and the availability of serological diagnostic tests have all appeared to have effected an apparent rise in disease incidence. The 432 cases reported to CDI to date this year emanated from most of Western Australia[2] and Queensland, the southern coast of New South Wales[3] and northern Tasmania[4,5]. Small localised outbreaks and sporadic cases have previously been identified in Victoria and South Australia[6].

The effects of RR virus in humans range from symptomless infection, transient rash and mild illness to acute severe symptoms resembling meningoencephalitis. However, the most common and troublesome form is epidemic polyarthritis when the clinical picture can closely resemble rheumatoid disease. This article is a review of the features of infection. It is intended to assist in the recognition and reporting of cases in areas of no local disease activity.

Table 1 lists the clinical signs and symptoms that may be observed in RR virus infection.

Specific HI antibody against RR virus is considered positive at titres of $\geqslant$ 1/20, but these levels may be indicative of infection years before. Titres are usually high at presentation ($\geqslant$1/1280) even at two days after onset, and four-fold rises in titre (from sera collected 10-14 days apart) are diagnostic. Antibody titres usually decay slowly, and remain static for months when the initial titres are moderate. IgM antibody can persist for long periods, and might represent an earlier symptomless infection unrelated to the presenting illness.

The peripheral blood is usually normal, although the whole variety of non-specific leucocyte responses have been observed including mild neutrophilia, depressed neutrophil count with a slight shift to the left, lymphocytosis or lymphopenia. Occasionally atypical mononuclear cells are prominent. The inflammatory response in synovial fluid is almost entirely mononuclear, dominated by macrophages which contain virus antigen but no other elements of immune complexes[7,8]. Further development of immunofluorescent tests may provide rapid diagnosis.

The erythrocyte sedimentation rate can be normal at all stages, but has been observed as high as 45mm. When raised, it usually falls within a few weeks and remains normal thereafter despite persistent symptoms. Serum C-reactive protein is sometimes elevated. Rheumatoid factor and antinuclear factors have not been found. Acute renal involvement might occur as in other virus infections, but clinical or biochemical evidence of hepatic disturbances has not been reported.

In presentations of acute febrile illness with systemic symptoms and rash, or acute arthritis with rash, differential

TABLE 1 Clinical features of Ross River virus infection

ACUTE			CHRONIC
Rash	Systemic	Rheumatic	
Rash may appear several days before and up to 11 days after arthritis. It consists of macules and papules, 1-3 mm in diameter (sometimes larger), and may be sparse or dense and confluent, appearing mainly on limbs and trunk, but may involve palms and soles, digits and face. Small vesicles which fail to form scabs, purpura as scattered spots on feet and lower legs, and subcutaneous haemorrhage (rare) may also occur. Itch is uncommon. The rash usually lasts 2-7 days, but lesions may persist and remain tender up to one month. Palatal enanthem has been reported, but it is very rare. Approximately one third of confirmed cases have no rash, and conversely it appears that many patients with mild infection present with rash but with virtually no other symptoms.	Systemic symptoms are usually mild or absent. Temperature may exceed 39°C, with severe headache and muscular pain in the neck and back. No reaction has been observed in the CSF, but a mild meningoencephalitis cannot be excluded at this stage. Mild coryza, lymphadenopathy (affecting any lymph node area), myalgia (either severe with marked muscle tenderness, or muscle pain without tenderness) and severe fatigue may also occur. Diarrhoea has been reported in the Western Pacific cases, but is not a feature in local infections. Post-infective depression is not evident except in patients with long-lasting rheumatic symptoms.	Onset of arthritis is usually acute, and may be so severe that patients cannot tolerate the weight of bedding. It is often symmetrical in distribution but less often in intensity. Swelling of the joints is common, frequently with effusions in the wrists, knees and ankles and in the tendon sheaths. Inconspicuous reddening and heat may be present. Arthritis is most common and severe in the peripheral joints, including the fingers, wrists, knees and ankles. Involvement of the jaw, spine and hips is less frequent and not persistent. Tenosynovitis with swelling at the wrists (both palmar and dorsal surfaces) and ankles may occur. Achilles tendonitis and plantar fascitis may also be a feature. Paraesthesia due to compression neuropathy in the wrists and possibly inflammatory peripheral neuropathy in the ankles may develop; persistent carpal tunnel syndrome has been the only observed serious consequence.	Rheumatic symptoms, with severe morning stiffness, pain, tenderness and diffuse periarticular swelling often persist. Some effusions last for several months. These symptoms resemble the early stages of rheumatoid arthritis Mild cases recover in 2-4 weeks, but most persist for more than 3 months, some with signs and symptoms for a recorded 2½ years. Acute exacerbations and brief relapses are common, and full recovery is assured only after one month without symptoms.

diagnosis could include rubella, hepatitis B, infectious mononucleosis, bacterial infections and brucellosis or Q fever in patients with occupational risks. Suboccipital, pre-and post-auricular or generalized adenopathy, or a prominent palatal enanthem would favour rubella or infectious mononucleosis. Epidemic polyarthritis is uncommon and usually mild in children,[9] and Henoch-Schonlein syndrome could be considered as an alternative. In acute arthritis without rash, and in the chronic phase, diagnosis can be extremely difficult. A careful review of the patient's travels, or possible exposure, can be helpful when the average incubation time of 7-11 days (4-21 day range) is considered. In the persistent phase, the best guide for diagnosis is a careful review of the course of the disease from onset, as negative tests for rheumatoid factor are not exclusive for early rheumatoid disease or lupus with arthritis.

Although RR virus infection rarely seems to cause permanent sequelae, the disease can no longer be regarded as trivial. Research has suggested that the virus survives in sequestered areas with sufficient local escape to provoke a mild inflammatory response.[10] Genetic studies have also suggested independent associations of the disease with the genetic determinants HLA DR7 and Gm $a^+x^+b^+$[11].

A clinical syndrome indistinguishable from epidemic polyarthritis has been observed in northern Victoria. The syndrome is accompanied by rash and characterised by a mononuclear synovial effusion. Although it has not yet been attributed to any known virus infection, the disease could be caused by one of the numerous arboviruses isolated from mosquitoes in the region. Complete recovery follows infection, but any well documented cases with acute and convalescent sera would assist in the eventual elucidation of this illness.

References

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8. Aust. N.Z. J. Med. (1981) 11 : 168
9. MJA (1972) 1 : 1083
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11. Aust. N.Z. J. Med. (1980) 10 : 597

MULTIPLY-RESISTANT PNEUMOCOCCUS - WESTERN AUSTRALIA

(Contributed by P.L. Masters and C.J.C. Richardson, Princess Margaret Hospital for Children, Perth).

Streptococcus pneumoniae type 19 was isolated from a "routine admission" nose swab of a four year old boy admitted to the burns unit at the Princess Margaret Hospital for Children. The same organism was found in pernasal swabs from the boys' brother and sister, but not from any other family members. The isolate exhibited a decreased susceptibility to penicillin (MIC = 0.6µg/ml), resistance to chloramphenicol (40µg/ml) and tetracycline (80µg/ml) and an intermediate resistance to sulphafurazole (80µg/ml). The pneumococcus was sensitive to erythromycin (0.25µg/ml) and trimethoprim (1µg/ml) by an agar dilution method.

The child had no evidence of an active infection, and was discharged after several days. Neither the patient nor his siblings were given chemotherapy. The boy, who was from an Arabian Gulf country, had only been in Australia for four months.

Although pneumococci with decreased susceptibility to penicillin, or resistance to chloramphenicol with or without concomittant resistance to tetracycline, have been isolated previously, this is the first multiresistant S. pneumoniae reported from Western Australia.

Editorial Comment

Following the first report of penicillin resistance in 1967,[1] pneumococci exhibiting resistance (MIC's $\geqslant$ 1µg/ml) and partial resistance (0.1-0.9µg/ml) have been reported from most parts of the world. Likewise chloramphenicol resistant strains have been reported sporadically since their recognition in 1970[2,3]. Although prevalence rates have been estimated to range from 0-14%[3], higher frequencies have been recorded in countries with uncontrolled and widespread usage of chloramphenicol[4]. Most chloramphenicol resistant strains are also resistant to tetracycline[3,5]. Resistance to erythromycin has also been reported in Japan[6] and USA.[7]

Subsequent to the first appearance of multiresistant strains in South Africa in 1977[8], isolates involving serotypes 6A, 6B, 19A, 14 and 23 have been reported[9,10]. Accordingly, CDC recommend that all clinically significant pneumococcal isolates should be screened for penicillin sensitivity using a 1µg oxacillin disc[11]. Those isolates having a zone size of $\leqslant$19mm might be associated with infections that could respond poorly to penicillin therapy, and should be tested further using a broth-dilution technique and screened for resistance to other antibiotics. Alternatively, it has been suggested that discs of 0.15µg (0.25 units) of penicillin G be used routinely to screen for penicillin resistance, rather than discs of 0.6µg (1 unit).[12]

References

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5. Antimicrob. Ag. Chemother. (1978) 13 : 577
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IMMUNISATION OF CHILDREN WHOSE RECORDS ARE LOST
(Based on California Morbidity (1981), No 31)

Frequently, children placed in foster homes, children from foreign countries or simply pupils entering schools, are found to lack immunisation records, although it is suspected that they have received at least some past immunisation. The Infectious Diseases Section of the California State Department of Health Services recommends that these children should be fully immunised, appropriate for their ages, under the assumption that they have received no prior immunisation.

Reimmunisation with the commonly used live virus vaccines - measles, mumps, rubella and oral polio vaccines - poses neglible risk. In immune persons, these vaccines simply fail to "take" (i.e set up an immunising infection) and should cause no significant reactions. This is reflected in the recent recommendations made by some investigators for a routine two-dose measles and rubella immunisation series[1,2], and by the recommendation for a supplementary dose of oral polio vaccine for children who may have missed one or more doses in infancy and for travellers to areas where poliomyelitis is prevalent[3].

With the killed vaccines, diphtheria-tetanus-pertussis (Triple antigen) and tetanus-diphtheria (CDT or ADT), administration to an already immunised person may occasionally result in an exaggerated (Arthus) reaction. If this occurs, the patient should be managed like any other Triple antigen/ADT vaccinee with a severe local reaction, either terminating that primary series or changing to another preparation (e.g. from Triple antigen to CDT or ADT) depending on clinical judgement of the circumstances. The possibility of exaggerated local reactions, which are usually transient and not severe, should not be a deterrent to starting primary Triple antigen or ADT series in children with unknown prior immunisation histories.

References

1. Am. J. Dis. Child. (1979) 123 : 1231
2. Paediatrics (1980) 65 : 1174
3. In, "Immunisation Procedures" Appendix to Report of 91st Session of NH & MRC, July 1981

SALMONELLA MONSCHAUI AS REFERENCE CULTURES

Reference cultures of S. typhimurium supplied by the Salmonella Reference Laboratory, Adelaide, for media quality control have been changed to S. monschaui. S. typhimurium is the most frequently isolated serotype from animal, food and environmental sources, so that staff would not be alerted to the possibility of a cross-contamination event. However, S. monschaui has been isolated on very few occasions, and the culture of this serotype from the specimen under test would be treated with suspicion. S. monschaui (S. 35 : m, t:-) will agglutinate with polyvalent "O" and "H" antisera.

(continued from page 1)

- The ICPMR, Sydney, reported the identification of small, virus-like particles in the faeces of a 23 year old female and 38 year old male, and rotavirus in a 22 year old male from Norfolk Island (see also CDI 80/19 and 80/25)

- A rise in HI titre against rubella virus was reported by Fairfield Hospital, Melbourne, in a 23 year old female presenting with rash. The patient reported she received a Cendevax vaccination two years previously.

- The State Health Laboratory Services, Perth, reported the isolation of adenovirus type 13 from faeces/rectal swabs in two males aged 32 and 31 years with genital disease. This serotype was last isolated from the faeces of an infant in October, 1978 by the institute of Medical and Veterinary Science, Adelaide.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 1/10/81 - 14/10/81 BULLETIN NUMBER - 81/21

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
0100 ADENOVIRUS NOT TYPED	8					1	6	1	16
0101 ADENOVIRUS TYPE 1	1			2		1		1	5
0102 ADENOVIRUS TYPE 2	4		1		2	1		1	9
0103 ADENOVIRUS TYPE 3						1			1
0105 ADENOVIRUS TYPE 5	2			1	1	1		2	7
0106 ADENOVIRUS TYPE 6	2								2
0107 ADENOVIRUS TYPE 7	2	2			1	1			6
0115 ADENOVIRUS TYPE 15						1			1
0119 ADENOVIRUS TYPE 19								2	2
0199 ADENOVIRUS TYPING PENDING			1		2	4			7
0201 INFLUENZA A VIRUS	1	2				2	2	1	8
0203 INFLUENZA B VIRUS	3			1					4
0206 INFLUENZA A VIRUS SUBTYPE H1N1					1				1
0301 PARAINFLUENZA VIRUS TYPE 1				3	2	1	1		7
0303 PARAINFLUENZA VIRUS TYPE 3		1	1	1	9		5		17
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	6	9	1		7	5	3	6	37
0500 RHINOVIRUS (ALL TYPES)	1			2	8	2	2	1	16
0600 MYCOPLASMA PNEUMONIAE	15			3		4	3		25
0700 ORNITHOSIS-PSITTACOSIS	1			2					3
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED						2	1		3
0816 COXSACKIEVIRUS A16				2					2
0904 COXSACKIEVIRUS B4	2	1		2	1			1	7
0905 COXSACKIEVIRUS B5						3			3
1004 ECHOVIRUS TYPE 4	1								1
1014 ECHOVIRUS TYPE 14						1		1	2
1017 ECHOVIRUS TYPE 17	1						2		3
1022 ECHOVIRUS TYPE 22				2	2		1		5
1025 ECHOVIRUS TYPE 25								1	1
1101 POLIOVIRUS TYPE 1						2		1	3
1102 POLIOVIRUS TYPE 2						2		1	3
1103 POLIOVIRUS TYPE 3						4			4

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 2

REPORTING PERIOD - 1/10/81 — 14/10/81 BULLETIN NUMBER . 81/21

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHD/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1104 POLIOVIRUS-VACCINAL STRAIN	2				3				5
1200 MUMPS VIRUS	11	2		11	2				26
1300 HERPES VIRUS GROUP-NOT TYPED	13			4		2			19
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	1		1				46	49
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	3							2	5
1303 VARICELLA-ZOSTER VIRUS		1				1	1		3
1306 HERPES SIMPLEX TYPE 1	3			17		9	20		49
1307 HERPES SIMPLEX TYPE 2	41			23		10	19		93
1399 HERPES VIRUS TYPING PENDING			6		3	1			10
1401 COXIELLA BURNETI	8			1		2	4		15
1502 PICORNA VIRUS-NOT TYPED							1	1	2
1521 MEASLES VIRUS	7	4		1	11	2			25
1522 RUBELLA VIRUS	3	1		6			10	3	23
1532 HEPATITIS B ANTIGEN	8		7	36		4	5	8	68
1535 HEPATITIS A ANTIBODY	1		3				5	5	14
1541 CHLAMYDIA A - C TRACHOMATIS	16							47	63
1556 CMV - CYTOMEGALOVIRUS	3		2	11	4	3	2	16	41
1564 ROTAVIRUS	14	6	8	7	16	12	3		66
1599 ENTEROVIRUS TYPING PENDING		2	1		6	2			11
ROSS RIVER VIRUS							3		3
ASTROVIRUS	2								2
SMALL VIRUS (LIKE) PARTICLE	1					2			3
PARAMYXO	1								1
Total	180	32	31	139	81	69	99	147	807

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

81/21

PERIOD : 1/10/81 to 14/10/81 ....

Viral Identifications by Clinical Information Table 1.
Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.; 07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respiratory	Encephalitis	Meningitis	Paralysis	CNS other unspec	GI	Hepatic	CVS	Urinary	Skin/ mucs memb
0101 ADENOVIRUS TYPE 1.....	1	1		1			2				
0102 ADENOVIRUS TYPE 2.....		2				1	6				
0103 ADENOVIRUS TYPE 3.....	1										
0105 ADENOVIRUS TYPE 5.....		4					2				
0106 ADENOVIRUS TYPE 6.....	1						1				
0107 ADENOVIRUS TYPE 7.....		2					4				
0201 INFLUENZA A VIRUS.....	1	7									1
0203 INFLUENZA B VIRUS.....	2	2									
0206 INFLUENZA A VIRUS SUBTYPE H1N1		1									
0301 PARAINFLUENZA VIRUS TYPE 1....		6									
0303 PARAINFLUENZA VIRUS TYPE 3....		16									2
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	3	36									
0500 RHINOVIRUS (ALL TYPES).....		15									
0600 MYCOPLASMA PNEUMONIAE.....	8	15									
0700 ORNITHOSIS-PSITTACOSIS.....		2									
0810 COXSACKIEVIRUS A16.....											2
0904 COXSACKIEVIRUS B4.....	1	4				1					
0905 COXSACKIEVIRUS B5.....		1		1			1				
1004 ECHOVIRUS TYPE 4.....							1				
1014 ECHOVIRUS TYPE 14.....				1			1				
1017 ECHOVIRUS TYPE 17.....		1					1				1
1022 ECHOVIRUS TYPE 22.....	2	1	1								
1025 ECHOVIRUS TYPE 25.....						1					
1101 POLIOVIRUS TYPE 1.....							2				
1102 POLIOVIRUS TYPE 2.....	2		1								
1103 POLIOVIRUS TYPE 3.....							1				
1104 POLIOVIRUS-VACCINAL STRAIN....	1	2					1				

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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

81/21

PERIOD : 1/10/81 to 14/10/81 ....

Viral Identifications by Clinical Information Table 1.
Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Enceph-
alitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.;
07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.-CONTINUED

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respir atory	Enceph alitis	Mening -itis	Para- lysis	CNS other unspec	GI	Hepa -tic	CVS	Urin -ary	Skin/ mucs memb
1200 MUMPS VIRUS	4	1	1	6				1			
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1		2								30
1302 EPSTEIN-BARR VIRUS (EB VIRUS)			1					1			
1303 VARICELLA-ZOSTER VIRUS			1								2
1306 HERPES SIMPLEX TYPE 1		1	1								29
1307 HERPES SIMPLEX TYPE 2	1						1				9
1401 COXIELLA BURNETI	4	1									
1502 PICORNA VIRUS-NOT TYPED							1				
1521 MEASLES VIRUS		4									24
1522 RUBELLA VIRUS											20
1532 HEPATITIS B ANTIGEN	30							38			
1535 HEPATITIS A ANTIBODY	1							13			
1556 CMV - CYTOMEGALOVIRUS	7	5		1		1	1			9	1
1564 ROTAVIRUS	4	1					59				
ASTROVIRUS							2				
SMALL VIRUS (LIKE) PARTICLE	1						3				
PARAMYXO							1				
Total	76	131	8	10		4	91	53		9	121

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 1/10/81 to 14/10/81 ...

81/21

Viral Identifications by Clinical Information Table 2.
Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;
38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;
G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

	VIRUS OR VIRAL ANTIGEN	Eye	Genital	Endo/sal gland	RES	Muscle/joint	Congenital	PUO	Fever/malaise	Other	SIDS
0105	ADENOVIRUS TYPE 5							1			
0115	ADENOVIRUS TYPE 15	1									
0119	ADENOVIRUS TYPE 19		2								
0301	PARAINFLUENZA VIRUS TYPE 1								1		
0500	RHINOVIRUS (ALL TYPES)								1		1
0600	MYCOPLASMA PNEUMONIAE					2		1			
0700	ORNITHOSIS-PSITTACOSIS							1			
0904	COXSACKIEVIRUS B4							1	1	1	
1017	ECHOVIRUS TYPE 17							2			
1022	ECHOVIRUS TYPE 22									1	
1101	POLIOVIRUS TYPE 1										1
1103	POLIOVIRUS TYPE 3									1	2
1104	POLIOVIRUS-VACCINAL STRAIN									1	
1200	MUMPS VIRUS			18					3		
1301	HERPES SIMPLEX VIRUS NOT-TYPED	2	17								
1302	EPSTEIN-BARR VIRUS (EB VIRUS)			3				1			
1306	HERPES SIMPLEX TYPE 1	5	13						1		
1307	HERPES SIMPLEX TYPE 2		81				1				
1401	COXIELLA BURNETII							5	5		
1522	RUBELLA VIRUS			1		3			2	1	
1541	CHLAMYDIA A - C TRACHOMATIS		63								
1566	CMV - CYTOMEGALOVIRUS	1	8					4	2	2	1
1604	ROTAVIRUS									1	1
ROSS	RIVER VIRUS					3					
Total		9	184	22		8	1	16	15	8	6

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

9th. 4 Weekly Period for..1981..
(9.8.81 to 5.9.81)

Bulletin ...81/21...

Disease	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Amoebiasis	N.N.	1	4	1					6	45
Ankylostomiasis	N.N.			N.N.			2		2	93
Anthrax									—	—
Arbovirus infection			2	N.N.					2	* 19
Brucellosis	1	1		1		1			4	26
Campylobacter infections	N.N.	1	N.N.	31	N.N.	N.N.	N.N.	N.N.	32	215
Chancroid			1	N.N.	1	N.N.	N.N.		2	18
Cholera									—	2
Congenital rubella syndrome	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Diphtheria							7		7	10 + 1 CARRIER
Donovanosis		N.N.	3	N.N.		N.N.	1		4	39
Giardiasis	N.N.	N.N.	N.N.	69	N.N.	N.N.	N.N.	N.N.	69	513
Genital herpes	N.N.	N.N.	N.N.	50	N.N.	N.N.	3	N.N.	53	266
Gonococcal ophthalmia neonatorum		N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Gonorrhoea	170	146	70	47	127	12	81	14	667	7438
Hepatitis A (infectious)	40	38	14	18	4	3	7	2	126	1048
Hepatitis B (serum)	9	10	11	4	2		1		37	335
Hepatitis - unspecified	N.N.	N.N.		1	27	N.N.	5		33	69
Hydatid disease	1								1	16
Lassa Fever	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Legionnaires disease	N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	16
Leprosy					2		3		5	30
Leptospirosis		1		1	1				3	42
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.			—	—
Malaria	4	5	11	2	6			3	31	308
Marburg Disease	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Meningococcal infections	N.N.		5	2		N.N.			7	48
Non-specific urethritis	N.N.	N.N.	N.N.	123	N.N.	N.N.	N.N.	N.N.	123	921
Ornithosis									—	8
Pertussis (whooping cough)	N.N.	2	N.N.	19	N.N.	N.N.	N.N.	N.N.	21	117
Plague									—	—
Poliomyelitis									—	—
Q. fever	11		21	7	N.N.		N.N.		39	308
Rabies	N.N.	N.N.	N.N.	N.N.		N.N.	N.N.	N.N.	—	—

DISEASE	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	7	113	18	95	12	2	28	7	282	1854
Shigella infections	N.N.	7	10	1	4	1	8		31	309
Smallpox									—	—
Syphilis	152	11	35	12	18		48		276	2086
Tetanus									—	9
Trachoma	N.N.	N.N.		N.N.	N.N.	N.N.			—	1
Tuberculosis (all forms)	38	36	13	14	11		1	1	114	993
Typhoid fever									—	7
Typhus (all forms)									—	—
Vibrio parahaemolyticus infections	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Yellow Fever									—	—
Yersinia enterocolitica infections	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	—

(Note: Data collected under the Notifiable 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.)

N.N. Not Notifiable

Corrections made to the Cumulative Total since last Report

Arbovirus infection -1 case for NSW