



Communicable Diseases Intelligence

Bulletin number 81/9

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BOTULISM - VICTORIA - A ten year old boy was admitted to the Royal Children's Hospital, Melbourne, on 1 April 1981 with suspected appendicitis. He was discharged without operation, but readmitted on 7 April with cranial nerve palsies. Botulism was diagnosed on the basis of neurological manifestations, electromyographic findings and the identification of C. botulinum type A organisms and toxin in the faeces. No toxin was detected in the serum. Investigations to date have failed to reveal a source for the illness, although on the weekend immediately preceding the onset of symptoms (28-29 March) the patient had attended a cub scout camp at Mt. Martha in Victoria.

VIRUS REPORTING SCHEME - A total of 791 reports were received this period. The reports indicate a continuation of the rise of respiratory syncytial virus infections, and may reflect an early beginning to the 1981 expected seasonal increase rather than an unseasonal outbreak. Parainfluenza infections continue to be the predominant respiratory tract infections reported by the Institute of Medical and Veterinary Science, Adelaide. The increase in the number of rotavirus reports may also be the first indication of the 1981 seasonal winter rise - 39 reports received compared with 19, 13, and 14 for the previous three periods.

Eleven Ross River virus reports were received from the State Health Laboratories, Perth, with the distribution of cases mirroring the mosquito activity for Australian encephalitis (see text). There were four cases from Karratha, two from Goldsworthy and one each from Newman, South Headland, Roeburn and Darwin in the Northern Territory. One notification was reported from Moora, about 180 km north of Perth.

- . Vaccinia virus was isolated by Fairfield Hospital, Melbourne, from skin lesions taken from an 18 year old Navy serviceman who had been vaccinated against smallpox. At present smallpox vaccination continues to be administered to Australian Armed Forces personnel. The risk of vaccinia transmission from recently vaccinated service personnel is likely to increase as the civilian population becomes more susceptible. Six cases of person-to-person vaccinia transmission that had originated from a serviceman were detected in Canada (see CDWR (1981) 7 : 29).

AUSTRALIAN ENCEPHALITIS IN WESTERN AUSTRALIA - 1981

(Contributed by N.F. Stanley, Department of Microbiology, University of Western Australia, and the State Health Department, Perth).

As detailed in CDI 81/8, seven 1981 cases of Australian encephalitis have been confirmed in Western Australia by the State Health Laboratory Services, Perth. An additional case has been confirmed from Groote Eylandt, in the Northern Territory. Three further cases await confirmation.

The disease was detected in Western Australia in 1969 and 1974 as isolated human cases, both patients coming from the Ord Valley. In 1978, a widespread outbreak occurred with seven cases in the Kimberley (Broome, Balgo, Kununurra, Lissadell and Sturt Creek) and one at Port Hedland in the Pilbara (see CDI 78/14). Two cases were observed in 1979, at Cherrabun and Louisa Downs in the Kimberley (see CDI 79/8). All cases were from infection with Murray Valley Encephalitis virus (MVE), except the patient from Broome who was infected with the closely related group B arbovirus, Kunjin virus.

Studies have defined annual patterns of virus activity. In the Kimberley, MVE and other arboviruses have been shown to be active during the first five months of the year, whereas in the Pilbara this activity occurs only occasionally. Although MVE activity in the Kimberley was in evidence in 1972, the first widespread outbreak was not defined until 1978. Some cases in 1978 were originally diagnosed and treated as "aseptic meningitis". Subsequent testing showed that they were in fact due to MVE virus infection. Increased awareness of the potential for Australian encephalitis cases has led to definition of subsequent cases and outbreaks. In 1978, the widespread dissemination of MVE in the Pilbara culminated in a human case in Port Hedland. Seroepidemiological studies defined the intensity of activity in the Pilbara, but could not determine its southern limit. Surveys did not detect any activity in the Pilbara in 1979 or 1980.

The human cases confirmed in 1981 are detailed in Table 1.

TABLE 1 Confirmed MVE cases
in Western Australia/Northern Territory - 1981

<u>Location</u>	<u>Date of onset</u>	<u>Age</u>	<u>Comment</u>
Balgo, Kimberley	2.3.81	4 months	Male aboriginal
Newman, Pilbara	8.3.81	33 years	Female caucasian
Bililuna (Balgo), Kimberley	11.3.81	11 months	Male aboriginal
Newman, Pilbara	11.3.81	29 years	Male caucasian
Groote Eylandt, NT	25.3.81 (approx)	3½ years	Female aboriginal
Carnarvon	26.3.81	5 weeks	Male aboriginal
Derby, Kimberley	27.3.81	39 years	Male caucasian
Christmas Creek/Fitzroy, Kimberley	4.4.81	8 months	Male aboriginal

Again the cases were widely scattered, with four having been contracted in the Kimberley (Derby, Balgo, Bililuna, Fitzroy/Christmas Creek), two from Pilbara (Newman) and one from Carnarvon. The Carnarvon case is the most southerly record of MVE activity in Western Australia. All three caucasians

infected are adults, whilst all the aboriginal infections were in children. This may reflect greater immunity among aboriginals resulting from previous exposure so that only the very young are susceptible. On the other hand, caucasians move into epidemic/endemic zones from elsewhere, and by their life-style, are more protected from mosquito attack. Hence, there is a general level of susceptibility among all age classes.

Epidemiological Investigations

The Pilbara - Sentinel chicken studies subsequent to the 1978 case at Port Hedland, showed that MVE was widely active throughout the Pilbara including Tom Price. With the exception of one low positive result in the survey, Carnarvon was negative for MVE. In 1980, a transect was carried out between these localities to determine how far south the virus had extended. The results from all areas tested showed a positivity of up to 20%, but no conclusions could be drawn on the southern limit of activity. Following the cases at Newman, the transect was repeated to determine the extent of the 1981 dissemination. The results are presented in Figure 1 and Table 2.

FIGURE 1 Sentinel chicken serology in the Pilbara - 1981
 (% of chickens positive)

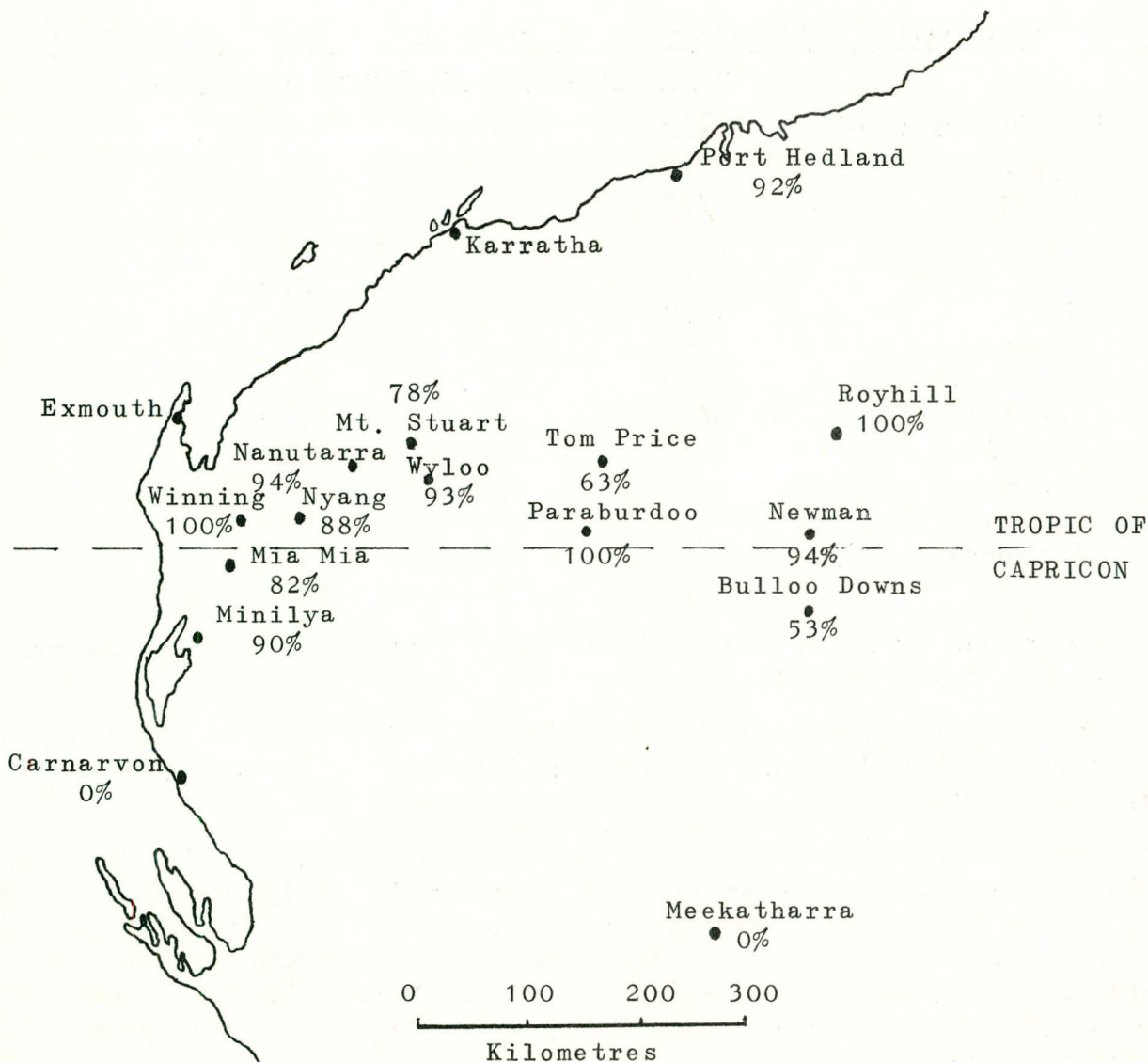


TABLE 2 Sentinel chickens in the Pilbara - 1981
(Tested by HI against MVE virus)

<u>Locality</u>	<u>No. Tested</u>	<u>% positive</u>	<u>Locality</u>	<u>No. Tested</u>	<u>% positive</u>
Carnarvon	11	0	Mt Stuart Station	14	78
Meekatharra	5	0	Tom Price	30	63
Minilya Station	20	90	Wyloo Station	15	93
Mia Mia Station	17	82	Paraburdoo	19	100
Winning Station	20	100	Newman	38	94
Nyang Station	18	88	Binoo Downs Station	15	53
Nanutarra Station	16	94	Roy hill Station	10	100
			Port Hedland	36	92

From the results it is concluded that Carnarvon and Meekatharra were negative, whilst Minilya (some 120 km north of Carnarvon) and all stations further north were highly positive. However, this is at variance with the occurrence of a case at Carnarvon. The results show clearly that again all localities tested in the Pilbara were involved in the current virus dissemination.

Sentinel fowls have also been placed at Karratha, Exmouth and Carnarvon. The results of monitoring the sera of these birds is presented in Table 3.

TABLE 3 Serological monitoring⁽¹⁾ of selected sentinel chickens⁽²⁾
in the Pilbara and Gascoyne regions

<u>Monthly Sampling</u>	<u>Karratha</u>	<u>Exmouth</u>	<u>Carnarvon</u>
1980 March	0/10		
April	0/10		
May	-		0/10
June	0/10		0/10
July	0/10	0/10	-
August	-	-	-
September	0/10	0/10	-
October	0/10	-	0/10
November	1/10	-	0/10
December	1/10	0/10	-
1981 January	-	-	-
February	5/10	1/10	-
March	5/10	1/10	0/10

(1) Sera examined by HI against MVE virus. Titres of 1:20 or higher treated as being positive.

(2) Sentinel chicken flocks were established at Karratha in March 1980, Carnarvon in May 1980 and Exmouth in July 1980. Ten birds were tagged and bled regularly, or when possible.

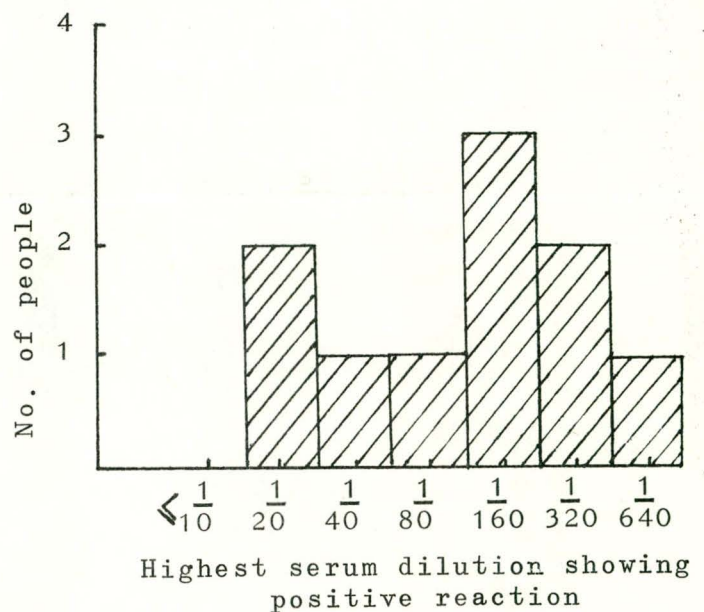
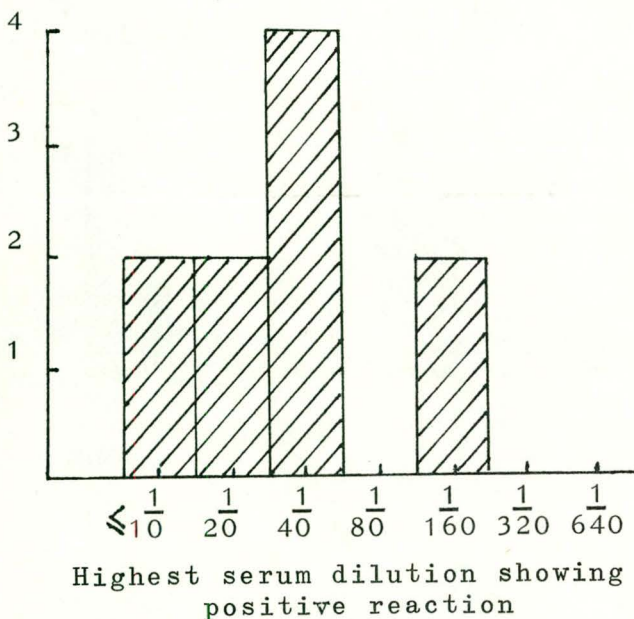
The first seroconversions occurred in February at Karratha, whereas chickens held at Carnarvon and Exmouth have been consistently negative. Some birds at Karratha also seroconverted to alphaviruses in July 1980, but no activity was recorded at Exmouth or Carnarvon. Concurrent with the prevalence of Australian encephalitis in the Pilbara, there has been a significant incidence of Ross River virus infections, especially at Newman and Port Hedland.

The Kimberley - Information pertaining to Australian encephalitis in the Kimberley region is always similar. Studies over the past eight years have clearly demonstrated that MVE is active throughout the Kimberley each year from January/February through to April/May. The distribution and intensity of activity is defined by local climatic variation. However, cases at communities such as Balgo, which are peripheral to the main body of the Kimberley, necessitated further investigation.

Large numbers of mosquitoes (predominantly *Culex annulirostris*) were collected mainly in association with the sewage treatment works. A small sample of sera from nestling white-necked herons were all highly positive by HI to MVE. Also a small sample of aboriginals from Balgo mission were examined serologically. The participants were divided into two groups - ten individuals who were older than three years, who presumably were present in 1978 when MVE was last known to be active in Balgo, and ten children aged less than three years. The results (Figure 2) clearly show a build-up in immunity in the older subgroup. This is both in the titre of antibody and in the proportion of sample positive.

FIGURE 2 Serological examination⁽¹⁾ of selected humans at Balgo - 1981⁽²⁾

No. of children under 3 years



(1) HI test against MVE virus.

(2) Those whose sera react at $1/20$ or greater are taken as being positive.

Future seroepidemiological studies will involve the investigation of the case at Carnarvon, with areas to the south sampled to define the limit of virus dissemination more clearly, and the collection of more human sera and animal sera from outlying communities in the Pilbara.

Editorial Comment

The usefulness of domestic fowl as sentinels for detecting MVE virus activity was indicated as early as 1953, and the results given above reinforce this argument. Improved human living conditions along with development and changed ecology has altered the case distribution of epidemics from those in earlier decades. However, the pseudopodial outbreaks of MVE still seem to follow the excess rainfall in the enzootic areas. The human population in these areas is still small, so that the

establishment of sentinel chicken flocks, the investigation of water-bird and domestic animal serology and the culture of mosquito populations is still necessary to demonstrate viral activity, even though the topography, climate and absence of river systems in the central coastal areas mitigate against pseudopodial outbreaks further south.

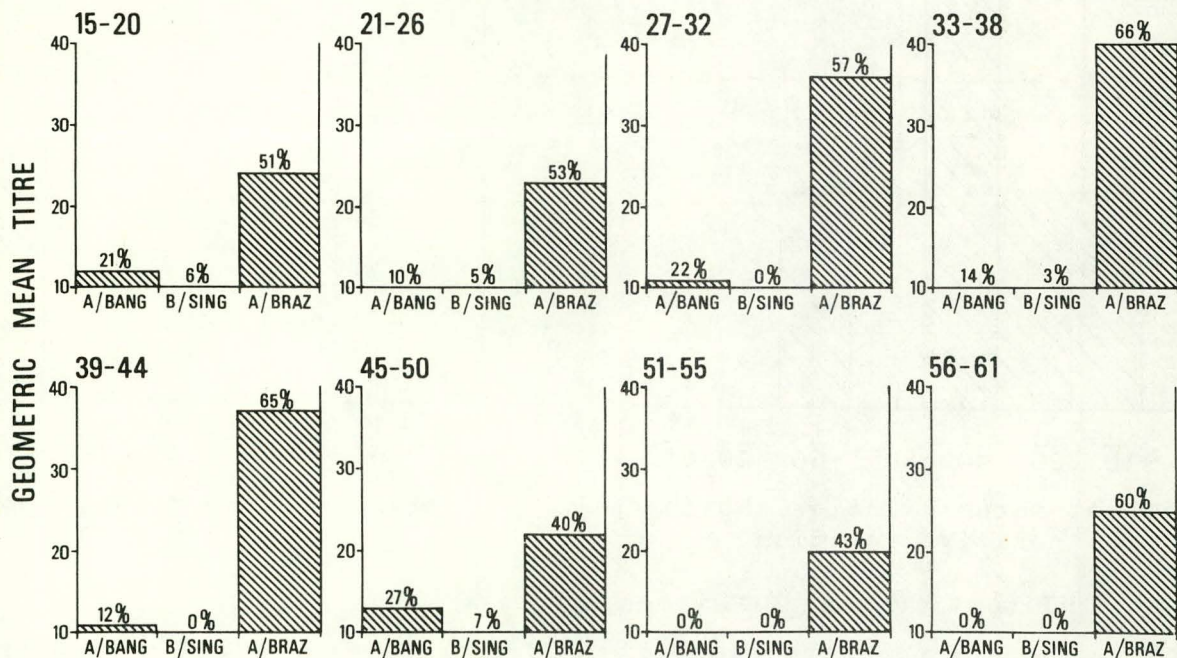
SEROLOGICAL SURVEY OF INFLUENZA VIRUSES IN THE NEWCASTLE DISTRICT

(Contributed by G.A. Tannock, M.J. Hensley, D. Bryce and J. Paul, Faculty of Medicine, University of Newcastle and A.J. Keller, Blood Transfusion Service, Royal Newcastle Hospital).

Two hundred sera were obtained from the blood bank at the Royal Newcastle Hospital in September 1980. These sera were titrated for the presence of HI antibodies to the following viruses: A/Bangkok/1/79 (H_3N_2), B/Singapore/222/79 and a high yielding recombinant containing the surface antigens of A/Brazil/11/78 (H_1N_1). All titrations were carried out by the standard CDC procedure.

The results of the survey summarised in Figure 1 reveal a high and age-related incidence of antibody to A/Brazil/11/78 and relatively little antibody to either A/Bangkok/1/79 or B/Singapore/222/79.

FIGURE 1 Age distribution of HI antibodies to A/Bangkok/1/79 (H_3N_2), B/Singapore/222/79 and A/Brazil/11/78 (H_1N_1)



The figure above each bar is the percentage of individuals within each group with an HI titre of ≥ 40 for a particular antigen.

Recent reports (1-6) for the Northern winter of 1980-81 suggest that influenzal disease produced by A/Bangkok-like viruses is relatively widespread in both the US and Europe and that A/Brazil-like viruses are also present. If the survey we have carried out is representative, the community has relatively little experience of H_3N_2 A/Bangkok-like viruses and outbreaks such as those recorded in the US can be anticipated during the Australian winter of 1981.

References

- (1) MMWR (1980) 29 : 530 (2) MMWR (1980) 29 : 578 (3) MMWR (1980) 29 : 599
- (4) MMWR (1980) 29 : 611 (5) MMWR (1981) 29 : 615 (6) MMWR (1981) 30 : 23

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 16-4-81 - 29-4-81 BULLETIN NUMBER . 81/9.
 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.....	9			2		5	4	8	28
0101 ADENOVIRUS TYPE 1.....					3	3			6
0102 ADENOVIRUS TYPE 2.....				2	1	2			5
0103 ADENOVIRUS TYPE 3.....	1			1	2				4
0105 ADENOVIRUS TYPE 5.....				1					1
0106 ADENOVIRUS TYPE 6.....			1						1
0107 ADENOVIRUS TYPE 7.....	3								3
0108 ADENOVIRUS TYPE 8.....					1				1
0119 ADENOVIRUS TYPE 19.....				2					2
0199 ADENOVIRUS TYPING PENDING.....		1	1		1	1			4
0201 INFLUENZA A VIRUS.....	1		2				1	1	5
0204 INFLUENZA C VIRUS.....							1		1
0301 PARAINFLUENZA VIRUS TYPE 1.....						3	19		22
0302 PARAINFLUENZA VIRUS TYPE 2.....						6	3		9
0303 PARAINFLUENZA VIRUS TYPE 3.....						4	1		5
0399 PARAINFLUENZA VIRUS TYPING PENDING.....							16		16
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	11	31				14	1	18	78
0500 RHINOVIRUS (ALL TYPES).....	3			7	14	2	4		30
0600 MYCOPLASMA PNEUMONIAE.....	1	1	3	2		1	1		9
0700 ORNITHOSIS-PSITTACOSIS.....	1			1					2
0809 COXSACKIEVIRUS A9.....							1	1	2
0816 COXSACKIEVIRUS A16.....						1			1
0901 COXSACKIEVIRUS B1.....		1					1		2
0902 COXSACKIEVIRUS B2.....						1			1
0904 COXSACKIEVIRUS B4.....		1							1
1002 ECHOVIRUS TYPE 2.....							1		1
1006 ECHOVIRUS TYPE 6.....							2		2
1009 ECHOVIRUS TYPE 9.....			3	2					5
1011 ECHOVIRUS TYPE 11.....			2						2
1014 ECHOVIRUS TYPE 14.....	3		1				6		10
1022 ECHOVIRUS TYPE 22.....						11			11
1025 ECHOVIRUS TYPE 25.....							2		2

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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REPORTING PERIOD - 16-4-81 - 29-4-81 BULLETIN NUMBER . 81/9
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

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
1030 ECHOVIRUS TYPE 30.....				6	4		1		11
1031 ECHOVIRUS TYPE 31.....				1					1
1101 POLIOVIRUS TYPE 1.....		1							1
1102 POLIOVIRUS TYPE 2.....		1		1		2			4
1103 POLIOVIRUS TYPE 3.....	1	1				1	1		4
1104 POLIOVIRUS-VACCINAL STRAIN.....			1		6				7
1200 MUMPS VIRUS.....	2			3			2		7
1300 HERPES VIRUS GROUP-NOT TYPED.....	10		5	2		2			19
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....		3		2				13	18
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	4					1	1		6
1303 VARICELLA-ZOSTER VIRUS.....			3	1	1		1	1	7
1306 HERPES SIMPLEX TYPE 1.....	1			11		7	11		30
1307 HERPES SIMPLEX TYPE 2.....	37			23		17	25		102
1399 HERPES VIRUS TYPING PENDING.....			6			1			7
1401 COXIELLA BURNETI.....	3		2	2		2	5		14
1512 VACCINIA VIRUS.....				1					1
1514 MOLLUSCUM CONTAGIOSUM.....								2	2
1521 MEASLES VIRUS.....	3	1	2	2		1			9
1522 RUBELLA VIRUS.....	1			12				1	14
1532 HEPATITIS B ANTIGEN.....	7		6	24		2	3	9	51
1535 HEPATITIS A ANTIBODY.....	2	1	1	8		3	3	2	20
1541 CHLAMYDIA A - TRIC TYPE.....	12			1				16	29
1556 CMV - CYTOMEGALOVIRUS.....	4	1	10	18	4	1	1	13	52
1562 REOVIRUS (ALL TYPES).....	1					1			2
1563 CORONAVIRUS.....				1					1
1564 ROTAVIRUS.....	1	2	5	3	17	10		1	39
1565 CALICI VIRUS.....	1								1
1599 ENTEROVIRUS TYPING PENDING.....			5		4	1	4		14
AUSTRALIAN ENCEPHALITIS.....								1	1
ROSS RIVER VIRUS.....							33	11	44
Total.....	123	46	62	142	103	105	136	74	791

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 16 / 4 / 81 to 29 / 4 / 81

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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	Respir atory	Enceph alitis	Mening -itis	Para- lysis	CNS other unspec	GI	Hepa -tic	CVS	Urin -ary	Skin/ muc memb
0101 ADENOVIRUS TYPE 1.....		3					1				
0102 ADENOVIRUS TYPE 2.....							2				1
0103 ADENOVIRUS TYPE 3.....		1									
0107 ADENOVIRUS TYPE 7.....		1					1				
0108 ADENOVIRUS TYPE 8.....		1									
0201 INFLUENZA A VIRUS.....		4									
0204 INFLUENZA C VIRUS.....		1									
0301 PARAINFLUENZA VIRUS TYPE 1....		22									
0302 PARAINFLUENZA VIRUS TYPE 2....		9									
0303 PARAINFLUENZA VIRUS TYPE 3....		5									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	1	81									1
0500 RHINOVIRUS (ALL TYPES).....		29			1						1
0600 MYCOPLASMA PNEUMONIAE.....		4			1						1
0700 ORNITHOSIS-PSITTACOSIS.....		2									
0809 COXSACKIEVIRUS A9.....	1				1						
0816 COXSACKIEVIRUS A16.....											1
0901 COXSACKIEVIRUS B1.....		1			1						
0902 COXSACKIEVIRUS B2.....							1				
0904 COXSACKIEVIRUS B4.....					1						
1002 ECHOVIRUS TYPE 2.....					1						
1006 ECHOVIRUS TYPE 6.....	2										
1009 ECHOVIRUS TYPE 9.....					1			1			3
1011 ECHOVIRUS TYPE 11.....					1		1				
1014 ECHOVIRUS TYPE 14.....	4		1		1	1	3				
1022 ECHOVIRUS TYPE 22.....	9						1				
1025 ECHOVIRUS TYPE 25.....	2										
1030 ECHOVIRUS TYPE 30.....		3			7		1				

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 16/4/81 to 29/4/81

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Viral Identifications by Clinical Information Table 1.

Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; H3 -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/ muc memb
1031 ECHOVIRUS TYPE 31.....					1						
1102 POLIOVIRUS TYPE 2.....		2					2				
1103 POLIOVIRUS TYPE 3.....	1						1				
1104 POLIOVIRUS-VACCINAL STRAIN....						1	2				
1200 MUMPS VIRUS.....				2			1				
1300 HERPES VIRUS GROUP-NOT TYPED..										1	1
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1									1	10
1303 VARICELLA-ZOSTER VIRUS.....	1										5
1306 HERPES SIMPLEX TYPE 1.....	1	1	1					1		1	14
1307 HERPES SIMPLEX TYPE 2.....											5
1401 COXIELLA BURNETI.....	4	2									
1512 VACCINIA VIRUS.....											1
1514 MOLLUSCUM CONTAGIOSUM.....											2
1521 MEASLES VIRUS.....	2		1								6
1522 RUBELLA VIRUS.....	4										9
1532 HEPATITIS B ANTIGEN.....	24							27			
1535 HEPATITIS A ANTIBODY.....								20			
1541 CHLAMYDIA A - TRIC TYPE.....		1									
1556 CMV - CYTOMEGALOVIRUS.....	5	2						4		4	2
1562 REOVIRUS (ALL TYPES).....							1				1
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....	14						24				
1565 CALICI VIRUS.....							1				
AUSTRALIAN ENCEPHALITIS			1								
ROSS RIVER VIRUS	12	1									4
Total.....	88	176	4	19		2	44	53		6	68

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 16 / 4 / 81 to 29 / 4 / 81 ...
 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;
 68 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle /joint	Con-genital	PUO	Fever /mal-aise	Other	SIDS
0101 ADENOVIRUS TYPE 1.....								2		
0102 ADENOVIRUS TYPE 2.....								2	1	
0103 ADENOVIRUS TYPE 3.....	1							1	1	
0105 ADENOVIRUS TYPE 5.....								1		
0106 ADENOVIRUS TYPE 6.....							1			
0107 ADENOVIRUS TYPE 7.....								1		
0119 ADENOVIRUS TYPE 19.....	2									
0201 INFLUENZA A VIRUS.....							1	1		
0204 INFLUENZA C VIRUS.....								1		
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)							1			
0500 RHINOVIRUS (ALL TYPES)			1				1			1
0600 MYCOPLASMA PNEUMONIAE.....							1	2		
1014 ECHOVIRUS TYPE 14.....								1		
1022 ECHOVIRUS TYPE 22.....									1	
1030 ECHOVIRUS TYPE 30.....								1		
1101 POLIOVIRUS TYPE 1.....										1
1103 POLIOVIRUS TYPE 3.....									1	1
1104 POLIOVIRUS-VACCINAL STRAIN.....										4
1200 MUMPS VIRUS.....			3					1		
1300 HERPES VIRUS GROUP-NOT TYPED...	1									
1301 HERPES SIMPLEX VIRUS NOT-TYPED		6						1		
1302 EPSTEIN-BARR VIRUS (EB VIRUS) ..		1	4				1	1		
1303 VARICELLA-ZOSTER VIRUS.....								1		
1306 HERPES SIMPLEX TYPE 1.....	3	9							1	
1307 HERPES SIMPLEX TYPE 2.....		96							1	
1401 COXIELLA BURNETI.....							1	7	1	
1522 RUBELLA VIRUS.....					1	1				

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 16 / 4 / 81 to 29 / 4 / 81 ...

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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 ...

-CONTINUED

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/mal-aise	Other	SIDS
1541 CHLAMYDIA A - TRIC TYPE.....	2	26								
1556 CMV - CYTOMEGALOVIRUS.....	1	12		1		4	4	1	13	1
1562 REOVIRUS (ALL TYPES).....							1			
1564 ROTAVIRUS.....									1	
ROSS RIVER VIRUS				1	34			14		
Total.....	10	150	8	2	35	5	12	39	21	8