



# Communicable Diseases Intelligence

Bulletin number 81/6

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AUSTRALIAN ENCEPHALITIS IN WESTERN AUSTRALIA - Australian encephalitis was confirmed by haemagglutination inhibition by the State Health Laboratory, Perth, in three patients from the north of Western Australia (see Virus Tables). Two cases were in Aboriginal children; a three month old male and a two year old boy from Balgo Hills in the Great Sandy Desert of the Kimberley region; and one case in a white 31 year old female from Newman in the Pilbara region. The condition of the baby required intubation, whereas the older boy had a milder illness. The adult female presented with only a tremor and short-term memory loss.

The extensive wet season with associated cyclonic weather appears to have been responsible for the increased water-fowl life and concomitant mosquito activity. Sentinel chicken flocks located in the Pilbara area were shown to be positive for arbovirus group B antibody. Residents and tourists in the area have been urged to take precautions against being bitten by mosquitoes.

Eight cases of Australian Encephalitis were reported in the same area between February and June 1978 (see CDI 78/14). There were no fatalities.

VIRUS REPORTING SCHEME - A total of 754 reports were received this period.

General patterns as suggested by the reports show an unseasonal increase in the number of respiratory syncytial (RS) virus infections.

	<u>No. of reports</u>	<u>Previous three periods</u>
State Health Laboratory, Brisbane	15	4, 2, 1
Royal Alexandra Hospital for Children, Sydney	9	4, 1, 1
Institute of Clinical Pathology and Medical Research, Sydney	6	0, 1, 3
Royal Children's Hospital, Melbourne	7	1, 0, 1

A similar summer outbreak of RS virus occurred in 1979 in the U.K. (see CDR 79/26, 79/27 and CDS 79/31).

An increase in echovirus activity was also indicated in the reports from  
(continued on page 8)

VIRUS REPORTS - 1980

A total of 18908 reports were received by the CDI for 1980 (up to 31 January 1981) compared with 18540 reports for 1979. An analysis of these isolations and identifications is shown in Figure 1 on page 3 together with the corresponding percentages for 1979 (see CDI 80/4). Second and subsequent notifications of the same report, i.e. reports of the same virus from the same patient and source specimens but collected on different dates, or of pending reports prior to virus typing, have been deleted wherever possible.

Analysis of the data for each of the two years indicates changes in reported incidence for certain viruses. The increased reporting during 1980 of hepatitis, Chlamydia trachomatis and rotavirus infections reflect extended diagnostic coverage offered by participating laboratories following the introduction of specialised radio-immune, immunoenzymatic, and tissue culture techniques. The rise in the number of herpes simplex virus infections is the result of Sexually Transmitted Diseases (S.T.D.) clinics referring more specimens for diagnosis. The viral infections that were reported less in 1980 are of more epidemiological relevance: the higher 1979 echovirus total was a result of the nationwide echovirus type 11 epidemic; the decrease in the number of M. pneumoniae infections is a continuation of the downward trend that began in 1978; and the fall in the number of parainfluenza reports is a consequence of fewer parainfluenza type 1 infections during 1980 (40 reports compared with 307 for 1979). No single factor can be attributed to the decrease in the number of mumps, measles and rubella reports. Overall, the sexually transmitted diseases of genital herpes and C. trachomatis were the most commonly diagnosed and reported. Similarly, under the Notifiable Diseases scheme, gonorrhoea, syphilis and non-specific urethritis accounted for 60% of all reports received in 1980.

Herpes simplex - Of the 5005 herpes simplex virus reports received, 884 were of type 1, 2182 were of type 2 and 1939 were untyped. Type 1 isolates were principally collected from skin lesions (57.3%), but 19.9% were from genital sources and 7.7% from eye infections. Approximately 95% of type 2 isolates were from genital sources.

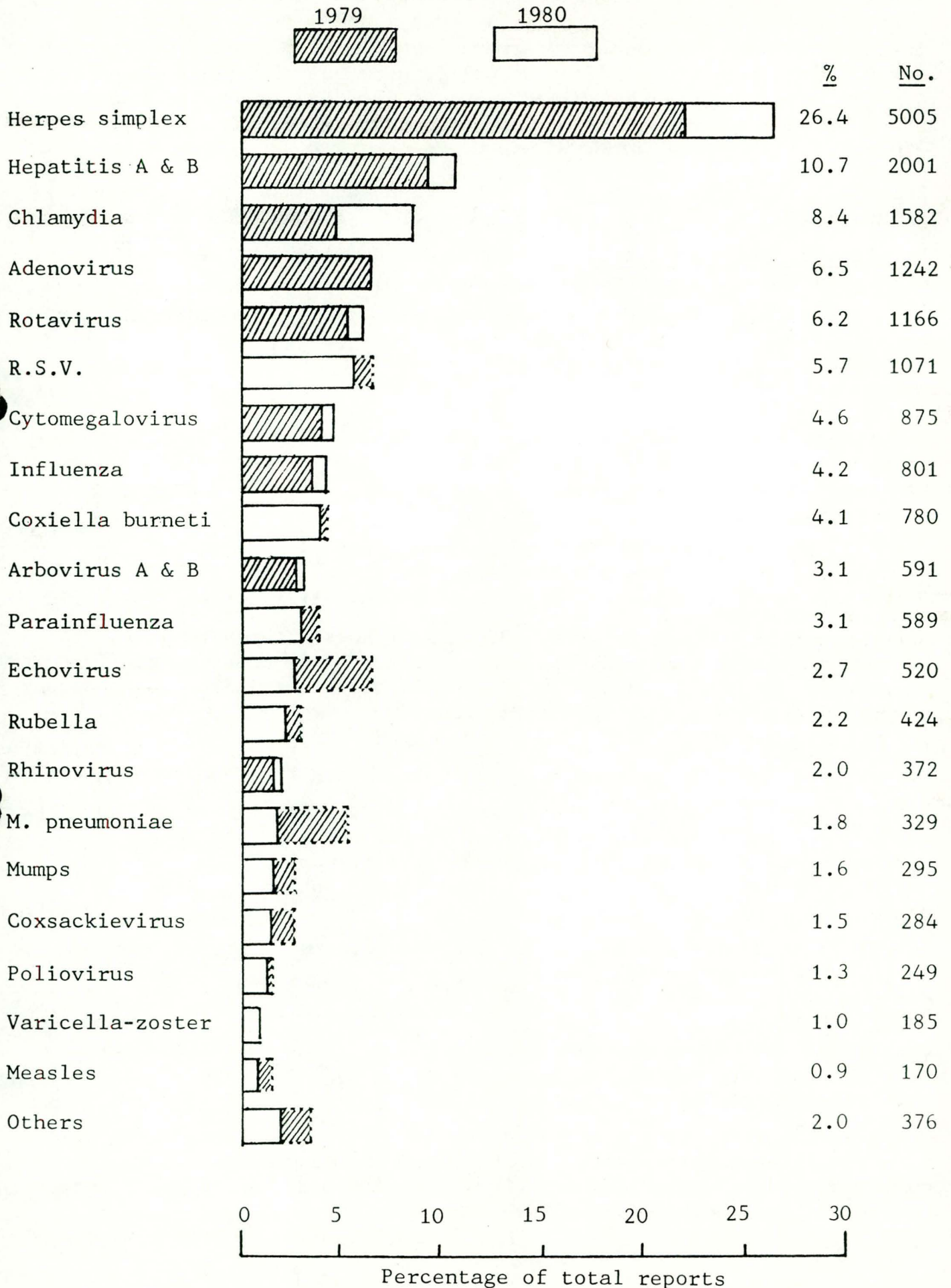
Hepatitis - Detection of hepatitis B surface antigen (HBsAg) comprised 76.9% of hepatitis reports. Of these reports, 34.3% occurred in the 15-24 age group, and 38.2% in the 25-59 age group.

Chlamydia - C. trachomatis accounted for 91.5% of the isolations; 85% of which were made in McCoy cells, and 13.7% in HeLa cells. The increase in the number of reports is attributed to increased community awareness together with increased screening at S.T.D. clinics with corresponding referrals. Conjunctivitis was recorded in 34 patients, 16 of whom were infants. Apart from three lymphogranuloma venereum reports, the remaining infections were C. psittaci.

Adenovirus - Approximately 38% of the adenovirus isolates were untyped. Type 1 (130 reports) and type 2 (196 reports) were the most common serotypes, with 90% of infections in children aged less than 5 years.

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TABLE I Frequency distribution of 18540 isolations and identifications reported to CDI - 1980



Respiratory tract infections (29% for type 1 and 34% for type 2) and gastrointestinal infections (44% for type 1 and 40% for type 2) were the most common presentations. Adenovirus type 19 (135 reports) presented as eye (32.5%) or genital infections (37%), with 93% of reports in patients over 15 years. Other eye infections were principally contributed to adenovirus type 3 (17 of 68 reports) and adenovirus type 7 (16 of 84 reports).

Rotavirus - Rotavirus infections were diagnosed in patients of all age groups, although 90% were in children aged less than five years.

Respiratory syncytial virus - Over 90% of the diagnoses were in children aged less than five years, and 44% in infants aged less than six months.

Cytomegalovirus - Reports were received from all States, with 37.3% of infections being in children aged less than five years. Congenital infections comprised 6% of reports.

Influenza - Of the 520 reports, five were H<sub>1</sub>N<sub>1</sub> subtype and 129 H<sub>3</sub>N<sub>2</sub> subtype. The virus H<sub>3</sub>N<sub>2</sub> isolations resembling either A/Bangkok/1/79, A/Texas/1/77 or bridging strains between the two. There were 277 reports of influenza B infections; with all isolations resembling B/Singapore/222/79.

Coxiella burneti - Queensland reported 44.2% of diagnoses, with the remaining reports from New South Wales (27%), South Australia (14.6%) and Victoria (13.9%). Only one report was received from Western Australia.

Arbovirus - Of the 591 reports, 535 were of Ross River virus (89% from Queensland). The remaining reports comprised of 50 cases of confirmed or clinically diagnosed dengue fever, two Sindbis virus infections and four unspecified arbovirus group A infections.

Parainfluenza - Parainfluenza type 3 (64.8%) and type 2 (28%) predominated, with 81% of infections in children aged less than five years.

Echovirus - The most common isolates were of type 11 (160 reports, with 64.3% in children aged less than five years, and 43.7% of patients presenting with meningitis) and type 30 (113 reports, with 28.3% in children aged less than five years, and 88% of patients presenting with meningitis).

Rubella - 66.5% of reports were in patients over 15 years of age.

M. pneumoniae - Infections were most frequently reported in the 5-14 year age group (32%).

Coxsackievirus - The most prevalent coxsackievirus infections were type A9 (28.5%), type B2 (22.2%), type B4 (17.0%) and type A16 (14.4%). All predominantly affected young children.

Other - This group incorporates numerous virus reports each forming less than 1% of the total; Epstein-Barr virus, untyped picornaviruses the poxvirus group, papovavirus, reovirus, coronavirus, calicivirus, astrovirus, parvovirus, paramyxovirus and Norwalk agent.

Age groups - Infections most commonly reported in the various age groups were as follows:

- 0-1 year - Respiratory syncytial virus (25.5%); rotavirus (18%); adenovirus (10.4%)  
 1-4 years - Rotavirus (20.5%); adenovirus (16.8%); parainfluenza (10.5%)  
 5-14 years - Herpes simplex (13.1%); adenovirus (9.3%); hepatitis B (8.1%); mumps (7.1%); M. pneumoniae (6.2%)  
 15-24 years - Herpes simplex (18.8%); C. trachomatis (16.5%); hepatitis B (14.1%)

The figures in parenthesis are the percentages of the total number of infections for that age group.

Further information - Copies of the 1980 tables are available from the Editor on request. The tables include type and number of virus isolations reported by State (laboratory), patient age, clinical symptomatology, source tissue and method of isolation or identification.

### TOXIC SHOCK SYNDROME (TSS)

TESTING OF TAMPONS FOR STAPHYLOCOCCAL CONTAMINATION (Contributed by the National Biological Standards Laboratory, Department of Health, Canberra.)

The cases of TSS in Launceston, Tasmania; Melbourne, Perth and Sydney were reported in CDI 81/2, 81/3 and 81/5. The women involved in the first two cases had been using Johnson and Johnson "Carefree Super" tampons manufactured in New Zealand. Although the batches were different, the products were subsequently temporarily withdrawn from the market.

Staphylococcus aureus has been implicated as the causative organism of TSS, and in order to check the possibility of tampons as marketed being contaminated, 399 tampons and 402 wrappers from Batch B 008542, implicated in the Tasmanian case, were tested. The tampons were forwarded to NBSL by the Tasmanian Health Department and had been obtained from Johnson & Johnson (recalled lot). NBSL also tested nine tampons and wrappers which remained in a pack partly used by the Launceston patient.

In order to reduce the chances of adventitious contamination the initial inoculations were carried out using the methods and the test suite normally reserved for sterility testing. All material needed for testing was surface decontaminated prior to introduction into the Testing Room. The Room had HEPA filtered air under positive pressure and all testing was performed in a Laminar Flow Cabinet. The operators wore sterile garments: head covers, masks, gowns, gloves and boots. (The rate of adventitious contamination in this unit is approximately 1 per 3,000 inoculations.)

Tampons were immersed in medium and incubated until growth was evident, or for 14 days, whichever was the shorter period. Trypticase soy broth or Trypticase soy broth with 6.5% NaCl was used as Staphylococcal selective media. Media showing growth were subjected to Gram staining and were subcultured onto Vogel Johnson and Trypticase soy agar. Suspicious

colonies were subjected to further examination. The most commonly isolated organisms were Bacillus species. Micrococcus and Aerococcus were less commonly detected.

S. aureus was not isolated from any of the tampons or wrappers from Batch 008542 or from the pack partly used by the Launceston patient. Staphylococcus epidermidis was detected on one of the 402 from the recalled batch and from 4 out of the 9 wrappers in the partly used pack.

Testing is being extended to Australian made "Carefree Super" tampons as well as to other brands. The program is still under way, but tests for S. aureus have now been completed on a total of 937 tampons. No S. aureus has been detected. S. epidermidis was found on 3 wrappers from Australian made "Carefree Super" tampons out of a total of 110 so far completed.

Unfortunately, no practical amount of testing can demonstrate that tampons are entirely free from S. aureus. Although all tests on 937 tampons have been negative it can only be said with 95% confidence that the overall rate of contamination is less than approximately 0.3%. In practice, contamination will not be randomly distributed either between batches or within a single batch. Even larger samples might not detect sporadic contamination.

The detection of S. epidermidis is of interest as this organism is a normal inhabitant of the skin and mucous membranes. Products which can become contaminated with S. epidermidis during manufacture clearly have the potential to acquire S. aureus, albeit at a lower rate.

Wrappers from the partly used pack had a higher rate of contamination with S. epidermidis which seems likely to be a result of contamination by the user. It is clear that there must be caution about interpretation of results of tests on part used packs. Isolation of S. aureus from unused tampons as reported (CDI 81/2) could have been a result of contamination by the patient.

It can be concluded that if S. aureus is present on tampons it must be at low levels. However, the presence of S. epidermidis indicates that opportunities for contamination of wrappers and tampons with S. aureus can occur.

#### ANTIBIOTIC SENSITIVITY AND PHAGE TYPING OF TSS ISOLATES (Contributed by the Fairfax Institute, University of Sydney.)

The S. aureus isolates from the first two TSS cases have been tested for antibiotic sensitivity and phage type.

Case 1 (Melbourne) - Cultures were taken from a cervico-vaginal swab, and from an unused tampon from the patient's packet (CDI 81/2). Both sources yielded the same phage type:

Routine Test Dilution (RTD)      29/52/75/83A  
100 x RTD      29/52/52A/53/75/77/80/83A/84/85/95

The organism was sensitive to all antibiotics.

Case 2 (Launceston) - Cultures were taken from a vaginal swab (CDI 81/3):

RTD 29/52/83A

100 x RTD 29/52/52A/75/79/80/83A/95

This strain was resistant to penicillin but sensitive to all others tested (methicillin, erythromycin, clindamycin, tetracycline, gesidin, chloramphenicol, sulphonamides, trimethoprim/sulphamethoxazole and gentamicin).

These results indicate a considerable difference between the two strains.

#### Editorial Comment

Based on Science (1981) 211:842)

There is no current evidence suggesting that S. aureus isolates from TSS patients have any characteristic bacteriophage typing patterns. However, a recent research report by M.L. Cohen and S. Falkow implicates two antigenic protein species of molecular weight 33,000 and 30,000 as possible antigenic markers for "TSS strains". Whether these proteins are the toxin (toxins) or the toxic sub-units that produce the clinical manifestations have yet to be determined.

Isolates from 32 TSS patients and 20 control patients colonised or infected with S. aureus but without symptoms of TSS were examined. The presence of the two proteins were demonstrated in 25 of the 32 TSS isolates, and in five of the 20 controls. The presence of the two marker proteins in the five control isolates indicate that these "TSS S. aureus" phenotypes may colonise women without causing overt symptoms, although they may be at a high risk of developing TSS. This ability to distinguish staphylococcal isolates should be invaluable in examining the epidemiology of TSS and the factors that influence or have influenced the emergence of these strains.

#### CHOLERA - NEW SOUTH WALES

(Contributed by P. Christopher, N.S.W. Health Commission, Sydney.)

A 66 year old man became ill at 3.00 a.m. on 8 March 1981. He passed about 40 motions which looked like "greyish-water". His 64 year old wife became ill at 4.00 a.m. but after two or three loose motions her diarrhoea stopped. The man was admitted to Lismore Base Hospital at 10.00 a.m. the same day, where a provisional diagnosis of cholera was made. On admission he presented with dehydration, intense cramps in both legs and arms, central cyanosis, and had a pulse rate of 140/min. and blood pressure 100/60mm Hg. During the second day he required nine litres of fluid replacement. The patient had a history of gastric shunt for a gastric ulcer, and this probably aggravated his condition.

The wife was admitted to hospital symptomless on 13 March, after her stool cultures had also been found to be positive for V. cholerae biotype El Tor (serotype Inaba).

The couple had not been overseas, nor had they had any visitors the

previous week. In addition, they had not used any public toilets, nor eaten out socially or in restaurants. Consequently, samples were taken at various points along the Lismore reticulated water supply, from swimming pools, local sewerage treatment works, and from 18 food items consumed by the couple in the previous five days. *Vibrio* organisms were not detected in any sample. Locally harvested prawns were the suspected vehicle of transmission. The crustacea were harvested green 150 km south of Lismore on the Clarence River, boiled aboard the fishing vessels for two or three minutes until red, and then rapidly cooled by dousing with river water. As a precautionary measure this method of processing has since been revised using reticulated water for cooling purposes.

In view of the effluent from the South Grafton Sewerage Treatment Works entering the Clarence River about 20 km from the main prawning grounds, the RAAF Mobile Laboratory was airlifted to Grafton on 17 March as a further precautionary measure to monitor the river, effluents and the prawns. A review was also made of the current hospital disinfection procedures.

In Australia the two previous locally acquired cholera infections were in Beaudesert, Queensland, in February 1980 involving a 2½ year old boy and his mother (CDI 80/3). The woman was asymptomatic and the source of infection on this occasion was thought to have been the river water.

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(continued from page 1)

Fairfield Hospital, Melbourne (echovirus type 30), the State Health Laboratory, Brisbane and the Royal Children's Hospital, Melbourne (echovirus type 14). Meningitis was the most common presentation with echovirus type 30.

Twelve Ross River virus reports were received from the State Health Laboratories in Perth (6 reports) and Brisbane (6 reports). However, the incidence of infection appears to be considerably lower than the corresponding 1980 season (100 and 195 reports received during February and March 1980 respectively).

Individual reports of interest include:

- . The Institute of Clinical Pathology and Medical Research, Sydney, identified *Coxiella burneti* by immunofluorescence and electronmicroscopy in a heart biopsy from a 39 year old male presenting with endocarditis. The patient was an abattoir worker from Newcastle, and CF titres, ELISA and Ig M determinations suggested a Q fever infection of a one year duration.
  - . Less common virus isolations reported this period include echovirus type 1, type 16, and type 28, and adenovirus type 14 and type 16.
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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

2.

REPORTING PERIOD - 5-3-81 - 18-3-81 BULLETIN NUMBER . 81/6  
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	INVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1030 ECHOVIRUS TYPE 30.....	1		1	8					10
1101 POLIOVIRUS TYPE 1.....							2		2
1102 POLIOVIRUS TYPE 2.....							3		3
1103 POLIOVIRUS TYPE 3.....								2	2
1200 MUMPS VIRUS.....				2	1	1	1	1	6
1300 HERPES VIRUS GROUP-NOT TYPED.....	21		3	2		2	1	1	30
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....		1						56	57
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	4					3		2	9
1303 VARICELLA-ZOSTER VIRUS.....	2		3		1		2		8
1306 HERPES SIMPLEX TYPE 1.....	5		3	22		9	12		51
1307 HERPES SIMPLEX TYPE 2.....	33		9	19		6	20		87
1399 HERPES VIRUS TYPING PENDING.....					7	2			9
1401 COXIELLA BURNETI.....	15					8	6		29
1521 MEASLES VIRUS.....	1		1			1	1		4
1522 RUBELLA VIRUS.....	1			6				2	9
1532 HEPATITIS B ANTIGEN.....		2	6	25		5	4	10	52
1535 HEPATITIS A ANTIBODY.....		1	1	8		11	2	4	27
1541 CHLAMYDIA A - TRIC TYPE.....	19	1	2					42	64
1556 CMV - CYTOMEGALOVIRUS.....	8	1	3	28	2	1	2	2	47
1562 REOVIRUS (ALL TYPES).....								2	2
1563 CORONAVIRUS.....				1					1
1564 ROTAVIRUS.....		3	5		2	3		1	14
1599 ENTEROVIRUS TYPING PENDING.....			7		10	1	2		20
AUSTRALIAN ENCEPHALITIS .....								3	3
ROSS RIVER VIRUS .....							6	6	12
DENGUE .....			1						1
ARBO. GROUP B. ... ..				3					3
Total.....	143	23	62	139	55	82	99	151	754

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

3

PERIOD : 5 / 3 / 81 to 18 / 3 / 81 ....

81/6

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
0100 ADENOVIRUS NOT TYPED.....	3	7					1				2
0101 ADENOVIRUS TYPE 1.....		1					1				
0102 ADENOVIRUS TYPE 2.....							3				
0103 ADENOVIRUS TYPE 3.....							1				1
0105 ADENOVIRUS TYPE 5.....		3									
0107 ADENOVIRUS TYPE 7.....							1				
0114 ADENOVIRUS TYPE 14.....						1					
0199 ADENOVIRUS TYPING PENDING.....							1				
0201 INFLUENZA A VIRUS.....		1									
0203 INFLUENZA B VIRUS.....		3									
0301 PARAINFLUENZA VIRUS TYPE 1....		6									
0302 PARAINFLUENZA VIRUS TYPE 2....		6									
0303 PARAINFLUENZA VIRUS TYPE 3....		3									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS) .....		38									
0500 RHINOVIRUS (ALL TYPES) .....	1	8									1
0600 MYCOPLASMA PNEUMONIAE.....	1	14									
0809 COXSACKIEVIRUS A9.....		1					1				
0816 COXSACKIEVIRUS A16.....							1				1
0902 COXSACKIEVIRUS B2.....					1						
1006 ECHOVIRUS TYPE 6.....					1		1				
1007 ECHOVIRUS TYPE 7.....		1									
1009 ECHOVIRUS TYPE 9.....		1			4			1			2
1014 ECHOVIRUS TYPE 14.....	1				3		4				1
1019 ECHOVIRUS TYPE 19.....							1				
1022 ECHOVIRUS TYPE 22.....	2	1					1				
1023 ECHOVIRUS TYPE 23.....							2				
1025 ECHOVIRUS TYPE 25.....							1				

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

4

PERIOD : 5/3/81 to 18/3/81 ....

81/6

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.-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
1028 ECHOVIRUS TYPE 28=RHINOVIRUS..		1									
1030 ECHOVIRUS TYPE 30.....		1		7			1				
1101 POLIOVIRUS TYPE 1.....		2									
1102 POLIOVIRUS TYPE 2.....	1						1				
1103 POLIOVIRUS TYPE 3.....		1				1					
1200 MUMPS VIRUS.....	1			1							
1300 HERPES VIRUS GROUP-NOT TYPED..	2	2		1							15
1301 HERPES SIMPLEX VIRUS NOT-TYPED	3	1									37
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .	2										
1303 VARICELLA-ZOSTER VIRUS.....	3										5
1306 HERPES SIMPLEX TYPE 1.....	1	1	2			1					28
1307 HERPES SIMPLEX TYPE 2.....	1										16
1401 COXIELLA BURNETI.....	12								1		
1521 MEASLES VIRUS.....	1										2
1522 RUBELLA VIRUS.....											7
1532 HEPATITIS B ANTIGEN.....	22							29			
1535 HEPATITIS A ANTIBODY.....	3	1						23			
1541 CHLAMYDIA A - TRIC TYPE.....		1									
1556 CMV - CYTOMEGALOVIRUS.....	14	2						2		8	
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....	1						13				
AUSTRALIAN ENCEPHALITIS .....			3								
ROSS RIVER VIRUS .....											2
Total.....	75	107	5	18		3	35	55	1	8	120

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

5

PERIOD : 5/3/81 to 18/3/81 ... 81/6  
 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	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/mal-aise	Other	SIDS
0100 ADENOVIRUS NOT TYPED.....	1	1	1				1	1		1
0103 ADENOVIRUS TYPE 3.....	2									1
0105 ADENOVIRUS TYPE 5.....			1							
0116 ADENOVIRUS TYPE 16.....		1								
0201 INFLUENZA A VIRUS.....							1			
0203 INFLUENZA B VIRUS.....								1	1	
0301 PARAINFLUENZA VIRUS TYPE 1....							1			
0302 PARAINFLUENZA VIRUS TYPE 2....									1	
0303 PARAINFLUENZA VIRUS TYPE 3....					1		1			
0600 MYCOPLASMA PNEUMONIAE.....								1		
0816 COXSACKIEVIRUS A16.....								1		
1001 ECHOVIRUS TYPE 1.....							1			
1007 ECHOVIRUS TYPE 7.....							1	1		
1009 ECHOVIRUS TYPE 9.....							2	1		1
1016 ECHOVIRUS TYPE 16.....							1			
1022 ECHOVIRUS TYPE 22.....								1		
1030 ECHOVIRUS TYPE 30.....							1			
1102 POLIOVIRUS TYPE 2.....								2		
1200 MUMPS VIRUS.....			3				1			
1300 HERPES VIRUS GROUP-NOT TYPED..	1	4					1	2	1	
1301 HERPES SIMPLEX VIRUS NOT-TYPED		19								
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .			1	5				1		
1306 HERPES SIMPLEX TYPE 1.....	6	11					1			
1307 HERPES SIMPLEX TYPE 2.....		70								
1401 COXIELLA BURNETI.....			1				8	7		
1521 MEASLES VIRUS.....								2		
1522 RUBELLA VIRUS.....					1	1			1	
1532 HEPATITIS B ANTIGEN.....				2						

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

6

PERIOD : 5 / 3 / 81 to 18 / 3 / 81 ... 81/6

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 ...

-CONTINUED

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/malaise	Other	SIDS
1541 CHLAMYDIA A - TRIC TYPE.....		63								
1556 CMV - CYTOMEGALOVIRUS.....		1	1	1	1	5	4	3	7	
ROSS RIVER VIRUS .....					11			1		
DENGUE (TYPE 3) .....								3		
ARBO. GROUP B. ....								1		
Total.....	10	170	8	8	14	6	24	29	11	3

**NOTIFIABLE DISEASES - AUSTRALIA 1980**

(as notified to 20 March 1981)

Disease	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total
Amoebiasis	N.N.	1	22	14	4	1		11	53
Ankylostomiasis	N.N.		112	N.N.			104	3	219
Anthrax		2							2
Arbovirus infection		14	16	N.N.					30
Brucellosis	10	4	5	27	3				49
Campylobacter infections	N.N.	N.N.	N.N.	501	N.N.	N.N.	N.N.	N.N.	501
Chancroid	N.N.	2	28	N.N.		N.N.	N.N.		30
Cholera		1	2						3
Congenital rubella syndrome	N.N.	N.N.	N.N.	1	N.N.	N.N.	N.N.		1
Diphtheria		2 CARRIERS	1						1+2 CARRIERS
Donovanosis	N.N.	N.N.	90	N.N.		N.N.	18		108
Giardiasis	N.N.	N.N.	N.N.	568	N.N.	N.N.	N.N.	N.N.	568
Genital herpes	N.N.	N.N.	N.N.	410	N.N.	N.N.	N.N.	N.N.	410
Gonococcal ophthalmia neonatorum	N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	—
Gonorrhoea	3643	2744	1838	856	1208	197	722	269	11,477
Hepatitis A (infectious)	558	332	142	115	59	26	125	28	1,385
Hepatitis B (serum)	181	172	61	189	16	4	13	10	646
Hepatitis - unspecified	N.N.	1 CARRIER		10	168	N.N.	N.N.		178 + 1 CARRIER
Hydatid disease	24	2	1	7		2		3	39
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.	—
Leprosy	9	4	5	1	9		7		35
Leptospirosis	2	24	16	11	9	1		1	64
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.	1		1
Malaria	113	102	207	54	50	4	7	16	553
Marburg Disease	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—
Meningococcal infections	N.N.	4	63	4		N.N.			71
Non-specific urethritis	N.N.	N.N.	N.N.	1232	N.N.	N.N.	N.N.	N.N.	1,232
Ornithosis				15			1	1	17
Pertussis (whooping cough)	N.N.	69	N.N.	55	N.N.	N.N.	N.N.	N.N.	124
Plague									—
Poliomyelitis									—
Q. fever	45	36	415	125	N.N.		N.N.		621
Rabies	N.N.	N.N.	N.N.	N.N.		N.N.	N.N.	N.N.	—

