



Communicable Diseases Intelligence

Bulletin number 81/10

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VIRUS REPORTING SCHEME - A total of 869 reports were received this period. The reports indicate an outbreak of epidemic polyarthrititis in Queensland (55 reports of Ross River virus received from the State Health Laboratory, Brisbane, compared to 33, 29 and 17 for the previous three periods), but a plateauing of the incidence of infection in Western Australia (9 reports received from the State Health Laboratory, Perth, compared with 11, 11 and 5 for the previous three periods). Approximately 80% of the serum specimens received by the Brisbane laboratory were collected in April. In 1980, the seasonal rise of Ross River virus infection peaked in March. An age/sex distribution of the infections is shown in Table 1.

TABLE 1 The age/sex distribution of Ross River infections

<u>Age Group</u>	<u>SHL, Brisbane</u>		<u>SHL, Perth</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
< 14	1	1	-	-
15-20	4	1	-	-
21-25	3	8	1	-
26-35	15	11	1	4
36-45	3	5	-	1
46-55	1	1	-	1
56+	-	-	-	1
Unknown	1	-	-	-
	<u>28</u>	<u>27</u>	<u>2</u>	<u>7</u>

The above age distribution agrees with published findings that Ross River infection only infrequently or mildly affects children.

- . Australian encephalitis was diagnosed in a 2½ year old boy from Mt. Isa by the State Health Laboratory, Brisbane. Sera collected on 1 April, 14 April and 1 May demonstrated rises in titre of 1/20, 1/80 and 1/320 respectively. Specific IgM was detected in the second serum sample. The sera have been forwarded to the Queensland Institute of Medical Research for confirmation and further testing.

The Bulletin is compiled and distributed by the Environmental Health Branch, Department of Health, P.O. Box 100, Woden, A.C.T. 2606, Australia, and is available on request.

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Material appearing in the Bulletin may be quoted provided suitable acknowledgment is made.

Figures given may be subject to revision.

UNUSUAL H ANTIGENS IN STRAINS OF SALMONELLA TYPHI

(Contributed by P. Taylor, the Prince Henry Hospital, Sydney, and S. Dixon, Salmonella Reference Laboratory, Adelaide)

Four strains of S. typhi isolated at the Prince Henry Hospital, Sydney, during September-October 1980 were forwarded to the Salmonella Reference Laboratory for serotyping. Two of the isolates were from young men who became ill immediately after spending three weeks in Indonesia on vacation. Both had been vaccinated against typhoid before travelling. The other two strains were from an Indonesian couple holidaying in Sydney. The male had typhoid fever, whereas his wife remained asymptomatic.

All strains possessed O antigens 9, 12, and Vi, and although motile, did not react with d antiserum. They showed minimal agglutination with z59 antiserum, which was considered to be a possible cross-reaction. The four strains were sent to the Microbiological Diagnostic Unit, Melbourne, for phage typing, but were determined to be untypable. All strains were sensitive to ampicillin, chloramphenicol, tetracycline, sulphamide, trimethoprim and gentamicin.

The cultures were also forwarded to Dr Le Minor at the Pasteur Institute, France, who is investigating strains of S. typhi not agglutinated with d antiserum. Analysis indicated that three of the strains showed H antigen j and z₆₆, and the fourth possessed only antigen j.

Hence, the formulae are 9, 12, Vi:j-z₆₆:-
and 9, 12, Vi:j:-

By culturing S. typhi in the presence of d antiserum, Kauffman in 1936 selected bacteria with a different and uncommon H antigen which he called an R phase and designated j. R phase antigens are considered variants of S phase antigens. Different R phases may be found in one serotype. By culturing R phase strains in the presence of R phase antiserum, the normal S phase is sometimes recovered.

The previously undescribed antigen designated z₆₆ has been found in 11 strains of S. typhi which were isolated from Indonesian residents or from people who had visited Indonesia shortly before the onset of the disease during 1979-80 (Dr Le Minor, personal communication). Of these, seven strains also possessed j, and the other four could be converted to the d phase. It is thought that this type of S. typhi with R phase antigens is indigenous in Indonesia. The above research was done in conjunction with Guinee et al., from the Rijksinstituut, Bilthoven, the Netherlands, and will be published in Annales de Microbiologie (Inst. Pasteur).

ANTIBIOTIC - RESISTANT SHIGELLA FLEXNERI

(Contributed by A. Henderson, State Health Laboratory Services, Perth)

During January, February, March and April, the State Health Laboratory Services found that of the 28 strains of Shigella flexneri type 2 isolated, 18 were resistant to ampicillin, sulphamide and trimethoprim. For the same period, Princess Margaret Hospital for Children noted similar results in six of 19 strains. All of these strains were sensitive to colistin, kanamycin, neomycin, tetracycline and furoxone. One of the resistant strains was isolated from a boy who died, as well as from his sister.

Ampicillin, sulphonamide, tetracycline, chloramphenicol and co-trimoxazole resistance have all been reported for *Shigella* species. Nevertheless, the NH & MRC endorse the findings of controlled studies in shigellosis which indicate that the use of absorbable antibiotics such as ampicillin or co-trimoxazole may shorten the duration of faecal excretion of *Shigella* and prevent the spread of infection within the family (see CDI 80/15).

HYDATID DISEASE - AUSTRALIA

(Based on information supplied by T.C. Beard, Department of Health, Canberra).

The parasite responsible for hydatidosis is the small cestode *Echinococcus granulosus*. In the natural infections occurring in Australia, the adult worm is an intestinal parasite of dogs, while the larval stage occurs as a cyst in sheep, cattle, pigs, macropods and man. Biological variants of "strains" of *E. granulosus* may exist, of which some may not be infective for man^(1,2).

Human infections may be silent, so that the total infection rate is unknown. Retrospective indication may be obtained from serial necropsy studies. Man is infected by ingesting ova passed in the faeces of dogs. On release, the larval oncospheres penetrate the intestinal mucosa and enter the portal system. Surviving oncospheres develop into hydatid cysts in the lungs, brain, kidney, bones and other tissues. The incidence and/or prevalence of latent or overt disease in humans can be estimated from mass chest X-ray surveys, mass serological surveys, compulsory notifications and hospital morbidity data. However, in addition to the number of reported human cases, analysis of the distribution of echinococcus in a defined region must also consider the prevalences of adult worms in the definitive host, and the presence of the larval stages in slaughtered ruminants.

Human morbidity data have often been less accurate and harder to collect than animal data. This has been observed internationally and has been illustrated in Australia by the fact that our export abattoirs have had better national statistics on this infection than have our hospitals.

The disease has been notifiable in all States since 1966, and figures for the last four years are given in Table 1.

TABLE 1 Number of Hydatid notifications 1977-1980

	<u>NSW</u>	<u>VIC</u>	<u>QLD</u>	<u>SA</u>	<u>WA</u>	<u>TAS</u>	<u>NT</u>	<u>ACT</u>	<u>Total</u>
1977	9	3	1	3	1	-	-	2	19
1978	8	5	-	3	1	-	-	-	17
1979	7	5	2	3	-	1	-	6	24
1980	24	2	1	7	-	2	-	3	39

However, the notifications of infection are unreliable since, although they may frequently include readmissions, the figures still tend to fall far short of the true surgical incidence. A study of the hospital morbidity index for NSW for 1977-78 indicated that 134 persons were treated in NSW hospitals for hydatid disease⁽³⁾. The average length of stay in hospital during 1977 in these cases was 23 days, indicating probable major surgery.

The situation of hydatid disease in Australia was reviewed by Beard in 1979⁽⁴⁾. He stated that up to 1967, Western Australia had a low total prevalence (0.4 per 100,000), although it was the only State reporting a significant rate in Aborigines (6.9 per 100,000 aborigines). South Australia had a relatively high rural prevalence in the 1940's (1.7 per 100,000), but there were no available figures for the State for recent years. Victoria was traditionally one of the States with a high prevalence in the 1940's (2.1 per 100,000), but by 1970-74, the rural incidence was surprisingly low, with 49% of new cases born overseas, and 47% of cases from recognized endemic areas⁽⁵⁾. There appeared to be no published reports of hospital admissions for hydatid disease in the Northern Territory, and a relatively low prevalence could be extrapolated from hospital morbidity data for Queensland.

During the decade 1941-50 Tasmania had an annual prevalence of 9.3 per 100,000 for the State as a whole, and 27.4 for the rural population. Voluntary control measures were inaugurated in 1962, followed by an official eradication program in 1965. The annual surgical incidence for the first five-year period was 3.1 per 100,000, and 1.4 for the second quinquennium. There was a substantial decrease in the disease in all age groups indicating the susceptibility of adults, and suggesting that the latent period between infection and diagnosis in many cases was only a few years⁽⁶⁾. The misconception that most people were infected in childhood used to be a traditional source of apathy in instituting control programs because it implied a generation's delay before the incidence would fall in any adult age group.

The four available studies of prevalence and/or incidence for NSW showed very little change between 1941 and 1973 (1.3 per 100,000). However, in the South Eastern Statistical Division of NSW, together with the Canberra district, which resembles Tasmania in land area, sheep density and human population, an indigenous hydatid prevalence of 27.5 per 100,000 per rural population was calculated. This figure closely matched that reported for Tasmania before the control program.

Following recommendations issued by the National Health and Medical Research Council in October 1980, a national register of hydatid cases has been established at the Commonwealth Institute of Health, Sydney, which relies upon information collected and recorded by each State. In addition to the human incidence (new cases), the resident or migrant status and the postcode for the area where each person was living when first admitted to hospital is collected. The definition of a new case follows Schwabe's "surgical incidence" (new cases confirmed at operation) of hydatid disease⁽⁷⁾, and not cases of silent infection where the parasite was an incidental operative finding, or of calcified degenerative cysts which were silent and discovered at an examination made for other reasons. These findings have no bearing on recent transmission rates. In Tasmania, the State register also includes children who died of anaphylaxis without reaching the surgeon.

The collection of data on the human incidence will be an early and sensitive indication of the rate of transmission of hydatid disease since it appears to change at about the same rate as the animal data. This correlation

has been illustrated in the successful control campaigns instituted in New Zealand⁽⁸⁾, Tasmania⁽⁴⁾, and Cyprus⁽⁹⁾. Such campaigns to disrupt the complete life cycle of the cestode involve large scale educational programs and the enactment of legislation prohibiting the feeding of offal to dogs. The remarkable progress in Cyprus was achieved by more energetic enforcement of comprehensive legislation⁽⁹⁾. Dogs were required to be leashed or enclosed at all times except while working; otherwise they were defined as strays and eliminated. Dog numbers were then stabilized by enforcing high registration fees, and the voluntary spaying of bitches. The animals were also required to be examined several times each year at owner expense, with all infected dogs killed. In addition, livestock slaughtering was prohibited except in licensed village abattoirs, with all offal destroyed by incineration.

With hydatid disease, the appropriateness of the saying "prevention is better than cure" cannot be overemphasised.

References

- | | |
|---|---|
| 1. <u>Int.J. Parasitol</u> (1974) <u>44</u> : 443 | 7. In : WHO/FAO Inter-Regional Seminar on the Control of Echinococcosis (Hydatidosis). Buenos Aires (1970), WHO, Geneva |
| 2. <u>J. Helminth</u> (1976) <u>50</u> : 175 | 8. <u>J. N.Z. Med</u> (1977) <u>85</u> : 173 |
| 3. <u>MJA</u> (1980) <u>1</u> : 446 | 9. <u>WER</u> (1981) 56 : 91 |
| 4. <u>Aust. Vet. J.</u> (1979) <u>55</u> : 131 | |
| 5. <u>MJA</u> (1977) <u>2</u> : 493 | |
| 6. <u>Lancet</u> (1978) <u>2</u> : 30 | |

AMOEBIASIS ASSOCIATED WITH COLONIC IRRIGATION - USA

(Based on MMWR (1981) 30 : 101)

An outbreak of amoebiasis occurred in the period December 1977-November 1980 that was associated with colonic irrigation performed at a chiropractic clinic in Colorado. This treatment consists of a series of enemas performed by machine to "wash out" the colon, and the practice has been gaining popularity recently among some chiropractors, naturopaths and nutritional counsellors.

As at 14 February 1981, 15 biopsy confirmed cases of colitis with onset of symptoms from December 1977 through November 1980 had been identified. Thirteen of these had evidence to support a diagnosis of amoebiasis either on the basis of identification of the organism in a biopsy specimen or the presence of a high antibody titre. Ten patients had such fulminant disease that they developed bowel perforation, and had to have a partial or total colectomy. Seven of these patients died.

Cultures of specimens taken from the colonic irrigation machine after routine cleaning showed heavy contamination with coliforms in virtually the entire system.

The editor of MMWR commented that the isolation of coliform bacteria from the internal passages of the enema machine suggests that infective amoebae from an earlier patient's effluent could have contaminated the common inflow/outflow tubing used for later patients. The usual mode of transmission of amoebiasis in the United States is person to person, and rarely by contaminated food or drink. Such infection presumable occurs by oral

ingestion of amoebic cysts. Since the practice of colonic irrigation is now widespread, further cases associated with the use of improperly disinfected machines may have occurred

The diagnosis of amoebiasis can be difficult. Successful diagnosis is facilitated by multiple stool specimens that are preserved promptly in fixative, concentrated and prepared for permanent stain and wet mount, and examined carefully by trained personnel⁽¹⁾. Sigmoidoscopic swabs or biopsy specimens may also contain identifiable amoebae. Although only about 10% of asymptomatic cyst carriers and a minority of those with amoebic diarrhoea will have positive titres (≥ 256), about 85% of those with invasive amoebic dysentery and over 90% of those with amoebic abscesses will have positive titres⁽²⁾, Intestinal amoebiasis can resemble Crohn's disease or ulcerative colitis, prompting the use of steroids that could exacerbate the infection⁽³⁾. In such situations, early diagnosis and treatment of amoebiasis may prevent complications such as perforation and even death.

References

1. Melvin D.M., Brooke M.M. Laboratory procedures for the diagnosis of intestinal parasites (HHS Publication No. CDC-80-8282). (1975) CDC, Atlanta. (Available from National Technical Information Service, Springfield, VA)
2. Kagan, I.G. Serodiagnosis of parasitic diseases. In : Lennette E, Balows A, Hausler W, Truant J, eds. Manual of clinical microbiology. 3rd ed. Washington, DC, American Society for Microbiology (1980) : 724
3. Ann. Intern. Med. (1978) 88 : 89

ARBOVIRUS SYMPOSIUM - 1982

The third Australian Arbovirus Symposium will be held in Brisbane 15-17 February 1982. The first two days of the program include plenary sessions on the arbovirus threat in the 80's, and advances in the fields of virology, pathogenesis, entomology, epidemiology, immunology and control of arbovirus disease. Three concurrent workshops will be held on the third day and at present include entomology (one day), bluetongue ($\frac{1}{2}$ day), arbovirus biochemistry ($\frac{1}{2}$ day) and clinical aspects of arbovirus disease/s.

Enquiries regarding submission of papers should be addressed to:

The Convenor,
Third Arbovirus Symposium,
CSIRO, Long Pocket Laboratories,
Private Bag No. 3, P.O.
INDOOROPILLY. QLD. 4068

ERRATUM

- . In CDI 81/8 page 6, Serum 2 has the following properties:
Serum 2 - HAI titre $>1/10$; IgM⁻
-

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 30-4-81 - 13-5-81 BULLETIN NUMBER . 81/10
 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.....	15	1				1	3	6	26
0101 ADENOVIRUS TYPE 1.....				4	1	1		1	7
0102 ADENOVIRUS TYPE 2.....	1				1	3		1	6
0103 ADENOVIRUS TYPE 3.....	4			1	1			3	9
0105 ADENOVIRUS TYPE 5.....	1			2		1			4
0107 ADENOVIRUS TYPE 7.....	4								4
0108 ADENOVIRUS TYPE 8.....								1	1
0116 ADENOVIRUS TYPE 16.....						1			1
0119 ADENOVIRUS TYPE 19.....	2			1				1	4
0126 ADENOVIRUS TYPE 26.....								1	1
0131 ADENOVIRUS TYPE 31.....						1			1
0199 ADENOVIRUS TYPING PENDING.....				4		3	1		8
0201 INFLUENZA A VIRUS.....						1			1
0301 PARAINFLUENZA VIRUS TYPE 1.....		7				3	24		34
0302 PARAINFLUENZA VIRUS TYPE 2.....	1					1	6	1	10
0303 PARAINFLUENZA VIRUS TYPE 3.....	2	1				1	3		7
0399 PARAINFLUENZA VIRUS TYPING PENDING.....							4		4
0400 RESPIRATORY SYNCYTIAL VIRUS (RS) ...	26	16		2	21	4	13	2	84
0500 RHINOVIRUS (ALL TYPES).....	2			1	5		2	1	11
0600 MYCOPLASMA PNEUMONIAE.....	6	1		2		1	2	4	16
0700 ORNITHOSIS-PSITTACOSIS.....	3								3
0809 COXSACKIEVIRUS A9.....	2								2
0902 COXSACKIEVIRUS B2.....							1		1
1002 ECHOVIRUS TYPE 2.....							2	1	3
1004 ECHOVIRUS TYPE 4.....	1								1
1006 ECHOVIRUS TYPE 6.....							2		2
1009 ECHOVIRUS TYPE 9.....	4			1	1		1		7
1014 ECHOVIRUS TYPE 14.....	2			2			6		10
1017 ECHOVIRUS TYPE 17.....							1		1
1021 ECHOVIRUS TYPE 21.....	1								1
1022 ECHOVIRUS TYPE 22.....						7	1		8
1030 ECHOVIRUS TYPE 30.....	2			5	3		3		13

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

2.

REPORTING PERIOD - 30-4-81 - 13-5-81 BULLETIN NUMBER
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

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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
1033 ECHOVIRUS TYPE 33.....					1				1
1101 POLIOVIRUS TYPE 1.....	1					1			2
1102 POLIOVIRUS TYPE 2.....	5					2			7
1103 POLIOVIRUS TYPE 3.....				1			1	1	3
1200 MUMPS VIRUS.....	10			2		1	1		14
1300 HERPES VIRUS GROUP-NOT TYPED.....	29			3					32
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....	3	2	2	1			1	45	54
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	1					3		3	7
1303 VARICELLA-ZOSTER VIRUS.....	3						1		4
1306 HERPES SIMPLEX TYPE 1.....	3		5	19		3	12		42
1307 HERPES SIMPLEX TYPE 2.....	41		3	25		3	9		81
1399 HERPES VIRUS TYPING PENDING.....			1		2	1			4
1401 COXIELLA BURNETI.....	8			2			8		18
1502 PICORNA VIRUS-NOT TYPED.....							4		4
1514 MOLLUSCUM CONTAGIOSUM.....				1		1		1	3
1521 MEASLES VIRUS.....	1	1		1		1	1	1	6
1522 RUBELLA VIRUS.....				3			5	2	10
1532 HEPATITIS B ANTIGEN.....	12		8	36	1	12	2	8	79
1535 HEPATITIS A ANTIBODY.....	5	1		5		7	3	4	25
1541 CHLAMYDIA A - TRIC TYPE.....	6					2		30	38
1556 CMV - CYTOMEGALOVIRUS.....	9	1	4	8	4	1	3	7	37
1562 REOVIRUS (ALL TYPES).....						3			3
1563 CORONAVIRUS.....	1								1
1564 ROTAVIRUS.....	4	1	8			6			19
1599 ENTEROVIRUS TYPING PENDING.....	1		6		6				13
AUSTRALIAN ENCEPHALITIS							1		1
ROSS RIVER VIRUS							55	9	64
ASTROVIRUS	5								5
SMALL VIRUS (LIKE) PARTICLE						1			1
Total.....	227	32	41	128	64	101	148	128	869

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 30/4/81 to 13/5/81

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	Respir atory	Enceph alitis	Mening -itis	Para- lysis	CNS other unspec	GI	Hepa -tic	CVS	Urin -ary	Skin/ mucs memb
0101 ADENOVIRUS TYPE 1.....		3			1		2				
0102 ADENOVIRUS TYPE 2.....		3					3				
0103 ADENOVIRUS TYPE 3.....		3					3	1			1
0105 ADENOVIRUS TYPE 5.....		2					2				
0107 ADENOVIRUS TYPE 7.....		2					1				
0116 ADENOVIRUS TYPE 16.....							1				
0119 ADENOVIRUS TYPE 19.....	1										
0131 ADENOVIRUS TYPE 31.....							1				
0201 INFLUENZA A VIRUS.....		1									
0301 PARAINFLUENZA VIRUS TYPE 1.....		33									1
0302 PARAINFLUENZA VIRUS TYPE 2.....	1	9									
0303 PARAINFLUENZA VIRUS TYPE 3.....		6			1						
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	3	81					1				
0500 RHINOVIRUS (ALL TYPES).....		8									
0600 MYCOPLASMA PNEUMONIAE.....	3	9							1		
0700 ORNITHOSIS-PSITTACOSIS.....	1	1									
0809 COXSACKIEVIRUS A9.....					1						
1002 ECHOVIRUS TYPE 2.....					3						
1004 ECHOVIRUS TYPE 4.....							1				
1006 ECHOVIRUS TYPE 6.....	1						1				
1009 ECHOVIRUS TYPE 9.....	1	1			1						1
1014 ECHOVIRUS TYPE 14.....	5	1			3						1
1017 ECHOVIRUS TYPE 17.....		1									
1021 ECHOVIRUS TYPE 21.....	1										
1022 ECHOVIRUS TYPE 22.....	4	2					1				
1030 ECHOVIRUS TYPE 30.....	1	1	1		7		1				1
1101 POLIOVIRUS TYPE 1.....		1					1				

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

4

PERIOD : 30 / 4 / 81 to 13 / 5 / 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.-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
1102 POLIOVIRUS TYPE 2.....		1					6				
1103 POLIOVIRUS TYPE 3.....		2									
1200 MUMPS VIRUS.....	2	1		2		1					
1300 HERPES VIRUS GROUP-NOT TYPED..	3		1	1							14
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	1	1								31
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .	3							1			
1303 VARICELLA-ZOSTER VIRUS.....											4
1306 HERPES SIMPLEX TYPE 1.....	2	4				1					17
1307 HERPES SIMPLEX TYPE 2.....											6
1401 COXIELLA BURNETI.....	2	2									
1514 MOLLUSCUM CONTAGIOSUM.....											1
1521 MEASLES VIRUS.....	1					1					4
1522 RUBELLA VIRUS.....	2										8
1532 HEPATITIS B ANTIGEN.....	44	1						33			
1535 HEPATITIS A ANTIBODY.....	5							20			
1541 CHLAMYDIA A - TRIC TYPE.....	4										
1556 CMV - CYTOMEGALOVIRUS.....	12	2				1		3		3	1
1562 REOVIRUS (ALL TYPES).....	1						1	1			
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....							19				
AUSTRALIAN ENCEPHALITIS			1								
ROSS RIVER VIRUS	1	1					1				15
ASTROVIRUS							5				
SMALL VIRUS (LIKE) PARTICLE							1				
Total.....	105	183	4	20		4	53	59	1	3	106

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 30 / 4 / 81 to 13 / 5 / 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;
 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
0101 ADENOVIRUS TYPE 1.....	1									1
0103 ADENOVIRUS TYPE 3.....	1							1		
0107 ADENOVIRUS TYPE 7.....								1		
0108 ADENOVIRUS TYPE 8.....	1									
0119 ADENOVIRUS TYPE 19.....	3									
0126 ADENOVIRUS TYPE 26.....		1								
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....							1	3		1
0500 RHINOVIRUS (ALL TYPES).....										3
0600 MYCOPLASMA PNEUMONIAE.....			1				2	2		
0700 ORNITHOSIS-PSITTACOSIS.....			1							
0809 COXSACKIEVIRUS A9.....								1		
0902 COXSACKIEVIRUS B2.....							1			
1009 ECHOVIRUS TYPE 9.....							3	1		
1014 ECHOVIRUS TYPE 14.....							1			
1022 ECHOVIRUS TYPE 22.....										1
1030 ECHOVIRUS TYPE 30.....							1			
1033 ECHOVIRUS TYPE 33.....										1
1103 POLIOVIRUS TYPE 3.....										1
1200 MUMPS VIRUS.....			8					1		
1300 HERPES VIRUS GROUP-NOT TYPED..		9					1			
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	21			1					
1302 EPSTEIN-BARR VIRUS (EB VIRUS)..			1	1				2		
1306 HERPES SIMPLEX TYPE 1.....	8	9						3		
1307 HERPES SIMPLEX TYPE 2.....		75								
1401 COXIELLA BURNETI.....							4	11		
1514 MOLLUSCUM CONTAGIOSUM.....	1	1								
1522 RUBELLA VIRUS.....					1			4		

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

6
81/10

PERIOD : 30 / 4 / 81 to 13 / 5 / 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;
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/malaise	Other	SIDS
1532 HEPATITIS B ANTIGEN.....							1			
1541 CHLAMYDIA A - TRIC TYPE.....		34								
1556 CMV - CYTOMEGALOVIRUS.....		3	1			2	4	6	2	
ROSS RIVER VIRUS					59			18		
Total.....	16	153	12	1	61	2	19	54	2	8

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

3rd. 4 Weekly Period for 1981...

(22.2.81 to 21.3.81 inclusive)

Bulletin 81/10.

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	5	1					7	12
Ankylostomiasis	N.N.		7	N.N.					7	10
Anthrax									—	—
Arbovirus infection	1	2	2	1					6	8
Brucellosis	3	1		1					5	7
Campylobacter infections:	N.N.	N.N.	N.N.	43	N.N.	N.N.	N.N.	N.N.	43	73
Chancroid			3	N.N.		N.N.	N.N.		3	6
Cholera	2								2	2
Congenital rubella syndrome	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Diphtheria									—	1+1 CARRIER
Dorovanosis		N.N.	4	N.N.	1	N.N.	6		11	22
Giardiasis	N.N.	N.N.	N.N.	99	N.N.	N.N.	N.N.	N.N.	99	161
Genital herpes	N.N.	N.N.	N.N.	37	N.N.	N.N.	N.N.	N.N.	37	97
Gonococcal ophthalmia neonatorum		N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Gonorrhoea	289	210	99	100	117	22	79	3	919	*2559
Hepatitis A (infectious)	74	28	12	8	7	4	18	4	155	382
Hepatitis B (serum)	16	6	2	8					32	* 89
Hepatitis - unspecified	N.N.	N.N.		N.N.	10	N.N.	N.N.	2	12	24
Hydatid disease	2								2	9
Lassa Fever	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Legionnaires disease	N.N.		N.N.	4	N.N.	N.N.	N.N.	N.N.	4	5
Leprosy	5						2		7	13
Leptospirosis		2		3					5	20
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.			—	—
Malaria	5	13	14	5	1			2	40	99
Marburg Disease	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Meningococcal infections	N.N.		2			N.N.			2	14
Non-specific urethritis	N.N.	N.N.	N.N.	105	N.N.	N.N.	N.N.	N.N.	105	396
Ornithosis		1							1	7
Pertussis (whooping cough)	N.N.	4	N.N.	31	N.N.	N.N.	N.N.	N.N.	35	52
Plague									—	—
Poliomyelitis									—	—
Q. fever	5	2	18	24	N.N.		N.N.		49	* 107
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	33	16	37	77	27	8	34	1	233	598
Shigella infections	N.N.	6	5	5	9		19		44	133
Smallpox									-	-
Syphilis	126	9	42	11	17		29		234 *	575
Tetanus		1							1	8
Trachoma	N.N.	N.N.		N.N.	N.N.	N.N.			-	-
Tuberculosis (all forms)	57	37	19	6	10		3	2	134	324
Typhoid fever									-	4
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

Gonorrhoea -12 cases for N.T.

Hepatitis B (serum) -1 case for S.A.

Q. fever -2 cases for S.A.

Syphilis +10 cases for N.T.