

Communicable

Diseases

Intelligence

Virus reports this period - Total: 614

Interesting reports include:

Coxiella burneti - The incidence of cases remains high (mainly in Queensland) with 31 reports this period. All cases were associated with fever and malaise, and 2 were reported as involving hepatic disease. This brings the total number of cases of Q. fever this year to 150 (up till 21 March) which compares with 114 cases for the first 3 months of 1978.

Echovirus type 30 - 8 cases of encephalitis/meningitis are attributed to this virus, all involving adults. Other meningitis cases reported included coxsackie virus A9 in a 2 yr female; coxsackie-virus B4 in 13 yr male and 1 mth male; Echovirus 11 in a 5 yr male.

Ross River Virus - The incidence of this disease continues to be high with 44 cases reported this period. Of these, 33 were from Queensland, 7 from South Australia and 4 from Western Australia.

S. muenchen food poisoning in Western Australia - follow up report

Further to the report in Bulletin 79/4 of food poisoning from poultry in Western Australia, the Public Health Department in Perth has advised that the number of people now found to be excreting S. muenchen is approximately 450.

The escalation in isolates has arisen from an intensive surveillance of food-handlers rather than from clinical cases, since it appears that the excretion rate of S. muenchen in food-handlers is very high. A more detailed report will be included in the next bulletin.

Chloroquine resistant falciparum malaria - Melbourne (compiled from reports by N. Bennett, Fairfield Hospital, Melbourne)

Since early February, 7 patients with malaria due to infection with chloroquine resistant Plasmodium falciparum have been treated in Fairfield Hospital. All were members of an Australian party of 18 on an excursion in the vicinity of Rabaul from 30 December 1978 to 21

January 1979. Six cases were successfully treated with a combination of quinine and Fansidar, while the seventh, a young woman who had a history of allergy to sulphonamides, was treated with quinine followed by tetracycline.

One other member of the party was similarly infected and treated in another hospital. The occurrence of 8 cases of chloroquine resistant falciparum malaria in a party of 18 people emphasises the likelihood of acquiring this potentially dangerous form of malaria in certain parts of Papua New Guinea as far east as Rabaul. If circumstances suggest that visitors to such areas are particularly likely to acquire malaria, prophylaxis with Fansidar instead of chloroquine is indicated, since this is the only effective drug available in Australia. This drug is, however, contraindicated for patients with sulphonamide allergies.

Coxsackie B virus (contributed by the staff of the Virus Laboratory, Fairfield Hospital, Melbourne, and of the Launceston General Hospital)

Since the beginning of 1979 Coxsackie B viruses have been isolated from 5 patients whose specimens were processed at Fairfield Hospital Virus Laboratory. One strain from a 6 week old baby with viral meningitis has been typed as Coxsackie B₃. The remainder were Coxsackie B₁ and were from 3 adults with pericarditis, tonsillitis and viral meningitis respectively and two infants, a two year old suffering from gastroenteritis and an 8 day old baby with a rapidly fatal myocarditis. This was diagnosed by histology at Launceston General Hospital and Coxsackie B₁ isolated from p.m. tissues sent to our laboratory.

Samples from Melbourne sewage effluent during the past 16 months indicate that Coxsackie B₃ has been the prevalent coxsackie virus circulating, but Coxsackie B₁ was identified in a December sample.

β-lactamase producing N. gonorrhoeae

A further 4 cases of gonorrhoeae caused by β-lactamase producing gonococci have been reported from New South Wales. These are: Female who works at massage parlour in Kings Cross. Multiple sexual contacts who, because of their casual nature, cannot be traced; Male, contact of above; Male, contact with bar girl in Manila in November 1978. On return to Australia, treated with penicillin and amoxycillin, but urethral discharge persisted until he presented for treatment at V.D. Clinic; Female, 30 yrs., no history.

The MMWR March 2, 1979 reports that 508 cases of β-lactamase producing Neisseria gonorrhoeae were reported to the C.D.C. in Atlanta between March 1976 and December 1978. Approximately half of these

cases were imported into the U.S.A. or linked to imported cases, and all but one of these originated in South East Asia.

Thirty-seven countries have reported cases of this organism to the W.H.O., but of interest is its prevalence in the Philippines and Singapore. The organism accounts for about 30% of all recent gonococcal isolates in the Philippines and 16% in Singapore, and it is believed that a contributing factor is the preventive use of oral penicillins, especially by prostitutes, in these countries.

Dengue Fever - Suva

The W.H.O. office in Suva advises that a mild and gradual outbreak of dengue-like illness was reported in the South Pacific in January. The clinical syndrome appeared both like Asiatic influenza and clinical dengue, and was first noticed in Tahiti and the neighbouring archipelagoes. Approximately 700 cases were reported, but there were no deaths and no cases involving haemorrhage. Six of 7 serum samples tested confirmed the presence of Dengue type 4.

The 6 cases reported by Fairfield Hospital in Melbourne in Bulletin 79/4 have not yet been investigated for the determination of the specific type of dengue virus involved. Because of the possible increased activity of this disease in the South Pacific, any cases detected in Australia should be reported to the Editor, for transmission to W.H.O.

Enterovirus 71 (contributed by the staff of Virus Laboratories of the Fairfield Hospital and Royal Children's Hospital, Melbourne)

The W.H.O. Weekly Epidemiological Record of 23 February 1979 reports an epidemic of acute central nervous system disease in Hungary during April-September 1978. Two agents appear to have been involved in the aetiology of 724 cases of aseptic meningitis and 555 cases of encephalitis. There were 45 deaths and 12 patients with poliomyelitis-like paralysis. Adults were mainly affected by a tick borne encephalitis, whilst enterovirus 71 was responsible for most childhood cases - 52% of the aseptic meningitis sufferers and 40% of those with encephalitis being younger than 6 years.

In the Weekly Epidemiological Record of 16 March 1979, another enterovirus 71 outbreak is noted. Poliomyelitis-like disease extensively affected young children in Bulgaria in 1975. More than 20% of patients presented with paralysis and 25% of those cases were fatal. Other signs of CNS involvement were encephalitis, encephalomyocarditis and aseptic meningitis.

Enterovirus 71 was first recorded in the literature when the

isolation of an apparently new enterovirus was reported in 1974 by Schmidt, Lennette and Ho.¹ The virus was recovered from more than 20 patients with central nervous system disease during the previous 4 years in California and one strain was from the brain of a child with a fatal encephalitis.

In Sweden in 1973² an epidemic of aseptic meningitis occurred, together with some cases of hand, foot and mouth disease, 21% of the patients being below three years of age. Enterovirus 71 was the aetiological agent.

Enterovirus 71 infections were reported in Melbourne by Kennett et al³ at Fairfield Hospital when recording an outbreak of aseptic meningitis, which occurred in the summer of 1972-1973. A number of patients with meningitis at this time also had a fine erythematous rash, sometimes with vesicles. Two patients had hand, foot and mouth disease. Sporadic isolations of enterovirus 71 have been made at Fairfield Hospital Virus Laboratory since then. In 1978-1979, 7 strains were isolated. These were from four children with viral meningitis, one adult out-patient where the clinical notes indicated that the specimen was from a skin lesion, and two children aged one yr and eight yrs with hand, foot and mouth disease.

Royal Children's Hospital staff have also recently isolated enterovirus 71. The virus was recovered from both brain and faeces of a five mth. old patient of a country hospital. This child had presented with a clinical meningoencephalitis, characterised by hemiplegia and at post mortem specimens were collected with appropriate care to avoid cross contamination of tissue. Collaterally the patient showed evidence of respiratory pathology suggesting an adenoviral infection, but this was not confirmed by virus isolation. Retrospective EM investigations are now being carried out on lung and brain tissue.

Strains of enterovirus 71 have been shown to be pathogenic for suckling mice, causing coxsackievirus A - like pathology. The virus has now been isolated from throat swabs, vesicle swabs, faeces, CSF (the Swedish outbreak only) and post mortem brain tissue.

Amendment to bulletin 79/5

On page 3, the infant mortality rate in Naples should have read "36.7/1000".

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- References: 1. J. of Infectious Diseases Vol 139. No.3. March 1974 p.304
 2. Lancet 13 July 1974, p.112
 3. Bulletin W.H.O. Vol 51 1974, p.609

Salmonella isolates : February 1979 (Provisional total = 500)

S. aberdeen 1, S. abony 1, S. adelaide 5, S. anatum 10, S. bahrenfeld, S. bardo 1, S. bovis-morbificans 7, S. bradford 1, S. braenderup 1, S. bredeney 3, S. charity 1, S. chester 15, S. dan 1, S. derby 8, S. eastbourne 3, S. enteritidis 7, S. give 8, S. havana 14, S. hvittingfoss 1, S. infantis 6, S. jangwani 1, S. java 4, S. kottbus 2, S. litchfield 2, S. meleagridis 1, S. mississippi 1, S. muenchen 294, S. newport 15, S. ohio 1, S. ohlstedt 1, S. oranienburg 3, S. orientalis 1, S. orion 2, S. paratyphi A 2, S. rubislaw 2, S. saint-paul 18, S. san-diego 1, S. sentfenberg 3, S. singapore 6, S. tennessee 4, S. thompson 1, S. typhi 1, S. typhimurium 21, S. urbana 1, S. virchow 12, S. wandsworth 1, S. wordsworth 3, S. warragul 1,

Comment: The above figures exclude isolates from Victoria, which will be listed in the next issue. Nevertheless, the total of 500 represents a record number of isolates since monitoring began in April 1978. This is largely due to the 294 cases of S. muenchen, 284 of which were reported from Western Australia (see discussion in this Bulletin).

The small number of S. typhimurium reports is influenced by the absence of the Victorian results, since the Microbiological Diagnostic Unit in Melbourne performs phage typing on isolates from all States and then forwards the report to Canberra.

Interesting cases in the above list include:

S. paratyphi A in a 22 yr male, possibly acquired in S-E Asia; S. paratyphi A in a male recently returned from S-E Asia; S. typhi in a 5 mth. female who had vomiting and diarrhoea for one week, and then diarrhoea only for the following week.

S. saint-paul - 14 of the 18 cases were from Western Australia; S. virchow - 10 of 12 cases were from Queensland.

Case report: Congenital abnormality possibly associated with gastroenteritis in the pregnant mother (contributed by I. Mogg and F. Ranjan Perera, Cootamundra District Hospital, Cootamundra, N.S.W.)

A primiparous 22 yr old woman contacted gastroenteritis at approx. 9-10 weeks gestation following ingestion of oysters. The pregnancy was otherwise incident free apart from slight hypertension with oedemia and mild toxemia at 38 weeks gestation which settled in about 2 days.

After 2 unsuccessful attempts at induction she was delivered of a 3750g male by Caesarean Section at approx. 42 weeks gestation. The otherwise normal babe has Agensis of right fibula and 4th and 5th

toes and Agenesis of left 5th toe.

This may be purely coincidental with the gastroenteritis but since it occurred at the time of organogenesis the case may be of interest.

At the time of the gastroenteritis no medication was given. No other medication was taken during the pregnancy.

Editor's note: We are unaware of any studies which have associated the agents of viral gastroenteritis (as in the oyster food poisoning outbreak) with congenital abnormalities.

It is reiterated that the association is speculative. Also, the role of the oysters in causing the gastroenteritis was not confirmed by laboratory studies.

International notes

Human to human rabies transmission (MMWR March 16, 1979, No.10)

On 10 October 1978, a 37 yr old woman in Idaho died of rabies. She had received a corneal transplant 7 weeks earlier from a 39 yr old man who had died of presumed Guillain-Barre syndrome.

The possibility of rabies was first raised when inclusion bodies were found in the brain tissue from both patients following an investigation into the woman's death. The diagnosis was confirmed in the donor by identifying rabies virus in the donor's frozen eye, and by florescent antibody studies and virus isolation. No history of an animal bite was found for either patient, but the donor's work included trapping, shooting and skinning coyotes.

This is the first case of rabies acquired from a tissue transplant of any kind, and highlights previously expressed concern about the transmission of infectious agents by corneal transplants. (N.Engl. J. Med 290:692-693, 1974)

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8-3-79 - 21-3-79 BULLETIN NUMBER - 79/6
 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.....				1	1	1	6	7	16
0101 ADENOVIRUS TYPE 1.....				1					1
0102 ADENOVIRUS TYPE 2.....				1		4			5
0103 ADENOVIRUS TYPE 3.....						1		2	3
0104 ADENOVIRUS TYPE 4.....				1					1
0105 ADENOVIRUS TYPE 5.....		1				4			5
0107 ADENOVIRUS TYPE 7.....				1		1		1	3
0108 ADENOVIRUS TYPE 8.....				1					1
0109 ADENOVIRUS TYPE 9.....				1					1
0111 ADENOVIRUS TYPE 11.....	1								1
0119 ADENOVIRUS TYPE 19.....				2		1			3
0199 ADENOVIRUS TYPING PENDING.....		1	1		3				5
0203 INFLUENZA B VIRUS.....							3		3
0204 INFLUENZA C VIRUS.....							2		2
0301 PARAINFLUENZA VIRUS TYPE 1.....				2	14	1	1	1	19
0302 PARAINFLUENZA VIRUS TYPE 2.....						2	3		5
0399 PARAINFLUENZA VIRUS TYPING PENDING.....						1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....				1					1
0500 RHINOVIRUS (ALL TYPES).....					1	1	1		3
0600 MYCOPLASMA PNEUMONIAE.....	7	2		6		5	9	5	34
0700 ORNITHOSIS-PSITTACOSIS.....	2					1		1	4
0809 COXSACKIEVIRUS A9.....			1	1					2
0901 COXSACKIEVIRUS B1.....				1		1			2
0902 COXSACKIEVIRUS B2.....							1		1
0903 COXSACKIEVIRUS B3.....		1							1
0904 COXSACKIEVIRUS B4.....	1	1							2
0906 COXSACKIEVIRUS B6.....						1			1
1000 ECHOVIRUS NOT TYPED.....							1		1
1003 ECHOVIRUS TYPE 3.....	1	1		1					3
1006 ECHOVIRUS TYPE 6.....						2			2
1009 ECHOVIRUS TYPE 9.....						1			1
1011 ECHOVIRUS TYPE 11.....							1	6	7

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8-3-79 . 21-3-79 BULLETIN NUMBER - 79/6
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PRH/ POW (NSW)	PAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1019 ECHOVIRUS TYPE 19.....			1						1
1021 ECHOVIRUS TYPE 21.....							2		2
1027 ECHOVIRUS TYPE 27.....						2	1	1	4
1030 ECHOVIRUS TYPE 30.....	7		1	6	3	1	1		19
1099 ECHOVIRUS TYPING PENDING.....		3							3
1103 POLIOVIRUS TYPE 3.....				1					1
1104 POLIOVIRUS-VACCINAL STRAIN.....					5				5
1199 POLIOVIRUS TYPING PENDING.....		4							4
1200 MUMPS VIRUS.....	2			3			5	2	12
1300 HERPES VIRUS GROUP-NOT TYPED.....	2			3				1	6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	5				16	2	20	29	72
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....						6			6
1303 VARICELLA-ZOSTER VIRUS.....	2					1	2		5
1306 HERPES SIMPLEX TYPE 1.....	7			3		6		1	17
1307 HERPES SIMPLEX TYPE 2.....	27			20		5		1	53
1401 COXIELLA BURNETI.....	15					1	15		31
1521 MEASLES VIRUS.....	1			1		2	3		7
1522 RUBELLA VIRUS.....							4	6	10
1530 HEPATITIS A VIRUS.....								3	3
1532 HEPATITIS B ANTIGEN.....			13	18		7	20	17	75
1541 CHLAMYDIA A - TRIC TYPE.....	12							39	51
1556 CMV - CYTOMEGALOVIRUS.....	2			6	3	2		2	15
1562 REOVIRUS (ALL TYPES).....								1	1
1564 ROTAVIRUS.....			1					6	7
1571 ENTEROVIRUS TYPE 71 (BRCR).....				1					1
1599 ENTEROVIRUS TYPING PENDING.....	1		1		11	4			17
ROSS RIVER VIRUS.....						7	33	4	44
PARVOVIRUS(LIKE).....						2			2
Total.....	95	14	19	83	57	76	134	136	614

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8-3-79 - 21-3-79 BULLETIN NUMBER
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

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VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
0100 ADENOVIRUS NOT TYPED.....	8	5	3								16
0101 ADENOVIRUS TYPE 1.....			1								1
0102 ADENOVIRUS TYPE 2.....	1		4								5
0103 ADENOVIRUS TYPE 3.....			1			1	1				3
0104 ADENOVIRUS TYPE 4.....						1					1
0105 ADENOVIRUS TYPE 5.....	4									1	5
0107 ADENOVIRUS TYPE 7.....	2		1								3
0108 ADENOVIRUS TYPE 8.....						1					1
0109 ADENOVIRUS TYPE 9.....	1										1
0111 ADENOVIRUS TYPE 11.....						1					1
0119 ADENOVIRUS TYPE 19.....						3					3
0199 ADENOVIRUS TYPING PENDING.....	3		1			1					5
0203 INFLUENZA B VIRUS.....		3									3
0204 INFLUENZA C VIRUS.....		2									2
0301 PARAINFLUENZA VIRUS TYPE 1.....			18					1			19
0302 PARAINFLUENZA VIRUS TYPE 2.....		2	3								5
0399 PARAINFLUENZA VIRUS TYPING PENDING.....			1								1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....			1								1
0500 RHINOVIRUS (ALL TYPES).....			3								3
0600 MYCOPLASMA PNEUMONIAE.....		34									34
0700 ORNITHOSIS-PSITTACOSIS.....		4									4
0809 COXSACKIEVIRUS A9.....	1				1						2
0901 COXSACKIEVIRUS B1.....	1									1	2
0902 COXSACKIEVIRUS B2.....			1				1				2
0903 COXSACKIEVIRUS B3.....					1						1
0904 COXSACKIEVIRUS B4.....					2						2
0906 COXSACKIEVIRUS B6.....	1										1
1000 ECHOVIRUS NOT TYPED.....	1										1
1003 ECHOVIRUS TYPE 3.....	1		1	1							3
1006 ECHOVIRUS TYPE 6.....	2										2
1009 ECHOVIRUS TYPE 9.....	1										1
1011 ECHOVIRUS TYPE 11.....	2		3	2						1	8
1019 ECHOVIRUS TYPE 19.....				1							1

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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 8-3-79 - 21-3-79 BULLETIN NUMBER - 79/6
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	SL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1021 ECHOVIRUS TYPE 21.....	2										2
1027 ECHOVIRUS TYPE 27.....	3		1								4
1030 ECHOVIRUS TYPE 30.....	5		5	11							21
1099 ECHOVIRUS TYPING PENDING.....	2			1							3
1103 POLIOVIRUS TYPE 3.....	1										1
1104 POLIOVIRUS-VACCINAL STRAIN.....	3		3								6
1199 POLIOVIRUS TYPING PENDING.....	4										4
1200 MUMPS VIRUS.....		11		1							12
1300 HERPES VIRUS GROUP-NOT TYPED.....		1			2				3		6
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....		2	21	1	16				27	5	72
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....		6									6
1303 VARICELLA-ZOSTER VIRUS.....		4			1						5
1306 HERPES SIMPLEX TYPE 1.....			1		10				6		17
1307 HERPES SIMPLEX TYPE 2.....	1				5				47		53
1401 COXIELLA BURNETI.....		31									31
1521 MEASLES VIRUS.....		6	1								7
1522 RUBELLA VIRUS.....		10									10
1530 HEPATITIS A VIRUS.....		3									3
1532 HEPATITIS B ANTIGEN.....		75									75
1541 CHLAMYDIA A - TRIC TYPE.....		4					1		50		55
1556 CMV - CYTOMEGALOVIRUS.....		6	2					5	2	1	16
1562 REOVIRUS (ALL TYPES).....		1									1
1564 ROTAVIRUS.....	7										7
1571 ENTEROVIRUS TYPE 71 (BRCR).....					1						1
1599 ENTEROVIRUS TYPING PENDING.....	10		7	2				1			20
ROSS RIVER VIRUS.....		44									44
PARVOVIRUS.....	2										2
Total.....	69	254	83	24	35	9	8	1	135	9	627

DISEASE	Total	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	268	53	17	7	64	90	2	33	2	524
Shigella infections	72			16	16	23		16	1	110
Smallpox										
Syphilis	110	50	10		8	8		30	4	222
Tetanus	1	1								3
Trachoma										
Tuberculosis (all forms)	146	53	53	12	4	18	1	3	2	275
Typhoid fever	1						1			4
Typhus (all forms)										1
Vibrio parahaemolyticus infections										
Yellow Fever										
Yersinia enterocolitica infections										

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.

*Ornithosis - 2 cases have been deleted from S.A. figures since the last report. The cumulative total is now 1 instead of 3.