

# AUSTRALIA

## Communicable

Bulletin Number 78/23  
Reporting Period 2 November 1978  
to  
15 November 1978

## Diseases

## Intelligence

### TWO UNUSUAL CASES OF TYPHOID IN N.S.W. (contributed by the staff of the Prince of Wales Hospital, Randwick, Sydney)

Two young adults, brother and sister (aged 25 and 20 years) were admitted to the Prince Henry Hospital on the 14 October 1978, with a clinical diagnosis of typhoid fever. Both patients took ill after holidaying in Funafuti in the Ellice Islands. The patients had been sick for about seven days before admission but had received no antibiotic treatment. On admission the patients were delirious with high fevers and were described as extremely ill with symptoms of toxicity and dehydration.

Three sets of blood cultures and several specimens of faeces were taken from each patient before antibiotic treatment was started. In each patient Salmonella typhi was isolated from all three blood cultures. Three of six faeces specimens yielded S. typhi in the female patient and one of five faecal samples grew S. typhi in the male.

In both patients the antibiotic sensitivity pattern of the S. typhi isolated from blood was different to that of the organism found in the faecal specimens. The S. typhi from blood culture was sensitive to ampicillin, tetracycline, chloramphenicol, kanamycin and gentamicin when tested by disc sensitivity (C.D.S. method) whereas the isolate from faeces was resistant to ampicillin, tetracycline and chloramphenicol and sensitive only to kanamycin and gentamicin. These different sensitivity patterns were confirmed by repeated testing of at least ten colonies from each of the primary isolation plates of the blood and faeces cultures. The identity of the organisms from each site was confirmed as Salmonella typhi, phage type E1, by the University of Melbourne.

Both patients were treated initially with ampicillin, 1 G 4th hourly intravenously, and after three doses chloramphenicol, 500 mg 6th hourly intravenously, was substituted. Chloramphenicol was continued for ten days and the patients were then treated with oral amoxycillin, 500 mg 6th hourly for 24 days. Both made an apparent rapid response to treatment; the fever and pulse fell by the fourth day and the patients were asymptomatic by the seventh to eighth day. Three stool cultures taken from each at 17 days to 20 days after admission were negative, and both patients were discharged to out-patients follow-up after 20 days hospitalisation.

#### EDITOR'S COMMENT

The organism involved in the above cases is unusual for two reasons. Firstly, although resistance to ampicillin in S. typhi isolates

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so far detected in Australia is uncommon, is believed that this is the first S. typhi isolated in this country which is resistant to chloramphenicol. The latter is a cause for concern since chloramphenicol is the antibiotic of choice for the treatment of typhoid.

Secondly, the variation in antibiotic sensitivity patterns demonstrated by the isolates from blood compared to those from faeces in both patients is not readily explainable. Cultures from these patients have been sent to the Center for Disease Control in Atlanta for further testing.

#### HUMAN SALMONELLOSIS - OCTOBER

During October, 152 salmonella reports were received. S. typhimurium was still the most common isolate (34%) and the 1-5 year age group the most commonly reported (50%).

Interesting cases included:

S. typhi phage type D1 isolated from faeces of 7 year male with P.U.O.;

S. typhi phage type M1 isolated from 28 year female being investigated for obstructive jaundice;  
S. paratyphi A phage type 4 isolated from blood culture from 34 year male who had been working in the jungle in Indonesia eleven weeks before. He had been ill while in Indonesia and treated. Returned six weeks ago and became ill ten days before isolations of the organism.

S. anatum from 30 year female - faeces contained pus, blood and mucus with no parasites detected, described as living 'Chinese style' in Hong Kong for 12 months.

S. saint-paul from 24 year male with diarrhoea and septic arthritis.

#### AMENDMENT TO BULLETIN 78/22

The 2 Arbovirus group B reports mentioned in the last issue were incorrectly described as "isolates". Diagnosis of these cases was exclusively by serological methods.

#### INTERNATIONAL NOTES

- (a) Gonorrhoea Screening U.S. - For the 6-month period ending 30 June 1978, a total of 4,294,044 specimens were taken from women as part of a gonorrhoea screening program in the U.S. 188,200 (4.4%) were found to be positive, with the positivity rate varying for different groups between 1.6%

(Student Health Centres) and 18.9% (V.D. Clinics)  
(MMWR 10 November 1978)

- (b) Salmonellosis, Canada - For the quarter April, May, June 1978, 2026 salmonellae were isolated from human sources in Canada. A total of 74 serotypes were detected, with S. typhimurium (56.6%) being the most predominant. Other common serotypes included S. heidelberg (5.2%), S. infantis (4.2%) and S. saint-paul (4.0%). (C.D.W.R. 4 November 1978)
- (c) Japanese B. encephalitis in India. During 1978, an outbreak of encephalitis due to Japanese B encephalitis virus has been occurring in India. As of 9 November, 4,017 cases and 1,358 deaths have been reported from 3 States (Bihar, West Bengal and Uttar Pradesh).

Japanese B encephalitis is a mosquito-borne disease (C. vishnui) endemic in much of Asia. Studies have shown that hundreds of inapparent or mild infections may occur for each case of clinical encephalitis, but the fatality rate for encephalitic patients may exceed 20%. It is typically a rural disease and vector culicine mosquitoes breed in paddy fields. As the rainy season is now ending, it is likely that the epidemic will wane. (WER 17 November 1978 and CDR 10 November 1978).

REPORT ON INFLUENZA VIRUS ISOLATIONS FROM THE WHO NATIONAL INFLUENZA CENTRE, COMMONWEALTH SERUM LABORATORIES, MELBOURNE

Influenza type A

Subsequent to the last report from this laboratory, another 60 isolations have been made of viruses closely resembling A/USSR/90/77 in HI tests. These have come from the student population of the University of Melbourne, two suburban clinics, CSL staff, the Department of Health, Tasmania, and from the RAAF base at Point Cook. The isolation rate has now dropped and the outbreak appears to have passed.

Influenza type B

A further two isolations were made but this virus has not been isolated for several weeks.

HUMAN SALMONELLOSIS CASES

PERIOD OCTOBER

SEROTYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	AGE					NOT STATED	CUMULAT TOTAL
									<1	1-5	6-15	16-60	>60		
S. adelaide	2					2			1				1		37
S. anatum	11			5	1	3		2	4	2		5			69
S. bareilly	2		1		1							2			6
S. birkenhead	1			1								1			9
S. bovis-mobificans	4		2		1			1		3		1			70
S. bredeney	3			3					1			1	1		29
S. braenderup	1		1										1		1
S. bukavu	1							1	1						1
S. chester	6		1		2	1		2	1	2	1	2			51
S. d. by	2		2							1		1			67
S. eastbourne	2					2				1		1			8
S. fremantle	1					1						1			1
S. gaminara	2					2					1	1			3
S. haifa	1	1										1			2
S. havana	5				1	3		1		4		1			48
S. hvittingfoss	6					6			2	1	1	1		1	15
S. infantis	4	1				3				1				3	36
S. kottbus	1			1						1					4
S. lexington	1		1									1			15
S. litchfield	2			1		1				1	1				10
S. london	2	1	1									2			11
S. muenchen	6				1	2		3	4	1	1				68
S. newington	1		1									1			6
S. newport	6		6						1	2	2	1			64
S. orion	2					1		1		1		1			16
S. oranienburg	1							1	1						15
S. oslo	1			1								1			2
S. panama	1	1										1			2
S. paratyphi A phage type 4	1		1									1			6
S. paratyphi B	1	1												1	1
S. potsdam	3	2			1				1	1			1		18
S. saintpaul	6		2			4			2	1		1	1	1	88
S. senftenberg	1		1										1		15
S. tennessee	1					1								1	21
S. thompson	2		2									2			5
S. typhi*	4	4									1	3			32
S. typhimurium*	51	3	26		4	15	2	1	11	19	6	8	1	6	709
S. virchow	1			1					1						48

HUMAN SALMONELLOSIS CASES

PERIOD OCTOBER

SERO TYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	1	1-5	6-15	16-60	60	NOT STATED	CUMULATIVE TOTAL
S. weltevreden	3			1				2	2	1					12
	152	14	48	13	13	47	2	15	33	43					
S. typhi*															
phage type D1	1	1									1				
" " E1	2	2										2			
" " M1	1	1										1			
S. typhimurium* (untyped)	28	2	4		4	15	2	1	4	11	2	6			5
" phage type 4	1		1							1					
" " " 9	1		1										1		
" " " 21	1		1							1					
" " " 24	1		1							1					
" " " 26	1		1									1			
" " " 44	1		1									1			
" " " 135	3		3						1	1	1				
" " " 179	11	4	7						4	2	4	1			
" " " 183	3	1	2							3					



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REPORTING PERIOD - 2 Nov 78 - 15 Nov 78

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VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPBR	RABC (NSW)	PBH/ POA	FAIR-	RCG (VIC)	EVS (SA)	STATE	STATE	Total
	(NSW)/ WVH (ACT)		(NSW)	FIELD (VIC)			LAB (QLD)	LAB (WA)	
1030 ECHOVIRUS TYPE 30.....				3				7	10
1101 POLIOVIRUS TYPE 1.....							1		1
1102 POLIOVIRUS TYPE 2.....						1			1
1103 POLIOVIRUS TYPE 3.....							1		1
1104 POLIOVIRUS-VACCINAL STRAIN.....			5						5
1200 MORBIL VIRUS.....				4		1	8		13
1300 HERPES VIRUS GROUP-NOT TYPED.....				1					1
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	6		1	1		2	11	45	66
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....				1					1
1303 VARICELLA-ZOSTER VIRUS.....	1			4		2		1	8
1306 HERPES SIMPLEX TYPE 1.....	1	2		7		17			27
1307 HERPES SIMPLEX TYPE 2.....	14			5		15			34
1401 COXIELLA BURNETT.....	6			1		2	10		25
1502 PICORNA VIRUS-NOT TYPED.....								1	1
1521 MEASLES VIRUS.....	3			3					6
1522 RUBELLA VIRUS.....				1			2	7	10
1532 HEPATITIS B ANTIGEN.....			11	22		11	5	9	58
1533 HEPATITIS B ANTIBODY.....						11		11	22
1541 COLONYDIA A - TRIC TYPE.....								3	3
1556 CMV - CYTOMEGALOVIRUS.....	3	1	3	3		15	5	2	27
1564 ROTAVIRUS.....	1		1			2		4	8
1586 NORWALK AGENT.....				1					1
ROSS LIVER VIRUS.....							1		1
ECHOVIRUS (LIKE).....	15					6			21
Total.....	108	14	27	109		156	64	148	640

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VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS

VIRUS OR VIRAL ANTIGEN	FA	BL	KA	CS	SK	ET	UF	SA	SH	OT	TOTAL
0100 ADENOVIRUS NOT TYPED.....	2	2	5			2					11
0101 ADENOVIRUS TYPE 1.....	6		3								9
0102 ADENOVIRUS TYPE 2.....	10		4								14
0104 ADENOVIRUS TYPE 4.....						1					1
0105 ADENOVIRUS TYPE 5.....	2		3								5
0107 ADENOVIRUS TYPE 7.....	2					1	2				5
0119 ADENOVIRUS TYPE 19.....						1					1
0199 ADENOVIRUS TYPING PENDING.....	4		1								5
0201 INFLUENZA A VIRUS.....		25	2								27
0203 INFLUENZA B VIRUS.....		16	3								19
0301 PARAINFLUENZA VIRUS TYPE 1.....			1								1
0303 PARAINFLUENZA VIRUS TYPE 3.....		5	3								8
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....		1	9								10
0500 RHINOVIRUS (ALL TYPES).....			6								6
0600 MYCOPLASMA PNEUMONIAE.....		143									143
0700 ORNITHOSIS-PSITTACOSIS.....		1									1
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....	1										1
0809 COXSACKIEVIRUS A9.....			1								1
0816 COXSACKIEVIRUS A16.....											2
0901 COXSACKIEVIRUS B1.....	2		3								5
0903 COXSACKIEVIRUS B3.....			2								2
0904 COXSACKIEVIRUS B4.....					1						1
1000 ECHOVIRUS NOT TYPED.....	2										2
1005 ECHOVIRUS TYPE 5.....	2										2
1007 ECHOVIRUS TYPE 7.....						1					1
1015 ECHOVIRUS TYPE 15.....	1										1
1017 ECHOVIRUS TYPE 17.....				2							2
1018 ECHOVIRUS TYPE 18.....	2		1								3
1019 ECHOVIRUS TYPE 19.....						1					1
1021 ECHOVIRUS TYPE 21.....	1									1	2
1022 ECHOVIRUS TYPE 22.....		1	1								2
1030 ECHOVIRUS TYPE 30.....	5		2	4							11

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REPORTING PERIOD - 2 Nov 78 - 15 Nov 78

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VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	EL	LA	CS	SK	LT	GN	DR	GL	OT	TOTAL
1101 POLIOVIRUS TYPE 1.....	1										1
1102 POLIOVIRUS TYPE 2.....	1										1
1103 POLIOVIRUS TYPE 3.....	1										1
1104 POLIOVIRUS-VACCINAL STRAIN.....	4						1				5
1200 MUMPS VIRUS.....		10	2	1							13
1300 HERPES VIRUS GROUP-NOT TYPED.....					1						1
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....		8	3		22				31	1	65
1302 PESTON-BARK VIRUS (EB VIRUS).....		1									1
1303 VARICELLA-ZOSTER VIRUS.....		7			1						8
1306 HERPES SIMPLEX TYPE 1.....			9		13				1	3	26
1307 HERPES SIMPLEX TYPE 2.....					3	1			27	2	33
1401 COXIELLA BURNETI.....		25									25
1502 PICORNA VIRUS-NOT TYPED.....	1										1
1521 MEASLES VIRUS.....		4	2								6
1522 RUBELLA VIRUS.....		10									10
1532 HEPATITIS B ANTIGEN.....		58									58
1533 HEPATITIS B ANTIBODY.....		22									22
1541 CHLAMYDIA A - TRIC TYPE.....									3		3
1556 CMV - CYTOMEGALOVIRUS.....		8	6				6		2	5	27
1564 ROTAVIRUS.....	8										8
1566 NORWALK AGENT.....	1										1
BOSS RIVER VIRUS.....		1									1
PAROVIRUS.....	7	14									21
total.....	66	302	74	8	42	8	9		64	12	643