

AUSTRALIA

Communicable

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Diseases

Intelligence

HEPATITIS SCREENING IN PERTH

From 1 January to 31 October 1978, the Australian Red Cross Society Blood Transfusion Service in Perth screened 45,779 blood donors for the presence of hepatitis B antigen (HB_sAg); of these, 27 were positive (0.06%). The number of people screened represented the total number of blood donors the the Service.

In addition to the above, donors with a history of either hepatitis or malaria were screened for the presence of antibody against the surface antigen of the hepatitis B virus (HB_sAb) and against the hepatitis A virus (HA Ab). The following table shows the positivity rates for these tests:

	Hb _s Ab (from July 1976	HAAb (from Sept. 1978
History hepatitis	39/2376 (1.6%)	161/186 (86.6%)
Malaria exposure	46/2190 (2.1%)	59/103 (57.3%)
Other donors	124/9745 (1.3%)	40/86 (46.5%)

Limited testing was also carried out for the presence of antibody to the core antigen of the hepatitis B antigen (HB_cAb). Of 192 sera tested between July and October 1978, 7 (3.6%) were positive for this antibody. In addition, 55 of 56 HB_sAg positive donors and 28 of 29 HB_sAb positive donors had HB_cAb in their blood. This test is employed to define a recent infection with the hepatitis B virus, since the HB_cAb appears usually at or close to the time of clinical symptoms or biochemical evidence of hepatocellular damage. Some authors claim that antibodies to the core antigen appear to fall to low or undetectable levels fairly rapidly¹, and it has been suggested that their persistence may indicate continuing viral replication and hence the ability of the blood to be infectious². This appears not always to be the case with sera tested at the W.A. Blood Transfusion Service although specific data is not available on this aspect. HB_cAb is detected by radioimmunoassay.

The data above was provided by M.G. Davey and R. Allen of the Australian Red Cross Society Blood Transfusion Service, Perth.

1. A.S. Evans (Editor) Viral Infections of Humans Plenum Medical Book Co. 1976. p.237
2. A.S. Benenson (Editor) Control of Communicable Diseases in Man A.P.H.A. 12th Ed. 1975. p.144

Oyster Food Poisoning in Darwin

In the middle of December, the Commonwealth Department of Health in Darwin was notified of an outbreak of diarrhoea and vomiting in 150 people. All had been guests at either one of two Christmas parties held at a Darwin hotel, and all but a few consumed a meal of Sydney Rock Oysters. The oysters supplied to the hotel were frozen in the half shell and had been supplied to the hotel in two lots. Both lots were identified as originating from the region north of Sydney. Further investigations are continuing.

In addition to the above, the staff at the Institute of Clinical Pathology and Medical Research in Sydney forwarded the following advice:

"A panel of volunteers has been set up by the N.S.W. Government to "test consume" oysters which have been through depuration tanks and before they are released to the public. Last week three individuals became ill after eating oysters and 22-25nm particles were found in the stools of two. Both these people had stools collected prior to the consumption of oysters but no viral particles were found, i.e., the 22-25nm particles appeared following the consumption of oysters. Norwalk-like particles were not found but immune electron microscopy and serology for Norwalk virus have not been carried out as yet."

Studies in the past on the sera of those who suffered gastroenteritis after eating oysters have implicated the Norwalk agent which is usually described as a 27-30nm particle under electronmicroscopy. The evidence to incriminate any specific agent in this disease is equivocal. In the absence of specific information on the nature of the agent responsible it is proving difficult to evolve policies for the harvesting of oysters which will guarantee protection of consumers of oysters from gastroenteritis.

Present policy in N.S.W. requires oysters to be depurated either in natural waters or in special tanks for 48 hours. The above reports suggest that this may not be sufficient.

HUMAN SALMONELLOSIS - NOVEMBER

For November, 169 reports of cases of salmonella infections have been received to date. Of these 73 (43%) involved S. typhimurium, with phage type 179 continuing to be the most prevalent, and 89 (53%) were in children under 5 years of age. Interesting cases included:

S. bovis-morbificans in 11 year old female, described as associating with kangaroos and fauna which suffered from diarrhoea a few weeks before, some of which died.

S. typhi (phage type untypable) from 26 year old male, who had just returned from Indonesia; S. typhi (phage type C₁) in a 6 year old male, who had been treated for typhoid in Malta but was referred for review - asymptomatic; S. typhi (phage type D₆) in a 16 month old female in Sydney - no history.

A table with amendments to the October figures is also attached. Figures for December will not be published until February because of the Christmas break. Also in the New Year, a summary table for the salmonella cases recorded during 1978 will be included.

INTERNATIONAL NOTESCHOLERA IN JAPAN

Early in November, an outbreak of cholera occurred in Japan amongst guests at a number of weddings held at a large wedding reception hall in Tokyo during 28 and 29 October. This weekend was special for weddings according to the ancient Japanese calendar, and the ensuing investigation involved checking some 7000 guests who had passed through this centre during the weekend.

Although the source of the outbreak has not been confirmed by isolation of V. cholerae from the suspect food, it is believed that seafood imported from Indonesia was responsible. The sale of all seafood imported to Japan from South-East Asian countries was subsequently stopped.

Japan was not classified as a cholera infected country by the WHO since it was felt that the outbreak had been localized and sufficiently contained by the health authorities. A check was made by the Australian Department of Health to ensure similar products from Indonesia were not entering Australia.

Source .. Australian Department of Health, Canberra; and Far Eastern Economic Review I. December 1978, p.16

CAMPYLOBACTER INFECTION IN U.K. (C.D.R. 78/47 28 November 1978)

An outbreak of enteritis due to Campylobacter spp was detected in Bradford, U.K. This is believed to be milkborne, and involved the consumption of untreated milk from a farm. In all, Campylobacter spp (as yet untyped) were isolated from 13 people, only 9 of whom had enteritis. The organism was also isolated from samples of milk taken from the farm involved.

HERPES ZOSTER IN THE ELDERLY - CANADA (CDWR 2 December 1978 - Vol. 4-48)

Five cases of herpes zoster (shingles) were diagnosed over a 10 month period among residents of a 47 bed senior citizens home in Newfoundland. Two of the cases suffered post-infectious sequelae which are commonly manifested in older persons. It is believed that direct transmission of the virus may have been involved, at least in 2 of the 5 cases.

This outbreak is unusual, since herpes zoster is most commonly associated with the reactivation of latent virus within the dorsal root ganglia where it has remained dormant for some time. The authors of this article cite previous cases of exogenously acquired infection.

PERIOD OCT 78 - ADDITIONS

SEROTYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	AGE					NOT STATED
									<1	1-5	6-15	16-60	>60	
S. anatum	5	2		1				2	2	1	1			1
S. cholerae-suis	1				1				1					
S. derby	1			1						1				
S. havana	2	1		1							1		1	
S. mississippi	1						1							1
S. muenchen	2			2					1					1
S. newport	3	1		2						2				1
S. orientalis	1			1						1				
S. potsdam	1			1										
S. singapore	1		1							1				
S. thompson	1							1		1				
S. typhimurium*	25	6		7	8		2	2	4	13	2	3	1	2
S. virchow	3	2		1					1			1		1
Total	47	12	1	17	9	0	3	5	11	19	4	4	2	7
S. typhimurium														
phage type 5	1			1						1				
phage type 6	1					1							1	
phage type 12a	1							1		1				
phage type 26	1			1						1				
phage type 35	1			1					1					
phage type 101	1				1					1				
phage type 108	1			1						1				
phage type 135	4	2			1		1			3		1		
phage type 123	1	1									1			
phage type 170	1				1									1
phage type 178	1				1									1
phage type 179	3	1			1			1	1	1		1		
phage type 183	2	1		1						1		1		
phage type 186	1			1						1				
phage type un- typable	5	1		1	3				3	2				

Note: Delete 6 S. typhimurium untyped.

HUMAN SALMONELLOSIS CASES

PERIOD NOVEMBER 1978

SERO TYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	AGE					NOT STATED	
									<1	1-5	6-15	16-60	>60		
typhi murium															
" phage type 6	1				1								1		
" " " 8	1				1							1			
" " " 9	2		1		1					1			1		
" " " 12a	1		1							1					
" " " 21	1				1					1					
" " " 22	1			1						1					
" " " 25	1			1					1						
" " " 26	2		1				1		1		1				
" " " 27	3	2	1							1					2
" " " 44	4	1	2	1					1	2				1	
" " " 64	2		1		1					2					
" " " 92	1	1								1					
" " " 101	3	1						2	1	2					
" " " 104	1		1												1
" " " 108	2		1	1						1			1		
" " " 126	1	1								1					
" " " 135	4	2	1					1	2	1					1
" " " 141	1							1	1						
" " " 144	1		1								1				
" " " 170	2	1						1					2		
" " " 179	15	4	8	1	1			1	3	5	2	4	1	1	
phage type untypeable	8		5		1			2	3	2		1	1	1	

HUMAN SALMONELLOSIS CASES

PERIOD NOVEMBER 1978

SEROTYPE	TOTAL	NSW & ACT	VIC.	QLD	SA	WA	TAS	NT	AGE					NOT STATED	
									< 1	1-5	6-15	16-60	> 60		
S. aberdeen	1		1						1						
S. adelaide	1					1			1						
S. anatum	6				1	5				1	1	4			
S. birkenhead	1	1							1						
S. bovis-morbificans	6	1	4					1	1	2	1	1	1		
S. bredeney	2	1			1					2					
S. champaign	2					2			1			1			
S. chester	10		2		3	4		1	3	2	2	1		2	
S. give	4			2		1		1	2	1		1			
S. havana	6		3		1			2	5						
S. hessarek	1		1								1				
S. hvittingfoss	1							1	1						
S. infantis	5	1	2		2					4		1			
S. kinondoni	1							1		1					
S. lansing	1				1				1						
S. muenchen	5		1		1			3	1	3		1			
S. newington	1			1					1						
S. newport	18	5	8	2	3				6	1	5	4		2	
S. oranienburg	1				1					1					
S. orion	1							1			1				
S. rubislaw	2							2		1	1				
S. saint paul	7			4		3			1	3				3	
S. senftenberg	3		1					2							
S. tennessee	1					1				1					
S. typhi	4		1		3						1	1		2	
S. typhimurium	73	15	23	7	8	8	2	10	14	28	6	15	3	7	
S. virchow	1									1					
S. wandsbek	1					1						1			
S. waycross	1			1					1						
S. welikade	1			1					1						
S. weltevreden	1	1							1						
Total	169	25	44	22	25	26	2	35	44	54	19	32	4	16	
S. typhi murium untyped	8					8				3	3	1		1	
" phage type 4	3	1	1				1			1		1		1	
" " " 5	4			1	1			2	1	2		1			

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 30-11-78 . 13-12-78 BULLETIN NUMBER . 78/25
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPER	FAHC	PHH/	FAIR-	RCA	IBVS	STATE	STATE	Total
	(NSW)/ WVH (ACT)	(NSW)	POW (NSW)	FIELD (VIC)	(VIC)	(SA)	LAB (QLD)	LAB (WA)	
0100 ADENOVIRUS NOT TYPED.....	1	1	3	1	1	2	6	7	22
0101 ADENOVIRUS TYPE 1.....		1		1				1	3
0102 ADENOVIRUS TYPE 2.....				1		2		1	4
0103 ADENOVIRUS TYPE 3.....								1	1
0105 ADENOVIRUS TYPE 5.....	1			1					2
0106 ADENOVIRUS TYPE 6.....	1								1
0107 ADENOVIRUS TYPE 7.....				3		1		1	5
0199 ADENOVIRUS TYPING PENDING.....		1			6	1			8
0201 INFLUENZA A VIRUS.....	6			6		6	2	2	22
0203 INFLUENZA L VIRUS.....	3					1	11		15
0301 PARAINFLUENZA VIRUS TYPE 1.....						1		3	4
0302 PARAINFLUENZA VIRUS TYPE 2.....						1	1		2
0303 PARAINFLUENZA VIRUS TYPE 3.....		1			4	5	2	3	15
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)...						3		10	13
0500 RHINOVIRUS (ALL TYPES).....				1	8	3	1	2	15
0600 MYCOPLASMA PNEUMONIAE.....	35	1		15	4	17	23	35	130
0700 ORNITHOSIS-PSITTACOSIS.....	1			6		1		5	13
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....							1		1
0809 COXSACKIEVIRUS A9.....	1						1		2
0816 COXSACKIEVIRUS A16.....								1	1
0900 COXSACKIEVIRUS GROUP B - NOT TYPED.								2	2
0901 COXSACKIEVIRUS B1.....	1			1					2
0903 COXSACKIEVIRUS B3.....	2			1					3
0904 COXSACKIEVIRUS B4.....	2		1				1		4
1000 ECHOVIRUS NOT TYPED.....							1	1	2
1001 ECHOVIRUS TYPE 1.....							1		1
1003 ECHOVIRUS TYPE 3.....				1			1		2
1007 ECHOVIRUS TYPE 7.....					2				2
1009 ECHOVIRUS TYPE 9.....							1		1
1011 ECHOVIRUS TYPE 11.....				2					2
1014 ECHOVIRUS TYPE 14.....					1		4		5

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 30-11-78 . 13-12-78 BULLETIN NUMBER . 78/25
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMA (NSW) WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCB (VIC)	LEVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1015 ECHOVIRUS TYPE 15.....						1			1
1018 ECHOVIRUS TYPE 18.....				1					1
1019 ECHOVIRUS TYPE 19.....			2						2
1022 ECHOVIRUS TYPE 22.....							2		2
1023 ECHOVIRUS TYPE 23.....							1		1
1030 ECHOVIRUS TYPE 30.....				5			2	5	12
1101 POLIOVIRUS TYPE 1.....						2		2	4
1102 POLIOVIRUS TYPE 2.....						2		1	3
1103 POLIOVIRUS TYPE 3.....						2	2	1	5
1200 HERPES VIRUS.....	1			5	1	4	8		19
1300 HERPES VIRUS GROUP-NOT TYPED.....	1			4		1		4	10
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	7		6	2	2	2	16	37	72
1303 VARICELLA-ZOSTER VIRUS.....	2					1	1		4
1306 HERPES SIMPLEX TYPE 1.....	8	2		6		9			25
1307 HERPES SIMPLEX TYPE 2.....	37			10		12			59
1401 COXIELLA BURNETI.....	4			4		5	8		21
1514 MOLLUSCUM CONTAGIOSUM.....								1	1
1521 MEASLES VIRUS.....	6	1		14	1	2	1		25
1522 RUBELLA VIRUS.....					1	1	2	12	16
1530 HEPATITIS A VIRUS.....								8	8
1532 HEPATITIS B ANTIGEN.....	1	1	7	39		13	9	15	85
1533 HEPATITIS B ANTIBODY.....						14		21	35
1541 CHLAMYDIA A - TRIC TYPE.....								20	20
1555 PAPILLOMAVIRUS GROUP (PAPILLOMA-HUMAN WART).....				1					1
1556 CMV - CYTOMEGALOVIRUS.....					2	1	4	3	10
1562 ECHOVIRUS (ALL TYPES).....								1	1
1564 ROTAVIRUS.....			2			9	1	2	14
1599 ENTEROVIRUS TYPING PENDING.....		5				8	2		15
ROSS RIVER VIRUS.....							4		4
PAROVIRUS (LIKE).....	2					2			4
Total.....	123	14	21	133	48	127	119	208	793

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 30-11-78 . 13-12-78 BULLETIN NUMBER - 78/25
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	OR	BR	GE	OT	TOTAL
1018 ECHOVIRUS TYPE 18.....			1								1
1019 ECHOVIRUS TYPE 19.....	2										2
1022 ECHOVIRUS TYPE 22.....	2										2
1023 ECHOVIRUS TYPE 23.....	1										1
1030 ECHOVIRUS TYPE 30.....	4		7	4							15
1101 POLIOVIRUS TYPE 1.....	4		1				1				6
1102 POLIOVIRUS TYPE 2.....	2		2				1				5
1103 POLIOVIRUS TYPE 3.....	5										5
1200 MUMPS VIRUS.....		13	3	2			1				19
1300 HERPES VIRUS GROUP-NOT TYPED.....					9	1					10
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....		8	7		26	2	1		29	2	75
1303 VARICELLA-ZOSTER VIRUS.....		2			2						4
1306 HERPES SIMPLEX TYPE 1.....	1		9	1	9				5	2	27
1307 HERPES SIMPLEX TYPE 2.....			1		1				57		59
1401 COXIELLA BURNETI.....		21									21
1514 MOLLUSCUM CONTAGIOSUM.....					1						1
1521 MEASLES VIRUS.....		13	12								25
1522 RUBELLA VIRUS.....		15	1								16
1530 HEPATITIS A VIRUS.....		7									7
1532 HEPATITIS B ANTIGEN.....		83									83
1533 HEPATITIS B ANTIBODY.....		35									35
1541 CHLAMYDIA A - TRIC TYPE.....						1			19		20
1555 PAPAOVAVIRUS GROUP (PAPILLOMA-HUMAN WART).....					1						1
1556 CMV - CYTOMEGALOVIRUS.....		3	3				3		1	1	11
1562 REOVIRUS (ALL TYPES).....	1										1
1564 ROTAVIRUS.....	13	1									14
1599 ENTEROVIRUS TYPING PENDING.....	7		6							1	14
ROSS RIVER VIRUS.....		4									4
PAROVIRUS.....	4										4
Total.....	74	407	112	17	50	6	10	1	111	10	798