

AUSTRALIA

Communicable Diseases Intelligence

Bulletin Number 79/2
Reporting Period 2 February 1979

Production of CDI during 1978

Production of the CDI in January was affected by the holiday season. This issue therefore includes the salmonella tables for November and December 1978.

In forthcoming issues the CDI will publish the following summaries of the data collected during 1978:

- (a) Virus isolates by month : 1 January 1978 - 31 December 1978
- (b) Virus isolates by age : 1 January 1978 - 31 December 1978
- (c) Salmonella cases by month : 1 May 1978 - 31 December 1978
- (d) Salmonella cases by State : 1 May 1978 - 31 December 1978

Requests for tables showing a breakdown of the virus data other than those above should be addressed to the Editor. Please specify your requirements. There will be no charge.

An index of articles published in the CDI during 1978 will also be produced in the near future.

Apparent failure of measles vaccination - request for case histories

Dr Scott Cameron of the South Australian Health Commission has written to say that many doctors in South Australia have the impression that there is a striking incidence of natural measles amongst children previously vaccinated with live attenuated virus. He comments that it is nonetheless difficult to find cases where there are both an undoubted history of vaccination and confirmed clinical disease.

The Communicable Diseases Committee of the National Health and Medical Research Council will be discussing this subject at a meeting on 22 and 23 February. If any reader can supply case details in time for that meeting, this would be appreciated by the Committee; confidentiality is assured and case histories should be sent to the Editor of the CDI.

Persons or laboratories who would be prepared to participate in a later study of the subject should also identify themselves to the Editor.

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Measles cases in Melbourne (Contributed by I. Jack, Royal Children's Hospital, Melbourne)

In the past few weeks measles virus and/or its antigens have been demonstrated in 10 patients admitted to R.C.H. with presenting diagnoses or symptoms ranging from croup, whooping cough, recurrent pneumonia to rash without Koplik spots. Three patients were typical measles.

One child suffered a severe illness and eventually died. He was leukaemic but was considered to be in remission. On Jan 10 he developed an URTI and 4 days later developed sore eyes. When admitted on Jan 17 a fever with rash was diagnosed as measles. Mucus taken at that time showed measles infected cells by specific immuno-fluorescence and eventually yielded measles virus.

The child received gamma globulin but a pneumonia developed and his condition became worse. He died on Jan 23 and at that stage measles virus was again demonstrated, this time in lung cells prepared by frozen section and by simple cut surface impression smears.

This case serves to illustrate the potential severity of measles in leukaemic patients and suggests the need for immunisation. It is sometimes suggested that live virus vaccine should be preceded with a course of killed vaccine in such subjects or should be given with a gamma globulin coverage.

The other cases illustrate the difficulty of making clinical diagnoses in the prodromal stages of ordinary measles.

Histoplasma capsulatum infection (Contributed by F. Jennis, Director of Microbiology, Kanematsu Memorial Institute, Sydney Hospital, Sydney)

A patient presented at the Sydney Hospital with swollen, painful and ulcerated gums and was diagnosed, on histological and cultural findings, from a biopsy of the lesion. His serum also gave a positive Histoplasmin Latex test. The disease appears to be confined to the gums on present evidence. The C.X.R. is normal, there is some degree of hepatomegaly, but liver biopsy and bone marrow histology and cultures are, so far, negative.

The patient is part-Indian, is now working as a Real Estate Agent in Liverpool, N.S.W., where he has resided for nine years. He has had no contact with poultry, birds or caves in Australia. In India, in his youth, he was on a farm and later, before emigrating, he did a lot of shooting of ducks, geese, pigeons, etc.

Isolation of β -lactamase producing *Haemophilus influenzae* from an adult with epiglottitis (Contributed by B.A.J. Walters, W.N. Dunstan, and R. Forgan-Smith, Repatriation General Hospital, Greenslopes, Brisbane.)

A 52 year old previously well female presented at the Repatriation General Hospital, Brisbane, with acute dyspnoea and minimal swelling in the right side of the neck. She complained of a sore throat of one week duration but had taken no treatment. On admission, throat swabs and blood cultures were taken and I.V. penicillin (2×10^6 units) given. A diagnosis of acute epiglottitis was made and antibiotic therapy changed to 1.2g chloromycetin four times/day. Although she developed right side pleurisy, which resolved with physiotherapy, she was discharged well after one week.

Bacteriological findings: A heavy growth of *Haemophilus influenzae* (type B) was grown from the throat swab. Its sensitivity pattern using single radial disc diffusion technique was as follows:

sensitive to tetracycline and chloramphenicol; resistant to penicillin, ampicillin, erythromycin, trimethoprim/sulphamethoxazole. Using the 'Intralactam' strip test for the detection of intracellular β -lactamase (Mast Lab) resistance to ampicillin was confirmed. The MIC was $> 64 \mu\text{g/ml}$.

Blood cultures taken at the time of admission grew *H. influenzae* (type B) with an identical sensitivity pattern.

Human salmonellosis

Tables showing the salmonella infections reported during November and December 1978 are attached. During November, 291 cases were reported, with 159 cases being recorded for December so far. The November tables replace those included in Bulletin 78/25.

Interesting cases included:

S. chester in a 57 year old male from an infected finger; *S. chester* in a 4/12 Aboriginal female who died from dehydration; *S. chester* in a 10 year male with concurrent *Sh. sonnei*, *Hymenolepis nana* and *Trichuris trichuria* infections, contracted at an Aboriginal settlement; *S. potsdam* in a 36 year old male with concurrent *Plesiomonas shigelloides* contracted in Bali; *S. potsdam* in a 2 year old female with concurrent *Hymenolepis nana* and *Giardia lamblia* infections contracted at a different Aboriginal settlement from that quoted previously; *S. typhi* (untyped) in a female Vietnamese refugee whose daughter had an *S. newport* infection; *S. typhi* (phage type FI) in a 48 year old male, apparently acquired in Sydney.

Malaria in Australia - Sensitivity testing service

Bulletin 79/1 referred to the increasing spread of chloroquine resistant *Plasmodium falciparum* throughout the world. Sensitivity

testing of P. falciparum is available free of charge in Australia from the centre mentioned below, and the following is a guide for forwarding specimens for testing:

- "1. The specimen should demonstrate a parasitaemia of between 2,000 and 80,000 per cubic mm of blood.
2. The majority of parasites should be trophozoites which have reached about 3/4 maturity (i.e. about 35% or more of large fleshy rings).
3. 10 mls of blood are to be withdrawn into a 25 or 50 ml sterile Erlenmeyer flask with glass beads in the bottom.
4. Swirl the flask for five minutes to defibrinate the blood.
5. The blood may then be stored in the flask in a refrigerator at about 4°c. It should be despatched to the testing laboratory so that the blood can be set up for incubation within twelve hours of it having been taken.
6. At the time of despatch of the blood sample, please advise by telegram or phone, the airline, the flight number, the departure time and ETA. Clearly mark the container as follows:

Lieutenant Colonel A.D. Parkinson
1 Malaria Research Unit
2nd Military Hospital
Ingleburn NSW 2174

'URGENT BLOOD SAMPLES

FRAGILE THIS SIDE UP

REFRIGERATE DO NOT FREEZE'

The best containers are wide-necked thermos flasks or polyurethane boxes large enough to take 4-6 cans of beer. Ice should be put in beside the flask of blood.

7. Forwarding laboratories must pay their own despatch costs. There is no charge for the laboratory work and this can be undertaken at any time of the day or night.
8. Urgent advice out of hours may be obtained from Lt. Col. Parkinson whose home phone number is 046-669868.
9. Please send a brief clinical resume with blood sample detailing when the person was last in which malarious area, what

anti-malarial drugs they had been taking, and when they took the last dose.

β -lactamase producing *N. gonorrhoeae* - November and December 1977

The following seven cases of infection with β -lactamase producing *N. gonorrhoeae* were reported to the CDI:

South Australia: Male, infected in the Philippines; male infected in Bangkok; female, contact of latter.

N.S.W.: Male, contact of prostitute in Kings Cross, Sydney; female, works in Sydney massage parlour; male, contact of latter; female, prostitute in Sydney. Contact tracing of the ladies described was reported to be unsuccessful.

These cases bring the total reported to this office since mid-1977 to 88. Spectinomycin treatment has in all cases been successful, but caution is advocated with the use of this antibiotic since a few cases of absolute resistance to spectinomycin have been reported. (Current Therapeutics Sept. 1978, p.47).

Oyster food poisoning (Contributed by A. Murphy, I.C.P. & M.R. Westmead, Sydney)

Investigations into the food poisoning outbreak in Darwin described in Bulletin 78/25 included the examination of 21 faecal specimens by electron microscopy and immuno-electron microscopy.

Direct EM revealed that eight specimens contained small virus particles. In four 27-30nm particles were detected, in three 22-25nm particles were detected and in one specimen both types were detected. Using a specific anti-Norwalk chimpanzee antiserum, IEM studies were carried out on all specimens. Immune complexes were observed in the five specimens containing the 27-30nm particles. No complexes were seen with the 22-25nm particles. These results indicate that Norwalk agent was again involved in an outbreak of gastroenteritis from the consumption of oysters. Also, from two specimens an echovirus was isolated (as yet untyped).

No further illnesses have been reported from the volunteer panel who are "test-consuming" oysters before sale.

Virus tables

As with 79/1 only one virus table is included. Computing problems are preventing the second table from being produced.

PERIOD December

SEROTYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	AGE					NOT STATED
									<1	1-5	6-15	16-60	>60	
S. abony	2					2			1					1
S. adelaide	3			1	1	1			1	2				
S. agona	1				1					1				
S. anatum	5		2		2	1						3		2
S. bardo	1	1							1					
S. bareilly	1					1						1		
S. birkenhead	2			1	1				1	1				
S. bovis-morbificans	2	1	1							1		1		
S. bredeney	1				1					1				
S. charity	1							1	1					
S. chester	5		4	1						1			3	
S. coleypark	1					1						1		1
S. derby	3			1		1	1					1		1
S. enteritidis	4	1	3						2			1		1
S. havana	8	2	1	3				2	4			1	1	2
S. heidelberg	1					1						1		
S. infantis	3		1			2				1		2		
S. java	1	1												1
S. kottbus	1	1								1				
S. litchfield	1	1							1					
S. london	1	1										1		
S. mississippi	1						1			1				
S. muenchen	8	1			1	3		3	2	2		4		
S. newport	11	4	1	2	4				3	4		3	1	
S. paratyphi B	1	1												1
S. paratyphi B phage type java	1					1							1	
S. paratyphi B phage type tarenton	1	1								1				
S. potsdam	2			2					1	1				
S. rubislaw	4			4					3	1				
S. saint-paul	12		1	1	1	9			4	2		5		1
S. senftenberg	2	1				1				1				1
S. tennessee	6					2		4				6		
S. typhi-murium*	59	7	12		1	39			15	16	9	13	1	5
S. virchow	3	1	1	1						2		1		
TOTAL	159	25	24	17	13	75	2	10	40	40	11	45	7	16
S. typhi-murium*														
untyped	43	3			1	39			11	13	8	7		4
phage type 5	1		1								1			
phage type 9	1		1										1	
phage type 21	3		3						1		1			1
phage type 93	1	1							1					
phage type 127	2		2							1		1		
phage type 135	4	2	2						2			2		
phage type 141	1		1							1				
phage type 145	1	1										1		
phage type 179	2		2									2		

PERIOD NOVEMBER

SEROTYPE	TOTAL	NSW & ACT	VIC	QLD	SA	WA	TAS	NT	AGE					NOT STATED
									<1	1-5	6-15	16-60	>60	
<u>S. typhi-murium*</u>														
phage type untyped	21					21			1	7	5	5	2	1
phage type untypable	11		5	1	1			4	3	3	1	2	1	1
phage type 3	2				2					1		1		1
phage type 4	4	1	2				1			1		2		1
phage type 5	9	1		2	4			2	2	5		1	1	
phage type 6	2				2				1			1		
phage type 8	1				1						1			
phage type 9	4		1	1	2				1	1		2		
phage type 12a	5	3	1	1					3	2				
phage type 21	1				1					1				
phage type 22	4	3		1						4				
phage type 25	1			1					1					
phage type 26	3	1	1				1		1	1	1			2
phage type 27	6	2	1		2			1	1	1		2		2
phage type 29	1	1										1		1
phage type 44	4	1	2	1					1	2				1
phage type 55	1	1											1	
phage type 64	2	1	1							2				
phage type 92	1	1								1				
phage type 101	5	2			1			2	3	2				1
phage type 104	1		1											1
phage type 108	5		1	4					1	2		2		
phage type 126	1	1								1				
phage type 127	1		1							1				
phage type 135	15	11	1	2				1	3	6		1		5
phage type 141	1							1	1					
phage type 144	1		1							1		1		
phage type 170	7	2		4				1	2	1	1	3		
phage type 179	22	8	9	2	2			1	5	5	6	5	1	1
phage type 186	1	1											1	
<u>S. typhi*</u>														
phage type untyped	1					1						1		
phage type untypable	1				1							1		
phage type C1	1		1								1			
phage type D6	1	1								1				
phage type F1	1	1										1		

HUMAN SALMONELLOSIS CASES

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PERIOD NOVEMBER

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. abony	1			1					1					
S. adelaide	2	1				1			2					
S. anatum	3			1	1	1			1		2			
S. ball	1	*						1		1				
S. birkenhead	1	1							1					
S. blukwa	2					2					2			
S. bovis-morbificans	8	3	1	3				1	1	2	1	1	1	2
S. bredeney	3	2			1				1	2				
S. chester	17		2	3	5	4		3	5	3	2	3	2	2
S. enteritidis	1			1					1					
S. gaminara	1					1			1					
S. give	3			2				1	1	1	1			
S. havana	8			3	2	1		2	3	5				
S. heidelberg	1	1												1
S. hessarek	1		1								1			
S. hvittingfoss	1							1	1					
S. infantis	7	3	2		2				2	2	1	2		
S. kinondoni	1							1		1				
S. kottbus	1					1			1					
S. litchfield	2			1		1			1					1
S. livingstone	1	1								1				
S. loehbrugge	1			1										1
S. muenchen	6		1		1			4	2	3		1		
S. new brunswick	1		1						1					
S. newington	2	1		1					1			1		
S. newport	24	6	8	6	3	1			8	3	6	5		2
S. oranienburg	2				1	1				1		1		
S. orion	2				1	1			1		1			
S. paratyphi B phage type Dundee	1	1												1
S. paratyphi B phage type Java	2					1							1	
S. potsdam	1	1										1		
S. reading	2	1		1					1					1
S. rubislaw	10			7	2	1			3	3	3			1
S. saint-paul	11			5		6			4	3		2		2
S. senftenberg	3		1					2	1	1		1		
S. tennessee	1	1												1
S. typhi	5	2	1		1	1				1	1	2		
S. typhi-murium	*143	41	26	21	19	21	2	13	30	50	15	29	8	11
S. virchow	4			4					1	2				1
S. wandsbek	1					1						1		
S. waycross	1			1					1					
S. welikade	1			1					1					
S. weltevreden	1	1							1					
Total	291	67	44	64	39	46	2	29	80	85	33	54	12	27

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 11-1-79 . 24-1-79 BULLETIN NUMBER . 79/2
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMH	FAHC (NSW)	PHH/ POW (NSW)	PAIR- FIELD (VIC)	ECH (VIC)	IMVS (SA)	STATE	STATE	Total
	(NSW)/ WVH (ACT)						LAB (QLD)	LAB (WA)	
0100 ADENOVIRUS NOT TYPED.....	3		2		3	2	1		11
0101 ADENOVIRUS TYPE 1.....	2		2	3	2	1			10
0102 ADENOVIRUS TYPE 2.....	2	1	2		6	2			13
0103 ADENOVIRUS TYPE 3.....	1				1				2
0105 ADENOVIRUS TYPE 5.....				1		3			4
0106 ADENOVIRUS TYPE 6.....			1			1			2
0107 ADENOVIRUS TYPE 7.....	1			6	1				8
0119 ADENOVIRUS TYPE 19.....						3			3
0121 ADENOVIRUS TYPE 21.....						1			1
0199 ADENOVIRUS TYPING PENDING.....	2	1	1			2			6
0201 INFLUENZA A VIRUS.....	2	1	1	1			1		6
0301 PARAINFLUENZA VIRUS TYPE 1.....				1					1
0302 PARAINFLUENZA VIRUS TYPE 2.....		1					1		2
0303 PARAINFLUENZA VIRUS TYPE 3.....		1				4	4		9
0500 RHINOVIRUS (ALL TYPES).....				4	4	3	1		12
0600 MYCOPLASMA PNEUMONIAE.....	19	2	5	9	1	19	25		80
0700 ORNITHOSIS-PSITTACOSIS.....			1	4					5
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....							2		2
0809 COXSACKIEVIRUS A9.....						1	3		4
0810 COXSACKIEVIRUS A10.....	1								1
0816 COXSACKIEVIRUS A16.....						1			1
0900 COXSACKIEVIRUS GROUP B - NOT TYPED.....			1						1
0901 COXSACKIEVIRUS B1.....	1			1	1	6			9
0902 COXSACKIEVIRUS B2.....		1							1
0903 COXSACKIEVIRUS B3.....	1			1	1	2	4		9
0904 COXSACKIEVIRUS B4.....		1							1
1000 ECHOVIRUS NOT TYPED.....							15		15
1003 ECHOVIRUS TYPE 3.....	2		4						6
1005 ECHOVIRUS TYPE 5.....				1					1
1006 ECHOVIRUS TYPE 6.....						1			1
1013 ECHOVIRUS TYPE 13.....			1						1

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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 11-1-79 . 24-1-79 BULLETIN NUMBER - 79/2
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMF (NSW) / WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1015 ECHOVIRUS TYPE 15.....	1								1
1016 ECHOVIRUS TYPE 16.....		1							1
1018 ECHOVIRUS TYPE 18.....	2			2		1			5
1022 ECHOVIRUS TYPE 22.....					1				1
1027 ECHOVIRUS TYPE 27.....						1			1
1030 ECHOVIRUS TYPE 30.....	1	1		10	8	2			22
1099 ECHOVIRUS TYPING PENDING.....	9								9
1101 POLIOVIRUS TYPE 1.....	1			1	2		1		5
1102 POLIOVIRUS TYPE 2.....					4	1	1		6
1103 POLIOVIRUS TYPE 3.....					3				3
1104 POLIOVIRUS-VACCINAL STRAIN.....			3			2			5
1200 MUMPS VIRUS.....	9	1	2	3	1	3	10		29
1300 HERPES VIRUS GROUP-NOT TYPED.....				1					1
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	22		8		6	1	16		53
1303 VARICELLA-ZOSTER VIRUS.....	6		1	2		4	2		15
1306 HERPES SIMPLEX TYPE 1.....	5			13		14			32
1307 HERPES SIMPLEX TYPE 2.....	45			11		18			74
1399 HERPES VIRUS TYPING PENDING.....	1					1			2
1401 COXIELLA BURNETI.....	1			1		2	14		18
1512 VACCINIA VIRUS.....				1					1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS).....	1								1
1521 MEASLES VIRUS.....	2		2	12	6	2	6		30
1522 RUBELLA VIRUS.....				4	2	2	12		20
1532 HEPATITIS B ANTIGEN.....			11	20		14	18		63
1533 HEPATITIS B ANTIBODY.....						16			16
1556 CMV - CYTOMEGALOVIRUS.....	9	3	4	7	1	2	6		32
1564 ROTAVIRUS.....			3			1			4
1566 NORWALK AGENT.....	3								3
1599 ENTEROVIRUS TYPING PENDING.....	2		11		1	6			20
ROSS RIVER VIRUS.....							6		6
PARVOVIRUS (LIKE).....	4								4
Total.....	161	15	66	120	59	141	149		711

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 11-1-79 - 24-1-79 BULLETIN NUMBER - 79/2
 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	OT	TOTAL
1005 ECHOVIRUS TYPE 5.....										1	1
1006 ECHOVIRUS TYPE 6.....	1										1
1013 ECHOVIRUS TYPE 13.....	1										1
1015 ECHOVIRUS TYPE 15.....			1								1
1016 ECHOVIRUS TYPE 16.....	1										1
1018 ECHOVIRUS TYPE 18.....			2	3							5
1019 ECHOVIRUS TYPE 19.....	1										1
1022 ECHOVIRUS TYPE 22.....	1										1
1027 ECHOVIRUS TYPE 27.....	1										1
1030 ECHOVIRUS TYPE 30.....	13		11	7			1	1		1	34
1099 ECHOVIRUS TYPING PENDING.....	4		1	3			1				9
1101 POLIOVIRUS TYPE 1.....	2										2
1102 POLIOVIRUS TYPE 2.....	4		2								6
1103 POLIOVIRUS TYPE 3.....	2										2
1104 POLIOVIRUS-VACCINAL STRAIN.....	5										5
1200 MUMPS VIRUS.....		20	2	8							30
1300 HERPES VIRUS GROUP-NOT TYPED.....					1					1	2
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....		8	11	4	26		1		35	6	91
1303 VARICELLA-ZOSTER VIRUS.....		13		1	1						15
1306 HERPES SIMPLEX TYPE 1.....			8		20	1		1	3	2	35
1307 HERPES SIMPLEX TYPE 2.....			1	1	7				64		73
1399 HERPES VIRUS TYPING PENDING.....					2						2
1401 COXISILLA BURNETI.....		18									18
1502 PICORNA VIRUS-NOT TYPED.....	1										1
1512 VACCINIA VIRUS.....					1						1
1515 CONTAGIOUS PUSTULAR DERMATITIS (ORF VIRUS).....					1						1
1521 MEASLES VIRUS.....		15	14	1							30
1522 RUBELLA VIRUS.....		24	3								27
1530 HEPATITIS A VIRUS.....		3									3
1532 HEPATITIS B ANTIGEN.....		80									80
1533 HEPATITIS B ANTIBODY.....		28									28
1541 CHLAMYDIA A - TRIC TYPE.....									24		24

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 11-1-79 . 24-1-79 BULLETIN NUMBER - 79/2
VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS-CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	FY	UR	BR	GE	OT	TOTAL
1556 CMV - CYTOMEGALOVIRUS.....	1	20	2				7		2	2	34
1564 ROTAVIRUS.....	4										4
1566 NORWALK AGENT.....	3										3
1599 ENTEROVIRUS TYPING PENDING.....	11		7	4		1					23
ROSS RIVER VIRUS		8									8
PAROVIRUS	4										4
Total.....	109	342	137	42	61	11	12	3	129	18	864