NATIONAL MICROBIOLOGICAL LABORATORY REPORTING SERVICE

BULLETIN 14

1-14 July 1977

Common-source outbreak of salmonella bredeney (Contributed by Microbiological Diagnostic Unit, Victorian Department of Health, and others.)

On April 15, 1977, a culture of a Salmonella, presumed to be Salmonella paratyphi A, and isolated from a 5 month old child was flown from Warrnambool to the Microbiological Diagnostic Unit, University of Melbourne. This was identified as Salmonella bredeney. Another culture of Salmonella bredeney, and again from a 5 month child was referred from Warrnambool on 22nd April. In the interim three more cultures had been received from the Melbourne region, one from a 5 month old baby, the others from children, 12 and 5 years old. Inspection of the year's record showed that 9 other isolates of this organism had been received, two from adults and the rest from children of less than 18 months (see Table).

Microbiological Diagnostic Unit

S. bredeney isolations by month, 1977 and age group of patient

		Age						
	TOTAL	0-6 mths	6-12 mths	12-18 mths	18mths - 2 yrs	2-3 yrs	Over 3	Adult
Jan.	0							
Feb.	5	3		1	1			
March	2							2
April	7	3	2				2	
May	11	6	1	1			1	2
June	14	8	2			2	1	2
TOTAL	39	20	5	2	1	1	4	6

By the end of April some 320 salmonellas had been identified by the Unit in 1977 but the unusual age distribution of cases especially due to a less common serotype was recognised and the Assistant Chief Health Officer was alerted by telephone and on the 3rd May by letter. On May 4th the first culture of Salmonella typhi from the Eastlands outbreak was received and the efforts of the Health Department were necessarily diverted.

At the Australian Society for Microbiology Conference, May 17-20, Miss Taplin (M.D.U.) and Mrs Dixon (S.R.L. Adelaide)

.../2

discussed the rising incidence of Salmonella bredeney isolations, now occurring in several States. As soon as officers could be spared from the typhoid outbreak, the Victorian Health Department started to investigate the cases with a view to establishing a common source. Patients or parents were interviewed and questioned and infant food formula soon appeared to be a common factor. This suspicion was strengthened by the story of a baby in South Australia who acquired gastro-enteritis when put on one of the powdered formulae. At this time Salmonella bredeney had not been isolated from powdered formula but arrangements were made to test large numbers of specimens on July 12, however, news came that 3 babies in Launceston had become ill and all had been fed a specific batch of Enfamil. This had been a 'special' in Launceston chemists for some weeks. By then it was clear that all three powdered infant feeds which figured prominently in feeding histories of the Victorian cases (Similac with Iron, Enfamil and Lactogen) had their origin or were packed in plants at Tongala and Dennington and these were visited by Victorian Health Department officers on July 15.

It appeared that the Tongala Plant, which made up Similac and Enfamil and supplied some components of Lactogen, had had trouble with bacteriological quality and had isolated Salmonella bredeney, from dried milk powder, in the months preceding closure of the milk drying-tower in April 1977. This closure had been followed by reconstruction of the cone of the drying-tower. On July 18 Company representatives were acquainted with the situation and by then Salmonella bredeney had been isolated by Mrs Dixon, S.R.L., from 2 of 6 tins of Enfamil of the batch incriminated in Launceston. Press announcements were released that evening to warn the public. (From February to 14 July 1977, the S.R.L. in Adelaide had serotyped 80 isolates of S. bredeney, 40 from Victoria, 23 from New South Wales, the remainder from other areas.)

A case of imported typhoid in Brisbane (contributed by Laboratory of Pathology and Microbiology, Brisbane)

On 11 July 1977 the Queensland Department of Health was notified of a case of typhoid fever in the Metropolitan Hospital for Infectious Diseases, Brisbane. Inquiries revealed that the patient, an adult female Indonesian, probably contracted the infection in Indonesia shortly before her arrival in Australia. Her movements since arrival indicated that her contacts were few and that she only prepared food for her own and her husband's consumption. The contacts were interviewed, advised and placed under surveillance. To date, there have been no further cases of typhoid.

.../3

Haemophus influenzae bacteraemia (contributed by Dr David Dorman, Royal Alexandra Hospital for Children, Sydney)

During the past month, eight children with Haemophilus influenzae type b bacteraemia have been admitted to this hospital. A variety of clinical presentations was found amongst these patients. Three were suffering from acute epiglottitis (age 1½, 2½ and 5 years) and one each from septic arthritis (1½ yrs), periorbital cellulitis (5 months), meningitis (4 years), bronchiolitis (5 months) and croup (1½ years).

Ampicillin resistant strains of H. influenzae b, causing serious illness in children, remain uncommon in Sydney. Only one such organism has been isolated from 50 children with Haemophilus meningitis admitted to this hospital since April, 1975.

Influenza A (contributed by Dr Louise Irving, Fairfield Hospital, Melbourne)

To date this year two isolations of Influenza A have been made from pooled nose and throat swabs; the first from a 26 year old male, who presented with fever, headache and sore throat in February and the second in June, when a 9 year old male, with rhinorrhoea, fever headache and vomiting was admitted with suspected meningitis. These isolates have been sent to the World Influenza Centre at Mill Hill, London and in a haemagglutination inhibition test the strain isolated in February reacted best with antisera against A/England/864/75, which makes it similar to the recently isolated A/Texas/1/77. Results on the other isolate are not available as yet.

In addition, during May - June, serological evidence of Influenza A infection has been obtained from 3 patients. A 57 year old man, recently returned from England was severely ill with pneumonia complicated by thyrotoxicosis, a 42 year old male visitor from South Korea presented with atypical pneumonia and a 75 year old female, became critically ill with atypical pneumonia at the end of a six week tour of South East Asia. All patients recovered.

PERIOD 14
DATES 1-14 JULY 1977

LABORATORY

	VIRUS OR VIRAL ANTIGEN	SYDNEY			MELBOURNE		ADELAIDE	PERTH	TOTAL
		ICPMR	RAHC	PHH/POW	FAIR-FIELD	RCH	IMVS	STATE LAB.	
0100	Adenovirus not typed				1		2		3
0101	" type 1					1		1	2
0102	" " 2			2		3		1	6
0103	" " 3			3				1	4
0104	" " 4						2		2
0108	" " 8				1				1
0201	Influenza A virus	2			2			1	5
0202	" " " subtype H3N2 (former A2)				1				1
0301	Parainfluenza virus type 1		1		2	15	4	5	27
0302	" " " 2				3	1	1	4	9
0303	" " " 3					1		3	4
0400	Respiratory syncytial virus (RS)		1		7	40	2	3	53
0500	Rhinovirus (all types)				2	7	3		12
0600	Mycoplasma pneumoniae	3	2		1		1	5	12
0700	Ornithosis-psittacosis				1		1		2
0806	Coxsackievirus A6							1	1
0809	" A9					1		3	4
0816	" A16						3		3
0903	" B3						1		1
1000	Echovirus not typed			1					1
1006	" type 6				2				2
1007	" " 7			3				2	5
1009	" " 9				1		3	1	5
1012	" " 12			3				1	4

.../2

PERIOD 14
DATES. 1-14 JULY 1977

VIRUS OR VIRAL ANTIGEN	LABORATORY: SYDNEY ICPMR	SYDNEY RAHC	SYDNEY PHH/POW	MELBOURNE FAIR-FIELD	MELBOURNE RCH	ADELAIDE IMVS	PERTH STATE LAB.	TOTAL
1013 Echovirus type 13			1					1
1017 " " 17 * 1018- See end of table					4		1	5
1019 " " 19			3	2	1			6
1022 " " 22							1	1
1025 " " 25				1				1
1101 Poliovirus type 1				1				1
1102 " " 2				1	1			2
1103 " " 3				2				2
1200 Mumps virus				8		6		14
1300 Herpes virus not typed						3	1	4
1301 " simplex virus - not typed		1	2		4			7
1303 Varicella-Zoster virus		1	1	2		1		5
1306 Herpes simplex type 1	5			9		14		28
1307 " " " 2	9			5		5		19
1401 Coxiella burneti	5					4	5	14
1502 Picorna virus - not typed							2	2
1515 Contagious pustular dermatitis (Orf virus)						1		1
1521 Measles virus	2							2
1522 Rubella virus				2				2
1530 Hepatitis A virus					1			1
1532 " B antigen		1	10	22		9	6	48
1533 " B antibody						14	21	35
1541 TRIC - Trachoma-Inclusion conjunctivitis						2	5	7

.../3

PERIOD 14
DATES 1-14 JULY 1977

VIRUS OR VIRAL ANTIGEN	LABORATORY							
	SYDNEY			MELBOURNE		ADELAIDE	PERTH	
	ICPMR	RAHC	PHH/POW	FAIR-FIELD	RCH	IMVS	STATE LAB.	TOTAL
1556 CMV - cytomegalovirus			1		5	11	8	25
1564 Rotavirus			1			4	8	13
* 1018 Echovirus Type 18					2			2
TOTAL TYPED VIRUSES	26	7	31	79	87	97	90	417
0199 Adenovirus type pending					1	3		4
0399 Parainfluenza virus type pending					3	4		7
1099 Echovirus type pending						5		5
1399 Herpes virus type pending							19	19
1599 Enterovirus type pending					5			5

NATIONAL MICROBIOLOGICAL LABORATORY REPORTING SERVICE

PERIOD 14
DATES 1-14 JULY 1977

SOURCE OF SPECIMEN

	VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	GE	BR	OT	TOTAL
0100	Adenovirus not typed	2	1									3
0101	" type 1							1				1
0102	" " 2	3		4								7
0103	" " 3	2					2					4
0104	" " 4			1			1					2
0108	" " 8						1					1
0201	Influenza A virus		4									4
0202	" " " subtype H3N2 (former A2)			1								1
0301	Parainfluenza virus type 1		1	25								26
0302	" " " 2			9								9
0303	" " " 3			4								4
0400	Respiratory syncytial virus (RS)		3	49								52
0500	Rhinovirus (all types)			12								12
0600	Mycoplasma pneumoniae		12									12
0700	Ornithosis-psittacosis		2									2
0806	Coxsackievirus A6	1										1
0809	" A9	3		1								4
0816	" A16					3						3
0903	" B3			1								1
1000	Echovirus not typed	1										1
1006	" type 6	1			1							2
1007	" " 7	5										5
1009	" " 9	1		3	1							5
1012	" " 12	4										4

.../2

NATIONAL MICROBIOLOGICAL LABORATORY REPORTING SERVICE

PERIOD 14
DATES 1-14 JULY 1977

	VIRUS OR VIRAL ANTIGEN	SOURCE OF SPECIMEN FA	BL	NA	CS	SK	EY	UR	GE	BR	OT	TOTAL
1013	Echovirus type 13	1										1
1017	" " 17	2		3								5
1018	" " 18	1		1	1							3
1019	" " 19	6										6
1022	" " 22	1						1				2
1025	" " 25			1								1
1101	Poliovirus type 1			1								1
1102	" " 2			2								2
1103	" " 3	1		1								2
1200	Mumps virus		5	6	4							15
1300	Herpes virus not typed		1			3						4
1301	" simplex virus - not typed			6		1						7
1303	Varicella-Zoster virus		2			2					1	5
1306	Herpes simplex type 1			7	1	17	1		3			29
1307	" " " " 2			1				1	17			19
1401	Coxiella burneti		14									14
1502	Picorna virus - not typed	1			1							2
1515	Contagious pustular dermatitis (Orf virus)					1						1
1521	Measles virus		2									2
1522	Rubella virus		2									2
1530	Hepatitis A virus			1	1							2
1532	" B antigen		48									48
1533	" B antibody		33									33
1541	TRIC - Trachoma-Inclusion conjunctivitis						1		6			7

.../2

PERIOD 14

DATES 1-14 JULY 1977

VIRUS OR VIRAL ANTIGEN	SOURCE OF SPECIMEN										
	FA	BL	NA	CS	SK	EY	UR	GE	BR	OT	TOTAL
1556 CMV - cytomegalovirus		3	8				7	7		1	26
1564 Rotavirus	13										13
TOTAL TYPED VIRUSES	49	133	148	10	27	6	10	33	-	2	418
0199 Adenovirus type pending	3		2								5
0399 Parainfluenza virus type pending			7								7
1099 Echovirus type pending	2		3								5
1399 Herpes virus type pending			3		12			4			19
1599 Enterovirus type pending	3						2				5