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Communicable Diseases Intelligence

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Contents:

- Human salmonellosis surveillance.
- Salmonellosis surveillance - non-human isolates.
- Tuberculosis surveillance.

VIRUS REPORTING SCHEME - A total of 1637 reports were processed.

- Influenza - The laboratory indices continue to show little evidence of widespread influenza activity, with only 31 reports of influenza A (23 of H_3N_2 subtype) and 35 reports of influenza B infection compared with 47, 31 and 0 and 4, 6 and 4 for the previous three periods respectively. Infections were recorded in all age groups. Twenty-two of the influenza A reports were from Melbourne, whereas 25 of influenza B cases were reported by Sydney laboratories. During August, eight influenza B infections were also diagnosed at a private pathology laboratory in Rockhampton (T.B. Lynch, personal communication). Antigenic analysis of the influenza isolates collected by the OIC WHO Influenza Reference Centre, Melbourne, has indicated that the H_1N_1 strains react equally well with A/England/333/80 and A/India/6263/80 antisera, but not with any of the antisera prepared against the 1983 H_1N_1 isolates. This is also true for the H_1N_1 isolates forwarded from other laboratories with the exception of A/Perth/1/84 which closely resembles A/Victoria/7/83. The H_3N_2 strains are still related to A/Philippines/2/82, although some viruses are reacting poorly with all standard antisera. Whether this activity is due to a real antigenic drift or a poor avidity will only be resolved after the preparation of homologous antisera. The influenza B isolates are USSR/100/83 - like.

- Rubella - Specific IgM was detected at the Prince of Wales Hospital, Sydney, in 13 of 15 sera taken from pupils at a boys high school in the eastern suburbs during a rubella outbreak in August. A similar, but unconfirmed, outbreak was also recorded in a neighbouring boys school, but no cases were detected in any of the community's girls schools. Furthermore, 14 cases of rubella (mainly from the Dubbo, Tamworth and Gulgong areas) were reported by the Institute of Clinical Pathology and Medical Research, Sydney. In addition, congenital rubella syndrome (CRS) was confirmed in a baby girl from Alice Springs with cataracts of the left eye at the Royal Children's Hospital, Melbourne. A fatal CRS case was also diagnosed recently at the Prince of Wales Hospital. The risk of congenital rubella in seronegative pregnant women has been estimated to be about 0.4 per 1000 births each year, with a frequency of congenital infection after maternal rash evaluated at more than 80% during the first 12 weeks of pregnancy, 54% at 13-14 weeks and 25% at the end of the second trimester.

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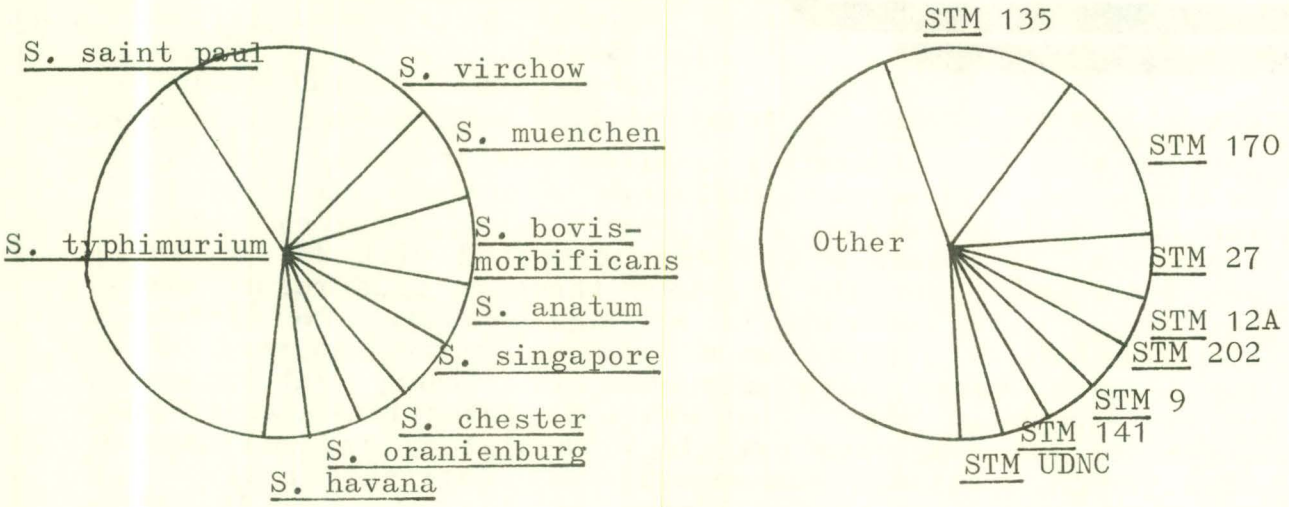
HUMAN SALMONELLOSIS SURVEILLANCE

(Contributed by S.A. Hogben, J. Taplin and L.K. Scott, Microbiological Diagnostic Unit (MDU), University of Melbourne).

A total of 951 salmonella (76 serotypes), 167 shigella and 375 campylobacter reports from human cases were collated in Australia during April-June 1984. The top-ten salmonella serotypes and S. typhimurium phage types are illustrated in Figure 1.

FIGURE 1. Pie charts of the "top ten" salmonella serotypes and S. typhimurium phage types for April - June, 1984.



CHOLERA - Vibrio cholerae 01 eltor, serotype Inaba, was isolated from faeces of a 37 year old male with diarrhoea after a bushwalking holiday near Townsville (see CDI 84/8). Follow-up of the patients' contacts and other members of the party failed to find any other cases.

TYPHOID - S. typhi degraded was cultured from blood and faeces of a 27 year old male who had arrived recently from the Philippines. The phage reactions were similar to those seen in cultures of S. typhi referred from the area. Other isolations from infections acquired overseas comprised S. typhi degraded from a 72 year old female; S. typhi A from blood and faeces of a 30 year old male; and S. typhi O from blood and faeces of a 30 year old male. All the patients had returned from holidaying in India. S. typhi 46 was isolated from faeces of a seven year old girl who had a two week history of fever before which she had been treated with amoxycillin. Her 41 year old uncle had been suffering with PUO four weeks earlier following his arrival from India. S. typhi 46 was cultured from his blood, and an untypable strain of S. typhi was isolated from faeces. Other isolations included S. typhi E1 from blood and faeces of a 25 year old male with a two week history of fever, headache and night sweats and a one week history of diarrhoea. He had not travelled overseas, and no carrier was found amongst his immediate contacts. Finally, S. typhi degraded was cultured from urine of a 64 year old male during routine investigation for weight loss. The same organism was subsequently isolated from faeces. He had migrated from Italy 20 years previously, and appeared to have no history of typhoid. His family contacts were all negative.

PARATYPHOID - S. paratyphi A type 6 was isolated from faeces of a 28 year old male with diarrhoea after a recent trip to India; and from blood and faeces of a 24 year old male admitted to hospital with fever and night sweats following visits to India, Thailand, Nepal and Hong Kong. Shigella boydii type 1 was also grown from faeces specimens. Similarly, S. paratyphi A type 1 was cultured from faeces of a 27 year old female with fever and

night sweats after returning from a visit to India and Egypt; and S. paratyphi A untypable isolated from blood and faeces of a 38 year old male after holidaying in India and Sri Lanka. S. paratyphi B type Dundee was reisolated from the five year old boy reported in the first quarter of 1984 (see CDI 84/16).

OUTBREAKS - Family outbreaks were attributed to serotypes S. oranienburg, Shigella sonnei biotype A, and S. typhimurium phage types 22, 135, 170, and UDNC.

SEROTYPE FLUCTUATIONS - Twenty-four cases of S. bovis-morbificans infection were reported from New South Wales during the quarter. Reports of this serotype have exhibited peaks in the second quarter for the past three years. Of the current 24 reports, 17 patients were less than five years of age, with two cases in sisters aged two and four years. No geographic foci were apparent.

URINE ISOLATIONS - Isolations from urine comprised serotypes S. bovis morbificans, S. ohio, S. saint paul, S. tennessee, S. typhi degraded, S. typhimurium, S. typhimurium phage type 135 and S. untypable rough :-:-.

BLOOD ISOLATIONS - Cases of septicaemia involved serotypes S. bredeney, S. paratyphi A untypable and type 6; S. typhi E1, O, 46 and degraded, S. typhimurium phage types 135 (from a 15 year old girl with neurofibromatosis) and 150 (from a three month old boy with suspected septic arthritis), S. untypable 38:1, V:- and S. virchow.

Other isolations of interest include S. ball from cerebrospinal fluid, S. typhimurium phage type 27 from mesenteric lymph node at appendectomy, phage types 72 and 135 from pleural fluid, and phage type 151 from gall bladder. Organisms isolated for the first time this quarter were S. bornum (Northern Territory), S. chicago (Victoria) from a 13 year old Vietnamese migrant, and S. merseyside (Tasmania). S. merseyside belongs to subgenus II, and is an unusual type. The previous recorded isolation of this serotype was from shellfish in Tasmania in 1980, although one isolate has been recovered in July this year from a catchment stream. The serotype was also recently recovered from river water in Western Australia (see following article).

SALMONELLA SURVEILLANCE - NON-HUMAN ISOLATES

(Contributed by J. Taplin and L.K. Scott, MDU, University of Melbourne).

A total of 2002 salmonella reports from non-human sources were collated by the National Salmonella Surveillance Scheme (NSSS) during January - March 1984. The reports had a State distribution of Australian Capital Territory - 10; New South Wales - 252; Victoria - 462; Queensland - 52; South Australia - 28; Northern Territory - 14; Western Australia - 1180 and Tasmania - 4. There was an increase of 339 cultures processed compared with the total for the final quarter of 1983, with all States, except Victoria, exhibiting increments.

DAIRY FACTORIES - In Victoria, further isolates of S. adelaide and S. havana were recovered from the environment at factory 7. S. agona was reisolated from environmental samples at factory 1 and also from their skim milk powder, whey powder and full cream powdered milk. At factory 4, S havana and S. ohio were cultured from environmental samples, and the skim milk powder yielded S. havana. Three new factories became positive in the quarter. S. havana was recovered from full cream milk

powder at factory 8; S. anatum, S. bredeney (including a lactose positive variant of S. bredeney) were isolated from the environment at factory 9; and S. anatum was cultured from full cream milk powder, skim milk powder and the environment at factory 10. S. havana was also grown from environmental samples at factory 10.

In New South Wales, environmental isolates of S. meleagridis were collected in addition to S. senftenberg from the factory where the latter serotype had been a problem. S. havana was also isolated from skim milk powder.

In Queensland, S. gaminara was cultured from casein at a factory where similar isolations had been made in 1983. In another factory, S. havana was isolated from butter milk powder skim milk powder and the environment.

WATERS - Surveillance of the reticulation, reservoirs and river systems in Victoria indicated the following serotype prevalences. In Central Victoria, S. victoria was recovered from a reticulation and reservoir, and S. houten and S. subgenus II from reservoirs. S. warragul was isolated from reticulation, service basin and spring (on two occasions), and S. muenchen from a reservoir and S. subgenus II from reticulation in NE Victoria. In NW Victoria, S. wandsbek was isolated on three occasions from river water. In Eastern Victoria; three different S. arizonae serotypes were isolated in one region together with S. hessarek and S. warragul; the same S. arizonae serotype was isolated from reticulation of two seaside towns; and S. victoria was isolated from a weir and S. subgenus IV from reticulation. In one region of Western Victoria, S. warragul was isolated from reticulation and raw water samples, S. subgenus II and S. subgenus IV from raw water, and S. houten from reticulation. Salmonella serotypes were also isolated from four other towns in the area - S. warragul (2) and two serotypes of S. arizonae (2).

In New South Wales, the following serotypes were isolated from drinking waters:- S. arizonae (2 serotypes), S. birkenhead (4), S. bredeney, S. hvittingfoss (2), S. infantis (2), S. mobeni, S. victoria (11), S. wandsbek, S. warragul (3 from raw water), S. untypable rough:K:enz/5, and S. typhimurium phage types 141 and 22 (raw water). S. bovis-morbificans (2), S. mowanjum, S. postsdam, S. rubislaw, S. singapore (2), S. victoria and S. untypable rough: Z:- were isolated from river water. The continuing review of beach waters gave S. anatum, S. bornam, S. bovis morbificans (5), S. bredeney (8), S. derby (15), S. enteritidis (11), S. give (13), S. infantis (7), S. johannesburg (4), S. reading, S. schwarzengrund, S. typhimurium untypable (7), S. typhimurium phage types 12A(7), 27(4), 135(3), 179(4) and 202(2), S. untypable 3,15:y:-, S. virchow and S. waycross (2).

In Western Australia, S. adelaide, S. abony (2), S. brisbane (4), S. chester, S. fremantle, S. havana, S. oranienburg (3), S. orion, S. rubislaw (4), S. saint paul, S. typhimurium, S. wandsbek, and S. wandsworth (4) were cultured from potable waters. The river water systems yielded the following serotypes - S. alsterdorf (2), S.arizonae, S. birkenhead, S. blukwa, S. eastbourne, S. merseyside, S. orientalis (3), S. orion, S. potsdam (3), S. sachsenwald, S. saint paul (2), S. senftenberg, S. sofia, S. typhimurium (2), S. wandsbek (4) and S. waycross.

In Queensland, S. birkenhead, S. lansing, S. reading, S. typhimurium phage type 22 and S. waycross were isolated from one river system; S. aberdeen, S. houten and S. virchow from a second; and S. lansing and S. muenchen from two others.

In the Northern Territory, S. ball, S. chester, S. give, S. kinodoni, S. ondersterpoort, S. oranienburg and S. rubislaw were isolated from river waters.

FOODSTUFFS - In March, S. aberdeen, S. lansing and S. virchow were grown from lettuce head washings in Queensland. In January, February and March, S. aberdeen had been isolated from local river water. S. virchow had also been isolated in January. S. virchow, S. aberdeen and S. lansing are common causes of human salmonellosis in Queensland.

In New South Wales, several serotypes were isolated in January and February from a variety of airline meals prepared at an overseas airport:- S. cerro, S. derby, S. emek (from 4 different foods), S. montevideo (on two separate occasions), S. ohio, S. saint paul and S. virchow (from 2 different cakes). Other isolations from imported foods included S. java from lobsters and S. thompson from prawns, both processed in Indonesia.

EGGS AND EGG PRODUCTS - Apart from two isolates of S. typhimurium from unpasteurised egg pulp from Western Australia, and one isolate of S. typhimurium phage type 135 from egg albumen from New South Wales, all the reports came from Victoria. S. infantis (5), S. oranienburg (2), S. singapore (4), S. typhimurium phage types 6 (3) and 135 and S. 4,12:d:- (2) were isolated from unpasteurised whole egg pulp; S. infantis (2), S. oranienburg (3), S. singapore, S. typhimurium phage types 6(5) and 135(2) were cultured from unpasteurised egg white; and S. oranienburg (2) and S. typhimurium phage type 6 were grown from unpasteurised egg yolk.

ANIMALS - Relatively few poultry-associated isolates were received during the quarter. The most common serotype was S. sofia from chicken caeca and processed chickens in Victoria, and from processed chickens, chicken products and litter from Western Australia.

Thirty isolates of salmonella from cattle were collated. In New South Wales, S. typhimurium was the most common isolate, with two isolates of phase type 170, and one each of phage types 108, 124 and untypable. One isolate of S. dublin was made from a calf. On the other hand, nine isolates of S. dublin were made in Victoria - five from foetal membranes, two from a foetus, one from an adult animal on a property where several animals were affected, and one in association with S. kottbus on a property where several other animals were infected with S. kottbus. Analysis of the concurrent data on human salmonellosis cases revealed that S. dublin had been isolated from a 15 year old girl in the Gippsland area, and an eight month old baby near Melbourne. Other bovine isolates in Victoria comprised S. bovis-morbificans (2), S. give, S. subgenus IV and one each of S. typhimurium phage types 44, 108 and 141. In South Australia there was one isolate each of S. dublin and S. typhimurium phage type 26. In Queensland, the serotypes included S. aberdeen, S. lansing and S. typhimurium phage types 90 and 101.

Nine of the 14 equine isolates were S. bovis-morbificans (South Australia - 3; New South Wales - 3; Queensland - 2; Western Australia -1). The remaining serotypes were S. 4,12:d:- and

S. typhimurium phage types 92 and 135 from New South Wales; and S. anatum and S. typhimurium phage type 44 from Queensland.

Twelve of the 16 ovine isolates were from Western Australia and included S. adelaide (2), S. bovis-morbificans (3), S. havana (2) and S. typhimurium (5). The four remaining reports were from South Australia and comprised S. chester, S. typhimurium and S. typhimurium phage type 9.

S. anatum (19), S. bredeney (15), S. derby (19), S. give (21), S. havana (2), S. infantis (5), S. newington (1), S. stanley (3) and S. 4,12:d:- (2) were isolated from swabs of pig carcasses during the continuing surveillance at four Victorian abattoirs.

TUBERCULOSIS SURVEILLANCE - AUSTRALIA (1983)

(Based on Australian Tuberculosis Newsletter No. 1. August 1984)

A total of 1151 tuberculosis notifications (excluding reactivations) were collated during 1983. This represents a national rate of 7.5 per 100,000 population, which is the lowest figure achieved to date. A trend of gradual decline in incidence has been evident for the past decade, although the rate has slowed during the past five years (1978-83) compared with the first five years (1973-77). A comparison of the rates for 1973 and 1983 with a State breakdown is given in Table 1.

TABLE 1. Tuberculosis rates per 100,000 population for Australia; 1973 and 1983

State	1973	1983	Change
New South Wales	12.5	7.4	-41%
Victoria	10.0	6.0	-42%
Queensland	11.8	5.8	-51%
South Australia	9.1	10.6	+16%
Western Australia	12.7	10.7	-16%
Tasmania	12.1	3.2	-73%
Northern Territory	61.6	32.8	-47%
Australian Capital Territory	13.6	8.9	-36%
AUSTRALIA	11.9	7.5	-37%

With the current trend, a rate of about five notifications per 100,000 population can be expected in the Bicentennial year of 1988. This compares with a rate of 46.8 per 100,000 population in 1948. The decline in cases bacteriologically positive for Mycobacterium tuberculosis has been even more significant over the past ten years - from 8.8 per 100,000 (1150 cases) in 1973 to 3.9 per 100,000 (596 cases) in 1983 giving a change of-55%. The number of reactivated cases has also decreased from 10% of notifications in 1973 to less than 4% in 1983, reflecting the improved methods of supervised chemotherapy and almost universal use of rifampicin. Since the phasing out of mass surveys in 1973-75, the most important single source of notifications are chest clinics (49%), followed by hospitals (28%), private medical practitioners (17%), repatriation hospitals and clinics (3%), death certificates and special X-ray surveys (3%).

A total of 649 (56%) notifications were made on migrants and refugees in 1983, although this group comprised only about 25% of the population. Of these, 295 (45%) were notified within

12 months of arrival, and the majority being admitted under Tuberculosis Undertakings i.e. with tuberculosis under treatment. The countries from where the foreign born cases originated included Vietnam (229), Kampuchea (75), Yugoslavia (25), Philippines (23), Italy (23), India (17), Indonesia (14), Hong Kong (12), Poland (11), Laos (11) and Greece (10).

Approximately 65% of pulmonary tuberculosis cases were in males, whereas the non-pulmonary tuberculosis infections were equally distributed. Drug sensitivity tests were performed in 90% of cases. Drug resistance was rare, with only 22 (4%) previously untreated patients showing resistance to one of the first-line drugs (16 to streptomycin; 6 to isoniazid (INH)). Eight previously treated patients (about 20% of reactivations) showed drug resistance, usually to multiple drug combinations. Only five (<1%) of the 537 drug sensitivity tests showed organisms resistant to rifampicin.

The Australian Tuberculosis Newsletter is written for and distributed free of charge among medical practitioners, nurses and other health professionals engaged in the prevention, diagnosis and treatment of tuberculosis. Anyone wishing to receive a copy of the Newsletter, which will be published bi-annually, should write to Dr A.J. Proust (Editor), P.O. Box 825, Canberra, ACT 2601. The Editor would also be grateful for any letters, brief articles or resumes of relevant current literature suitable for the next issue planned for March 1985.

Editorial Comment

Despite the decline in the case rates in most developed countries, tuberculosis persists as a public health problem.(1) National rates for the USA and Canada in 1982 were 11.0 per 100,000 population (25,520 cases) (2) and 10.0 per 100,000 population (2472 cases) (3) respectively. Although the death rate from tuberculosis has fallen to about one per 100,000 population in such countries, the statistics are still cause for concern (4,5,).

As tuberculosis becomes increasingly a disease of the elderly, particularly males, diagnosis may be more difficult because not only are there many causes of cough and sputum in middle-aged and elderly men, but the disease may present nonspecifically as fever, weight loss and haematological disorders, with the tuberculin test frequently giving a negative result. In addition, treatment compliance is often hindered because of apathy, poor eyesight, and poor memory. Side effects may also be more troublesome.

Drug resistance are relatively small problems among the indigenous cases of developed countries, and modern regimens can usually overcome the problem. Initial drug resistance to rifampicin remains very low. However, the scale of drug resistance in foreign born cases is much greater. During the period 1975-80, CDC, Atlanta, recorded drug resistance in 12.6% of Hispanics and 12.7% of Asians compared with 6.0% of whites and 5.2% of blacks in the USA. (6) In Korea, 25% of the newly reported patients not admitting to previous treatment had resistance to INH, and almost 5% to rifampicin (7), and initial resistance has been found as 16.3% in Hong Kong. (8) Also, florid disease is rarely present at the time of immigration, and the infectious pool of sputum positive patients with extensive disease is small (9).

With the steady decline in disease incidence, physicians may also have a low index of suspicion for tuberculosis in the differential diagnosis. Continued surveillance is essential to maintain the rate of disease eradication as it introduces an element of quality control to both diagnosis and treatment.

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HUMAN SALMONELLOSIS CASES

Period: April - June 1984

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. aberdeen	5				5				
S. abony	3		1		2				
S. adelaide	7					3	3		1
S. agona	12		1	4	2		1		4
S. anatum	34		3	1	13		10		7
S. arizonae	4				3		1		
S. barenfeld	2						2		
S. ball	8								8
S. bareilly	2						2		
S. birkenhead	15				13	1	1		
S. bleadon	1								1
S. blockley	6			3	1		2		
S. bootle	1								1
S. bornum	1								1
S. bovis-morbificans	43		24	1	2	6	7	1	2
S. bredeney	7		1		4		2		
S. butatan	1			1					
S. chester	26			1	6		12		7
S. chicago	1			1					
S. derby	19		11	2	1	1	4		
S. eastbourne	9			1	2		5		1
S. eimsbuettel	1			1					
S. enteritidis	10	1	2	2	4		1		
S. give	2								2
S. haifa	2		1						1
S. havana	22		3	2	1		9		7
S. heidelberg	8				6		2		
S. hessarek	1					1			
S. hvittingfoss	3			1	1		1		
S. infantis	18		6	3	2	2	3		2
S. jangwani	5				2				3
S. java	2				1		1		
S. java battersea	1				1				
S. java untypable	4			1		1			2
S. java 1, var 6	1				1				
S. javiana	2			1	1				
S. johannesburg	2				2				
S. kentucky	1			1					
S. kinondoni	4				4				
S. kottbus	4				2		1		1
S. lansing	4				3		1		
S. litchfield	13				5		3		5
S. livingstone	1		1						
S. mbandaka	3		1	1			1		
S. merseyside	1							1	
S. mississippi	4							4	
S. muenchen	44	1	2	1	14	1	14		11
S. new brunswick	1				1				
S. newington	4				4				
S. newport	3			2	1				
S. ohio	6	4	1					1	
S. ohlstedt	1								1
S. oranienburg	25		3	2	6	1	4		9
S. orientalis	2		1				1		
S. orion	6					1	2		3
S. panama	2						1		1
S. paratyphi A untypable	1					1			
S. paratyphi A1	1			1					

HUMAN SALMONELLOSIS CASES

Period: April - June 1984

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. paratyphi A6	4			4					
S. paratyphi B dundee	3			3					
S. poona	4				4				
S. potsdam	6		1		3		1		1
S. rubislaw	2								2
S. sachsenwald	2				2				
S. saint-paul	64	1	5	5	30	2	15		6
S. senftenberg	14				2		3		9
S. singapore	31		15	10		1	5		
S. sofia	1			1					
S. stanley	12			5	2	3	2		
S. tennessee	6			2			4		
S. thompson	2				2				
S. typhi*	23		6	11			5		1
S. typhimurium*	239	4	83	44	29	38	25	9	7
S. untypable	1					1			
S. untypable rough:-:-	1		1						
S. untypable rough:C:I,6	1		1						
S. untypable rough:F,G:-	2								2
S. untypable 3,10:R:-	1			1					
S. untypable 38:L,V:-	1								1
S. untypable 4,12,27:-:-	1		1						
S. untypable 8,20:Z10:-	1			1					
S. urbana	2								2
S. virchow	63			3	1	58			1
S. wandsbek	1				1				
S. wandsworth	4				2		1		1
S. waycross	8				8				
S. welikade	12				6	1	3		2
S. weltevreden	12			2		2			8
S. zanzibar	4		1	2	1				
S. 1,4,5,12:-:1,2	1								1
TOTAL	951	11	179	126	266	67	161	16	125
S. typhi*									
S. typhi	2						2		
S. typhi A	2		2						
S. typhi degraded	8		1	6			1		
S. typhi E1	2			2					
S. typhi O	2						2		
S. typhi untypable	2			1					1
S. typhi 40	3		3						
S. typhi 46	2			2					
TOTAL	23		6	11			5		1
S. typhimurium*									
S. typhimurium	11	1	4		1		5		
S. typhimurium UDNC	9		4	1	1	1	1		1
S. typhimurium untypable	15		6	2	2	2	2		1
phage type 1	4		3		1				
phage type 6	7			5		1		1	
phage type 8	5		2		2				1
phage type 9	10		2	1	2	2	3		
phage type 12	1		1						

HUMAN SALMONELLOSIS CASES

Period: April - June 1984

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
phage type 12A	10		1		1	6	1		1
phage type 22	5		2		2		1		
phage type 26	7		1	3	1	2			
phage type 27	12	1	6	2			3		
phage type 30	1					1			
phage type 31	3			3					
phage type 44	2		2						
phage type 55	3						3		
phage type 64	4						4		
phage type 72	4		2	2					
phage type 90	2		1			1			
phage type 101	2		2						
phage type 102	3				1		1	1	
phage type 108	4	1	2			1			
phage type 122	1				1				
phage type 124	6		6						
phage type 135	38	1	12	7	2	9	1	4	2
phage type 141	9		3	3	1			2	
phage type 145	3			2		1			
phage type 150	5			5					
phage type 151	1					1			
phage type 154	1								1
phage type 170	33		18	5	5	5			
phage type 176	1					1			
phage type 179	7		3	3				1	
phage type 202	10					6	4		
TOTAL	239	4	83	44	29	38	25	9	7
Shigellae									
S. boydii 1	1			1					
S. boydii 2	4		2			1	1		
S. boydii 11	4	1		3					
S. dysenteriae	1						1		
S. dysenteriae 2	1			1					
S. flexneri	2						2		
S. flexneri var X	1			1					
S. flexneri 1A	1			1					
S. flexneri 1B	2			1	1				
S. flexneri 2	46		2				38		6
S. flexneri 2A	18					7			11
S. flexneri 4	2		1				1		
S. flexneri 4A	3		2						1
S. flexneri 6	30		1	3			22		4
S. sonnei	37		13				24		
S. sonnei BIO A	12			5	6	1			
S. sonnei BIO F	1			1					
S. sonnei BIO G	1							1	
TOTAL	167	1	21	17	7	9	89	1	22

HUMAN SALMONELLOSIS CASES

Period: April - June 1984

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
Campylobacter									
C. coli	2					2			
C. jejuni	322	9	45	86	29	18	134		1
C. species	51		43	1		5			2
TOTAL	375	9	88	87	29	25	134		3
Escherichia coli									
E. coli 0111 K58 B4	1			1					
E. coli 0114 K90 B	2			2					
E. coli 0126 K71 B16	3		1	2					
E. coli 026 K60 B6	2		1	1					
E. coli 055 K59 B5	1			1					
TOTAL	9		2	7					

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 30/8/84 - 12/9/84 BULLETIN NUMBER 84/19

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	3		13		6	1	27	2	52
0101 ADENOVIRUS TYPE 1						3		3	6
0102 ADENOVIRUS TYPE 2	1	1		3		1		1	7
0103 ADENOVIRUS TYPE 3	1	1				2		2	6
0105 ADENOVIRUS TYPE 5				1					1
0106 ADENOVIRUS TYPE 6	1							1	2
0107 ADENOVIRUS TYPE 7	1					1			2
0108 ADENOVIRUS TYPE 8								3	3
0127 ADENOVIRUS TYPE 27	1								1
0130 ADENOVIRUS TYPE 30						1			1
0199 ADENOVIRUS TYPING PENDING		2			3	4			9
0201 INFLUENZA A VIRUS	1		2			1		4	8
0202 INFLUENZA A VIRUS SUBTYPE H3N2	1			12	10				23
0203 INFLUENZA B VIRUS	17	1	7			1	5	4	35
0301 PARAINFLUENZA VIRUS TYPE 1					3	9	1		13
0302 PARAINFLUENZA VIRUS TYPE 2				2		14	1		17
0303 PARAINFLUENZA VIRUS TYPE 3	2	1			1	5	7	1	17
0304 PARAINFLUENZA VIRUS TYPE 4								2	2
0399 PARAINFLUENZA VIRUS TYPING PENDING		1				3	2		6
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	35	20	15	17	21	47	101	12	268
0500 RHINOVIRUS (ALL TYPES)					9	1	36	3	49
0600 MYCOPLASMA PNEUMONIAE	22		6				5	1	34
0700 ORNITHOSIS-PSITTACOSIS	3								3
0816 COXSACKIEVIRUS A16	1			1					2
0904 COXSACKIEVIRUS B4					4				4
1000 ECHOVIRUS NOT TYPED							1		1
1004 ECHOVIRUS TYPE 4								1	1
1005 ECHOVIRUS TYPE 5								1	1
1006 ECHOVIRUS TYPE 6	1				2	1			4
1007 ECHOVIRUS TYPE 7	1								1
1009 ECHOVIRUS TYPE 9		2		2					4
1011 ECHOVIRUS TYPE 11			2						2
1017 ECHOVIRUS TYPE 17				2					2
1018 ECHOVIRUS TYPE 18				1					1
1019 ECHOVIRUS TYPE 19				1					1
1021 ECHOVIRUS TYPE 21								2	2
1022 ECHOVIRUS TYPE 22							1		1
1100 POLIOVIRUS NOT TYPED			2		11				13
1101 POLIOVIRUS TYPE 1	2	1				1	5	1	10
1102 POLIOVIRUS TYPE 2	2			1			1		4
1103 POLIOVIRUS TYPE 3						2			2
1200 MUMPS VIRUS	6	1	2	4	1			1	15
1300 HERPES VIRUS GROUP-NOT TYPED	30			4				2	36
1301 HERPES SIMPLEX VIRUS NOT-TYPED						1			1
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	6		1					10	17
1303 VARICELLA-ZOSTER VIRUS	6					3	2		11
1306 HERPES SIMPLEX TYPE 1	12		23	28		19	36	21	139
1307 HERPES SIMPLEX TYPE 2	70		27	37		40	96	54	324
1399 HERPES VIRUS TYPING PENDING			12		4	2			18
1401 COXIELLA BURNETI	3						5		8
1502 PICORNA VIRUS-NOT TYPED	4		4						8
1521 MEASLES VIRUS	2	1						2	5
1522 RUBELLA VIRUS	15	1	12	1	1	7	2	4	43
1532 HEPATITIS B ANTIGEN	50		8	18		27	20	3	126
1535 HEPATITIS A ANTIBODY	3		2	3		5	4	1	18
1541 CHLAMYDIA A - C TRACHOMATIS	23	1	4	21			29	30	108
1556 CMV - CYTOMEGALOVIRUS	11		4	3	6	4	14	1	43
1563 CORONAVIRUS				1					1
1564 ROTAVIRUS	10	10	20		9	14	2		65
1599 ENTEROVIRUS TYPING PENDING		2	3		5	2			12
9902 POXVIRUS GROUP NOT TYPED								1	1
9992 ROSS RIVER VIRUS							7	3	10
9994 SMALL VIRUS (LIKE) PARTICLE		5		1					6
9998 ARBO. GROUP B.							1		1
Total	347	51	169	164	96	222	411	177	1,637

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 30/8/84 to 12/9/84 .... 84/19

Viral Identifications by Clinical Information Table 1.
Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.; 07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respiratory	Encephalitis	Meningitis	Paralysis	CNS other unspec	GI	Hepatic	CVS	Urinary	Skin/mucs memb
0101 ADENOVIRUS TYPE 1.....		5				1					
0102 ADENOVIRUS TYPE 2.....		6									
0103 ADENOVIRUS TYPE 3.....		2					1				
0105 ADENOVIRUS TYPE 5.....		1									
0106 ADENOVIRUS TYPE 6.....	1	1									
0107 ADENOVIRUS TYPE 7.....		1					1				
0127 ADENOVIRUS TYPE 27.....							1				
0201 INFLUENZA A VIRUS.....	1	6									
0202 INFLUENZA A VIRUS SUBTYPE H3N2		18			1	2					
0203 INFLUENZA B VIRUS.....	1	29						1			
0301 PARAINFLUENZA VIRUS TYPE 1....		13									
0302 PARAINFLUENZA VIRUS TYPE 2....		17									
0303 PARAINFLUENZA VIRUS TYPE 3....		17									
0304 PARAINFLUENZA VIRUS TYPE 4....		1									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	5	266				2	3	1			2
0500 RHINOVIRUS (ALL TYPES).....		59									
0600 MYCOPLASMA PNEUMONIAE.....	7	21									1
0700 ORNITHOSIS-PSITTACOSIS.....		3							1		
0816 COXSACKIEVIRUS A16.....					1						1
0904 COXSACKIEVIRUS B4.....		4									
1005 ECHOVIRUS TYPE 5.....	1										
1006 ECHOVIRUS TYPE 6.....		1				1	1				
1009 ECHOVIRUS TYPE 9.....	1	1			2						
1011 ECHOVIRUS TYPE 11.....						2					
1017 ECHOVIRUS TYPE 17.....					2						
1018 ECHOVIRUS TYPE 18.....					1						
1022 ECHOVIRUS TYPE 22.....		1									
1100 POLIOVIRUS NOT TYPED.....							2				
1101 POLIOVIRUS TYPE 1.....		6					1				
1102 POLIOVIRUS TYPE 2.....		3					1				
1103 POLIOVIRUS TYPE 3.....		2									
1200 MUMPS VIRUS.....	2	1	2	2		1					
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	5	1		1				2			
1303 VARICELLA-ZOSTER VIRUS.....				1		1					7
1306 HERPES SIMPLEX TYPE 1.....	5	15				1				1	65
1307 HERPES SIMPLEX TYPE 2.....	19										59
1401 COXIELLA BURNETI.....	1	2						1			
1521 MEASLES VIRUS.....	2		2								1
1522 RUBELLA VIRUS.....	1	2									2
1532 HEPATITIS B ANTIGEN.....	55						1	46			
1535 HEPATITIS A ANTIBODY.....	1						1	16			
1541 CHLAMYDIA A - C.TRACHOMATIS...	2										1
1556 CMV - CYTOMEGALOVIRUS.....	3	18			1					2	2
1563 CORONAVIRUS.....		1									
1564 ROTAVIRUS.....	4	1					60				
9992 ROSS RIVER VIRUS.....											1
9994 SMALL VIRUS (LIKE) PARTICLE...		1					6				
Total.....	117	526	4	12		11	79	67	1	3	162

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 30/8/84 to 12/9/84 ... 84/19
Viral Identifications by Clinical Information Table 2.
Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;
38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;
G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Genital	Endo/sal gland	RES	Muscle/joint	Congenital	PUO	Fever/malaise	Other	SIDS
0101 ADENOVIRUS TYPE 1.....							1			
0102 ADENOVIRUS TYPE 2.....							1			
0103 ADENOVIRUS TYPE 3.....	3									
0108 ADENOVIRUS TYPE 8.....	1	2								
0201 INFLUENZA A VIRUS.....							1			
0202 INFLUENZA A VIRUS SUBTYPE H3N2							2	5		
0203 INFLUENZA B VIRUS.....							2	3		
0304 PARAINFLUENZA VIRUS TYPE 4....						1				
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	2						4	1	1	
0500 RHINOVIRUS (ALL TYPES).....							1			
0600 MYCOPLASMA PNEUMONIAE.....			1					8		
1004 ECHOVIRUS TYPE 4.....		1								
1006 ECHOVIRUS TYPE 6.....								1		
1007 ECHOVIRUS TYPE 7.....		1								
1009 ECHOVIRUS TYPE 9.....								1		
1017 ECHOVIRUS TYPE 17.....								1		
1019 ECHOVIRUS TYPE 19.....	1									
1021 ECHOVIRUS TYPE 21.....					1		1			
1101 POLIOVIRUS TYPE 1.....										2
1102 POLIOVIRUS TYPE 2.....										1
1200 MUMPS VIRUS.....			6					1		
1301 HERPES SIMPLEX VIRUS NOT-TYPED		1								
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			9					1	1	
1303 VARICELLA-ZOSTER VIRUS.....				1					1	
1306 HERPES SIMPLEX TYPE 1.....	4	46					1	3	2	
1307 HERPES SIMPLEX TYPE 2.....		246							1	
1401 COXIELLA BURNETI.....					1		1	4	1	
1522 RUBELLA VIRUS.....	1		1		2	2	4	2	11	
1532 HEPATITIS B ANTIGEN.....					1				23	
1541 CHLAMYDIA A - C.TRACHOMATIS...	1	103							1	
1556 CMV - CYTOMEGALOVIRUS.....		5	1			4	2	1	7	
1564 ROTAVIRUS.....										1
9992 ROSS RIVER VIRUS.....			1		6			4		
9994 SMALL VIRUS (LIKE) PARTICLE...			1							
Total.....	13	406	20	1	11	7	21	36	49	4