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Communicable Diseases Intelligence

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Contents:

Editor Dr I.F. Cook

VIRUS REPORTING SCHEME: A total of 1 420 reports were processed for this period.

Sixteen cases of Q fever were reported for this period (7 from New South Wales, 7 from Queensland and 2 from South Australia). Occupational exposure data were only available for:-

. the 2 South Australian cases; 2 abattoir workers, one male aged 39 and one female aged 23
. four of the 7 Queensland cases; 3 male meatworkers aged 19 (from Grafton), aged 20 (from Ipswich) and aged 35 (from Bowen) respectively and one 40 year old male grazier from Roma.
None of these sixteen patients were involved in the Q fever vaccine field trial conducted in South Australia.

Respiratory Syncytial Virus (RSV) was isolated from:
. the nasal aspirate of an 8 month old male presenting with a cardiac arrest following a severe prolonged fever
. the post mortem specimens of tissues derived from the respiratory tract of a 5 month old female who died of Sudden Infant Death Syndrome.

Cytomegalovirus was isolated from the urine and the bowel biopsy specimens of a 10 year old female presenting with meningitis.

CHOLERA UPDATE : HONG KONG

Following the recent outbreak of cholera in Hong Kong (CDI 86/17) medical and health services have advised that in accordance with WHO regulations, Hong Kong has been declared free of cholera on 19 August 1986 as 10 days have elapsed since the last cholera case was isolated on 6 August.

In addition, there was no evidence that the disease was spreading beyond primary cases. However, health authorities are continuing the inspection of food premises, the attempt to control food sales by illegal hawkers, and the examination of water and food samples to prevent a recurrence of the disease.

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COMMUNICABLE DISEASE INTELLIGENCE EXPANSION SCHEME

PATHOGEN REPORT - AUGUST 1986

PATHOGEN REPORTING SCHEME: A total of 263 reports (211 bacterial, 22 fungal, 27 protozoan and 3 helminthic infections) were processed for the month of August 1986.

These reports were contributed by the following Laboratories.

Laboratories	Bacteria	Fungi	Protozoa	Helminths	Total
Commonwealth Laboratory (Toowoomba)	34	8	16	1	59
State Health Laboratory (Brisbane)	114	3	1	1	119
Prince of Wales Hospital (Randwick-NSW)	10	-	-	-	10
Royal Brisbane Hospital	53	11	10	1	75
TOTAL	211	22	27	3	263

Pathogen reports collected for this month featured the following *

Bacterial infections:-

- Staphylococcus species (14) which included
  - S. aureus (5)
  - MRSA (Methicillin-resistant S. aureus) (1)
- Streptococcus species (11) which included
  - S. pneumoniae (3)
  - S. faecalis (2)
  - S. salivarius (1)
- Proteus species (6)

Fungal infections:-

- Microsporum species (7) which included
  - M. canis (1)
- Trichophyton species (5) which included
  - T. tonsurans (1)
  - T. mentagrophytes (2)
  - T. rubrum (1)
  - T. violaceum (1)
- Candida species (4) which included
  - C. albicans (1)

Protozoan infections:-

. Cryptosporidium species (10)
. Giardia lamblia (16)

* In the analysis of pathogen reports the following organisms have been excluded:

. Salmonella species, Campylobacter species, Shigella species, Escherichia coli (all these organisms are routinely monitored by the National Salmonella Surveillance Scheme at the Microbiological Diagnostic Unit - University of Melbourne).

. Treponema pallidum, Neisseria gonorrhoeae (the latter is routinely monitored by the Australian Gonococcal Surveillance Program - Prince of Wales Hospital).

AN OUTBREAK OF METHICILLIN - RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) IN A DISTRICT GENERAL HOSPITAL (UK)

(Based on CDR 86/30, 25 July 1986)

During the period between 5 January and 31 July 1985 an outbreak of methicillin resistant Staphylococcus aureus (MRSA) infection occurred in a District General Hospital (DGH) which was housed on two sites. The main site, with 425 beds, provided services for general medicine, surgery, pediatrics, gynaecology, maternity, special care baby unit and geriatrics. The smaller hospital, of 80 beds, provided services for trauma and orthopaedic surgery and plastic surgery and included an accident and emergency department, but no intensive care unit. With the exception of plastic surgery patients in the small hospital, few tertiary referrals were admitted to the DGH.

Ninety five patients and thirteen staff became infected or colonised during the 7 month period. The isolates were typed by the Public Health Laboratory Services Division of Hospital Infection and found to be similar to the epidemic strain that has caused several outbreaks since 1981 in the Thames NHS Regions but different in other, important, characteristics[1]. There were no cases of septicaemia, and no patients died as a result of the infection.

The epidemiological and clinical features of the cases were as follows:

. On 5 January, infections in 3 patients on the main site were confirmed as MRSA positive in routine swabs taken from leg ulcers in two of the patients, and from an amputation stump in a third. The patients had been admitted to different wards at different times and had not overlapped with each other on any ward during their stay.

  It was not possible to identify the source of infection in any of these cases although all the patients had attended the outpatient department in the previous twelve months. One of the cases was attending the day hospital at the time MRSA was isolated.

- No further cases were diagnosed until 19 January. Over the next few weeks however, the number of cases increased rapidly. By 11 February, 22 patients on six different wards in the main hospital had been affected, and one staff nasal carrier identified. Control measures introduced at this time were only temporarily successful in reducing the number of cases. The infection continued to spread, with patients from all adult wards affected, and only the maternity and special care baby unit remaining free from infection. Patients on both the orthopaedic wards in the smaller hospital became colonised, although the plastic surgery ward was not affected.

- Infections were usually accounted for by an overlap with cases subsequently found to be MRSA positive. In 15 patients however the source of infection could not be determined.

- The sites most frequently involved were skin lesions (pressure sores, wounds and leg ulcers) although a few patients were nasal carriers. There were no cases of septicaemia or other serious systemic infection.

- Most of the patients affected were elderly. The sexes were equally represented. Nearly a third of the patients had been admitted to hospital during the previous 12 months, all but one of them to a local hospital. This patient had a hip replacement in a London hospital in September 1984, but had been screened for MRSA before discharge and found to be negative.

- Fifty-six percent of the cases had been treated with one or more antibiotics during the course of the current admission, and 42% had an invasive procedure.

Control measures taken

Patients were nursed initially in either a side room or transferred to an infectious disease unit in an adjacent district. When the number of cases increased, one ward in the geriatric wing of the main hospital was designated as an isolation unit, and all cases were transferred there. The ward was closed to non-MRSA admissions, and movement of staff between the ward and other wards was discouraged, although this proved difficult to enforce and was later abandoned in favour of cohort nursing. Physiotherapy and ancillary staff working on MRSA wards were restricted from working on other wards, although medical staff continued to do so.

Cases were treated by daily skin washing with an antiseptic hand wash containing 4% chlorhexidine gluconate in a detergent base, twice weekly hairwashing with a cetrimide and chlorhexidine proprietary mixture and nasal application of a cream containing chlorhexidine and neomycin.

In some cases mupirocin (pseudomonic acid) ointment was added to the treatment regimen, with some improvement in the healing and clearance of MRSA from lesions.

A weekly programme of screening was initiated for staff and patients on the isolation ward and other wards where cases were occurring. Initial swabs concentrated on noses and skin lesions, with further swabbing only in positive cases. Patients were not discharged or transferred from the isolation ward until three consecutive negative swabs, taken at weekly intervals, had been obtained.

Staff on the isolation ward who were found to be nasal carriers were not excluded from work, although nasal carriers on other wards could only return to work after treatment with nasal antibiotic cream followed by a negative swab 48 hours post treatment.

Patients who were postive and were scheduled for surgery were cancelled unless urgent, in which case they were treated as 'dirty' cases, and placed last on the list.

The records of patients who had been postive were flagged before discharge, the aim being to prevent spread of the infection at subsequent hospital admissions.

Despite control measures, further cases occurred, including patients who became reinfected/colonised after being cleared and transferred from the isolation ward back to their ward of origin. As spread of MRSA between patients transferred to different wards after admission was a probable factor in the continuing outbreak, a policy of not moving patients after admission was adopted at the beginning of May. This resulted in a steady decrease in the number of cases, with only four new cases reported during July. Sporadic cases continue to occur.

CDR Editorial Comment:

It was difficult to distinguish colonised from infected patients. Most of the lesions affected were in the skin, eg decubitus ulcers, and it was not possible to ascertain if MRSA was a contributory factor, although there was an impression among the clinicians that active treatment of lesions resulted in more rapid healing in some but not all cases. Nevertheless, the outbreak demonstrates the highly infectious nature of MRSA. Despite a good control of infection procedure and enthusiatic staff, the infection continued to spread within the hospital, although it was possible to prevent spread to hospital in other Districts in the Region. Continuing high profile control measures are required to contain an outbreak[2]. This is particularly important when the number of cases has decreased to a low number, and there is a tendency to relax control procedures.

In this outbreak there were no serious infections or deaths. This contracts with the experience in teaching hospitals[2, 3]. Patients at risk from serious disease caused by MRSA are those in intensive care, especially following neurosurgery or cardiothoracic surgery. In this outbreak, however, there were no such patients at risk, and it could be that the absence of serious infections reflected the nature of the patients rather than the virulence of the organism.

The costs of an outbreak of MRSA are high, due to the staffing requirements imposed by cohort nursing and the demand placed on sterile services. The unit costs for the first nine months of this outbreak were calculated to be in excess of $A 750 000 underlining the need for early aggressive control measures.

REFERENCES

1. PHLS Microb. Digest (1985) 2:62-64
2. Am J Infect Control (1985) 13:115-21
3. Lancet (1985) 1:1493-95

HUMAN SALMONELLOSIS SURVEILLANCE

(Contributed by J. Taplin, J. Powling, L. Scott and J. Morris, Microbiological Diagnostic Unit (MDU), University of Melbourne).

A total of 1126 salmonella (92 serotypes), 281 shigella, 578 campylobacter, 2 vibrio and 16 pathogenic *E. coli* reports from human cases were collected in Australia during October-December 1985.

The 1126 salmonella cultures were obtained from 1058 patients, of whom 79 acquired their infection overseas. The State breakdown of cases of salmonella infections acquired in Australia for this quarter are shown below:

	ACT	NSW	VIC	QLD	SA	NT	WA	TAS
Case numbers	21	206	142	230	80	93	189	18

Salmonella typhi

- *S. typhi* O was isolated from an 18 year old male, a 26 year old female carrier and a 6 year old male who had recently arrived from India
- *S. typhi* E1 was isolated from
  - a 38 year old male presenting with pyrexia of unknown origin and liver abscess; the patient had come from South America 15 years ago
  - a 5 year old Sri Lankan male who had travelled from Nigeria via London, South India and Singapore
  - the bile of a 50 year old female during a surgical operation
- *S. typhi* A was isolated from a 26 year old male who acquired the infection overseas
- *S. typhi* B2 was isolated from a 7 year old male
- *S. typhi* 46 was isolated from a 13 year old female
- *S. typhi* 51 was isolated from an 8 year old male who recently returned from Lebanon
- *S. typhi* degraded was isolated from a 19 year old female returning from the Philippines and from a 43 year old male presenting with fever and dysentery.
- *S. typhi* untypable was isolated from a 25 year old male and also from the 50 year old female from whom *S. typhi* E1 was isolated from bile during a surgical procedure.

Salmonella paratyphi

. S. paratyphi A

- phage type 1 was still being isolated from a 59 year old male who had been reported 4 months earlier
- phage type 2 was isolated from a 29 year old male returning from a visit to Thailand
- phage type 6 was isolated from a 31 year old male who acquired the infection overseas and also from a 24 year old female who had resided for 10 months in Malaysia and had spent 5 weeks in Thailand before returning to Australia.
- phage type RDNC was isolated from a 28 year old male, a 25 year old male returning from India and a 40 year old female returning from Pakistan.

. S. paratyphi B

- phage type B Taunton was isolated from a 37 year old female who had visited South America and from 2 males
- phage type RDNC was isolated from a 10 year old male who returned from South America.

Other Salmonella Infections

A. ISOLATIONS FROM URINE comprised the following serotypes:

. S. give, S. havana, S. ohio, S. worthington, S. typhimurium 4, S. typhimurium 44, S. typhimurium 179
. S. muenchen was isolated from a 46 year old female with urinary tract infection following cholecystectomy.

B. ISOLATIONS FROM BLOOD Cases of septicaemia involved the following serotypes:

. S. dublin was isolated from a 46 year old female experiencing fever following a mitral valve replacement.
. S. bovismorbificans was isolated from an 89 year old female
. S.heidelberg was isolated from a 6 month old female
. S. typhimurium 4 was isolated from a 78 year old male
. S. typhimurium 9 was isolated from a 74 year old female
. S. typhimurium 108 was isolated from a one year old male
. S. typhimurium 135 was isolated from a 62 year old male
. S. typhimurium RDNC was isolated from a 70 year old female

Shigella septicaemia was reported in a one year old male who had been infected with Sh. flexneri 2A

Other isolations of interest included the following serotypes:

. S. chester was isolated from the pus of an infected appendix removed from a 15 year old female
. S. ohio was isolated from the penile swab of a 47 year old male with pancreatitis and generalised sepsis. The patient subsequently died. The culture organism was resistant to ampicillin, sulphonamide, trimethoprim, kanamycin and gentamycin.
. S. adelaide was isolated from the pus exudate from the tibia of a 27 year old male with osteomyelitis. The infection appeared to be recurrent since the organism had been isolated in October 1984.

Salmonella serotypes reported for the first time in the surveillance scheme included:

- S. abaetetuba (isolated from a 20 month old male)
- S. augustenborg (isolated from a one year old male)
- S. haardt (isolated at medical screening from a 34 year old male migrant)
- S. matopeni (isolated from a 27 year old male refugee from Vietnam)
- S. typhimurium 17 (isolated from a 59 year old female)
- S. typhimurium 40 (isolated from 2 brothers aged 3 and 6 years)
- S. typhimurium 96 (isolated from a 30 year old immunocompromised male patient with cryptococcal meningtis)
- S. virginia (isolated from a 6 month old female)

ENTERIC PATHOGENS ACQUIRED/OUTSIDE AUSTRALIA

In addition to the cases of enteric fever detailed above, the following serotypes were isolated either from travellers returning from overseas visits or from migrant screening programs:

A. Salmonella species: For this quarter a total of 79 patients were reported to have been infected overseas, mainly in South East Asia.

- S. anatum, S. agona, S. bareilly, S. blockley, S. bovismorbificans, S. braenderup, S. derby S. emek, S. haardt, S. havana, S. johannesburg, S. kentucky, S. london, S. matopeni, S. mbandaka S. montevideo, S. muenchen, S. oslo, S. stanley, S. tennessee, S. thompson, S. virchow S. weltevreden,
- S. paratyphi A, (phage types 2, 6, RDNC)
- S. paratyphi B, (phage types Taunton, RDNC)
- S. typhi (phage types A, B2, E1, 0, 46, 51, untypable and degraded)
- S. typhimurium (phage types 9, 135)
- S. 3, 10: r: - and S. - : 1V: 1,6.

B. Shigella species 21 persons had acquired shigella infections overseas which included:

- Sh. dysenteriae 1 (isolated from a 31 year old female)
- Sh. sonnei

  - biotype A (isolated from 6 persons)
  - biotype G (isolated from 2 persons)

- Sh. flexneri types 1b, 2a, 3a, 3c, 4a and 6.
- Sh. boydii 5

Other enteric pathogens of interest included:

- V. cholerae 01 el Tor serotype Ogawa was isolated from a 15 year old male who had called into Hong Kong and Manila on his return from a world trip.
- V. parahaemolyticus was isolated from a 44 year old female who had been working in Burma.

CLUSTERS OF ENTERIC INFECTIONS:

S. typhimurium 9 isolations for this quarter remained high in New South Wales and Victoria but were lower in the ACT. The demographic pattern of isolates observed in the previous quarter remained unchanged for this quarter with the majority of cases reported in children under 10. It was also noted that all the cases reported from Queensland for this period were all resistant to Streptomycin and sulphonamides.

S. heidelberg appeared for the first time in the 10 most common serotypes with 14 cases reported for this quarter. Nine of the cases were reported from Victoria with eight of these involving children under 5 years. All the Victorian isolates were resistant to streptomycin, sulphonamides and spectinomycin. An outbreak of this serotype was reported in CDI 86/5.

A total of 36 family outbreaks involving 2 or more people have been reported for this quarter. Twenty five outbreaks were caused by Salmonella serotypes, 7 by Shigella serotypes and 4 by Campylobacter species.

National Salmonella Surveillance Scheme
Human Isolates - 4th quarter 1985

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. abaetetuba	1								1
S. aberdeen	4				4				
S. abony	4		1		3				
S. adelaide	19	1	3	3	7	1	1		3
S. agona	11		2	4	1	3	1		
S. alsterdorf subgenus II	1					1			
S. anatum	27			2	13		9		3
S. anatum var 15+	4				4				
S. arizonae	3				2	1			
S. augustenborg	1		1						
S. bahrenfeld	2								2
S. ball	6				3				3
S. bareilly	1		1						
S. birkenhead	19		8		9	2			
S. blockley	8		2	5			1		
S. bovismorbificans	18		15	1			2		
S. bovismorbificans 13	2						2		
S. bovismorbificans 19	2						2		
S. bovismorbificans 23	7		1				6		
S. bovismorbificans 4	1						1		
S. bovismorbificans 7	3		1			1			1
S. bovismorbificans RDNC	1					1			
S. braenderup	2		2						
S. bredeney	12		1		2		4		5
S. bukavu	1						1		
S. cerro	1				1				
S. charity	1		1						
S. chester	33		6		11		6		10
S. cholerae - suis	1		1						
S. derby	18		2	12	3	1			

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. dublin	2		2						
S. eastbourne	4				1		2		1
S. emek	2			2					
S. emmastad	1				1				
S. enteritidis	13		2	2	9				
S. fremantle subgenus II	1				1				
S. give	12			2	2		7		1
S. haardt	1						1		
S. havana	29			3	5	5	9	1	6
S. heidelberg	30		5	9	14		1		1
S. hessarek var 27	2					2			
S. houten subgenus IV	1			1					
S. hvittingfoss	4				2		2		
S. infantis	22		5	6	5		5		1
S. irimu	1		1						
S. jangwani	1						1		
S. java	2		2						
S. java 1 var 6	1								1
S. java Battersea	3						1		2
S. java Dundee	1						1		
S. javiana	5				5				
S. johannesburg	2		1	1					
S. kentucky	2						1		1
S. kinondoni	1		1						
S. kottbus	3		1	1					1
S. lansing	10				7		1		2
S. lexington	1						1		
S. litchfield	5				1		2		2
S. london	1	1							
S. matopeni	1			1					
S. mbandaka	5			4			1		
S. mississippi	6							6	
S. montevideo	8		1	1	1	1	4		
S. muenchen	34		6	1	6		15		6
S. newport	4		3		1				
S. ohio	5	1		4					
S. ohlstedt	1						1		
S. onderstepoort	2				1				1
S. oranienburg	11		2				1		8
S. orientalis	3			1	2				
S. orion	5						3		2
S. orion var 15+	4		4						
S. oslo	1			1					
S. panama	1		1						
S. paratyphi A1	3			3					
S. paratyphi A2	2			2					
S. paratyphi A6	5		3	2					
S. paratyphi A RDNC	3	1	1				1		
S. paratyphi B	1						1		
S. paratyphi B RDNC	1						1		
S. paratyphi B Taunton	3		1	1		1			
S. potsdam	7		1		3	1			2
S. reading	1					1			
S. rubislaw	8				5				3
S. saintpaul	57	1	1	2	32	5	10		6
S. saintpaul 2	7						7		
S. saintpaul 6	1						1		

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
S. schwarzengrund	1		1						
S. senftenberg	6		1		1	1	3		
S. singapore	18		4	2	5	1	2		4
S. sofia subgenus II	3		2			1			
S. stanley	4		1	2			1		
S. tennessee	6					5			1
S. thompson	5			2	2				1
S. typhi*	20	1	9	8	1		1		
S. typhimurium*	427	12	125	115	32	51	70	12	10
S. 4, 12: d: -	1				1				
S. untypable 1V:1, 6	1			1					
S. untypable 1, 3, 19:1Z13Z28	1					1			
S. untypable 40:-:1, 5	1		1						
S. untypable 53:d:	1					1			
S. untypable rough: mt-	1								1
S. urbana	3				1				2
S. victoria	1			1					
S. virchow	37	3	2	7	25				
S. virginia	1				1				
S. wandsworth	4						1		3
S. waycross	3		1		2				
S. welikade	4		1		1		2		
S. weltevreden	7			3					4
S. worthington	1			1					
S. zanzibar	1				1				
S. zehlendorf	1				1				
TOTAL	1126	21	240	219	241	82	203	18	101

S. typhi *									
S. typhi	1		1						
S. typhi 46	1	1							
S. typhi 51	1		1						
S. typhi A	1		1						
S. typhi B2	1		1						
S. typhi degraded	4		1	2	1				
S. typhi E1	6		1	5					
S. typhi O	3		2	1					
S. typhi untypable	2		1				1		
TOTAL	20	1	9	8	1		1		

S. typhimurium *									
S. typhimurium	17						17		
S. typhimurium RDNC	57		23	5	2	6	17	4	
S. typhimurium RDNC +	1						1		
S. typhimurium untypable	13		3	4			4		2
phage type 3	1				1				
phage type 4	19		3	15				1	
phage type 5	7					5	1		1

Serotype	Total	ACT	NSW	VIC	QLD	SA	WA	TAS	NT
phage type 6	5		2	2			1		
phage type 8	6		1	4					1
phage type 9	66	9	27	21	4	1	3		1
phage type 12A	18		4	1	6	6		1	
phage type 13	2		2						
phage type 16	5		1		1	3			
phage type 17	1					1			
phage type 22	11		3		3		5		
phage type 24	1		1						
phage type 25	4			3		1			
phage type 26	15		1	13		1			
phage type 27	2		1				1		
phage type 29	1					1			
phage type 40	2						2		
phage type 44	17		2	14	1				
phage type 46	1			1					
phage type 52	2		1				1		
phage type 55	1			1					
phage type 58	2						2		
phage type 64	7						7		
phage type 68	2					1	1		
phage type 72	1							1	
phage type 81	3			3					
phage type 90	5		3		1	1			
phage type 96	1		1						
phage type 101	14		2		6	5		1	
phage type 102	4		2	1	1				
phage type 104	1			1					
phage type 108	10	1	2	1	3		1	1	1
phage type 116	1		1						
phage type 124	2		2						
phage type 126	1		1						
phage type 132	3					3			
phage type 135	60	1	20	19	1	13	3	1	2
phage type 141	7		1	1			3	2	
phage type 145	1		1						
phage type 151	1				1				
phage type 154	2								2
phage type 170	8		5	2	1				
phage type 179	12		9	1		2			
phage type 202	4	1		2		1			
TOTAL	427	12	125	115	32	51	70	12	10

ANNOUNCEMENT : MPH - UNIVERSITY OF SYDNEY

The School of Public Health and Tropical Medicine (University of Sydney) announces that applications should now be made for the following 1987 postgraduate courses in the areas of Public Health and Tropical Health:

. Master of Public Health
. Diploma in Tropical Public Health

which commence on 23 February 1987.

Details of entrance requirements, applications forms and further information can be obtained from:-

Mrs Susan Hudson
Academic Registrar
School of Public Health and Tropical Medicine
Building A27, University of Sydney, NSW 2006

Telephone (02) 6609323

Final closing date for applications: 30 November 1986.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 2/9/86 - 15/9/86 BULLETIN NUMBER 86/19
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	1	2	3	1	6	2	7		22
0101 ADENOVIRUS TYPE 1				3		1		2	6
0102 ADENOVIRUS TYPE 2						2		2	4
0103 ADENOVIRUS TYPE 3				1				3	4
0105 ADENOVIRUS TYPE 5			1	1		2			4
0106 ADENOVIRUS TYPE 6	1								1
0108 ADENOVIRUS TYPE 8				1					1
0199 ADENOVIRUS TYPING PENDING			1		2				3
0201 INFLUENZA A VIRUS						1	1		2
0203 INFLUENZA B VIRUS	2								2
0206 INFLUENZA A VIRUS SUBTYPE H1N1				2					2
0301 PARAINFLUENZA VIRUS TYPE 1				1	3	1	1	1	7
0302 PARAINFLUENZA VIRUS TYPE 2	1			1	4	12			18
0303 PARAINFLUENZA VIRUS TYPE 3	1				2	1	5	2	11
0399 PARAINFLUENZA VIRUS TYPING PENDING							3		3
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	22	21	3	32	56	20	60	7	221
0500 RHINOVIRUS (ALL TYPES)				3	15	4		1	23
0600 MYCOPLASMA PNEUMONIAE	2					1	1	4	8
0700 ORNITHOSIS-PSITTACOSIS	1						2		3
0904 COXSACKIEVIRUS B4						2			2
1003 ECHOVIRUS TYPE 3				1					1
1005 ECHOVIRUS TYPE 5				2					2
1011 ECHOVIRUS TYPE 11	6	1	1	2				10	20
1019 ECHOVIRUS TYPE 19						1			1
1020 ECHOVIRUS TYPE 20				2					2
1022 ECHOVIRUS TYPE 22			1						1
1100 POLIOVIRUS NOT TYPED			3						3
1101 POLIOVIRUS TYPE 1	1			1					2
1102 POLIOVIRUS TYPE 2		1				2			3
1200 MUMPS VIRUS								1	1
1300 HERPES VIRUS GROUP-NOT TYPED	12			4					16
1301 HERPES SIMPLEX VIRUS NOT-TYPED		2							2
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	7						5	7	19
1303 VARICELLA-ZOSTER VIRUS	3		1	4		2	1	4	15
1306 HERPES SIMPLEX TYPE 1	15			46		18	27	21	127
1307 HERPES SIMPLEX TYPE 2	97			61		24	61	56	299
1399 HERPES VIRUS TYPING PENDING					5			1	6
1401 COXIELLA BURNETI	7					2	7		16
1502 PICORNA VIRUS-NOT TYPED			6				8	3	17
1521 MEASLES VIRUS				1	4	1			6
1522 RUBELLA VIRUS				4			4	2	10
1532 HEPATITIS B ANTIGEN	42	3	13	21	1	11	14	19	124
1535 HEPATITIS A ANTIBODY	6			11		13	2	13	45
1541 CHLAMYDIA A - C TRACHOMATIS	43					29	17	56	145
1556 CMV - CYTOMEGALOVIRUS	5		2	18	4	9	19	11	68
1564 ROTAVIRUS	11	4	28	4	24	10			81
1571 ENTEROVIRUS TYPE 71 (BRCR)	2	1		12		4			19
1599 ENTEROVIRUS TYPING PENDING		2	8		8				18
9992 ROSS RIVER VIRUS							3		3
9994 SMALL VIRUS (LIKE) PARTICLE				1					1
Total	288	37	71	241	134	175	248	226	1,420

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 2/9/86 - 15/9/86
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
0100 ADENOVIRUS NOT TYPED.....		1									
0101 ADENOVIRUS TYPE 1.....		5									
0102 ADENOVIRUS TYPE 2.....		1				1					
0103 ADENOVIRUS TYPE 3.....		1		1					1		
0105 ADENOVIRUS TYPE 5.....	1										1
0106 ADENOVIRUS TYPE 6.....		1									
0201 INFLUENZA A VIRUS.....		1									
0203 INFLUENZA B VIRUS.....		2									
INFLUENZA A VIRUS SUBTYPE H1N1				2							
0301 PARAINFLUENZA VIRUS TYPE 1....		7									
0302 PARAINFLUENZA VIRUS TYPE 2....		18									
0303 PARAINFLUENZA VIRUS TYPE 3....		11									
0399 PARAINFLUENZA VIRUS TYPING PENDING.....		3									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	2	214				1					2
0500 RHINOVIRUS (ALL TYPES).....		20				1	2				
0600 MYCOPLASMA PNEUMONIAE.....		6		1							
0700 ORNITHOSIS-PSITTACOSIS.....	1	1									
0904 COXSACKIEVIRUS B4.....		1									
1003 ECHOVIRUS TYPE 3.....											1
1005 ECHOVIRUS TYPE 5.....		1									
1011 ECHOVIRUS TYPE 11.....	2			8		1	1				
1019 ECHOVIRUS TYPE 19.....				1							
1020 ECHOVIRUS TYPE 20.....				2							
1022 ECHOVIRUS TYPE 22.....		1									
1101 POLIOVIRUS TYPE 1.....		2									
1102 POLIOVIRUS TYPE 2.....		1					2				
1200 MUMPS VIRUS.....				1				1			
1301 HERPES SIMPLEX VIRUS NOT-TYPED											2
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	5	4									1
1303 VARICELLA-ZOSTER VIRUS.....		1									12
1306 HERPES SIMPLEX TYPE 1.....	5	9					1			2	60
1307 HERPES SIMPLEX TYPE 2.....	14			1							67
1501 COXIELLA BURNETI.....	2	1									
1502 PICORNA VIRUS-NOT TYPED.....				1							
1521 MEASLES VIRUS.....											6
1522 RUBELLA VIRUS.....	1	1									6
1532 HEPATITIS B ANTIGEN.....	52							63			
1535 HEPATITIS A ANTIBODY.....	8						1	35			
1541 CHLAMYDIA A - C.TRACHOMATIS...	19										1
1556 CMV - CYTOMEGALOVIRUS.....	6	18		1				2		4	
1564 ROTAVIRUS.....							81				
1571 ENTEROVIRUS TYPE 71 (BRCR)....		3		4							12
9992 ROSS RIVER VIRUS.....	1										1
9994 SMALL VIRUS (LIKE) PARTICLE...							1				
Total.....	119	335		23		4	89	101	1	6	172

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 2/9/86 - 15/9/86
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	1	
0103 ADENOVIRUS TYPE 3.....	1									
0105 ADENOVIRUS TYPE 5.....	1								1	
0108 ADENOVIRUS TYPE 8.....	1									
0201 INFLUENZA A VIRUS.....								1		
0206 INFLUENZA A VIRUS SUBTYPE H1N1								1		
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....			1				1	2		1
0600 MYCOPLASMA PNEUMONIAE.....								1	1	
0700 ORNITHOSIS-PSITTACOSIS.....								2		
0904 COXSACKIEVIRUS B4.....										1
1005 ECHOVIRUS TYPE 5.....								1		
1011 ECHOVIRUS TYPE 11.....								3	6	
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			7	1			2	6		
1303 VARICELLA-ZOSTER VIRUS.....					1			1	2	
1306 HERPES SIMPLEX TYPE 1.....	7	42						1		
1307 HERPES SIMPLEX TYPE 2.....		219								
1399 HERPES VIRUS TYPING PENDING...		1								
1401 COXIELLA BURNETI.....					1		4	8	2	
1522 RUBELLA VIRUS.....					2			3	2	
1532 HEPATITIS B ANTIGEN.....									9	
1535 HEPATITIS A ANTIBODY.....									1	
1541 CHLAMYDIA A - C.TRACHOMATIS...	1	124								
1556 CMV - CYTOMEGALOVIRUS.....		5	1	2		7	2	6	17	
1571 ENTEROVIRUS TYPE 71 (BRCR)....							1			
9992 ROSS RIVER VIRUS.....					1					
Total.....	11	391	9	3	5	7	10	37	43	