ISSN 0725-3141

Communicable Diseases Intelligence

Bulletin number 85/8
Issue date: 19 April 1985

Contents:

VIRUS REPORTING SCHEME - A total of 1,082 reports were processed for this period.

Ross River Virus infections were reported from Victoria (4), New South Wales (1), Queensland (11) and Western Australia (7).

Ten cases of Q fever were reported. Details of occupational exposure were available for only two of these patients. One was a South Australian shearer and the other an employee of a Queensland feral pig abattoir. None of these patients was involved in the Q fever vaccine field trial being conducted in South Australia.

Three cases of Sudden Infant Death Syndrome were reported by the State Health Laboratory, Brisbane. Cytomegalovirus was isolated from a two year old male. In the other cases an untyped enterovirus and a picorna virus were isolated respectively from the patients (males of unstated age).

Herpes Simplex Virus Type 1 was implicated in the death of a 10 day old female baby who died from encephalitis.

Five patients had demonstrated infection with Chlamydia psittaci; exposure to birds was documented in only one case.

Other reports of interest were twelve cases of Ross River Virus and one case of Q fever in a resident of Bajool, a small rural town south of Rockhampton (personal communication — from T.B. Lynch, pathologist, Rockhampton, Queensland).

The Bulletin is compiled and distributed by the Environmental Health Branch, Department of Health, P.O. Box 100, Woden, A.C.T. 2606, Australia, and is available on request.

MULTIPLE MEASLES OUTBREAKS ON COLLEGE CAMPUSES - OHIO, MASSACHUSETTS, ILLINOIS, U.S.A. (from MMWR (1985) 34: 129-130)

Since 15 January 1985, measles outbreaks have occurred on at least three college campuses in the United States, with probable spread to three additional campuses. The first outbreak, which occurred at The Ohio State University and involved 12 confirmed cases, has been reported previously.(1) The index patient acquired measles while travelling to London and Sierra Leone. Three additional suspected cases are being investigated, and over 2,000 doses of measles vaccine have been administered to students as part of the control effort. Approximately 50,000 students are enrolled at this university.

Boston University, in Massachusetts, has been the site of a large outbreak that began at the end of January. The index patient was a student who had acquired measles while travelling in Venezuela and developed onset of rash on 29 January, 1985. As of 12 March, 82 confirmed cases have been reported among students at Boston University, which has approximately 28,000 students. In addition, related cases appear to have occurred in two students at the Massachusetts Institute of Technology, one student at Boston College, and two students at Northeastern University. To control the outbreak, Boston University required all students to provide proof of immunity to re-enter school at the end of spring break on 11 March. In addition, 5,000 doses of measles vaccine have been administered to students at college-based vaccination clinics. The Massachusetts Department of Public Health is also working with all other Boston-area colleges to adopt similar programmes to review their students' immune status and vaccinate susceptibles. Eventually, all college campuses in Massachusetts will be contacted.

The largest outbreak has occurred at Principia College, a Christian Science college in Illinois with an enrolment of 712 students, with 128 confirmed or probable cases (113 among students and 15 among other residents) reported between 15 January and 10 March. In addition, three deaths apparently related to respiratory complications from measles have occurred among students and residents at the college. Students are being required to remain on campus unless they receive vaccine or produce other evidence of immunity. To date, approximately 421 doses of vaccine have been given to students. Possible related cases have occurred in Indiana, Michigan, and New Jersey. One hundred and thirty-nine students of 712 enrolled pupils had histories of previous immunity to measles. The source of the outbreak remains unknown.

EDITORIAL COMMENT

Measles outbreaks on college campuses have been reported with increasing frequency in recent years.(2) In 1980, 1.5% of all reported cases occurred on college campuses, compared with 19.8% of all cases reported in 1983. In 1984, one large outbreak in New Hampshire involved 29 students or their family contacts at Dartmouth College, the community, and patients and staff at the community hospital.(3) The current outbreak has already involved three generations, and additional spread seems likely.

The propensity of measles to spread among college students is related to several factors, the most important of which include: (i) many college-aged students may have missed measles vaccination in the first years following licensure of measles vaccine; (ii) college students tend to congregate in large groups (e.g. dormitories, fraternities and sororities, and social and sporting events); and (iii) many colleges and universities lack immunization requirements. Since approximately 5%-15% of college-aged individuals are currently susceptible to measles when tested serologically, [4] college campuses effectively become a gathering place where large pools of susceptibles congregate. Any introduction of measles virus is likely to spread easily in such a susceptible population.

Measles outbreaks on college campuses are costly and disruptive. It is estimated that the Dartmouth outbreak cost over $30,000 to control.[3] The direct costs of controlling the 1983 outbreak at Indiana University at Bloomington exceeded $225,000.[2]

Because it is more cost-effective to prevent measles outbreaks than to attempt to control them[2], in May 1983, the American College Health Association adopted a pre-admission immunization policy recommending that, by September 1985, colleges and universities require all students born after 1956 to present documentation of immunity to measles and other vaccine-preventable diseases before matriculation. A similar recommendation was made in 1980 by the Immunization Practices Advisory Committee[5]. Several universities have already implemented such policies. In Mississippi, students registering for the first time at state-supported 4-year colleges and universities are required to furnish proof of immunity to measles and rubella. Currently, neither The Ohio State University nor the other affected colleges in Ohio have immunization requirements for matriculating students.

REFERENCES

1. MMWR (1985) 34: 89-90

2. MMWR (1983) 32: 193-5

3. MMWR (1984) 33: 549-54, 559

4. J. Am. College Health (1983) 32: 53-7

5. MMWR (1980) 29: 378-80

NATIONAL SALMONELLA SURVEILLANCE SCHEME

(Contributed by J. Taplin, J.R.L. Forsyth and L.K. Scott, Microbiological Diagnostic Unit (MDU), University of Melbourne)

The National Salmonella Surveillance Scheme (NSSS) has now been in operation for 5 years for human isolates, and for 2 years for non-human isolates. During this time good co-operation has been received from laboratories throughout Australia.

As from 1 April, 1985, new revised sets of cards have been introduced for the reporting of enteric pathogens from both human and non-human sources. Non-human cards cover isolations

from animals, environment and water, foodstuffs/pharmaceutical products, egg and egg products, and milk and milk products. The cards have been sent to all submitting laboratories with instructions for their completion.

The cards may be submitted with cultures for identification to the Salmonella Reference Laboratory (SRL) in Adelaide, to the Bacteriology Laboratory at the Institute for Clinical Pathology and Medical Research (ICPMR) at Westmead NSW, or to the Microbiological Diagnositc Unit (MDU) at Melbourne University. When the culture has been identified, the card is forwarded to the MDU for entry into the computer data base which is used to generate the quarterly reports which appear in C.D.I. and to monitor fluctuations in numbers of isolations of particular serotypes and to alert health authorities of these occurrences. For laboratories which identify their own cultures (e.g. Campylobacter, Shigellas) the cards may be submitted direct to MDU.

Laboratories which require more cards or cards of a different kind are asked to contact MDU, the SRL or ICPMR. All laboratories have been given a code name to assist in filling in the cards. If any laboratory has not been given a code they should write to the MDU.

The scheme is designed for:

(a) Salmonella species

(b) Shigella species

(c) Campylobacter species:-

(differentiate C. jejuni - hydrolyses hippurate
C. laridis - nalidixic acid resistant
C. coli
or C. species)

The scheme is now being expanded to include:

(d) Vibrio species

(e) Yersinia enterocolitica

Y. fredericksenii
Y. intermedia
Y. kristensenii

(f) Escherichia coli - only where there is definite evidence of markers of enteric pathogenicity

(e.g. EPEC - serotype
ETEC - LT, ST toxin production
EIEC - Sereny test, serotype)

AND evidence of association with disease, e.g. isolated from cases or from water or food etc. consumed by cases.

It is hoped that the new format for the cards will be simpler for laboratories to complete and also that it will be possible to get a more complete epidemiological picture of the state of enteric disease in Australia.

SALMONELLA SURVEILLANCE - NON-HUMAN ISOLATES

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

2326 salmonella reports were collated by the National Salmonella Surveillance Scheme (NSSS) during July - September 1984. A State distribution and comparison of the reports with the same period in 1983 is given in Table 1. There has been a fall of 352 isolations compared with the second quarter of 1984, which has come mainly from Western Australia and Queensland.

Table 1. State distribution of salmonella reports from non-human sources for the third quarters of 1983 and 1984

State	July-September 1984	July-September 1983
Australian Capital Territory (ACT)	11	-
New South Wales (NSW)	123	84
Victoria (Vic)	747	293
Queensland (QLD)	40	18
South Australia (SA)	38	9
Northern Territory (NT)	70	18
Western Australia (WA)	1276	892
Tasmania (Tas)	21	-
Total	2326	1314

FOODSTUFFS

There were further isolations of S.4,12:d:- (NSW 28, QLD 1) S. singapore (NSW 3) and S. senftenberg (NSW 6) from the dehydrated meal reported in the second quarter report.

The following serotypes were isolated from imported foods:

- S. binza from Indian fenugreek seed (NSW)
- S. mbandaka from white pepper (NSW)
- S. weltevreden from Thai dried shrimp (Vic)
- S. anatum from Thai dried salmon (Vic)
- S. senftenberg from Philippines coconut (WA)
- A sucrose positive variant of S. senftenberg was also isolated in Victoria.
- Other serotypes isolated from coconut in WA included S. bareilly, S. derby, S. java and S. weltevreden
- S. tennessee from West African cocoa powder (Vic)
- S. saint paul (NSW) was isolated from boiled milk from an airline meal prepared in India and
- S. havana (NSW) from cold chicken also from an airline meal prepared in India.

DAIRY PRODUCTS - The following were isolated from dairy products:

- S. anatum from raw goats milk (QLD).
- S. agona from skim milk powder (Vic). (The factory has had isolations of S. agona from environmental samples).
- S. dublin (NSW) from skim milk.
- S. havana from cheese powder (Vic), milk powder (NSW) and skim milk powder and full cream milk powder (Vic). (S. havana had been isolated from the environment of this last factory).

. S. newport (Vic) from skim milk powder. S. newport was also isolated from environmental samples. This factory had a problem with S. newport in 1977.
. S. ohio from milk powder and raw milk (NSW).
. S. anatum, S. agona, S. derby, S. havana, S. newport and S. ohio were all isolated from Victorian dairy factories.
. S. infantis was isolated for the first time from a dairy factory which previously had S. havana and S. anatum.
. An H_2S negative variant of S. ohio was isolated from a factory in Victoria.

EGG PRODUCTS - The following serotypes occurred in egg products:

S. decatur (WA), S. eimsbuettel (NSW), S. enteritidis (Vic), S. havana (Vic), S. infantis (21 from Victoria), S. ohio (Vic), S. singapore (Vic 5, NSW 1), S. tennessee (WA 13), S. typhimurium (WA 4), S. typhimurium phage type 135 (Vic 12, NSW 4), S. typhimurium phage type 55 (WA), S. typhimurium untypable (Vic 1, NSW 6)

Western Australia reported a total of 29 serotypes in 229 isolations from foods and food processing sources. S. infantis, S. sofia and S. typhimurium were predominant in chicken, S. give, S. senftenberg and S. typhimurium in beef; S. typhimurium, S. havana in mutton and S. saint paul in buffalo. In meat products S. lansing, S. java, S. sofia, S. oranienburg and S. give were isolated from beefburgers or burger mixes; and S. adelaide, S. anatum, S. bovis-morbificans, S. chester, S. derby and S. typhimurium were isolated from sausages and sausage casings.

Apart from S. sofia in Victoria there were few isolates of Salmonella serotypes reported from chicken sources.

S. typhimurium UDNC (culture reacts with typing phages but does not conform to a known phage type) was isolated from oysters during routine screening in NSW.

ANIMALS

S. dublin was the most commonly isolated serotype from cattle- 67 of 112 bovine isolates (60%) - all except 3 (NSW) came from Victoria. It was given as possible cause of abortion in 5 instances. S. dublin was isolated from synovial fluid of an animal with septic arthritis. S. dublin was isolated from 4 different pieces of abattoir equipment. Other serotypes associated with cattle were S. bredeney (NT), S. birkenhead (QLD), S. chester (NT & QLD), S. give (NT), S. johannesburg (QLD), S. muenchen (NT), S. newington (NT), S. orion (NT), S. orientalis (Vic), S. saint paul (NSW, NT), S. senftenberg (NT), S. singapore (Vic), S. tennessee (NT), S. urbana (NT), S. zanzibar (QLD) and S. typhimurium - 37 isolates (33%).

Phage types of S. typhimurium included: types 12A, 135, 170, 31, 44, 6, 64, 9 and UDNC from Victoria; type 135 and 44 from NSW; types 156 and 4 from SA; types 16 and 3 from QLD; 3 isolates from NT were untypable and 3 isolates from WA were not typed.

There were 224 isolates associated with pigs. Three serotypes, S. derby (41%), S. anatum (25%) and S. give (14%) accounted for 80% of the isolates. Except for 10 isolates (QLD 7, WA 2, TAS 1) all came from a continuing study of pig carcasses from

Victorian abattoirs. Other serotypes isolated from pigs were (S. agona (WA 6, Vic 1) S. bovis - morbificans (WA, VIC), S. bredeney (Vic), S. eimsbuettel (QLD), S. newbrunswick (QLD), S. nienstedten (Vic), S. stanley (Vic), S. worthington (QLD) S. 4,12:d:- (QLD 6). There were 12 isolates of S. typhimurium-phage type 68 (NSW), phage type 135 (NSW & Vic), untypable (NSW & Vic) and 3 isolates from WA were not phage typed.

The survey of pig lairage in Victoria included isolates of:

S. anatum (20), S. bovis-morbificans (30), S. derby (53), S. havana (13), S. infantis (13), and S. 4,12:d:- (8) and occasional isolates of S. adelaide, S. agona, S. bredeney, S. chester, S. eimsbuettel, S. give, S. newington, S. nienstedten, S. oranienburg, S. stanley and S. typhimurium (phage types 135, 175, 29, 41, 44, 8 and untypable).

There was one isolate of S. cholerae-suis var Kunzendorf from a porcine lairage.

There were 12 isolates from sheep - S. typhimurium phage type 9 (3) and S. sofia from Victoria, S. organienburg from Tasmania and S. havana (2) and S. typhimurium (5) from WA.

The eight isolates from horses included S. bovis-morbificans type 4 and S. rubislaw from SA, S. litchfield from Tasmania and S. typhimurium and an untypable Salmonella from WA.

In WA serotypes isolated from wild life were:

. from kangaroos - S. fremantle and S. typhimurium.
. from quokkas - S. adelaide, S. anatum, S. arizonae, S. cerro, S. havana, S. infantis, S. muenchen, S. wandsbek, S. waycross and S. typhimurium.

A survey of mice from the mouse plague in Victoria gave S. typhimurium phage type 4 (3), S. typhimurium phage type 9 (1) S. typhimurium phage type 135 (2).

S. mississippi was isolated 5 times from native animals and twice from river water in Tasmania.

WATERS AND EFFLUENTS

Western Australia - Fourteen isolations comprising 4 serotypes (S. adelaide, S. agona, S. typhimurium and S. weltevreden) were identified from water supplies with 8 isolations from bores and wells and 6 from sumps and storage tanks.

All 6 metropolitan isolations were from an island holiday resort supply and no water sources were directly implicated in human infection.

Strains isolated from sewerage stations were consistent with established patterns, the major serotypes being S. orion, S. typhimurium, S. chester, S. muenchen, S. havana and S. infantis.

Effluents from abattoirs, & meat and poultry processing establishments yielded the normal range of serotypes (S. adelaide, S. anatum, S. bovis-morbificans, S. chester, S. derby, S. give, S. havana, S. infantis, S. livingstone, S. orion and S. typhimurium being the most common).

S. agona was detected for the first time in abattoir effluents at a small abattoir and smallgoods producing operation. Follow-up revealed widespread contamination at the abattoir and in the offal and sausage casings supplied to the small goods trade and animal feed industry (State Health Laboratory Services, Health Dept, WA. Quarterly report July - September, 1984).

Victoria - S. paratyphi B type 3aI Var 4 was isolated from the same plant twice during a sewage monitoring programme at 3 sites in Melbourne. A further 30 isolates included S. 4,12:d:-, S. adelaide, S. bovis-morbificans, S. derby, S. give, S. havana, S. newington, S. saint paul, and S. typhimurium phage types 135 and 9.

The only isolates from potable waters were S. houten (SG IV) and S. singapore.

New South Wales - The following serotypes were isolated from water: S. birkenhead, S. brandenburg (from a dam), S. hvittingfoss, and from sea water, S. derby, S. heidelberg and S. virchow.

Queensland - S. arizonae (3), S. birkenhead, and S. orion, were isolated from river water and S. orientalis from dam water.

(Note: (i) Comments on W.A. isolations were taken from the State Health Laboratory Services Quarterly Report July - Sept 1984.

(ii) the Microbiological Diagnostic unit also reported Sh. flexneri 2A (Vic) from a monkey with bloody diarrhoea).

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 28/3/85 — 10/4/85 BULLETIN NUMBER 85/8

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		5			2	9		17
0101 ADENOVIRUS TYPE 1	1			1		3			5
0102 ADENOVIRUS TYPE 2	4			1		1		2	8
0103 ADENOVIRUS TYPE 3	1	1				3			5
0105 ADENOVIRUS TYPE 5						1			1
0107 ADENOVIRUS TYPE 7								1	1
0108 ADENOVIRUS TYPE 8						1			1
0111 ADENOVIRUS TYPE 11				1					1
0119 ADENOVIRUS TYPE 19	1			1		1			3
0199 ADENOVIRUS TYPING PENDING					3	1			4
0201 INFLUENZA A VIRUS								2	2
0203 INFLUENZA B VIRUS								1	1
0301 PARAINFLUENZA VIRUS TYPE 1					1	4			5
0302 PARAINFLUENZA VIRUS TYPE 2	1				2		2		5
0303 PARAINFLUENZA VIRUS TYPE 3	1	1			3	1		1	7
0399 PARAINFLUENZA VIRUS TYPING PENDING						3	4		7
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	5	6	1	1	5	2	2		22
0500 RHINOVIRUS (ALL TYPES)				4	6	8	2	2	22
0600 MYCOPLASMA PNEUMONIAE	4								4
0700 ORNITHOSIS-PSITTACOSIS	3			1				1	5
0809 COXSACKIEVIRUS A9	1					1		1	3
0901 COXSACKIEVIRUS B1		1							1
0904 COXSACKIEVIRUS B4						3			3
0905 COXSACKIEVIRUS B5	2					1		1	4
1003 ECHOVIRUS TYPE 3	1								1
1005 ECHOVIRUS TYPE 5				2					2
1006 ECHOVIRUS TYPE 6				1					1
1007 ECHOVIRUS TYPE 7	4	4	1	1					10
1012 ECHOVIRUS TYPE 12						1			1
1013 ECHOVIRUS TYPE 13								1	1
1016 ECHOVIRUS TYPE 16				1					1
1020 ECHOVIRUS TYPE 20				2					2
1021 ECHOVIRUS TYPE 21				1					1
1022 ECHOVIRUS TYPE 22				1		1			2
1031 ECHOVIRUS TYPE 31	1			1					2
1033 ECHOVIRUS TYPE 33				1					1
1100 POLIOVIRUS NOT TYPED			2						2
1101 POLIOVIRUS TYPE 1						1			1
1102 POLIOVIRUS TYPE 2	2								2
1103 POLIOVIRUS TYPE 3								1	1
1200 MUMPS VIRUS	2			7	1				10
1300 HERPES VIRUS GROUP-NOT TYPED	18		4	2				3	27
1301 HERPES SIMPLEX VIRUS NOT-TYPED		3		2				2	7
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	12	1		12				5	30
1303 VARICELLA-ZOSTER VIRUS	5	1	1	2			1	1	11
1306 HERPES SIMPLEX TYPE 1	24		6	20		18	18	13	99
1307 HERPES SIMPLEX TYPE 2	135		25	44		26	81	36	347
1399 HERPES VIRUS TYPING PENDING					1	4			5
1401 COXIELLA BURNETI	3					2	5		10
1502 PICORNA VIRUS-NOT TYPED	2		12				19		33
1521 MEASLES VIRUS	2			1					3
1522 RUBELLA VIRUS	2					1	1		4
1531 HEPATITIS B VIRUS		3		16					19
1532 HEPATITIS B ANTIGEN	46		10			31	14		101
1535 HEPATITIS A ANTIBODY	5		3	3		4			15
1541 CHLAMYDIA A - C TRACHOMATIS	34		5				8	34	81
1556 CMV - CYTOMEGALOVIRUS	16		1	11	4		5	11	48
1564 ROTAVIRUS		2	4		2	11			19
1566 NORWALK AGENT				1					1
1599 ENTEROVIRUS TYPING PENDING			16		4	1			21
9992 ROSS RIVER VIRUS				5			11	7	23
Total	339	23	96	147	32	137	182	126	1,082

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 28/3/85 to 10/4/85 ....
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	Respir-atory	Enceph-alitis	Mening-itis	Para-lysis	CNS other unspec	GI	Hepa-tic	CVS	Urin-ary	Skin/ mucs memb
0100 ADENOVIRUS NOT TYPED.....		6		1			5				
0101 ADENOVIRUS TYPE 1.....		3					2				
0102 ADENOVIRUS TYPE 2.....		2				1	3	1			
0103 ADENOVIRUS TYPE 3.....	1	1					3				
0105 ADENOVIRUS TYPE 5.....		1									
0107 ADENOVIRUS TYPE 7.....	1										
0111 ADENOVIRUS TYPE 11.....										1	
0301 PARAINFLUENZA VIRUS TYPE 1....		5									
0302 PARAINFLUENZA VIRUS TYPE 2....		5									
0303 PARAINFLUENZA VIRUS TYPE 3....	1	5		1							
0399 PARAINFLUENZA VIRUS TYPING PENDING.....		1									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		20		1							
0500 RHINOVIRUS (ALL TYPES).....		16									
0600 MYCOPLASMA PNEUMONIAE.....	1	2									
0700 ORNITHOSIS-PSITTACOSIS.....		4				1					
0809 COXSACKIEVIRUS A9.....		1									1
0901 COXSACKIEVIRUS B1.....				1							
0904 COXSACKIEVIRUS B4.....		1					1				
0905 COXSACKIEVIRUS B5.....		1		3							
1003 ECHOVIRUS TYPE 3.....		1					1				
1005 ECHOVIRUS TYPE 5.....				1			1				
1007 ECHOVIRUS TYPE 7.....		3		4			1				
1012 ECHOVIRUS TYPE 12.....							1				
1013 ECHOVIRUS TYPE 13.....				1							
1016 ECHOVIRUS TYPE 16.....											1
1020 ECHOVIRUS TYPE 20.....		1		1							
1021 ECHOVIRUS TYPE 21.....		1									
1022 ECHOVIRUS TYPE 22.....				1			1				
1033 ECHOVIRUS TYPE 33.....				1							
1100 POLIOVIRUS NOT TYPED.....							2				
1101 POLIOVIRUS TYPE 1.....		1									
1300 HERPES VIRUS GROUP-NOT TYPED..	2										14
1301 HERPES SIMPLEX VIRUS NOT-TYPED				2							5
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	3	2						1			
1303 VARICELLA-ZOSTER VIRUS.....	1										9
1306 HERPES SIMPLEX TYPE 1.....	6	8	1	1						1	40
1307 HERPES SIMPLEX TYPE 2.....	18										40
1401 COXIELLA BURNETI.....	4							2			
1502 PICORNA VIRUS-NOT TYPED.....	2	1	1	10			11		1		1
1521 MEASLES VIRUS.....	1										2
1522 RUBELLA VIRUS.....											4
1531 HEPATITIS B VIRUS.....	12							7			
1532 HEPATITIS B ANTIGEN.....	32							41			
1535 HEPATITIS A ANTIBODY.....	1							13			
1556 CMV - CYTOMEGALOVIRUS.....	8	4						1		6	
1564 ROTAVIRUS.....	1						17				
1599 ENTEROVIRUS TYPING PENDING....				1							
9992 ROSS RIVER VIRUS.....	2										8
Total.....	97	96	2	30		2	49	66	1	8	125

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 28/3/85 to 10/4/85 ...
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
0100 ADENOVIRUS NOT TYPED.....	4	1								
0102 ADENOVIRUS TYPE 2.....	1						2			
0108 ADENOVIRUS TYPE 8.....	1									
0119 ADENOVIRUS TYPE 19.....	1	2								
0201 INFLUENZA A VIRUS.....								2		
0203 INFLUENZA B VIRUS.....									1	
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....									1	
0500 RHINOVIRUS (ALL TYPES).....							1	1		
0600 MYCOPLASMA PNEUMONIAE.....							1			
0809 COXSACKIEVIRUS A9.....							1			
0904 COXSACKIEVIRUS B4.....							1			
1005 ECHOVIRUS TYPE 5.....								1		
1006 ECHOVIRUS TYPE 6.....									1	
1007 ECHOVIRUS TYPE 7.....									2	
1016 ECHOVIRUS TYPE 16.....								1		
1021 ECHOVIRUS TYPE 21.....								1		
1031 ECHOVIRUS TYPE 31.....							1	1		
1102 POLIOVIRUS TYPE 2.....						1		1		
1103 POLIOVIRUS TYPE 3.....								1		
1200 MUMPS VIRUS.....			10							
1300 HERPES VIRUS GROUP-NOT TYPED..		10								
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			20	2	1		2	1	1	
1303 VARICELLA-ZOSTER VIRUS.....									1	
1306 HERPES SIMPLEX TYPE 1.....	3	32					3	2	3	
1307 HERPES SIMPLEX TYPE 2.....		287							2	
1401 COXIELLA BURNETI.....					1		1	4		
1502 PICORNA VIRUS-NOT TYPED.....								3	1	2
1522 RUBELLA VIRUS.....					1			1		
1532 HEPATITIS B ANTIGEN.....									28	
1535 HEPATITIS A ANTIBODY.....									1	
1541 CHLAMYDIA A - C.TRACHOMATIS...		81								
1556 CMV - CYTOMEGALOVIRUS.....		11	1			4	1		13	
1564 ROTAVIRUS.....								1		
1566 NORWALK AGENT.....									1	
9992 ROSS RIVER VIRUS.....					15			2	4	
Total.....	10	424	31	2	18	5	14	23	60	2