



Communicable Diseases Intelligence

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- . 'Viral diseases in S.E. Asia and the Western Pacific' Symposium - 1982.

VIRUS REPORTING SCHEME - A total of 841 reports were received this period. Reports of interest include:

- . Influenza A virus, resembling A/Bangkok/1/79, was isolated by the Royal Children's Hospital, Melbourne, from a three year old boy presenting with croup of 12 hours duration.
- . Rotavirus infection was diagnosed by the Institute of Clinical Pathology and Medical Research in three infants implicated in a ward outbreak of gastro-enteritis at the Royal Alexandra Hospital for Children, Sydney. Astrovirus was also identified in the faecal specimens of one infant.
- . Two patients with less common forms of tuberculosis were recently admitted to Fairfield Hospital, Melbourne. A 36 year old male presented with tuberculosis of the spine, and a 31 year old male alcoholic presented with a large left-sided empyema. The pleural pus contained both acid-fast and Gram-negative anaerobic bacilli.
- . A four year old girl who returned from New Hebrides 15 months previously was admitted to Fairfield Hospital with vivax malaria. This infection had recurred despite two previous complete eradicated treatments with chloroquine and primaquine. Her third attack responded well to the same treatment regimen.

SALMONELLA PARATYPHI A INFECTION IN TRAVELLERS FROM S.E. ASIA

(Contributed by J.W. Pearman, K.J. Christiansen and J.K. Stewart, Royal Perth Hospital, and V.W. Bamford, State Health Laboratory Services, Perth).

Two cases of S. paratyphi A infection were diagnosed during March 1981 in adults who had recently returned from S.E. Asia.

- Seventeen days after returning from Bali on 1 February 1981, an 18 year old female developed a generalized rash and fever. Rubella infection was diagnosed by her family doctor, and both the rash and fever resolved after three days. Six days later she again developed fever, with night sweats, rigors, bitemporal headache and vomiting. Amoxycillin was prescribed, but there was no diminution of fever, and diarrhoea developed four days later. The treatment was changed to cotrimoxazole, but because of continuing symptoms she was admitted to the Royal Perth Hospital the following day with high fever, diarrhoea, vomiting and dehydration. On admission her temperature was 40.2°C, the pulse rate 95/minute, but apart from slight dehydration there were no other abnormal findings. She was barrier nursed and rehydrated with intravenous fluids. S. paratyphi A was isolated from two samples of venous blood cultured under aerobic and anaerobic conditions. The organism was sensitive to tetracycline, amoxycillin, cotrimoxazole and chloramphenicol. Serological testing indicated an antibody titre of 1/80 against paratyphi A'H' antigen but no detectable antibody to a range of salmonella 'O' antigens including paratyphi A'O' antigen.

Chloramphenicol was given orally at 50 mg/kg/day in four divided doses for ten days. The fever subsided rapidly with her temperature returning to normal in 36 hours, and the patient was discharged on day 13 of hospitalisation. Two faecal specimens cultured before chloramphenicol treatment, one during treatment and one 3½ weeks following treatment were negative for S. paratyphi A. Faecal specimens taken from the patient's parents (three each) and from four close contacts in follow-up studies by the State Health Laboratory Services were also negative.

- The second patient was a 31 year old male Chinese travel consultant who had been to Singapore, Kuala Lumpur and Malaysia two weeks previously. He developed fever, vertigo and diarrhoea (8-10 bowel actions/day, no blood) while overseas, but the condition was diagnosed as a viral illness from which he appeared to recover. One and a half weeks later he developed a recurrence of fever, diarrhoea (containing blood) and a nose bleed (once). During the previous two weeks he had lost 3 kg in weight. The patient was febrile (37.9°C), but with no other abnormal presentation. S. paratyphi A was isolated from faecal specimens but not from the one venous blood sample. The Widal test showed an antibody titre of 1/40 against paratyphi A'H' antigen, but no detectable antibody against paratyphi A'O' antigen.

Amoxycillin 500 mg q.i.d. orally was administered for 14 days. Follow-up cultures of the patient's faecal specimens taken one and five weeks after completion of chemotherapy were all pathogen-free, as were the three faecal specimens taken from the patient's wife.

These two cases highlight the importance of having a high index of suspicion of an exotic illness, particularly enteric fever, for patients who have returned from S.E. Asia with fever, rash or diarrhoea.

NON-SEXUALLY TRANSMITTED GONOCOCCAL CONJUNCTIVITIS

(Contributed by R. Matters, Pathology Laboratory, Alice Springs Hospital, Northern Territory).

During the period 13 May-17 June 1981, the Pathology Laboratory of the Alice Springs Hospital examined smears and swabs from 48 suspected cases of gonococcal conjunctivitis. N. gonorrhoeae was cultured from ocular swabs taken from 23 patients. In a further seven patients, intracellular Gram-negative diplococci (GND) were identified from direct smears, although no organisms could be cultured.

All isolates were from Aboriginals aged between six months and 40 years living in settlements encompassing a wide area in the Northern Territory, Western and South Australia. The settlements included Yuendumu, Papunya, Willowra, Wingelina, Pipalyatjara and a fringe settlement of Alice Springs. Swabs taken from patients at Wingelina and Pipalyatjara were three days old before examination. Only a suspected diagnosis of gonococcal conjunctivitis was made for these patients since although specimens were GND positive for smears, no organisms could be cultured.

The initial isolates were identified using Young's rapid carbohydrate utilization test⁽¹⁾. Two isolates were confirmed as N. gonorrhoeae by the Institute of Medical and Veterinary Science, Adelaide, and MIC testing gave the following values; penicillin - 0.01 µg/ml; tetracycline 0.5 µg/ml and spectinomycin 15 µg/ml. Cases were treated with penicillin eyedrops and oral amoxycillin. A 100% recovery rate has been achieved to date, with no scarring of the eyes.

The epidemiology of the outbreak is obscure because of the difficulty in obtaining case details and the extensive movement of Aboriginals between settlements. Although the inter-settlement travel has probably resulted in the wide spread of the disease, the actual mode of person-to-person transmission is speculative. A similar outbreak has occurred at Warburton in Western Australia, where five Aboriginals showed intracellular GND on direct smear examination. No organisms were isolated on culture. The ages of the patients ranged from three to 18 years, and all presented with the classical gonococcal conjunctivitis with copious purulent discharge from the eyes. This suspected outbreak occurred before any positive isolations were made in the Northern Territory, and no direct link could be established between the Warburton outbreak and those described in the settlements affected.

The outbreak illustrates the value of direct smears where swabs from patients in remote areas cannot be cultured within optimum time.

Reference

1. Brit. J. Vener. Dis. (1976) 52 : 172

AMPICILLIN-RESISTANT SHIGELLA FLEXNERI - NORTH QUEENSLAND

(Contributed by R.W. Guard, Commonwealth Pathology Laboratory, Cairns)

Since February 1981 there has been a marked increase in the number of ampicillin-resistant Shigella flexneri infections in North Queensland, from Tully northwards (see also CDI 81/10). Twenty-four isolations have been made this year, with three organisms isolated in February, four in March, six in April, eight in May and three to date in June. Of these isolates, 21 also showed resistance to tetracycline and cotrimoxazole. Testing was done by the Kirby Bauer disc technique.

Sources indicated a wide community distribution, so it was not possible to link all cases. Thirteen patients were from the Yarrabah Aboriginal community near Cairns, five were from recent Vietnamese immigrants at Innisfail, and the remainder were of individual cases at Normanton, Cairns, Mareeba and Aurukun.

A review of the laboratory records for the last five years has indicated only one previous case of S. flexneri ampicillin-resistance in the region. This isolation was from a patient from the Lockart River Community, Cape York, in March 1980.

POLIOVIRUS ANTIBODY LEVELS IN SYDNEY SCHOOLCHILDREN

(Contributed by P. Christopher, Health Commission of New South Wales, and A. Murphy, Institute of Clinical Pathology and Medical Research, Sydney).

The following has been extracted from an extensive study on the poliovirus immune status of 329 Sydney schoolchildren; a complete report will be published elsewhere.

A survey was undertaken between 20 November-12 December 1980, at four inner Sydney schools situated in Surry Hills (two), Chippendale and Darlinghurst. Antibody titres were measured by specific neutralization since the more sensitive ELISA technique could not be adapted in time for the study. Antibody titres of $\geq 1/8$ were regarded as protective in this study.

Of the 329 children tested, 42% had immunity with all three type specific antibodies; 30% had two antibodies; 16% had one and 12% had no detectable antibody. Poliovirus type 1 antibody was present in 64% of children, type 2 in 74% and type 3 in 66%. A separate analysis of the 212 Australian-born children within this group indicated that 39% had all three antibodies; 31% had two; 17% had one and 13% had no antibody.

These results support the recent study by Menser et al⁽¹⁾. Both deviate from the earlier study of poliomyelitis immunity in NSW by Murphy et al⁽²⁾ in 1972, which reported that 78% of children in the 10-14 year age group had full immune status. The results of the two previous studies and the present survey are given in Table 1, although geographical, socioeconomic, ethnic and temporal factors may influence any direct comparison.

Table 1

Poliovirus antibody surveys in NSW schoolchildren

<u>Survey</u>	<u>No. children</u>	<u>3 antibodies</u> (3 serotypes)	<u>2 antibodies</u> (2 serotypes)	<u>1 antibody</u> (1 serotype)	<u>No antibody</u>
Murphy <i>et al.</i> (1972) (aged 10-14 yr)	185	78%	15%	5%	2%
Menser <i>et al.</i> (1980) (aged 12 yr)	569	40%	35%	17%	8%
Christopher (1980) (aged 7-12 yr)	329	42%	30%	16%	12%

Following this initial survey, a single dose of Sabin vaccine was administered to 129 children, and their post-vaccination status determined. Of these, 81% of children now had all three antibodies; 12.5% had two; 5% had one and 1.5% had no detectable antibody. Individual antibody figures gave 97% of children with type 1, 96% with type 2 and 77% with type 3. A "failure to take" vaccination was assumed for individuals who did not show a four-fold rise in antibody titre (13% for type 1; 21% for type 2; 37% for type 3). Within these figures, 3% for type 1, 5% for type 2 and 10% for type 3 were of children who had antibody titres of $< 1/8$ before vaccination.

To determine whether vaccination of the initial sero-negative population had elicited a primary or secondary response, the presence of specific IgM antibody was assayed in 44 post-immunisation sera. However, the results obtained could not be interpreted with confidence. Extraneous complications were introduced by the fact that many parents indicated a precise number of previous Sabin vaccinations (varying from one to five) for their sero-negative children.

As a result of this and the previous surveys, the Health Commission of New South Wales is re-immunising all children in the third, fourth, fifth and sixth year of primary school with a single dose of Sabin poliomyelitis vaccine. This resolution was implemented as a mass program in schools during the second school term which began on 27 May 1981. It is estimated that an additional 350,000 doses of vaccine will be required for this "once-off" exercise. A future recommendation will be for both Sabin and "Adult" Diphtheria-Tetanus (ADT) boosters to be administered at 15 years of age or at school leaving.

Editorial Comment

The NH & MRC considers that the need for supplementary or booster doses of oral poliomyelitis vaccine has yet to be established, but to ensure maximum coverage in children who may have missed one or more doses in infancy, it does recommend that a dose be given to all children on school entry at approximately five years of age.

Gradual declines in poliovirus antibody levels have been reported after immunisation, but they appear to rise promptly in response to booster doses⁽³⁾, and presumably afford protection to live wild virus exposure. Nevertheless, it is advisable to have a single booster dose before travelling to countries where poliomyelitis remains a serious problem, particularly if visiting rural or remote areas that are off the usual tourist routes. The global situation of poliomyelitis is regularly

accounted by WHO. In 1979, data were available from 158 countries and areas representing 96% of the estimated world population. In all, 35,747 cases were reported, over 9,000 fewer than in 1978⁽⁴⁾.

The 3,432 cases reported in the African Region exhibited a uniform pattern indicating that the disease is endemic in the continent, whereas the 4,489 reports from the American Region were sharply delineated between those countries where poliomyelitis is no longer a threat to public health, and those which are still having serious difficulties in controlling the disease. Brazil, Bolivia, Columbia, Honduras and Mexico accounted for 93% of the region poliomyelitis reports in 1979. In the European Region, Algeria, Morocco and Turkey accounted for 63% of reported cases, and Afganistan, Egypt, Iraq and Pakistan yielded the major proportion of reports for the Eastern Mediterranean Region. Like the American Region, the Western Pacific Region showed clear division between the developed countries where the disease is under control, and those where poliomyelitis is still prevalent (e.g. China, Philippines, Vietnam and Papua New Guinea). In the neighbouring South-East Asian Region, India, Thailand, Burma, Indonesia and Sri Lanka accounted for most of the reported cases.

It must be noted however, that many countries have joined the WHO Expanded Program on Immunization, so that the higher coverage produced with expanded and continued immunisation programs will change the disease incidence and pattern in the coming decade.

References

1. MJA (1980) 2 : 131
2. MJA (1972) 2 : 1404
3. Lancet (1982) 1 : 831
4. WER (1980) 55 : 361, 369

"VIRAL DISEASES IN S.E. ASIA AND THE WESTERN PACIFIC" SYMPOSIUM - 1982

An international seminar on 'Viral Diseases in South-East Asia and the Western Pacific' sponsored by the Australian Development Assistance Bureau, World Health Organization, Australian Academy of Science and Australian Society for Microbiology will be held at the Australian Academy of Science Canberra, on 8-12 February 1982.

The aim of the meeting will be to delineate and compare the incidence of specific viral diseases within individual nations in the two regions, and provide a forum to discuss common problems in diagnoses and control. The program will include overviews on the current state of knowledge by distinguished keynote speakers.

The seminar will be dedicated to Emeritus Professor Frank Fenner in honour of his many achievements in virology and biomedical sciences, and to mark his retirement from the Australian National University, Canberra.

Virologists interested in attending the seminar, presenting a paper or placing their names on the mailing list for subsequent circulars, should contact the organizing secretary:

Associate Professor J.S. Mackenzie,
Department of Microbiology,
University of Western Australia,
NEDLANDS. WESTERN AUSTRALIA. 6009

Participation in the seminar will be limited by venue size to about 200.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 11-6-81 - 24-6-81 BULLETIN NUMBER .
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

81/13

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	BARC (NSW)	PRD/ POW (NSW)	FAIR- FIELD (VIC)	PCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
0100 ADENOVIRUS NOT TYPED.....	5			3		5	1	12	26
0101 ADENOVIRUS TYPE 1.....					2				2
0102 ADENOVIRUS TYPE 2.....	2					1	2		5
0103 ADENOVIRUS TYPE 3.....	3			1			1		5
0104 ADENOVIRUS TYPE 4.....							1		1
0105 ADENOVIRUS TYPE 5.....				1	1				2
0119 ADENOVIRUS TYPE 19.....	1			2				1	4
0126 ADENOVIRUS TYPE 26.....				1					1
0199 ADENOVIRUS TYPING PENDING.....				3		5	5		13
0201 INFLUENZA A VIRUS.....							3	1	4
0202 INFLUENZA A VIRUS SUBTYPE H3N2.....						1			1
0203 INFLUENZA B VIRUS.....				2					2
0301 PARAINFLUENZA VIRUS TYPE 1.....	1	1				11	9	1	23
0302 PARAINFLUENZA VIRUS TYPE 2.....						2	2		4
0303 PARAINFLUENZA VIRUS TYPE 3.....						1	3		4
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....	10	16	4	9	61	5	9	1	115
0500 RHINOVIRUS (ALL TYPES).....		2	1	4	4			3	14
0600 MYCOPLASMA PNEUMONIAE.....	1			6			2	2	12
0700 ORNITHOSIS-PSITTACOSIS.....				1			1		2
0809 COXSACKIEVIRUS A9.....								1	1
0905 COXSACKIEVIRUS B5.....							1		1
1009 ECHOVIRUS TYPE 9.....	1				1			1	3
1014 ECHOVIRUS TYPE 14.....	1					1	1		4
1017 ECHOVIRUS TYPE 17.....	2								2
1022 ECHOVIRUS TYPE 22.....						2		1	3
1030 ECHOVIRUS TYPE 30.....				1		1			2
1031 ECHOVIRUS TYPE 31.....				1					1
1099 ECHOVIRUS TYPING PENDING.....								4	4
1101 POLIOVIRUS TYPE 1.....							1	2	3
1103 POLIOVIRUS TYPE 3.....								2	2
1104 POLIOVIRUS-VACCINAL STRAIN.....						3			3
1200 MUMPS VIRUS.....				4	2	4	1	1	12

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

2

REPORTING PERIOD - 11-6-81 - 24-6-81 BULLETIN NUMBER .
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

81/13

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	PCd (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1300 HERPES VIRUS GROUP-NOT TYPED.....	9		4	5		7	1		26
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....		4		2				69	75
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	9								9
1303 VARICELLA-ZOSTER VIRUS.....			1			1	1		3
1306 HERPES SIMPLEX TYPE 1.....	3		12	19		14	17		65
1307 HERPES SIMPLEX TYPE 2.....	31		13	28		12	22		106
1399 HERPES VIRUS TYPING PENDING.....			1		5	10			16
1401 COXIELLA BURNETI.....	11			1		4	7		23
1514 MOLLUSCUM CONTAGIOSUM.....						1		1	2
1516 MILKERS NODULE VIRUS.....	1								1
1521 MEASLES VIRUS.....		4		1					5
1522 RUBELLA VIRUS.....			1	3			1	2	7
1532 HEPATITIS B ANTIGEN.....	5	1	10	16	1	12	5	5	55
1535 HEPATITIS A ANTIBODY.....	3	1	2			4	1	2	13
1541 CHLAMYDIA A - TRIC TYPE.....	11		2					17	30
1556 CMV - CYTOMEGALOVIRUS.....			16	10	8	2	3		39
1562 REOVIRUS (ALL TYPES).....						1		1	2
1564 ROTAVIRUS.....	8	5	2	4	2	23			44
1565 CALICI VIRUS.....	1								1
1599 ENTEROVIRUS TYPING PENDING.....			2		6				8
ROSS RIVER VIRUS						2	21		23
ASTROVIRUS	3								3
SMALL VIRUS (LIKE) PARTICLE	3			1					4
Total.....	125	34	90	113	123	135	114	107	841

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

3

PERIOD : 11/6/81 to 24/6/81

81/13

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/mucous memb
0101 ADENOVIRUS TYPE 1.....		2									
0102 ADENOVIRUS TYPE 2.....	2						3				
0103 ADENOVIRUS TYPE 3.....							2				
0104 ADENOVIRUS TYPE 4.....							1				
0105 ADENOVIRUS TYPE 5.....		2									
0126 ADENOVIRUS TYPE 26.....							1				
0201 INFLUENZA A VIRUS.....		2						1			
0202 INFLUENZA A VIRUS SJBTYPE H3N2		1									
0301 PARAINFLUENZA VIRUS TYPE 1....		22					1		1		
0302 PARAINFLUENZA VIRUS TYPE 2....		4									
0303 PARAINFLUENZA VIRUS TYPE 3....		4									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	3	110				1					
0500 RHINOVIRUS (ALL TYPES).....		11		1							
0600 MYCOPLASMA PNEUMONIAE.....	1	9									1
0700 ORNITHOSIS-PSITTACOSIS.....		2									
0809 COXSACKIEVIRUS A9.....		1									
0905 COXSACKIEVIRUS B5.....				1							
1009 ECHOVIRUS TYPE 9.....	2										
1014 ECHOVIRUS TYPE 14.....		2	1	1			2				
1017 ECHOVIRUS TYPE 17.....							2				
1022 ECHOVIRUS TYPE 22.....	2						1				
1030 ECHOVIRUS TYPE 30.....		1		1							
1031 ECHOVIRUS TYPE 31.....				1							
1101 POLIOVIRUS TYPE 1.....		1					1				
1103 POLIOVIRUS TYPE 3.....							2				
1104 POLIOVIRUS-VACCINAL STRAIN....		1				1	1				
1200 MUMPS VIRUS.....	1	2		3							

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

4

PERIOD : 11 / 6 / 81 to 24 / 6 / 81

81/13

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.-CONTINUED

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
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1		1								40
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	3										
1303 VARICELLA-ZOSTER VIRUS.....											3
1306 HERPES SIMPLEX TYPE 1.....	1	3	3	1						1	33
1307 HERPES SIMPLEX TYPE 2.....	3										7
1401 COXIELLA BURNETI.....	2	2						1			
1514 MOLLUSCUM CONTAGIOSUM.....											1
1516 MILKERS NODULE VIRUS.....											1
1521 MEASLES VIRUS.....		1				1					4
1522 RUBELLA VIRUS.....	1	1									4
1532 HEPATITIS B ANTIGEN.....	16							36			
1535 HEPATITIS A ANTIBODY.....	1							12			
1556 CMV - CYTOMEGALOVIRUS.....	4	13				1		1		3	1
1562 REOVIRUS (ALL TYPES).....		1									1
1564 ROTAVIRUS.....							43				
1565 CALICI VIRUS.....							1				
ROSS RIVER VIRUS	1										1
ASTROVIRUS							3				
SMALL VIRUS (LIKE) PARTICLE							4				
Total.....	44	198	5	9	1	3	68	51	1	4	97

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 11/6/81 to 24/6/81 ... 81/13
 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;
 38 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/malaise	Other	SIDS
0103 ADENOVIRUS TYPE 3.....	3									
0119 ADENOVIRUS TYPE 19.....	2	2								
0201 INFLUENZA A VIRUS.....								1		
0203 INFLUENZA B VIRUS.....					1		1			
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....				1			2	1		1
0500 RHINOVIRUS (ALL TYPES).....				1						1
0600 MYCOPLASMA PNEUMONIAE.....							1	1		
1009 ECHOVIRUS TYPE 9.....								1		
1101 POLIOVIRUS TYPE 1.....										1
1200 MUMPS VIRUS.....			8				1	1		
1301 HERPES SIMPLEX VIRUS NOT-TYPED	3	31						1	1	
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .			1					3	2	
1306 HERPES SIMPLEX TYPE 1.....	5	15					1	3		
1307 HERPES SIMPLEX TYPE 2.....		96								
1401 COXIELLA BURNETI.....							4	16	1	
1514 MOLLUSCUM CONTAGIOSUM.....		1								
1522 RUBELLA VIRUS.....				1	1			1		
1532 HEPATITIS B ANTIGEN.....				1				1	1	
1541 CHLAMYDIA A - TRIC TYPE.....		30								
1556 CMV - CYTOMEGALOVIRUS.....		1		1			6	3	5	
1562 REOVIRUS (ALL TYPES).....								1		
1564 ROTAVIRUS.....										1
ROSS RIVER VIRUS					20			6		
Total.....	13	176	9	5	22		16	40	10	4