ISSN 0725-3141

Communicable Diseases Intelligence

Bulletin number 82/2
Issue date: 29 January 1982

Contents.

- Outbreak of S. typhimurium 101.
- Toxic Shock Syndrome (TSS)
  - TSS - Victoria.
  - TSS or atypical measles - USA.
- Toxigenic diphtheria bacilli and impetigo.

VIRUS REPORTING SCHEME - A total of 868 reports were received this period. Increases in mumps infections were reported by Fairfield Hospital, Melbourne (12 reports compared with 13 (two periods), 5 and 4 for the previous four periods) and the Institute of Clinical Pathology and Medical Research, Sydney (18 compared with 7 (two periods), 10 and 3). Six of the eight echovirus type 17 cases reported by the State Health Laboratory, Brisbane, were in children aged less than seven years.

- Arbovirus infections - The dengue infections reported by the State Health Laboratory, Brisbane, all originated from Thursday Island. The cases included a 36 year old line serviceman who had been on the island prior to disease onset; a 20 year old female student from Thursday Island now residing in Cairns; and eight IgM positive sera from 193 schoolchildren that were surveyed during the dengue epidemic in November 1981. All the children had sub-clinical infections. A rubella infection was also confirmed in a 20 year old male from Cairns who had previously contracted dengue fever.

  Twenty seroconversions against group A arbovirus have been detected among the sentinel chicken flocks (see CDI 81/5) established at Mildura, Barmah, Cobram, Robinvale and Swan Hill in Victoria. Apart from one seroconversion against Kunjin virus at Echuca in March, all the sentinel chicken flocks were negative for arbovirus serology in the 1980-1981 period.

- Small virus-like particles (25.6-28.3 nm in diameter) were identified by the Institute of Clinical Pathology and Medical Research, Sydney, in faecal specimens from a one year old boy with gastro-enteritis from Norfolk Island.

Other reports of interest include:

- A single isolation of Corynebacterium diphtheriae was made by the State Health Laboratory Services, Perth, from the intercostal drainage tube of a patient with mesothelioma.

- The Perth laboratory also isolated Mycobacterium marinum from a culture referred from the Royal Perth Hospital of a synovium on the wrist of a 76 year old women with rheumatoid arthritis.

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.

OUTBREAK OF S. TYPHIMURIUM PHAGE TYPE 101

(Contributed by J. Taplin, Microbiological Diagnostic Unit, University of Melbourne).

A sudden increase in the number of isolations of S. typhimurium phage type 101 in Victoria was recognized on 19 September 1981 (see CDI 82/1). Four of the seven patients were children aged less than ten years living in the eastern suburbs of Melbourne. At the beginning of September, two cases of S. typhimurium phage type 101 were reported from children aged less than two years in New South Wales, and on 22 September the first case was isolated in South Australia. Table 1 illustrates the distribution of isolates by 30 September.

TABLE 1. Distribution of S. typhimurium phage type 101 cases in September 1981.

State	First case	No. of cases	No. aged < 10 years
New South Wales	4 Sept	15	13
Victoria	19 Sept	7	4
South Australia	22 Sept	13	10
Queensland	30 Sept	1	1

Eight of the isolates from South Australia were reported from the Port Pirie/Whyalla area.

The outbreak waned in Victoria (4) and New South Wales (9) in October, but increased in South Australia with 58 new isolations. This trend continued into November (Table 2).

Table 2. Number of S. typhimurium phage type 101 cases

State	Sept.	Oct.	Nov.	Dec.	Total
New South Wales	15	9	2	-	26
Victoria	7	4	1(1)	2(1)	14
South Australia	13	58	28	7	106(2)
Queensland	1	2	1	-	4
Total	36	73	32	9	150

(1) Family outbreak - mother and two children under two years.
(2) Three isolates from Northern Territory, two in late November and one in December.

The majority of cases in South Australia came from the Adelaide suburbs and the Port Pirie/Whyalla area (36). Nine cases were also reported from the Mount Gambier area at the end of October. Children aged ten years or less accounted for over 50% of the cases in each State (Table 3).

Table 3 Age distribution of S. typhimurium phage type 101 cases.

State	Age (years)							Total
	2	3-5	6-10	11-20	21-60	>60	unknown	
New South Wales	4	6	5	2	5	-	4	26
Victoria	4	3	1	1	4	-	1	14
South Australia	17	26	11	14	25	3	10	106
Queensland	3	-	-	-	-	1	-	4
Total	28	35	17	17	34	4	15	150
Percentage	18.7%	23.3%	11.3%	11.3%	22.7%	2.7%	10%	

Family outbreaks included two in Victoria (both involved children under two years), one in New South Wales (two adults and two children) and 14 in South Australia (five involved two children, one involved three children, one involved four children, four involved one adult and one child, one involved two elderly people and two were from families where age was not specified). The phage type was also isolated from blood of a 36 year old male alcoholic with fever in the Northern Territory, and from urine from a 68 year old female in South Australia.

All investigations by the State Health Departments to date have failed to establish a common foodstuff. S. typhimurium phage type 101 is a relatively common isolate from chickens, and the only other food isolates made in the previous six months were from salami (1) and beef (1) in August.

TOXIC SHOCK SYNDROME (TSS).

TSS - Victoria
(Contributed by G.J. Rouch, Health Commission of Victoria).

Two further cases of TSS have been reported in Victoria.

- On 10 July 1981, three days after commencing a normal menstrual period using Tampax tampons, a 34 year old female was admitted to Geelong Hospital with fever (40°C), myalgia, sore throat, postural dizziness, vomiting, abdominal pain and generalized erythematous rash. Desquamation of the skin on her hands and lips occurred on 22 July. She also reported a history of pelvic inflammatory disease on 15 June (her menstrual period commenced on 8 June) when she was treated with amoxycillin and flagyl. Staphylococcus aureus phage type group 1 (RTD 29/52) was isolated from the vagina, but not from blood or throat swabs. The isolate was resistant to penicillin and ampicillin.
- A 14 year old girl from Melbourne experienced malaise at the commencement of a normal menstrual period on 9 December 1981. She later developed a sore throat and was treated with penicillin by her local medical practitioner on 10 December. However, the next day she presented with headache, disorientation, urinary and faecal incontinence, which progressed to an erythematous rash on her face and limbs, fever (38.7°C), enlarged reddened tonsils, hypotension and oliguria. She was admitted to Fairfield Hospital on 12 December. S. aureus was isolated from the vagina and nasal swabs. It was suspected that a Carefree tampon has been in-situ for 18 hours. The isolate was not typable, but was penicillin and streptomycin resistant. The patient was discharged on 19 December.

TSS or atypical measles? - California
(Based on California Morbidity (1981) No.49).

An illness initially diagnosed as atypical measles(1) was recently re-diagnosed as TSS.(2)

A 14 year old girl was hospitalized in 1973 with chills, temperature of 104°F, projectile vomiting, diarrhoea, persistent hypotension, oliguria and a diffuse cutaneous flush followed by faint papular rash spreading from the shoulders and neck to the trunk and thighs. She also had erythema of the hands and feet, and a bright red "strawberry" tongue.

Laboratory findings included WBC 16,000 with shift to the left, hyponatraemia, hypocalcaemia, hypoalbuminaemia and elevated BUN. All cultures were negative. The patient recovered within two weeks, although there was marked skin peeling on the palms and soles with loss of toenails and fingernails late in her illness.

An acute measles HI antibody titre of $<1/4$ and a convalescent titre of 1/32 three months later was recorded. On this basis, together with a history of live measles vaccine plus immunoglobulin ten years previously and live measles vaccine again at four months prior to onset, the diagnosis was concluded as atypical measles following a natural measles exposure in an immunised individual.

However, a re-examination of her history in the light of TSS indicated that her illness began on the first day of menstruation. The patient also used tampons. Accordingly, the diagnosis was changed retrospectively to TSS with a high fever, diffuse erythematous macular eruption, hypotension, late desquamation of the palms and soles and multi-organ system involvement. No vaginal culture for S. aureus was done. Atypical measles usually begins with 2-3 days of fever, headache and cough followed by a maculopapular rash which starts on the wrists and ankles and spreads centrally to the palms and soles. The rash may become vesicular or petechial. Other features include peripheral oedema, abdominal pain, chest X-ray evidence of pneumonitis, hilar adenopathy or pleural effusion and a marked measles antibody titre rise. Atypical measles occurs after measles exposure in some people who received the killed measles vaccine or the killed-lived measles vaccine combinations used in 1963-67. Reports of atypical measles in persons who received only the live virus measles vaccine are extremely rare, and such cases are reported to be less severe and are accompanied by a higher acute but somewhat lower convalescent measles antibody titre than are cases who received the former vaccines[3].

The acute and convalescent measles antibody titres in the above patient are puzzling. The absence of HI antibody (titre 1/4) in the acute specimen (obtained four months after the last dose of measles vaccine) is unusual although possible. However, the rise in titre to 1/32 obtained three months after her illness is not consistent with TSS. Possible explanations include:

- Laboratory error is unlikely since both specimens were analysed in the same laboratory at the same time.
- A non-specific polyclonal antibody-producing cell activation may have occurred, perhaps in response to a staphylococcal toxin.
- Since three months elapsed between the two specimens and measles was present in the community at the time, the patient may have been exposed to the virus, and while protected from clinical illness by prior immunisation she experienced a subclinical measles infection.

Editorial Comment

A summary of the Australian TSS cases in 1981 is given below.

TABLE 1 TSS cases in Australia - 1981 (cf. CDI 81/11)

	Location	Date	Sex	Age	Menstrual	Tampon brand
1.	Melbourne	Jan	F	30	Yes	Carefree Super (NZ)
2.	Launceston	Jan	F	20	Yes	Carefree Super (NZ)
3.	(Perth	March	F	30	Yes	Meds (Aust)
	(recurrence	August			Yes	No
4.	Sydney	March	F	15	Yes	Carefree Reg (Aust)
5.	Collie (WA)	March	F	12	Yes	Meds (Aust)
6.	Sydney	May	F	28	No	
		(Followed caesarean section)				
7.	Adelaide	May	F	31	No	
		(Followed deep abscess. Positive bacteraemia)				
8.	Geelong	July	F	34	Yes	Tampax
9.	Melbourne	Dec	F	14	Yes	Carefree
Probable retrospective cases						
R1	Adelaide	1974	F	15	Yes	Meds
R2	Sydney	1980	M	19		
		(Followed infection of biopsy wound)				
R3	Brisbane	1975	F	15	Yes	Yes, brand unknown
R4	Canberra	1979	F	32	Yes	Tampax (UK)
		(Diagnosed as severe measles. Vaginal swabs not taken)				

S. aureus was found in all cases occurring in 1981, and in those retrospective cases where swabs were taken.

Cases of TSS have recently been reported associated with the use of a diaphragm[4]. Consequently it is suggested that women should be reminded about the necessity of observing elementary hygiene precautions in the storage and repeated use of diaphragms, and should be advised to remove them not later than eight hours after insertion.

A review of the TSS cases reported to CDC in the 18 months to June 1981 has shown that 13.2% of cases were not associated with menstruation[5]. The 54 cases were associated with a variety of S. aureus infections including cutaneous or subcutaneous lesions, infected surgical wounds, bursitis, adenitis, lung abscess and primary bacteraemia or followed childbirth by vaginal delivery and caesarian section. Seventeen of the reports were in males. The clinical features of TSS not associated with menstruation and the characteristics of the S. aureus strains isolated from the patients were similar to those observed in TSS related to menstruation. A suspected case of TSS was recently reported in a 41 year old male maintenance worker following possible contamination of a leg wound by blood from disposed tampons[6].

Although vaginal cultures have incriminated S. aureus, studies have not yet catalogued the toxin responsible for the manifestations of TSS. Investigations of acute and convalescent serum taken from persons with TSS and their controls have implicated a pyrogenic enterotoxin[7], an exotoxin[8] and two protein antigens of unknown biological activity[9]. Recently the Toxic Shock Syndrome Task Force of the CDC proposed that the toxin responsible be referred to as migmatoxin (migma is the Greek word for mixture or blend), and

that the disease it produces be generically referred to as staphylococcal migmatoxinaemia[10]. TSS represents the most severe manifestations of migmatoxinaemia, and this name should continue to be used, but only when shock is present. Enhanced susceptibility in test animals, and clinical signs and symptoms of endotoxin shock in humans have also been observed[7], so that the manifestations of TSS are probably not all direct results of migmatoxinaemia.

References

1. Paed. (1976) 57 : 148
2. Paed. (1981) 67 : 942
3. Paed. (1970) 50 : 712
4. NEJM (1981) 305 : 1585
5. Lancet (1982) 1 : 1
6. Lancet (1981) 2 : 1354
7. Lancet (1981) 1 : 1017
8. J. Inf Dis. (1981) 143 : 509
9. Science (1981) 211 : 842
10. J. Inf Dis. (1981) 143 : 631

TOXIGENIC DIPHTHERIA BACILLI AND IMPETIGO

(Based on CDR (1982) 82/01 : 4).

On 26 August 1981, a 15 year old girl was admitted to isolation ward at East Birminghan Hospital. She was originally seen in outpatients because of impetigo-like lesions in the skin behind the ears, in the area of the naso-labial folds and in the axillae. The patient reported that they had been present for several years, and prior to her arrival to the UK in 1979 from Pakistan. The lesions varied in severity, with ulcerations on the side of her nose which was pierced by an ornamental pin and the nasal mucosa surrounding the pin.

The toxigenic strain of Corynebacterium diphtheriae - mitis, together with Staphylococcus aureus, were grown from all lesions. A Shick test was not done. She was given oral erythromycin and fusidic acid cream was applied to the skin. The lesions healed completely within one week at which time cultures from these sites were negative. There was a small sore in the right axilla two weeks later, but swabs were negative for pathogens.

The patient had not left the country since her arrival, and had no record of diphtheria immunisation. Six family contacts were kept under close surveillance at home. No skin lesions or throat infections were noted, and there was no history of any of her family having had similar lesions. All throat and nasal swabs before and after prophylactic treatment with erythromycin were negative. Examination of the patient's close school contacts were also culture negative. No secondary cases were known to have resulted from this incident.

The source of the case remains unknown. It is possible that the girl was primarily a nasal carrier of diphtheria bacilli and that staphylococcal impetigo became secondarily infected with C. diphtheriae. Skin diphtheria is very rare in temperate countries, but is seen in areas with severe (very hot or very cold) climatic conditions. It is considered by some to contribute towards the immunity of people in these areas.

AUSTRALIA COMMUNICABLE DISEASES INTELLIGENCE 1

REPORTING PERIOD - 7/1/82 - 20/1/82 BULLETIN NUMBER . 82/2

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	10		2		1	1	4	3	21
0101 ADENOVIRUS TYPE 1	1			1		6		1	9
0102 ADENOVIRUS TYPE 2	2					1		1	4
0103 ADENOVIRUS TYPE 3				1					1
0105 ADENOVIRUS TYPE 5						3		1	4
0107 ADENOVIRUS TYPE 7				1				1	2
0119 ADENOVIRUS TYPE 19						3		1	4
0132 ADENOVIRUS TYPE 32								1	1
0199 ADENOVIRUS TYPING PENDING			1		2	8		1	12
0201 INFLUENZA A VIRUS	1		1					1	3
0203 INFLUENZA B VIRUS	1		1						2
0301 PARAINFLUENZA VIRUS TYPE 1					5		1		6
0302 PARAINFLUENZA VIRUS TYPE 2					1				1
0303 PARAINFLUENZA VIRUS TYPE 3		2			3	5	2	6	18
0399 PARAINFLUENZA VIRUS TYPING PENDING						2	1		3
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	1		1			4		1	7
0500 RHINOVIRUS (ALL TYPES)		1		2	4	1	1		9
0600 MYCOPLASMA PNEUMONIAE	4		2	1		1	8	2	18
0700 ORNITHOSIS-PSITTACOSIS			2						2
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED						1			1
0902 COXSACKIEVIRUS B2							1		1
0904 COXSACKIEVIRUS B4	2	1					1		4
0905 COXSACKIEVIRUS B5	1			2	1		4	1	9
1002 ECHOVIRUS TYPE 2	1			1					2
1006 ECHOVIRUS TYPE 6	1								1
1017 ECHOVIRUS TYPE 17				1			8		9
1020 ECHOVIRUS TYPE 20	2								2
1022 ECHOVIRUS TYPE 22			1		8				9
1025 ECHOVIRUS TYPE 25								2	2
1030 ECHOVIRUS TYPE 30				1					1
1102 POLIOVIRUS TYPE 2				1			2	2	5

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 2

REPORTING PERIOD - 7/1/82 - 20/1/82 BULLETIN NUMBER . 82/2

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

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
1103 POLIOVIRUS TYPE 3		1					1		2
1104 POLIOVIRUS-VACCINAL STRAIN	1				3				4
1200 MUMPS VIRUS	18		3	12	1	1	3	1	39
1300 HERPES VIRUS GROUP-NOT TYPED	22		2	1		5			30
1301 HERPES SIMPLEX VIRUS NOT-TYPED		2		3				43	48
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	10			1		1			12
1303 VARICELLA-ZOSTER VIRUS	1		5	2		1			9
1306 HERPES SIMPLEX TYPE 1	8		11	25		13	10		67
1307 HERPES SIMPLEX TYPE 2	60		12	20		14	27		133
1399 HERPES VIRUS TYPING PENDING			1		3	7			11
1401 COXIELLA BURNETI	6		1	4		2	8		21
1502 PICORNA VIRUS-NOT TYPED								1	1
1521 MEASLES VIRUS	6	2	2	6	6	4	1		27
1522 RUBELLA VIRUS		1		10	1	2	14	5	33
1532 HEPATITIS B ANTIGEN	10		5	19		5	9	13	61
1535 HEPATITIS A ANTIBODY	9		3	10		2	11	9	44
1541 CHLAMYDIA A - C TRACHOMATIS	27		6			3		43	79
1556 CMV - CYTOMEGALOVIRUS	4		8	6	1	2	2	3	26
1564 ROTAVIRUS	5	2	4		5	2		4	22
1565 CALICI VIRUS	1								1
1599 ENTEROVIRUS TYPING PENDING			4		4	1			9
ROSS RIVER VIRUS							3		3
SMALL VIRUS (LIKE) PARTICLE	1								1
DENGUE							11		11
PARAMYXOVIRUS						1			1
Total	216	12	78	131	49	102	133	147	868

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

3

PERIOD : 7/1/82 to 20/1/82 ....

82/2

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.....		4					3				
0102 ADENOVIRUS TYPE 2.....		2									
0103 ADENOVIRUS TYPE 3.....		1									
0105 ADENOVIRUS TYPE 5.....						1	3				
0107 ADENOVIRUS TYPE 7.....											1
0132 ADENOVIRUS TYPE 32.....	1										
0201 INFLUENZA A VIRUS.....		1									
0203 INFLUENZA B VIRUS.....											1
0301 PARAINFLUENZA VIRUS TYPE 1....		6									
0302 PARAINFLUENZA VIRUS TYPE 2....		1									
0303 PARAINFLUENZA VIRUS TYPE 3....	1	14				1			1		1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	2	5									
0500 RHINOVIRUS (ALL TYPES).....		8					1				
0600 MYCOPLASMA PNEUMONIAE.....	3	10		2		1					1
0700 ORNITHOSIS-PSITTACOSIS.....		1									
0902 COXSACKIEVIRUS B2.....							1				
0904 COXSACKIEVIRUS B4.....	1			3							
0905 COXSACKIEVIRUS B5.....	2	1		3			2				
1002 ECHOVIRUS TYPE 2.....				1			1				
1006 ECHOVIRUS TYPE 6.....		1									
1017 ECHOVIRUS TYPE 17.....	3	1		5							
1020 ECHOVIRUS TYPE 20.....	1								1		
1022 ECHOVIRUS TYPE 22.....	7						2				
1025 ECHOVIRUS TYPE 25.....	1					1					
1030 ECHOVIRUS TYPE 30.....				1							
1102 POLIOVIRUS TYPE 2.....	1	2					1				
1103 POLIOVIRUS TYPE 3.....		2									

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

4

PERIOD : 7/1/82 to 20/1/82 ....

82/2

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
1104	POLIOVIRUS-VACCINAL STRAIN....		2					3	1			
1200	MUMPS VIRUS.....	4	2	1	14							
1301	HERPES SIMPLEX VIRUS NOT-TYPED	3		1								2
1302	EPSTEIN-BARR VIRUS (EB VIRUS).	2	1						1			
1303	VARICELLA-ZOSTER VIRUS.....	3										
1306	HERPES SIMPLEX TYPE 1.....		5	1							1	3
1307	HERPES SIMPLEX TYPE 2.....											
1401	COXIELLA BURNETI.....	4				1						
1521	MEASLES VIRUS.....	2	2		1							2
1522	RUBELLA VIRUS.....	2										3
1532	HEPATITIS B ANTIGEN.....	20							37			
1535	HEPATITIS A ANTIBODY.....	4							39			
1541	CHLAMYDIA A - C TRACHOMATIS...											
1556	CMV - CYTOMEGALOVIRUS.....	6	4								2	
1564	ROTAVIRUS.....	1						21				
1565	CALICI VIRUS.....							1				
ROSS RIVER VIRUS		2										
SMALL VIRUS (LIKE) PARTICLE								1				
DENGUE		9										
Total.....		85	76	3	30	1	4	40	78	2	3	13

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

5

82/2

PERIOD : 7/1/82 to 20/1/82 ...

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								1	
0102 ADENOVIRUS TYPE 2.....	1								1	
0103 ADENOVIRUS TYPE 3.....								1		
0107 ADENOVIRUS TYPE 7.....							1			
0119 ADENOVIRUS TYPE 19.....	3	1								
0201 INFLUENZA A VIRUS.....							2			
0203 INFLUENZA B VIRUS.....										1
0303 PARAINFLUENZA VIRUS TYPE 3....								1		
0600 MYCOPLASMA PNEUMONIAE.....							1	1	1	
0700 ORNITHOSIS-PSITTACOSIS.....									1	
0905 COXSACKIEVIRUS B5.....								1		
1102 POLIOVIRUS TYPE 2.....										1
1103 POLIOVIRUS TYPE 3.....										1
1200 MUMPS VIRUS.....			16				1	3	2	
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	23								
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			7					1	1	
1303 VARICELLA-ZOSTER VIRUS.....								1	1	
1306 HERPES SIMPLEX TYPE 1.....	7	18						5		
1307 HERPES SIMPLEX TYPE 2.....	1	128								
1401 COXIELLA BURNETI.....					1		5	10	1	
1521 MEASLES VIRUS.....			1		1					
1522 RUBELLA VIRUS.....			1		4			1		
1532 HEPATITIS B ANTIGEN.....				1				1	1	
1535 HEPATITIS A ANTIBODY.....								1		
1541 CHLAMYDIA A - C TRACHOMATIS...		78								
1556 CMV - CYTOMEGALOVIRUS.....				3		4	3	1	4	
ROSS RIVER VIRUS					1					
DENGUE					1			1		
Total.....	14	248	25	4	8	4	13	29	14	3