ISSN 0725-3141

Communicable Diseases Intelligence

Bulletin number 82/6
Issue date: 26 March 1982

Contents:

VIRUS REPORTING SCHEME - A total of 925 reports were received this period. Patterns suggested by the reports included a decrease in measles infections (one report compared with 13,11 and 18 for the previous three periods), and an indication from the Royal Alexandra Hospital for Children, Sydney, of an early seasonal rise of respiratory syncytial virus infections (21 compared with 6, 4 and 8). The 13 M. pneumoniae infections reported by the Woden Valley Hospital, Canberra, included two family groups of two and four members respectively.

- Arbovirus infections - The localities of the group B arbovirus infections reported by the State Health Laboratory, Brisbane, were Cairns (6) and Thursday Island (9) for dengue, and Charleville and Theodore for Kunjin virus. Serological testing of the sentinel chicken flocks in Victoria has now been discontinued. A total of 45 chickens with HI antibody against group A arbovirus antigen have been recorded to date.
- Herpes simplex virus type 1 and herpes simplex virus type 2 were isolated by Fairfield Hospital, Melbourne, from saliva and urine respectively of a 32 year old female renal transplant recipient. Similarly, diagnostic rises by CF against influenza A virus, influenza B virus and mumps were reported by the State Health Laboratory, Brisbane, in a 52 year old male with a lower respiratory tract infection.
- The 26 rubella reports from Fairfield Hospital included two isolations from therapeutic abortion specimens and five diagnoses in females that were 6-18 weeks pregnant.
- Specific IgM ($\geq$1/320) against lymphogranuloma venereum was reported by the State Health Laboratory Services, Perth, in a 23 year old Vietnamese patient.
- Ten seroconversions and 34 four-fold rises in titre against enterovirus type 70 were detected among the 49 paired sera referred to Fairfield Hospital from Fiji following an outbreak of acute haemorrhagic conjunctivitis (see CDI 82/3). A single serum specimen also had high titres against the virus. Adenoviruses were isolated from two specimens (from patients aged 13 and 35 years) of a total of 100 referred for culture.

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.

METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

MRSA - Victoria

(Contributed by G.J. Rouch, Public Health Division, and J. Elderton, Chairman of Standing Committee on Infection Control, Health Commission of Victoria).

Following the recognition that MRSA was an important nosocomial pathogen in hospitals in Victoria, a study was augmented to examine the extent of the problem. Table 1 tabulates the MRSA notifications received during the period November 1980 - December 1981.

MRSA - Fairfield Hospital, Melbourne

(Contributed by P. Cavanagh, Fairfield Hospital, Melbourne).

Because of the building design and skill in the practice of barrier nursing techniques, Fairfield Hospital has cooperated with the Health Commission of Victoria and other hospitals to provide facilities for patients harbouring MRSA. This has usually involved care of the patients over long stays, intensive nursing, consumption of large quantities of surgical and other supplies, and in some cases, great numbers of diagnostic tests.

During the period July 1980 to June 1981, 60 MRSA patients were admitted, of whom six died, 45 were later discharged, and nine were still in hospital at the end of the period. Few had serious infections such as S. aureus septicaemia or peritonitis, and the majority were elderly and debilitated patients in whom the MRSA strain had colonized sites such as leg ulcers, decubitus ulcers, burn wounds, sputum and the urinary tract. A number of patients with colonization alone who were no hazard to most medical patients were either discharged home or back to the institution of origin.

More recently during the quarter October-December 1981, 24 patients whose skin or wounds were colonised by MRSA (13 females:11 males) were admitted from other hospitals. Twenty were aged 60 years or more, and the four younger patients aged two, six, 17 and 41 years were under stress or compromised by viral pneumonia, spina bifida and measles, motor car accident (fractured skull) or long standing alcoholism with a history of pulmonary tuberculosis respectively. The sites of colonisation were unremarkable (nose, throat, sputum, axilla, perineum), but strains were recovered from urine of three of the elder patients, and from conjunctival swabs from the 17 year old road traffic victim and the six year old spina bifida patient.

MRSA - Queen Elizabeth Hospital, Adelaide

(Contributed by M.D.G. Guiness, Department of Clinical Microbiology, Queen Elizabeth Hospital, Adelaide).

The index case of MRSA nosocomial infection at the Queen Elizabeth Hospital is attributed to a patient in July 1980, since prior cases were infrequent and isolated. Although new isolations may represent only infection of a superficial ulcer or nasal carriage, and not necessarily severe infection, they do reflect the genuine incidence of the organism within the hospital since all swabs were identified for the primary bacterial pathogen (Figure 1). In contrast to the epidemics which have occurred on the Eastern seaboard where the organism was initially susceptible to aminoglycosides, this strain was resistant to gentamicin from the outset.

TABLE 1

MRSA notifications in Victoria (November 1980 - December 1981)

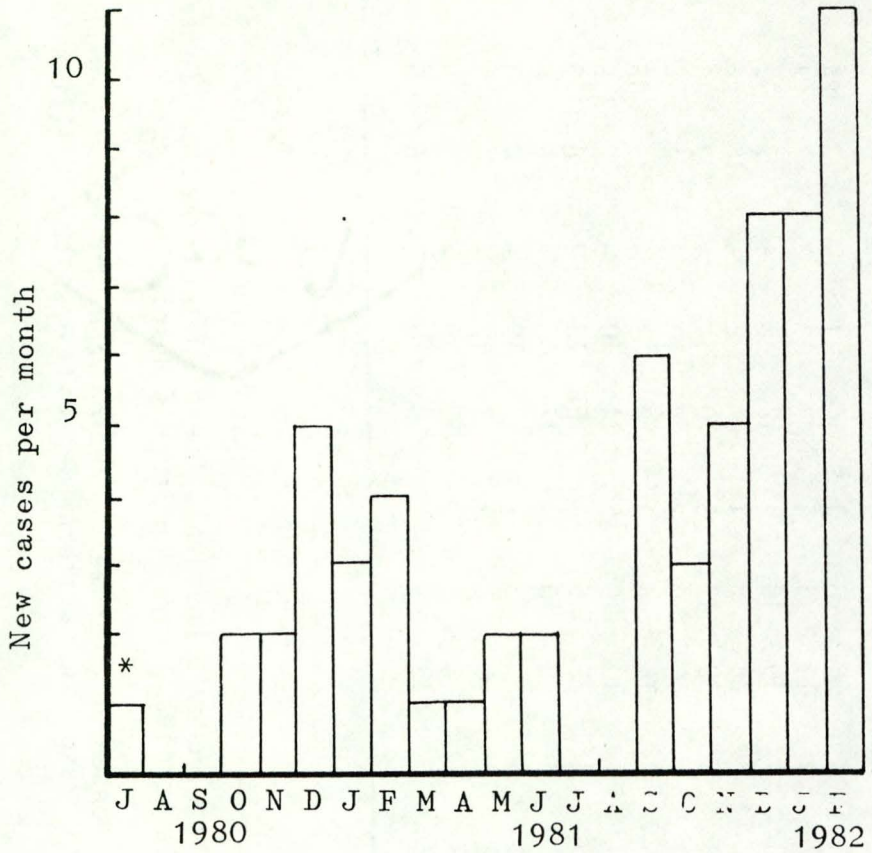
Month	All hospitals			Major teaching hospitals			Large metropolitan hospitals			Base hospitals			Country hospitals			Geriatric institutions			Private hosp. & other institutions		
	IIP	CIP	TOP	IIP	CIP	TOP	IIP	CIP	TOP	IIP	CIP	TOP	IIP	CIP	TOP	IIP	CIP	TOP	IIP	CIP	TOP
Nov	130	212	32	68	124	19	28	23	3	7	12	3	6	8	1	14	21	1	7	24	5
Dec	121	171	44	60	130	32	22	15	1	14	17	9	11	1	1	7	7	1	7	1	-
Jan	116	168	26	64	115	17	16	13	4	7	10	4	10	10	1	12	7	-	7	13	-
Feb	124	188	15	66	110	8	25	15	3	4	12	2	6	3	1	7	2	-	16	46	-
Mar	135	211	23	66	136	11	32	14	4	15	19	6	9	17	3	10	14	-	3	11	-
Apr	117	195	29	73	122	18	8	11	1	13	20	7	10	10	2	9	10	1	4	-	-
May	121	198	32	72	137	19	18	19	1	7	25	9	11	4	1	8	-	-	5	13	-
Jun	139	202	34	73	132	19	28	26	2	12	21	7	10	9	5	14	10	-	2	9	1
Jul	98	177	19	54	104	8	15	18	2	12	16	3	5	5	4	6	13	1	6	11	1
Aug	116	201	21	66	146	12	20	15	6	4	11	2	8	10	-	12	13	-	6	6	1
Sep	116	227	25	57	165	9	23	14	2	15	18	13	6	3	-	11	18	-	4	1	1
Oct	113	159	29	71	96	13	9	10	3	17	32	12	6	8	1	7	12	-	3	1	-
Nov	132	165	37	82	118	25	17	13	3	18	11	7	6	5	1	3	9	-	7	9	1
Dec	126	194	22	65	132	11	18	18	-	16	22	5	13	9	3	8	10	2	6	5	1

IIP - Infected in-patients
CIP - Colonised in-patients
TOP - Total (infected + colonised) out-patients.

Major teaching hospitals - Alfred Hospital, Austin Hospital, Prince Henry's Hospital, Queen Victoria Medical Centre, Royal Melbourne Hospital, St. Vincent's Hospital, Royal Children's Hospital.

Large metropolitan hospitals - Box Hill and District Hospital, Dandenong Hospital, Preston and Northcote Community Hospital, Royal Southern Memorial Hospital, Western General Hospital, Williamstown Hospital.

FIGURE 1 MRSA isolations from the Queen Elizabeth Hospital, Adelaide (July 1980 - February 1982)



* – Index case, ex Melbourne.

Editorial Comment

MRSA strains were first identified in 1961[1], with subsequent isolations reported from centres throughout Europe[2,3]. Systematic surveillance of MRSA in British hospitals indicated a modest rise from 0.48% in 1963 to 0.89% in 1969[4], whereas in Europe more significant incidences were recorded[5,6]. MRSA strains were rarely encountered in US hospitals until 1967[7], although the percentage of all S. aureus infections due to MRSA has now risen steadily in the large tertiary referral hospitals but remained below 4% for hospitals in all other categories[8]. Since 1976, MRSA has been an increasing problem in metropolitan hospitals in Victoria, and during the period January 1979 to December 1980, 28 (53%) of the 53 nosocomial staphylococci bacteraemias at the Royal Melbourne Hospital were due to MRSA, of which only one strain was gentamicin sensitive[9].

The mechanism of resistance in MRSA strains is unknown, since no specific "methicillinase" has been demonstrated, although a penicillin-binding protein with decreased affinity for methicillin has been described in one MRSA strain[10]. Resistance is apparently not transferable and favours chromosomal determinants[11], whereas gentamicin resistance, first recognized six years ago, is mediated by specific inactivating enzymes controlled by plasmid genes[12]. However, the use of antibiotics increases the transmissibility of S. aureus between patients[13], and MRSA infection occurs more frequently in patients exposed to multiple or broad spectrum antibiotics[14,15]. Also seriously ill patients are more prone to acquire MRSA infection particularly as they are more likely to have intravascular or other invasive

devices[15]. Although intra-abdominal staphylococcal sepsis is rare[16], MRSA peritonitis has also occurred after peritoneal dialysis in a continuous ambulatory peritoneal dialysis program in Melbourne[17].

Optimal isolation precautions remain to be defined, but "barrier precautions" may be adequate in the absence of a condition requiring another specific type of isolation[18]. Transfer of MRSA infected patients to and from extended care facilities (nursing homes, geriatric hospitals, rehabilitation centres, terminal care hospitals) represent a special problem, since it is often impractical to delay their admission or discharge indefinitely because of colonisation or clinical infection. Further studies of the frequency and modes of transmission of MRSA in extended care settings are needed to determine whether isolation precautions or efforts to eradicate the organism are effective in reducing morbidity and spread[19]. Hospital infection-control staff experiencing MRSA problems may find it useful to define their problem epidemiologically and to perform culture surveys of patients and staff members in the involved areas for detection or confirmation of the presence of a reservoir[8]. It has been shown that both airborne bacteria and contamination of hands, despite rigorous hand-washing standards, have been important in the spread of infection[20,21]. However, in the absence of a known or suspected MRSA problem, routine culture surveys are not recommended. Laboratory methods for reliability detecting methicillin resistance include incubation at 35°C, use of fully potent methicillin, oxacillin or nafcillin discs, and careful reading of plates to detect light growth inside the zone of inhibition (heteroresistant strains). It is prudent temporarily to assign employees who are culture-positive with dermatitis or those associated epidemiologically with spread of the infection to nonclinical duties while treatment is instituted.

To date all clinical isolates of MRSA from Melbourne hospitals have been sensitive to vancomycin (minimum inhibitory concentration < 4 µg/ml) (R. Skurray, Department of Microbiology, Monash University, personal communication), and this is the drug of choice in the treatment of severe MRSA infections[9]. In addition, the CDC Antimicrobes Reference Laboratory has not found any MRSA strains resistant to vancomycin[8]. Vancomycin may be ototoxic and nephrotoxic[22], but the monitoring of serum drug levels should minimise these complications. Although MRSA isolates often appear to be sensitive to cephalosporins by routine disc sensitivity procedures, these antibiotics are usually ineffective against MRSA infection[23,24].

References

1. BMJ (1961) 1 : 124
2. Annales de l' Institute Pasteur (1962) 103 : 222
3. Postgrad. Med. J. (1964) 40 Supplement : 170
4. Lancet (1970) 1 : 230
5. N.Y. Acad. Sci. (1971) 182 : 21
6. Antimicrob. Ag. Chemother. (1970) : 280
7. NEJM (1968) 279 : 441
8. MMWR (1981) 30 : 557
9. MJA (1981) 2 : 191
10. Federation of European Microbiology Societies Microbiology Letters (1981) 10 : 119
11. Bacteriol. Rev. (1975) 39 : 1
12. Ann. Microbiol. Inst. Pasteur (1975) 126 : 91

13 NEJM (1960) 262 : 637
14. J. Inf. Dis. (1979) 139 : 273
15. Ann. Intern. Med. (1980) 93 : 526
16. Medicine (1977) 56 : 383
17. CDI (1980) 80/25 : 2
18. Am. J. Med. (1981) 70 : 449
19. MJA (1981) 2 : 388
20. J. Inf. Dis. (1979) 139 : 280
21. Am. J. Dis. Child (1981) 135 : 689
22. Kucers, A. and Bennet, N. McK. (1979) The Use of Antibiotics. 3rd ed. Heinemann, London.
23. Am. J. Med. (1976) 61 : 340
24. Infection Control (1981) 2 : 110

TOXIC SHOCK SYNDROME (TSS) - SYDNEY

(Contributed by E. Reiss-Levy, E. Wegman and P. Trew, St. George Hospital, Kogarah, Sydney).

A 25 year old woman was admitted to the St. George Hospital, Sydney, on 9 August 1981 with a 24 hour history of fever, rigors, excessive thirst, dizziness and generalised muscle pain with ataxia. This occurred on the fourth day of her first menstrual period twelve weeks after a difficult breech delivery. The patient was pale and disorientated with periorbital oedema, conjunctivitis and photophobia, tachypnoea, tachycardia, low blood pressure (70/44 mm Hg) and high temperature (40.5°C). She had been using Meds tampons, and one had been in situ for four hours.

Investigations indicated renal failure (serum creatinine = 0.47 SI units), rhabdomyolysis (myoglobinuria, pyuria, numerous granular casts but no bacteriuria) and disseminated intravascular coagulation (elevated fibrin degradation products, prothrombin index and partial thromboplastin time); serum calcium was reduced (1.5 SI units) and the CSF was normal. S. aureus was isolated in heavy growth from cervical and vaginal swabs and from the used tampon. Twelve remaining tampons from the same packet were cultured, but no S. aureus was isolated. The strain was resistant to penicillin, and was catalogued as phage type 52 at RTD and 29/52/79/80/75/95 at 100 x RTD (A. Vickery, Staphylococcal Referral Laboratory, Royal Prince Alfred Hospital, Sydney).

The patient was resuscitated, given intravenous clindamycin followed by cloxacillin and treated with peritoneal dialysis. She improved markedly in the first 72 hours, but remained in renal failure. Twelve hours after admission she developed an erythematous macular rash on her chest and thorax. The skin on her chest and distal phalanges desquamated two weeks later. Peritoneal dialysis was continued for a total of three weeks, whereupon the patient was discharged. Two weeks later her renal function had returned to normal, and she has remained perfectly well since. The patient was maintained on oral cloxacillin for three months after discharge.

Swabs of the patient's nose, the husband's nose and the baby's nose and perineum were then collected and cultured. All grew S. aureus. The strains from the patient and baby were 52 and 29/52 at RTD, and 29/52/80/75/77/83A/95 at 100 x RTD. They were considered to be the same as the patient's original S. aureus strain because the previous 79, and the present 77 and 83A, reactions were weak. The strain isolated from the husband was typed as not typable at RTD and 52A/83A/84/95 at 100 x RTD. All three received hibitane nasal cream and pHisoHex skin cleanser for one week, and the baby also had

gentian violet on the nappy rash. Three weeks later, swabs from the patient's nose, vagina and perineum were negative. The baby lost the original strain, but had two others in succession; - type 94/96 then type 187. The husband lost the original organism, but was recolonised with S. aureus phage type not typable at RTD, 95/90 at 100 x RTD.

The S. aureus strain associated with this episode resembled most isolates associated with TSS in that it was lysed by phage 29 among others. It is hoped that the displacement of the original S. aureus from the patient and her baby will reduce her risk of a recurrence.

NON-BACTERIAL FOOD POISONING

(Contributed by A. Tan, Microbiological Diagnostic Unit, University of Melbourne).

Two interesting cases of non-bacterial food poisoning were reported to the Microbiological Diagnostic Unit in January and February 1982.

. The first case involved the consumption of bitter zucchini. Only one person was affected; the others at the table considered the vegetable to be so bitter as to be unpalatable. The victim developed diarrhoea and stomach cramps seven to eight hours after the meal. A cursory survey among the metropolitan health departments revealed that about three independent cases had been reported to a local body before Christmas, and one case was reported to a second department soon after the incident recorded above. The main complaint was the extreme bitter taste of the zucchini. In one case the victim complained of the astringent taste of the vegetable, as well as "burning sensation" in the mouth on ingestion. Both raw and cooked zucchinis were implicated. Symptoms were consistently stomach cramps and diarrhoea with short incubation periods (less than seven hours).

The bitter principles of Cucurbitaceae have been known to possess purgative properties since ancient times, and in fact the cucurbits have been used by some tribes in South Africa for that purpose. The bitterness occurs sporadically in cultivated cucurbits, and are said to present a real hazard to human health[1].

. The second case involved the consumption of red kidney beans. Two people developed vomiting and diarrhoea two to three hours after eating chili con carne. The illness lasted some 48 hours.

Several cases of food poisoning from red kidney beans have been reported in the UK[2]. The problem has been considered sufficiently severe as to warrant the Department of Health and Social Security making efforts to inform the general public of the hazard via food retail organisations and other relevant trade interests[3,4]. The essence of the warning was that beans, which are nutritious, must be made safe and palatable by proper cooking so as to destroy the naturally occurring toxic factor (presumptively a haemagglutinin).

References

1. S. Afr. Med. J. (1950) 24 : 713
2. CDR (1980) 80/37 : 4
3. CDR (1981) 81/27 : 1
4. BMJ (1980) 281 : 236

PROGRESSION OF EPIDEMIC PNEUMONIA TO NEUROMUSCULAR ILLNESS - SPAIN

(Based on MMWR (1982) 31 : 93)

In May and June 1981, an extensive outbreak of severe respiratory illness occurred in Spain, primarily in Madrid and the northwest regions of the country (see CDI 81/19). Patients initially had the clinical and radiographic findings of atypical pneumonia, but other common findings were fever, rash, myalgia and marked eosinophilia. About 1% of patients died. Autopsies showed interstitial pneumonitis and widespread vasculitis. Convalescence was prolonged in many cases and was characterised by diffuse myalgia, non-pitting oedema of the limbs, liver enzyme abnormalities and sustained eosinophilia. Epidemiological studies have uniformly shown a strong association between illness and ingestion of an illegally marketed cooking oil which contained rapeseed oil, was denatured by the addition of 2% aniline, and was imported into Spain for industrial use.

Beginning in August, it was recognized that substantial numbers of previously ill patients were developing neuromuscular problems. Clinical manifestations included muscle atrophy, weight loss, weakness, symmetrical sensory loss and hyporeflexia. Many patients developed keratoconjunctivitis sicca (decreased tearing and salivation) and scleroderma-like changes of the skin. By that time, chest X-rays had become normal. Eosinophilia continued, but at somewhat diminished levels. Moderate elevations of liver enzymes persisted. Electromyograms showed terminal axonal death, with denervation atrophy on muscle biopsy. Some patients had severe muscle weakness that led to failure of respiratory muscles. Most deaths among patients with neuromuscular illness have largely resulted from complications associated with prolonged maintenance on mechanical ventilation. It is estimated that the epidemic to date has affected about 17,000 persons (about 70% in Madrid). As of 24 December 1981, 13,222 patients had been hospitalised and 246 had died. Morbidity and case/fatality ratios have been somewhat higher for females than for males, especially among persons between the ages of ten and 50 years.

Following vigorous efforts by the Spanish government in late June 1981 to remove all implicated oil from the market, the epidemic occurrence of acute pneumonia fell dramatically, with the last reported new case of epidemic illness occurring in September. However patients with neuromuscular disease, representing about 20% of all cases in the epidemic, constitute a major continuing health problem in Spain.

The unusual collection of clinical features associated with this syndrome clearly represents a new disease. The search for a chemical toxin has been difficult and not yet productive. Because legal action is pending against the distributors of the illicit oil, there is little information regarding the method of processing the oil and the manner in which it might have been contaminated. No known toxic agents have yet been found in any case-associated oils tested thus far, at least not at levels high enough to produce illness. Animal toxicity testing has in general yielded negative results. The clinical picture is not that of toxicity caused by aniline, the chemical denaturant. Much investigative attention has been directed at fatty-acid anilides found in relatively high concentrations in some case-associated oils. The significance of these compounds is uncertain, however, since they are generally considered non-toxic.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 4/3/82 - 17/3/82 BULLETIN NUMBER - 82/6

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	7		2		1	2	4	2	18
0101 ADENOVIRUS TYPE 1			1	4	3			2	10
0102 ADENOVIRUS TYPE 2				1	1	4		1	7
0103 ADENOVIRUS TYPE 3						1		1	2
0105 ADENOVIRUS TYPE 5	1			1	1				3
0106 ADENOVIRUS TYPE 6					1				1
0107 ADENOVIRUS TYPE 7			1						1
0108 ADENOVIRUS TYPE 8			1						1
0119 ADENOVIRUS TYPE 19	1			1					2
0199 ADENOVIRUS TYPING PENDING			2		1	2			5
0201 INFLUENZA A VIRUS			6			1	2		9
0202 INFLUENZA A VIRUS SUBTYPE H3N2			1						1
0203 INFLUENZA B VIRUS			4		1		2		7
0301 PARAINFLUENZA VIRUS TYPE 1				3		1	1		5
0302 PARAINFLUENZA VIRUS TYPE 2					1	2		1	4
0303 PARAINFLUENZA VIRUS TYPE 3					1		2	4	7
0399 PARAINFLUENZA VIRUS TYPING PENDING						1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	1	14	1			3	2		21
0500 RHINOVIRUS (ALL TYPES)	4			4	13		2		23
0600 MYCOPLASMA PNEUMONIAE	26	1	3	2			6	3	41
0700 ORNITHOSIS-PSITTACOSIS	1		2						3
0904 COXSACKIEVIRUS B4						2			2
0905 COXSACKIEVIRUS B5	1	2	1	4			1		9
1000 ECHOVIRUS NOT TYPED							1		1
1002 ECHOVIRUS TYPE 2	1		1						2
1005 ECHOVIRUS TYPE 5			1						1
1006 ECHOVIRUS TYPE 6						1	1		2
1007 ECHOVIRUS TYPE 7							2		2
1017 ECHOVIRUS TYPE 17				1			1	4	6
1018 ECHOVIRUS TYPE 18							1		1
1022 ECHOVIRUS TYPE 22		1	3		9				13
1030 ECHOVIRUS TYPE 30					1		1		2

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 2

REPORTING PERIOD - 4/3/82 - 17/3/82 BULLETIN NUMBER . 82/6

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PmH/ POW (NSW)	FAIR-FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1102 POLIOVIRUS TYPE 2				1					1
1104 POLIOVIRUS-VACCINAL STRAIN	3								3
1200 MUMPS VIRUS	9		1	4		1	2	1	18
1300 HERPES VIRUS GROUP-NOT TYPED	22			3		3			28
1301 HERPES SIMPLEX VIRUS NOT-TYPED		2		8				44	54
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	7					2		4	13
1303 VARICELLA-ZOSTER VIRUS	1	1	2	3		1	1	3	12
1306 HERPES SIMPLEX TYPE 1	21			28		19	13		81
1307 HERPES SIMPLEX TYPE 2	52			31		15	34		132
1399 HERPES VIRUS TYPING PENDING			6			5			13
1401 COXIELLA BURNETI	9		1	1		2			13
1502 PICORNA VIRUS-NOT TYPED				1				2	3
1514 MOLLUSCUM CONTAGIOSUM						1		1	2
1521 MEASLES VIRUS	1								1
1522 RUBELLA VIRUS	1			26	1				28
1532 HEPATITIS B ANTIGEN	12		6	28		9	1	3	59
1535 HEPATITIS A ANTIBODY	6		1			4	1	4	16
1541 CHLAMYDIA A - C TRACHOMATIS	28		13			1		34	76
1543 CHLAMYDIA A - LGV TYPE								1	1
1556 CMV - CYTOMEGALOVIRUS	3	1	2	21	4		6	4	41
1562 REOVIRUS (ALL TYPES)					1				1
1564 ROTAVIRUS	2		7	1		2		2	14
1599 ENTEROVIRUS TYPING PENDING			2		14				16
ARBO. GROUP A.(UNSPECIFIED)				10					10
ROSS RIVER VIRUS						4	43	6	53
ASTROVIRUS	1								1
SMALL VIRUS (LIKE) PARTICLE						1	1		2
DENGUE							15		15
PARAMYXOVIRUS						3			3
KUNJIN VIRUS							2		2
Total	221	22	73	187	54	93	148	127	925

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

3

PERIOD : 4/3/82 to 17/3/82 .... 82/6

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.....		2									
0101 ADENOVIRUS TYPE 1.....	1	4					2				
0102 ADENOVIRUS TYPE 2.....	1	3					3				
0103 ADENOVIRUS TYPE 3.....	1										
0105 ADENOVIRUS TYPE 5.....		1									
0106 ADENOVIRUS TYPE 6.....		1									
0201 INFLUENZA A VIRUS.....		2		1							3
0203 INFLUENZA B VIRUS.....		5		1						1	
0301 PARAINFLUENZA VIRUS TYPE 1....	1	2									
0302 PARAINFLUENZA VIRUS TYPE 2....		3									
0303 PARAINFLUENZA VIRUS TYPE 3....		6									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	2	16						1			
0500 RHINOVIRUS (ALL TYPES).....		21					1				1
0600 MYCOPLASMA PNEUMONIAE.....	7	26						1	1		
0700 ORNITHOSIS-PSITTACOSIS.....		1									1
0904 COXSACKIEVIRUS B4.....							2				
0905 COXSACKIEVIRUS B5.....		1		4			2				1
1002 ECHOVIRUS TYPE 2.....							2				
1005 ECHOVIRUS TYPE 5.....						1					
1006 ECHOVIRUS TYPE 6.....	1						1				
1007 ECHOVIRUS TYPE 7.....		2		1							
1017 ECHOVIRUS TYPE 17.....		2		3		1	1				
1018 ECHOVIRUS TYPE 18.....	1										
1022 ECHOVIRUS TYPE 22.....	9	1					3				
1030 ECHOVIRUS TYPE 30.....				1			1				
1102 POLIOVIRUS TYPE 2.....						1					
1104 POLIOVIRUS-VACCINAL STRAIN....	1	1					1				

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 4

PERIOD : 4/3/82 to 17/3/82 .... 82/6

Viral Identifications by Clinical Information Table 1.
Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Enceph-alitis; 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
1200 MUMPS VIRUS.....	1	1		3							
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	1	1			2				2	23
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	1							1		1	1
1303 VARICELLA-ZOSTER VIRUS.....	1	1	1			1					8
1306 HERPES SIMPLEX TYPE 1.....	4	5	1			1			1	3	42
1307 HERPES SIMPLEX TYPE 2.....	1									1	11
1401 COXIELLA BURNETI.....	8									1	
1514 MOLLUSCUM CONTAGIOSUM.....											1
1521 MEASLES VIRUS.....											1
1522 RUBELLA VIRUS.....											23
1532 HEPATITIS B ANTIGEN.....	26							31			
1535 HEPATITIS A ANTIBODY.....								15			
1543 CHLAMYDIA A - LGV TYPE.....											1
1556 CMV - CYTOMEGALOVIRUS.....	3	6				2		3		7	2
1562 REOVIRUS (ALL TYPES).....							1				
1564 ROTAVIRUS.....	1						13				
ARBO. GROUP A.(UNSPECIFIED).....	1										7
ROSS RIVER VIRUS	23										7
ASTROVIRUS							1				
SMALL VIRUS (LIKE) PARTICLE	1						1				
DENGUE	9										3
PARAMYXOVIRUS		3									
Total.....	106	121	3	14		9	35	52	2	16	136

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

5

82/6

PERIOD : 4/3/82 to 17/3/82 ...

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
0100 ADENOVIRUS NOT TYPED.....			1					1		
0101 ADENOVIRUS TYPE 1.....				1				2		1
0103 ADENOVIRUS TYPE 3.....	1									
0105 ADENOVIRUS TYPE 5.....	1							1		
0107 ADENOVIRUS TYPE 7.....	1									
0108 ADENOVIRUS TYPE 8.....	1									
0119 ADENOVIRUS TYPE 19.....	2									
0201 INFLUENZA A VIRUS.....	1				1		1			
0202 INFLUENZA A VIRUS SUBTYPE H3N2									1	
0203 INFLUENZA B VIRUS.....									1	
0301 PARAINFLUENZA VIRUS TYPE 1....							1	1		
0302 PARAINFLUENZA VIRUS TYPE 2....								1		
0303 PARAINFLUENZA VIRUS TYPE 3....								1		
0600 MYCOPLASMA PNEUMONIAE.....					1		2	1	1	
0700 ORNITHOSIS-PSITTACOSIS.....									1	
0905 COXSACKIEVIRUS B5.....							1	2		
1200 MUMPS VIRUS.....			9					1	3	
1301 HERPES SIMPLEX VIRUS NOT-TYPED	2	23								
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			3	3				2	2	
1303 VARICELLA-ZOSTER VIRUS.....				1			1		1	
1306 HERPES SIMPLEX TYPE 1.....	2	21						3		
1307 HERPES SIMPLEX TYPE 2.....		119								
1401 COXIELLA BURNETI.....							3	1		
1514 MOLLUSCUM CONTAGIOSUM.....		2								
1522 RUBELLA VIRUS.....						1			4	
1532 HEPATITIS B ANTIGEN.....					1				2	
1535 HEPATITIS A ANTIBODY.....									1	
1541 CHLAMYDIA A - C TRACHOMATIS...	4	72								

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE 6

PERIOD : 4/3/82 to 17/3/82 ... 82/6

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 ... -CONTINUED

VIRUS OR VIRAL ANTIGEN	Eye	Genital	Endo/sal gland	RES	Muscle/joint	Congenital	PUO	Fever/malaise	Other	SIDS
1543 CHLAMYDIA A - LGV TYPE.....		1								
1550 CMV - CYTOMEGALOVIRUS.....		3		1	1	8	1	3	5	
ARBO. GROUP A.(UNSPECIFIED).....					6			1		
ROSS RIVER VIRUS					27			1	1	
DENGUE					3			2		
KUNJIN VIRUS					2					
Total.....	15	241	13	6	42	9	10	24	23	1

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

12th and 13th 4 Weekly Period for 1981.
(1.11.81 to 31.12.81 inclusive)

Bulletin 82/6.

Disease	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Amoebiasis	N.N.		5	6					11	64
Ankylostomiasis	N.N.		5					1	6	* 137
Anthrax									—	* —
Arbovirus infection		1							1	20
Brucellosis	2		3	3					8	36
Campylobacter infections	N.N.	1	N.N.	55	4	N.N.		N.N.	60	339
Chancroid			1	N.N.		N.N.	N.N.		1	20
Cholera									—	2
Congenital rubella syndrome	N.N.	N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—
Diphtheria		1 c					1		1+1c	16 + 2 CARRIERS
Gonovanosis		N.N.	7	N.N.	3	N.N.	2		12	70
Giardiasis	N.N.	N.N.	N.N.	76	N.N.	N.N.	N.N.	N.N.	76	661
Genital herpes	N.N.	N.N.	N.N.	77	N.N.	N.N.	N.N.	N.N.	77	* 362
Gonococcal ophthalmia neonatorum		N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	—	1
Gonorrhoea	852	311	165	210	254	26	143	17	1978	*11,261
Hepatitis A (infectious)	90	39	57	19	20	5	3	3	236	* 1,500
Hepatitis B (serum)	17	39	13	13	14		5	1	102	* 506
Hepatitis - unspecified	N.N.	N.N.		2	5	N.N.	7	1	15	108
Hydatid disease	1			1		1		2	5	24
Lassa Fever	N.N.		N.N.			N.N.	N.N.	N.N.	—	—
Legionnaires disease	N.N.		N.N.	1	N.N.	N.N.	N.N.	N.N.	1	17
Leprosy		1	4		1		3		9	47
Leptospirosis		39	1	1	1				42	101
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.	1		1	1
Malaria	13	6	24	5	5		3		56	413
Marburg Disease	N.N.		N.N.			N.N.	N.N.	N.N.	—	—
Meningococcal infections	N.N.		1	7		N.N.			8	66
Non-specific urethritis	N.N.	N.N.	N.N.	284	N.N.	N.N.	N.N.	N.N.	284	1297
Ornithosis		1		1					2	14
Pertussis (whooping cough)	N.N.	24	N.N.	18	N.N.	N.N.	N.N.	N.N.	42	173
Plague									—	—
Poliomyelitis									—	—
Q. fever	16		27	16	N.N.		N.N.		59	446
Rabies	N.N.	N.N.	N.N.			N.N.	N.N.	N.N.	—	—

DISEASE	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Salmonella infections	451	29	65	137	16	6	58	3	465	* 2,655
Shigella infections	N.N.	5	5	1	16	1	18		46	422
Smallpox									—	—
Syphilis	234	19	72	8	41		97		471	* 2,959
Tetanus									—	—
Trachoma	N.N.	N.N.			N.N.	N.N.			—	—
Tuberculosis (all forms)	81	74	36	18	28		21	2	260	* 1,464
Typhoid fever	2	4							6	* 24 + 1 CARRIER
Typhus (all forms)									—	—
Vibrio parahaemolyticus infections	N.N.	N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—
Yellow Fever									—	—
Yersinia enterocolitica infections	N.N.	N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	—	—

(Note: Data collected under the Notifiable Diseases Returns may bear little or no correlation to that collected under the CDI laboratory scheme. Whilst the latter is a sampling program, the Notifiable Diseases data is dependent upon voluntary reporting by medical practitioners etc.)

N.N. Not Notifiable

* Corrections made to the Cumulative Total since last report.

Ankylostomiasis	+37 cases for N.T.
Anthrax	-1 cases for N.S.W.
Genital herpes	-1 cases for N.S.W.
Gonorrhoea	+15 cases for W.A.
Hepatitis A	-9 cases for N.S.W.
Hepatitis B	-10 cases for W.A.
Salmonella infections	-4 cases for S.A.
Syphilis	+24 cases for N.S.W. and -8 cases for W.A.
Tuberculosis	-3 cases for W.A.
Typhoid fever	+10 cases for N.S.W.