



Communicable Diseases Intelligence

Bulletin number 80/25

Issue date: 19 December 1980

Contents:

- Methicillin-resistant Staphylococcus epidermidis and Staphylococcus aureus
- Gastro-enteritis on Norfolk Island
- Giardiasis - South Australia
- Campylobacter in the newborn
- Smallpox vaccination

This is the final issue of CDI for 1980, and includes the subject index for the year. The next issue will be on 16 January 1981.

The editorial staff take this opportunity of extending seasonal greetings to all readers, with best wishes for the New Year.

DANGER FROM PINK ELEPHANTS

(Contributed by S. Salamouris, State Health Laboratory Services, Perth.)

A woman has contracted gastro-enteritis after consuming a drink into which water from a frozen pink plastic elephant had leaked. A baby also has contracted gastro-enteritis after drinking water obtained by biting a frozen pink elephant.

These pink plastic elephants are a novelty imported from the United Kingdom. They contain water ("guaranteed filled with English drinking water") and are intended to be frozen then immersed in beverage in place of ice.

Laboratory examination of two similar elephants yielded a bacterial count in excess of ten million organisms per millilitre. The organisms grown included Alkaligenes and Pseudomonas group IIK. A further batch yielded a count of from 20 to 50 bacteria per millilitre; in this instance the organisms included Alkaligenes, Pseudomonas group IIK and aerobic Actinomyces.

VIRUS REPORTING SCHEME - A total of 774 reports were received this period.

Reports of interest include:

- The Institute of Clinical Pathology and Medical Research, Sydney, reported Norwalk agent gastro-enteritis in a seven month old male and a two month old female, both patients at the Royal Alexander Hospital for Children, Sydney. The viruses, approximately 30nm in diameter were identified by immune-electronmicroscopy.

Five cases of astrovirus gastro-enteritis were also identified from children in one ward at the same hospital.

(continued on page 6)

THE EFFECT OF AN ENDEMIC OF METHICILLIN-RESISTANT STAPHYLOCOCCUS EPIDERMIDIS AND STAPHYLOCOCCUS AUREUS ON A MANAGEMENT PROGRAMME FOR CHRONIC RENAL FAILURE

(Contributed by T.J. Humphery, R.C. Atkins, and N.M. Thomson, Department of Nephrology, and A. Davidson, J. Williamson, Department of Microbiology, Prince Henry's Hospital, Melbourne.)

For approximately two years the emergence of methicillin-resistant staphylococci has been a problem in Melbourne hospitals. Both S. epidermidis (SE) and S. aureus (SA) have acquired antibiotic resistance of large magnitude. Strains causing clinical infection now exist which are resistant to penicillin, ampicillin, ticarcillin, methicillin, cephalothin, kanamycin, gentamicin, tobramycin, co-trimoxazole, chloramphenicol, tetracycline and erythromycin. Several isolates from the Melbourne area have also had fusidic acid and rifampin resistance, although these strains have not yet entered Prince Henry's Hospital Renal Unit. The present mainstay of treatment has been vancomycin. Occasional strains of staphylococci have retained some aminoglycoside sensitivity in the Renal Unit; but in the present report all are simply coded as methicillin-resistant S. aureus or S. epidermidis (MRSA or MRSE). To date, there has been no report which documents or quantitates the clinical effects of current Melbourne strains of either organism in a clearly defined clinical situation.

Continuous ambulatory peritoneal dialysis - In this form of treatment a Silastic (TM) Tenckhoff catheter is placed in the peritoneal cavity under strict aseptic techniques in the operating theatre. The patients perform peritoneal dialysis by running at least four (usually five) two-litre dialysate fluid exchanges in and out of the abdomen daily, seven days per week, while attending to their usual occupations. Fifty-eight patients have been trained in the technique, and fifty-four patients have remained under long-term supervision for a total treatment duration of 45.2 patient years. During this time 154 episodes of peritonitis occurred. Investigation, management and treatment of peritonitis has followed closely supervised protocols. Morbidity has been assessed in terms of days spent in hospital purely because of peritonitis and its complications; and days of fever. The results are shown in Figure 1 and Tables 1 and 2. MRSE and MRSA account for 33.1% of our peritonitis hospitalization costs.

FIGURE 1 Ranked morbidity as mean number of hospital days, per episode of peritonitis. (taken from Table 2).

1. MRSA ←
2. Mixed organisms
3. MRSE ←
4. Other organisms
5. Gram negative rods
6. Streptococci
7. SA
8. SE

METHICILLIN
RESISTANCE
EFFECT

All categories were organisms isolated in pure culture except in the case of mixed infection.

TABLE 1 Morbidity as days of fever (> final plateau temperature).
Whole table significance by analysis of variance, $P < 0.01$

Organism isolated in pure culture	Mean no. of fever days	± SEM N-1	Total days of fever caused
SE	1.96	0.32	43
MRSE	4.13	0.85	62
SA	3.80	0.66	13
MRSA	>13.9*	>4.97	97.3
<hr/>			
Streptococci †	3.29	0.44	79
Gram negative rod ††	5.58	1.43	67

TABLE 2 Morbidity as hospital days solely due to peritonitis and its complications.

Analysis of variance: for whole table, $P < 0.01$
for (a), $P < 0.0005$
for (b), $P < 0.05$

Organism isolated in pure culture	Mean no. of hospital days	± SEM N-1	Total days of hospital stay
SE	5.64	0.62	124
MRSE	10.69	1.55	171
SA	6.60	0.60	33
MRSA	35.8	17.7	>251
<hr/>			
Streptococci †	7.48	0.78	187
Gram negative rod ††	9.33	1.73	112

* one death

† Several types, mainly skin-associated; none were β -hemolytic

†† Several common types, variable antibiotic resistance.

In a situation where predominately skin-borne organisms can cause infection, a number of points can be made:

- . Both MRSE and MRSA are major pathogens.
- . MRSE causes greater morbidity than a range of streptococci, of usually skin-associated, but occasionally enteric origin.
- . Pathogenicity of MRSE is approaching that of gram-negative rods of predominantly non-hospital origin.
- . Urgent major control measures are needed, as the incidence of MRSE and MRSA infections is jeopardizing major treatment programmes.
- . The continuing emergence of antibiotic resistance may make these infections impossible to treat if microbial adaptation continues at the present rate.

GASTRO-ENTERITIS ON NORFOLK ISLAND

(Contributed by A.M. Murphy and G.S. Grohmann, Institute of Clinical Pathology and Medical Research (ICPMR), Sydney; and M.F.H. Sexton, Government Medical Officer, Norfolk Island.)

This contribution is a follow-up to the epidemiology of infectious gastro-enteritis on Norfolk Island detailed in CDI 80/19.

Examination of Faecal Specimens - Twenty-five faecal specimens from individuals with gastroenteritis have now been examined by electron microscopy and cell culture. No viruses were isolated in cultures, but viruses, morphologically similar to known gastroenteritis-producing viruses, were found in 20 specimens (80%). The results are tabulated in Table 1.

TABLE 1 Faecal Specimens (EM Observations)

	Rota-virus	Astro-virus	Calici-virus	Small Round virus (22-25nm)	No viruses	TOTAL
Adults (17-75 years)	3	1	1	5	2	12
Children (2-8 years)	<u>3</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>13</u>
Totals	<u>6</u>	<u>5</u>	<u>3</u>	<u>6</u>	<u>5</u>	<u>25</u>

This is the highest percentage of positive results obtained from sporadic cases of gastro-enteritis since this type of work commenced at the ICPMR in 1974.

Examination of drinking water and sewage effluent - There is no reticulated water supply on Norfolk Island, and rain water is used for most domestic purposes. However, in dry weather it may become necessary to supplement this source with bore water which is collected from various sites, and sold to resident householders and some of the smaller accommodation houses.

In addition to the island's residents, some 25 000 tourists visit the region each year, so that the major hotels/motels have to rely on their own rain-water supplies, supplemented with bore water for drinking. This bore water is used totally for household purposes, and is mostly supplied from the hotel's own bore, usually located in a nearby valley. In most cases, sewage and waste water from these hotels are disposed of by small sewage package plants. After limited chlorination, the effluent is absorbed into the surrounding soil.

Five samples of bore water used for drinking purposes, and one hotel septic tank effluent, were tested for viruses. The results are shown in Table 2.

TABLE 2 Viruses identified in samples of bore water and sewage effluent

<u>Water Sample</u>	<u>EM</u>	<u>Cell Culture</u>
Private Commercial Bore No.1	Negative	Negative
Private Commercial Bore No.2	Negative	Negative
Hotel A Drinking water	Negative	Negative
Hotel B Drinking water	Rotavirus	Negative
Hotel C Drinking water	Small round viruses	Negative
Hotel C Septic Tank effluent	Rotavirus	Poliovirus type 1 (Vaccine strain)

In spite of the fact that the sewage effluent was chlorinated, rotaviruses were detected by EM and poliovirus type 1 (vaccine strain) isolated in cell culture. Small round viruses (morphologically similar to parvoviruses) were also detected by EM in the bore drinking water of this hotel. Rotaviruses were detected in the drinking water of another large hotel. Three other water specimens (one from a hotel and two from private "commercial" bores) were negative.

When examining drinking water for viruses it is usual to examine between 50-100 litres. In these tests only 4.5 litres (1 gallon) were available. The positive results are therefore indicative of heavy viral pollution (of the order of 1×10^6 particles per 4.5 litres), and provide further evidence of contamination of deep groundwater by effluents, at least in the vicinity of the more populous areas. It is hoped to examine larger volumes in the near future.

GIARDIASIS - SOUTH AUSTRALIA

(Contributed by A. Cameron, Communicable Diseases Control, South Australian Health Commission.)

In CDI 80/23, the article "Giardiasis" stated that the disease is notifiable in South Australia. This is not completely correct; notification is not incorporated into State legislature, but the South Australian Health Commission has introduced an interim measure of collating cases diagnosed by major co-operating hospitals and laboratories in the State.

From this surveillance, an epidemic of giardiasis was recorded in metropolitan Adelaide in October 1979. Over a two week period, 13 of 32 children

in a child-minding centre were found to be infected. It was concluded that faecal-oral transmission was responsible for the outbreak, since investigation of the water supply used by the centre, both mains and rain-water, were negative for cysts.

CAMPYLOBACTER IN THE NEWBORN

(Contributed by S. Chopra, Commonwealth Department of Health Pathology Laboratory, Bendigo.)

Campylobacter fetus was recently isolated from the faeces of a three day old female newborn who showed some blood stains during bowel action. There were no clinical signs of infection. The infant was breast fed, and both she and the mother were discharged well and fit without any treatment. The isolate was later confirmed by Fairfield Hospital, Melbourne, to be C. fetus sub species jejuni.

Whether the infant had milk borne, transplacental or post-natal infection was not established, since neither the infant's IgM antibody levels, nor the mother's stools or serum antibodies were investigated. Although people of all ages are susceptible to infection, the highest incidence being in young children, the age of this patient is unusual.

SMALLPOX VACCINATION

(From WER (1980) 55:376 and 378)

International certificates of smallpox vaccination are no longer necessary for travellers entering Djibouti. On the basis of available information, only Chad and Democratic Kampuchea may be requiring a smallpox vaccination certificate from travellers as from 1 January 1981.

ERRATA

- . CDI 80/22, page 10 - In the article 'Methicillin-resistant Staphylococcus aureus', where 'only one was sensitive to rifampicin' the line should read 'only one was resistant to rifampicin'.
- . CDI 80/23, page 5 - In the article 'Leptospirosis - UK', a serogroup was misspelled. The correct taxonomy is the Hebdomadis serogroup.

(continued from page 1)

- . The arbovirus group B infection, clinically dengue, reported by Fairfield Hospital, Melbourne, was in a 28 year old businessman who had recently visited India, Katmandu and Sri Lanka.
 - . Less common isolates reported this period include a diagnosis of lymphogranuloma venereum in a 39 year old male by serology and isolation in McCoy cells, and the isolation of adenovirus type 9 from genital sources in a 43 year old male. Both notifications were reported by the State Health Laboratory, Perth.
-

- 1 -

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 27-11-80 - 10-12-80 BULLETIN NUMBER .

80/25

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.....	3	1				1	3	3	1	12
0101 ADENOVIRUS TYPE 1.....				1			4			5
0102 ADENOVIRUS TYPE 2.....	3		1	2						6
0103 ADENOVIRUS TYPE 3.....	1							1		2
0105 ADENOVIRUS TYPE 5.....	1			1		1				3
0107 ADENOVIRUS TYPE 7.....	3	2		1				1		7
0109 ADENOVIRUS TYPE 9.....								1		1
0115 ADENOVIRUS TYPE 15.....	1								1	1
0119 ADENOVIRUS TYPE 19.....								3		3
0199 ADENOVIRUS TYPING PENDING.....		1	2		5	2				10
0201 INFLUENZA A VIRUS.....	1			2		2				5
0203 INFLUENZA B VIRUS.....	2			3	1	7	2			15
0302 PARAINFLUENZA VIRUS TYPE 2.....						1				1
0303 PARAINFLUENZA VIRUS TYPE 3.....	1	2			10	3	4	2		22
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)...		2		1	1	1		4		9
0500 RHINOVIRUS (ALL TYPES).....	5			5	2	8		1		21
0600 MYCOPLASMA PNEUMONIAE.....			4				1	1		6
0700 ORNITHOSIS-PSITTACOSIS.....				1						1
0809 COXSACKIEVIRUS A9.....				5	3	1	1			10
0902 COXSACKIEVIRUS B2.....					1			1		2
0903 COXSACKIEVIRUS B3.....					1					1
0904 COXSACKIEVIRUS B4.....					2					2
1006 ECHOVIRUS TYPE 6.....		2								2
1009 ECHOVIRUS TYPE 9.....	3			1						4
1011 ECHOVIRUS TYPE 11.....	2									2
1014 ECHOVIRUS TYPE 14.....							1			1
1019 ECHOVIRUS TYPE 19.....	2									2
1021 ECHOVIRUS TYPE 21.....								2		2
1022 ECHOVIRUS TYPE 22.....			1					1		2
1025 ECHOVIRUS TYPE 25.....	2					1				3
1030 ECHOVIRUS TYPE 30.....				2	2					4
1099 ECHOVIRUS TYPING PENDING.....			7			3				10

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

2

REPORTING PERIOD - 27-11-80 - 10-12-80 BULLETIN NUMBER .
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

80/25

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ MVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	TOTAL
1101 POLIOVIRUS TYPE 1.....				1		1			2
1104 POLIOVIRUS-VACCINAL STRAIN.....					3				3
1200 MUMPS VIRUS.....			1	2		2	2	1	8
1300 HERPES VIRUS GROUP-NOT TYPED.....	13		2	2		3			20
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....	10			1	2			42	55
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	5			1					6
1303 VARICELLA-ZOSTER VIRUS.....	2		3	2		1			8
1306 HERPES SIMPLEX TYPE 1.....	2			23		11	13		49
1307 HERPES SIMPLEX TYPE 2.....	53			30		18	15		116
1399 HERPES VIRUS TYPING PENDING.....			3		1	4			8
1401 COXIELLA BURNETI.....	12			5		6	15		38
1521 MEASLES VIRUS.....	2		1	1				2	6
1522 RUBELLA VIRUS.....	6	2	5	2	2		10	7	34
1532 HEPATITIS B ANTIGEN.....	7		9	28		16	1	7	68
1535 HEPATITIS A ANTIBODY.....	3		1	4		7		4	19
1541 CHLAMYDIA A - TRIC TYPE.....	7		1					30	38
1543 CHLAMYDIA A - LGV TYPE.....								1	1
1556 CMV - CYTOMEGALOVIRUS.....	6		1	36	4	4	2	2	55
1562 REOVIRUS (ALL TYPES).....						1			1
1564 ROTAVIRUS.....	11		3	4	2	10		1	31
1566 NORWALK AGENT.....	2								2
1599 ENTEROVIRUS TYPING PENDING.....		1			12	1			14
ROSS RIVER VIRUS							3	3	6
ASTROVIRUS	6								6
SMALL VIRUS (LIKE) PARTICLE						1			1
ARBO. GROUP B.				1					1
TOTAL	177	13	45	168	56	122	73	120	774

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

4

PERIOD : 27/11/80 to 10/12/80

80/25

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 unspc.;

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
1025 ECHOVIRUS TYPE 25.....							1				
1030 ECHOVIRUS TYPE 30.....		1		2			1				
1101 POLIOVIRUS TYPE 1.....		1									
1104 POLIOVIRUS-VACCINAL STRAIN....	1	1									
1200 MUMPS VIRUS.....	1			3		1					
1300 HERPES VIRUS GROUP-NOT TYPED..		1	3			1					8
1301 HERPES SIMPLEX VIRUS NOT-TYPED	10							1	1	1	40
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	1	1									
1303 VARICELLA-ZOSTER VIRUS.....						1					5
1306 HERPES SIMPLEX TYPE 1.....	1	3				2		1	1	3	32
1307 HERPES SIMPLEX TYPE 2.....						1					8
1401 COXIELLA BURNETI.....	6	3									
1521 MEASLES VIRUS.....		1									4
1522 RUBELLA VIRUS.....	3	2				1					27
1532 HEPATITIS B ANTIGEN.....	40						1	30			
1535 HEPATITIS A ANTIBODY.....	6							12			
1541 CHLAMYDIA A - TRIC TYPE.....	29										
1556 CMV - CYTOMEGALOVIRUS.....	7	9	1			1		2		14	
1562 REOVIRUS (ALL TYPES).....							1				
1564 ROTAVIRUS.....	5						25	1			
1566 NORWALK AGENT.....							2				
ROSS RIVER VIRUS	1										2
ASTROVIRUS							6				
SMALL VIRUS (LIKE) PARTICLE							1				
TOTAL	121	93	5	16	1	9	56	49	4	18	128

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

5

PERIOD : 27/11/80 to 10/12/80 ...

80/25

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	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/mal-aise	Other	SIDS
0100 ADENOVIRUS NOT TYPED.....	1			1				2		
0102 ADENOVIRUS TYPE 2.....	1		1					1		
0103 ADENOVIRUS TYPE 3.....	1							1		
0107 ADENOVIRUS TYPE 7.....	1		1					2		
0119 ADENOVIRUS TYPE 19.....		2								
0201 INFLUENZA A VIRUS.....			1				1			
0203 INFLUENZA B VIRUS.....								4		
0303 PARAINFLUENZA VIRUS TYPE 3....				1					1	
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	1							1		
0500 RHINOVIRUS (ALL TYPES).....								1		
0600 MYCOPLASMA PNEUMONIAE.....				1				1	1	
0700 ORNITHOSIS-PSITTACOSIS.....								1		
0809 COXSACKIEVIRUS A9.....								1		
1006 ECHOVIRUS TYPE 6.....								1		
1009 ECHOVIRUS TYPE 9.....							3	1		
1019 ECHOVIRUS TYPE 19.....			1					1		
1022 ECHOVIRUS TYPE 22.....							1			
1025 ECHOVIRUS TYPE 25.....							2			
1030 ECHOVIRUS TYPE 30.....										1
1101 POLIOVIRUS TYPE 1.....	1									
1104 POLIOVIRUS-VACCINAL STRAIN....										1
1200 MUMPS VIRUS.....			1					2		
1300 HERPES VIRUS GROUP-NOT TYPED..		5						1		
1301 HERPES SIMPLEX VIRUS NOT-TYPED		2							1	
1302 EPSTEIN-BARR VIRUS (EB VIRUS)..		2	1					1		
1303 VARICELLA-ZOSTER VIRUS.....	1							1	1	
1306 HERPES SIMPLEX TYPE 1.....	3	5	1					1		

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

6

PERIOD : 27/11/80 to 10/12/80 ...

80/25

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;

68 -Fever/malaise; 09 -Other; A1 -SIDS ...

-CONTINUED

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/mal-aise	Other	SIDS
1307 HERPES SIMPLEX TYPE 2.....		107								
1401 COXIELLA BURNETI.....					3		7	20		
1521 MEASLES VIRUS.....			1							
1522 RUBELLA VIRUS.....				2	4			1		
1535 HEPATITIS A ANTIBODY.....							1	1		
1541 CHLAMYDIA A - TRIC TYPE.....		8								
1543 CHLAMYDIA A - LGV TYPE.....		1	1							
1556 CMV - CYTOMEGALOVIRUS.....	1		1			3	12	2	10	1
ROSS RIVER VIRUS					4					
ARBO. GROUP B.								1		
TOTAL	11	132	10	5	11	3	27	49	14	3

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

11th Weekly Period for 1980...

4.10.80 to 31.10.80 inclusive

Bulletin ...80/25

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.		1	4					5	45
Ankylostomiasis	N.N.			N.N.					—	177
Anthrax		1							1	2
Arbovirus infection		1	1	N.N.					2	24
Brucellosis	1		1						2	45
Campylobacter infections	N.N.	N.N.	N.N.	42	N.N.	N.N.	N.N.	N.N.	42	350
Chancroid	N.N.		3	N.N.	N.N.	N.N.	N.N.		3	28
Cholera									—	3
Congenital rubella syndrome	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	1
Diphtheria		CARRIER							CARRIER	1+2 CARRIERS
Donovanosis	N.N.	N.N.	9	N.N.	N.N.	N.N.	1		10	57
Giardiasis	N.N.	N.N.	N.N.	36	N.N.	N.N.	N.N.	N.N.	36	427
Genital herpes	N.N.	N.N.	N.N.	59	N.N.	N.N.	N.N.	N.N.	59	324
Gonococcal ophthalmia neonatorum	N.N.	N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Gonorrhoea	314	211	94	74	64	10	50	13	830	9781
Hepatitis A (infectious)	39	12	16	17	8	1	14	5	112	1149
Hepatitis B (serum)	8	2	3	8			1		22	584
Hepatitis - unspecified	N.N.	N.N.		N.N.	13	N.N.	N.N.		13	158+1 CARRIER
Hydatid disease	4					1		1	6	34
Lassa Fever	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Legionnaires disease	N.N.		N.N.	N.N.	N.N.	N.N.	N.N.	N.N.	—	—
Leprosy	9								9	31
Leptospirosis	1								1	36
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.			—	1
Malaria	3	8	19	2	2			3	37	493
Marburg Disease	N.N.		N.N.	N.N.		N.N.	N.N.	N.N.	—	—
Meningococcal infections	N.N.	1	5			N.N.			6	65
Non-specific urethritis	N.N.	N.N.	N.N.	234	N.N.	N.N.	N.N.	N.N.	234	1099
Ornithosis				2			1		3	17
Pertussis (whooping cough)	N.N.	4	N.N.	2	N.N.	N.N.	N.N.	N.N.	6	86
Plague									—	—
Polioyelitis									—	—
Q. fever	1		79	13	N.N.		N.N.		93	525
Rabies	N.N.	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	26	20	12	52	12		19	4	145	1942
Shigella infections	N.N.	2	4	19	6		18		49	455
Smallpox									—	—
Syphilis	139	10	62	20	14		22		267	2388
Tetanus		1	1						2	8
Trachoma	N.N.	N.N.		N.N.	N.N.	N.N.			—	1
Tuberculosis (all forms)	31	26	26	11	13		3	5	115	1326
Typhoid fever	2		1						3	17 + 4 CARRIERS
Typhus (all forms)									—	—
Vibrio parahaemolyticus infections	N.N.	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.	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

INDEX 1980

Entries indicate Issue: page number
Underlined entries refer to longer articles
(c) = correction/amendment of earlier articles

- Adenoviruses - 4:3 13:1
- Adenovirus 1 - 12:1
- " 3 - 11:1
- " 11 - 24:1
- " 18 - 8:1
- " 19 - 21:1
- Amantadine HC1 - 13:4
- Amoebic meningitis - 3:2 4:5
- Anthrax - 6:5
- Antibiotics - 15:2
- Arboviruses (see also Ross River and Dengue)
- 4:4 9:1 24:1
- Arbovirus in Pacific Islands - 6:1 22:2
- Astroviruses - 16:1 17:1 25:1
- Botulism - 5:5 5:6 12:2
- Brucellosis - 11:6 15:6
- Caliciviruses - 12:1 16:1
- Campylobacter - 2:6(c) 9:4 25:6
- CDI Distribution 21:8
- CDI Serology Survey 24:5
- Cholera - 3:1 14:1
- Chlamydia - 4:4 19:3
- Clostridium botulinum - 5:5 5:6
- Clostridium difficile - 13:6 15:5
- Coxsackie viruses - 4.4
- Coxsackie A2 - 20:1
- " A16 - 6:1 10:1 19:1 19:6 22:1
- " B1 - 10:1
- " B2 - 1:1 8:4
- " B4 - 8:4 10:1
- Coxsiella burneti - 4:4 13:1 14:1 17:1 19:1 22:1
- Cytomegalovirus - 4:4 9:1 15:7 21:4
- Dengue - 4:1 10:1 11:1 12:1 14:1 15:1 16:1
- 17:1 18:1 20:1 21:1 24:1 24:4 25:1
- " (Pacific Islands) - 5:1 22:2
- Drink Poisoning - 25:1
- Echoviruses - 4:3 17:3
- " 11 - 1:1 2:1 5:1 7:1 8:4
- " 17 - 14:1
- " 19 - 8:4
- " 20 - 8:4
- " 22 - 7:1
- " 23 - 11:1
- " 24 - 23:1
- " 25 - 7:1
- " 30 - 7:1 11:1 17:1
- " 31 - 20:1
- Entamoeba histolytica 17:4
- Enterovirus acosta - 7:1
- Enterovirus 70 - 21:7
- Erythema infectiosum - 11:5 12:6(c)
- Eye infections - 4:1
- Food Poisoning - Clostridium - 12:2
- " " - Salmonella - 8:5 10:2 21:1
- Food virology - 12:5
- Gastrointestinal - 15:2 19:2 23:1 24:1 25:1
- Giardiasis - 11:6 23:2 25:6(c)
- Gonorrhoea - 23:6
- Gonorrhoea-β - lactamase - 3:5 6:6 8:6 11:6 12:6
- 13:2 14:2 16:8(c) 20:6 21:8 24:9
- Guillain - Barré syndrome - 13:1
- Head Lice - 24:4
- Hepatitis A - 2:2 6:1 13:1 20:5 24:3
- Hepatitis B - 2:2 4:1 4:3 7:4
- Hepatitis Non-A/Non-B - 18:2
- Herpes virus -4:3 7:1 8:4 9:1 13:1
- Immunisation schedules 5:2
- Influenza - 2:1 4:4 6:4 8:1 10:1 11:1 12:1
- 13:1 13:3 16:1 17:1 18:1 19:1 20:1
- 22:1 23:1 23:4 24:1

Kawasaki disease - 12:4 24:1

Legionnaires' disease - 11:2 20:1

Leptospirosis 21:2 23:5 25:6(c)

Lymphogranuloma venereum - 2:1 25:6

Malaria - 2:5 3:6 8:2 9:6(c) 10:5 18:2 22:1 22:10

Measles - 1:5

Meningitis - 8:4

Milker's Nodule Virus 20:1

Molluscum contagiosum - 8:1

Mumps - 4:1 4:4 4:6 6:1 7:2 24:4

Mycobacterium haemophilum 20:1

Mycoplasma pneumoniae - 4:4 24:1

Naegleria fowleri - 3:2

Neisseria meningitidis - 15:5

Norfolk Island - 16:1 17:1 19:2 23:1 25:4

Norwalk agent 2:6(c) 13:6(c) 25:1

Nosocomial influenza - 13:3

Notifiable diseases - 6:2

Parainfluenza - 4:4 6:1 24:1

Parasitic infections 18:5

Poliovirus - 16:1 24:1

Pseudocowpox - 6:1

Rabies - 5:6 16:2

Rapid laboratory diagnosis - 12:6

Refugees 4:6(c)

Reovirus - 8:1 12:1 13:1

Respiratory syncytial virus - 4:3 12:1 14:1 17:1
21:1 24:1

Respiratory Viruses - 14:5 22:9

Reye syndrome - 12:1

Rhinovirus - 7:1 24:1

Rickettsia conori 19:5

Rift Valley Fever - 9:2 24:4

Ross River Virus - 1:1 2:1 3:5 4:1 4:6 5:1 6:1
7:1 8:1 10:1 20:6 22:2

Rotavirus - 4:4 11:1 13:1 19:1 24:1

Rubella - 2:1 4:4 5:1 13:1 21:1 24:7

Salmonella - 2:5 8:5 10:2 12:2 14:1

Salmonellosis Surveillance - 17:2 18:4 20:2

Salmonella typhi - 7:5 7:6 18:1 19:1 20:1

Sindbis - 8:1 10:1

Smallpox vaccination - 10:6 11:6 20:3 24:2

Staphylococcus aureus - 9:6 22:10 25:2 25:6(c)

Staphylococcus epidermidis 25:2

Taenia saginata - 11:6

Toxic Shock Syndrome - 12:3 16:7 24:2

Vaccinia - 12:1 23:1

Varicella - 1:4 2:1 7:1

Vibrio cholera - 3:1

Virus reports, 1979 - 4:3

Water - 1:2

Yersinia enterocolitica - 14:5

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : / / to / /

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	Respiratory	Encephalitis	Meningitis	Paralysis	CNS other unspec	GI	Hepatic	CVS	Urinary	Skin/mucous memb
1025 ECHOVIRUS TYPE 25.....							1				
1030 ECHOVIRUS TYPE 30.....		1		2			1				
1101 POLIOVIRUS TYPE 1.....		1					1				
1104 POLIOVIRUS-VACCINAL STRAIN....	1	1									
1200 MUMPS VIRUS.....	1			3		1					
1300 HERPES VIRUS GROUP-NOT TYPED..		1	3			1					8
1301 HERPES SIMPLEX VIRUS NOT-TYPED	10							1	1	1	38
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .	1	1									
1303 VARICELLA-ZOSTER VIRUS.....					1						5
1306 HERPES SIMPLEX TYPE 1.....	1	3				2		1	1	3	32
1307 HERPES SIMPLEX TYPE 2.....						1					8
1401 COXIELLA BURNETI.....	6	2									
1521 MEASLES VIRUS.....		1									4
1522 RUBELLA VIRUS.....	3	2				1					27
1532 HEPATITIS B ANTIGEN.....	40						1	30			
1535 HEPATITIS A ANTIBODY.....	6							12			
1541 CHLAMYDIA A - TRIC TYPE.....	30										
1556 CMV - CYTOMEGALOVIRUS.....	7	9	1			1		2		13	1
1562 REOVIRUS (ALL TYPES).....							1				
1564 ROTAVIRUS.....	5						26	1			
1566 NORWALK AGENT.....							2				
ROSS RIVER VIRUS	1										2
ASTROVIRUS							6				
SMALL VIRUS (LIKE) PARTICLE							1				
Total.....	122	95	5	16	2	9	58	49	4	17	127

- 1 -
AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : / / to / / ...
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;
68 -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
0100 ADENOVIRUS NOT TYPED.....	1			1				2		
0102 ADENOVIRUS TYPE 2.....	1		1					1		
0103 ADENOVIRUS TYPE 3.....	1							1		
0107 ADENOVIRUS TYPE 7.....	1		1					2		
0119 ADENOVIRUS TYPE 19.....		2								
0201 INFLUENZA A VIRUS.....			1				1			
0203 INFLUENZA B VIRUS.....								4		
0303 PARAINFLUENZA VIRUS TYPE 3.....				1					1	
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)								1		
0500 RHINOVIRUS (ALL TYPES)								1		
0600 MYCOPLASMA PNEUMONIAE.....				1				1	1	
0700 ORNITHOSIS-PSITTACOSIS.....								1		
0809 COXSACKIEVIRUS A9.....								1		
1006 ECHOVIRUS TYPE 6.....								1		
1009 ECHOVIRUS TYPE 9.....							3	1		
1011 ECHOVIRUS TYPE 11.....									1	
1019 ECHOVIRUS TYPE 19.....			1					1		
1022 ECHOVIRUS TYPE 22.....							1			
1025 ECHOVIRUS TYPE 25.....							1			
1030 ECHOVIRUS TYPE 30.....										1
1104 POLIOVIRUS-VACCINAL STRAIN.....										1
1200 MUMPS VIRUS.....			1					2		
1300 HERPES VIRUS GROUP-NOT TYPED..		5						1		
1301 HERPES SIMPLEX VIRUS NOT-TYPED		2							1	
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .		2	1					1		
1303 VARICELLA-ZOSTER VIRUS.....	1							1	1	
1306 HERPES SIMPLEX TYPE 1.....	3	5	1					1		

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : / / to / / ...

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;

68 -Fever/malaise; 09 -Other; A1 -SIDS ...

-CONTINUED

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	RES	Muscle/joint	Con-genital	PUO	Fever/mal-aise	Other	SIDS
1307 HERPES SIMPLEX TYPE 2.....		107								
1401 COXIELLA BURNETI.....					3		8	21		
1521 MEASLES VIRUS.....			1							
1522 RUBELLA VIRUS.....				2	4			1		
1532 HEPATITIS B ANTIGEN.....	1									
1535 HEPATITIS A ANTIBODY.....							1	1		
1541 CHLAMYDIA A - TRIC TYPE.....		8								
1543 CHLAMYDIA A - LGV TYPE.....		1	1							
1556 CMV - CYTOMEGALOVIRUS.....			1			3	11	2	10	1
ROSS RIVER VIRUS					4					
ARBO. GROUP B.								1		
Total.....	9	132	10	5	11	3	26	50	15	3

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 27-11-80 - 10-12-80 BULLETIN NUMBER . 001. 80/25
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMR		PHH/	FAIR-			STATE	STATE	Total	
	(NSW) / WVH (ACT)	RAHC (NSW)	POW (NSW)	FIELD (VIC)	RCH (VIC)	IMVS (SA)	LAB (QLD)	LAB (WA)		
0100 ADENOVIRUS NOT TYPED.....	3	1				1	3	3	1	12
0101 ADENOVIRUS TYPE 1.....				1			4			5
0102 ADENOVIRUS TYPE 2.....	3		1	2						6
0103 ADENOVIRUS TYPE 3.....	1								1	2
0105 ADENOVIRUS TYPE 5.....	1			1		1				3
0107 ADENOVIRUS TYPE 7.....	3	2		1					1	7
0109 ADENOVIRUS TYPE 9.....									1	1
0115 ADENOVIRUS TYPE 15.....	1									1
0119 ADENOVIRUS TYPE 19.....									3	3
0199 ADENOVIRUS TYPING PENDING.....		1	2			5	2			10
0201 INFLUENZA A VIRUS.....	1			2			2			5
0203 INFLUENZA B VIRUS.....	2			3	1	8	2			16
0302 PARAINFLUENZA VIRUS TYPE 2.....						1				1
0303 PARAINFLUENZA VIRUS TYPE 3.....	1	2				10	3	4	2	22
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....		2		1	2	1			4	10
0500 RHINOVIRUS (ALL TYPES).....	5			5	2	8			1	21
0600 MYCOPLASMA PNEUMONIAE.....			4					1	1	6
0700 ORNITHOSIS-PSITTACOSIS.....				1						1
0809 COXSACKIEVIRUS A9.....				5	3	1	1			10
0902 COXSACKIEVIRUS B2.....					1				1	2
0903 COXSACKIEVIRUS B3.....					1					1
0904 COXSACKIEVIRUS B4.....					2					2
1006 ECHOVIRUS TYPE 6.....		2								2
1009 ECHOVIRUS TYPE 9.....	3			1						4
1011 ECHOVIRUS TYPE 11.....	2									2
1014 ECHOVIRUS TYPE 14.....								1		1
1019 ECHOVIRUS TYPE 19.....	2									2
1021 ECHOVIRUS TYPE 21.....									2	2
1022 ECHOVIRUS TYPE 22.....			1						1	2
1025 ECHOVIRUS TYPE 25.....	1				1					2
1030 ECHOVIRUS TYPE 30.....				2	2					4
1099 ECHOVIRUS TYPING PENDING.....			7			3				10

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - - - BULLETIN NUMBER .
 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
1101 POLIOVIRUS TYPE 1.....				1		1			2
1104 POLIOVIRUS-VACCINAL STRAIN.....						3			3
1200 MUMPS VIRUS.....			1	2		2	2	1	8
1300 HERPES VIRUS GROUP-NOT TYPED.....	13		3	2		3			21
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....	10			1	2			39	52
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	5			1					6
1303 VARICELLA-ZOSTER VIRUS.....	2		3	2		1			8
1306 HERPES SIMPLEX TYPE 1.....	2			23		11	13		49
1307 HERPES SIMPLEX TYPE 2.....	52			30		17	16		115
1399 HERPES VIRUS TYPING PENDING.....			3		1	4			8
1401 COXIELLA BURNETI.....	11			5		6	16		38
1521 MEASLES VIRUS.....	2		1	1				2	6
1522 RUBELLA VIRUS.....	6	2	5	2	2		10	7	34
1532 HEPATITIS B ANTIGEN.....	7		13	28		16	1	7	72
1535 HEPATITIS A ANTIBODY.....	3		1	4		7		4	19
1541 CHLAMYDIA A - TRIC TYPE.....	7		1					30	38
1543 CHLAMYDIA A - LGV TYPE.....								1	1
1556 CMV - CYTOMEGALOVIRUS.....	6		1	35	4	4	2	2	54
1562 REOVIRUS (ALL TYPES).....						1			1
1564 ROTAVIRUS.....	11		3	4	2	11		1	32
1566 NORWALK AGENT.....	2								2
1599 ENTEROVIRUS TYPING PENDING.....		1			13	1			15
ROSS RIVER VIRUS							3	3	6
ASTROVIRUS	6								6
SMALL VIRUS (LIKE) PARTICLE						1			1
ARBO. GROUP B.				1					1
Total.....	174	13	50	167	58	123	75	116	776