



# Communicable Diseases Intelligence

Bulletin number 80/20

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- Human salmonellosis surveillance
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- $\beta$ -lactamase producing N.gonorrhoeae
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VIRUS REPORTING SCHEME - A total of 818 reports were received this period, although figures from one laboratory have not been received due to delay in the mail. There are fewer reports than last period of respiratory syncytial virus and rotavirus infection.

## Reports of interest include:

- Influenza - The State Health Laboratory, Brisbane, reported six isolations of influenza A virus resembling A/Texas/1/77. The specimens were received from Brisbane, Ipswich, Wondai and Rockhampton. The bridging influenza A strains forwarded to the WHO Influenza Centre, CSL, Melbourne (CDI 80/19) were confirmed to be closer to A/Texas than A/Bangkok. Influenza B virus was also isolated from the lungs of a 67 year old woman with chronic obstructive airways disease.  
During September, the WHO Influenza Centre identified nine influenza A isolates, all resembling A/Bangkok/1/79 in HI tests.
- S. typhi was isolated from a 30 year old Vietnamese carrier by the State Health Laboratory, Perth. She had been in Australia for two years, and was detected following her application for a post in the kitchens of the Royal Perth Hospital.
- The two arbovirus group B infections, both clinically dengue, reported by Fairfield Hospital, Melbourne, were of patients who had recently visited Bali and Indonesia.
- Legionnaire's Disease was diagnosed by the State Health Laboratory, Perth, in a 44 year old man admitted to St Annes Hospital. The patient showed a serological response by ELISA to Legionella type 1. He recovered following erythromycin treatment.
- Mycobacterium haemophilum was isolated from a skin infection of a female cadaveric renal transplant recipient at the Royal Perth Hospital. This is the first time this species has been isolated in Western Australia, and only the fourth time in Australia.
- Less common isolates reported this period include the first 1980 notifications of coxsackievirus type A2 and milker's nodule virus, and the third 1980 notification of echovirus type 31.

## HUMAN SALMONELLOSIS SURVEILLANCE

(Based on material supplied by C. Beaton, Microbiological Diagnostic Unit, University of Melbourne.)

This issue contains tables tabulating the identification of salmonellas and shigellas isolated from humans in Australia for the second quarter of 1980 (see CDI 80/17 for tables from first quarter).

From 1 April to 30 June 1980, 1315 salmonella isolations were reported, comprising 69 serotypes. S. typhimurium was the most prevalent serotype (771 reports involving 54 phage types).

The 22 isolations of S. typhi made during the three months include:

- S. typhi phage type C<sub>1</sub> was isolated from blood cultures and faeces of a two year old girl who was admitted to hospital with slight diarrhoea and fever. The same phage type was also isolated from faeces of her eight year old sister in the follow-up screening of family contacts. The older child had been absent from school one month previously, when she had been ill with diarrhoea and abdominal pain. No faecal specimens were cultured at that time, and no carrier has been detected to date.
- S. typhi untypable was isolated from blood cultures of a ten year old girl with a four day history of chills and fever. She had just returned from Afganistan. The screening of her immediate family resulted in the isolation of Sh. sonnei from her two year old sister, and Sh. flexneri 1B from her 12 year old brother.
- S. typhi phage type A and an untypable Vi negative strain were cultured from two faecal specimens of a 68 year old woman who had recently returned from Barcelona. There was no history of previous typhoid infection, but she has suffered chronic diarrhoea for 15 to 20 years, about the same time as she was diagnosed as a diabetic. S. typhi phage type A was also isolated from the faeces of her three year old grandson.
- S. typhi phage type D<sub>1</sub> was isolated from blood culture of a six year old boy with a history of vomiting, abdominal pain and a raised temperature. Screening of family contacts resulted in isolation of S. typhi D<sub>1</sub> from the patient's 11 year old sister, 38 year old father, and on one occasion from his mother. The father, mother and third younger unaffected sibling had returned from Italy in February this year. Both father and the sister were asymptomatic.
- S. typhi untypable was isolated from blood culture of an eight year old boy with fever following his return from Singapore and Malaysia, and from the blood and faeces of a 16 year old male after travelling in Bali.
- The routine screening of arrival refugees resulted in the isolation of S. typhi untypable (Vi negative) from a carrier 42 year old female, and the re-isolation of S. typhi phage type E, from a 66 year old female (first isolated in December 1979).

- . S. typhi phage type E<sub>9</sub> was isolated from a male patient in Kiribati.

S. bovis morbificans was implicated in two food poisoning incidents. On 27 March, three patients and a pantry maid in a geriatric hospital in Ballarat became ill. Over the next two weeks, S. bovis morbificans (all tetracycline resistant) was isolated from the faeces of 21 patients, 13 staff members and on family contact from one of the kitchen staff. The patients were scattered over 12 wards. The judicious use of sewer swabs enabled asymptomatic excretors to be detected in apparently unaffected wards. The index case appeared to be one of the pantry maids who had worked in the staff dining room as well as three of the wards. The second incident involved an isolated food poisoning report from Western Australia.

For the three month period, 70 tetracycline resistant S. bovis morbificans isolations were made. Three isolates were resistant to streptomycin and sulphonamides, and one resistant to sulphonamides.

Other reports of interest include:

- . S. paratyphi A phage type 2 was isolated from blood culture of a 25 year old man with P.U.O. He had recently returned from Thailand.
- . A food poisoning incident involving S. ball and S. give occurred in Perth, and appeared to be associated with contaminated pork.
- . S. houten, previously isolated from a child in Queensland, was isolated from an Indo Chinese refugee. This is only the second isolation in Australia.

ERRATUM - In CDI 80/17, S. chester was incorrectly recorded as S. charity. The number of reports for this serotype has continued to rise, although this increased number is a result of separate incidents and not outbreaks.

#### SMALLPOX VACCINATION

At the World Health Assembly in May 1980, the World Health Organisation (WHO) declared the world free of smallpox. Australia, and most other nations do not require proof of smallpox vaccination as a condition of entry. As of 15 August 1980, only four nations - Democratic Kampuchea (Cambodia), Madagascar, Djibouti and Chad - continue to require an up-to-date certification of smallpox vaccination as a condition of entry, even though medical reasons for this requirement no longer exist.

Smallpox vaccination carries a small but measurable risk of serious complications to both vaccinees and contacts, and the vaccine should never be used therapeutically.<sup>1</sup> In Australia, the National Health and Medical Research Council recommends that vaccination of civilians is indicated only for laboratory workers directly involved with vaccinia and closely related orthopoxviruses in view of the possibility of accidental inoculation.

Since smallpox has the potential of being used as a biological weapon,

the consideration of continuing vaccination of the Australian Armed Forces involves weighing the risk of immunisation complications against the vulnerability of a military force to illness. At present, regular force male personnel are vaccinated against smallpox during recruit training with revaccination every three years, although this policy is under regular review.

The WHO campaign to eradicate smallpox was launched in 1958, a year in which 250000 cases of the disease were recorded. Following intensification of the campaign in 1967, the last endemic case of smallpox was reported in Somalia in October 1977. Nevertheless, the WHO plans to keep in reserve sufficient freeze-dried vaccine for 200 million people.

Surveillance activities included a search for an animal reservoir for variola virus. In 1970, a disease called human monkeypox was recognised in West and Central Africa, and to date 48 people (with eight deaths) have been affected with a smallpox-like illness.<sup>2</sup> Although monkeypox specific antibodies have been found in the sera of some primates, the natural reservoir for the virus remains unknown. Since transmission from the primary case is infrequent, WHO does not consider the monkeypox virus a threat to the permanence of smallpox eradication.

Three possibilities of the recurrence of smallpox have been considered by the WHO, but all are regarded as most unlikely, if not impossible:

- The first would be if the virus could lie dormant in smallpox scabs. These scabs were held by practitioners of variolation, pursued until recently in some remote tropical areas of Africa and Asia. However, variola virus becomes non-infectious within a year of collection in such tropical climates. Furthermore, no smallpox cases have been detected despite continued vigorous surveillance.
- The second possible source of re-infection comes from the variola virus stocks that are being held in the six WHO-approved and inspected laboratories in China, Netherlands, South Africa, USSR, United Kingdom and United States. This possibility became a reality in Birmingham U.K., in 1978, when one worker died and another became mildly ill. Since these were not endemic cases they were not included in the WHO's definition of the "last" cases. The biosafety requirements and inspection were consequently increased, and in two years it is hoped there will be fewer laboratories holding variola virus stocks.
- Research is continuing on the third possibility, i.e. by mutation from monkeypox virus. Following passage of monkeypox virus through hamsters, isolates were recovered that were indistinguishable from variola virus. This controversial finding in 1978 was quickly investigated. However, the characterisation of numerous monkeypox virus mutants at the molecular level, using restriction endonuclease enzymes to cleave the DNA genome into specific fragments, has shown that the differences between the two viruses are so great that it is highly improbable that smallpox virus could ever be derived from monkeypox virus by mutation. The most likely

explanation for the results is cross contamination of virus stocks.

References:

1. MMWR (1980) 29:417
2. Nature (1979) 279:293
3. Nature (1978) 276:291

MANAGEMENT OF FOOD HANDLERS WITH HEPATITIS A VIRUS INFECTION

(Based on Hepatitis Surveillance, Center for Disease Control (1980) 45:27)

Hepatitis A virus (HAV) can be transmitted by food contaminated with excreta from an infected food handler. When handler-caused outbreaks are identified, health officials should consider recommending immunoglobulin prophylaxis for patrons and other staff of the establishment concerned. The recommendation should be based on the probability of the transmission of infectious virus, and on the probability of successful intervention of the transmission by prophylaxis.

Probability of Transmission - The probability of transmission by a HAV excreting food handler depends on the amount of virus excreted, the types of food handled, and his/her hygienic practices.

The amount of virus excreted varies considerably both between individuals and during the course of infection. Virus shedding peaks at seven to 10 days before the onset of clinical symptoms, so that foodborne outbreaks of hepatitis A commonly originate from foods prepared before the food handler's illness.

HAV is temperature labile, and boiling (100°C) for one minute will inactivate it. Inactivation requires longer at lower temperatures. As a result, the foods associated with foodborne hepatitis have generally been uncooked foods (e.g. salads, cold sandwiches), cooked foods that have been allowed to cool and subsequently handled (e.g. glazed donuts), or cooked foods prepared using an internal cooking temperature insufficient to inactivate HAV.

Since HAV is transmitted by the faecal-oral route, the food handlers' personal hygienic practices are of paramount importance. The single most important factor in interrupting further disease transmission is handwashing. All food handlers must wash their hands very carefully (including cleaning of the nails), especially after defaecating.

Two groups of people may be considered for immunoglobulin prophylaxis; the patrons who may have eaten suspect food during the appropriate time period; and the source handler's co-workers. The latter are at particularly high risk because many employees in these trades eat at least one meal at the workplace every work day. If they become infected they too are sources of infection.

Probability of Successful Intervention - Successful interruption of disease transmission depends on identifying the persons at risk and administering immunoglobulin to them relatively early in the incubation

period. Immunoglobulin is effective in preventing clinical hepatitis if given within two weeks after exposure. However, because of delays in reporting cases and in identifying persons at risk, successful intervention often is not possible. Screening other food handlers for antibodies to HAV or for elevated liver enzymes is not justified, since these tests are not specific for ongoing viral excretion as both parameters appear late in infection.

Overall, the risk of hepatitis A transmission by food handlers appear to be low, since from the approximately 1000 reports received by the Center for Disease Control of food handlers infected with HAV, only four were associated with foodborne hepatitis outbreaks.

#### B-LACTAMASE PRODUCING N. GONORRHOEAE

Twenty-two further isolations have been reported, bringing the number of reports received since 1 January 1980 to 105.

<u>SEX</u>	<u>AGE</u>	<u>STATE</u>	<u>ORIGIN OF CONTRACT</u>
M	38	Western Australia	Unknown ✓
M	30	Western Australia	Unknown ✓
M	30	Western Australia	South East Asia ✓
M	26	Western Australia	Port Hedland ✓
M	22	Western Australia	Bali ✓
F	24	Western Australia	Local ✓
F	29	Western Australia	Adelaide ✓
F	26	Western Australia	England ✓
F	24	Western Australia	American sailor ✓
F	18	Western Australia	Philippines ✓
M	41	Victoria	Singapore
M	32	Queensland	Philippines
M	18	South Australia	Local)
M	24	South Australia	Local) post infective contacts
M	27	South Australia	Local)
M	29	South Australia	Melbourne
M	-	Australian Capital Territory	Bangkok
M	-	Australian Capital Territory	Bangkok
M	-	Australian Capital Territory	Manilla
F	34	Tasmania	Thailand
M	33	Tasmania	Post infective contact of female 34 above

#### ROSS RIVER VIRUS SEROLOGICAL SURVEY

Pools of "standard" Ross River virus sera have been prepared in an effort to examine inter-laboratory variation and to standardise the serology for the diagnosis of Ross River virus infection. Pools with no detectable HI antibody, with antibody, and with detectable IgM antibody, are available. Any laboratories performing Ross River virus serology (by HI, CF, ELISA, or neutralisation, etc.) may obtain samples of these sera for assay from Dr John Aaskov, Queensland Institute of Medical Research, Bramston Terrace, Herston, Brisbane, Qld. 4006.

The results of the assays will be collated, and the three sera standardised. Samples will then be available to Australian laboratories for use as a common internal standard.

## HUMAN SALMONELLOSIS CASES

Period April - June 1980

Serotype	Total	NSW & ACT	VIC	QLD	SA	WA	TAS	NT
S. aberdeen	1			1				
S. abony	5	1	1	2		1		
S. adelaide	12		1	5	2	4		
S. agona	8	2	5		1			
S. alachua	2	2						
S. anatum	23	2	5	1	3	9		3
S. bahrenfeld	1							1
S. ball	7			1		4		2
S. bareilly	2		1		1			
S. berta	1		1					
S. birkenhead	8	5		3				
S. blockley	2	1	1					
S. bovis-morbificans	111	10	75	2	15	4	2	3
S. bredeney	5		2		1	2		
S. breukelen	1		1					
S. cerro	1	1						
S. chester	34	3	3	7	1	17		3
S. coleypark	1		1					
S. derby	13		8	1		4		
S. eastbourne	3	2	1					
S. enteritides	14	1	2	10	1			
S. give	23	6	3		1	10		3
S. havana	36	7	1		6	12		10
S. heidelberg	1					1		
S. houten	1		1					
S. hvittingfoss	3	1		1				1
S. infantis	19	8	5		1	3		2
S. java	1							1
S. johannesburg	1							1
S. krefeld	3		3					
S. lansing	4			3		1		
S. lexington	1		1					
S. lille	1	1						
S. litchfield	5			1		2		2
S. london	2		2					
S. mbandaka	1		1					
S. meleagridis	1					1		
S. montevideo	2		2					
S. muenchen	30	2	1	3	4	17		3
S. newington	1			1				
S. newport	13	5	2	1	2	3		
S. ohio	1		1					

## HUMAN SALMONELLOSIS CASES

Period April - June 1980

	Total	NSW & ACT	VIC	QLD	SA	WA	TAS	NT
<i>S. ohlstedt</i>	2					1		1
<i>S. oranienburg</i>	12	1		1	5	4		1
<i>S. orientalis</i>	2			2				
<i>S. orion</i>	3			1	1	1		
<i>S. oslo</i>	3		2		1			
<i>S. panama</i>	1		1					
<i>S. paratyphi A</i>	1				1			
<i>S. paratyphi A2</i>	1				1			
<i>S. potsdam</i>	1		1	1		1		
<i>S. saint paul</i>	33	4	11	6	4	5	1	2
<i>S. schwarzengrund</i>	2		2					
<i>S. senftenberg</i>	8	1	3			4		
<i>S. singapore</i>	14	5	7		1	1		
<i>S. species</i>	2	2						
<i>S. stanley</i>	3		3					
<i>S. tennessee</i>	4			1		3		
<i>S. typhimurium*</i>	771	254	121	55	112	210	7	12
<i>S. unty 1,4,5,12-1,2</i>	1		1					
<i>S. untypable</i>	6	3				2	1	
<i>S. untypable 18:-</i>	1		1					
<i>S. untypable 41:-</i>	1		1					
<i>S. urbana</i>	1					1		
<i>S. victoria</i>	1		1					
<i>S. virchow</i>	11	1		9			1	
<i>S. wandsbek</i>	2				1	1		
<i>S. wandsworth</i>	3	1				2		
<i>S. waycross</i>	7		4	3				
<i>S. welikade</i>	2					2		
<i>S. weltevreden</i>	7		1	2				4
<i>S. 4,12:D:-</i>	2	1		1				
TOTAL	1315	333	291	125	166	333	12	55

## HUMAN SALMONELLOSIS CASES

Period April - June 1980

Serotype	Total	NSW & ACT	VIC	QLD	SA	WA	TAS	NT
<u>S. typhimurium*</u>								
untyped	139	57	20	5	26	28	1	2
phage type 1	6	3		1	2			
phage type 2	5		1	4				
phage type 3	1			1				
phage type 4	9	7			2			
phage type 5	15	7		1	4	3		
phage type 6	9	3			5	1		
phage type 9	23	2	7		3	11		
phage type 12	8		7	1				
phage type 12A	68	43	3	2	10	8	2	
phage type 16	1	1						
phage type 21	13			2	1	9	1	
phage type 22	14	2	2	4		6		
phage type 23	12				1	11		
phage type 25	5		1	1	2	1		
phage type 26	57	8	3		2	44		
phage type 27	7				5	2		
phage type 29	9	4	3	1	1			
phage type 31	1		1					
phage type 35	1	1						
phage type 41	1				1			
phage type 44	4		2	2				
phage type 64	13	1	3		8	1		
phage type 68	5	1		1		2	1	
phage type 88	4	2		2				
phage type 90	2					2		
phage type 91	1					1		
phage type 99	4	3			1			
phage type 101	41	4	4	9	7	15		2
phage type 102	1				1			
phage type 104	1	1						
phage type 108	13	2		5	2	3		1
phage type 121	3	1			2			
phage type 122	1				1			
phage type 123	1	1						
phage type 124	1	1						
phage type 126	3	2			1			
phage type 127	6	2	3		1			
phage type 132	2					2		
phage type 135	23	12	6		2	1		2

## HUMAN SALMONELLOSIS CASES

Period April - June 1980

Serotype	Total	NSW &						
		ACT	VIC	QLD	SA	WA	TAS	NT
phage type 141	28	5		1	1	19	2	
phage type 143	3	1			2			
phage type 145	1				1			
phage type 154	2		1					1
phage type 156	2				2			
phage type 167	1	1						
phage type 169	1					1		
phage type 170	58	29	8	6	12	2		1
phage type 174	2			2				
phage type 175	1	1						
phage type 176	2		2					
phage type 178	1	1						
phage type 179	106	18	43	4	2	36		3
phage type 182	19	19						
phage type 183	11	8	1		1	1		
<b>TOTAL</b>	<b>771</b>	<b>254</b>	<b>121</b>	<b>55</b>	<b>112</b>	<b>210</b>	<b>7</b>	<b>12</b>
<b><u>S. typhi</u></b>								
S. typhi A	2			2				
S. typhi C1	4		4					
S. typhi D1	6		6					
S. typhi E1	2		2					
S. typhi untyp Vi neg	2		2					
S. typhi untypable	6	2	2	1		1		
<b>TOTAL</b>	<b>22</b>	<b>2</b>	<b>16</b>	<b>3</b>		<b>1</b>		
<b><u>Sh.</u></b>								
Sh. boydii 3	1		1					
Sh. dysenteriae 2	1	1						
Sh. flexneri var X	2		2					
Sh. flexneri 1B	1		1					
Sh. flexneri 2A	8		5		1			2
Sh. flexneri 3A	11		11					
Sh. flexneri 6	3			1				2
Sh. sonnei	25	4	13	1	3			4
<b>TOTAL</b>	<b>52</b>	<b>5</b>	<b>33</b>	<b>2</b>	<b>4</b>			<b>8</b>

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 AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 18.9 -80 = 1-10-80 BULLETIN NUMBER  
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

80/20

VIRUS OR VIRAL ANTIGEN	ICPMH		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.....	6	1				1	2	4	15
0101 ADENOVIRUS TYPE 1.....				2		1			4
0102 ADENOVIRUS TYPE 2.....	2			1	3	7			13
0105 ADENOVIRUS TYPE 5.....				1				1	2
0107 ADENOVIRUS TYPE 7.....				1	2				3
0108 ADENOVIRUS TYPE 8.....					1				1
0119 ADENOVIRUS TYPE 19.....								5	5
0199 ADENOVIRUS TYPING PENDING.....						4	4		8
0201 INFLUENZA A VIRUS.....	5			19		8	2	11	45
0202 INFLUENZA A VIRUS SUBTYPE H3N2.....	4			3	6		6		19
0203 INFLUENZA B VIRUS.....	10	2		6	6	3	10		37
0302 PARAINFLUENZA VIRUS TYPE 2.....					2		2	1	5
0303 PARAINFLUENZA VIRUS TYPE 3.....		4		4	8	9	4	1	30
0399 PARAINFLUENZA VIRUS TYPING PENDING.....						1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)....	15	5		5	17	22	8	9	81
0500 RHINOVIRUS (ALL TYPES).....		1		2	10		5		18
0600 MYCOPLASMA PNEUMONIAE.....	5	2		1		6	2	2	18
0700 ORNITHOSIS-PSITTACOSIS.....	2			1		1			4
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....							1		1
0802 COXSACKIEVIRUS A2.....				2					2
0809 COXSACKIEVIRUS A9.....				1	1	1	1		4
0816 COXSACKIEVIRUS A16.....	1						1	1	3
0899 COXSACKIEVIRUS GROUP A TYPING PENDING.....				1					1
0902 COXSACKIEVIRUS B2.....				1					1
0903 COXSACKIEVIRUS B3.....								1	1
1009 ECHOVIRUS TYPE 9.....	1								1
1022 ECHOVIRUS TYPE 22.....						3			3
1030 ECHOVIRUS TYPE 30.....				2	3				5
1031 ECHOVIRUS TYPE 31.....								2	2
1101 POLIOVIRUS TYPE 1.....	1			1		1			3

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

2.

REPORTING PERIOD - 18-9-80 - 1-10-80 BULLETIN NUMBER - 80/20  
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW) / WVH (ACT)	RAHC (NSW)	PRH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	INVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1102 POLIOVIRUS TYPE 2.....						3			3
1103 POLIOVIRUS TYPE 3.....						3			3
1104 POLIOVIRUS-VACCINAL STRAIN.....	1					1			2
1200 MUMPS VIRUS.....	1			3	1	5		1	11
1300 HERPES VIRUS GROUP-NOT TYPED.....	21			2		2			25
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....	1			1			5	25	32
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	6			1					7
1303 VARICELLA-ZOSTER VIRUS.....	1						2		3
1306 HERPES SIMPLEX TYPE 1.....	6			20	1	3	7		37
1307 HERPES SIMPLEX TYPE 2.....	18			27		24	10		79
1399 HERPES VIRUS TYPING PENDING.....					2	4			6
1401 COXIELLA BURNETI.....	10			7		4	10		31
1502 PICORNA VIRUS-NOT TYPED.....								2	2
1516 MILKERS NODULE VIRUS.....						1			1
1521 MEASLES VIRUS.....	3	2		2					7
1522 RUBELLA VIRUS.....	7	1		3			8	4	23
1530 HEPATITIS A VIRUS.....						7		9	16
1531 HEPATITIS B VIRUS.....				34		4	2	9	49
1532 HEPATITIS B ANTIGEN.....	9				2				11
1535 HEPATITIS B ANTIBODY.....				6					6
1541 CHLAMYDIA A - TRIC TYPE.....	13	1						28	42
1556 CMV - CYTOMEGALOVIRUS.....	15	3		5	2	3	5	2	35
1564 ROTAVIRUS.....	22				2	10		2	36
1599 ENTEROVIRUS TYPING PENDING.....					7	2			9
ROSS RIVER VIRUS.....							4		4
ASTROVIRUS.....	1								1
SMALL VIRUS (LIKE) PARTICLE.....					3				3
ARBO. GROUP B. ....				2					2
Total.....	187	22		167	88	141	97	120	822

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 18/9/80 to 1/10/80 ....

80/20

4.

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.

VIROUS OR VIRAL ANTIGEN	No-ill or data	Respiratory	Encephalitis	Meningitis	Paralysis	CNS other unspec	GI	Hepatic	CVS	Urinary	Skin/mucous mem
0100 ADENOVIRUS NOT TYPED.....	2	5					3		1		
0101 ADENOVIRUS TYPE 1.....		3					1				
0102 ADENOVIRUS TYPE 2.....		8		1			4				
0105 ADENOVIRUS TYPE 5.....		1									
0107 ADENOVIRUS TYPE 7.....		1					1				
0108 ADENOVIRUS TYPE 8.....							1				
0201 INFLUENZA A VIRUS.....	1	35									1
0202 INFLUENZA A VIRUS SUBTYPE H3N2	3	10		2		1	1				
0203 INFLUENZA B VIRUS.....	1	30	1	2							1
0302 PARAINFLUENZA VIRUS TYPE 2....	1	4									
0303 PARAINFLUENZA VIRUS TYPE 3....	1	26					1				
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		81									
0500 RHINOVIRUS (ALL TYPES).....		16					1				
0600 MYCOPLASMA PNEUMONIAE.....	2	12	1						1		1
0700 ORNITHOSIS-PSITTACOSIS.....		4									
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....							1				
0802 COXSACKIEVIRUS A2.....		1									
0809 COXSACKIEVIRUS A9.....		1				1					2
0816 COXSACKIEVIRUS A16.....	1										2
0899 COXSACKIEVIRUS GROUP A TYPING PENDING.....		1									
0902 COXSACKIEVIRUS B2.....						1					
0903 COXSACKIEVIRUS B3.....									1		
1022 ECHOVIRUS TYPE 22.....	3										
1030 ECHOVIRUS TYPE 30.....		1		2			1				
1031 ECHOVIRUS TYPE 31.....		1						1			

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 18/9/80 to 1/10/80 .... 80/20 3

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
1101 POLIOVIRUS TYPE 1.....		1					1				
1102 POLIOVIRUS TYPE 2.....		1					2				
1103 POLIOVIRUS TYPE 3.....							2				
1104 POLIOVIRUS-VACCINAL STRAIN....							2				
1200 MUMPS VIRUS.....		1		5							
1300 HERPES VIRUS GROUP-NOT TYPED..	5	1		2				2			5
1301 HERPES SIMPLEX VIRUS NOT-TYPED	2	1						1			11
1303 VARICELLA-ZOSTER VIRUS.....			1								3
1306 HERPES SIMPLEX TYPE 1.....		5							1	1	15
1307 HERPES SIMPLEX TYPE 2.....											6
1401 COXIELLA BURNETI.....	1					1					1
1502 PICORNA VIRUS-NOT TYPED.....		1									1
1516 MILKERS NODULE VIRUS.....						1					6
1521 MEASLES VIRUS.....						1					6
1522 RUBELLA VIRUS.....	2										16
1530 HEPATITIS A VIRUS.....	8							8			
1531 HEPATITIS B VIRUS.....	27							21			
1532 HEPATITIS B ANTIGEN.....	7							3			
1535 HEPATITIS A ANTIBODY.....								6			
1541 CHLAMYDIA A - TRIC TYPE.....						1					
1556 CMV - CYTOMEGALOVIRUS.....	12	4	1				2			2	1
1564 ROTAVIRUS.....	3					1	30				
ROSS RIVER VIRUS .....	1										
ASTROVIRUS .....							1				
SMALL VIRUS (LIKE) PARTICLE .....	1						2				
Total.....	84	256	4	14		7	57	42	4	3	72

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 18/9/80 to 1/10/80 ... 80/20  
 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 ...

5.

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	1	
0102 ADENOVIRUS TYPE 2.....	1									
0105 ADENOVIRUS TYPE 5.....								1		1
0107 ADENOVIRUS TYPE 7.....	1									
0119 ADENOVIRUS TYPE 19.....		5								
0201 INFLUENZA A VIRUS.....							2	7		
0202 INFLUENZA A VIRUS SUBTYPE H3N2							2	1		1
0203 INFLUENZA B VIRUS.....			1		1		1	5		
0303 PARAINFLUENZA VIRUS TYPE 3....										2
0400 RESPIRATORY SYNCYTIAL VIRUS (RS) .....								1	1	
0500 RHINOVIRUS (ALL TYPES).....								1		2
0600 MYCOPLASMA PNEUMONIAE.....							2			
0802 COXSACKIEVIRUS A2.....									1	
0809 COXSACKIEVIRUS A9.....										1
1009 ECHOVIRUS TYPE 9.....							1			
1030 ECHOVIRUS TYPE 30.....								1		
1101 POLIOVIRUS TYPE 1.....							1			
1103 POLIOVIRUS TYPE 3.....										1
1200 MUMPS VIRUS.....			5					1	1	
1300 HERPES VIRUS GROUP-NOT TYPED..		7					2	1	1	
1301 HERPES SIMPLEX VIRUS NOT-TYPED		19						1		
1302 EPSTEIN-BARR VIRUS (EB VIRUS) .			2					1	5	
1306 HERPES SIMPLEX TYPE 1.....	4	12	1							
1307 HERPES SIMPLEX TYPE 2.....		73								
1401 COXIELLA BURNETI.....	1				1		10	18	1	
1502 PICORNA VIRUS-NOT TYPED.....								1		
1521 MEASLES VIRUS.....								1		

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 18 / 9 / 80 to 1 / 10 / 80 ... 80/20 6.

Viral Identifications by Clinical Information Table 2.

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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
1522 RUBELLA VIRUS.....					3				5	
1532 HEPATITIS B ANTIGEN.....									1	
1541 CHLAMYDIA A - TRIC TYPE.....	1	4								
1556 CMV - CYTOMEGALOVIRUS.....		1	4			1	4	2	5	
1564 ROTAVIRUS.....								3		1
ROSS RIVER VIRUS .....					3					
ARBO. GROUP B. ....								2		
Total.....	8	158	14		8	1	26	50	22	9

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REPORTING PERIOD - 19.9 - 80 1. 10 80

BULLETIN NUMBER

80/20.

113. PH.  
P.H.H. P.O.W.

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.....				1					1
0101 ADENOVIRUS TYPE 1.....				3					3
0102 ADENOVIRUS TYPE 2.....				1					1
0105 ADENOVIRUS TYPE 5.....				2					2
0107 ADENOVIRUS TYPE 7.....				1					1
0114 ADENOVIRUS TYPE 14.....				1					1
0199 ADENOVIRUS TYPING PENDING.....				2					2
0201 INFLUENZA A VIRUS.....				5					5
0203 INFLUENZA B VIRUS.....				4					4
0400 RESPIRATORY SYNCYTIAL VIRUS (RS) ...				4					4
0600 MYCOPLASMA PNEUMONIAE.....				3					3
1099 ECHOVIRUS TYPING PENDING.....				4					4
1104 POLIOVIRUS-VACCINAL STRAIN.....				3					3
1200 MUMPS VIRUS.....				3					3
1303 VARICELLA-ZOSTER VIRUS.....				3					3
1306 HERPES SIMPLEX TYPE 1.....				7					7
1399 HERPES VIRUS TYPING PENDING.....				6					6
1521 MEASLES VIRUS.....				4					4
1532 HEPATITIS B ANTIGEN.....				7					7
1541 CHLAMYDIA A - TRIC TYPE.....				3					3
1556 CMV - CYTOMEGALOVIRUS.....				7					7
1564 ROTAVIRUS.....				15					15
Total.....				89					89

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

113. PHH. P.O.W.

PERIOD : 19 / 9 / 80 to 1 / 10 / 80 ....

80/20

Viral Identifications by Clinical Information Table 1.

Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.; 07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respir atory	Enceph alitis	Mening -itis	Para- lysis	CNS other unspec	GI	Hepa -tic	CVS	Urin -ary	Skin/ mucs memb
0100 ADENOVIRUS NOT TYPED.....		1									
0101 ADENOVIRUS TYPE 1.....							3				
0102 ADENOVIRUS TYPE 2.....							1				
0105 ADENOVIRUS TYPE 5.....							2				
0107 ADENOVIRUS TYPE 7.....		1									
0201 INFLUENZA A VIRUS.....		3									
0203 INFLUENZA B VIRUS.....		3									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		3				1					
0600 MYCOPLASMA PNEUMONIAE.....						1					1
1104 POLIOVIRUS-VACCINAL STRAIN....							3				
1200 MUMPS VIRUS.....				1		1					1
1303 VARICELLA-ZOSTER VIRUS.....						1					1
1306 HERPES SIMPLEX TYPE 1.....											3
1521 MEASLES VIRUS.....		1									2
1532 HEPATITIS B ANTIGEN.....								7			
1556 CMV - CYTOMEGALOVIRUS.....			1						1	3	
1564 ROTAVIRUS.....						1	14				
Total.....		12	1	1		5	23	7	1	3	8

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

113. P.H.H. P.O.W.

PERIOD : 19/9/80 to 1/10/80 ... 80/20

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/malaise	Other	SIDS
0114 ADENOVIRUS TYPE 14.....	1									
0201 INFLUENZA A VIRUS.....				1				1		
0203 INFLUENZA B VIRUS.....								1		
0600 MYCOPLASMA PNEUMONIAE.....								1		
1303 VARICELLA-ZOSTER VIRUS.....									1	
1306 HERPES SIMPLEX TYPE 1.....	1							4		
1521 MEASLES VIRUS.....								1	1	
1541 CHLAMYDIA A - TRIC TYPE.....	1	2								
1556 CMV - CYTOMEGALOVIRUS.....						2				
Total.....	3	2		1		2		8	2	