AUSTRALIA

Communicable Diseases Intelligence

Bulletin number 86/4

Issue date: 21 February 1986

Contents:

Editor: Dr I F Cook

VIRUS REPORTING SCHEME - A total of 1,204 reports were processed for this period.

Herpes Simplex Virus was isolated from:

. the tracheal aspirate of a 36 year old male with renal failure.
. the broncho-alveolar washing of a 54 year old male with renal failure and pneumonia.
. the saliva of two renal transplants (males, 57 and 36 years old) both with a febrile illness following transplantation.
. the saliva and throat swabs of a male neonate who died of suspected herpes encephalitis 4 days after birth. This baby was born to a 24 year old South East Asian mother with herpes genitalis isolated from the labia.

Poliovirus types 1 and 2 - vaccinal strains were isolated from:

. the faeces of a one year old male and a 2 month old female presenting with gastro-intestinal symptoms, and a 7 month old female with a mild febrile illness.
. the nasal aspirates of a one month old female and a 7 month old male who presented with upper and lower respiratory tract infections respectively.
. the post-mortem neural tissue (brain and spinal cord) from a 2 month old male and intestinal mucosal tissue from a 3 month old female. Both babies died of Sudden Infant Death Syndrome.

Cytomegalovirus (CMV) was isolated from the leucocytes and a skin lesion on the abdominal wall of an adult male AIDS patient.

Four cases of Q fever were reported. Details of occupational exposure was available for only two of these patients. Both were South Australian meat workers. None of these patients was involved in the Q fever vaccine field trial being conducted in South Australia.

The Bulletin is compiled and distributed by the Communicable Diseases Branch, Department of Health, P.O. Box 100, Woden, A.C.T. 2606, Australia, and is available on request.
Contributions are solicited, and do not preclude later publication elsewhere.
Material appearing in the Bulletin may be quoted provided suitable acknowledgment is made.
Figures given may be subject to revision.

Twenty three cases of Ross River virus were reported, comprising of 5 from Western Australia, 6 from New South Wales and 12 from Victoria. One case reported from New South Wales was in a 50 year old female, resident of East Gippsland, Victoria.

AIDS SURVEILLANCE IN THE AMERICAS

(Based on Epidem. Bull.-i(1985)6:14-15)

To 30 June 1985, a total of 26 countries in the Americas had reported confirmed cases of AIDS (as defined by U.S. Centers for Disease Control) to the Pan America Health Organization.

The United States of America had reported the largest number of cases (11,497) while the second largest number of reported cases was made by Haiti (377 confirmed, 239 suspected). The numbers of cases and deaths due to AIDS is shown in Table 1.

TABLE 1 Number of confirmed and suspected cases and deaths due to AIDS in the Americas, 1979 to 30 June 1985.

Country or territory	Cases		Deaths
	Confirmed	Suspected	
Argentina	26	...	13
Bahamas	2	...	...
Barbados	4	4	1
Bermuda	10	...	10
Brazil[b]	262	54	109
Canada	248	–	124
Chile	5	...	3
Colombia	4	...	2
Costa Rica	6	...	3
French Guiana	9	2	4
Grenada	2	...	...
Guadeloupe	9	...	...
Guatemala	1	4	1
Haiti	377	239	88
Honduras	1	...	1
Jamaica	2	...	1
Martinique	2	...	–
Mexico	24	...	8
Panama	3	1	1
Peru	...	1	...
Saint Lucia	1	2	1
Saint Vincent and the Grenadines	1	...	1
Suriname	3	4	1
Trinidad and Tobago	16	...	...
United States of America	11,497	–	5,710
Uruguay	8	17	4
Venezuela	24	...	17
Total	12,547	328	6,103

... Data not available.
– None.
[a]Note: As of 30 June 1985, the following countries have reported no cases of AIDS: Antigua, Belize, Bolivia, the British Virgin Islands, the Cayman Islands, Cuba, Dominica, Ecuador, El Salvador, Guyana, Montserrat, Nicaragua, Paraguay, Saint Christopher and Nevis, and the Turks and Caicos Islands. Information was not available from the Dominican Republic, Saint Martin, and Saint Bartholomew.
[b]Data through 22 April 1985.

SALMONELLA SURVEILLANCE - NON-HUMAN ISOLATES

(Contributed by J. Powling, J. Taplin and L. Scott, Microbiological Diagnostic Unit, University of Melbourne)

2423 salmonella reports were collated by the National Salmonella Surveillance Scheme (NSSS) during January - March 1985. A State distribution and comparison of the reports with the same period in 1984 is given in Table 1.

TABLE 1 State distribution of salmonella reports from non-human sources for the first quarter of 1985 and 1986

State	January-March 1985	January-March 1984
Australian Capital Territory (ACT)	1	10
New South Wales (NSW)	246	252
Victoria (Vic)	251	462
Queensland (Qld)	62	52
South Australia (S.A.)	22	28
Northern Territory (N.T.)	23	14
Western Australia (W.A.)	1768	1180
Tasmania (Tas)	50	4
Total	2423	2002

The cultures were divided into seven categories on the basis of the type of cards used in the scheme (Table 2).

TABLE 2 Source of salmonella isolated collected by NSSS - January-March 1985

Category	No. of cultures isolated								
	ACT	NSW	VIC	QLD	SA	NT	WA	TAS	TOTAL
Foodstuffs (incl. animals)	-	62	11	2	-	-	315	1	391
Eggs	-	15	40	-	-	-	7	-	62
Milk	-		12	-	-	-	-	-	12
Animals	-	17	62	38	14	20	634	15	800
Environment including:	1	152	126	22	8	3	812	34	1158
Potable waters	-	4	13	-	-	-	15	1	33
Dairy Factory	-	-	89	-	-	-	-	-	89
Total	1	246	251	62	22	23	1768	50	2423

Foodstuffs:

The following serotypes were isolated from imported foodstuffs:

. S. uganda from Kenyan cashew nuts (W.A.)
. S. mbandaka from Malaysian black pepper (Qld)
. S. agona from Thai smoked salmon (Vic)
. S. javiana from Indonesian raw prawns (Vic)
. S. litchfield from Taiwanese frozen cooked shrimps (Vic)
. Other serotypes isolated from Indonesian prawns in Western Australia included S. java and S. lexington.

S. infantis (21 isolates), S. muenchen (30 isolates) and S. sofia (39 isolates) were isolated from the 100 samples of processed chicken; 97 of these samples were contributed by Western Australia.

S. infantis (20 isolates) and S. singapore (15 isolates), isolated from eggs and egg products, were the two serotypes found to be common in 55 samples from both Victoria (40) and New South Wales (15). S. tennessee was recovered from 7 egg samples in Western Australia.

Twelve milk isolates were received for the period. All were from Victoria and the serotypes were S. agona and S. havana (exact numbers of serotypes unavailable).

ANIMALS

A large number of isolates were obtained from Western Australia sheep, destined as live exports to the Middle East, which died while in holding yards. One hundred and twelve OVINE isolations were processed this period, including 106 samples obtained as part of the investigation of feedlot deaths. The following serotypes were identified S. bovimorbificans (22 isolates, including 11 type 23, 5 type 4 and 5 type 2,) S. havana (22 isolates), and S. typhimurium (94 isolates including 34 type 64 and 15 type 30).

The major serotypes identified in 29 BOVINE isolates were: S. dublin (14 isolates), S. havana, S. muenchen, S. waycross and S. typhimurium types 108, 135, 141, 44 and 9.

No single serotype was predominant in the 12 EQUINE isolates reported. S. mississippi was isolated in Tasmania from a horse which subsequently died.

The major serotypes identified in 46 PORCINE isolates were S. anatum (13 isolates) and S. ohio (5) from Victoria, and S. johannesburg (4 isolates) and S. give (6) from Queensland.

S. infantis (31 isolates), S. muenchen (154 isolates), and S. sofia (123 isolates) were recovered from the 308 POULTRY isolates including 305 contributed by Western Australia.

Animal isolates from Western Australia also included 151 from marsupials as part of a monitoring program. Twenty-three serotypes were found, the most common being S. muenchen (35 isolates), S. wandsbeck SGII (31 isolates), S. adelaide (23 isolates), S. anatum var 15+ (16 isolates), S. orientalis (14 isolates), S. javiana (12 isolates) S. orion (10 isolates) and S. typhimurium type 202 (10 isolates). One isolate of Campylobacter jejuni was also recovered.

ENVIRONMENT AND WATER

As part of a continuing survey, all the 89 isolates from the environment of dairy factories came from Victoria. Twelve serotypes were isolated, the most common being S. agona (23 isolates), S. havana (20 isolates), S. anatum var 15+ (11 isolates) S. derby (9 isolates), S. anatum (7 isolates) and S. wandsbeck SGII (6 isolates).

Of the 33 drinking water isolates, 15 were from Western Australia and 13 from Victoria. No one serotype was predominant in either State. S. warragul was found in 3 samples from Victoria; S. wandsworth and S. fremantle SGII were found in 3 samples from Western Australia. S. mississippi was found in 1 sample from Tasmania.

REPORT NOTE: SALMONELLA TYPHIMURIUM

A total of 330 isolates of S. typhimurium were reported during the January-March quarter of 1985. Of these isolates 289 were phage typed, 25 were untypable and 16 could not be assigned to a recognisable phage type. S. typhimurium typing during this period recovered 32 phage types; the most common phage types were 135 (67 isolates), 170 (35 isolates), 141 (9 isolates), 64 (50 isolates) and 68 (19 isolates).

PERTUSSIS - A PROBLEM IN DIAGNOSIS

Pertussis (whooping cough) should always be considered in the differential diagnosis of respiratory illness in children. A study[1] in a health clinic in Syracuse, New York State, reviewed 61 patients during an eight year period who were positive for pertussis by specific fluorescent antibody stain. Of the 61 patients, 46 required hospital admission and 15 were outpatients. Pertussis was not recorded initially by residents in the differential diagnosis in 55% of cases.

Frequent vomiting (at least four episodes per day) and severe coughing were the most helpful clinical findings leading to an accurate diagnosis. Younger and less immunised patients had more severe and prolonged clinical courses. Among the 46 inpatients, 7 patients (15%) had received more than two pertussis immunisations. The average age of admitted patients was 4.5 months. In contrast, 11 outpatients (73%) had received more than two pertussis immunisations. In this group, only 4 patients (26%) were under 4 months of age and the average age was 19 months.

White blood cell counts greater than 20,000 per mL were found in only 25% of inpatients, and abnormal chest xrays were present in less than 40%. Only one patient had contact with a known case of pertussis and the majority had not been diagnosed during a recognised outbreak of the disease.

The study demonstrates that the diagnosis of pertussis is often delayed or missed. The postulated reasons for these omissions include (i) clinical symptoms and laboratory results that were not clearly suggestive of the diagnosis, (ii) the fact that with the decreasing incidence of pertussis, the diagnosis is often not considered, (iii) over-estimation of the degree of protection afforded by pertussis immunisation, and (iv) the lack of history of exposure to other individuals with pertussis.

In November, 1985 the National Health and Medical Research Council (NHMRC)[2] recommended that the pertussis vaccine should be included with diphtheria and tetanus vaccine in the immunisation booster for children at eighteen months of age. The Council[3] has also previously recommended that a surveillance program on pertussis (co-ordinated by the Department of Microbiology, Royal Alexandra Hospital for Children, Sydney) be established.

REFERENCES

1. AJDC (1985) 139:724-7

2. Report of NHMRC, 100th Session, November 1985

3. Report of NHMRC, 99th Session, June 1985

CRYPTOSPORIDIUM AND TRAVEL - BRITISH COLUMBIA, CANADA
(Based on CDWR (1985) 11 : 173-175)

Cryptosporidium, an intestinal protozoan parasite, is a newly recognized pathogen of the gastrointestinal tract of man. In the past it was regarded as an animal parasite, particularly found in calves, but in the last few years it has been shown to be a cause of diarrhoea in humans.

When healthy individuals are infected, mild flu-like symptoms are most often experienced, although in some cases the diarrhoea may be quite severe. The symptoms generally disappear within 2-3 weeks. In the immunosuppressed, however, the diarrhoea is persistent and can be life-threatening. The mode of transmission is faecal-oral with indirect transmission suspected via contaminated water, food and possibly milk.

Between 1 October 1983, when stool specimens were first examined for Cryptosporidium, and 31 May 1985, 66 cases of cryptosporidosis were diagnosed in the British Columbian Provincial Laboratories. Initially, only specimens from patients suspected of having the acquired immune-deficiency syndrome (AIDS) were checked for the presence of the oocysts. However, as more reports were being published implicating Cryptosporidium as the causative agent of diarrhoea in non-immunosuppressed patients,[1,2] the British Columbian Provincial Laboratories began to screen routinely all specimens from children, travellers, and patients with symptoms of diarrhoea.

The method of staining currently being used at the Laboratories is a modified Kinyoun stain[3], although in doubtful cases auramine O stain is available. In the near future, auramine O will be implemented routinely. Because most of the specimens were submitted in a sodium acetate, acetic acid and formaldehyde (S.A.F.) preservative, they were not checked for enteric pathogens.

At the beginning of 1985 the number of positives increased significantly. In order to investigate the epidemiology of the organism, information was sought from the patients' physicians, covering the time period from 1 October 1983 to 31 May 1985.

Most patients were under 40 years of age. At least half the patients suffered from diarrhoea only, others had diarrhoea and vomiting or diarrhoea, vomiting and fever. Most cases appeared to have acquired the infection while travelling, particularly in Mexico. Ice cubes, untreated water, milk or milk products, and salads could be implicated as modes of transmission. Two males aged 44 and 38 years were AIDS patients with no history of travel or animal contact.

REFERENCES

1. Br. Med. J. (1984) 289: 814-816

2. MMWR (1984) 33: 599-601

3. J. Clin. Microbiol (1984) 20: 860-861

LISTERIOSIS

Listeriosis is a bacterial disease caused by Listeria monocytogenes, types 1-4. It may present as acute meningoencephalitis, septicaemia, abscess, habitual abortion, endocarditis and cutaneous disease. Intrauterine listeriosis has previously been described in Australia[1].

A study of an extensive outbreak of food-borne listeriosis in California has been reported[2]. An increase in listeriosis incidence was first noted in April 1985. All cases were in pregnant Hispanic women and/or their offspring. Subsequent investigation revealed that a food used more frequently by adult cases than controls was Mexican style cheeses, and that one brand of Mexican cheese (Jalisco) was eaten significantly more often by cases. Contamination of Jalisco products with L. monocytogenes, serotype 4B was confirmed by laboratory studies, and Jalisco products were ordered removed from sale. Investigation of the plant and production records suggest that a portion of the raw milk used in the cheese may not have been pasteurised.

Statewide surveillance to identify all listeriosis in California since January 1, 1985 has identified 314 cases (as at November 2), 181 cases occurred in infant-mother pairs and 133 in other members of the population. Of 210 with completed food histories, 103 (49%) gave a history of eating Jalisco cheese. Deaths were reported in fetuses, neonates and older individuals with compromised health status.

REFERENCES

1. CDI (1984) 13: 3-5

2. California Morbidity (1985) 46:1

RABIES

(based on Exotic Animal Diseases Bulletin (1985):2:4)

Rabies is an almost invariably fatal disease of the central nervous system. It is present in animal reservoirs in Europe, North and South America, Africa and Asia. A recent report has outlined current rabies control programs in Sri Lanka, Malaysia and Indonesia[1].

In 1981 Sri Lanka began a major rabies control campaign involving several government authorities. The campaign is based on: (i) elimination of stray and unwanted dogs, (ii) mass vaccination of owned dogs using inactivated tissue culture vaccine, (iii) revision and enforcement of rabies control legislation that provides not only for elimination of stray dogs and immunisation of owned dogs but also for the compulsory registration of dogs, and (iv) public education programs to explain the rabies hazard and rabies control methods. Prior to the present campaign, Sri Lanka recorded 300-400 human deaths from rabies annually. In four years of operation, this figure has been reduced to 90 deaths per annum.

The rabies control program in Malaysia is considered to be even more effective. Only along the border with Thailand will it be necessary to maintain an immune belt by continued animal vaccination. Indonesia is also conducting a rabies control

program based on mass vaccination of dogs, cats and pet monkeys, combined with elimination of stray dogs. Nevertheless, the incidence of the disease continues at a high level. In the period 1979-82 there were 236 human deaths from rabies.

CDI Editorial Comment

Bali is considered to be a rabies risk area by the National Health and Medical Research Council (NHMRC)[2] and the Commonwealth Department of Health. It is considered that Australians who have been bitten by dogs or monkeys whilst visiting Bali, be offered post exposure treatment.

Post exposure treatment

(i) Immediate and thorough washing of all bite wounds and scratches with soap and water.

(ii) Post exposure rabies immunisation should always include administration of both antibody (preferably rabies immunoglobulin, human) and vaccine (human diploid cell rabies vaccine [HDCV], Merieux inactivated rabies vaccine). The recommended dose of rabies immunoglobulin (human) is 20 IU/kg given at the time of the first dose of vaccine. A portion of this dose should be used to infiltrate the wound, the rest is injected intramuscularly. In total six doses of vaccine should be given (days 0, 3, 7, 14, 30 and 90).

(iii) Tetanus prophylaxis and measures to control bacterial infection should be given as indicated.

Rabies immunoglobulin and vaccine are available in Australia from the Commonwealth Serum Laboratories (CSL) for post exposure prophylaxis. They are issued free of charge to patients on an authority from the Commonwealth Department of Health (Central or Regional Offices) or the Director of CSL.

Pre-exposure management

Pre-exposure prophylaxis should be considered for veterinarians, agricultural advisers and laboratory workers who may be exposed to the rabies virus. It is not recommended for travellers who would have extremely limited chances of exposure. Pre-exposure prophylaxis involves 3 doses of rabies vaccine (days 0, 7, 30) the costs of which have to be met by either the individual or the employer. Vaccine for pre-exposure use may be obtained from May and Baker Australia Pty Ltd.

REFERENCES

1. Exotic Animal Diseases Bulletin (1985): 2:4

2. NHMRC: Report of the Ninety-seventh Session (June, 1984)

CHEMOPROPHYLAXIS OF MENINGOCOCCAL MENINGITIS

(Based on CDR (1986) 4:3-4)

Following admission to hospital of a 6 month child with group B meningoccal meningitis, all members of the extended family were tested because of frequent close contact.

The one positive swab came from an uncle who was group A positive. Chemoprophylaxis with rifampicin was given to the siblings of the index case and the child of the group A carrier. However, 19 days after hospitalisation of the index case, a 4 year old sibling became ill and group B meningococcus was isolated from blood.

Family contacts were swabbed again and an aunt was found to be carrying group B meningococcus. No further chemoprophylaxis was given. Seven weeks later, the aunt's 18 month old child developed meningococcal septicaemia.

CDR comments

1) Prophylaxis

- Although children are at most risk of infection, prophylaxis should also be given to adult family members, as if the carrier is an adult, and prophylaxis is only given to the children, then the children will be at risk again as soon as prophylaxis is completed.
- It is important to realise that even following appropriate treatment for meningococcal septicaemia or meningitis, an individual may still carry the infecting strain in the pharynx. This may explain the second case mentioned above, since this occurred one week after the discharge of the index case from hospital.
- Because of the great emotion and anxiety that can be generated by meningococcal infection, there is a temptation to extend prophylaxis to more individuals than necessary. The risk of secondary cases is confined to those in intimate contact. As in the cluster described, probably the most important group outside the immediate family are extended families, particularly the children. Other indications would be for boyfriends/girlfriends. For hospital staff prophylaxis is indicated only for those who have given mouth to mouth resuscitation.
- For sporadic cases, no measures are required for primary or secondary school contacts. Day nurseries are something of a grey area. It is likely on emotive grounds to be impractical to confine prophylaxis to very close contacts, whereas mass prophylaxis is not usually justifiable in this situation. Indeed giving prophylaxis to "open" communities is always ineffective as recolonisation occurs very quickly afterwards. Therefore, for sporadic cases, it is better to avoid prophylaxis other than to family contacts. It might be helpful to notify the relevant GPs that a case had occurred, so that prompt action can be taken should a child attending the nursery become ill.

2) Antibiotics

- Rifampicin should be regarded as the drug of first choice for prophylaxis as there is increasing sulphonamide resistance and minocycline's adverse reactions make it unacceptable for prophylaxis.

3) Need for swabbing

. Prophylaxis should not be delayed until swab results are available. If swabs are taken, any meningococci should be grouped and typed if possible. Where swabbing has been carried out, follow up specimens should be obtained from carriers after prophylaxis to ensure the eradication of the meningococcus.

Meningococcal Meningitis Vaccine

The Commonwealth Department of Health has sent advice to all registered medical practitioners in Australia indicating the availability of a single dose meningococcal meningitis vaccine for travellers to endemic areas.

Currently recognised endemic areas are rural districts in Ghana, Burkina Faso (Upper Volta), Niger, Nigeria, Mali, Sudan, Chad, Egypt, Brazil, Nepal, Mongolia and Vietnam.

ERRATA:

1. CDI 86/3 AIDS in French Polynesia, the article should have read: '... a serological survey did not identify the presence of antibody to HTLV-III in 80 homosexual men, 29 female prostitutes and 33 recipients of blood transfusion.'

2. CDI 86/2: one case of rabies was incorrectly reported to the CDI. Please delete the case from the CDI 86/2 virus tables.

KUNJIN VIRUS ENCEPHALITIS

A documented case of Kunjin virus encephalitis has been reported[1,2]. The patient was a 49 year old male from the northern Victorian town of Murchison. He was admitted to the Royal Melbourne Hospital in March 1984 with a five-day history of fever, sweats and rigors. This was followed by a severe headache, confusion, disorientation and ataxia. On admission, he was afebrile (36.5°C), his speech was slurred and he appeared drowsy. His condition deteriorated over the next 24 hours, and he developed profound bulbar, truncal and proximal muscle weakness suggestive of damage to cranial motor nuclei and anterior horn cells. This was slow to resolve and when reviewed the patient still had significant proximal weakness.

A marked rise in antibody titres to Kunjin virus was shown by haemagglutination inhibition tests. Specific IgM antibodies were detected only against Kunjin virus.

Kunjin virus encephalitis is probably rare. The majority of human infections are subclinical or mild febrile illnesses. Clearly documented evidence of Kunjin virus encephalitis in humans has not been previously published.

REFERENCES

1. Med J Aust (1986) 144: 41-42
2. CDI (1984) 84/11: 1

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD 3/2/86 - 16/2/86 BULLETIN NUMBER 86/4

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	1		6	1	1		8		17
0101 ADENOVIRUS TYPE 1				1	3	2		1	7
0102 ADENOVIRUS TYPE 2					9	4		1	14
0103 ADENOVIRUS TYPE 3					2				2
0105 ADENOVIRUS TYPE 5						2			2
0106 ADENOVIRUS TYPE 6	2				2				4
0107 ADENOVIRUS TYPE 7		1				2	1		4
0108 ADENOVIRUS TYPE 8	1								1
0199 ADENOVIRUS TYPING PENDING	2		3		1				6
0201 INFLUENZA A VIRUS	3								3
0202 INFLUENZA A VIRUS SUBTYPE H3N2				1					1
0203 INFLUENZA B VIRUS								1	1
0301 PARAINFLUENZA VIRUS TYPE 1					1				1
0302 PARAINFLUENZA VIRUS TYPE 2						1			1
0303 PARAINFLUENZA VIRUS TYPE 3	1	1				4	3		9
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)							2		2
0500 RHINOVIRUS (ALL TYPES)					10	11	4	1	26
0600 MYCOPLASMA PNEUMONIAE	8	1	1			1	1	3	15
0700 ORNITHOSIS-PSITTACOSIS	2			2					4
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED						1			1
0816 COXSACKIEVIRUS A16				1					1
0903 COXSACKIEVIRUS B3						1			1
0904 COXSACKIEVIRUS B4					1		1		2
1001 ECHOVIRUS TYPE 1						1			1
1003 ECHOVIRUS TYPE 3	1								1
1004 ECHOVIRUS TYPE 4							1		1
1007 ECHOVIRUS TYPE 7					1			1	2
1011 ECHOVIRUS TYPE 11				1					1
1014 ECHOVIRUS TYPE 14			1				1		2
1020 ECHOVIRUS TYPE 20	2								2
1022 ECHOVIRUS TYPE 22				2		1	2		5
1100 POLIOVIRUS NOT TYPED			1						1
1101 POLIOVIRUS TYPE 1						1			1
1102 POLIOVIRUS TYPE 2	1					1			2
1103 POLIOVIRUS TYPE 3	1					2			3
1104 POLIOVIRUS-VACCINAL STRAIN					1		6		7
1200 MUMPS VIRUS				2	1				3
1300 HERPES VIRUS GROUP-NOT TYPED	21		2	8					31
1301 HERPES SIMPLEX VIRUS NOT-TYPED		5					1	1	7
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	13	2	3	2		2		11	33
1303 VARICELLA-ZOSTER VIRUS	4		2			4	2		12
1306 HERPES SIMPLEX TYPE 1	17		10	24	14	32	30	28	155
1307 HERPES SIMPLEX TYPE 2	78		28	68	1	22	54	49	300
1399 HERPES VIRUS TYPING PENDING					6				6
1401 COXIELLA BURNETI			1	1		2			4
1502 PICORNA VIRUS-NOT TYPED	13	1	17				8		39
1514 MOLLUSCUM CONTAGIOSUM				1				1	2
1521 MEASLES VIRUS	1			1					2
1522 RUBELLA VIRUS	3							5	8
1532 HEPATITIS B ANTIGEN	46	1	7	12		14	19	14	113
1535 HEPATITIS A ANTIBODY	7		1	5		12	2	24	51
1541 CHLAMYDIA A - C TRACHOMATIS	19		7			41	38	79	184
1556 CMV - CYTOMEGALOVIRUS	6		1	14	7	5	1	5	39
1563 CORONAVIRUS				1				1	2
1564 ROTAVIRUS	10		2	2	1	6			21
1566 NORWALK AGENT			1						1
1599 ENTEROVIRUS TYPING PENDING		1	10		1				12
9992 ROSS RIVER VIRUS			6	12				5	23
9994 SMALL VIRUS (LIKE) PARTICLE	1	1							2
Total	264	14	110	162	63	175	185	231	1,204

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 3/2/86 - 16/2/86

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.....		1									
0101 ADENOVIRUS TYPE 1.....		2					2				1
0102 ADENOVIRUS TYPE 2.....		11	1								
0103 ADENOVIRUS TYPE 3.....		2									
0105 ADENOVIRUS TYPE 5.....							2				
0106 ADENOVIRUS TYPE 6.....		1					1				
0107 ADENOVIRUS TYPE 7.....		2					2				
0201 INFLUENZA A VIRUS.....	1	1									1
0202 INFLUENZA A VIRUS SUBTYPE H3N2		1									
0301 PARAINFLUENZA VIRUS TYPE 1....		1					1				
0302 PARAINFLUENZA VIRUS TYPE 2....		1									
0303 PARAINFLUENZA VIRUS TYPE 3....	1	8									
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		2									
0500 RHINOVIRUS (ALL TYPES).....	1										
0600 MYCOPLASMA PNEUMONIAE.....	2	11									
0700 ORNITHOSIS-PSITTACOSIS.....		3									
0800 COXSACKIEVIRUSES GROUP A - NOT TYPED.....											1
0816 COXSACKIEVIRUS A16.....		1									
0903 COXSACKIEVIRUS B3.....							1				
0904 COXSACKIEVIRUS B4.....		1									
1001 ECHOVIRUS TYPE 1.....		1									
1004 ECHOVIRUS TYPE 4.....							1				
1007 ECHOVIRUS TYPE 7.....				1							
1011 ECHOVIRUS TYPE 11.....			1								
1014 ECHOVIRUS TYPE 14.....				2							
1022 ECHOVIRUS TYPE 22.....	3	2					1				
1101 POLIOVIRUS TYPE 1.....		1									
1102 POLIOVIRUS TYPE 2.....		1					1				
1103 POLIOVIRUS TYPE 3.....							3				
1104 POLIOVIRUS-VACCINAL STRAIN....		2					2				
1200 MUMPS VIRUS.....	1			1							
1300 HERPES VIRUS GROUP-NOT TYPED..			1	1							
1301 HERPES SIMPLEX VIRUS NOT-TYPED											5
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	3	2		1		1		3			1
1303 VARICELLA-ZOSTER VIRUS.....	1										11
1306 HERPES SIMPLEX TYPE 1.....	9	8					2			1	89
1307 HERPES SIMPLEX TYPE 2.....	27						1				51
1401 COXIELLA BURNETI.....	1	1									
1502 PICORNA VIRUS-NOT TYPED.....	5	1		3			4		2		
1521 MEASLES VIRUS.....											2
1522 RUBELLA VIRUS.....		1									3
1532 HEPATITIS B ANTIGEN.....	44							63			
1535 HEPATITIS A ANTIBODY.....	4							44			
1541 CHLAMYDIA A - C.TRACHOMATIS...	1	1									
1556 CMV - CYTOMEGALOVIRUS.....	5	13						1		1	2
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....	1						18				
9994 SMALL VIRUS (LIKE) PARTICLE...					1		1				
Total.....	110	83	3	9	1	1	44	111	2	2	167

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 3/2/86 to 16/2/86
Viral Identifications by Clinical Information Table 2.
Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;
38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;
G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Genital	Endo/sal gland	RES	Muscle/joint	Congenital	PUO	Fever/malaise	Other	SIDS
0101 ADENOVIRUS TYPE 1.....									3	
0102 ADENOVIRUS TYPE 2.....									2	
0106 ADENOVIRUS TYPE 6.....									2	
0108 ADENOVIRUS TYPE 8.....	1									
0202 INFLUENZA A VIRUS SUBTYPE H3N2									1	
0203 INFLUENZA B VIRUS.....								1		
0500 RHINOVIRUS (ALL TYPES).....										1
0600 MYCOPLASMA PNEUMONIAE.....					1			1		
0700 ORNITHOSIS-PSITTACOSIS.....					1				1	
0904 COXSACKIEVIRUS B4.....									1	
1003 ECHOVIRUS TYPE 3.....										1
1007 ECHOVIRUS TYPE 7.....									1	
1020 ECHOVIRUS TYPE 20.....								2		
1104 POLIOVIRUS-VACCINAL STRAIN....									1	2
1200 MUMPS VIRUS.....			1							
1301 HERPES SIMPLEX VIRUS NOT-TYPED									2	
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			14	2				1	3	4
1306 HERPES SIMPLEX TYPE 1.....	4	40							4	
1307 HERPES SIMPLEX TYPE 2.....	1	223								
1401 COXIELLA BURNETI.....								2		
1502 PICORNA VIRUS-NOT TYPED.....					2			2	2	1
1514 MOLLUSCUM CONTAGIOSUM.....				1						
1522 RUBELLA VIRUS.....						1	1	1	3	
1532 HEPATITIS B ANTIGEN.....			1		1				1	4
1535 HEPATITIS A ANTIBODY.....									3	
1541 CHLAMYDIA A - C.TRACHOMATIS...	4	175							3	
1556 CMV - CYTOMEGALOVIRUS.....		3				2	3	1	11	
1563 CORONAVIRUS.....								1		
1564 ROTAVIRUS.....									2	
1566 NORWALK AGENT.....									1	
9992 ROSS RIVER VIRUS.....			1		11			1		
Total.....	10	441	17	3	16	3	13	26	35	3

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 10
8 September 1985 to 5 October 1985 Bulletin 86/4

Disease	N.S.W.	VIC	QLD	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	CUMULATIVE TOTAL TO DATE FOR YEAR
Amoebiasis			3		1				4	26
Ankylostomiasis			2	1			N.N.		3	34
Anthrax									–	—
Arbovirus infection			22		1				23	* 467
Brucellosis	1								1	13
Campylobacter infections	55	N.N.	N.N.	98	15	N.N.		N.N.	168	1688
Chancroid				N.N.		N.N.			–	8
Cholera									–	–
Congenital rubella syndrome	1	N.N.	N.N.	1		N.N.		N.N.	2	3
Diphtheria							3		3	12
Donovanosis		N.N.		N.N.	1	N.N.	3		4	* 65
Giardiasis	21	N.N.	N.N.	45	4	N.N.	N.N.	N.N.	70	* 899
Genital herpes	54	N.N.	11	22	N.N.	N.N.	2		89	1262
Gonococcal ophthalmia neonatorum		N.N.	N.N.		N.N.	N.N.		N.N.	–	5
Gonorrhoea	109	81	59	41	123	2	60	9	484	5970
Hepatitis A (infectious)	11	4	25	11	22		5		78	586
Hepatitis B (serum)	54	14	30	20	54	1	10	4	187	1304
Hepatitis – unspecified	7		N.N.		12	N.N			19	93
Hydatid disease	1		3						4	11
Lassa Fever		N.N	N.N.			N.N.	N.N.	N.N.	–	1
Legionnaires' disease			N.N.		1	N.N.		N.N.	1	17
Leprosy	1						1		2	32
Leptospirosis	1	1	2		1				5	152
Lymphogranuloma venereum		N.N.	N.N.	N.N.	N.N.	N.N.	1		1	4
Malaria	11	4	12	3	5		3	3	41	499
Marburg Disease		N.N.	N.N.			N.N.	N.N.	N.N.	–	–
Meningococcal infections	2					N.N.	1		3	44
Non-specific urethritis	190	N.N.	11	97		N.N.		N.N.	298	3612
Ornithosis	1								1	8
Pertussis (whooping cough)	15	7	N.N.	9		N.N.		N.N.	31	381
Plague									–	–
Poliomyelitis									–	–
Q. fever	3		7	8			N.N.		18	161
Rabies		N.N	N.N.	N.N.		N.N.	N N.	N.N.	–	–

2.

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	84	10	20	15	13	3	6	50	201	2191
Shigella infections	11		8	9	14		9		51	587
Smallpox									-	-
Syphilis	27	6	18	21	20		52	2	146	1776
Tetanus									-	8
Trachoma		N.N.			59	N.N.	N.N.		59	33
Tuberculosis (all forms)	39	18	2	13	5		10	3	90	860
Typhoid fever									-	23
Typhus (all forms)									-	5
Vibrio parahaemolyticus infections		N.N.	N.N.			N.N.		N.N.	-	4
Yellow Fever									-	-
Yersinia enterocolitica infections	2	N.N.	N.N.	3		N.N.		N.N.	5	34

(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

Donovanosis + 4 Western Australia
Giardiasis + 1 Western Australia
Arbovirus Infection + 1 Western Australia