



Communicable Diseases Intelligence

Bulletin number 85/22

Issue date: 1 November 1985

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Arbovirus surveillance - NSW.
Heterosexual transmission of
LAV/HTLV-III.

Adverse reactions to cholera
vaccine - Republic of China.

VIRUS REPORTING SCHEME - A total of 966 reports were processed this period.

Ross River Virus infection was diagnosed in a 39 year old female resident in the metropolitan area of Perth who presented with rash and joint pains. A second case of Ross River Virus infection was diagnosed in a patient in northern Western Australia with fever and joint pains.

Serology from a 7 year old boy and a 10 year old boy with subacute sclerosing panencephalitis showed elevated titres of antibodies to measles in the serum and cerebrospinal fluid. This progressive fatal disease can be avoided by measles vaccination. The current level of measles vaccination in the community (68%) is insufficient to give herd immunity against this disease.

Post-mortem samples were taken from a one month old girl with congenital respiratory infection. Cytomegalovirus was isolated from both lung and kidney samples.

Cytomegalovirus was isolated from a 16 month old girl with recently increasing deafness. The child had been previously diagnosed with congenital CMV.

Three cases of sudden infant death syndrome were reported during this period. Cytomegalovirus was isolated from a nasal sample of a 9 month old boy and adenovirus type 10 from a 4 month old boy. An untyped adenovirus was identified by immunoenzymatic techniques in the faeces of the third child.

Rubella was diagnosed in a 36 year old woman with a rubella-form rash, itchiness and polyarthrititis. The woman was reported to have had an episode of rubella during childhood.

Adenovirus type 35, cytomegalovirus and herpes simplex virus type I were isolated from the saliva and urine of a 31 year old AIDS patient. Adenovirus type 24 and cytomegalovirus were isolated from the urine and faeces of a 30 year old HTLV-III antibody positive male and cytomegalovirus was isolated from the serum of a 40 year old HTLV-III antibody positive male.

(continued on page 8)

(Contributed by H.M. Naim, R.A. Hawkes, C.R. Boughton, B. Myrick, L. Ramsay
Arbovirus Research Unit, University of New South Wales)

This is the 4th report summarising the Unit's recent arbovirus surveillance in chickens. As in 1984, seronegative chickens were stationed at 16 locations in NSW. In the south the flocks were located at Albury, Berrigan, Deniliquin, Griffith, Hay, Leeton and Wentworth. They were bled weekly from early December to late April. The northern flocks at Bourke, Broken Hill, Menindee, Narrabri, Gunnedah, Moree, McQuarie Marshes and Warren were bled monthly. Each flock consisted of approximately 15 birds. Sera were tested by the haemagglutination-inhibition method for antibody against the alphavirus Sindbis and the flaviviruses Murray Valley Encephalitis, Kunjin, Alfuy, Stratford, Kokobera and Edge Hill. a summary of the results is given in the table.

Table 1 Seroconversions in Arboviruses in sentinel chickens in NSW 1984-1985

Town	Sindbis Seroconverions	Week of 1st seroconversion
Albury	0	-
Berrigan	2	18.1.85
Deniliquin	0	-
Griffith	5	7.1.85
Hay	2	14.1.85
Leeton	3	1.4.85
McQuarie Marshes	2	9.1.85
Wentworth	0	-
Bourke	3	8.1.85
Broken Hill	0	-
Menindee	4	15.1.85
Narrabri	0	-
Gunnedah	0	-
Kempsey	0	-
Moree	0	-
Warren	0	-

Seroconversions to Sindbis virus occurred in 7 flocks beginning first in Griffith and Bourke and occurring as late as March in Leeton. There were no flavivirus seroconversions. Chicken sentinels in the above areas will be set out again in the summer of 1985-1986. In Bourke, Warren and Griffith a sentinel scheme in dogs has been set up and in Kempsey sentinel cattle will be monitored.

HETEROSEXUAL TRANSMISSION OF LYMPHADENOPATHY-ASSOCIATED VIRUS/HUMAN T-LYMPHOTROPIC VIRUS TYPE III

(Based on MMWR (1985) 34: 561 -3)

Acquired immune deficiency syndrome (AIDS) is caused by a virus that is known to be transmitted through sexual contact and parenteral exposure to blood or blood products and from mother to child during the perinatal period.

In the United States, sexual contact is believed to be the only risk factor for 8,374 (64%) of the 13,061 AIDS cases among

adults reported to Centers for Disease Control (CDC) as of 15 September 1985. These sexual-contact cases include 8,241 homosexual or bisexual men with no other known risk factors for infection and 133 heterosexual men and women.

The heterosexual-contact cases are among persons who denied belonging to known AIDS risk groups, but reported sexual contact with a risk-group member or an AIDS patient of the opposite sex. The proportion of AIDS patients placed in this category has not changed significantly over time ($p > 0.15$). The 133 heterosexual-contact cases include 118 women and 15 men, the majority of whom said they had sexual contact with intravenous (IV) drug abusers.

No risk factors have been identified for LAV/HTLV-III infection in 829 of the total AIDS cases reported to CDC. Of these 829 patients, 344 were born in developing countries where AIDS is known to exist. The remaining 485 cases constitute a proportion of AIDS patients that has not changed significantly over time ($p > 0.15$). Of these 485 patients with no identified risk, 99 were available for in-depth interviews. Twenty-three (34%) of the 58 men gave histories of sexual contact with female prostitutes. One (3%) of the 31 women gave a history of prostitution.

Serological evidence of LAV/HTLV-III infection in female prostitutes has been shown in preliminary studies from several American cities. Of 92 prostitutes tested in Seattle, five (6%) had HTLV-III antibody detected by the enzyme immunoassay (ELISA) tests of two manufacturers in Miami, Florida, 10 (40%) of 25 prostitutes attending an AIDS screening clinic had HTLV-III antibody detected by both ELISA and Western blot methods. Eight of the 10 seropositive women reported previous IV drug abuse.

(Reported by H. Handsfield, MD, Seattle-King County Dept of Public Health, J. Kobayashi, MD, State Epidemiologist, Washington State Dept of Social and Health Svcs; M. Fischl, MD, G. Dickinson, MD, University of Miami School of Medicine, J. White, MD, Florida Dept of Health and Rehabilitative Svcs; AIDS Br, Div of Viral Diseases, Center for Infectious Diseases CDC).

MMWR Editorial Note: Transmission of LAV/HTLV-III from heterosexual men to their female sexual partners has been well established in studies from the United States and elsewhere. Several published reports from the United States describe the occurrence of AIDS in heterosexual couples, where only the male partner had a known AIDS risk factor (1-3). A study in Rwanda and Belgium described AIDS or related conditions in 42 African women, including 10 prostitutes, who denied IV drug abuse (4).

Studies of AIDS patients from several developing countries also indicate that female-to-male sexual transmission of LAV/HTLV-III infection occurs in those settings and emphasize the role of female prostitutes in this transmission. In Zaire, the ratio of male-to-female AIDS cases is 1.1:1 (5). A case-control study of heterosexual African men with AIDS or related conditions in Rwanda and Belgium showed a significant association of LAV/HTLV-III infection with a history of contact with prostitutes and with an increased number of female partners per year (4). A case-control study of Haitian men with AIDS in Miami and New York City showed a significant

association of AIDS with a history of prostitute contact and with a history of sexually transmitted diseases, suggesting that sexual contact may be a major method of transmission in these heterosexual men (6).

For persons born in the United States, female-to-male sexual transmission of LAV/HTLV-III has been less evident than male-to-female transmission. The reasons for reported differences in the epidemiological pattern of LAV/HTLV-III infections in the United States and certain developing countries are not clear. However, there are at least two possible explanations for the paucity of reported male "heterosexual contact" AIDS patients in the United States. First, female-to-male transmission of LAV/HTLV-III may be less efficient than male-to-female transmission, as has been reported for gonococcal infections (7,8). Second, the proportion of women among infected persons is relatively small. Of the 2,665 reported heterosexual AIDS patients with known risk factors in the United States, only 647 (24%) are women. The inclusion of 1,427 AIDS cases among bisexual men would further decrease the proportion of women among potential transmitters of infection. If the distribution of LAV/HTLV-III infected persons in the population is similar to the distribution of AIDS patients, infected heterosexual men would outnumber infected women by a ratio of 5:1.

While additional evidence for female-to-male transmission of LAV/HTLV-III in the United States is being sought, it would seem prudent to assume that such transmission occurs. In all other sexually transmitted infections, transmission is bidirectional, and LAV/HTLV-III appears to be spread bidirectionally in other populations. LAV/HTLV-III has been isolated from semen (9, 10) and, presumably, would be present in the menstrual blood and the lymphocytes found in cervical and vaginal secretions of infected women. Attempts to isolate the virus from cervical and vaginal secretions are in progress.

All sexually active persons should realize that their risks of acquiring infection are greatly increased by having sexual intercourse with members of known AIDS risk groups or with persons who are the sexual contacts of risk-group members. Sexually active persons should also recognize that, as with other sexually transmitted diseases, the greater the number of sexual partners, the greater the risk of possible LAV/HTLV-III infection. Consistent use of condoms should assist in preventing infection with LAV/HTLV-III but their efficacy in reducing transmission has not yet been proven.

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ADVERSE REACTIONS TO CHOLERA VACCINE - TAIPEI CITY AND MIAOLI COUNTY

(Based on Epidemiology Bulletin, Republic of China, 1985, 1:65-7)

In May 1985, two clusters of adverse reactions to cholera vaccine were reported to the Bureau of Disease Control. The vaccine associated with both clusters (agar grown fluid type containing 8×10^9 total vibrios per ml of Inaba and Ogawa serotypes) was manufactured in Taiwan by the National Institute of Preventive Medicine.

The first cluster of reactions occurred among a group of 945 Taipei City Bank employees who received 1 ml of cholera vaccine (lot #73-2) during an employee immunization program. Approximately 20 employees initially reported mild to moderate local reactions (pain, induration and erythema). Questionnaires were distributed to all vaccinees to identify the number with adverse reactions, their signs and symptoms and potential risk factors. A total of 631 questionnaires were returned for a response rate of 67 percent. Thirty-five (5.5%) employees reported adverse reactions including tenderness (80%) swelling at the injection site (69%), induration (60%), malaise (29%), erythema (17%), fever (17%), and lymphadenopathy (9%). Onset of reactions occurred 1-8 days (median = 5.3 days) after injection. There was no association of reactions with time or day of immunization, or by worksite. No differences were noted between reactors and nonreactors with respect to age or sex. Risk factors for reactions included a history of previous reaction to cholera vaccine ($p=3.66 \times 10^{-3}$, Fisher's exact test), and illness in the week preceding vaccination ($p=3.49 \times 10^{-3}$, FET). Previous immunization with cholera vaccine was not associated with reactions.

The second cluster of reactions was reported among primary school children in Miaoli County after cholera vaccine (lot #73-6) was administered to school children during a county-wide mass immunization campaign. Although all 161 schools in Miaoli County participated in the campaign, reports of vaccine reactions were received from only two elementary schools: one in the township of Ta Hu (enrollment 905) and the other in Kong Kwan (enrollment 536). Two different methods were used to administer cholera vaccine in Miaoli county: students in larger schools (> 500 students) were vaccinated with a pneumatic jet injector gun (Hyjector YS-2, Tokyo Sokuhan Company) and students in smaller schools were vaccinated with disposable needles and syringes.

To determine rates and type of reaction to cholera vaccine, questionnaires were sent to parents of all children in the larger of the two elementary schools reporting reactions (school A). Students in school A received cholera vaccine via jet injector gun. For comparison, questionnaires were also sent to parents of a nearby elementary school (school B) in which students received vaccine via needle and syringe. No spontaneous reports of vaccine reactions had been received from school B. In school A, 776 questionnaires were returned by 868 vaccinees for a response rate of 89 percent. In school B, 327 questionnaires were returned by 335 vaccinees for a response rate of 98 percent. A probable reaction to cholera vaccine was defined as any local or systemic sign or symptom noted after

the administration of cholera vaccine. The rate of reactions to schools A and B were 29 and 19 percent, respectively ($p < 0.002$). Signs and symptoms were similar among students in both schools (Table 1). The median time from injection to onset of symptoms was two hours for students in school A and five hours for students in school B ($p > 0.05$; Wilcoxon rank sum test). The median duration of symptoms was four hours for students in both schools. Reaction rates did not differ significantly by school grade, however, there was significant clustering of reactions in classrooms of both schools: $p < 0.001$ for schools A and B (χ^2 goodness-of-fit). The pattern of clustering was unrelated to time of vaccination, personnel administering the vaccine, or individual vials of vaccine from the same lot number.

To identify potential risk factors for vaccine reaction, we redefined a reaction more strictly as a student with fever $> 39^\circ\text{C}$, or $\geq 38^\circ\text{C}$, plus two or more symptoms including nausea, vomiting, headache, dizziness, chills, localized erythema or induration. Two factors were significantly associated with reactions in both schools: previous history of a reaction to cholera vaccine (school A, $p < 10^{-5}$; school B, $p = 1.49 \times 10^{-8}$, FET) and illness during the week preceding vaccination (school A, $p < 0.01$; school B, $p = 9.19 \times 10^{-3}$, FET). Once the effects of these two factors were taken into account, the clustering of reactions in classrooms was no longer significant in either school (Mantel-Haenszel $\chi^2 = 1.52$ for school A and 2.90 for school B).

Table 1. Comparison of signs and symptoms among students with reaction to cholera vaccine in schools A and B.

Signs and Symptoms	School A (N=223)	School B (N=63)
Dizziness	59%	35%
Fever	48%	51%
Headache	46%	24%
Nausea	19%	13%
Chills	10%	11%
Vomiting	5%	5%
Rash	4%	11%
Cyanosis	2%	6%

Vaccine vials associated with reactions were tested by the laboratory of the Food and Drug Bureau. The vaccines met quality control standards for sterility, pH, nitrogen and phenol content. The production records of all lots of cholera vaccine manufactured in 1984, including the two lots associated with reactions, were reviewed and all had passed sterility, abnormal toxicity, and safety tests.

The reactions among bank employees differed significantly from those among primary school children. Age may have an important influence on type of reaction of cholera vaccine, however, we were unable to show any age-specific differences in reaction rates or type of reactions within the age groups of our study. Alternatively, there could be an undetected chemical or biological difference between the two different vaccine lots which could account for differences in the characteristics of reactions.

In both bank employees and school children, a history of previous reaction to cholera vaccine and illness in the week preceding vaccination were significantly associated with reactions. Previous reaction may indicate a hypersensitivity to some component of cholera vaccine which predisposes to subsequent reactions. Preceding illness could also alter the immune system permitting increased susceptibility to reactions from vaccines.

The difference in rates of reaction between students vaccinated by jet injector gun and needle and syringe are difficult to assess since only two schools were studied. Controlling for previous reaction to cholera vaccine and illness in the week preceding vaccination did not eliminate the significant differences in reaction rates between the two schools (Mantel-Haenszel $\chi^2=24.73$, $p < 10^{-6}$). It is possible that the injector gun produced more local trauma predisposing to higher rates of reaction, although this cannot be proved with the data presently available.

(Reported by Taipei City Health Department: Miaoli County Health Bureau: National Institute of Preventive Medicine; Food and Drug Bureau; Bureau of Disease Control, Department of Health, Executive Yuan.)

Epidemiology Bulletin Editorial Note: Mild to moderate reactions to cholera vaccine are common, however, specific data on rates and type of reactions are limited. In a field trial of high potency cholera vaccine in Indonesia in 1973-1975, local reactions (pain, erythema, swelling and induration) occurred in 30-40 percent of children 1-9 years of age, and systemic reactions (headache, malaise) occurred in 4-8 percent⁽¹⁾. Since the vaccine used in the Indonesian field trial contained twice the number of organisms per ml as the vaccine used in Taiwan, it is difficult to directly compare reaction rates.

Although cholera vaccine has been produced for many years in Taiwan, this is the first report of a large number of reactions to the vaccine. These reactions were not severe and are consistent with previously described reactions to cholera vaccine. It is possible that these reactions only came to the attention of health authorities because a large number of individuals were vaccinated in a relatively short period of time. School B, which did not spontaneously report any reactions, had a reaction rate of 19 percent.

Cholera vaccine is not included among the routine vaccinations in the immunization program of the Republic of China. Cholera vaccine offers only partial protection, and duration of immunity is brief⁽²⁻⁵⁾. With adequate treatment, the case-fatality rate of cholera is less than one percent with a lower relative cost-per-death-prevented than with vaccination programs⁽⁶⁾. The Department of Health, Executive Yuan, Republic of China, therefore recommends that the use of cholera vaccine should not be encouraged by City and County Health Departments. Cholera vaccine should not be given to individuals with a history of previous reaction to cholera vaccine or illness in the preceding week.

CDI Editorial Comment: The vaccine available for use in Australia contains twice the number of organisms per ml compared with that used in this report. 0.5 ml of this vaccine

is administered subcutaneously and a primary immunization course consists of two doses of the vaccine injected at an interval of 14 to 18 days. Similar antibody response with a considerable reduction in the frequency and severity of adverse reactions can be achieved by the intradermal administration of 0.1 ml of this vaccine. This route of administration, which requires a high level of dexterity, is preferable in patients with an atopic diathesis.

References:

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(continued from page 1)

In September, the National HTLV-III Reference Laboratory successfully isolated the AIDS virus for the first time in Australia and is now one of a small number of laboratories throughout the world with this capability.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 14/10/85-27/10/85 BULLETIN NUMBER 85/22
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			9	3	14	28
0101 ADENOVIRUS TYPE 1.....	1	1		1				1	4
0102 ADENOVIRUS TYPE 2.....							2	1	3
0103 ADENOVIRUS TYPE 3.....							3		3
0105 ADENOVIRUS TYPE 5.....								1	1
0106 ADENOVIRUS TYPE 6.....							1		1
0110 ADENOVIRUS TYPE 10.....								1	1
0115 ADENOVIRUS TYPE 15.....							1		1
0119 ADENOVIRUS TYPE 19.....								1	1
0124 ADENOVIRUS TYPE 24.....				1					1
0126 ADENOVIRUS TYPE 26.....	1								1
0135 ADENOVIRUS TYPE 35.....				1					1
0199 ADENOVIRUS TYPING PENDING.....		1	1			6			8
0201 INFLUENZA A VIRUS.....		1	6				1		8
0203 INFLUENZA B VIRUS.....	1	1	1	1	2	8	3	4	21
0301 PARAINFLUENZA VIRUS TYPE 1.....							1		1
0302 PARAINFLUENZA VIRUS TYPE 2.....								1	2
0303 PARAINFLUENZA VIRUS TYPE 3.....	1	1		1	5	8	12	2	30
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)...	1		3	2	3	8	12	2	31
0500 RHINOVIRUS (ALL TYPES).....	1	1	1	3	17	13	4	1	41
0600 MYCOPLASMA PNEUMONIAE.....	1					2		4	7
0906 COXSACKIEVIRUS B6.....						1			1
1000 ECHOVIRUS NOT TYPED.....						2			2
1006 ECHOVIRUS TYPE 6.....						1			1
1007 ECHOVIRUS TYPE 7.....				1		1		4	6
1012 ECHOVIRUS TYPE 12.....						1			1
1015 ECHOVIRUS TYPE 15.....								2	2
1024 ECHOVIRUS TYPE 24.....			1						1
1100 POLIOVIRUS NOT TYPED.....			2						2
1101 POLIOVIRUS TYPE 1.....				1		1			2
1102 POLIOVIRUS TYPE 2.....	1					1			2
1103 POLIOVIRUS TYPE 3.....						3			3
1200 MUMPS VIRUS.....								1	1
1300 HERPES VIRUS GROUP-NOT TYPED.....	16		1	2		1		2	22
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....		1							1
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....		3						14	17
1303 VARICELLA-ZOSTER VIRUS.....			1			2		2	5
1306 HERPES SIMPLEX TYPE 1.....				37	4	16	26	23	106
1307 HERPES SIMPLEX TYPE 2.....	1			47	4	20	58	71	197
1399 HERPES VIRUS TYPING PENDING.....				4	4				8
1502 PICORNA VIRUS-NOT TYPED.....		1	5				2		8
1521 MEASLES VIRUS.....						2			2
1522 RUBELLA VIRUS.....	8		2	5		1		9	25
1530 HEPATITIS A VIRUS.....						2			2
1532 HEPATITIS B ANTIGEN.....	3	1	13	25	1	17	9	7	76
1533 HEPATITIS B ANTIBODY.....						2			2
1535 HEPATITIS A ANTIBODY.....				3	1	2	1	9	16
1541 CHLAMYDIA A - C TRACHOMATIS.....				39*		54		72	165
1556 CMV - CYTOMEGALOVIRUS.....			2	22	4	3	7	5	43
1563 CORONAVIRUS.....								3	3
1564 ROTAVIRUS.....			10	2	6	21			39
1599 ENTEROVIRUS TYPING PENDING.....		1	2		5				8
9992 ROSS RIVER VIRUS.....								2	2
Total.....	36	14	52	198	69	203	149	245	966

* Cultures performed at Microbiological Diagnostic Unit, Melbourne

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 14/10/85 to 27/10/85

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.....		3					1				
0101 ADENOVIRUS TYPE 1.....							1				
0102 ADENOVIRUS TYPE 2.....		1				1	1				
0103 ADENOVIRUS TYPE 3.....		1									
0105 ADENOVIRUS TYPE 5.....		1									
0106 ADENOVIRUS TYPE 6.....		1									
0126 ADENOVIRUS TYPE 26.....							1				
0201 INFLUENZA A VIRUS.....			9								
0203 INFLUENZA B VIRUS.....	1	15									
0301 PARAINFLUENZA VIRUS TYPE 1....		1									
0302 PARAINFLUENZA VIRUS TYPE 2....		1									
0303 PARAINFLUENZA VIRUS TYPE 3....		26			1					1	1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....	1	27						1			
0500 RHINOVIRUS (ALL TYPES).....		37					2				1
0600 MYCOPLASMA PNEUMONIAE.....		7									
0906 COXSACKIEVIRUS B6.....							1				
1006 ECHOVIRUS TYPE 6.....	1										
1007 ECHOVIRUS TYPE 7.....		2			1		1				
1012 ECHOVIRUS TYPE 12.....							1				
1015 ECHOVIRUS TYPE 15.....	1										
1024 ECHOVIRUS TYPE 24.....		1									
1100 POLIOVIRUS NOT TYPED.....							2				
1101 POLIOVIRUS TYPE 1.....		1					1				
1102 POLIOVIRUS TYPE 2.....		1									
1103 POLIOVIRUS TYPE 3.....							3				
1300 HERPES VIRUS GROUP-NOT TYPED..											3
1301 HERPES SIMPLEX VIRUS NOT-TYPED											1
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	2										1
1303 VARICELLA-ZOSTER VIRUS.....		1				2					1
1306 HERPES SIMPLEX TYPE 1.....	5	6								1	53
1307 HERPES SIMPLEX TYPE 2.....	15										54
1502 PICORNA VIRUS-NOT TYPED.....								5			
1521 MEASLES VIRUS.....				2							
1522 RUBELLA VIRUS.....							1				19
1530 HEPATITIS A VIRUS.....								2			
1532 HEPATITIS B ANTIGEN.....	26							40			1
1533 HEPATITIS B ANTIBODY.....	1										
1535 HEPATITIS A ANTIBODY.....	4							12			
1541 CHLAMYDIA A - C.TRACHOMATIS...	1										1
1556 CMV - CYTOMEGALOVIRUS.....	2	16						1		1	1
1563 CORONAVIRUS.....		3									
1564 ROTAVIRUS.....	1						38				
9992 ROSS RIVER VIRUS.....											1
Total.....	61	161	2	2		3	59	56		3	138

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 14/10/85 to 27/10/85

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
0101 ADENOVIRUS TYPE 1.....				1				1	1	
0103 ADENOVIRUS TYPE 3.....	1						1			
0110 ADENOVIRUS TYPE 10.....										1
0115 ADENOVIRUS TYPE 15.....	1									
0119 ADENOVIRUS TYPE 19.....	1									
0124 ADENOVIRUS TYPE 24.....		1								
0135 ADENOVIRUS TYPE 35.....		1								
0203 INFLUENZA B VIRUS.....				1	1				5	
0302 PARAINFLUENZA VIRUS TYPE 2....	1							1	2	
0303 PARAINFLUENZA VIRUS TYPE 3....								1	2	
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....									1	1
0500 RHINOVIRUS (ALL TYPES).....									1	
1007 ECHOVIRUS TYPE 7.....									2	
1015 ECHOVIRUS TYPE 15.....	1									
1102 POLIOVIRUS TYPE 2.....							1			
1200 MUMPS VIRUS.....				1						
1300 HERPES VIRUS GROUP-NOT TYPED..		15					1	1		
1302 EPSTEIN-BARR VIRUS (EB VIRUS)..				1	9		1	1	4	2
1303 VARICELLA-ZOSTER VIRUS.....									2	
1306 HERPES SIMPLEX TYPE 1.....	4	37					2	1		
1307 HERPES SIMPLEX TYPE 2.....		132						1		1
1502 PICORNA VIRUS-NOT TYPED.....										1
1522 RUBELLA VIRUS.....				1	1	2		10		3
1532 HEPATITIS B ANTIGEN.....				1			1			9
1533 HEPATITIS B ANTIBODY.....										1
1541 CHLAMYDIA A - C.TRACHOMATIS...	3	160								
1556 CMV - CYTOMEGALOVIRUS.....							7	2	15	1
1563 CORONAVIRUS.....								1		
9992 ROSS RIVER VIRUS.....					2					
Total.....	12	346	4	12	5	7	8	34	34	2

in/
acs
mb

1

1

3

1

1

1

53

54

19

1

1

1

1

138