ISSN 0725-3141

Communicable Diseases Intelligence

Bulletin number 86/8
Issue date: 21 April 1986

Contents:

Editor: Dr I F Cook

VIRUS REPORTING SCHEME: A total of 1 079 reports were processed for this period.

Thirteen cases of Q fever were reported (8 from Queensland, 4 from New South Wales and 1 from Victoria). Occupational exposure data were available for three patients, a 17 year old stockman from Townsville, a 55 year old male meatworker from Brisbane and a 33 year old female meatworker from Wondai.

Two imported cases of dengue fever, serotype 1, were reported, a 28 year old male and an adult male of unknown age who acquired their infections in the Pacific Islands and South East Asia respectively.

There has been an apparent increase of rotavirus associated diarrhoea during this period, predominantly in young children. The demographics of these cases were:
SEX: Male, 25; Female, 30; Not known 3.
AGE: 0-1 years, 37; 2-5 years, 8; 6-10 years, 1
10 years, 3; Not known 9.

Ross River virus activity showed an apparent increase with 97 cases (46 from Queensland, 37 from Victoria, 9 from New South Wales and 5 from Western Australia) reported in this period compared with 22, 60, 48 and 23 for the four previous periods.

ERRATUM

The contact number for the NH&MRC Publications Section as provided to the CDI and published in CDI 86/7 was incorrect. The correct telephone number is (062) 897318.

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.

BAT-RABIES IN DENMARK
(Based on CDS 86/03, 18 January 1986)

On September 10, 1985 a bat of the species Eptesicus serotinus, (one of 13 different bat species existing in Denmark) found in a weak condition at Ansager near Varde, Jutland, bit the finger of a Danish woman. Post-exposure treatment was initiated immediately following confirmation by the State Veterinary Serum Laboratory in Copenhagen that the bat was infected with rabies. Bat-rabies has never previously been diagnosed in Denmark.

A total of 9 bats was submitted to the State Veterinary Serum Laboratory during the month of September, as part of a campaign which encouraged Danish citizens to hand in to practising veterinarians any bats found dead or sick, in order to determine the prevalence of rabies in bats. Four of the 9 bats were found to be positive to rabies by the fluorescent antibody test. All 4 bats were found in weak condition or dead within a distance of 30 km from Ansager.

Monoclonal antibody studies indicated that the bat-rabies isolates differed from the European sylvatic rabies strain, but appeared to be identical to the bat-virus isolates originating from the north-western part of the Federal Republic of (West) Germany. The last case of sylvatic rabies in Denmark was diagnosed in a cow on March 9, 1982.

In Europe[1], cases of bat-rabies have involved the following bat species:- Nyctalus noctula, Eptesicus serotinus and Rhinolophus ferrumequinum and three other unidentified bats. Laboratory findings in the three unidentified bats collected in the maritime northern part of the Federal Republic of Germany, indicated a rabies virus strain bearing characteristic antigenic determinants of Duvenhage virus from Africa, which has not previously been found in Europe. It is not known whether the bats had been inadvertently imported on three different occassions; e.g. by boat, or whether the virus has established itself in bat species indigenous to Europe.

REFERENCE

1. WHO, Technical Report Series 709 (1984): 65-66

ADDITIONAL RECOMMENDATIONS TO REDUCE SEXUAL AND DRUG ABUSE - RELATED TRANSMISSION OF HUMAN T-LYMPHOTROPIC VIRUS TYPE III.
(Based on MMWR Vol. 35/No 10, 14 March 1986)

BACKGROUND:

Human T-lymphotropic virus type III (HTLV-III) that causes acquired immunodeficiency syndrome (AIDS), is transmitted through sexual contact, parenteral exposure to infected blood or blood products, and perinatally from mother to foetus or neonate. In the United States, over 73% of adult AIDS patients are homosexual or bisexual men; 11% of these males also had a history of intravenous (IV) drug abuse. Seventeen percent of all adult AIDS patients were heterosexual men or women who abused IV drugs [1,2]. The prevalence of HTLV-III antibody is high in certain risk groups in the United States [3,4].

Since a large proportion of seropositive asymptomatic persons have been shown to be viremic [5], all seropositive individuals, whether symptomatic or not, must be presumed capable of transmitting this infection. A repeatedly reactive serologic test for HTLV-III has important medical, as well as public health implications for the individual and his/her health-care provider. The purpose of these recommendations are to suggest ways to facilitate identification of seropositive asymptomatic persons, both for medical evaluation and for counselling to prevent transmission.

Previous U.S. Public Health Service recommendations pertaining to sexual, IV drug abuse, and perinatal transmission of HTLV-III have been published [6,8]. Reduction of sexual and IV transmission of HTLV-III should be enhanced by using available serologic tests to give asymptomatic, infected individuals in high-risk groups the opportunity to know their status so they can take appropriate steps to prevent the further transmission of this virus.

Since the objective of these additional recommendations is to help interrupt transmission by encouraging testing and counselling among persons in high-risk groups, careful attention must be paid to maintain confidentiality and to protecting records from any unauthorised disclosure. The ability of health departments to assure confidentiality - and the public confidence in that ability - are crucial to efforts to increase the number of persons requesting such testing and counselling. Without appropriate confidentiality protection, anonymous testing should be considered. Persons tested anonymously would still be offered medical evaluation and counselling.

PERSONS AT INCREASED RISK OF HTLV-III INFECTION

Persons at increased risk of HTLV-III infection include:

- homosexual and bisexual men
- present or past IV drug abusers
- persons with clinical or laboratory evidence of infection, such as those with signs or symptoms compatible with AIDS or AIDS-related complex (ARC)
- persons born in countries where heterosexual transmission is thought to play a major role (eg Haiti, Central African countries)
- male or female prostitutes and their sex partners
- sex partners of infected persons or persons at increased risk
- all persons with haemophilia who have received clotting-factor products
- newborn infants of high-risk or infected mothers.

RECOMMENDATIONS

1. Community health education programs should be aimed at members of high-risk groups to:
   - increase knowledge of AIDS
   - facilitate behavioural changes to reduce risks of HTLV-III infection
   - encourage voluntary testing and counselling.

2. Counselling and voluntary serologic testing for HTLV-III should be routinely offered to all persons at increased risk when they present to health-care settings. Such facilities include, but are not limited to, sexually transmitted disease clinics, clinics for treating parenteral drug abusers, and clinics for examining prostitutes.

   a. Persons with a repeatedly reactive test result (see section on Test Interpretation) should receive a thorough medical evaluation, which may include history, physical examination, and appropriate laboratory studies.

   b. High-risk persons with a negative test result should be counselled to reduce their risk of becoming infected by:
      . reducing the number of sex partners. A stable, mutually monogamous relationship with an uninfected person eliminates any new risk of sexually transmitted HTLV-III infection.
      . protecting themselves during sexual activity with any possibly infected person by taking appropriate precautions to prevent contact with the person's blood, semen, urine, faeces, saliva, cervical secretions, or vaginal secretions. Although the efficacy of condoms in preventing infections with HTLV-III is still under study, consistent use of condoms should reduce transmission of HTLV-III by preventing exposure to semen and infected lymphocytes (9,10).
      . for IV drug abusers, enrolling or continuing in programs to eliminate abuse of IV substances. Needles, other apparatus, and drugs must never be shared.

   c. Infected persons should be counselled to prevent the further transmission of HTLV-III by:
      . informing prospective sex partners of his/her infection with HTLV-III, so they can take appropriate precautions. Clearly, abstention from sexual activity with another person is one option that would eliminate any risk of sexually transmitted HTLV-III infection.
      . protecting a partner during any sexual activity by taking appropriate precautions to prevent that individual from coming into contact with the infected person's blood, semen, urine, faeces, saliva, cervical secretions, or vaginal secretions. Although the efficacy of using condoms to prevent infections with HTLV-III is still under study, consistent use of condoms should reduce transmission of HTLV-III by preventing exposure to semen and infected lymphocytes (9,10).
      . informing previous sex partners and any persons with whom needles were shared of their potential exposure to HTLV-III and encouraging them to seek counselling/testing.
      . for IV drug abusers, enrolling or continuing in programs to eliminate abuse of IV substances. Needles, other apparatus, and drugs must never be shared.

- not sharing toothbrushes, razors, or other items that could become contaminated with blood.
- refraining from donating blood, plasma, body organs, other tissue, or semen.
- avoiding pregnancy until more is known about the risks of transmitting HTLV-III from mother to foetus or newborn (8).
- cleaning and disinfecting surfaces on which blood or other body fluids have spilled, in accordance with previous recommendations (2).
- informing physicians, dentists, and other appropriate health professionals of his/her antibody status when seeking medical care so that the patient can be appropriately evaluated.

3. Infected patients should be encouraged to refer sex partners or persons with whom they have shared needles to their health-care provider for evaluation and/or testing. If patients prefer, trained health department professionals should be made available to assist in notifying their partners and counselling them regarding evaluation and/or testing.

4. Persons with a negative test result should be counselled regarding their need for continued evaluation to monitor their infection status if they continue high-risk behaviour (8).

5. State and local health officials should evaluate the implications of requiring the reporting of repeatedly reactive HTLV-III antibody test results to the State health department.

6. State or local action is appropriate on public health grounds to regulate or close establishments where there is evidence that they facilitate high-risk behaviours, such as anonymous sexual contacts and/or intercourse with multiple partners or IV drug abuse (eg bath-houses, houses of prostitution, "shooting galleries")

TEST INTERPRETATION

Commercially available tests to detect antibody to HTLV-III are enzyme-linked immunosorbent assays (ELISAs) using antigens derived from disrupted HTLV-III. When the ELISA is reactive on initial testing, it is standard procedure to repeat the test on the same specimen.

Repeatedly reactive tests are highly sensitive and specific for HTLV-III antibody. However, since falsely positive tests occur, and the implications of a positive test are serious, additional more specific tests (eg Western blot, immunofluorescent assay, etc.) are recommended following repeatedly reactive ELISA results, especially in low-prevalence populations. If additional, more specific, test results are not readily available, persons in high-risk groups with strong repeatedly reactive ELISA results can be counselled before any additional test results are received regarding their probable infection status, their need for medical follow-up and ways to reduce further transmission of HTLV-III.

OTHER CONSIDERATIONS:

State or local policies governing informing and counselling sex partners and those who share needles with persons who are HTLV-III antibody positive will vary, depending on State and local statutes that authorize such actions. Accomplishing the objective of interrupting transmission by encouraging testing and counselling among persons in high-risk groups will depend heavily on health officials paying careful attention to maintaining confidentiality and protecting records from unauthorized disclosure.

The public health effectiveness of various approaches to counselling, sex partner referral, and laboratory testing will require careful monitoring. The feasibility and efficacy of each of these measures should be evaluated by State and local health departments to best utilise available resources.

REFERENCES:

1. Science (1985) 229 : 1352-7

2. MMWR (1985) 34 : 682-6, 691-5

3. MMWR (1985) 34 : 573-5

4. MMWR (1985) 34 : 561-3

5. MMWR (1985) 34 : 1-5

6. MMWR (1983) 32 : 101-4

7. MMWR (1984) 33 : 377-9

8. MMWR (1985) 34 : 721-32

9. Prog. Intern. Society for STD Res. (Abstract - 1983): 176

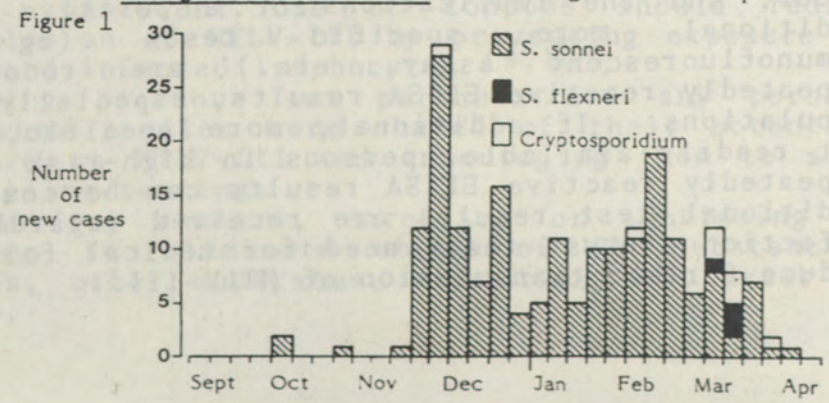
10. Sex Transm. Dis. (1984) 11 : 94

CRYPTOSPORIDIOSIS DURING AN EPIDEMIC OF SHIGELLA SONNEI DYSENTERY IN THE UK

(Based on CDR 86/08 P3)

During the period November 1984 to March 1985, an epidemic of dysentery occurred in Crawley, Sussex, UK. There was evidence of transmission between the children of 4 schools, and from children to their families, teachers and friends. Of 2368 faecal specimens received by the relevant public health laboratory from 1390 individuals, 181 persons were stated to be culture positive for Shigella sonnei during the epidemic (figure 1).

Figure 1



Of 1004 individuals for whom clinical details were available, 650 were symptomatic and 354 contacts were symptomless. In addition to faeces cultured for S. sonnei, smears were made and examined for cryptosporidium using auramine staining[1]. The original report states that Cryptosporidium oocysts were demonstrated in 15 individuals with diarrhoea and one child without, and that thirteen of the cases, from nine families, were diagnosed in a three-week period (figure 1). The figure, however, indicates that Cryptosporidium oocysts were isolated from only 9 cases, 6 of these in a 2 week period. It is presumed that there is a typographical error in the figure. (The figure also gives data for 190 new cases culture positive for S. sonnei between September 1984 and April 1985. The additional 9 cases are assumed to have been diagnosed in Sept/Oct and April.)

Four children were infected with both S. sonnei and cryptosporidium. A common source seemed likely, although infection may have spread from person to person. A retrospective epidemiological study of the outbreak was undertaken. Interviews and questionnaires from the families involved were completed for 18 patients with symptoms and 10 symptomless family contacts, but no significant common factors associated with the cases were found.

Of 111 patients with cryptosporidium seen since January 1984 there have been mixed infections in 14, including four with shigella, one salmonella (plus two patients with recent salmonella infections), two campylobacter, one enteropathogenic Escherichia coli, two rotavirus, one adenovirus, one echovirus, one Giardia lamblia, and one mixed infection with both campylobacter and enteropathogenic E. coli.

Comment

Cryptosporidium usually presents as the sole pathogen in patients with cryptosporidiosis, but, as with other enteropathogens, combined infections can occur[2]. An oubreak was associated with campylobacter infections in the UK[3], and in the USA there was an association with giardia, Entamoeba histolytica, shigella and salmonella[4]. Combined infections with measles[5], salmonella, shigella, and campylobacter[6] were reported in Rwanda. Mixed infections with rotavirus, ascaris, strongyloides, enterotoxigenic E. coli, and enteropathogenic E. coli were demonstrated in Brazil[7]. In AIDS patients with cryptosporidiosis mixed infections with giardia are common, but other organisms (Isospora belli, E. histolytica) can also occur. Combined infections have also been reported in animal cryptosporidiosis.

This epidemic confirms previous reports that cryptosporidium can occur in with epidemics of other enteric pathogens and the close association with S. sonnei indicates that the mode of transmission in some patients may be similar. Although animals, food, milk, water and sexual activity have been suggested as modes of spread it is likely that person to person transmission, particularly with children, is more common.

References

1. Lancet (1984) 1: 735.

2. Lancet (1985) 1: 381-83.

3. CDR 84/32: 3-4.

4. N Eng J Med (1985) 312: 1278-82.

5. Lancet (1984) 2: 42-43.

6. J Clin Micro (1984) 20: 874-76.

7. J Infect Dis (1985) 151: 963-65.

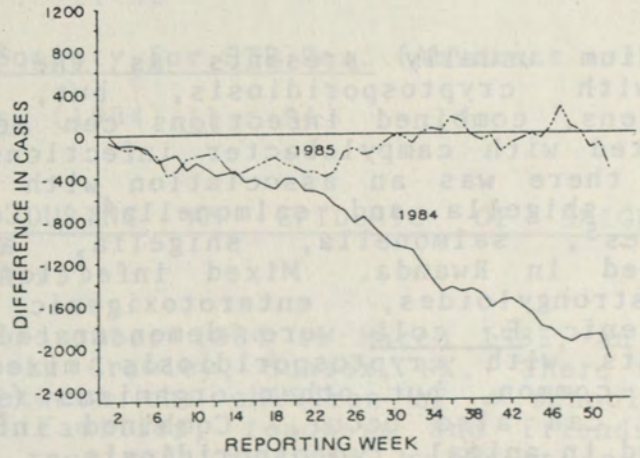
TUBERCULOSIS IN THE USA, 1985 AND THE POSSIBLE IMPACT OF HTLV-III INFECTION.

(Based on MMWR (1986) 35 (5) 74-76)

A provisional total of 21,801 tuberculosis cases was reported to the Centres for Disease Control (CDC), Atlanta, Georgia in 1985, representing a 2% decrease from the confirmed total of 22,255 cases in 1984. Similarly, in 1985, the provisional incidence rate was 9.1 cases per 100,000 population, a decline of 3.2% from the 1984 rate of 9.4 per 100,000.

Compared with 1983, the number of reported cases in 1984 declined progressively, so that by week 52, there were 2139 fewer cumulative provisional reported cases (See figure 1). Compared with 1984, there was no such progressive decline in 1985.

FIGURE 1. Difference in cumulative tuberculosis cases in the USA between 1985 and 1983 and between 1985 and 1984, by MMWR reporting week.



EDITORIAL NOTE. Between 1975 and 1978, the average annual decrease in tuberculosis cases reported to the CDC was 5.7%. Between 1978 and 1981, when there was a large influx of South-East Asian refugees, the average decline was only 1.4%. An average decrease of 6.7% between 1982 and 1984 indicated that the previous downward trend had resumed. The 2% decrease in 1985 thus represents another slowing of this trend.

Although the reasons for the relatively small decline in 1985 cases are not known it is possible that HTLV-III infection of persons infected with the tubercle bacillus has caused an increase in tuberculosis.

This hypothesis is supported by the following:

1. Since other immunosuppressive disorders are associated with an increased risk of developing clinically apparent tuberculosis[1,2], there is a theoretical reason to believe that compromised immunity secondary to HTLV-III infection may favor activation of preexisting latent Mycobacterium tuberculosis infection.

2. Some of the areas with the largest tuberculosis morbidity increases in 1985 (New York City, California, Florida, Texas) are also some of the areas that have reported the largest number of acquired immunodeficiency syndrome (AIDS) cases to date[3].

3. Data from New York City indicate that increased tuberculosis morbidity is occurring in areas of the city where most AIDS cases have occurred. Matching the New York City tuberculosis and AIDS case registers has revealed increasing numbers of AIDS patients with histories of tuberculosis. An increasing number of persons with histories of intravenous drug abuse - a known risk factor for AIDS - have been diagnosed as having tuberculosis[4].

4. In parts of Florida, a substantial number of persons with AIDS either had tuberculosis at the time AIDS was diagnosed or had it within the 18 months preceding the AIDS diagnosis[5]. Based on an analysis currently in progress, 109 (10.0%) of the 1,094 AIDS patients reported to CDC from Florida up to December 31, 1985, have also been diagnosed with tuberculosis.

To understand the problem better and to design the most effective and efficient program strategies, it will be essential to establish: (1) the proportion of tuberculosis patients who also have AIDS; (2) the proportion of specific subpopulations with tuberculosis that have HTLV-III infection; (3) the proportion of AIDS patients who have had tuberculosis diagnosed; (4) the relative risk among persons with both tuberculosis infection and HTLV-III infection of developing clinical tuberculosis, compared with suitable controls with tuberculous infection; (5) whether patients with HTLV-III infection and tuberculosis are more or less likely to transmit tuberculosis infection to others; (6) the validity of tuberculin skin-test results for persons with AIDS or HTLV-III infection; and (7) the efficacy of current treatment regimens among patients with HTLV-III infection and tuberculosis.

The CDC is working closely with State and Regional Health Departments in the design and conduct of studies which will investigate these questions.

REFERENCES

1. Am Rev Respir Dis (1976) 114: 593-627.

2. Lancet (1979) 1: 1176-8.

3. MMWR 1986; 34: 784.

4. Atlanta, Georgia: International conference on acquired immunodeficiency syndrome (AIDS). April 14-17, 1985.

5. Ann Intern Med (1984) 101: 641-5.

DRUG RESISTANT COLIFORMS IN NEW SOUTH WALES DRINKING WATERS (APRIL-OCTOBER, 1985)

(Contributed by P.W. Bodnaruk, A.G. Bernard, Microbiology Laboratory, Division of Analytical Laboratories, N.S.W. Department of Health, Lidcombe)

The quality of drinking waters in New South Wales is routinely monitored for coliform bacteria count to determine the degree of human and animal waste contamination of drinking water supplies, and to ascertain the drug resistance phenotypes of faecal coliforms. The NSW public health authorities responsible for the formulation of water quality standards, express concern at the coliform bacteria, in particular *E. coli*, which are capable of acquiring resistance factors and disseminating them through a sensitive population[1,2].

The present study reports the incidence of antimicrobial resistance in coliforms isolated from both treated and untreated drinking water supplies in NSW. Three hundred and eighteen drinking water samples from both public and private supplies throughout the State were collected and examined for the presence of coliforms by using the membrane filter technique. Nine hundred and eighty two isolates were identified, and confirmed colonies[3] were tested for resistance to the following antimicrobial agents[4]:

- ampicillin (Ac) 10 ug/ml
- chloramphenicol (Cm) 25 ug/ml
- gentamicin (Gm) 5 ug/ml
- sulphapyridine (Su) 350 ug/ml
- oxytetracycline (Tc) 25 ug/ml

The species identification and the resistance determinants are shown in Table 1.

TABLE 1: Incidence of resistance to different drugs among bacterial isolates

Isolate identification	Number of isolates	Number of isolates resistant to:-				
		Ac	Tc	Cm	Gm	Su
E. Coli	718	32	43	13	Nil	22
K. oxytoca	23	15	1	Nil	Nil	Nil
Other coliforms	151	66	8	Nil	Nil	3
Non coliforms	90	------ Not tested ------				
Total	982	113	52	13	Nil	25

A number of isolates were shown to carry between 1 and 4 resistance determinants including at least 12 isolates which were resistant to 3 or more antimicrobials.

E. coli resistant to sulphapyridine, oxytetracycline, chloramphenicol and ampicillin was isolated from 2 samples obtained from different private drinking water supplies and 2 samples obtained from the same public water supply 15 days apart.

Another 10 E. coli isolates including 8 detected in the same public water supply from the same 2 sampling points on 4 different occasions, exhibited resistance to sulphapyridine and oxytetracycline. This drug resistance pattern was used to identify the possible source of contamination of the water supply. Subsequent isolation of E. coli from the raw water source was not found to be resistant to either sulphapyridine or oxytetracycline. Such finding points to a source of contamination within the reticulation system rather than inadequate treatment of raw water.

Coliforms, predominantly E. coli, with 3 or more resistance determinants are of greatest public health significance. One strain of multiply resistant E. coli detected in a private drinking water supply has been identified as a classical enteropathogenic E. coli (EEC) serotype 0126:K71 which is associated mainly with outbreaks of diarrhoea in young children and infants[5].

In the current review of drinking water standards by the State's public health authorities, special consideration is given to the detection of antimicrobial resistant coliforms and the assessment of potential risk to public health of these drug resistant organisms.

REFERENCES

1. Water Res (1974) 8: 1
2. App. Env. Micro. (1978) 36: 450
3. Standards Association of Australia
4. App. Env. Micro. (1981) 42: 277-283
5. J. Food Protection (1982) 45: 1051

ADDENDUM

Editorial changes to the article on 'Salmonella Distribution in Humans and Poultry' contributed by C. Murray of the Institute of Medical and Veterinary Science, Adelaide and published in CDI 86/5, may have caused confusion. The author did not state that "Raw chicken meat is a major source of Salmonella infection within the community". He actually stated that "Raw chicken meat has a higher incidence of Salmonella contamination than other sources of meat."

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD 31/3/86 - 13/4/86 BULLETIN NUMBER 86/8

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		2				1		4
0101 ADENOVIRUS TYPE 1				1		1			2
0102 ADENOVIRUS TYPE 2				2					2
0103 ADENOVIRUS TYPE 3				1		3			4
0105 ADENOVIRUS TYPE 5						1		1	2
0107 ADENOVIRUS TYPE 7	1								1
0108 ADENOVIRUS TYPE 8	3			2		1			6
0199 ADENOVIRUS TYPING PENDING	2	2							4
0201 INFLUENZA A VIRUS	1								1
0203 INFLUENZA B VIRUS	2			1					3
0302 PARAINFLUENZA VIRUS TYPE 2						1	2		3
0303 PARAINFLUENZA VIRUS TYPE 3		2		1		1	2		6
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)	5	1				1	1		8
0500 RHINOVIRUS (ALL TYPES)	1			2		10			13
0600 MYCOPLASMA PNEUMONIAE	7	1	1	3			1	1	14
0700 ORNITHOSIS-PSITTACOSIS	1			5					6
0816 COXSACKIEVIRUS A16		1							1
0902 COXSACKIEVIRUS B2				1					1
0904 COXSACKIEVIRUS B4						3		4	7
1005 ECHOVIRUS TYPE 5	2								2
1011 ECHOVIRUS TYPE 11		1							1
1021 ECHOVIRUS TYPE 21				2					2
1022 ECHOVIRUS TYPE 22			1						1
1101 POLIOVIRUS TYPE 1	1					1			2
1102 POLIOVIRUS TYPE 2						1			1
1103 POLIOVIRUS TYPE 3	1								1
1200 MUMPS VIRUS		2							2
1300 HERPES VIRUS GROUP-NOT TYPED	11			4		1		2	18
1301 HERPES SIMPLEX VIRUS NOT-TYPED		1		3			1	1	6
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	21	5	1	8		1		9	45
1303 VARICELLA-ZOSTER VIRUS	1		3	3		1	1		9
1306 HERPES SIMPLEX TYPE 1	26	2		23		26	10	14	101
1307 HERPES SIMPLEX TYPE 2	139			40		18	38	41	276
1401 COXIELLA BURNETI	4			1			8		13
1502 PICORNA VIRUS-NOT TYPED	11		8					1	20
1522 RUBELLA VIRUS			1	9				2	12
1532 HEPATITIS B ANTIGEN	77		8	16			3	16	120
1535 HEPATITIS A ANTIBODY	9	3	1	7			1	18	39
1541 CHLAMYDIA A - C TRACHOMATIS	28		2			35	12	37	114
1556 CMV - CYTOMEGALOVIRUS	4			22		3		6	35
1563 CORONAVIRUS				1					1
1564 ROTAVIRUS	14		1			43			58
1571 ENTEROVIRUS TYPE 71 (BRCR)				1					1
1599 ENTEROVIRUS TYPING PENDING		3	4						7
9902 POXVIRUS GROUP NOT TYPED								1	1
9992 ROSS RIVER VIRUS		4	5	37			46	5	97
9994 SMALL VIRUS (LIKE) PARTICLE	1					1			2
9995 DENGUE							2		2
9997 KUNJIN VIRUS							1		1
9998 ARBO. GROUP B.							1		1
Total	374	28	38	196		153	131	159	1,079

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 31/3/86 - 13/4/86

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
0101 ADENOVIRUS TYPE 1.....	1	1									
0102 ADENOVIRUS TYPE 2.....		3									
0103 ADENOVIRUS TYPE 3.....		1					1				
0105 ADENOVIRUS TYPE 5.....		2									
0201 INFLUENZA A VIRUS.....		1									
0203 INFLUENZA B VIRUS.....	1	1									
0302 PARAINFLUENZA VIRUS TYPE 2....		2						1			
0303 PARAINFLUENZA VIRUS TYPE 3....		5						1			
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....		6						1			
0500 RHINOVIRUS (ALL TYPES).....		13									
0600 MYCOPLASMA PNEUMONIAE.....	3	10					1				1
0700 ORNITHOSIS-PSITTACOSIS.....		6									
0816 COXSACKIEVIRUS A16.....											1
0902 COXSACKIEVIRUS B2.....		1									
0904 COXSACKIEVIRUS B4.....		2		1			1		1		
1005 ECHOVIRUS TYPE 5.....	1										
1011 ECHOVIRUS TYPE 11.....				1							
1101 POLIOVIRUS TYPE 1.....		2									
1102 POLIOVIRUS TYPE 2.....							1				
1103 POLIOVIRUS TYPE 3.....							1				
1200 MUMPS VIRUS.....					1						
1300 HERPES VIRUS GROUP-NOT TYPED..		1									2
1301 HERPES SIMPLEX VIRUS NOT-TYPED		1									1
1302 EPSTEIN-BARR VIRUS (EB VIRUS).	7	1				1					1
1303 VARICELLA-ZOSTER VIRUS.....		1		1		2					5
1306 HERPES SIMPLEX TYPE 1.....	10	2	1							1	48
1307 HERPES SIMPLEX TYPE 2.....	12										61
1401 COXIELLA BURNETI.....	1	2						3	1		
1502 PICORNA VIRUS-NOT TYPED.....	2	2	2	1		1	6		2		2
1522 RUBELLA VIRUS.....	4										5
1532 HEPATITIS B ANTIGEN.....	46							74			
1535 HEPATITIS A ANTIBODY.....	15							24			
1556 CMV - CYTOMEGALOVIRUS.....	1	2						2		3	
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....							58				
1571 ENTEROVIRUS TYPE 71 (BRCR)....											1
9992 ROSS RIVER VIRUS.....	12										18
9994 SMALL VIRUS (LIKE) PARTICLE...							2				
9995 DENGUE.....	1										
Total.....	117	68	3	4	1	4	72	106	4	4	146

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 31/3/86 - 13/4/86
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.....								1		
0103 ADENOVIRUS TYPE 3.....	1							1		
0107 ADENOVIRUS TYPE 7.....	1									
0108 ADENOVIRUS TYPE 8.....	6									
0203 INFLUENZA B VIRUS.....							1			
0302 PARAINFLUENZA VIRUS TYPE 2....								2		
0303 PARAINFLUENZA VIRUS TYPE 3....								1		
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....								1	1	
0500 RHINOVIRUS (ALL TYPES).....								1	1	
0904 COXSACKIEVIRUS B4.....							1			1
1005 ECHOVIRUS TYPE 5.....									1	
1021 ECHOVIRUS TYPE 21.....								2		
1022 ECHOVIRUS TYPE 22.....								1		
1200 MUMPS VIRUS.....					1					
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1									
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			19	8			2	5	5	
1303 VARICELLA-ZOSTER VIRUS.....	1	1								
1306 HERPES SIMPLEX TYPE 1.....	3	32						4	1	
1307 HERPES SIMPLEX TYPE 2.....		211							1	
1401 COXIELLA BURNETI.....			1		1		2	7	1	
1502 PICORNA VIRUS-NOT TYPED.....					1			3	1	
1522 RUBELLA VIRUS.....			1		1			2	3	
1541 CHLAMYDIA A - C.TRACHOMATIS...	1	112							1	
1556 CMV - CYTOMEGALOVIRUS.....		5		1		1	3	2	17	
9992 ROSS RIVER VIRUS.....					81			6		
9995 DENGUE.....								1		
9997 KUNJIN VIRUS.....								1		
Total.....	14	361	21	10	84	1	9	41	33	1