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Communicable Diseases Intelligence

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Contents:

Editor Dr I.F. Cook

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1372 reports were processed during this period.

Eleven cases of Q fever (all males) were reported during this period. Three cases had defined occupational exposure risk - a shearer and two meatworkers. Ages were only provided for 2 cases - a 54 year old and a 61 year old.

Reports of two cases of echovirus type 30 meningitis were received from states other than Victoria - one from New South Wales and one from Western Australia. The current cumulative total of echovirus type 30 cases is 118 - 115 from Victoria, 2 from Western Australia and 1 from New South Wales.

Herpes virus type 2 was isolated from placental tissue from a 15 year old pregnant female.

NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL (NH&MRC) WORKSHOP ON NATIONAL DISEASES SURVEILLANCE - SUMMARY OF RECOMMENDATIONS

The NH&MRC Workshop on National Diseases Surveillance was proposed by the NH&MRC Public Health Committee. It was conducted by the Communicable Diseases Committee on

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- Contributions are solicited, and do not preclude later publication elsewhere.
- Material appearing in the Bulletin may be quoted provided suitable acknowledgement is made.
- Figures given may be subject to revision.

7 October 1988. Participants and observers attended from all States and Territories and New Zealand, from government and non-government agencies, from scientific and medical organisations and from reference laboratories.

The purpose of the Workshop was to review the requirements for national communicable diseases surveillance in Australia and to formulate recommendations to be adopted as procedures for the national collection, collation, analysis, distribution and dissemination of Australian epidemiological data on communicable diseases.

The Workshop recommended:

1. That a centralised agency for national communicable disease surveillance be established to enable national data collection to be carried out for the purpose of national disease surveillance and monitoring;

2. That a Working Party be established with the following terms of reference:

   - to determine with the contribution of States and Territories a nationally acceptable list of diseases notifiable to the Commonwealth from all States and Territories,
   - to produce with the co-operation of States and Territories a national inventory of communicable diseases surveillance activities as deployed in each State and Territory of Australia,
   - to develop with the participation of States and Territories a uniform approach to a national disease surveillance scheme including standardising reporting format and streamlining notification processes, and
   - to formulate with the agreement of States and Territories uniform basic data requirements for diseases to be nationally notified and determine, from time to time, specific disease targets to be brought under national disease surveillance.

3. That the Australian Institute of Health carry out the functions of that centralised agency and that options for resourcing this centre be investigated, including discussions with the Department of Community Services and Health; and

4. That the central repository of up-to-date information for overseas travellers, as recommended by the NH&MRC at its 105th Session in June 1988, remain with the Communicable Diseases Section of the Department of Community Services and Health and be adequately resourced and expanded to provide a quality service.

The recommendations of the Workshop were endorsed by Council at its meeting on 2 - 3 November 1988. The Working Party on National Diseases Surveillance is scheduled for January 1989.

FAILURE OF THE STANDARD RADICAL CURE REGIMEN FOR *PLASMODIUM VIVAX* MALARIA ACQUIRED IN THE SOUTH WEST PACIFIC REGION - A CASE REPORT

(Contributed by Dr Paul Van Buynder, Northern Territory Department of Health and Community Services, East Arnhem Region)

A male 22 year old pilot returned to the Northern Territory after a prolonged tour of duty in the highlands of Papua New Guinea. He had the classical features of vivax malaria and this was confirmed with thick blood films.

The patient was treated with a standard course of chloroquine followed by 7.5 mgs of primaquine three times daily for 14 days. He was well on discharge.

Three months later he again presented with fever and sweats. A repeat blood film again showed the presence of *P. vivax*. There was no suggestion of poor absorption or failure to take the original course of treatment. He is now being treated with 14 days of primaquine at the rate of 7.5 mgs four times daily.

As the patient had not subsequently left the Northern Territory, it is assumed that the original dose of primaquine was not sufficient to completely destroy latent exoerythrocytic forms in the liver.

CDI Editorial Comment

Following the work of the late Professor Robert Black, it was recognised that radical cures consisting of 15 mg primaquine base daily for 14 days were were at the most only 70% effective in preventing relapses of *P. vivax* malaria acquired in the South West Pacific Region. Consequently, a regimen of 7.5 mg primaquine base three times a day for 14 days was recommended for radical cure of vivax malaria acquired in this region. However, as in the case described, this regimen can also have a failure rate of 1 - 5%.

TRANSMISSION OF HIV THROUGH BONE TRANSPLANTATION: CASE REPORT AND PUBLIC HEALTH RECOMMENDATIONS

(Based on MMWR (1988) 37: 597-599)

In February 1988, a bone transplant recipient was diagnosed with acquired immune deficiency syndrome (AIDS) after being found positive for antibody to human immunodeficiency virus (HIV) and developing *Pneumocystis carinii* pneumonia (PCP). The recipient had no known risk for HIV infection other than the bone grafting procedure, and the bone donor was subsequently found to have been infected with HIV. A summary of the investigation of the recipient and the donor follows.

Recipient: In November 1984, a woman with progressive idiopathic scoliosis underwent a fusion of a lateral curvature of her spine. She received no blood transfusions. Allograft bone obtained from the hospital bone bank was used in the procedure. The recipient was seen by a physician 21 days after surgery for complaints of fevers with temperatures to 102°F,

night sweats, diarrhoea, nausea with vomiting, and enlarged lymph nodes. On physical examination, the physician noted bilateral cervical and axillary lymphadenopathy. The patient's symptoms resolved over the next 3 days.

In July 1986, 20 months after receiving the bone allograft, the recipient was evaluated again when she complained of enlarged axillary lymph nodes that she had found during a breast self-examination. The physician noted almond-sized axillary and anterior cervical glands. No change in the size of these nodes was found on a second examination by another physician 6 months later, and no further diagnostic procedures were performed.

In February 1988, the patient returned to her physician with a 2-week history of malaise, fever, nonproductive cough, and generalised chest pain. On physical examination, the physician noted oral and vaginal candidiasis and generalised lymphadenopathy. She was tested and found positive for HIV antibody and was subsequently diagnosed with PCP and AIDS. The patient's illness improved with therapy that included pentamidine, azidothymidine, and ventilatory support; she has not developed other HIV-related illness.

On interview, the recipient denied using intravenous drugs or previous blood transfusions. She was employed as a health-care worker, and although she had washed gynaecological specula without using gloves, she had never had a needlestick injury or a mucous membrane exposure to blood or other body secretions in the course of her work. She had been married since 4 years before the transplantation and denied other sex partners. Her husband also denied extramarital sex partners and denied any other risk for HIV infection since 1979. He was tested for HIV antibody in February and April 1988; both tests were negative.

Donor: The bone donor was a 52 year old man who had donated his left femoral head, which was excised during a hip arthroplasty procedure performed for degenerative joint disease in November 1984. At the time of tissue procurement, the donor said that he had had a 'cyst' removed from the left side of his neck in July 1984. It was not recorded in the medical record whether the donor was asked about known risks associated with AIDS. On physical examination at the time of donation, a 2 cm node in the right cervical area was found. The donor's bone was harvested under sterile conditions and stored at -80°C, and no sterilising procedures were performed. The bone was used in the recipient's surgery 24 days after procurement.

In July 1986, the donor developed PCP, was tested and found positive for HIV antibody, and was diagnosed as having AIDS. At that time, the donor reported previous intravenous drug use and denied other risks for HIV infection. The donor's wife was also tested and found positive for HIV antibody. Subsequent review of the donor's medical record from another hospital revealed that a lymph node, not a cyst, was biopsied in July 1984. The pathology report noted nonspecific hyperplastic changes, and no further evaluation was performed. The donor died in April 1987 of recurrent PCP and atypical mycobacteriosis.

MMWR Editorial Note:

This is the first reported case of HIV transmission by bone transplantation. Also, the recipient is the first person reported to CDC as having developed transplantation-associated AIDS. Previous reports have identified transmission of HIV through transplantation of kidney, liver, heart, pancreas[1-3], possibly by skin[4], and by artificial insemination[5] but none of these infected recipients have been reported as having developed AIDS.

Bone grafts may be procured from the recipient's own bone (autograft) or from either living donors who are having bone removed during surgical procedures or cadaveric donors (allograft)[6,7]. The use of bone autografts will reduce the risk of HIV transmission by bone transplantation.

The US Public Health Service has recommended that all donors of tissue and organ allografts be evaluated for risk associated with HIV infection and tested for HIV antibody[1,8,9]. On 10 August 1988, representatives of the American Association of Tissue Banks (AATB), American Academy of Orthopedic Surgery, Food and Drug Administration, and Centers for Disease Control (CDC) met to discuss draft recommendations for the prevention of HIV transmission by bone transplantation. Based on this meeting and previous recommendations, the US Public Health Service also recommends the following measures to prevent HIV transmission.

Recommendations:

For donors of bone allografts, as well as other organ and tissue allografts, the assessment of risks for HIV infection should include reviewing the donor's medical record, testing the donor for HIV antibody, and interviewing living donors. The interview should consist of standardised questions that identify risks for HIV infection. The donor's responses to these questions should be recorded on a form signed by the donor acknowledging that the recorded responses are correct. The completed form should be kept in the tissue bank with other records for the donor.

As previously recommended by AATB, all living donors of bone should be retested at least 90 days after tissue procurement, and only bone from living donors negative for HIV antibody on this repeat testing should be distributed for transplantation[10]. Bone from donors not available for retesting, including cadaveric donors, should be used when bone from retested living donors is not available or is not appropriate for use in the anticipated surgical procedure.

REFERENCES

1. MMWR (1987) 36: 306-8.
2. Transplant Proc (1987) XIX: 2169-71.
3. In: IV International Conference on AIDS. Book 2. Stockholm, 12-16 June 1988, p 363.
4. Lancet (1987) 1: 983.
5. Lancet (1985) 2: 581-4.
6. Clin Orthop (1987) 225: 7-16.

7. Clin Orthop (1983) 174: 69-86.
8. MMWR (1985) 34: 294.
9. MMWR (1988) 37: 57-8,63.
10. American Association of Tissue Banks. Standards for surgical bone banking. Arlington, Virginia: American Association of Tissue Banks, 1987. (Revision to standards, effective 15 January 1988, section C1.330).

TRENDS IN HUMAN IMMUNODEFICIENCY VIRUS INFECTION AMONG CIVILIAN APPLICANTS FOR MILITARY SERVICE - UNITED STATES, OCTOBER 1985 - MARCH 1988

(Based on MMWR (1988) 37:677-9)

Since October 1985, the U.S. Department of Defense has routinely tested civilian applicants for military service for serological evidence of infection with human immunodeficiency virus type 1 (HIV-1).

From October 1985 through March 1988, 1,525,869 recruit applicants were tested; the presence of HIV-1 antibody was confirmed by enzyme immunoassay and Western blot in 2152 (1.4 per 1000). During this period, seroprevalence rates based on 6 month intervals decreased from 1.5 to 1.2 per 1000 applicants (Table 1).

Between the first and last intervals, seroprevalence rates showed a statistically significant decrease among male recruit applicants. During the same time period, prevalence of HIV-1 antibody remained unchanged among female applicants (Table 1). Overall, the number of applicants for military service decreased by approximately 12%.

MMWR Editorial Note:

Applicants for U.S. military service constitute a geographically diverse group of young, apparently healthy persons who are systematically tested for evidence of HIV-1 infection. The interpretation of seroprevalence trends in this group is complicated by two important considerations:

1) Social and demographic characteristics of military applicants differ from those of the U.S. civilian population in the same age groups. Males and racial and ethnic minorities are overrepresented among applicants, while certain groups at high risk for HIV-1 infection, including homosexual men and intravenous (IV) drug users, are subject to exclusion from military service.

2) Characteristics of the applicant population have probably changed over time because of increased self-deferral of persons who suspect that they have been exposed to HIV-1.

Seroprevalence among military applicants was reported to be stable after the first 6, 15, and 24 months of testing[1-4]. However, these data are derived from a series of cross-sectional surveys. Direct measurement of incidence of HIV-1 infection is possible only in cohort studies, which detect new infections in a specified population over time. For example, among several cohorts of homosexual and bisexual men, incidence of HIV-1 infection has decreased[4]. For other groups, such as IV drug users and heterosexually active persons, comparable data are not available.

Table 1: HIV-1 antibody seroprevalence in civilian applicants for military service - United States, October 1985 - March 1988.

Group	Number tested	Number positive*	Seroprevalence (per 1000)						
				By 6 month interval					
				10/85-3/86	4/86-9/86	10/86-3/87	4/87-9/87	10/87-3/88	p value+
Total@	1,525,869	2,152	1.4	1.5	1.5	1.5	1.3	1.2	< 0.001
Region									
Northeast	259,732	573	2.2	2.4	2.4	2.3	2.0	1.8	< 0.05
North Central	401,543	298	0.7	0.8	0.7	0.8	0.8	0.5	NS
South	558,106	868	1.6	1.6	1.8	1.6	1.3	1.5	NS
West	289,990	339	1.2	1.4	1.2	1.2	1.2	0.8	< 0.01
U.S. territories	13,486	74	5.5	7.3	4.6	8.4	3.0	3.5	NS
Age group (yrs)									
17-19	796,851	307	0.4	0.4	0.4	0.3	0.4	0.3	< 0.05
20-24	470,577	869	1.8	1.8	2.0	2.0	1.8	1.5	NS
25-29	150,768	601	4.0	4.6	4.0	4.1	3.2	3.8	< 0.05
≥ 30	107,673	375	3.5	4.3	3.2	3.8	3.0	3.3	NS
Males									
All#	1,314,646	2,008	1.5	1.7	1.7	1.6	1.4	1.2	< 0.001
Black	228,142	1,024	4.5	4.6	5.1	5.1	3.6	4.0	< 0.01
Hispanic	63,488	144	2.3	2.4	2.0	3.1	2.0	1.8	NS
White	978,519	753	0.8	1.0	0.8	0.7	0.8	0.5	< 0.001
Female									
All#	211,222	144	0.7	0.7	0.7	0.6	0.7	0.8	NS
Black	58,220	96	1.6	1.6	1.4	1.8	1.6	2.0	NS
Hispanic	7,781	4	0.5	**	**	**	**	**	**
White	138,219	39	0.3	0.3	0.3	0.1	0.4	0.3	NS

* Repeatedly reactive enzyme immunoassay confirmed by Western blot.
\+ Chi-square test for trend; NS indicates p > 0.05.
@ Includes 3012 applicants from regions other than those shown and 1 applicant with sex unknown (all seronegative).
\# Includes groups other than black, white, or Hispanic.
** Insufficient data.

The apparent decrease in seroprevalence among military recruit applicants is limited to males. This trend probably reflects increasing self-deferral among high-risk males, as well as other factors. The stable seroprevalence rate among female applicants is consistent with the possibility that women may be less aware of their risk for HIV-1 infection and thus less likely to self-defer. Risk factor information for seropositive recruit applicants will assist in interpreting these observations.

The 50% decline in seroprevalence among white males, who constitute nearly two thirds of recruit applicants, dominantes the observed trend for all applicants. Because the dynamics of the HIV-1 epidemic differ among demographic subgroups, it is important to monitor subgroup-specific trends in seroprevalence among military applicants[5,6]. These data will permit comparisons with those from other screened volunteer populations (eg, blood donors and Job Corps entrants), as well as from surveys of populations less subject to self-selection biases (eg, hospital patients and childbearing women)[7,8].

REFERENCES

1. MMWR (1986) 35: 421-4.
2. N Engl J Med (1987) 317: 131-6.
3. MMWR (1987) 36: 273-6.
4. MMWR (1987) 36 (suppl S-6).
5. NY State J Med (1988) 88: 232-5.
6. Gardner LI, Brundage J, McNeil J, Burke D, Miller R. Race specific trend analyses of HIV antibody prevalence in the United States [Abstract]. IV International Conference on AIDS. Book 2. Stockholm, 12-16 June 1988 p221.
7. MMWR (1988) 37: 223-6.
8. N Engl J Med (1988) 318: 525-30.

AIDS UPDATE - INTERNATIONAL (DATA AS AT 31 OCTOBER 1988)

(Based on WER (1988) 63:341-348)

Country/Area	Number of cases	Date of report
Africa		
Algeria	13	26.03.88
Angola	65	01.07.88
Benin	15	30.06.88
Botswana	34	31.03.88
Burkina Faso	26	30.06.87
Burundi	1 408	30.06.88
Cameroon	53	16.06.88
Cape Verde	4	30.04.87
Central African Republic	432	15.06.88
Chad	7	15.06.88
Comoros	1	31.05.88
Congo	1 250	31.12.87
Côte d'Ivoire	250	20.11.87
Djibouti	—	01.10.87
Egypt	6	30.07.88
Equatorial Guinea	—	16.05.88
Ethiopia	54	17.08.88
Gabon	18	31.03.88
Gambia	52	29.08.88
Ghana	145	25.05.87
Guinea	10	22.07.88
Guinea-Bissau	29	15.06.88
Kenya	2 732	30.06.88
Lesotho	2	26.08.88
Liberia	2	11.03.88
Libyan Arab Jamahiriya	—	31.12.87

Country/Area	Number of cases	Date of report
Africa *(contd)*		
Madagascar	—	25.04.87
Malawi	2 586	30.06.88
Mali	29	14.01.88
Mauritania	—	15.06.88
Mauritius	1	27.07.88
Morocco	12	15.06.88
Mozambique	10	31.08.88
Niger	9	14.10.87
Nigeria	11	31.05.88
Reunion	3	28.04.88
Rwanda	987	31.03.88
Sao Tomé and Principe	1	11.02.88
Senegal	131	09.06.88
Seychelles	—	13.11.86
Sierra Leone	5	18.08.88
Somalia	—	31.12.87
South Africa	135	19.08.88
Sudan — Soudan	68	30.06.88
Swaziland	14	16.06.88
Togo	2	15.06.88
Tunisia	21	30.07.88
Uganda	4 006	15.06.88
United Republic of Tanzania	3 055	31.07.88
Zaire	335	30.06.87
Zambia	993	05.08.88
Zimbabwe	119	30.04.88
Total	19 141	

Country/Area	Number of cases	Date of report
Americas		
Anguilla	1	30.06.88
Antigua and Barbuda	3	30.06.88
Argentina	197	30.06.88
Bahamas	214	30.06.88
Barbados	63	30.06.88
Belize	8	31.03.88
Bermuda	81	30.06.88
Bolivia	8	13.09.88 *
Brazil	3 687	30.06.88
British Virgin Islands	—	31.03.88
Canada	2 001	13.09.88 *
Cayman Islands	4	30.06.88
Chile	83	30.06.88
Colombia	244	30.06.88
Costa Rica	66	13.09.88 *
Cuba	34	13.09.88 *
Dominica	6	31.03.88
Dominican Republic	566	30.06.88
Ecuador	45	13.09.88 *
El Salvador	32	13.09.88 *
French Guiana	113	31.03.88
Grenada	11	31.03.88
Guadeloupe	74	31.12.87
Guatemala	39	13.09.88 *
Guyana	16	31.03.88
Haiti	1 455	30.06.88
Honduras	164	13.09.88 *
Jamaica	66	30.06.88
Martinique	38	31.12.87
Mexico	1 502	30.06.88
Montserrat	—	31.03.88
Nicaragua	1	30.06.88
Panama	64	13.09.88 *
Paraguay	8	31.12.87
Peru	98	30.06.88
Saint Kitts and Nevis	1	31.03.88
Saint Lucia	11	31.03.88
Saint Vincent and the Grenadines	10	31.03.88
Suriname	9	31.03.88
Trinidad and Tobago	302	30.06.88
Turks and Caicos Islands	5	31.12.87
United States of America	76 670	26.10.88
Uruguay	26	30.06.88
Venezuela	207	13.09.88 *
Total	**88 233**	
Asia		
Afghanistan	—	31.12.87
Bahrain	—	11.07.88
Bangladesh	—	15.06.88
Bhutan	—	14.04.87
Brunei Darussalam	—	08.09.87
Burma	—	14.04.87
China	3	31.07.88
China (Province of Taiwan)	1	26.01.86
Cyprus	5	30.07.88
Democratic People's Republic of Korea	—	10.05.88
Democratic Yemen	—	25.09.88
Hong Kong	13	16.08.88
India	9	09.05.87
Indonesia	3	30.07.88
Iran (Islamic Republic of)	—	31.12.87
Iraq	—	31.12.87
Israel	65	30.06.88
Japan	90	31.08.88

Country/Area	Number of cases	Date of report
Asia *(contd)*		
Jordan	3	01.07.88
Kuwait	1	31.12.87
Lebanon	5	31.12.87
Malaysia	4	27.09.88
Maldives	—	30.06.87
Mongolia	—	30.09.88
Nepal	—	15.06.88
Oman	6	30.04.88
Pakistan	6	25.09.88
Philippines	17	17.10.88
Qatar	3	23.04.88
Singapore	4	31.01.88
Sri Lanka	1	19.05.88
Syrian Arab Republic	4	30.07.88
Thailand	8	01.07.88
Turkey	9	31.05.88
Viet Nam	—	08.09.87
Yemen	—	31.12.87
Total	**281**	
Europe		
Albania	—	13.09.88
Austria	211	01.10.88
Belgium	368	30.06.88
Bulgaria	3	30.06.88
Czechoslovakia	11	30.06.88
Denmark	319	30.09.88
Finland	32	30.06.88
France	4 211	30.06.88
German Democratic Republic	6	30.06.88
Germany, Federal Republic of	2 488	30.09.88
Greece	127	30.06.88
Hungary	14	30.09.88
Iceland	6	30.06.88
Ireland	49	30.06.88
Italy	2 556	30.09.88
Luxembourg	12	30.06.88
Malta	12	30.06.88
Monaco	1	31.12.87
Netherlands	605	30.09.88
Norway	91	04.10.88
Poland	3	30.09.88
Portugal	173	30.09.88
Romania	8	30.06.88
San Marino	—	15.10.88
Spain	1 471	30.06.88
Sweden	223	13.10.88
Switzerland	502	30.06.88
USSR	4	30.06.88
United Kingdom	1 794	07.10.88
Yugoslavia	40	30.06.88
Total	**15 340**	
Oceania		
Australia	1 024	11.10.88
Cook Islands	—	08.09.87
Fiji	—	08.09.87
French Polynesia	1	31.01.88
Kiribati	—	18.01.88
Mariana Islands	—	05.08.87
New Caledonia and Dependencies	—	08.09.87
New Zealand	89	15.09.88
Papua New Guinea	4	01.08.88
Samoa	—	14.07.88
Solomon Islands	—	08.09.87
Tonga	1	06.10.87
Tuvalu	—	08.09.87
Vanuatu	—	05.07.88
Total	**1 119**	
World total	**124 114**	

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 12/11/88 TO 25/11/88

1. CODE 019 - FAIRFIELD(VIC)
2. CODE 065 - STATE LAB(WA)
3. CODE 110 - IMVS(SA)
4. CODE 111 - RCH(VIC)
5. CODE 112 - ICPMR(NSW) WVH(ACT)
6. CODE 113 - PHH POW(NSW)
7. CODE 114 - RAHC(NSW)
8. CODE 115 - STATE LAB(QLD)

		019	065	110	111	112	113	114	115	TOTAL
0100	ADENOVIRUS NOT TYPED	4	1	1	2	6	8	1	14	37
0101	ADENOVIRUS TYPE 1	0	0	0	6	0	0	0	0	6
0102	ADENOVIRUS TYPE 2	0	1	2	9	1	0	0	0	13
0103	ADENOVIRUS TYPE 3	0	0	0	0	1	0	0	0	1
0104	ADENOVIRUS TYPE 4	1	0	0	1	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	0	0	4	0	0	0	0	4
0107	ADENOVIRUS TYPE 7	0	0	1	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	0	1	0	0	1	0	0	0	2
0122	ADENOVIRUS TYPE 22	0	0	0	0	1	0	0	0	1
0135	ADENOVIRUS TYPE 35	1	0	0	0	0	0	0	0	1
0137	ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	5	0	0	2	0	7
0201	INFLUENZA A VIRUS	0	0	2	0	11	0	0	19	32
0203	INFLUENZA B VIRUS	0	1	0	1	1	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	0	0	4	0	0	0	4
0302	PARAINFLUENZA VIRUS TYPE 2	1	0	0	1	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	3	0	11	12	1	1	1	21	50
0400	RESPIRATORY SYNCYTIAL VIRUS (R	5	0	6	0	0	0	0	1	12
0500	RHINOVIRUS (ALL TYPES)	12	2	7	13	0	0	1	5	40
0600	MYCOPLASMA PNEUMONIAE	7	4	19	10	2	0	0	8	50
0700	ORNITHOSIS-PSITTACOSIS	3	0	1	0	0	0	0	0	4
0809	COXSACKIEVIRUS A9	1	1	0	1	3	0	0	0	6
0816	COXSACKIEVIRUS A16	1	1	1	0	0	0	0	0	3
0904	COXSACKIEVIRUS B4	2	0	1	11	1	0	1	0	16
0905	COXSACKIEVIRUS B5	2	0	0	2	0	0	0	0	4
1004	ECHOVIRUS TYPE 4	1	0	2	1	0	0	0	0	4
1006	ECHOVIRUS TYPE 6	0	2	0	0	0	0	0	0	2
1009	ECHOVIRUS TYPE 9	1	6	0	0	0	0	2	0	9
1010	ECHOVIRUS TYPE 10	0	0	0	0	2	0	0	0	2
1024	ECHOVIRUS TYPE 24	0	0	1	0	0	0	0	0	1
1026	ECHOVIRUS TYPE 26	0	0	1	0	0	0	0	0	1
1030	ECHOVIRUS TYPE 30	7	1	0	9	1	0	0	0	18
1033	ECHOVIRUS TYPE 33	0	0	1	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	2	0	1	0	0	3
1101	POLIOVIRUS TYPE 1	0	0	0	0	1	0	0	0	1
1200	MUMPS VIRUS	0	0	0	0	0	2	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	2	1	0	0	0	3	0	1	7
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	0	88	0	0	0	88
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	11	18	0	10	4	5	29	77
1303	VARICELLA-ZOSTER VIRUS	7	4	0	1	1	4	1	0	18
1306	HERPES SIMPLEX TYPE 1	49	20	13	0	2	0	0	25	109
1307	HERPES SIMPLEX TYPE 2	50	56	17	0	38	0	0	41	202
1399	HERPES VIRUS TYPING PENDING	3	0	0	6	0	0	0	0	9
1401	COXIELLA BURNETI	0	0	0	0	1	1	0	9	11
1502	PICORNIA VIRUS - NOT TYPED = E	0	2	0	0	7	6	0	14	29
1516	MILKERS NODULE VIRUS	1	0	0	0	0	0	0	0	1
1521	MEASLES VIRUS	2	0	0	0	0	0	0	0	2
1522	RUBELLA VIRUS	3	0	0	1	3	0	0	5	12
1532	HEPATITIS B ANTIGEN	24	13	15	0	36	7	0	32	127
1535	HEPATITIS A ANTIBODY	3	5	6	0	1	0	0	0	15
1541	CHLAMYDIA A - C. TRACHOMATIS	15	59	18	0	24	3	0	21	140
1556	CMV - CYTOMEGALOVIRUS	26	5	4	2	15	9	2	16	79
1564	ROTAVIRUS	7	1	23	0	10	9	2	10	62
1566	NORWALK AGENT	0	0	0	6	0	0	0	0	6
1599	ENTEROVIRUS TYPING PENDING	0	0	0	6	0	0	1	0	7
9992	ROSS RIVER VIRUS	2	6	0	0	2	0	0	9	19
9995	DENGUE	0	1	0	0	1	0	0	1	3
TOTAL		247	205	171	112	276	58	19	281	1369

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 12/11/88 TO 25/11/88

1. CODE 00, 99 ..... - NO ILL OR DATA
2. CODE 01, 02, 11, 12 - RESPIRATORY
3. CODE 05 ..... - ENCEPHALITIS
4. CODE 03 ..... - MENINGITIS
5. CODE 04 ..... - PARALYSIS
6. CODE 05, 13 ..... - CNS OTHER UNSPEC
7. CODE 07, 49 - GASTRO INTESTINAL
8. CODE 17, 47 - HEPATIC
9. CODE 19 ... - CVS
10. CODE 09 ... - URINARY TRACCT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	2	11	0	0	0	17	0	0	0	0	30
0101	ADENOVIRUS TYPE 1	0	6	0	0	0	0	0	0	0	0	6
0102	ADENOVIRUS TYPE 2	1	10	0	0	1	0	0	0	0	0	12
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	0	1
0105	ADENOVIRUS TYPE 5	0	3	0	0	0	0	0	0	0	0	3
0107	ADENOVIRUS TYPE 7	0	1	0	0	0	0	0	0	0	0	1
0122	ADENOVIRUS TYPE 22	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	4	0	0	0	2	0	0	0	0	6
0201	INFLUENZA A VIRUS	3	13	0	0	0	0	0	5	0	0	21
0203	INFLUENZA B VIRUS	0	3	0	0	0	0	0	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	1	0	0	0	0	0	0	0	0	1	2
0302	PARAINFLUENZA VIRUS TYPE 2	0	2	0	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	48	0	0	0	0	0	0	0	0	48
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	10	0	0	0	0	0	0	0	0	10
0500	RHINOVIRUS (ALL TYPES)	0	38	0	0	0	0	0	0	0	0	38
0600	MYCOPLASMA PNEUMONIAE	4	32	0	0	0	0	0	0	0	0	36
0700	ORNITHOSIS-PSITTACOSIS	1	3	0	0	0	0	0	0	0	0	4
0809	COXSACKIEVIRUS A9	1	3	0	2	0	0	0	0	0	0	6
0816	COXSACKIEVIRUS A16	0	0	0	1	0	1	0	0	0	0	2
0904	COXSACKIEVIRUS B4	0	8	0	0	0	1	0	1	0	0	10
0905	COXSACKIEVIRUS B5	0	1	0	3	0	0	0	0	0	0	4
1004	ECHOVIRUS TYPE 4	0	2	0	0	0	0	0	0	0	0	2
1006	ECHOVIRUS TYPE 6	0	0	0	1	0	1	0	0	0	0	2
1009	ECHOVIRUS TYPE 9	1	1	0	3	0	0	0	0	0	1	6
1010	ECHOVIRUS TYPE 10	0	1	0	0	0	0	0	0	0	0	1
1024	ECHOVIRUS TYPE 24	0	1	0	0	0	0	0	0	0	0	1
1026	ECHOVIRUS TYPE 26	1	0	0	0	0	0	0	0	0	0	1
1030	ECHOVIRUS TYPE 30	0	4	0	13	0	0	0	0	0	0	17
1033	ECHOVIRUS TYPE 33	0	1	0	0	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	1	0	0	0	1	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	2	0	0	0	0	4	6
1301	HERPES SIMPLEX VIRUS - NOT TYP	20	1	0	0	0	0	0	0	0	13	34
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	17	6	0	0	0	0	9	1	0	1	34
1303	VARICELLA-ZOSTER VIRUS	4	0	0	0	1	0	0	0	0	11	16
1306	HERPES SIMPLEX TYPE 1	1	4	0	0	0	0	0	0	0	62	67
1307	HERPES SIMPLEX TYPE 2	3	1	0	0	0	0	0	0	0	50	54
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	1	0	0	5	7
1401	COXIELLA BURNETI	3	0	0	0	0	0	0	0	0	0	3
1502	PICORNIA VIRUS - NOT TYPED = E	1	11	0	0	1	10	0	1	0	0	24
1516	MILKERS NODULE VIRUS	0	0	0	0	0	0	0	0	0	1	1
1521	MEASLES VIRUS	0	0	0	0	0	0	0	0	0	2	2
1522	RUBELLA VIRUS	0	1	0	0	0	0	0	0	0	7	8
1532	HEPATITIS B ANTIGEN	67	0	0	0	0	0	52	0	0	0	119
1535	HEPATITIS A ANTIBODY	5	0	0	0	0	0	6	0	0	0	11
1541	CHLAMYDIA A - C. TRACHOMATIS	15	0	0	0	0	0	0	0	0	0	15
1556	CMV - CYTOMEGALOVIRUS	10	10	1	1	0	0	7	2	5	3	39
1564	ROTAVIRUS	0	0	0	0	0	62	0	0	0	0	62
1566	NORWALK AGENT	0	4	0	0	0	0	0	0	0	0	4
1599	ENTEROVIRUS TYPING PENDING	0	3	0	3	0	0	0	0	0	0	6
9992	ROSS RIVER VIRUS	2	1	0	0	0	1	0	0	0	4	8
TOTAL		164	250	1	27	5	97	75	10	5	165	799

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 12/11/88 TO 25/11/88

12. CODE 10 - EYE
13. CODE 59 - GENITAL
14. CODE 39 - ENDOCRINE/SALIVARY GL.
15. CODE 38 - RETICULO-ENDOTHELIAL
16. CODE 29 - MUSCLE/JOINT
17. CODE 69 - CONGENTIAL
18. CODE P8 - PUO
19. CODE G8 - FEVER/MALAISE
20. CODE 09 - OTHER
21. CODE A1 - SIDS

		12	13	14	15	16	17	18	19	20	21	TOTAL
0100	ADENOVIRUS NOT TYPED	0	0	0	0	0	0	0	6	0	1	7
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
0104	ADENOVIRUS TYPE 4	2	0	0	0	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	0	0	0	0	0	0	1	0	0	1
0108	ADENOVIRUS TYPE 8	2	0	0	0	0	0	0	0	0	0	2
0135	ADENOVIRUS TYPE 35	0	0	0	0	0	0	0	1	0	0	1
0137	ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	0	1	1
0201	INFLUENZA A VIRUS	0	0	0	0	1	0	1	7	2	0	11
0301	PARAINFLUENZA VIRUS TYPE 1	0	2	0	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	0	2	0	0	2
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	1	1	0	0	2
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	1	1	0	2
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	2	0	1	5	6	0	14
0816	COXSACKIEVIRUS A16	0	0	0	0	0	0	0	1	0	0	1
0904	COXSACKIEVIRUS B4	0	0	0	0	0	0	0	6	0	0	6
1004	ECHOVIRUS TYPE 4	0	0	0	0	0	0	0	1	0	1	2
1009	ECHOVIRUS TYPE 9	0	0	0	1	0	0	0	2	0	0	3
1010	ECHOVIRUS TYPE 10	0	0	0	0	0	0	0	1	0	0	1
1030	ECHOVIRUS TYPE 30	0	0	0	0	0	0	0	1	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	0	1	1
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	0	1	1
1200	MUMPS VIRUS	0	0	1	0	1	0	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	0	0	0	1	0	0	1
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	51	0	0	0	0	0	0	3	0	54
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	18	2	2	0	0	14	7	0	43
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	2	0	2
1306	HERPES SIMPLEX TYPE 1	3	35	0	0	0	0	0	1	3	0	42
1307	HERPES SIMPLEX TYPE 2	0	148	0	0	0	0	0	0	0	0	148
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	2	0	2
1401	COXIELLA BURNETI	0	0	0	0	1	0	0	7	0	0	8
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	1	0	0	2	2	0	5
1522	RUBELLA VIRUS	0	0	0	1	1	0	0	2	0	0	4
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	1	7	0	8
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	0	4	0	4
1541	CHLAMYDIA A - C. TRACHOMATIS	1	124	0	0	0	0	0	0	0	0	125
1556	CMV - CYTOMEGALOVIRUS	1	1	1	1	0	2	2	19	13	0	40
1566	NORWALK AGENT	0	0	0	0	0	2	0	0	0	0	2
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	0	1
9992	ROSS RIVER VIRUS	0	0	0	1	9	0	0	1	0	0	11
9995	DENGUE	0	0	0	0	1	0	0	2	0	0	3
TOTAL		10	361	20	6	19	4	5	88	52	5	570