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Communicable Diseases Intelligence

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Contents:

Editor *Dr Robert Hall*

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1516 reports were processed during this period.

Four cases of Q fever were reported during this period - a 49-year-old male kangaroo shooter and 3 other males aged 32, 39 and 44 years.

The high level spring/summer Ross River virus activity reported in CDI 89/3 continues with 239 serologically-confirmed cases reported during this period. Activity in Western Australia and Victoria continues to be high and a slight increase in activity is seen in South Australia (see below).

State	Date of sample collection					
	1988				1989	
	Sep	Oct	Nov	Dec	Jan	Feb
Western Australia	0	4	19	113	196	43*
Victoria	0	2	25	103	142	73*
South Australia	0	0	2	2	3	11*
Other States	9	1	0	1	1	0

* Data are incomplete and may be amended at a later date.

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Acyclovir-resistant herpes simplex type 2 was isolated from a 25-year-old female AIDS patient with recurrent genital herpes.

Unspecified group B arboviruses have been serologically diagnosed (using haemagglutination inhibition) in three patients who have recently visited Kiribati. Dengue fever is suspected; a dengue type 1 epidemic began in Kiribati in November 1988, with 3,000 cases notified in December of that year.

Thirty-seven isloates of echovirus type 30 were reported during this period (VIC, 23; WA, 5; SA, 2; NSW, 7).

OVERSEAS BRIEFS

1. INDIA: REPORT OF BATCHES OF IMMUNOGLOBULIN CONTAMINATED BY HUMAN IMMUNODEFICIENCY VIRUS

The Maharashtra Government Drug Controller's Office is currently investigating a report of the presence of human immunodeficiency virus in two batches of immunoglobulin manufactured by Bharat Vaccines of Bombay.

HIV was reported in:

. Bharglob, human normal immunoglobulin, Batch 13/87; and
. Vinublin, a batch of anti RH(D) immunoglobulin, Batch 6/88.

A WARNING WAS ISSUED THAT TRAVELLERS ARE ADVISED NOT TO SEEK IMMUNOGLOBULIN INJECTIONS IN INDIA. It is not known how many doses of immunoglobulin were produced from each batch or whether the drug has been withdrawn from sale in all parts of India. The Government Drug Controller's Office does not believe that any of the drug was exported.

As yet, no details of this report (eg how the virus was detected and what tests were used to confirm the presence of HIV in the batches of immunoglobulin) have been received.

CDI Editorial Comment

There have been no previous reports of HIV in immunoglobulin. However, the presence of antibody to HIV in batches of hepatitis B in Canada has been reported (1,2). This is a single unconfirmed report of the presence of HIV in immunoglobulin, and has been forwarded to the Department of Community Services and Health by diplomatic staff in India. Official confirmation has been sought from the Maharashtra Government Drug Controller's Office but, as yet, no response has been received. This report has been published in the interests of Australians travelling overseas.

In Australia, immunoglobulin is manufactured by the Commonwealth Serum Laboratories. Since May 1985, all plasma for use in the production of immunoglobulins has been screened for HIV antibody (as individual donations and as pooled plasma). In addition, it has been shown that established manufacturing procedures for the preparation of human immunoglobulins can completely inactivate or eliminate HIV (3,4). (Note: There are no remaining stocks of immunoglobulins produced before the introduction of screening.)

Therapeutic goods imported into Australia for administration to humans must be screened for HIV antibody and hepatitis B surface antigen (HBsAg). Evidence must be submitted that both individual donors and the final bulk product have been tested for HIV antibody and HBsAg and found negative.

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2. MENINGOCOCCAL MENINGITIS

Ethiopia

An outbreak of meningococcal meningitis (type A or C) which commenced in September 1988 has spread across the country. Official figures now stand at 6,688 cases with 629 deaths. It is believed that actual figures may be much higher as many people live far from medical centres. Over half of the reported cases are in children.

Neigbouring countries (Djibouti, Kenya, Somalia and Sudan) have been alerted to watch for cases in bordering areas. Cases have already been reported in Sudan.

Sudan

Between 16 December 1988 and 20 January 1989, 165 cases (22 deaths) have been reported in Sudan. A sulphonamide-resistant strain is suspected.

Syria

An outbreak of meningococcal meningitis (believed to be type A) has been reported in Damascus. No details are available.

Availability of the vaccine

The appropriate vaccine is bivalent A/C meningococcal meningitis vaccine, Mencevax (R) AC (Smith, Kline & French). This vaccine is available at the vaccinee's own expense from the Commonwealth Serum Laboratories in Melbourne, (03) 389 1276.

A single dose of the vaccine provides effective immunity one to two weeks after administration and protection for 1-3 years.

3. VACCINATION ADVICE FOR OVERSEAS TRAVEL - TRIAL SERVICE FOR DOCTORS

Since 1 March 1989, yellow fever vaccination is the only vaccination service available through the CMO Service.

Alternative arrangements for the provision of advice to intending travellers and to medical practitioners, have been established **on a trial basis.**

On 1 March 1989, each Commonwealth Medical Examination Service Office installed a telephone answering system with a recorded message. **Intending travellers** are advised:

- of yellow fever vaccination requirements for overseas travel;
- how to arrange an appointment for yellow fever vaccination;
- to consult travel agents for details of vaccinations *required* by other countries;
- of other infectious diseases for which they may need protection; and
- to discuss their particular needs with their own doctor.

A telephone enquiry service (062-891555) is available between 2pm and 4pm* each weekdays **for doctors** requiring further information.

* Eastern Summer Time to 18 March 1989 or Eastern Standard Time from 19 March 1989.

ANNOUNCEMENT: FIRST ANNUAL HOUSTON CONFERENCE ON AIDS IN AMERICA

Title:	First Annual Houston Conference on AIDS in America
Location:	Hyatt Regency Hotel - Houston Houston, Texas
Date:	11-12 May 1989
Conference Director:	Adan Rios, M.D. Houston, Texas
Program:	Includes lectures, discussions and audience participation. The keynote speaker will be Dr Luc Montagnier of Paris, France.

For further information contact:

Lynne K. Tiras, CMP
International Meeting Managers, Inc.
4550 Post Oak Place, Suite 248
Houston, Texas 77027
Phone (713) 965-0566
Fax (713) 960-0488

DENGUE TYPE 1 IN PARAGUAY

Confirmed local transmission of dengue fever in Paraguay has been reported for the first time in 50 years.

The first cases of dengue-like illness apparently occurred following the return of travellers who had visited Santa Cruz, Bolivia, during a major epidemic of dengue type 1 in that country in January 1988.

Further cases of dengue-like fever were reported in Villarica, Paraguay, in February and March 1988. Dengue type 1 virus was isolated from 11 patients whose onset of illness occurred in April. Between April and July, further cases of dengue were reported around Asuncion, the capital city of Paraguay.

No information is available on the number of cases occurring or their severity.

CDI Editorial Comment

This report highlights the potential for the introduction of arboviral diseases via infected humans into areas where a suitable mosquito vector exists.

Prevention of foci of infection depends on:

i) prevention of infection in travellers to endemic areas (see CDI 89/4 for a discussion of methods of preventing mosquito bites);
ii) a travel history being taken so that communicable diseases not usually present in Australia can be considered in the differential diagnosis; and
iii) notification of arboviral diseases to public health authorities so that vector control measures can be considered and instituted where necessary.

UPDATE: CREUTZFELDT-JAKOB DISEASE IN A SECOND PATIENT WHO RECEIVED A CADAVERIC DURA MATER GRAFT

(Based on MMWR 1989;38:37-43)

In late May 1988, a 25-year-old man from New Zealand developed a rapidly progressive dementia 31 months after neurosurgery for head injuries sustained from a fall. During surgery, extensive, bilateral dura mater tears were repaired with imported, commercially prepared cadaveric human dura mater grafts. The patient died on 31 July 1988, and Creutzfeldt-Jakob disease (CJD) was confirmed by brain necropsy, which demonstrated spongiform encephalopathy. He had no family history of degenerative neurological disease, nor had he received cadaveric, pituitary-derived human growth hormone. Previous major surgery included an appendicectomy at 10 years of age. An ongoing investigation by the New Zealand Department of Health determined that the dural grafts used in this patient were Lyodura*, processed by B. Braun Melsungen AG of the Federal Republic of Germany; the lot numbers are unknown.

* Registered trade name

MMWR Editorial Note

This is the second patient reported to Centers for Disease Control (CDC) who developed CJD after receiving a lyophilised, irradiated, human cadaveric dura mater graft, Lyodura. The first patient was a 28-year-old woman from Connecticut who had received her graft, Lyodura (lot 2105), during a surgical resection of a cholesteatoma 19 months before onset of CJD (1,2). The young age of the patient from New Zealand and his recent surgery using the same brand of dura mater graft that was implicated as the source of the CJD agent in the U.S. patient strongly suggest that his dural grafts were the vehicle of transmission of the CJD agent. The surgeries during which Lyodura grafts were used in the two patients were performed within a 6-month period in 1985. Lot 2105 was not distributed to New Zealand. Whether these grafts were produced around the same time is unknown.

This second case of Lyodura-associated CJD supports a published conclusion of the joint CDC/Food and Drug Administration (FDA) investigation of the first patient that 'Lyodura may carry a higher risk of transmitting CJD than other dura mater products used in the United States' (2). In June 1987, representatives of B. Braun Melsungen AG reported that their procedures for collection and processing of dura after 1 May 1987, were revised to reduce the risk of CJD transmission.

On 28 April 1987, FDA had issued a safety alert recommending disposal of all Lyodura from packages bearing a four-digit lot number beginning with the digit '2' (code for material packaged in 1982), as well as all unmarked Lyodura (3). Because the lot numbers of the Lyodura used in the New Zealand patient cannot be determined, however, it now may be prudent to avoid using Lyodura produced before the manufacturer's reported changes in procedures were instituted.

The methods of producing and distributing human tissue products, including dura mater grafts, are not routinely subjected to FDA inspection and approval. Health-care providers are urged to use human tissue products that have been handled according to strict guidelines, such as those established by the American Association of Tissue Banks (4,5). In addition, hospitals should maintain records so that infections associated with human tissue products can be linked with specific lot numbers of the specific products.

Previous and current patients who have rapidly progressive dementing illnesses consistent with CJD and who have received a dural graft during an operative procedure should be reported to CDC, Atlanta through their appropriate state health department.

CDI Editorial Comment

In February 1987, the initial cadaveric dura mater-linked case of CJD was brought to the attention of relevant health authorities, colleges and specialist societies in Australia.

Assessment of new information on the effectiveness of treatment intended to inactivate the agent of CJD (6) led to the conclusion that there is no proven effective method of decontamination of duras from infected persons.

The safety of the product therefore depends upon the effectiveness of donor selection procedures and on the incidence of CJD in the population. Information from the US Centers for Disease Control suggests that evidence of CJD is found in 1 in 10,000 autopsies.

Subsequently, import permits for cadaveric dura mater material (Lyodura manufactured by B Braun Melsungen, and Tutoplast manufactured by Pfrimmer and Co) were withdrawn. The manufacturers were advised that any future approval to import material derived from cadaveric dura mater material would be dependent upon meeting stringent donor screening requirements, the maintenance of distribution and donor records, and revision of product literature to include reference to the risk of transmission of CJD. Cadaveric dura mater material is not currently imported into Australia.

As Lot No 2105 was not imported into Australia, stocks were not recalled. However, it was strongly recommended that surgeons restrict the use of dural grafts to indications where there is no satisfactory alternative.

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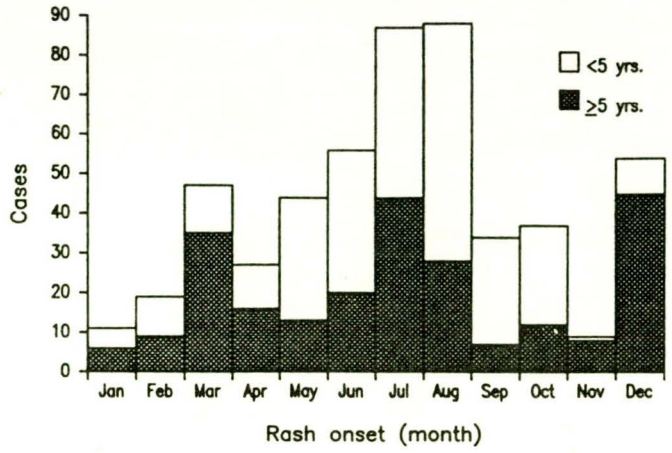
MEASLES - LOS ANGELES COUNTY, CALIFORNIA, USA, 1988

(Based on MMWR 1989;38:49-52)

In 1988, the provisional total of 513 confirmed cases of measles in Los Angeles County represented 17.5% of all (2933) cases reported in USA. The measles incidence for Los Angeles County (6.4 cases/100,000 persons) was 5.3 times higher than that in the rest of USA (1.2/100,000).

In early 1988, school-aged children and adults were predominantly affected. However, in May both the number and proportion of cases reported among children under 5 years of age increased (see Figure 1) prompting a more intense investigation.

Figure 1: Confirmed measles cases, by month of rash onset and patient age - Los Angeles County, California, 1988



Analysis of confirmed cases with onset from 1 May to 31 December 1988

A breakdown by age of 355 cases reported between 1 May and 31 December is shown in Table 1.

Table 1. Age distribution and incidence rates of reported measles cases - Los Angeles County, California, 1 May 1988 - 31 December 1988*

Age group (yrs)	No. (%)	Rate+
<1	87 (24.6)	66.9
1-4	141 (39.9)	27.3
5-9	37 (10.5)	6.6
10-19	33 (9.3)	2.6
≥20	55 (15.6)	1.0
Total (age known)	353 (100.0)	-
Age unknown	2 -	-
Total	355 -	4.4

* Number and proportion of patients <5 years of age increased in May.
\+ Cases/100,000 population (1985 population estimates).

Of the 353 cases with known ages:
- 228 (64.6%) were under 5 years of age;
- 135 (38.2%) were under 16 months of age (ie too young for routine vaccination); and
- 93 (26.3%) were 16 months to 4 years of age.

Infants under 12 months of age had the highest age specific incidence rate (66.9/100,000).

Race/ethnicity details were available for 331/355 cases. Incidence for the following groups were:

Hispanics	11.3/100,000
Black non-Hispanic	3.1/100,000
White non-Hispanic	0.9/100,000

The Centers for Disease Control (CDC), Atlanta, considers a measles case is preventable if illness occurs in a US citizen who is:

. at least 16 months of age;
. born after 1956;
. lacking adequate evidence of immunity to measles (documented receipt of live measles vaccine on or after the first birthday, or physician-diagnosed measles disease);
. without a medical contraindication to receiving vaccine; and
. with no religious or philosophic exemption under state law (1).

Prevantability status, according to the CDC definition, was known for 353 cases (99.4%):

. 150/353 (42.5%) were preventable; and
. 203/353 (57.5%) were considered non-preventable:
  - 135/203 (66.5%) were in children younger than the recommended age for routine vaccination;
  - 50/203 (24.6%) were in previously vaccinated persons;
  - 5/203 (2.5%) had philosophic exemption or medical contraindications; and
  - 13/203 (6.4%) were born before 1957.

Of the 90 vaccine-eligible preschoolers aged 16 months to 4 years for whom preventability status was known, 77 (85.6%) has preventable measles.

The transmission setting was known for 209/355 (58.9%) patients:

. 120/209 (57.4%) had known household transmission;
. 63/209 (30.1%) acquired measles in medical settings, where transmission occurred both among and between patients and personnel; and
. transmission also occurred in day-care centres, schools and colleges.

One hundred and twenty-two patients (34.4%) were hospitalised. The reported age-specific hospitalisation-to-case rates (highest to lowest) were:

Infants	43.7%
Preschool-aged children (1-4 years)	38.3%
Adults, 20 years or older	32.7%
5-9 years	17.1%

Of the 355 patients:

. 60 (16.9%) had diarrhoea;
. 37 (10.4%) had otitis media;
. 35 (9.9%) had pneumonia;
. 3 (0.8%) had encephalitis; and
. 2 (0.6%) had meningitis.

One adult patient with haemophilia and human immunodeficiency virus-related illness was probably exposed to measles at the medical centre where he was employed. His course was complicated by pneumonia, respiratory failure, and encephalitis, but he recovered after treatment with intravenous immune globulin and ribavirin.

Two measles-associated deaths occurred for a reported death-to-case ratio of 5.6/1,000 cases. One death occurred in an 8-month-old infant, the other in a 23-month-old unvaccinated child. Both patients had nosocomially acquired cases and were exposed to measles while hospitalised for other illnesses.

On 21 July, the Los Angeles County Department of Health Services lowered the minimum age for measles vaccination to 12 months. Media announcements informed the public of measles transmission in Los Angeles County, and parents were urged to have their children vaccinated. The health department also recommended that:

1) medical facilities, including emergency rooms (ERs), vaccinate measles-susceptible patients between 12 months and 4 years of age seen for any reason, unless a valid contraindication to vaccination exists;
2) ER staff promptly screen patients and isolate those suspected of having measles; and
3) medical staff without evidence of immunity to measles and who have patient contact be vaccinated.

MMWR Editorial Note

Measles transmission in preschool-aged children remains a major impediment to elimination of measles in the United States (2). Measles epidemiology in Los Angeles County is similar to that of other recent inner-city measles outbreaks among preschoolers in low socioeconomic groups in which most affected persons were unvaccinated (2-4). To improve vaccine coverage in high-risk children under 15 months of age, the Immunization Practices Advisory Committee (ACIP) recently recommended that public health officials in areas with recurrent measles transmission lower the minimum age for routine vaccination to 9 months of age (5). Children vaccinated before their first birthday should receive single-antigen measles vaccine and be revaccinated with measles, mumps, and rubella vaccine (MMR) at 15 months of age. An alternate strategy is to lower the age for routine vaccination to 12 months using one dose of MMR.

Lowering the minimum age for vaccination is an important adjunct to control measles transmission among children younger than the routine age for vaccination. However, the large percentage (77.8%) of vaccine-eligible patients 16 months to 4 years of age who were unvaccinated demonstrates the need for intensive efforts to increase vaccine coverage in this hard-to-reach group. Thus, long-term outreach programs are needed for parents and children in low socioeconomic groups in urban areas. Programs should emphasize the following:

- Barriers to obtaining immunisations (eg, physical or sociocultural) should be minimised, for example, by providing vaccination clinics on weekends and during evening hours convenient to families needing these services;
- Local community leaders and health officials should collaborate to promote age-appropriate vaccinations and use of existing public health systems;
- Community settings, such as church groups, schools, and mobile vans in neighbourhoods, should be considered for vaccine delivery and health education programs.

Such outreach efforts may improve vaccination levels, decrease measles transmission, and promote regular preventive health care.

In Los Angeles County and other areas with recent measles outbreaks in the United States, multiple settings of transmission have been identified (2-4). Exposure to measles

in medical settings has been important in perpetuating measles transmission (2-4,6). While most of the transmission in medical settings involved preschool-aged children, medical personnel have also been affected. The ACIP recommends that hospitals and other medical facilities ensure that personnel at risk for occupational exposure to measles be immune (7). A survey conducted in 1985-86 indicated that only 8 of the 147 acute-care hospitals in Los Angeles County had mandatory policies requiring employees to provide documentation of measles immunity (Immunization Unit, California Department of Health Services, unpublished data). In Los Angeles County, three medical centres reported nearly half (169) of the 355 measles cases with onset from 1 May to 31 December 1988 including one centre that accounted for more than one fourth (96) of all cases. Two of these centres have instituted policies for employees at risk for exposure to measles.

The risk for measles transmission was even more likely to be high in Los Angeles County because the inner-city Hispanic community (which was the major focus of this outbreak) seeks routine medical care primarily through hospital ERs, as demonstrated by the number of patients with measles seen in ERs. In addition to increasing vaccination coverage in this hard-to-reach group, vaccinating in ERs may help curtail transmission in these settings. However, in Los Angeles County, programmatic constraints have precluded vaccination of susceptible, vaccine-eligible children in most ERs. Transmission in ERs may also be reduced by prompt screening of patients and isolation of those suspected of having measles, a difficult task since measles patients are infectious during the prodrome of their illnesses before the appearance of rash. This control measure was implemented in hospital ERs in Los Angeles County.

Measles transmission in Los Angeles County also occurred among school-aged persons, another major pattern of transmission in the United States (2,8). During a 5-week period in autumn, 47 students and employees at a university in Los Angeles developed measles. As a result of efforts by the state and county health departments, more than 3,700 of the estimated 20,000 students at the university were vaccinated at special on-campus clinics. In addition, officials from the health departments urged the university and all other Los Angeles County colleges and universities to require documentation of both measles and rubella immunity as a prerequisite to matriculation, a recommendation supported by the ACIP (7) and the American College Health Association (9).

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AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 2/3/89 TO 16/2/891/3/89

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	0	1	0	0	1	4	0	8	14
0101	ADENOVIRUS TYPE 1	4	1	1	3	0	0	0	0	9
0102	ADENOVIRUS TYPE 2	3	1	2	4	0	0	0	0	10
0103	ADENOVIRUS TYPE 3	2	0	2	0	0	0	0	0	4
0105	ADENOVIRUS TYPE 5	1	0	0	1	1	0	1	0	4
0107	ADENOVIRUS TYPE 7	0	0	0	1	0	0	1	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	2	0	0	0	2
0120	ADENOVIRUS TYPE 20	1	0	0	0	0	0	0	0	1
0126	ADENOVIRUS TYPE 26	1	0	0	0	0	0	0	0	1
0130	ADENOVIRUS TYPE 30	1	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	2	0	1	1	0	5
0302	PARAINFLUENZA VIRUS TYPE 2	1	1	3	0	0	0	0	1	6
0303	PARAINFLUENZA VIRUS TYPE 3	2	0	1	2	0	0	1	0	6
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	2	1	0	0	0	0	0	3
0500	RHINOVIRUS (ALL TYPES)	16	2	7	6	0	0	0	8	39
0600	MYCOPLASMA PNEUMONIAE	10	9	9	5	1	2	0	0	36
0700	ORNITHOSIS-PSITTACOSIS	4	0	0	0	0	0	0	0	4
0800	COXSACKIEVIRUSES GROUP A - NOT	0	0	1	0	0	0	0	0	1
0904	COXSACKIEVIRUS B4	3	0	1	0	0	1	0	0	5
0905	COXSACKIEVIRUS B5	0	1	0	0	0	0	0	0	1
0999	COXSACKIEVIRUS GROUP B TYPING	0	0	0	0	0	0	1	0	1
1001	ECHOVIRUS TYPE 1	0	0	1	0	0	0	0	0	1
1003	ECHOVIRUS TYPE 3	0	0	0	0	1	0	0	0	1
1004	ECHOVIRUS TYPE 4	1	0	1	0	0	0	0	0	2
1007	ECHOVIRUS TYPE 7	0	0	0	0	1	0	0	0	1
1009	ECHOVIRUS TYPE 9	2	0	5	1	1	0	0	0	9
1011	ECHOVIRUS TYPE 11	0	1	0	0	1	0	0	0	2
1018	ECHOVIRUS TYPE 18	0	1	0	0	0	0	1	0	2
1022	ECHOVIRUS TYPE 22	0	0	1	0	1	0	0	0	2
1025	ECHOVIRUS TYPE 25	1	0	0	0	0	0	0	0	1
1030	ECHOVIRUS TYPE 30	20	5	2	3	4	2	1	0	37
1101	POLIOVIRUS TYPE 1	0	0	1	0	1	0	0	0	2
1200	MUMPS VIRUS	1	0	0	0	0	1	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	2	1	0	0	0	0	1	0	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	3	4	0	0	126	0	1	0	134
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	3	5	16	6	1	2	1	0	34
1303	VARICELLA-ZOSTER VIRUS	4	3	2	0	4	2	0	2	17
1306	HERPES SIMPLEX TYPE 1	89	10	13	0	1	0	0	32	145
1307	HERPES SIMPLEX TYPE 2	109	52	8	0	13	0	0	44	226
1399	HERPES VIRUS TYPING PENDING	8	0	0	3	0	0	0	1	12
1401	COXIELLA BURNETI	1	0	2	0	0	1	0	0	4
1502	PICORNIA VIRUS - NOT TYPED = E	0	3	0	0	0	4	0	14	21
1521	MEASLES VIRUS	0	2	0	0	0	1	1	0	4
1522	RUBELLA VIRUS	4	0	2	0	0	0	0	0	6
1532	HEPATITIS B ANTIGEN	42	4	24	1	34	17	1	29	152
1535	HEPATITIS A ANTIBODY	13	0	0	0	2	0	0	2	17
1541	CHLAMYDIA A - C. TRACHOMATIS	6	60	46	0	24	1	1	32	170
1547	UNKNOWN NAME OF THE VIRUS	0	1	0	0	0	0	0	0	1
1552	RABIES VIRUS	1	0	0	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	44	2	4	3	7	1	2	8	71
1564	ROTAVIRUS	0	15	0	0	3	3	1	1	23
1599	ENTEROVIRUS TYPING PENDING	0	0	0	3	0	12	0	0	15
9992	ROSS RIVER VIRUS	147	76	16	0	0	0	0	0	239
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	3	0	0	0	0	0	0	0	3
TOTAL		554	263	172	44	230	55	16	182	1516

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 2/3/89 TO 16/2/891/3/89

1. CODE 00, 99 ..... - NO ILL OR DATA
2. CODE 01, 02, 11, 12 - RESPIRATORY
3. CODE E3 ..... - ENCEPHALITIS
4. CODE M3 ..... - 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 89 ... - URINARY TRACCT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	3	2	1	0	0	5	0	0	0	11
0101	ADENOVIRUS TYPE 1	0	6	1	0	0	2	0	0	0	9
0102	ADENOVIRUS TYPE 2	0	9	1	0	0	0	0	0	0	10
0103	ADENOVIRUS TYPE 3	0	0	0	0	0	2	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	3	0	0	0	1	0	0	0	4
0107	ADENOVIRUS TYPE 7	0	1	0	1	0	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	1	0	0	0	0	0	0	0	0	1
0126	ADENOVIRUS TYPE 26	0	0	0	0	0	1	0	0	0	1
0130	ADENOVIRUS TYPE 30	0	0	0	0	0	1	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	3	0	0	0	1	0	0	0	4
0302	PARAINFLUENZA VIRUS TYPE 2	0	6	0	0	0	0	0	0	0	6
0303	PARAINFLUENZA VIRUS TYPE 3	0	5	0	1	0	0	0	0	0	6
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	3	0	0	0	0	0	0	0	3
0500	RHINOVIRUS (ALL TYPES)	1	30	0	0	0	3	0	0	1	35
0600	MYCOPLASMA PNEUMONIAE	2	29	0	0	0	1	0	0	0	32
0700	ORNITHOSIS-PSITTACOSIS	0	4	0	0	0	0	0	0	0	4
0800	COXSACKIEVIRUSES GROUP A - NOT	0	1	0	0	0	0	0	0	0	1
0904	COXSACKIEVIRUS B4	0	2	0	2	0	1	0	0	0	5
0905	COXSACKIEVIRUS B5	0	0	0	0	0	1	0	0	0	1
1001	ECHOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	1
1003	ECHOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	1
1004	ECHOVIRUS TYPE 4	0	1	0	1	0	0	0	0	0	2
1007	ECHOVIRUS TYPE 7	0	0	0	1	0	0	0	0	0	1
1009	ECHOVIRUS TYPE 9	0	3	1	4	1	0	0	0	0	9
1018	ECHOVIRUS TYPE 18	0	1	0	1	0	0	0	0	0	2
1022	ECHOVIRUS TYPE 22	0	1	0	0	0	1	0	0	0	2
1025	ECHOVIRUS TYPE 25	0	1	0	0	0	0	0	0	0	1
1030	ECHOVIRUS TYPE 30	4	2	1	27	0	2	0	0	1	37
1101	POLIOVIRUS TYPE 1	1	1	0	0	0	0	0	0	0	2
1200	MUMPS VIRUS	2	0	0	0	0	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	0	0	0	0	4	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	36	0	0	0	0	1	0	0	26	63
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	3	3	0	0	1	0	1	0	0	8
1303	VARICELLA-ZOSTER VIRUS	2	0	2	0	0	0	0	0	13	17
1306	HERPES SIMPLEX TYPE 1	7	10	1	0	0	1	0	0	76	95
1307	HERPES SIMPLEX TYPE 2	9	1	0	0	0	0	0	0	91	101
1399	HERPES VIRUS TYPING PENDING	0	2	0	0	0	0	1	3	2	8
1502	PICORNIA VIRUS - NOT TYPED = E	0	9	0	0	3	8	0	1	0	21
1521	MEASLES VIRUS	2	0	0	0	0	0	0	0	1	3
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	5	5
1532	HEPATITIS B ANTIGEN	75	0	0	0	0	0	69	0	0	144
1535	HEPATITIS A ANTIBODY	13	0	0	0	0	0	4	0	0	17
1541	CHLAMYDIA A - C. TRACHOMATIS	6	1	0	0	0	0	0	1	0	8
1552	RABIES VIRUS	1	0	0	0	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	8	13	0	0	0	0	0	5	1	27
1564	ROTAVIRUS	0	0	0	0	0	23	0	0	0	23
1599	ENTEROVIRUS TYPING PENDING	0	1	0	1	0	11	0	0	0	13
9992	ROSS RIVER VIRUS	64	0	0	0	0	0	0	0	36	100
9998	ARBOVIRUS GROUP B.(UNSPECIFIED	3	0	0	0	0	0	0	0	0	3
TOTAL		244	154	8	39	5	66	75	10	258	859

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 2/3/89 TO 16/2/891/3/89

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	TOTAL
0100	ADENOVIRUS NOT TYPED	1	0	0	0	0	0	1	1	0	3
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	1	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	0	1	1
0120	ADENOVIRUS TYPE 20	1	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	1	3	4
0600	MYCOPLASMA PNEUMONIAE	0	0	1	0	0	0	0	1	2	4
0999	COXSACKIEVIRUS GROUP B TYPING	0	0	0	0	0	0	0	0	1	1
1011	ECHOVIRUS TYPE 11	0	0	0	0	0	0	0	0	2	2
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	68	0	0	0	0	0	0	2	71
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	18	1	0	0	0	5	2	26
1306	HERPES SIMPLEX TYPE 1	2	34	0	0	0	0	0	3	11	50
1307	HERPES SIMPLEX TYPE 2	0	120	0	0	0	0	0	0	5	125
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	3	4
1401	COXIELLA BURNETI	0	0	0	0	0	0	3	1	0	4
1521	MEASLES VIRUS	0	0	0	0	0	0	0	1	0	1
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	1	0	1
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	2	6	8
1541	CHLAMYDIA A - C. TRACHOMATIS	2	159	0	0	0	1	0	0	0	162
1547	UNKNOWN NAME OF THE VIRUS	0	1	0	0	0	0	0	0	0	1
1556	CMV - CYTOMEGALOVIRUS	2	2	0	0	0	3	0	12	25	44
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	2	0	2
9992	ROSS RIVER VIRUS	0	0	0	0	134	0	0	5	0	139
TOTAL		10	385	19	1	134	4	4	35	65	657