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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 1 090 reports were processed during this period.

Q fever was reported in two males in South Australia. No occupational exposure data were provided for either of the patients. They were not involved in the South Australian Q fever vaccine trial.

IgM to dengue virus was identified in the serum of a 52 year old male with diarrhoea who had recently visited Bali.

Astrovirus was identified by electron microscopy in the faeces of a 1 year old girl with gastroenteritis.

Cytomegalovirus (CMV) was isolated from:

- postmortem brain, spinal cord and adrenal tissue specimens from a 44 year old male AIDS patient;
- a postmortem lung specimen from a 1 year old boy;
- leucocytes from an 11 year old boy with renal transplant rejection;
- the urine of three boys, aged 4, 7, and 8, who were contacts of a renal transplant patient with a five week history of primary CMV infection;
- the urine and saliva of a 1 day old baby boy; and
- a nasopharygeal swab of a 1 month old boy with paroxysmal cough.

The Bulletin is compiled and distributed by the Public Health Section, Communicable Diseases Branch, Department of Community Services and Health.

IgM to CMV was identified in the serum of a 22 year old women with a three month history of hepatitis.

OVERSEAS BRIEFS:

1. YELLOW FEVER VACCINATION FOR GUINEA (AFRICA)

Australia's quarantine regulations require yellow fever vaccination certificates from all travellers over 1 year of age arriving in Australia who have, within the previous six days, been in a country which has reported yellow fever activity in the past ten years.

Following a report of yellow fever in that country, valid yellow fever certificates are now required for Guinea (Africa). Travellers who do not comply with these requirements will be subject to quarantine.

2. HEPATITIS A OUTBREAK IN CHINA UNDER CONTROL

(Based on a report from the Chinese Ministry of Public Health, Beijing).

On 18 March, the Chinese Ministry announced details of the hepatitis A outbreak in Shanghai and surrounding provinces. This epidemic, which started on 19 January 1988, is now effectively under control. The daily incidence of new cases is now 400/day, approximately 4% of the daily rate at the peak of the epidemic.

The cause of the infection in approximately 90% of the cases has been attributed to the consumption of 'hairy clams'. Most cases were relatively mild although 11 deaths occurred in Shanghai.

The reported numbers of cases in Shanghai and neighbouring provinces were:

Area	Number of cases
Shanghai (to 18 March 1988)	292,301
Zhejiang Province (to 15 February 1988)	Approx. 70,000
Jiangsu Province (to 10 March 1988)	35,984
Fujian Province	3,000

The following control measures have been taken[1]:

- prohibition on the sale and consumption of uncooked contaminated hairy clams;
- isolation and treatment of patients;
- disinfection of excreta and contaminated articles used by patients;
- monitoring of contacts of patients and provision of gammaglobulin immunisation to children and close contacts;
- launching of a health education campaign especially on personal hygiene and disposal of excreta; and

. prohibition on the serving of contaminated hairy clams to tourists and attention to personal hygiene (handwashing before eating and after toilet use) and administration of gammaglobulin immunisation upon request.

REFERENCE

1. WER (1988) 63:91-2.

JAPANESE ENCEPHALITIS IN A CHILD AFTER A TWO WEEK HOLIDAY IN BALI: A CASE HISTORY

(Contributed by W.B.G. McDonald, A. Tink, R.A. Ouvrier, M.A. Menser, L.M. de Silva (The Children's Hospital, Camperdown) H. Naim and R.A. Hawkes (Arbovirus Research Unit, University of New South Wales)

A 10 year-old girl returned from a two week holiday in Bali in January 1988. She had stayed in an international class hotel in Nusa Dua and had made only infrequent day trips to rural areas. Four days after her return to Sydney she developed fever and vomiting, and presented to the Children's Hospital two days later in a coma.

Lumbar puncture at this stage showed 180×10^6/L white blood cells (65% monocytes, 35% polymorphs) with protein 0.31 g/L. C.T. scan showed generalised cerebral oedema, and isotope brain scan showed bilateral temporal lobe uptake. EEG showed bilateral slow wave epileptogenic activity.

The patient was commenced on acyclovir (30mg/kg/day) and phenobarbitone and remained comatose with focal seizures for one week, thereafter making a rapid recovery. She was discharged on 9 February 1988, three and a half weeks after admission.

The diagnosis was established by a rise in specific Japanese encephalitis (JE) virus haemagglutination inhibitation antibody titre from $\leqslant$ 1 in 10 to 1 in 480 with positive IgM antibody to the flavivirus group.

When seen in follow-up, the patient had a residual mild right-sided hemiparesis and significant cognitive dysfunction. However, she is continuing to improve and prospects for a return to normal schooling are good.

CDI Editorial Comment:

Details of the Biken JE vaccine and its availability in Australia, were published in CDI in August 1987[1]. The vaccine is currently available on an individual patient use (IPU) basis for the following indications which are recommended by the National Health and Medical Research Council (NH&MRC):

- persons who will be resident in endemic areas for more than 12 months; and
- travellers who visit rural areas during an epidemic.

In addition, the Minister for Community Services and Health has approved the use of JE vaccine for:

- tourists travelling extensively in rural areas of South East Asia.

Arrangements for the vaccine to be made available for individual travellers can be made by contacting Dr Ian Cook, Department of Community Sevices and Health, Canberra on (062) 89 1555.

REFERENCE

1. CDI (1987) 87/15: 20-21

MEASLES IN HIV-INFECTED CHILDREN, UNITED STATES

(Based on MMWR, Vol 37, No 12, 1 April 1988)

The Centers for Disease Control (CDC) Atlanta, has received reports of six cases of measles that occurred among children infected with human immunodeficiency virus (HIV) in the United States during the period 1986-1987. Two of these children died from measles. Like many other infections, measles appears to be more severe in persons with HIV infection. Data on these cases appears in Table 1.

Table 1: Cases of measles in children infected with HIV United States, 1986-1987

Case	Age	City	Measles Vaccine	Acquired	Typical Rash	Complications	Outcome
1	7 mo	NYC	no	hospital	yes	none	survived#
2	2 yr	NYC	no	hospital	no*	pneumonia	survived**
3	4 yr	NYC	no	hospital	yes	pneumonia	died
4	2 yr	NYC	no	hospital	yes	otitis media	survived
5	4 yr	Miami	no	ER+	no	pneumonia	died
6	14 yr	NYC	yes	community	yes	pneumonia	survived

\# Post-exposure prophylaxis with immunoglobulin more than 6 days after exposure.
* Evanescent rash with Koplik spots.
** Post-exposure prophylaxis with varicella-zoster immunoglobulin more that 6 days after exposure.
\+ Probable exposure in an emergency room.

Patients 1-3 became ill during a nosocomial outbreak in a New York City hospital[1]. These patients had acquired HIV infections perinatally. None had received measles vaccine nor were they receiving intravenous immunoglobulin.

All cases were assumed to have had a common source of exposure to measles in the hospital but the source was never identified. A medical student, who probably acquired the disease from the same source, developed a rash several days before the children did. The medical student, whose rash was initially thought to be varicella because she recently had been exposed to a patient with varicella, had contact with the HIV-infected patients. Consequently, Patient 2 received varicella-zoster immunoglobulin, and Patient 1 received intramuscular immunoglobulin. Both patients developed measles within several days of immunoglobulin administration and thus may have received immunoglobulins more that 6 days after

exposure. Patient 1, a 7 month-old with HIV, and Patient 3, a 4 year-old[2], had a typical measles illness with cough, coryza, conjunctivitis, Koplik spots, and rash. Patient 1 had a measles haemagglutination-inhibition (HI) antibody titre of 10 on the first day of rash (due either to residual, passively transferred maternal antibody or to passive immunisation). Patient 2, a 2-year-old with HIV infection and recurrent bacterial infections only had a transient rash and Koplik spots. Both Patients 2 and 3 developed severe pneumonia and were treated with aerosolised ribavirin[3]. Patient 3 died, and autopsy showed diffuse giant-cell pneumonia typical of mealses infection consisting of multinucleate giant cells with nuclear and cytoplasmic inclusions[4].

Patient 4, a 2 year-old with perinatally acquired HIV infection, had hepatosplenomegaly, generalised lymphadenopathy, and herpes stomatitis at the time of onset of measles. She acquired measles during hospitalisation at a different hospital in New York City. The source of her infection was not determined. This patient had never been vaccinated against measles and was not receiving intravenous immunoglobulin. She developed generalised rash, fever, coryza, conjunctivitis, Koplik spots, and otitis media but no other complications.

Patient 5, a 4 year-old child with perinatally acquired HIV and with lymphoid interstitial pneumonitis, was admitted with fever and pneumonia to a hospital in Miami, Florida. The patient had never been vaccinated against measles but was receiving intravenous immunoglobulin (200 mg/kg) prophylactically every month. The last dose had been received 3 weeks before onset of illness. Her measles antibody titre at the time of onset of illness is not known. The patient developed respiratory failure and died 8 days after admission. There was no history of rash. The diagnosis of measles pneumonia was made on postmortem examination of lung tissue that showed multinucleate giant cells with nuclear and cytoplasmic inclusions. The patient was not isolated during her hospitalisation, and nosocomial transmission of measles resulted: a paediatric nurse and a patient, neither of whom had been vaccinated, acquired measles from the child. One additional patient acquired infection from the nurse.

Patient 6, a 14 year-old with thrombocytopenia[5], had acquired HIV as a result of a blood transfusion. He had been immunised with live attenuated measles vaccine at 15 months and again at 9 years of age. The patient was admitted to a hospital with fever and later developed rash and pneumonia. Measles was serologically confirmed. The patient was treated with aerosolised ribavirin and recovered without sequelae.

MMWR Editorial Note:

In addition to these six measles cases in children with HIV infection, CDC has received reports of two measles cases in HIV-infected adults. Both survived the acute measles infection, although one was hospitalised. The two measles deaths involving HIV-infected children in 1987 were the first deaths due to measles in the United States to be reported to CDC since 1985. While there may be underreporting of nonhospitalised or nonfatal measles cases in persons with HIV infection, the case-fatality rate for measles in HIV-infected children is clearly higher that the case-fatality rate of 0.1%

for measles in recent years in the United States [6].

Severe measles infections have been reported in other immunocompromised patients. Measles infection without rash has also been described [7]. Physicians caring for patients with HIV infections should be aware that measles can be severe and may occur without the typical rash. This may preclude diagnosis and, thus, delay or prevent initiation of treatment, outbreak control measures, or appropriate hospital isolation. The fact that an unimmunised medical worker acquired measles from one of these cases and was involved in transmission to a hospitalised patient is noteworthy. In addition, five of the six measles cases in HIV-infected children were acquired in medical settings. Since hospital workers may acquire and/or transmit measles, hospitals should ensure that employees who may have occupational exposure to measles have proof of measles immunity [8].

During 1986 and 1987, large measles outbreaks occurred in urban areas of the United States among preschool-age children with low immunisation levels [9]. These areas (New York City, Jersey City, and Miami) also have high incidence rates of paediatric acquired immunodeficiency syndrome. Since HIV-infected children may live in areas where measles virus circulates because of low preschool measles immunisation levels, they may be at higher risk of exposure to measles than other children in the United States.

As a result of these recent reports of measles in HIV-infected children, the Immunization Practices Advisory Committee (ACIP) now recommends that measles vaccine be considered for symptomatic as well as asymptomatic children with HIV infection [10]. This approach to protect the HIV-infected child is consistent with the World Health Organization's recommendation to provide measles vaccination for all children in developing countries regardless of HIV and symptoms status because of the high risk of measles and the severity of measles infection in general [11].

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1. Nosocomial measles: are current vaccination guidelines for staff adequate (Abstract) In: Program and abstracts of the 27th Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, October 4-7, 1987.
2. MMWR (1987) 36: 225-30, 235-6.
3. Smith RA, Knight V and Smith JAD (eds). Clinical applications of ribavirin. New York: Academic Press (1980): 203-9.
4. Pediatr Pathol (1984) 2: 226-9.
5. MMWR (1986) 35: 334-9.
6. CDC. Measles Surveillance Report No 11, 1977-1981. Atlanta: US Department of Health and Human Services, Public Health Service, (1982).
7. N Engl J Med (1959) 261: 875-81.
8. MMWR (1987) 36: 409-418, 423-25.
9. Measles outbreaks, US 1986 (Abstract) In: Program and abstracts of the 27th Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, October 4-7, 1987.
10. MMWR (1988) 37: 181-83 (see this issue CDI p/7-8)
11. WER (1987) 62: 5-9.

IMMUNISATION OF CHILDREN INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS - SUPPLEMENTARY ACIP STATEMENT

(Based on MMWR, Vol 37, No 12, 1 April 1988)

The Immunization Practices Advisory Committee (ACIP) recently reviewed data both on the risks and benefits of immunising children infected with human immunodeficiency virus (HIV)[1] and on severe and fatal measles in HIV-infected children in the United States[2]. Since this review, the committee has revised its previous recommendations for measles vaccination and for mumps and rubella vaccination.

Previously published ACIP statements on immunising HIV-infected children have recommended vaccinating children with asymptomatic HIV infection, but not those with symptomatic HIV infection[3]. After considering reports of severe measles in symptomatic HIV-infected children, and in the absence of reports of serious or unusual adverse effects of measles, mumps, and rubella (MMR) vaccination in limited studies of symptomatic patients[4,5], the committee feels that administration of MMR vaccine should be considered for all HIV-infected children, regardless of symptoms. This approach is consistent with the World Health Organization's recommendation for measles vaccination[6].

If the decision to vaccinate is made, symptomatic HIV-infected children should receive MMR vaccine at 15 months, the age currently recommended for vaccination of children without HIV infection and for those with asymptomatic HIV infection. When there is an increased risk of exposure to measles, such as during an outbreak, these children should receive vaccine at younger ages. At such times, infants 6 to 11 months of age should receive monovalent measles vaccine and should be revaccinated with MMR at 12 months of age or older. Children 12-14 months of age should receive MMR and do not need revaccination[7].

The use of high-dose intravenous immunoglobulin (IGIV) (approximately 5 gm% protein) administered at regular intervals is being studied to determine whether it will prevent a variety of infections in HIV-infected children. It should be recognised that MMR vaccine may be ineffective if administered to a child who has received IGIV during the preceding 3 months.

Immunoglobulin (IG) (16.5 gm% protein) can be used to prevent or modify measles infection in HIV-infected children if administered within 6 days of exposure. IG is indicated for measles-susceptible household contacts of children with asymptomatic HIV infection, particularly for those under 1 year of age and for measles-susceptible pregnant women. The recommended dose is 0.25 mL/kg intramuscularly (maximum dose, 15 mL)[7]. (Measles-susceptible persons are defined as those who are unvaccinated or do not have laboratory evidence or physician documentation of previous measles disease[7].

In contrast, exposed symptomatic HIV-infected patients should receive IG prophylaxis regardless of vaccination status. The standard post-exposure measles prophylaxis regimen for such patients is 0.5 mL/kg of IG intramuscularly (maximum dose, 15 mL)[7]. This regimen corresponds to a dose of protein of approximately 82.5 mg/kg (maximum dose, 2,475 mg).

Intramuscular IG may not be necessary if a patient with HIV infection is receiving 100-400 mg/kg IGIV at regular intervals and received the last dose within 3 weeks of exposure to measles. Based on the amount of protein that can be administered, high-dose IGIV may be as effective as IG given intramuscularly. However, no data exist on the efficacy of IGIV administered post-exposure in preventing measles.

Although post-exposure administration of globulins to symptomatic HIV-infected patients is recommended regardless of measles vaccine status, vaccination prior to exposure is desirable. Measles exposures are often unrecognised, and post-exposure prophylaxis is not always possible.

While recommendations for MMR vaccine have changed, those for other vaccines have not[3]. A summary of the current ACIP recommendations for HIV-infected persons follows (Table 1). These recommendations apply to adolescents and adults with HIV infection as well as to HIV-infected children.

Table 1: Recommendations for routine immunisation of HIV-infected children - United States, 1988

Vaccine	HIV Infection	
	Known Asymptomatic	Symptomatic
Diphtheria tetanus pertussis vaccine	yes	yes
Oral poliovirus vaccine	no	no
Inactivated poliovirus vaccine	yes	yes
Measles, mumps, and rubella combined vaccine	yes	yes*
Haemophilus influenzae type b conjugate vaccine	yes	yes
Pneumococcal vaccine	no	yes
Influenza vaccine	no	yes

* Should be considered.

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2. MMWR (1988) 37:183-186. (See this issue CDI p 4-6).
3. MMWR (1986) 35:595-8, 603-6.
4. McLaughlin P, Thomas PA, Onorato I, et al. Use of live virus vaccines in HIV-infected children: a retrospective survey. Pediatrics (in press).
5. Krasinski K, Borkowsky W, Krugman S. Antibody following measles immunization in children infected with human T-cell lymphotropic virus-type III/lymphadenopathy associated virus (HTLV-III/LAV) [Abstract]. In: Program and abstracts of the International Conference on Acquired Immunodeficiency Syndrome, Paris, France, June 23-25, 1986.
6. Wkly Epidem Rec (1987); 62:5-9.
7. MMWR (1987) 36:409-18, 423-5.

AIDS UPDATE - UNITED STATES

(Based on US Department of Health and Human Services, AIDS Weekly Surveillance Report, 22 February 1988)

As at 22 February 1988, 54 233 cases of AIDS had been reported to the Centers for Disease Control. This figure includes 4004 patients who meet only the 1987 revised surveillance definition for AIDS.

Table 1: AIDS cases and deaths, as at 22 February 1988

	Cases	Deaths	Case-Fatality Rate
Adults/adolescents	53382	29847	56%
Children*	851	508	60%
TOTAL	54233	30355	56%

* Includes all patients under 13 years of age at the time of diagnosis.

Eighty per cent of deaths occurred in patients diagnosed before January 1986. Case-fatality rates by half-year of diagnosis are listed in Table 2.

Table 2: Cases of AIDS and case-fatality rates by half-year of diagnosis, US.

	Number of cases	Number of known deaths	Case-fatality rate
Prior to 1981	75*	64*	(85%*)
1981 Jan June	88	82	93%
July-Dec	183	167	91%
1982 Jan-June	367	325	89%
July-Dec	654	573	88%
1983 Jan-June	1231	1100	89%
July-Dec	1602	1406	88%
1984 Jan-June	2480	2026	82%
July-Dec	3241	2637	81%
1985 Jan-June	4483	3502	78%
July-Dec	5741	4190	73%
1986 Jan-June	7160	4600	64%
July-Dec	8357	4146	50%
1987 Jan-June	9680	3598	37%
July-Dec	8531	1901	22%
1988 Jan-Feb 22	360	38	11%
TOTAL	54233	30355	56%

* Of the 75 cases diagnosed prior to 1981, only 64 are known to have died. Although not specifically stated, it is believed that some of these patients were lost to follow-up.

Table 3 lists cases of AIDS by transmission category:

- Cases with more than one risk factor other than the combinations listed in the table are included only in the category listed first.

- 'Heterosexual cases' includes 1243 persons (278 men, 965 women) who have had heterosexual contact with a person with AIDS or at risk for AIDS and 907 persons (704 men, 203 women) without other identified risks who were born in countries in which heterosexual transmission is believed to play a major role although precise means of transmission have not yet been fully defined.

- Undetermined cases includes patients on whom risk information is incomplete (due to death, refusal to be interviewed or loss to follow-up), patients still under investigation, men reported only to have had heterosexual contact with a prostitute, and interviewed patients for whom no specific risk was identified.

- For children with parents with or at risk of AIDS epidemiological data suggest transmission from an infected mother to her fetus or infant during the perinatal period.

Table 3: AIDS cases and deaths by transmission category as at 22 February 1988

Adults/adolescents	Males	Females	Total	Deaths
Homosexual/bisexual male	34434	-	34434	18897
Intravenous (IV) drug user	7307	2037	9344	5335
Homosexual male and IV drug user	3982	-	3982	2349
Hemophilia/coagulation disorder	522	22	544	315
Heterosexual cases	982	1168	2150	1170
Transfusion, blood/components	842	443	1285	864
Undetermined	1294	349	1643	917
Subtotal	49363	4019	53382	29847
Children				
Hemophilia/coagulation disorder	45	3	48	29
Parent with/at risk of AIDS	332	319	651	386
Transfusion, blood/components	69	48	117	75
Undetermined	18	17	35	18
Subtotal	464	387	851	508
TOTAL	49827	4406	54233	30355

Table 4 shows reported cases and deaths by opportunistic disease category. Disease categories are ordered hierarchically. Cases with more than one disease are tabulated only in the disease category listed first. Kaposi's sarcoma has been reported in 382 cases since January 1 and in 9603 cases cumulatively.

Table 4: Reported cases and deaths by disease category, as at 22 February 1988.

Disease category reported	Cumulative cases/deaths			
	Reported cases		Known deaths	
	Number	(% Total)	Number	(% Cases)
Pneumocystis carinii pneumonia	33850	(62)	19177	(57)
Other opportunistic diseases	14564	(27)	8440	(58)
Kaposi's sarcoma	5819	(11)	2738	(47)
TOTAL	54233	(100)	30355	(56)

Table 5 shows age at diagnosis by racial/ethnic group. The category, 'other/unknown' includes patients whose race/ethnicity is Asian/Pacific Islander (314 persons) and American Indian/Alaskan native (55 persons).

Table 5: Age at diagnosis by racial/ethnic group, as at 22 February 1988.

Age Group	White, not hispanic	Black, not hispanic	Hispanic	Other/ unknown	Total
Under 5	133	410	173	7	723
5 - 12	60	45	21	2	128
13 - 19	106	77	40	5	228
20 - 29	6201	3260	1704	86	11251
30 - 39	14784	6596	3511	221	25112
40 - 49	7328	2374	1441	124	11267
Over 49	3891	1002	576	55	5524
TOTAL	32503	13764	7466	500	54233

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 11 - 4 October 1987 to 31 October 1987 #

Disease	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Amoebiasis			3						3	45
Ankylostomiasis				4			NN		4	44
Anthrax									-	1
Arbovirus infection	1	1	25	1	NN				28	1146
Brucellosis	1								1	12
Campylobacter infections	99		NN	127		NN		1	227	2725
Chancroid				NN					-	5
Cholera									-	-
Congenital rubella syndrome			NN			NN		NN	-	-
Diphtheria							3		3	28
Donovanosis			16	NN					16	100
Giardiasis	14		NN	51		NN	NN	NN	65	1241
Genital herpes	57	2	122		NN	NN	1	3	185	1693
Gonococcal ophthalmia neonatorum		NN		1	NN	NN		NN	1	258
Gonorrhoea	35	3	173	20		3	24	1	259	4139
Hepatitis A (infectious)	14	3	7	13			14		61	612
Hepatitis B (serum)	16	13	60	8		1	3	4	105	1497
Hepatitis – unspecified	2		20	1	NN	NN			23	150
Hydatid disease	1		1						2	16
Lassa fever			NN			NN		NN	-	-
Legionnaires disease	2		NN			NN		NN	2	84
Leprosy	3	2					2		7	29
Leptospirosis	1		6						7	121
Lymphogranuloma venereum				NN	NN	NN		NN	-	-
Marburg disease			NN			NN		NN	-	-
Malaria	3	3	14	2		1	1		24	532
Meningococcal infections	2	5	1	1		NN			9	74

#

Disease	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Non-specific urethritis	217		1	NN	NN	NN	NN	NN	218	4315
Ornithosis				4					4	12
Pertussis (whooping cough)	2	2	NN	7		NN		NN	11	255
Plague									-	-
Poliomyelitis									-	-
Q. fever	8		26	2					36	341
Rabies				NN		NN		NN	-	-
Salmonella infections	31	6	42	14		4	13	2	112	2260
Shigella infections	3	1	4				11		19	504
Smallpox									-	-
Syphilis	22	1	115	2			52		192	1867
Tetanus									-	5
Trachoma		NN				NN	NN		-	192
Tuberculosis (all forms)	40	13	17	5		2	1	2	80	* 910
Typhoid fever	2		2			3		1	8	50
Typhus (all forms)									-	6
Vibrio parahaemolyticus infections			NN			NN		NN	-	3
Yellow fever									-	-
Yersinia infections	14		NN			NN		NN	14	104

NN - Not Notifiable

(Note: Data collected under the Notifiable Diseases Returns may bear little or no correlation to that collected under the CDI laboratory scheme. Whilst the latter is a sampling program, the Notifiable Diseases data is dependent upon voluntary reporting by medical practitioners etc.)

No Western Australian figures due to monthly totals.

* Adjustment to the Cumulative Total since last report

Tuberculosis (all forms) -1 Australian Capital Territory
Tuberculosis (all forms) +8 Tasmania

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

TOTAL VIRAL ISOLATIONS BASED ON DATE OF COLLECTION
PERIOD - FORTNIGHTLY
VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

Period 4-4-88 to 18-4-88.

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	0	4	1	2	0	0	1	17	25
0101	ADENOVIRUS TYPE 1	0	2	0	0	2	0	0	0	4
0102	ADENOVIRUS TYPE 2	2	2	0	0	1	0	0	0	5
0103	ADENOVIRUS TYPE 3	1	2	0	0	5	0	0	0	8
0104	ADENOVIRUS TYPE 4	1	0	1	0	0	0	0	0	2
0107	ADENOVIRUS TYPE 7	0	1	0	0	2	0	0	0	3
0109	ADENOVIRUS TYPE 9	0	0	0	0	2	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	1	0	0	0	1
0119	ADENOVIRUS TYPE 19	0	0	0	0	1	0	0	0	1
0135		1	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	2	0	0	3	0	2	0	0	7
0201	INFLUENZA A VIRUS	0	3	2	0	0	0	0	0	5
0203	INFLUENZA B VIRUS	0	0	0	0	2	0	0	0	2
0301	PARAINFLUENZA VIRUS TYPE 1	1	2	0	12	0	0	1	0	16
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	0	4	0	0	0	0	4
0303	PARAINFLUENZA VIRUS TYPE 3	1	0	1	6	0	0	0	0	8
0399	PARAINFLUENZA VIRUS TYPING PEN	0	0	0	1	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	2	2	0	2	4	2	1	7	20
0500	RHINOVIRUS (ALL TYPES)	2	2	0	10	0	0	1	1	16
0600	MYCOPLASMA PNEUMONIAE	0	0	4	10	7	2	2	0	25
0700	ORNITHOSIS-PSITTACOSIS	0	0	1	0	2	0	0	0	3
0809	COXSACKIEVIRUS A9	1	0	0	0	0	1	0	0	2
0816	COXSACKIEVIRUS A16	1	0	0	0	0	0	0	0	1
0902	COXSACKIEVIRUS B2	0	1	0	0	1	0	0	0	2
0905	COXSACKIEVIRUS B5	0	0	0	0	3	0	0	0	3
1005	ECHOVIRUS TYPE 5	0	1	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	0	1	0	0	0	1
1007	ECHOVIRUS TYPE 7	0	1	0	0	0	0	0	0	1
1009	ECHOVIRUS TYPE 9	0	0	0	0	3	0	0	0	3
1014	ECHOVIRUS TYPE 14	0	3	0	0	0	0	0	0	3
1020	ECHOVIRUS TYPE 20	0	1	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	3	0	0	3
1101	POLIOVIRUS TYPE 1	0	0	0	0	1	0	0	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	1	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	1	0	0	32	0	0	3	36
1301	HERPES SIMPLEX VIRUS - NOT TYP	5	3	0	0	0	0	1	0	9
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	12	0	0	0	6	2	0	20
1303	VARICELLA-ZOSTER VIRUS	2	2	0	1	2	0	0	3	10
1306	HERPES SIMPLEX TYPE 1	38	20	5	0	14	8	0	42	127
1307	HERPES SIMPLEX TYPE 2	56	35	15	0	52	12	0	67	237
1399	HERPES VIRUS TYPING PENDING	0	0	0	5	0	0	0	0	5
1401	COXIELLA BURNETI	0	0	2	0	1	1	0	0	4
1502	PICORNIA VIRUS - NOT TYPED = E	0	1	0	0	2	7	0	14	24
1522	RUBELLA VIRUS	2	0	0	0	2	2	0	0	6
1532	HEPATITIS B ANTIGEN	21	20	11	0	35	8	0	28	123
1535	HEPATITIS A ANTIBODY	10	14	1	2	3	0	0	0	30
1541	CHLAMYDIA A - C. TRACHOMATIS	9	78	24	1	43	5	1	14	175
1556	CMV - CYTOMEGALOVIRUS	29	4	2	2	6	6	0	9	58
1564	ROTAVIRUS	2	1	6	7	5	1	1	0	23
1566	NORWALK AGENT	0	0	0	0	1	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	1	0	0	3	0	6	1	0	11
9992	ROSS RIVER VIRUS	0	6	0	0	0	0	0	0	6
9993	ASTROVIRUS	0	0	0	0	1	0	0	0	1
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	1	0	0	0	1
9995	DENGUE	0	1	0	0	0	0	0	0	1
TOTAL		190	225	76	71	239	72	12	205	1090

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

Period 4-4-88 to 18-4-88.

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 TRA CT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	0	9	0	0	1	8	0	0	0	0	18
0101	ADENOVIRUS TYPE 1	0	1	0	0	0	3	0	0	0	0	4
0102	ADENOVIRUS TYPE 2	1	1	0	0	0	1	0	1	0	0	4
0103	ADENOVIRUS TYPE 3	1	3	0	0	0	1	0	0	0	0	5
0107	ADENOVIRUS TYPE 7	1	0	0	0	0	0	0	0	0	0	1
0109	ADENOVIRUS TYPE 9	0	0	0	0	0	2	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	1	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	2	0	0	0	0	2
0201	INFLUENZA A VIRUS	0	2	0	0	0	0	0	0	0	0	2
0203	INFLUENZA B VIRUS	0	0	0	0	1	0	0	0	0	0	1
0301	PARAINFLUENZA VIRUS TYPE 1	0	16	0	0	0	0	0	0	0	0	16
0302	PARAINFLUENZA VIRUS TYPE 2	0	3	0	0	1	0	0	0	0	0	4
0303	PARAINFLUENZA VIRUS TYPE 3	0	8	0	0	0	0	0	0	0	0	8
0399	PARAINFLUENZA VIRUS TYPING PEN	0	1	0	0	0	0	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	20	0	0	0	0	0	0	0	0	20
0500	RHINOVIRUS (ALL TYPES)	0	13	0	0	0	0	0	0	0	0	13
0600	MYCOPLASMA PNEUMONIAE	1	19	0	0	0	0	0	0	0	1	21
0700	ORNITHOSIS-PSITTACOSIS	0	3	0	0	0	0	0	0	0	0	3
0809	COXSACKIEVIRUS A9	0	1	0	0	0	0	0	0	0	0	1
0816	COXSACKIEVIRUS A16	0	0	0	0	0	0	0	0	0	1	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	1	0	0	0	0	1
0905	COXSACKIEVIRUS B5	0	1	0	0	0	2	0	0	0	0	3
1005	ECHOVIRUS TYPE 5	0	0	0	0	0	1	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	0	0	0	0	1	0	0	0	0	1
1007	ECHOVIRUS TYPE 7	0	0	1	0	0	0	0	0	0	0	1
1009	ECHOVIRUS TYPE 9	0	0	0	2	0	1	0	0	0	0	3
1014	ECHOVIRUS TYPE 14	0	0	0	0	1	1	0	0	0	0	2
1020	ECHOVIRUS TYPE 20	0	1	0	0	0	0	0	0	0	0	1
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	3	0	0	0	0	3
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	1	0	0	0	0	1
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
1200	HERPES VIRUS GROUP - NOT TYPED	8	2	0	0	0	0	0	0	0	11	21
1201	HERPES SIMPLEX VIRUS - NOT TYP	1	0	0	0	0	0	0	0	0	5	6
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	2	2	0	0	0	0	3	0	0	0	7
1303	VARICELLA-ZOSTER VIRUS	2	0	0	0	0	0	0	0	0	7	9
1306	HERPES SIMPLEX TYPE 1	4	3	0	0	0	0	0	0	1	63	71
1307	HERPES SIMPLEX TYPE 2	5	1	0	0	0	0	0	0	0	58	64
1399	HERPES VIRUS TYPING PENDING	0	2	0	0	0	0	0	0	0	3	5
1502	PICORNIA VIRUS - NOT TYPED = E	2	4	0	0	1	15	0	0	0	1	23
1522	RUBELLA VIRUS	1	0	0	0	0	0	0	0	0	3	4
1532	HEPATITIS B ANTIGEN	34	0	0	0	0	1	74	0	0	0	109
1535	HEPATITIS A ANTIBODY	1	0	0	0	0	1	24	0	0	0	26
1541	CHLAMYDIA A - C. TRACHOMATIS	19	0	0	0	0	0	0	0	0	1	20
1556	CMV - CYTOMEGALOVIRUS	4	4	1	2	0	0	1	0	6	0	18
1564	ROTAVIRUS	0	2	0	0	0	21	0	0	0	0	23
1566	NORWALK AGENT	0	0	0	0	0	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	1	0	1	1	6	0	0	0	0	9
9992	ROSS RIVER VIRUS	2	0	0	0	0	0	0	0	0	0	2
9993	ASTROVIRUS	0	0	0	0	0	1	0	0	0	0	1
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	1	0	0	0	0	1
9995	DENGUE	0	0	0	0	0	1	0	0	0	0	1
TOTAL		89	123	2	5	6	78	102	1	7	154	567

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

Period 4-4-88 to 18-4-88.

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	6	0	0	0	0	0	0	0	1	0	7
0102	ADENOVIRUS TYPE 2	1	0	0	0	0	0	0	0	0	0	1
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	1	1	0	0	3
0104	ADENOVIRUS TYPE 4	2	0	0	0	0	0	0	0	0	0	[illegible]
0107	ADENOVIRUS TYPE 7	2	0	0	0	0	0	0	0	0	0	[illegible]
0119	ADENOVIRUS TYPE 19	1	0	0	0	0	0	0	0	0	0	1
0135		0	0	0	0	0	0	0	0	1	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	2	2	0	5
0201	INFLUENZA A VIRUS	0	0	0	1	0	0	0	2	0	0	3
0203	INFLUENZA B VIRUS	0	0	0	0	0	0	0	1	0	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	1	0	0	0	1	0	1	3
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	2	2	0	4
0809	COXSACKIEVIRUS A9	0	0	0	0	0	0	0	1	0	0	1
0902	COXSACKIEVIRUS B2	0	0	0	0	0	0	1	0	0	0	1
1014	ECHOVIRUS TYPE 14	0	0	0	0	0	0	1	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	1	14	0	0	0	0	0	0	0	0	15
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	2	0	0	0	1	0	0	0	0	3
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	6	1	0	0	1	1	4	0	13
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	1	0	1
1306	HERPES SIMPLEX TYPE 1	3	48	0	0	0	1	0	2	2	0	56
1307	HERPES SIMPLEX TYPE 2	0	173	0	0	0	0	0	0	0	0	173
1401	COXIELLA BURNETI	0	0	0	0	0	0	2	0	2	0	4
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	0	1	0	1
1522	RUBELLA VIRUS	0	0	0	0	0	0	1	1	0	0	2
1532	HEPATITIS B ANTIGEN	0	0	0	1	0	0	0	0	13	0	14
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	3	1	0	4
1541	CHLAMYDIA A - C. TRACHOMATIS	3	152	0	0	0	0	0	0	0	0	155
1556	CMV - CYTOMEGALOVIRUS	2	1	1	1	0	3	2	3	27	0	40
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	1	0	2
9992	ROSS RIVER VIRUS	0	0	0	0	4	0	0	0	0	0	[illegible]
TOTAL		23	390	7	5	4	5	9	21	58	1	523