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Contents:

Editor Dr I.F. Cook

VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1,359 reports were processed during this period.

Seven cases of Q fever (6 males aged 25-51 years, 1 female aged 14 years) were reported during this period. No occupational exposure details were provided.

Twenty-two cases of echovirus type 30 were reported during this period, 12 from Fairfield Infectious Diseases Hospital, Victoria, and 10 from the Royal Children's Hospital, Parkville, Victoria, making a total of 86 cases so far this year. Twelve of the 22 patients in whom the virus was isolated had meningitis. One other isolation was from a faecal sample from a 4 month old male with sudden infant death syndrome. Most infections (17/22 cases) occurred in persons under 15 years of age.

Influenza A virus was isolated from postmortem lung, trachea and spleen samples from a 42 year old male with chest pain and no cardiac abnormalities at autopsy, who died suddenly.

Herpes simplex type 1 was isolated from a nasopharyngeal swab from a 21 year old woman with severe gingivostomatitis.

Respiratory syncytial virus was isolated from bronchial washings from a 35 year old male bone marrow transplant recipient with obstructive lung disease.

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- Figures given may be subject to revision.

JUDGE 'NOT SATISFIED' THAT WHOOPING COUGH VACCINE CAUSES BRAIN DAMAGE

(Based on Communicable Diseases New Zealand (1988) 88/8: 4-5.)

In a recent British High Court judgement Lord Justice Stuart-Smith declared himself not satisfied that pertussis vaccine caused permanent brain damage in children. The action arose from the case of a 17 year old young woman sueing her general practitioner on the grounds of negligence because of the alleged injury she has suffered from being given pertussis vaccine[1]. The case lasted 4 months; 9 expert witnesses were called for the plaintiff and 10 for the defence. In a 300 page judgement his Lordship pointed out that although reports of illness occurring shortly after vaccination raised an hypothesis of a causal link, no clinical syndromes specific to pertussis vaccine or specific disease process peculiar to deaths after pertussis vaccination had been identified. Encephalopathy occurs fairly commonly in young children who have not been immunised recently.

Reactions have been described in association with pertussis immunisation for more than 50 years, but until recently there have been virtually no controlled studies in which quantitative data has been available[2,3]. Certain contraindications to giving pertussis vaccine are recognised including:

- a severe local or generalised reaction to a preceding dose of the vaccine;
- a history of epilepsy or underlying brain damage as the result of a perinatal or later event; and
- possibly if there is a family history of adverse reactions to the vaccine.

In addition it is advised to delay giving the vaccine to a child who has a febrile illness with a fever of 37.5°C or above. The major concern is that the vaccine may precipitate a neurological event, usually a convulsion, which could lead to permanent brain damage.

Much of the controversy surrounding pertussis vaccine has centred around whether permanent brain damage or even death can occur after immunisation in a previously normal child. A landmark in attempting to answer this question was the British National Childhood Encephalopathy Study (NECS)[2,4], a massive undertaking of the Joint Committee on Vaccination and Immunisation which followed the fortunes of 3 annual birth cohorts of children between mid-1976 and mid-1978, providing approximately 5.4 million child years of observation during which some 2 million doses of pertussis vaccine were administered. This study showed that transient neurological symptoms might be expected in 1 in 110,000 doses, or more permanent sequelae in 1 in 310,000 doses. The importance of Lord Justice Stuart-Smith's judgement lies in the further examination of that figure of 1 in 310,000 dose related permanent neurological damage. When children who had developed infantile spasms were excluded - a condition which has been shown to have only a chance relationship with pertussis vaccine immunisation[5,6], only 7 permanently damaged children were shown to have been given the vaccine with 7 days prior to the

onset of their symptoms. Of these 7, 3 previously thought to have been damaged, were found to have been erroneously listed in the early NECS reports and were in fact quite healthy on follow up[7]. Of the remaining 4, 2 were found to have died from viral encephalitis, proven by virus culture, 1 died from Reye's syndrome and the fourth had the CSF changes of a virus encephalitis, but no cultures were taken. It appears then that no child suffered permanent injury or death clearly attributable to pertussis vaccine in the NECS, a view supported by a recent report of the Task Force on Pertussis and Pertussis Immunisation 1988 of the American Academy of Pediatrics[3].

Further good news comes from the United States. In a prospective study Varaff *et al*[8] evaluated the nature and rates of adverse reactions occurring within 48 hours following 15,752 Diphtheria Pertussis Tetanus (DTP) immunisations. Nine children had convulsions and 9 a hypotonic-hyporesponsive episode which is a recognised but uncommon side effect of pertussis vaccine coming on between 1 and 8 hours after immunisation. After 6-7 years, 16 of the 18 children were seen at follow up. None had suffered any permanent neurological damage and all had IQ's within the expected normal range.

We still need a better vaccine for pertussis with fewer short term side effects, but the good news is that there is now little evidence that the existing pertussis vaccine can cause permanent injury to a previously normal child.

REFERENCES

1. Br Med J (1988) 296: 1189-90.
2. Epidemiologic Reviews (1982) 4: 1-24.
3. Pediatrics (1988) 81 (Suppl): 939-84.
4. DHSS. Reports from the Committee on Safety and the Jount Committee on Vaccination and Immunisation. London. HM Stationery Office (1981) p184.
5. Dev Biol Stand (1985) 61: 389-94.
6. Arch Dis Child (1977) 52: 134-7.
7. Schaefele D. Head, Divison of Infectious Diseases and Professor of Pediatrics, University of British Columbia, Vancouver. New information on Pertussis Vaccine Associated Encephalopathy from the Loveday Trial. Unpublished report and commentary.
8. Pediatrics (1988) 81: 789-94.

QUARTERLY REPORT TO THE DOMESTIC POLICY COUNCIL ON THE PREVALENCE AND RATE OF SPREAD OF HIV AND AIDS - UNITED STATES

(Based on MMWR (1988) 37: 551-4, 559).

This article summarises the third report to the Domestic Policy Council (DPC) on the prevalence and rate of spread of human immunodeficiency virus (HIV) infection and acquired immune deficiency syndrome (AIDS) in the United States. The first report[1] extensively reviewed data on the prevalence and incidence of HIV infection. The second report was summarised in April 1988[2]. The third report was delivered to the DPC on 22 July 1988; its major points are summarised below, with information updated where appropriate.

A) Trends in Reported Cases of AIDS

. By 29 August 1988, a total of 72,024 AIDS cases had been reported in the United States, including over 12,500 cases since the last summary on 15 April 1988.

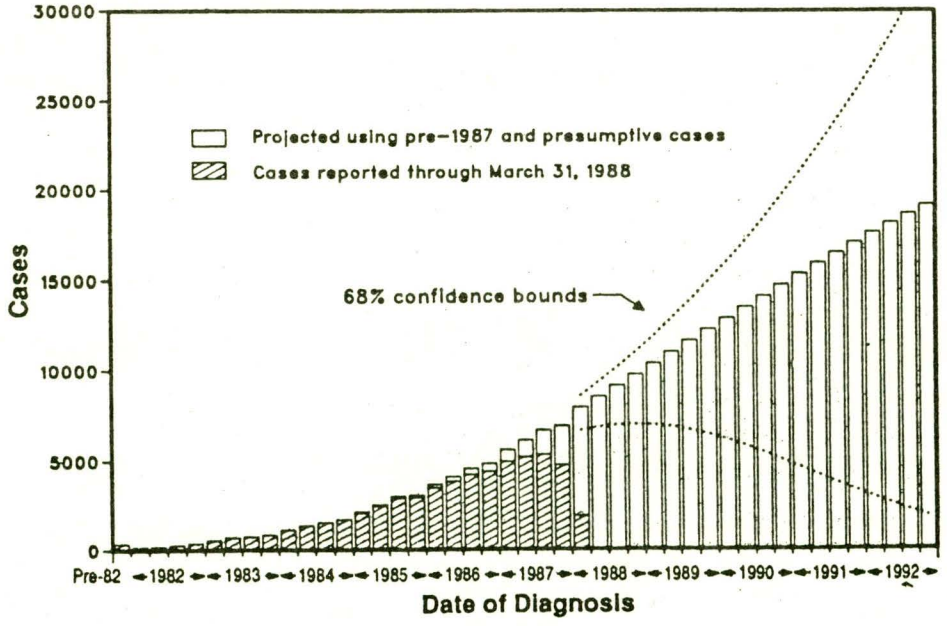
. In 1986 the US Public Health Service (PHS) projected that approximately 270,000 cumulative AIDS cases would be diagnosed by the end of 1991, including 15,800 cases diagnosed in 1986 and 23,000 in 1987. The actual numbers of cases for these years, adjusted for reporting delays, are 17,100 and 25,200 cases, respectively.

Using a method similar to that used in 1986[3], the PHS now projects a cumulative total of 365,000 cases diagnosed by the end of 1992, with 263,000 cumulative deaths (Figure 1).

. In 1992 alone, 80,000 cases are expected to be diagnosed and 66,000 deaths to occur. A total of 172,000 AIDS patients will require medical care in 1992 at a cost expected to range from US$5 billion to US$13 billion.

. In September 1987, the AIDS case definition was revised to include a broader spectrum of HIV-associated diseases and to allow for presumptive diagnoses of certain conditions. Comparisons of cases reported from the 12-month period before September 1987 with those reported since then show this change has led to an increase in the proportion of reported AIDS cases among blacks from 24% to 36% of all reported cases and an increase in the proportion of reported cases among Hispanics from 13% to 16%. Cases in persons thought to have been infected through heterosexual contact also increased from 2.6% of all cases to 3.6%.

Figure 1: Incidence of AIDS*, by quarter and year of diagnoses - United States, pre-1982 - 1992



*Projected from cases diagnosed as of 30 June 1987, and reported as of 31 March 1988.

B) Trends in Prevalence and Incidence of HIV Infection

. In April 1988, the Centers for Disease Control (CDC), Atlanta, Georgia, convened a meeting of experts in mathematical modelling techniques to help estimate the number of Americans now infected with HIV.

Based on two mathematical approaches, these experts agreed that the current CDC estimate of 1.0 million to 1.5 million is a reasonable working estimate of the number of persons now infected.

. Recent data, including prevalence rates in childbearing women in three states[2], patients at six sentinel hospitals, and prisoners in 15 states (see below), are consistent with this estimate.

. The current estimate for the number of infected Americans is the same as the estimate made in 1986. This does not mean that no new infections have occured. The 1986 estimate was based on preliminary data and was probably too high.

. Data on the prevalence rate of HIV infection (based on antibody prevalence) are now available from six urban and suburban sentinel hospitals, predominating in the midwest. In the first 18,809 tests conducted in persons admitted for reasons not associated with HIV infection, the overall seroprevalence was 0.3%. The observed rate is three to four times that found in military recruit applicants in the same cities. The higher rate in hospital patients is expected because persons with risk behaviours are to some extent excluded from military service.

. Seroprevalence in inmates from 15 state correctional systems and the Federal Bureau of Prisons ranges from 0 to 15% (median 0.4%) for the first 65,960 persons tested. Infection rates are highest in males, blacks and Hispanics, and applicants from urban areas.

. Infection rates in sentinel populations that have been followed over time have not shown significant increases. These populations include first-time blood donors (33 months of observation), applicants for military service (30 months of observation), and admissions to sentinel hospitals (15 months of observation). These findings are consistent with some continued HIV transmission (which is also seen in seroconversions in repeatedly tested active-duty military personnel and in repeat blood donors) but argue against an explosive spread of HIV in the population.

C) Status of HIV and AIDS-Associated Surveys

. *Implementation of the Comprehensive Family of HIV Surveys*

To conduct sentinel surveillance for HIV in 30 metropolitan areas, funding was awarded to health departments of 23 states, the District of Columbia, and Puerto Rico on 29 January 1988, with additional funds awarded on 1 May 1988. More than 420 different surveys will be conducted in sexually transmitted diseases clinics, drug abuse treatment centres, tuberculosis clinics, women's health clinics,

sentinel hospitals, and newborn infant screening programs (in which a sample of specimens routinely collected from newborns are anonymously tested to indicate the prevalence of HIV infection in childbearing women).

A program to evaluate HIV seroprevalence in college students has begun. By the end of 1988, a total of 20 colleges will participate, and approximately 20,000 serum samples will have been tested.

. *National Household Seroprevalence Survey (NHSS)*

A contract for the NHSS was awarded to the Research Triangle Institute. The NHSS will be conducted in two phases. Phase I will be a pilot phase to determine the feasibiltiy of conducting household interviews to obtain demographic information, HIV risk factors, and a blood test for HIV. If Phase I shows that the NHSS is feasible and if funds are available, Phase II (a probability sample of households from throughout the United States) would begin late in 1989 and would include approximately 50,000 respondents.

. *National Health Interview Survey: AIDS Attitudes and Knowledge Survey*

An AIDS questionnaire was developed for the National Health Interview Survey to provide estimates of public knowledge and attitudes about AIDS and changes in knowledge and attitudes over time. The first phase of the survey was conducted from August 1987 through January 1988 and showed continuous increases in knowledge of how HIV is transmitted. A second phase that began in early May 1988 contains additional questions to assist in the evaluation of the 'Understanding AIDS' mailing[4].

REFERENCES

1. MMWR (1987) 36 (Suppl S6).
2. MMWR (1988) 37: 223-6.
3. Public Health Rep (1986) 101: 459-65.
4. MMWR (1988) 37: 261-9.

DISTRIBUTION OF AIDS CASES BY RACIAL/ETHNIC GROUP AND EXPOSURE CATEGORY, UNITED STATES, 1 JUNE 1984 - 4 JULY 1988

In a recent article[1], the US Department of Health and Human Services analysed 65,133 (99.8%) of its acquired immune deficiency syndrome (AIDS) cases reported between 1 June 1984 and 4 July 1988 (ie those in which racial/ethnic group was specified).

The presumed means by which each patient became infected with HIV is analysed for each of the following racial groups:

. US residents:
  - Hispanics;
  - whites;
  - blacks;
  - Asians and Pacific Islanders;
  - American Indians and Alaskan Natives;
. Puerto Ricans.

Data is presented in seven tables:

. a breakdown of racial groups according to:
  - homosexual or bisexual men;
  - heterosexual men (regardless of means of exposure to HIV);
  - women;
  - children (under 13 years of age);

. 3 tables (one for each of men, women and children) showing the percentage for each exposure category within each racial/ethnic group; and

. 3 tables (one for each of men, women and children) showing the percentage of each racial group within each exposure category, and the corresponding percentage of each racial/ethnic group within the US population.

Analysis of the data showed that US AIDS patients were disproportionately black (26%) and Hispanic (13%) compared with the proportions of blacks (12%) and Hispanics (6%) within the US population.

In addition, the data shows that the proportion of intravenous drug use (IVDU)-associated AIDS cases is substantially greater in US blacks and Hispanics than in US whites (see below).

Table 1: Proportion* of IVDU within groups (men, women, children and overall populations)

Racial/ethnic group	Heterosexual IVDU or heterosexual whose sex partner was an IVDU		Children whose mother or mother's sex partner was an IVDU	All cases associated with IVDU by heterosexuals (including sex partners and children)
	Men	Women		
US black	34%	74%	62%	42%
US Hispanic	35%	80%	72%	40%
Puerto Rican residents	52%	83%	81%	58%
American Indian or Alaskan Native	10%	50%	50%	19%
US white	5%	52%	31%	7%
Asian/Pacific Islander	2%	31%	25%	5%

* Expressed as percentages within a particular age/sex group and racial/ethnic group.

Of all US AIDS cases associated with IVDU by heterosexuals, 54% occurred among blacks and 26% among Hispanics.

The proportion of AIDS cases (within the racial/ethnic group) in which the mode of HIV exposure was homosexual/bisexual activity was higher for US white (85.3%) or Asian/Pacific Islander (76.9%) AIDS cases than for American Indian/Alaskan Native (62.5%), Hispanic (52.0%), US black (43.7%), or Puerto Rican residents (34.9%).

REFERENCES

1. MMWR (1988) Suppl 3:1-10.

FANSIDAR-ASSOCIATED FATAL REACTION IN AN HIV-INFECTED MAN
(Based on MMWR (1988) 37: 571-2, 577.)

In March 1987, a 48-year-old homosexual man with oral thrush and a single dermatome zoster infection was found to be human immunodeficiency virus (HIV)-seropositive by enzyme immunoassay and Western blot. He had a depressed T4 lymphocyte count of 359 cells/mm^3 (normal: > 800 T4 cells/mm^3), and weekly pentamidine aerosol treatments were begun for prophylaxis against *Pneumocystis carinii* pneumonia (PCP). In late July 1987, the patient's T4 count had decreased to 311 cells/mm^3, and weekly pyrimethamine 25 mg/sulfadoxine 500 mg (Fansidar) was added to his prophylactic regimen.

In late August, while still on weekly pentamidine aerosols and oral Fansidar, he developed a maculopapular rash on his neck. During the next 10 days, the rash spread to his arms, legs, and trunk, and multiple bullae developed. He took one or two additional doses of Fansidar during this time. In early September, the patient was hospitalised with oropharyngeal blisters and extensive cutaneous lesions and was diagnosed initially as having disseminated zoster; treatment with intravenous acyclovir was begun. The next day, a skin biopsy showed toxic epidermal necrolysis. Despite aggressive intensive care, the patient rapidly developed fever, hypotension, and acute renal failure and died 48 hours after admission.

MMWR Editorial Note

This is the first report of a fatal cutaneous adverse reaction associated with Fansidar prophylaxis for PCP in an HIV-infected patient. Four nonfatal cases of Stevens-Johnson syndrome (severe erythema multiforme) in AIDS patients receiving Fansidar prophylaxis have been reported[1]. Severe cutaneous adverse reactions (including erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis) also have been reported among American travellers using Fansidar for malaria prophylaxis. These studies have estimated the incidence of these reactions to be one per 5,000-8,000 users, and fatalities, one per 11,000-25,000 users[2]. A comparable incidence was noted when sulfadoxine alone was used for prophylaxis of meningococcal disease in Morocco[3] and for cholera in Mozambique[4].

PCP, the most frequent opportunistic infection in American patients with AIDS, occurs in 56% of patients as the initial manifestation of the syndrome[5]. In addition, PCP frequently recurs after successful treatment. Trimethoprim/sulphamethoxazole is effective in treating PCP in AIDS patients but is associated with rash, fever, and neutropenia in up to 54% of cases, which may necessitate discontinuation or change of therapy[6]. Parenteral pentamidine is an effective chemotherapeutic agent but also may be associated with a high frequency of unacceptable adverse reactions[7] including neutropenia, azotaemia, and severe rash.

While trimethoprim/sulphamethoxazole and pentamidine are considered, respectively, the first and second drugs of choice for the treatment of PCP in AIDS patients, data concerning comparative safety and efficacy of various chemoprophylactic regimens are limited. Because of the high morbidity and

mortality associated with first and recurrent episodes of PCP, some investigators have proposed chemoprophylaxis for asymptomatic HIV-seropositive patients with low T4 lymphocyte counts as well as for AIDS patients with a history of PCP. Drugs used in this setting have included trimethoprim/sulphamethoxazole, intramuscular or aerosolised inhaled pentamidine, dapsone, and Fansidar[8,9]. A multicentre, randomised double-blind, placebo-controlled study is scheduled to ascertain the comparative efficacy and safety of trimethoprim/sulphamethoxazole, Fansidar, and aerosolised pentamidine for prophylaxis of PCP in AIDS patients receiving azidothymidine. However, no experimental evidence is available to suggest that Fansidar is biologically more active than trimethoprim/sulphamethoxazole against *P.carinii*. In addition, longer-acting sulphonamides (such as sulfadoxine) have been implicated as the cause of severe mucocutaneous reactions 10-20 times more frequently than shorter-acting congeners[10]. Consequently, the only advantage of selecting Fansidar as a first-line prophylactic drug in these patients would be potentially improved patient compliance due to weekly rather than daily dosing.

This report emphasises the importance of closely monitoring AIDS patients for adverse reactions to prophylactic drugs. In any patient receiving Fansidar or other prophylactic medication, the appearance of new cutaneous lesions should prompt immediate discontinuation of the drug until the etiology of the lesions is determined.

CDI Editorial Comment

Readers may also be interested in a recent article in the Journal of Infectious Diseases[11]. In this article Dr Joseph A Kovacs and Dr Henry Masur review alternatives for treatment and prophylaxis of *Pneumocystis carnii* pneumonia. With regard to prophylaxis, the authors conclude that trimethorprim/sulphamethoxazole (orally twice daily) is the only prophylactic regimen which has been shown to be effective in appropriate clinical trials in patients with AIDS[12].

In Australia, Fansidar is no longer recommended by the Department of Community Services and Health for the chemoprophylaxis of *Plasmodium falciparum* malaria because of the high attack rate of severe cutaneous adverse reactions including Stevens-Johnson syndrome.

REFERENCES

1. Lancet (1985) 1: 1332.
2. Am J Trop Med Hyg (1986) 35: 451-8.
3. Ann Derm Syph (1968) 95: 481-90.
4. Lancet (1985) 2: 1072-3.
5. MMWR (1985) 34: 245-8.
6. Ann Intern Med (1984) 100: 495-9.
7. Ann Intern Med (1986) 105: 37-44.
8. Lancet (1984) 2: 398-9.
9. Vieira J. Fansidar prophylaxis of *Pneumocystis carinii* pneumonia in asymptomatic HIV+ persons and persons with ARC (Abstract). III International Conference on AIDS, Washington, DC, 1-5 June 1987 p99.
10. JAMA (1966) 195: 691-3.
11. J Infect Dis (1988) 158: 254-9.
12. JAMA (1988) 259: 1185-9.

CDI 88/21

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 4. 27 March 1988 - 23 April 1988

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Amoebiasis	2			3			1		6	13
Ankylostomiasis				1	1		NN		2	15
Anthrax										
Arbovirus infection	3	1	56		2		3		65	232
Brucellosis	1		1	1	1				4	7
Campylobacter infection	131		NN	117	25	NN	10	NN	283	1283
Chancroid				NN						2
Cholera										
Congenital rubella syndrome			NN			NN		NN		2
Diphtheria							1		1	10
Donovanosis			1	NN	3		4		8	36
Giardiasis	33		NN	91	14	NN	NN	NN	138	602
Genital herpes	59		20		NN	NN	1	5	85	387
Gonococcal ophthalmia neonatorum		NN			NN	NN	1	NN	1	2
Gonnorhoea	70	5	40		104		33	6	258	1000
Hepatitis A (infectious)	4	2	3	7		28	4		48	194 *
Hepatitis B (serum)	27	3	13	2	43		4		92	426 *
Hepatitis - unspecified			2	1	NN	NN			3	31
Hydatid disease	1								1	5 *
Lassa fever			NN			NN		NN		
Legionnaires disease	3		NN	1		NN		NN	4	10
Leprosy					2				2	4
Leptospirosis	1	1	6	1					9	33
Lymphogranuloma venereum				NN	NN	NN		NN		
Marburg disease			NN			NN		NN		

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Malaria	7	7	10	1	2		2		29	137
Measles	5	NN		1		NN	NN		6	26
Meningococcal infections		2		1	1	NN			4	24
Non-specific urethritis	159		NN	NN	NN	NN	12	NN	171	939
Ornithosis				1					1	4
Pertussis (whooping cough)		2	NN	4	1	NN		NN	7	42
Plague										
Poliomyelitis										
Q fever	28		10	2					40	134 *
Rabies				NN		NN		NN		
Salmonella infections	68	35	69	36	36	10	16		270	1282
Shigella infections	5		6	9	5		8		33	208
Smallpox										
Syphilis	22	1	27		24		23		97	547
Tetahus										2
Trachoma		NN		1	1	NN	NN		2	23
Tuberculosis (all forms)	28	14	10	1	8	2	2	1	66	340
Typhoid fever		1							1	16
Typhus (all forms)										2
Vibrio parahaemolyticus infection	1		NN		1	NN		NN	2	2
Yellow fever										
Yersinia infections	9		NN	1		NN		NN	10	65

NN - Not notifiable

(Note: Data collected under the National 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.)

* ADJUSTMENT TO THE CUMULATIVE TOTAL SINCE LAST REPORT

Hepatitis A infection +3 South Australia
Hepatitis B (Serum) +4 South Australia
Hydatid disease +1 South Australia
Q fever +2 South Australia

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 5. 24 April 1988 - 21 May 1988

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Amoebiasis	1			4					9	22
Ankylostomiasis				3			NN		3	18
Anthrax										
Arbovirus infection	9	2	76		NN		4		91	323
Brucellosis			1						1	8
Campylobacter infection	161		NN	95	34	NN	12	NN	302	1585
Chancroid				NN						2
Cholera										
Congenital rubella syndrome			NN			NN		NN		2
Diphtheria							1		1	11
Donovanosis			5	NN	6		2		13	49
Giardiasis	48		NN	84	22	NN	NN	NN	154	756
Genital herpes	66		59		NN	NN	4	5	134	521
Gonococcal ophthalmia neonatorum		NN			NN	NN		NN		2
Gonnorhoea	48	6	113	22	118	3	44	1	355	1356 *
Hepatitis A (infectious)	10	7	1	3	36		2	1	60	253 *
Hepatitis B (serum)	30	16	5	1	34	1	2	3	92	518
Hepatitis - unspecified			5		NN	NN			5	36
Hydatid disease										5
Lassa fever			NN			NN		NN		
Legionnaires disease	2		1	2		NN		NN	5	15
Leprosy	1						2		3	7
Leptospirosis	7		5						12	45
Lymphogranuloma venereum				NN	NN	NN		NN		
Marburg disease			NN			NN		NN		

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Malaria	10	6	5		2		5	1	29	166
Measles	4	NN		2	2	NN	NN		8	34
Meningococcal infections	1	2	3	1		NN	3		10	34
Non-specific urethritis	274		NN	NN	NN	NN	6	NN	28	1219
Ornithosis			29						29	33
Pertussis (whooping cough)			NN	10	1	NN		NN	11	53
Plague										
Poliomyelitis										
Q fever	25		10	1					36	170
Rabies				NN		NN		NN		
Salmonella infections	93	24	91	37	43	10	21	2	321	1603
Shigella infections	10		7	6	11		15		49	257
Smallpox										
Syphilis	18	3	81	3	25		46		176	723
Tetanus										2
Trachoma		NN			2	NN	NN		2	25
Tuberculosis (all forms)	32	26	30	1	8		1	1	98	441 *
Typhoid fever	2	1							3	19
Typhus (all forms)					1				1	3
Vibrio parahaemolyticus infection			NN			NN		NN		
Yellow fever										2
Yersinia infections	11		NN	3		NN		NN	14	79

NN - Not notifiable

(Note: Data collected under the National 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.)

* ADJUSTMENT TO THE CUMULATIVE TOTAL SINCE LAST REPORT

Gonorrhoea	+1	A.C.T.
Hepatitis A (infectious)	-1	New South Wales
Tuberculosis (all forms)	+3	South Australia
	-1	A.C.T.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 1/10/88 TO 14/10/88

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	5	0	0	1	2	1	21	30
0101	ADENOVIRUS TYPE 1	3	1	0	0	1	0	0	0	5
0102	ADENOVIRUS TYPE 2	2	0	0	0	1	1	0	0	4
0103	ADENOVIRUS TYPE 3	0	0	1	0	1	0	0	0	2
0104	ADENOVIRUS TYPE 4	3	0	0	0	0	0	0	0	3
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	0	0	0	0	2	0	0	0	2
0110	ADENOVIRUS TYPE 10	0	2	0	0	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	0	0	0	1	0	0	0	1
0114	ADENOVIRUS TYPE 14	0	0	0	0	0	1	0	0	1
0130	ADENOVIRUS TYPE 30	0	0	0	0	3	0	0	0	3
0137	ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	2	0	1	0	0	4
0201	INFLUENZA A VIRUS	0	7	11	0	0	1	0	0	19
0203	INFLUENZA B VIRUS	0	0	1	0	1	2	0	0	4
0206	INFLUENZA A H1N1	0	0	3	0	0	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	1	0	0	0	0	1	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	4	11	2	7	0	0	6	30
0400	RESPIRATORY SYNCYTIAL VIRUS (R	6	8	8	11	5	1	0	5	44
0500	RHINOVIRUS (ALL TYPES)	4	2	9	24	6	1	0	8	54
0600	MYCOPLASMA PNEUMONIAE	0	4	33	7	12	1	0	0	57
0700	ORNITHOSIS-PSITTACOSIS	0	1	0	0	0	0	0	0	1
0805	COXSACKIEVIRUS A5	0	0	0	1	0	0	0	0	1
0809	COXSACKIEVIRUS A9	0	0	0	0	3	0	0	0	3
0821	COXSACKIEVIRUS A21	1	0	0	0	0	0	0	0	1
0904	COXSACKIEVIRUS B4	4	0	0	0	2	1	0	0	7
0905	COXSACKIEVIRUS B5	0	1	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	0	1	0	0	1	0	0	0	2
1009	ECHOVIRUS TYPE 9	1	9	0	0	2	1	0	0	13
1018	ECHOVIRUS TYPE 18	0	0	0	0	2	0	1	0	3
1022	ECHOVIRUS TYPE 22	0	0	0	0	1	0	0	0	1
1030	ECHOVIRUS TYPE 30	12	0	0	10	0	0	0	0	22
1100	POLIOVIRUS NOT TYPED	0	0	0	7	0	0	0	0	7
1101	POLIOVIRUS TYPE 1	0	0	2	0	1	0	0	0	3
1102	POLIOVIRUS TYPE 2	1	0	1	0	2	0	0	0	4
1103	POLIOVIRUS TYPE 3	0	0	0	0	1	0	0	0	1
1199	POLIOVIRUS TYPING PENDING	0	0	0	0	0	0	1	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	7	0	0	57	1	0	0	65
1301	HERPES SIMPLEX VIRUS - NOT TYP	3	3	0	0	0	0	1	0	7
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	15	10	0	3	0	3	0	31
1303	VARICELLA-ZOSTER VIRUS	0	1	0	0	2	2	0	5	10
1306	HERPES SIMPLEX TYPE 1	45	27	12	0	13	10	0	39	146
1307	HERPES SIMPLEX TYPE 2	74	74	16	0	66	17	0	53	300
1399	HERPES VIRUS TYPING PENDING	3	0	0	4	1	0	0	0	8
1401	COXIELLA BURNETI	0	0	0	0	8	0	0	0	8
1502	PICORNIA VIRUS - NOT TYPED = E	0	1	0	0	0	4	0	10	15
1514	MOLLUSCUM CONTAGIOSUM	0	1	0	0	0	0	0	0	1
1521	MEASLES VIRUS	0	0	0	1	0	1	0	0	2
1522	RUBELLA VIRUS	3	0	1	1	0	1	0	0	6
1532	HEPATITIS B ANTIGEN	16	9	6	2	34	7	0	16	90
1535	HEPATITIS A ANTIBODY	3	2	0	0	0	0	0	0	5
1541	CHLAMYDIA A - C. TRACHOMATIS	43	50	26	0	24	2	0	26	171
1556	CMV - CYTOMEGALOVIRUS	23	11	5	5	8	5	0	4	61
1564	ROTAVIRUS	4	15	24	0	10	14	3	4	74
1599	ENTEROVIRUS TYPING PENDING	0	0	0	7	0	5	0	0	12
9992	ROSS RIVER VIRUS	0	0	0	0	0	3	0	0	3
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	1	0	1
TOTAL		256	262	181	84	282	85	11	198	1359

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 1/10/88 TO 14/10/88

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 TRACCT
11. CODE 06 ... - SKIN MUCOUS

		1	2	3	4	6	7	8	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	0	10	0	0	1	15	0	0	0	26
0101	ADENOVIRUS TYPE 1	0	3	0	0	0	2	0	0	0	5
0102	ADENOVIRUS TYPE 2	0	1	0	0	1	1	0	0	0	3
0103	ADENOVIRUS TYPE 3	0	0	0	0	0	1	0	0	0	1
0104	ADENOVIRUS TYPE 4	0	2	0	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	1	0	0	0	0	1	0	0	0	2
0110	ADENOVIRUS TYPE 10	0	0	0	1	0	1	0	0	0	2
0130	ADENOVIRUS TYPE 30	1	0	0	0	0	1	0	0	0	2
0199	ADENOVIRUS TYPING PENDING	0	2	0	0	0	0	0	0	0	2
0201	INFLUENZA A VIRUS	1	10	0	0	0	0	0	0	0	11
0203	INFLUENZA B VIRUS	0	3	0	0	0	0	0	0	0	3
0206	INFLUENZA A H1N1	0	3	0	0	0	0	0	0	0	3
0301	PARAINFLUENZA VIRUS TYPE 1	0	2	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	0	26	0	1	0	0	0	0	0	27
0400	RESPIRATORY SYNCYTIAL VIRUS (R	2	39	1	0	0	0	0	0	0	42
0500	RHINOVIRUS (ALL TYPES)	0	44	0	0	0	0	1	0	1	46
0600	MYCOPLASMA PNEUMONIAE	7	40	1	0	0	1	0	1	0	50
0700	ORNITHOSIS-PSITTACOSIS	0	1	0	0	0	0	0	0	0	1
0805	COXSACKIEVIRUS A5	0	1	0	0	0	0	0	0	0	1
0809	COXSACKIEVIRUS A9	0	1	0	0	0	2	0	0	0	3
0904	COXSACKIEVIRUS B4	0	4	0	2	0	1	0	0	0	7
0905	COXSACKIEVIRUS B5	0	1	0	0	0	0	0	0	0	1
1006	ECHOVIRUS TYPE 6	1	1	0	0	0	0	0	0	0	2
1009	ECHOVIRUS TYPE 9	2	1	0	3	2	3	0	0	0	11
1018	ECHOVIRUS TYPE 18	1	1	0	0	0	0	0	0	0	2
1022	ECHOVIRUS TYPE 22	0	0	0	0	0	1	0	0	0	1
1030	ECHOVIRUS TYPE 30	0	4	0	12	0	1	0	0	0	17
1100	POLIOVIRUS NOT TYPED	0	3	0	0	0	0	0	0	0	3
1101	POLIOVIRUS TYPE 1	0	1	0	0	0	2	0	0	0	3
1102	POLIOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	1	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	11	0	0	0	0	0	0	1	16	28
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	0	0	0	0	0	4	4
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	7	2	0	0	0	0	2	0	0	11
1303	VARICELLA-ZOSTER VIRUS	1	0	0	0	0	0	0	1	6	8
1306	HERPES SIMPLEX TYPE 1	2	9	0	0	0	0	0	1	81	93
1307	HERPES SIMPLEX TYPE 2	2	0	0	0	0	0	0	0	93	95
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	3	3
1401	COXIELLA BURNETI	0	1	0	0	0	0	0	0	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	0	2	0	0	2	9	0	1	0	14
1514	MOLLUSCUM CONTAGIOSUM	0	0	0	0	0	0	0	0	1	1
1521	MEASLES VIRUS	1	0	0	0	0	0	0	0	1	2
1522	RUBELLA VIRUS	1	0	0	0	0	0	0	0	3	4
1532	HEPATITIS B ANTIGEN	45	1	0	0	0	0	42	0	0	88
1535	HEPATITIS A ANTIBODY	3	0	0	0	0	0	2	0	0	5
1541	CHLAMYDIA A - C. TRACHOMATIS	38	0	0	0	0	0	0	0	0	38
1556	CMV - CYTOMEGALOVIRUS	4	18	0	0	0	1	1	8	1	33
1564	ROTAVIRUS	0	1	0	0	0	73	0	0	0	74
1599	ENTEROVIRUS TYPING PENDING	1	5	0	2	0	0	0	0	0	8
TOTAL		132	245	2	21	6	117	48	13	210	794

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 1/10/88 TO 14/10/88

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	3	0	0	0	0	0	0	0	1	0	4
0102	ADENOVIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
0103	ADENOVIRUS TYPE 3	0	0	0	0	0	0	0	1	0	0	1
0104	ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	0	1	0	1
0114	ADENOVIRUS TYPE 14	0	0	0	0	0	0	0	1	0	0	1
0130	ADENOVIRUS TYPE 30	0	0	0	0	0	0	0	0	1	0	1
0137	ADENOVIRUS TYPE 37	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	0	1	0	2
0201	INFLUENZA A VIRUS	0	0	0	0	0	0	0	4	4	0	8
0203	INFLUENZA B VIRUS	0	0	0	0	0	0	0	1	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	1	1	1	0	3
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	0	2	0	2
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	5	2	1	8
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	2	5	0	7
0821	COXSACKIEVIRUS A21	0	1	0	0	0	0	0	0	0	0	1
1009	ECHOVIRUS TYPE 9	0	0	0	0	0	0	0	0	2	0	2
1018	ECHOVIRUS TYPE 18	0	0	0	0	0	0	1	0	0	0	1
1030	ECHOVIRUS TYPE 30	0	0	0	0	0	0	0	3	1	1	5
1100	POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	0	4	4
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	0	0	0	1	2	3
1199	POLIOVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	37	0	0	0	0	0	0	0	0	37
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	2	0	1	0	0	0	0	0	0	3
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	11	3	0	0	0	4	2	0	20
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	1	1	0	2
1306	HERPES SIMPLEX TYPE 1	1	47	0	0	0	0	0	1	4	0	53
1307	HERPES SIMPLEX TYPE 2	0	204	0	0	0	0	0	0	1	0	205
1399	HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	1	3	0	5
1401	COXIELLA BURNETI	0	0	0	0	0	0	3	1	3	0	7
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	1	0	0	1
1522	RUBELLA VIRUS	0	0	0	0	0	1	0	1	0	0	2
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	2	0	2
1541	CHLAMYDIA A - C. TRACHOMATIS	3	129	0	0	0	0	0	0	1	0	133
1556	CMV - CYTOMEGALOVIRUS	0	0	0	1	0	2	1	6	18	0	28
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	4	0	0	4
9992	ROSS RIVER VIRUS	0	0	0	0	3	0	0	0	0	0	3
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	0	0	1	0	1
TOTAL		10	421	11	5	3	3	6	39	59	8	565