



Communicable Diseases Intelligence

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 978 reports were processed during this period.

Orf virus was identified (using electron microscopy) in a pustule on the skin of a 41 year old abattoir worker.

Adenovirus type 3 was isolated from the eye of a 2 year old boy with conjunctivitis and periorbital cellulitis.

Adenovirus type 8 was isolated from the eye of a 45 year old male patient with hepatitis B who was also HIV positive.

Cytomegalovirus (CMV) was isolated from:

- . the breast milk of a 37 year old woman who had had a primary CMV infection shortly before becoming pregnant. Amniotic fluid samples were negative for CMV. No indication was given of the CMV status of the baby;
- . postmortem thyroid and parotid gland tissue of a 48 year old male with AIDS;
- . postmortem lung and thyroid tissue of a second male with AIDS; and
- . the urine of an 8 week old boy with obstructive jaundice who had received multiple blood transfusions.

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Rotavirus was identified by electron microscopy of a stool sample from a 3 month old boy with gastroenteritis and renal failure.

Influenza A virus, subtype HN, was isolated from a nasopharycal swab of a 35 year²old woman who was admitted to hospital with atypical pneumonia 3 days after returning from China.

GONOCOCCAL SURVEILLANCE - AUSTRALIA

(Contributed by the Australian Gonococcal Surveillance Programme (AGSP). Co-ordinator, Dr J.W. Tapsall, The Prince of Wales Hospital, Sydney, NSW 2031)

This report provides details of penicillin sensitivity of 560 strains of gonococci isolated in participating laboratories over the period 1 July to 30 September 1987 (Table 1). The sensitivity of the isolates to penicillin was determined by a standardised technique⁽¹⁾ and the performance of each participant was monitored by an external quality assurance program.

The penicillin sensitivity of the majority of gonococcal isolates falls within a bimodal distribution, reported as 'sensitive' and 'less sensitive' (see notes on the table). Only a small number of isolates do not fall into the listed categories and these have not been included in the table.

A trend towards increasing resistance to penicillin has been noted for a considerable time in this study. Increasing levels of chromosomally mediated resistance are seen as a greater percentage of strains which fall into the 'less sensitive' to penicillin category. High level intrinsic resistance (MIC 1.0 mg/L or greater) was noted in about 3% of isolates.

The increasing number of penicillinase-producing gonococci (PPNG) reflects the presence of larger numbers of gonococci harbouring a plasmid coding for lactamase production. Overall, there is little change in the proportion of PPNG when data from the corresponding period in 1986 are reviewed.

Table 1: Penicillin sensitivity of isolates of N. gonorrhoea
1 July - 30 September 1987

<u>Centre</u>	<u>Percentage of isolates</u>				
	<u>Sensitive*</u>		<u>Less Sensitive**</u>		<u>PPNG</u>
Brisbane	26.6	(24.3)	35.1	(56.8)	12.8 (12.6)
Sydney	11.2	(6.8)	34.4	(39.1)	36.8 (30.0)
Melbourne	7.25	(17.0)	55.1	(49.8)	16.7 (16.6)
Adelaide	14.8	(27.2)	43.5	(60.2)	11.9 (5.2)
Perth	24.3	(28.4)	37.8	(32.9)	10.8 (14.8)

* Sensitive MIC = 0.004-0.016 mg/L

** Less Sensitive MIC = 0.06-0.24 mg/L

Figures in parenthesis represent data for the same period in 1986.

Local, as opposed to overseas, acquisition of PPNG was reported from most centres and it is likely that these strains will continue to account for a significant proportion of gonococcal disease.

A notable feature of these reports is the low number of strains examined in this quarter (560). This is the lowest number tested in any quarter since the program began in 1981. Although the incidence of gonorrhoea always declines in the cooler months, the number of strains available from the same sources in the same period in 1986 was 1073.

REFERENCE

1. Br J Vener Dis (1984) 60:226-30.

SWIMMERS' ITCH, A SURFACING PROBLEM? AN OUTBREAK AT A SUFFOLK WATERSPORTS PARK

(Based on CDR (1988) 88/12: 3-4)

The outbreak: During July 1987 more than 65 people attending a watersports park in Suffolk were afflicted by an extremely itchy rash, accompanied by fever, nausea and vomiting in some severely affected schoolchildren. The occurrence was reported in the local newspaper.

Water samples submitted for analysis failed to reveal a cause for the rash, but 'Wanaka itch' (schistosoma or cercarial dermatitis^(1,2)), which occurs in some New Zealand lakes, was suspected for the following reasons:

- . contact with a natural body of water within the past three days;
- . a severely itchy papular dermatitis between 12 and 24 hours after exposure; and
- . rash confined only to immersed areas of the body⁽³⁾.

Questionnaires were sent to all persons reporting the rash and additional questionnaires were left at the office for completion by users of the park within the previous month.

Results: Completed questionnaires were received from 37 of 51 persons known to have reported the rash. Five hundred persons were using the lake each week but only 20 additional forms were completed at the office, 9 from unaffected board sailors, making a total of 48 completed questionnaires from those with rash.

The greatest response came from parents and children of the three school parties linked with the initial press report. The age range was 8-43 years. Twenty-two were aged under 15 years, 13 were aged 15-24 years and 13 aged 25 years or more. There were 31 males and 17 females reporting the rash. As no denominators were available, these numbers probably reflect usage of the lake during this period.

All 48 described the rash as itchy with the majority (42/48) also reporting a spotty or punchate appearance progressing to erythema (37/48) and weals (31/38). The feet and lower limbs were the most commonly affected sites (47/48) followed by the

hands and arms (27/48). Palms, soles and face were universally spared. Swimmers (20/31, 65%) were more likely to be affected on the arms and body than non-swimmers (7/17, 41%).

The average duration of the rash reported for children under 15 years was 12.7 days compared with 8.8 days in those aged 15 years or more. This may reflect a longer time spent actually immersed in the water by the younger group, although this difference did not come out from the questionnaire due to ambiguity in one of the questions. The weather on the days when the school parties attended the lake was hot and windless so that much of the children's time was said to be spent 'dabbling' in the weedy shallow areas. Most of this younger group were complete novices to watersports and reported few previous encounters with natural bodies of fresh water. Only one of the 48 respondents reported a similar previous rash, which appeared after clearing weed from a fish pond on a farm.

Symptoms, treatment and pathology of the rash: A minor prickling sensation was felt in many instances within minutes of leaving the water. This was followed between 3 hours and 5 days later by the rash; initially as small red papules which in some instances became vesicular and coalesced. Some individuals had hundreds of lesions. Twenty-one persons sought medical advice and a wide range of treatments including antihistamines and topical steroids were used. Presumptive diagnoses included scabies, early chickenpox and insect bites. The lesions resolved spontaneously between 1 and 30 days.

Two skin biopsies were obtained at 20 and 26 hours post-exposure. Histology was non-specific but consistent with cercarial dermatitis. Reports in the literature suggested that persons with swimmers' itch gave false positive results to serological tests for schistosomiasis. These tests detected antibodies to the cercarial proteins of *Schistosoma mansoni*. Fifteen blood specimens were obtained; 14 from those with rash and 1 from an unaffected employee at the lake who reported taking a daily swim. The sera were sent to the Hospital for Tropical Diseases, London, for testing. The test now used is a radio-immune assay (RIA) employing *S. mansoni* egg antigen. This test has a greater specificity and the results are expressed according to the likelihood of active human disease. A positive test at level 1 has a 63% and at level 2 a 76% predictive value of infection. Only three positive results were obtained, all from those with rash: two at level 1 and one at level 2. This result was disappointing but may be explained by the difference in the test procedures.

Investigation at the lake: The lake was a shallow, weedy, flooded gravel pit. The water was clear but calcareous with enormous numbers of the giant pond snail, *Lymnaea stagnalis*. These snails were found to be emitting cercariae of a wide range of Digenea parasites. Cercariae of *Trichobilharzia ocellata*, the organism implicated in the two previously reported outbreaks in the UK, were identified by the Natural History Museum. Five out of fifty snails (10%) submitted to the Parasitology Laboratory of MAFF in early August were found to be emitting the cercariae. Three out of thirty-six snails (8%) collected by the University of East Anglia at the end of September were infected. These three snails have been maintained in the laboratory and the behaviour of the cercariae

and their pattern of emergence studied. The cercariae are phototactic and are found attached to the water surface in a quiescent state but become motile when shaded. Over 2000 cercariae per snail may be emitted per day at 17°C. Water temperature, however, does not appear to be the critical factor for their release. Cercarial release continued when the three host snails were maintained at 4°C for six weeks. The level of cercarial release was reduced to about a quarter of its previous value. These cercariae were shown experimentally to produce lesions on the author's forearm identical to those reported by respondents.

Following local publicity and an interview on BBC Radio 4, reports consistent with schistosomal dermatitis were received from many parts of the UK, predominantly South East England. These have mostly been associated with activities in slow moving weedy rivers, estuaries and lakes.

Control measures: Control measures are only necessary where economic factors and severe recurrent problems arise. The main means has been the reduction of the snail population. In the past, copper salts have been used effectively but may be banned on environmental grounds. Molluscicides are not available commercially in the UK but may be prescribed by a veterinary surgeon to control disease in fish.

Biological control is being investigated at the watersports park lake and several hundred moderate sized carp have been introduced to help reduce both the weed and the snails.

Personal protection is afforded by clothing such as a wet-suit. Insect repellants are effective but rapidly washed off. Five per cent hexachlorophene skin wash has been reported as effective in an aquatic environment.

Conclusions: Swimmers' itch is an interesting but substantially under-diagnosed minor skin condition. With the growing interest in watersports it may become a more widely recognised problem. Severe reactions may deter some youngsters from pursuing sports which provide challenging recreational opportunities. This would be an unfortunate consequence of a condition which is short lived and self limiting, and for which preventive measures are available.

CDI Editorial Comment

Schistosomal cercariae are prevalent in many developed and developing countries. The cercariae of around 20 species of non-human schistosomes have been known to produce cercarial dermatitis in man.

The life-cycle of these trematodes involves an intermediate gastropod host, usually a marine snail, and a definitive vertebrate host, usually a bird or small mammal. Humans become infected by wading or swimming in water contaminated with cercariae released from the intermediate host.

In Australia, there have been sporadic reports of swimmers' itch in both saltwater and freshwater locations (see Table 1)

Table 1: Reports of cercarial dermatitis in Australia - distribution, trematodes and hosts^(8,9,10).

	<u>Saltwater</u>	<u>Freshwater</u>
<u>Distribution</u>	New South Wales Queensland Western Australia Tasmania	All mainland states
<u>Trematode</u>	<i>Austrobilharzia terrigalensis</i> <i>Gigantobilharzia</i> spp	<i>Trichobilharzia</i> spp
<u>Intermediate hosts</u>	<i>Velacumantus australis</i> <i>Planaxis sulcatus</i> <i>Siphonaria denticulata</i>	<i>Lymnaea lessoni</i>
<u>Definitive hosts</u>	water birds such as silver seagulls and terns	teal ducks, black swans, and stilts

The clinical features of the cases presented in this article are characteristic of swimmers' itch. This diagnosis may be difficult to make if a recent history of contact with water is not obtained. In persons who have already been sensitised to cercariae, a maculopapular rash is sometimes followed by the development of erythema, vesicles and oedema, as was reported in a number of cases in Western Australia. In this study, nausea and diarrhoea were also reported.

Human infection with non-human trematodes is self-limiting. Symptomatic relief⁽¹¹⁾ may be obtained with topical antipruritics and antihistamines.

REFERENCES

1. Rook A, Wilkinson DS, Ebling FJG, Champion RH, Burton JL. (Eds) Textbook of Dermatology, 4th Edn, 1986, Oxford:Blackwell, p1008-9.
2. NZ Med J (1944) 43:136-40.
3. South Afr Med J (1984) 65:467-69.
4. Trans Roy Soc Trop Med Hyg (1972) 66:21.
5. Kearne G, Cleveland G. University of East Anglia, School of Biological Sciences, Norwich 1988: Personal communication.
6. South Afr Med J (1973) 47:526-27.
7. Strickland, GT. Hunter's Tropical Medicine, 6th Edn, 1984 Philadelphia: Saunders, p708-739.
8. Med J Aust (1979) 1:141-5.
9. Stevenson, WJ and Hughes, KL. Synopsis of Zoonoses in Australia, 1980, AGPS: Canberra p85.
10. Z Parasitenkd (1977) 52:39-51.
11. MMWR (1982) 31:435-38.

AIDS UPDATE - EUROPE

(Based on WER (1983) 63: 105-107)

By 31 December 1987, a total of 10,181 AIDS cases had been reported to the WHO Collaborating Centre on AIDS by 28 countries (Table 1). By 31 December 1987, 4,640 deaths had been reported among the 10,181 cases (case-fatality rate: 45.6%). The case-fatality rates for those cases diagnosed before June 1985 are greater than 70% except for the first half-year of 1981.

Table 1. Cumulative AIDS cases reported by 28 European countries and estimated cumulative incidence rates per million population, 31 December 1987

Country	December 1986	March 1987	June 1987	September 1987	December 1987	Rate per million ^a
Austria	54	72	93	120	139	18.3
Belgium	207	230	255	277	277	28.0
Bulgaria	—	—	1	1	1	.1
Czechoslovakia	6	7	7	7	8	.5
Denmark	131	150	176	202	228	44.7
Finland	14	19	19	22	24	4.9
France	1 221	1 632	1 980	2 523	3 073	55.3
German Democratic Republic	1	3	4	4	6	.4
Germany, Federal Republic of	826	999	1 133	1 400	1 669	27.4
Greece	35	41	49	78	88	8.8
Hungary	1	3	5	6	8	.8
Iceland	4	4	4	4	4	20.0
Ireland	14	19	19	25	33	9.4
Israel	34	38	39	43	47	10.7
Italy	523	664	870	1 104	1 411	24.6
Luxembourg	6	7	7	8	9	22.5
Malta	5	5	6	7	7	17.5
Netherlands	218	260	308	370	420	28.8
Norway	35	45	49	64	70	16.7
Poland	1	2	2	3	3	.1
Portugal	46	54	67	81	90	8.7
Romania	2	2	2	2	3	.1
Spain	264	357	508	624	789	20.2
Sweden	90	105	129	143	163	19.4
Switzerland	192	227	266	299	355	53.8
United Kingdom	610	729	870	1 067	1 227	21.6
USSR	1	3	3	3	3	—
Yugoslavia	8	10	11	21	26	1.1
Total	4 549	5 687	6 882	8 508	10 181	

a

Source of population figures: Population & Societes, INED, Paris, 1987 (No 216).

Four other European countries have reported AIDS cases directly to WHO:

Albania: -

Monaco: 1

San Marino: -

Turkey: 21

The number of reported cases has increased by 124% (5,632 new cases) since December 1986.⁽¹⁾ Between September and December 1987, the greatest increases in the number of reported cases were noted in:

France:	+ 550 (42-43 per week)
Italy:	+ 307 (23-24 per week)
Germany, Fed. Rep. of:	+ 269 (20-21 per week)
Spain:	+ 165 (12-13 per week)
United Kingdom:	+ 160 (12-13 per week)
Switzerland:	+ 56 (4-5 per week)
Netherlands:	+ 50 (3-4 per week)

AIDS cases per million population have been calculated for each country from 1987 population estimates (Institut National d'Etudes Demographiques [INED], Paris). The highest cumulative incidence rates per million population were noted in:

France: 55.3
 Switzerland: 53.8
 Denmark: 44.7

By way of comparison, the rate in the United States of America was 216 per million population (Centers for Disease Control, AIDS activity, 28 December 1987).

The geographical origin of adult cases was:

Patients originating from
 the WHO European Region: 92.3%
 African origin 3.8%
 Caribbean origin 1.1%

Most patients of African origin resided in Europe (66.5%) and were diagnosed in France and Belgium. Most of the patients of Caribbean origin were diagnosed in France, but nearly half resided in the Caribbean Islands (48%).

Transmission category:

Table 2 gives the distribution of adult cases by country of diagnosis and transmission group. In Denmark, the Federal Republic of Germany, the Netherlands, Norway, Sweden and the United Kingdom, over 70% of the cases have occurred in the homosexual/bisexual population. In Italy and Spain, 64% and 53% respectively have occurred among IV drug users.

Table 2. Cumulative AIDS cases in adults by country of diagnosis and transmission category, 28 countries in the WHO European region, 31 December 1987

Country	Homosexual/ bisexual		IV drug user		Homosexual/ IV drug user		Haemophilia/ coagulation disorders		Transfusion recipient		Heterosexual		Other/ unknown		
	No. Nombre	%	No. Nombre	%	No. Nombre	%	No. Nombre	%	No. Nombre	%	No. Nombre	%	No. Nombre	%	
Austria	71	53	31	23	2	1	12	9	3	2	3	2	13	10	135
Belgium	66	25	4	2	3	1	—	—	21	8	154	58	18	7	266
Bulgaria	—	—	—	—	—	—	—	—	—	—	—	—	1	100	1
Czechoslovakia	6	75	—	—	—	—	—	—	—	—	—	—	2	25	8
Denmark	188	84	4	2	4	2	7	3	4	2	11	5	7	3	225
Finland	17	71	1	4	—	—	—	—	2	8	4	17	—	—	24
France	1 852	62	354	12	93	3	30	1	208	7	161	5	295	10	2 993
German Democratic Republic	2	33	—	—	—	—	2	33	—	—	—	—	2	33	6
Germany, Federal Republic of	1 233	75	143	9	19	1	84	5	33	2	56	3	76	5	1 644
Greece	40	47	1	1	1	1	15	17	6	7	20	23	3	3	86
Hungary	5	63	—	—	—	—	—	—	2	25	1	13	—	—	8
Iceland	4	100	—	—	—	—	—	—	—	—	—	—	4	—	—
Ireland	11	37	9	30	4	13	5	17	—	—	1	3	—	—	30
Israel	28	61	1	2	1	2	13	28	2	4	—	—	1	2	46
Italy	291	21	871	64	51	4	33	2	23	2	49	4	40	3	1 358
Luxembourg	4	50	1	13	—	—	—	—	1	13	—	—	2	25	8
Malta	4	67	—	—	—	—	2	33	—	—	—	—	—	—	6
Netherlands	359	87	16	4	5	1	1	—	6	1	8	2	17	4	412
Norway	55	79	4	6	—	—	3	4	3	4	5	7	—	—	70
Poland	2	67	—	—	—	—	—	—	—	—	1	33	—	—	3
Portugal	45	51	5	6	1	1	6	7	—	—	31	35	—	—	88
Romania	1	33	—	—	—	—	—	—	—	—	2	67	—	—	3
Spain	190	25	407	53	46	6	58	8	8	1	9	1	43	6	761
Sweden	131	81	—	—	—	—	5	3	14	9	11	7	—	—	161
Switzerland	218	63	66	19	9	3	2	1	3	1	36	10	14	4	348
United Kingdom	1 032	85	19	2	19	2	68	6	20	2	44	4	6	—	1 208
USSR	—	—	—	—	—	—	—	—	—	—	—	—	3	100	3
Yugoslavia	10	40	7	28	1	4	3	12	—	—	2	8	2	8	25
Total	5 865	59	1 944	20	259	3	349	4	359	4	609	6	545	5	9 930

(Based on/D'après: Report of the WHO Collaborating Centre on AIDS/Rapport du Centre collaborateur de l'OMS sur le SIDA, No. 16, 1987, Paris.)

Distribution by sex, age and transmission group:

Of the total cases reported, 89.1% were males and 10.9% were females giving a male:female sex ratio was 8.9:1. The sex ratio was nearer 1 in the following transmission groups:

IV drug users	(2.8:1)
Heterosexual contact	(1.8:1)
Transfusion recipients	(1.4:1)

Over half of the female cases (51.5%) were reported among IV drug users.

The age distribution of cases was:

	<u>Number of cases</u>
20-29 years	2876
30-39 years	3696
40-49 years	2102
Other	1507
Total	<u>10181%</u>

A total of 251 paediatric cases were reported by 18 countries. France, Italy and Spain declared 64.1% of the cases (161 out of 251). Mother-to-child transmission was the main mode of transmission (67.7%, 170 out of 251). Within this group, 53% (90 out of the 170) of the mothers were intravenous (IV) drug users.

Clinical presentation:

Opportunistic infection:	7,510 (73.8%)
Kaposi's sarcoma	1,610 (15.8%)
Opportunistic infection + Kaposi's sarcoma:	640 (6.3%)
Total	10,181 (100%)

The highest case-fatality rate (58.1%) is noted for the cases with opportunistic infection and Kaposi's sarcoma.

REFERENCE

1. WER (1987) 62: 117-121.

HIV-1 ANTIBODY SURVEYS IN THE UNITED STATES

(Extracted from MMWR (1988) 37:223-227)

The following is a summary of the status of HIV antibody surveys in the US. In addition to these surveys an evaluation of the level of public participation and potential self-selection bias is being undertaken. Provisional data from the AIDS information questionnaire administered as part of the National Health Interview Survey in August and September 1987 indicate that 71% of the 3,097 adults queried were willing to have their blood tested with assurances of privacy of test results⁽¹⁾. Other surveys have shown that a high percentage of infected persons is concentrated in the minority of persons who are not willing to be tested. A recent study of childbearing women in New York City found that voluntary testing⁽²⁾ failed to detect 86% of the women who were infected with HIV-1.

Implementation of the Comprehensive Family of HIV Surveys:

Since 30 November 1987 plans to implement the family of HIV-1 antibody surveys have proceeded rapidly. Effective 29 January 1988 funds were awarded to support over 420 different surveys in 30 major metropolitan areas.

Childbearing Women:

HIV-1 antibody prevalence for childbearing women has been measured by using blinded serological testing of blood samples collected on filter paper from newborns to measure maternal antibody. In the state of New York, preliminary results of 52,326 tests indicate an overall HIV-1 antibody prevalence of 0.8%. In New York City, one women in 61 giving birth had HIV-1 antibody. An estimated 40% of these women passed the infection to their newborns. This survey was instrumental in promoting the recent institution of a New York policy to encourage counselling all women of childbearing age and to offer both counselling and testing to women contemplating pregnancy or in the early stages of pregnancy.

Sentinel Hospitals:

HIV-1 antibody prevalence among hospital patients without AIDS or associated conditions is measured in CDC's blinded surveys in sentinel hospitals. In the first four institutions enrolled (all from the Midwest), overall prevalence was 0.3% for the first 12,000 individuals tested. HIV-1 antibody prevalence was highest for adults in the 25 to 44 ear age group, higher for black and Hispanic minorities than for whites, and higher for men than for women. A total of 40 sentinel hospitals in 30 cities is expected to be enrolled by September 1988.

Prison Surveys:

The Federal Bureau of Prisons implemented an HIV-1 testing program in June 1987. Of 29,193 inmates tested, 843 (2.9%) were positive for HIV-1. CDC and the National Institute of Justice are contracting with a major university to conduct a serosurvey of 10,000 inmates in ten state prisons beginning in June 1988.

College Students:

A co-operative agreement was awarded on 1 April 1988 to enable 15 private and public colleges each to perform blinded tests on approximately 1,000 blood specimens drawn for routine diagnostic purposes at college health clinics. Testing is expected to begin in April 1988.

National Household Seroprevalence Survey:

A contract will be awarded by the end of April to initiate a nationwide household-based sample survey. The survey will be conducted in two phases, a pilot phase followed by a national survey, if the pilot phase indicates that this would be feasible. Results of the first of the pilot studies are projected to be available by 1 October 1988 and results from the second and third pilot studies, by 1 February and 1 June 1989 respectively. The pilot studies will begin with a

sample of 800 persons in one community, followed by two samples of 1,500 persons. If the national survey is conducted, it will start in June 1989, and results would be expected in June 1990.

REFERENCES

1. Dawson DA, Cynamon M, Fitti JE. National Center for Health Statistics. AIDS knowledge and attitudes for September 1987: provisional data from the National Health Interview Survey. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Services, 1988; DHHS publication No. (PHS)88-1250. (Advance data from vital and health statistics; No. 148).
2. N Engl J Med (1988) 318:185.

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 12 - 1 November 1987 to 28 November 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	5			3					8	53
Ankylostomiasis				3	2		NN		5	49
Anthrax									-	1
Arbovirus infection	2		10		NN				12	1158
Brucellosis			1						1	13
Campylobacter infections	141		NN	205	21	NN	6	1	374	3099
Chancroid				NN					-	5
Cholera									-	-
Congenital rubella syndrome			NN			NN		NN	-	-
Diphtheria							4		4	32
Donovanosis				NN	1		6		7	107
Giardiasis	34		NN	62	24	NN	NN	NN	120	1361
Genital herpes	108	6	41		NN	NN	2	9	166	1859
Gonococcal ophthalmia neonatorum		NN			NN	NN	1	NN	1	259
Gonorrhoea	109	3	80	18	68	5	28	4	315	4454
Hepatitis A (infectious)	21	3	11	8	16		3		62	674
Hepatitis B (serum)	42	19	33	3	35		1	3	137	1634
Hepatitis - unspecified	4		3	1	NN	NN			8	158
Hydatid disease									-	16
Lassa fever			NN			NN		NN	-	-
Legionnaires disease	4		NN			NN		NN	4	88
Leprosy		1	1				1		3	32
Leptospirosis		7	6						13	134
Lymphogranuloma venereum				NN	NN	NN		NN	-	-
Marburg disease			NN			NN		NN	-	-
Malaria	5	4	19	1	2	1	2		34	566
Meningococcal infections			1	1	8	NN	3		13	87

Disease	N.S.W.	VIC.	Q.D.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Non-specific urethritis	669		2	NN	NN	NN	NN	NN	671	4986
Ornithosis				1					1	13
Pertussis (whooping cough)	5		NN	3	8	NN		NN	16	271
Plague									-	-
Poliomyelitis									-	-
Q. fever	6		9	1	1		1		18	359
Rabies				NN		NN		NN	-	-
Salmonella infections	54	12	66	18	35	6	10	5	206	2466
Shigella infections	9	1	3	4	14		7		38	542
Smallpox									-	-
Syphilis	38		64	8	15		47	2	175	2042
Tetanus	1								1	6
Trachoma		NN		31	2	NN	NN		33	225
Tuberculosis (all forms)	36	35	12	12	9	1	4	NN	109	1019
Typhoid fever	5								5	55
Typhus (all forms)			1						1	7
Vibrio parahaemolyticus infections			NN			NN		NN	-	3
Low fever									-	-
Yersinia infections	10		NN			NN		NN	10	114

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.)

NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 13 - 30 November 1987 to 31 December 1987

Disease	N.S.W.	VIC.	Q.D.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Amoebiasis	1			3			1		5	58
Ankylostomiasis				5	3		NN		8	57
Anthrax									-	1
Arbovirus infection	3		5		1				9	1167
Brucellosis									-	13
Campylobacter infections	137		NN	155	26	NN	15	NN	333	3432
Chancroid				NN					-	5
Cholera									-	-
Congenital rubella syndrome			NN			NN		NN	-	-
Diphtheria	1								1	33
Donovanosis			3	NN	32		4		39	146
Giardiasis	43		NN	87	18	NN	NN	NN	148	1509
Genital herpes	72	3	13	27	NN	NN	2	2	119	1978
Gonococcal ophthalmia neonatorum		NN			NN	NN	1	NN	1	260
Gonorrhoea	71	9	49	26	185	1	49	3	393	4847
Hepatitis A (infectious)	5	2	3	19	8	1	7	1	46	720
Hepatitis B (serum)	40	10	10	3	34		4	1	102	1736
Hepatitis - unspecified			1	1	NN	NN			2	160
Hydatid disease				1		1			2	18
Lassa fever			NN			NN		NN	-	-
Legionnaires disease	1		NN	2		NN		1	4	92
Leprosy									-	32
Leptospirosis	2	1			2	4			9	143
Lymphogranuloma venereum				NN	NN	NN		NN	-	-
Marburg disease			NN			NN		NN	-	-
Malaria	4	4	17	2	3		2	5	37	603
Meningococcal infections	4	1	1	1		NN			7	94

Disease	N.S.W.	VIC.	Q.D.	S.A.	W.A.	TAS.	N.T.	A.C.T.	Total	Cumulative Total to Date for Year
Non-specific urethritis	235		1	26	NN	NN	1	NN	263	5249
Ornithosis		1							1	14
Pertussis (whooping cough)	5	4	NN	6	4	NN		NN	19	290
Plague									-	-
Poliomyelitis									-	-
Q. fever	8	1	9						18	377
Rabies				NN		NN		NN	-	-
Salmonella infections	83	6	47	29	33	14	35	4	251	2717
Shigella infections	9	2	2	3	13	1	10		40	582
Smallpox									-	-
Syphilis	19	1	42	8	60		57		187	2229
Tetanus									-	6
Trachoma		NN		25	28	NN	NN		53	278
Tuberculosis (all forms)	43	22	5	4	11	2	8	2	97	1116
Typhoid fever	5						1		6	61
Typhus (all forms)									-	7
Vibrio parahaemolyticus infections	3		NN			NN		NN	3	6
Yellow fever									-	-
Yersinia infections	6		NN	1		NN	1	NN	8	122

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.)

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

TOTAL VIRAL ISOLATIONS BASED ON DATE OF REPORTING

PERIOD - FORTNIGHTLY

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

Period 19-4-88 to 2-5-88.

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

	019	065	110	111	112	113	114	115	TOTAL
0100 ADENOVIRUS NOT TYPED	1	11	2	3	0	7	2	4	30
0102 ADENOVIRUS TYPE 2	2	3	3	0	0	0	0	0	8
0103 ADENOVIRUS TYPE 3	1	5	2	0	0	0	0	0	8
0104 ADENOVIRUS TYPE 4	2	0	0	0	0	0	0	0	2
0105 ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	1
0106 ADENOVIRUS TYPE 6	0	0	1	0	0	0	0	0	1
0108 ADENOVIRUS TYPE 8	0	1	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	0	0	5	0	4	0	0	9
0201 INFLUENZA A VIRUS	0	3	2	0	0	1	0	0	6
0202 INFLUENZA A VIRUS SUBTYPE H3N2	2	0	0	0	0	0	0	0	2
0203 INFLUENZA B VIRUS	0	1	2	0	0	2	0	0	5
0301 PARAINFLUENZA VIRUS TYPE 1	1	11	2	16	0	0	0	0	30
0302 PARAINFLUENZA VIRUS TYPE 2	3	0	0	5	0	0	0	0	8
0303 PARAINFLUENZA VIRUS TYPE 3	5	1	6	7	0	0	0	0	19
0399 PARAINFLUENZA VIRUS TYPING PEN	0	0	0	1	0	0	0	0	1
0400 RESPIRATORY SYNCYTIAL VIRUS (R	2	2	2	1	1	5	3	7	23
0500 RHINOVIRUS (ALL TYPES)	0	4	0	12	0	0	0	0	16
0600 MYCOPLASMA PNEUMONIAE	0	3	8	6	0	1	1	0	19
0809 COXSACKIEVIRUS A9	3	0	0	7	0	1	0	0	11
0905 COXSACKIEVIRUS B5	3	0	0	2	1	0	0	0	6
1002 ECHOVIRUS TYPE 2	0	1	0	0	0	0	0	0	1
1005 ECHOVIRUS TYPE 5	0	1	0	0	0	0	0	0	1
1014 ECHOVIRUS TYPE 14	0	1	0	0	0	0	0	0	1
1022 ECHOVIRUS TYPE 22	0	3	0	0	0	0	0	0	3
1099 ECHOVIRUS TYPING PENDING	0	0	0	0	1	0	0	0	1
1100 POLIOVIRUS NOT TYPED	0	0	0	3	0	1	0	0	4
1103 POLIOVIRUS TYPE 3	1	0	0	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	2	0	0	7	3	0	0	12
1301 HERPES SIMPLEX VIRUS - NOT TYP	1	0	0	0	0	0	0	0	1
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	9	3	1	0	2	2	0	17
1303 VARICELLA-ZOSTER VIRUS	0	2	1	0	0	1	0	1	5
1306 HERPES SIMPLEX TYPE 1	34	23	15	0	0	13	0	36	121
1307 HERPES SIMPLEX TYPE 2	53	58	6	0	0	16	0	79	212
1399 HERPES VIRUS TYPING PENDING	0	0	0	5	0	0	0	0	5
1502 PICORNIA VIRUS - NOT TYPED = E	0	4	0	0	0	9	0	7	20
1515 CONTAGIOUS PUSTULAR DERMATITIS	0	1	0	0	0	0	0	0	1
1521 MEASLES VIRUS	0	0	1	2	0	1	0	0	4
1522 RUBELLA VIRUS	0	0	1	2	1	2	0	0	6
1532 HEPATITIS B ANTIGEN	34	22	5	0	0	12	0	13	86
1535 HEPATITIS A ANTIBODY	0	6	5	3	0	1	0	1	16
1541 CHLAMYDIA A - C. TRACHOMATIS	36	43	20	0	1	4	1	26	131
1543 CHLAMYDIA A - LGV TYPE	0	0	0	0	0	1	0	0	1
1556 CMV - CYTOMEGALOVIRUS	14	7	5	9	0	8	1	5	49
1564 ROTAVIRUS	1	8	15	7	0	4	0	0	35
1599 ENTEROVIRUS TYPING PENDING	0	0	0	2	0	20	0	0	22
9992 ROSS RIVER VIRUS	0	6	0	0	0	10	0	0	16
TOTAL	199	243	107	99	12	129	10	179	978

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

Period 19-4-88 to 2-5-88.

- | | |
|---|------------------------------------|
| 1. CODE 00, 99 - NO ILL OR DATA | 7. CODE 07, 49 - GASTRO INTESTINAL |
| 2. CODE 01, 02, 11, 12 - RESPIRATORY | 8. CODE 17, 47 - HEPATIC |
| 3. CODE E3 - ENCEPHALITIS | 9. CODE 19 ... - CVS |
| 4. CODE M3 - MENINGITIS | 10. CODE 89 ... - URINARY TRACT |
| 5. CODE 04 - PARALYSIS | 11. CODE 06 ... - SKIN MUCCUS |
| 6. CODE 05, 13 - CNS OTHER UNSPEC | |

	1	2	3	4	6	7	8	10	11	TOTAL
0100 ADENOVIRUS NOT TYPED	1	8	0	0	1	13	0	0	0	23
0102 ADENOVIRUS TYPE 2	0	5	0	0	0	2	0	0	0	7
0103 ADENOVIRUS TYPE 3	0	2	0	0	1	3	0	0	0	6
0106 ADENOVIRUS TYPE 6	0	1	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	5	0	0	0	3	0	0	0	8
0201 INFLUENZA A VIRUS	0	2	0	0	0	0	0	0	0	2
0202 INFLUENZA A VIRUS SUBTYPE H3N2	0	2	0	0	0	0	0	0	0	2
0203 INFLUENZA B VIRUS	0	2	0	0	1	0	0	0	0	3
0301 PARAINFLUENZA VIRUS TYPE 1	0	30	0	0	0	0	0	0	0	30
0302 PARAINFLUENZA VIRUS TYPE 2	0	8	0	0	0	0	0	0	0	8
0303 PARAINFLUENZA VIRUS TYPE 3	0	19	0	0	0	0	0	0	0	19
0399 PARAINFLUENZA VIRUS TYPING PEN	0	1	0	0	0	0	0	0	0	1
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	22	0	0	0	0	0	0	0	22
0500 RHINOVIRUS (ALL TYPES)	0	14	0	0	1	0	0	0	0	15
0600 MYCOPLASMA PNEUMONIAE	0	17	1	0	0	0	0	0	0	18
0809 COXSACKIEVIRUS A9	0	2	0	7	0	0	0	0	0	9
0905 COXSACKIEVIRUS B5	0	3	0	2	0	0	0	0	0	5
1002 ECHOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	1
1005 ECHOVIRUS TYPE 5	1	0	0	0	0	0	0	0	0	1
1014 ECHOVIRUS TYPE 14	0	1	0	0	0	0	0	0	0	1
1022 ECHOVIRUS TYPE 22	1	2	0	0	0	0	0	0	0	3
1099 ECHOVIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	1
1100 POLIOVIRUS NOT TYPED	0	1	0	0	0	2	0	0	0	3
1300 HERPES VIRUS GROUP - NOT TYPED	1	0	0	0	2	0	0	0	3	6
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	6	2	0	0	0	0	0	0	0	8
1303 VARICELLA-ZOSTER VIRUS	1	0	0	0	0	0	0	0	4	5
1306 HERPES SIMPLEX TYPE 1	1	5	0	0	0	0	1	0	62	69
1307 HERPES SIMPLEX TYPE 2	7	0	0	0	0	0	0	0	72	79
1399 HERPES VIRUS TYPING PENDING	0	1	0	0	0	0	0	0	3	4
1502 PICORNIA VIRUS - NOT TYPED = E	0	1	0	0	0	18	0	1	0	20
1515 CONTAGIOUS PUSTULAR DERMATITIS	0	0	0	0	0	0	0	0	1	1
1521 MEASLES VIRUS	1	0	0	1	0	1	0	0	0	3
1522 RUBELLA VIRUS	2	0	0	0	0	0	0	0	3	5
1532 HEPATITIS B ANTIGEN	9	0	0	0	0	0	70	0	0	79
1535 HEPATITIS A ANTIBODY	1	0	0	0	0	0	15	0	0	16
1541 CHLAMYDIA A - C. TRACHOMATIS	2	0	0	0	0	0	0	0	0	2
1543 CHLAMYDIA A - LGV TYPE	0	1	0	0	0	0	0	0	0	1
1556 CMV - CYTOMEGALOVIRUS	6	9	0	2	2	1	1	2	0	23
1564 ROTAVIRUS	0	1	0	0	0	34	0	0	0	35
1599 ENTEROVIRUS TYPING PENDING	0	1	0	1	0	19	0	0	0	21
9992 ROSS RIVER VIRUS	2	0	0	0	0	0	0	0	0	2
TOTAL	42	170	1	13	8	96	87	3	148	568

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

Period 19-4-88 to 2-5-88.

- | | |
|--------------------------------------|-----------------------------|
| 12. CODE 10 - EYE | 17. CODE 69 - CONGENITAL |
| 13. CODE 59 - GENITAL | 18. CODE P8 - PUG |
| 14. CODE 39 - ENDOCRINE/SALIVARY GL. | 19. CODE G3 - FEVER/MALAISE |
| 15. CODE 38 - RETICULO-ENDOTHELIAL | 20. CODE 09 - OTHER |
| 16. CODE 29 - MUSCLE/JOINT | 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	1	1	1	1	7
0102 ADENOVIRUS TYPE 2	0	0	0	0	0	0	0	1	0	0	1
0103 ADENOVIRUS TYPE 3	2	0	0	0	0	0	0	0	0	0	2
0104 ADENOVIRUS TYPE 4	2	0	0	0	0	0	0	0	0	0	2
0105 ADENOVIRUS TYPE 5	0	0	0	0	0	0	1	0	0	0	1
0108 ADENOVIRUS TYPE 8	1	0	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	0	0	0	1
0201 INFLUENZA A VIRUS	0	0	0	0	0	0	0	2	2	0	4
0203 INFLUENZA B VIRUS	0	0	0	0	0	0	0	0	2	0	2
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	1	0	0	0	1
0500 RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	1	0	0	1
0600 MYCOPLASMA PNEUMONIAE	0	0	0	0	0	0	0	0	1	0	1
0809 COXSACKIEVIRUS A9	0	0	0	0	0	0	0	2	0	0	2
0905 COXSACKIEVIRUS B5	0	0	0	0	0	0	0	1	0	0	1
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	0	1	1
1103 POLIOVIRUS TYPE 3	0	0	0	0	0	0	0	0	1	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	5	0	0	0	0	0	0	1	0	6
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	1	0	0	0	0	0	0	0	0	1
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	1	1	2	0	0	0	3	2	0	9
1306 HERPES SIMPLEX TYPE 1	8	43	0	0	0	0	0	1	0	0	52
1307 HERPES SIMPLEX TYPE 2	0	132	0	0	0	0	0	0	1	0	133
1399 HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	0	1
1521 MEASLES VIRUS	1	0	0	0	0	0	0	0	0	0	1
1522 RUBELLA VIRUS	0	0	0	0	0	0	0	1	0	0	1
1532 HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	7	0	7
1541 CHLAMYDIA A - C. TRACHOMATIS	0	128	0	0	0	0	0	0	1	0	129
1556 CMV - CYTOMEGALOVIRUS	1	2	2	1	0	2	0	5	12	1	26
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	0	1
9992 ROSS RIVER VIRUS	0	0	0	0	14	0	0	0	0	0	14
TOTAL	19	312	3	3	14	2	3	20	31	3	410