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Communicable Diseases Intelligence

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Contents:

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1,318 reports were processed during this period.

Three cases of Q fever (2 from Queensland, 1 from New South Wales, all males) were reported during this period. Occupational data was available only for the 2 cases reported from Queensland, one was a grazier and the other a maintenance worker at a meatworks.

There has be a significant increase in the number of cases of influenza A (173 cases) particularly subtype H1N1 (96 cases) reported over this period compared with the previous period (influenza A 59 cases, H1N1 33 cases). A number of the isolates have been identified as A/Taiwan/1/86.

Data indicates an increase in influenza A activity this year compared to last year. Notifications to date (283) have exceeded the total annual notifications of 1987 (208).

The pattern of influenza A viral activity observed in Australia so far this year has been similar to that reported in countries of the Northern Hemisphere during the 1987/88 winter, in that it has been associated with low mortality and mainly affects children under 5 years of age.

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- Contributions are solicited, and do not preclude later publication elsewhere.
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- Figures given may be subject to revision.

OVERSEAS BRIEF: CHOLERA OUTBREAKS IN INDIA

Reports in New Dehli have put the death toll from a cholera outbreak in the capital at 85 with over 6,000 people admitted to hospitals throughout the city.

Medical and health authorities have confirmed that cholera has broken out in a large number of re-settlement areas in and around New Dehli. Authorities also admitted that large numbers of people are contracting hepatitis and typhoid.

A major cholera epidemic is also occurring in Meerut, 70km north east of New Dehli.

All travellers to India should therefore:

1. exercise great caution in selecting food and water for consumption during their stay in India.

2. consider being immunised against:

. hepatitis A (immunoglobulin 0.2mL/kg for short duration visits [< 1 month] or 0.4mL/kg for longer visits);

. typhoid fever (either the oral, live attenuated vaccine [Ty 21a] or the heat killed parenteral one);

. cholera vaccine is regarded by WHO as ineffective, however travellers may be required to show evidence of vaccination. A single dose of the currently available vaccine will satisfy this requirement.

AIDS UPDATE - UNITED STATES

(Based on U.S. Department of Health and Human Services, AIDS Weekly Surveillance, 11 July 1988)

As at 11 July 1988, 67,273 cases of AIDS had been reported to the Centers for Disease Control (CDC). This figure includes 8,001 patients who meet only the 1987 revised surveillance definition of AIDS.

The distribution of AIDS patients by age group, risk category and year of reporting are shown in the tables below:-

Table 1: AIDS cases by age groups

AGE (Years)*	NUMBER	(%)
Under 5	897	(1.33)
5 - 12	168	(0.25)
13 - 19	278	(0.41)
20 - 29	13,971	(20.80)
30 - 39	31,146	(46.30)
40 - 49	13,940	(20.70)
Over 49	6,873	(10.20)
TOTAL	67,273	(100)

* age at diagnosis.

Table 2: AIDS cases by risk categories.

RISK CATEGORIES	MALES				FEMALES				TOTAL			
Adults/Adolescents	Since Jan 1		Cumulative		Since Jan 1		Cumulative		Since Jan 1		Cumulative	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Homosexual/bisexual male	9,280	62	41,546	68					9,280	56	41,546	63
Intravenous (IV) drug user	3,047	21	9,758	16	923	54	2,791	52	3,970	24	12,549	19
Homosexual male and IV drug user	1,123	8	4,910	8					1,123	7	4,910	7
Hemophilia/coagulation disorder	158	1	619	1	8	0	22	0	166	1	641	1
Heterosexual Transmission	293	2	1,208	2	447	26	1,553	29	740	4	2,761	4
Blood transfusion recipient	311	2	1,081	2	190	11	593	11	501	3	1,674	3
Undetermined	637	4	1,698	3	140	8	429	8	777	5	2,127	3
Subtotal	14,849	90	60,820	92	1,708	10	5,388	8	16,557	100	66,208	100
Paediatric												
Hemophilia/coagulation disorder	18	10	59	10	1	1	3	1	19	6	62	6
Parent with/at risk of AIDS	124	72	421	72	112	85	407	84	236	78	828	78
Blood transfusion recipient	24	14	85	15	11	8	51	11	35	12	136	13
Undetermined	7	4	18	3	7	5	21	4	14	5	39	4
Subtotal	173	57	583	55	131	43	482	45	304	100	1,065	100
TOTAL	15,022	89	61,403	91	1,839	11	5,870	9	16,861	100	67,273	100

Table 3: AIDS cases by risk categories and date of report to CDC, twelve month totals

RISK CATEGORIES Adults/Adolescents	YEAR ENDING 11 Jul 1987		YEAR ENDING 11 Jul 1988		CUMULATIVE CASES AND DEATHS Since June 1981			
	Number	%	Number	%	Number	%	Deaths	% Cases
Homosexual/bisexual male	10,690	67.0	16,290	58.0	41,546	62.8	23,263	62.3
Intravenous (IV) drug user	2,437	15.3	6,224	22.2	12,549	19.0	7,016	18.8
Homosexual male and IV drug user	1,171	7.3	1,963	7.0	4,910	7.4	2,933	7.9
Hemophilia/coagulation disorder	170	1.1	284	1.0	641	1.0	388	1.0
Heterosexual Transmission	625	3.9	1,265	4.5	2,761	4.2	1,467	3.9
Blood transfusion recipient	432	2.7	853	3.0	1,674	2.5	1,133	3.0
Undetermined	440	2.8	1,187	4.2	2,127	3.2	1,163	3.1
Subtotal	15,965	100.0	28,066	100.0	66,208	100.0	37,363	100.0
Paediatric								
Hemophilia/coagulation disorder	20	8.5	29	5.7	62	5.8	36	5.9
Parent with/at risk of AIDS	185	79.1	391	76.7	828	77.7	467	76.4
Blood transfusion recipient	23	9.8	65	12.7	136	12.8	85	13.9
Undetermined	6	2.6	25	4.9	39	3.7	23	3.8
Subtotal	234	100.0	510	100.0	1,065	100.0	611	100.0
TOTAL	16,199		28,576		67,273		37,974	

The majority of cases (87.8%) are in the 20-49 year age groups.

Notes for Tables 2 and 3

. Cases with more than one risk factor other than the combinations listed in the tables are tabulated only in the category listed first.

. 'Heterosexual cases' includes:

- 1,684 persons (376 men, 1,308 women) who have had heterosexual contact with a person with AIDS or at risk for AIDS and;

- 1,077 persons (832 men, 245 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 to have had heterosexual contact with a prostitute;

- interviewed patients for whom no specific risk was identified;

- and one health-care worker who seroconverted to HIV and developed AIDS after documented needle-stick to blood.

. Paediatric Cases includes all patients under 13 years of age at time of diagnosis.

. For paediatric cases with parents with or at risk of AIDS, epidemiological data suggests that most cases occur by transmission from an infected mother to her foetus or infant during the perinatal period.

CDI Editorial Comment:

ADULT CASES

Ninety two percent (60,820 out of 66,208) of adult AIDS cases are males.

The majority of females with AIDS are IV drug users (52% of female cases).

There has been a substantial increase (2.5 fold since 1987, see Table 3) in the number of IV drug users with AIDS, particularly female IV drug users (33% of cumulative total of female cases).

Pneumocystic carinii pneumonia (PCP) continues to be the most common opportunistic disease reported among Adult/Adolescent AIDS patients:

- 61% have had PCP;
- 29% have had other opportunistic infections;
- 10% have Kaposis Sarcoma (KS).

Adult/Adolescent AIDS cases have been reported in all States including the District of Columbia Puerto Rico, Guam, Trust Territory and Alaska.

The majority (66.8%) of Adult/Adolescent AIDS patients are resident in New York, California, Florida, New Jersey and Texas.

PAEDIATRIC CASES

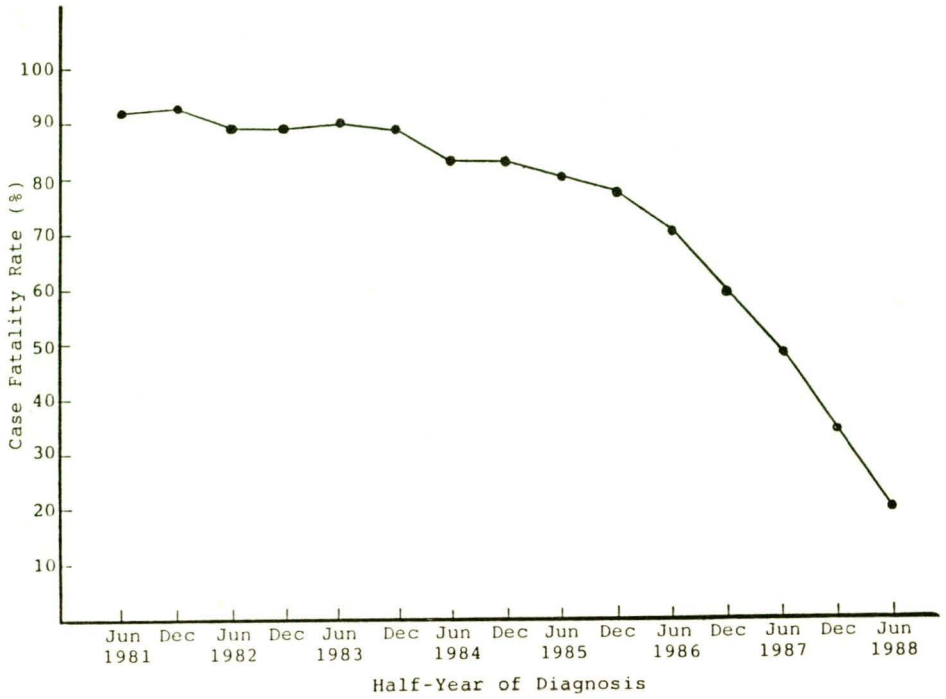
The number of paediatric cases (under 13 years of age at diagnosis) has increased (from 394 [12 September 1986] to 1,065 [11 July 1988]). The majority of paediatric patients (78%) are from families in which one or both parents had AIDS or were at an increased risk for developing AIDS. There has been a doubling of cases acquired by perinatal transmission since 1987. The increase in female IV drug users with AIDS may have given rise to an increase in paediatric AIDS patients by perinatal transmission.

Paediatric patients have been reported from 42 States, the District of Columbia and Puerto Rico. Reported cases per area range from one to 335. The majority of paediatric patients (64.3%) are residents of New York, New Jersey, Florida and California.

CASE FATALITY

The case fatality rates by half year of diagnosis are shown in Figure 1.

Figure 1: Cases Fatality rates by Half-Year of Diagnosis, United States



These rates have reduced from 92% in 1981 (Jan-Jun) to 20% in 1988 (Jan-Jun). The reduction in case fatality rates may reflect:

. earlier diagnosis of HIV infection;

. increased survival time due to drug treatment (zidovudine);

. increase in doubling time of cases;

. substantial reduction in cases of HIV infection in recipients of blood transfusions and blood products;

. change in sexual behaviour.

Case fatality rates are expected to decrease further with the advent of refined therapeutic treatments and early diagnosis of disease.

CHANGING PATTERNS OF GROUPS AT HIGH RISK FOR HEPATITIS B IN THE UNITED STATES
(Based on MMWR Vol. 37/No. 28, 22 July 1988)

Since 1982, the Centers for Disease Control (CDC) has been conducting intensive surveillance in collaboration with four sentinel counties (Denver County, Colorado; Jefferson County, Alabama; Pierce County, Washington; and Pinellas County, Florida) to determine trends in the epidemiology of acute viral hepatitis in the United States. Patients reported to these county health departments are considered to have acute viral hepatitis if they meet the following clinical criteria:

. presence of symptoms or signs of viral hepatitis;

. presence of serum aminotransferase levels higher than 2.5 times the upper limit of normal;

. and absence of other causes of liver injury.

All cases are then classified as to the specific type of viral hepatitis on the basis of the following serologic criteria:

1. hepatitis A (HA) - patient is positive for IgM antibody to hepatitis A virus (IgM anti-HAV).

2. hepatitis B (HB) - patient is positive for hepatitis B surface antigen (HBsAg) and/or for IgM antibody to hepatitis B core antigen (IgM anti-HBc).

3. non-A, non-B (NANB) hepatitis - patient is negative for IgM anti-HAV and negative for HBsAg and/or IgM anti-HBc.

Each patient with viral hepatitis is extensively interviewed for risk factors associated with acquiring the disease. In addition, to determine the actual source of infection for HB patients who have no identifiable source, attempts are made to obtain serum from household and sexual contacts of these patients.

From 1982 to 1985, both the overall incidence and the disease transmission patterns of HB were relatively constant (Figure 1, Table 1).

Figure 1: Reported incidence of hepatitis B virus in four sentinel counties, 1982-1987

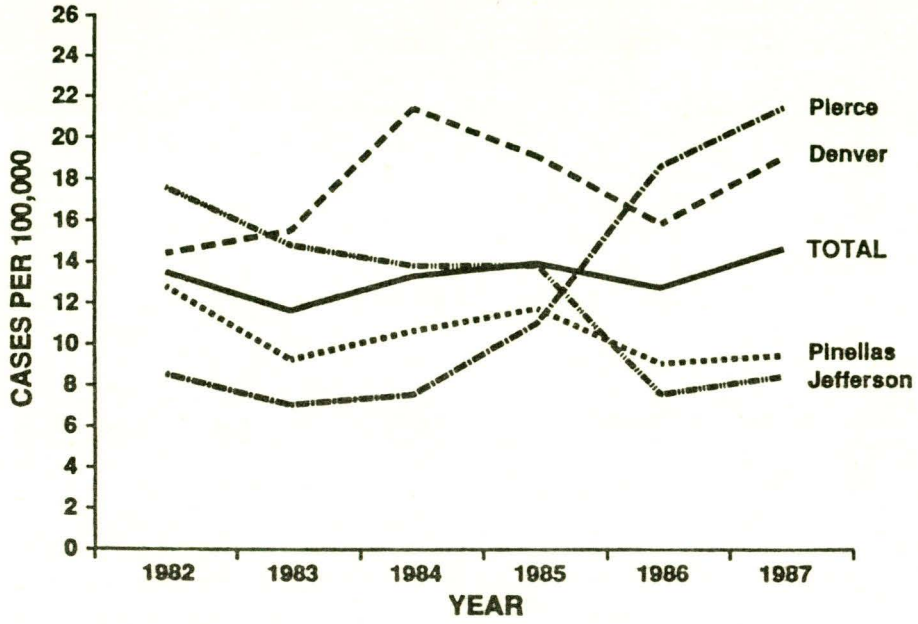


Table 1: Risk factors associated with reported cases of hepatitis B - four sentinel counties, 1982-1987

	Percentage of Cases					
Risk Factor#	1982 (n=326)*	1983 (n=230)*	1984 (n=256)*	1985 (n=283)*	1986 (n=250)*	1987 (n=295)*
Homosexual Activity	20	20	24	20	9	9
Intravenous Drug use	15	13	14	16	26	28
Heterosexual Activity@	15	20	20	19	26	22
Health-Care Employment with Frequent Blood Contact	3	6	4	3	1	2
Household Contact	<1	3	2	3	3	3
Blood Transfusion	4	2	1	3	3	2
Dialysis	<1	1	<1	<1	0	<1
Resident of Institution for Developmentally Disabled	1	2	0	0	<1	1
No Known Source	42	33	34	36	32	32

\# Within 6 months before onset of symptoms.

* n = number of patients interviewed (80%-90% of cases reported).

@ Includes sexual contact with an HB patient, with an HBV carrier, or with multiple partners.

During that time, three major risk factors accounted for almost half of disease transmission:

. male homosexual activity was reported by an average of 21% of patients;

. intravenous (IV) drug use, by an average of 15%;

. and heterosexual exposure (sexual contact with a known HB patient, with an HB virus [HBV] carrier, or with multiple partners) was reported by an average of 18%.

Other recognised risk factors included:

. health-care employment with frequent blood contact (5%),

. household contact with a known HB patient or carrier (2%),

. blood transfusions (2%),

. dialysis (1%), and

. residency in an institution for the developmentally disabled (1%).

No cases of HB resulting from perinatal transmission were identified in these four counties. For an average of 36% of cases, no source of infection was identified.

Since 1985, although the overall incidence of disease remained stable, IV drug use, reported by 27% of patients, replaced homosexual activity as the major risk factor for HBV infection. The proportion of patients whose risk factor for HB was heterosexual exposure (as defined above) also increased to 24%; in contrast, the percentage of patients reporting male homosexual activity declined to 9%, and that of patients reporting health-care employment with frequent blood contact declined to an average of 1%. The percentage of patients reporting no identifiable source of infection also declined slightly, while the percentage reporting household contact, transfusions, dialysis, and institutionalization did not change from previous years. The increase in cases of HB associated with IV drug use occurred in three (Denver, Jefferson, Pierce) of the four counties; however, it was most striking in Pierce County and accounted for the county's sharp increase in disease incidence.

MMWR Editorial Comment:

The recent changes in the percentage of HB cases attributable to specific groups at high risk for infection are striking. The 57% decrease in the number of HB cases among homosexual men is most likely as a result of modification of high-risk sexual behaviour to prevent human immunodeficiency virus (HIV) infection[1]. This hypothesis is supported by evidence that the incidence of new HIV infection is declining among certain cohorts of homosexual men[2] and that other sexually

transmitted diseases among this group also appear to be on the decline in some areas[3]. In contrast, the number of cases of HB due to heterosexual exposure increased modestly and parallels the recent increases in cases of primary and secondary syphilis that also occurred primarily among heterosexuals[3]. Of more concern is the 80% increase in the proportion of HB patients with a history of IV drug use. Because the overall incidence rate of HB has remained relatively constant during this period, the absolute number of HB cases related to drug use appears to be increasing, indicating no modification of this high-risk behaviour. Although most of the overall increase in IV drug use-associated HB found in this study was attributable to one county, similar increases nationwide have been seen in cases of HA, HB, and NANB hepatitis as reported to the National Viral Hepatitis Surveillance Program. These concurrent increases suggest that hepatitis associated with IV drug use is a widespread problem (4,5; CDC, unpublished data).

It is not surprising that in a sample of this size no perinatal cases of HB were reported. HBV infection in neonates usually results in subclinical infection.

Nationwide, the incidence of HB has increased steadily over the last decade in spite of the availability of a vaccine since 1982[4].

Vaccination programs and vaccine usage have focused primarily on three risk groups:

. health-care workers who are exposed to blood;

. staff and residents of institutions for the developmentally disabled;

. and staff and patients in haemodialysis units[6].

These groups, however, account for only 5%-10% of acute HB cases. The risk groups that account for most cases - IV drug users, persons acquiring disease through heterosexual exposure, and homosexual men - are not being reached effectively by current HB vaccine programs.

The ability to immunize those groups at highest risk of HBV infection is severely limited for several reasons:

. the failure of both health-care providers and the target population to recognize the specific groups at high risk of infection;

. difficulty in identifying persons with these high-risk behaviours; and

. difficulties in reaching these groups for delivery of vaccine and in timing of vaccination.

In 1985, CDC surveyed a random sample of physicians in two cities to determine patterns of use and delivery of HB vaccine. Only one-third had given HB vaccine to anyone in the previous 6 months. When physicians were asked why HB vaccine was not routinely recommended, 55% said they did not see patients at high risk.

When asked to specify the groups at high risk for HBV infection, 70% identified IV drug users, only 45% identified homosexual men, and very few (10%) identified heterosexuals with multiple partners or heterosexual contacts of carriers (12%). Thus, many potential vaccine providers have inadequate knowledge about who should receive vaccine (CDC unpublished data). Further, it is unknown whether medical-care providers who are aware of the groups at high risk of infection routinely obtain a history that would identify high-risk behaviours.

Adults in general and groups such as IV drug users in particular are extremely difficult to reach for delivery of vaccine. In addition, once persons begin those life-styles associated with a high risk of acquiring HB and can be identified as belonging to a high-risk group, they may become infected before vaccine can be given. Thus, the major obstacles to achieving an impact on the incidence of HBV infection in the United States are identifying and reaching persons before they become infected and vaccinating them in a timely manner. Failure to overcome these obstacles will necessitate consideration of a broader immunization strategy.

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6. MMWR (1987) 36:353-60, 366.

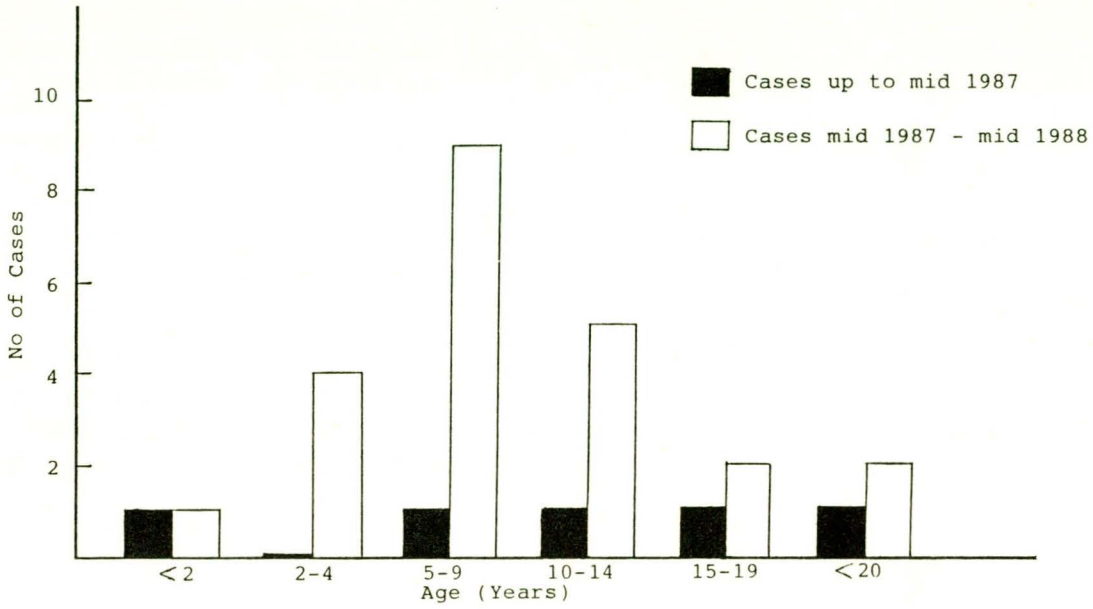
MENINGOCOCCAL MENINGITIS IN CENTRAL AUSTRALIA, 1984-1988

(Contributed by Dr J. Hanna, Communicable Diseases Control Centre, Alice Springs, Dr D. Thomas, Nganampa Health Council, Dr J. Thurley, Community Medical Officer Kalgoorlie)

From early 1984 to mid 1987, five cases of meningococcal meningitis were diagnosed at the Alice Springs Hospital. The patients (3 non Aborigines, 2 Aborigines) ranged in age from 2 months to 26 years and were evenly distributed over the 3 1/2 years. Four of the isolates were confirmed as group B meningococci. These results reflect sporadic occurrence of the disease.

An increase in cases of meningococcal meningitis has occurred in Central Australia since mid 1987. From mid 1987 to mid 1988 there have been 16 laboratory confirmed and 7 suspected cases of meningococcal meningitis. Of these cases 14 were treated at Alice Springs Hospital, 8 at Kalgoorlie Hospital and one at Tennant Creek Hospital. All 23 patients were Aborigines; 19 lived in the Pitjantjatjara and Ngaanyatjarra communities in the north west of South Australia, the south west of the Northern Territory and the adjacent part of Western Australia. The age specific incidence is shown in Figure 1. The majority of cases were in the 5-14 year age groups.

Figure 1: Age distribution of cases with meningococcal meningitis



One patient, a 36 year old man, with known chronic renal and cardiac disease, died in Alice Springs Hospital 7 days after admission.

The diagnosis was considered laboratory confirmed if Neisseria meningitidis was cultured from CSF or if gram negative diplococci were seen in CSF using microscopy. Suspect cases were those where culture or gram stain were negative for meningococci but where clinical and other laboratory findings were consistent with bacterial meningitis and the case was from one of the above communities.

There were 16 laboratory confirmed cases and 7 suspect cases over the 12 month period. From CSF cultures 6 were identified as type A meningococci, and one each of type B and C. Latex agglutination antigen-detection tests performed on the CSF of the gram-stain positive cases and on 2 suspect cases (remaining 5 not tested) were positive for combined A,C,Y and W135 antigens; that is type B was not involved.

The close family contacts of the cases were all offered rifampicin chemoprophylaxis[1]. By mid November, 5 cases (3 proven, 2 suspect) had occurred in the Pitjantjatjara Homelands in the northwest of South Australia, and the Nganampa Health Council (the Aboriginal Medical Service responsible for that region) offered meningococcal vaccine to all 3 to 15 year olds living on the Pitjantjatjara Homelands. An estimated 95% of the target population of about 650 were immunised. Following this a further two cases were seen in this area, but both occurred in unimmunised children (one of whom was a visitor from outside the region).

Epidemics of meningococcal meningitis have been recorded in Central Australia prior to the current outbreak. Between 1971 and 1973 there were three such epidemics resulting in 132 children being treated for suspected meningococcal meningitis at Alice Springs Hospital[2]. It is understood that the current outbreak was preceeded by similar outbreaks which started in the Pilbara region of Western Australia and subsequently moved southwards and eastwards towards Central Australia.

CDI Editorial Comment

There are two epidemiological patterns of meningococcal meningitis. In most western industrialised countries including Australia meningococcal infection is endemic. Most clinical disease is caused by meningococci belonging to serogroups B or C and infections are most frequently seen in children under five years of age. By contrast, the epidemic pattern most often involves serogroup A, sometimes C and affects children 5-15 years old.

Major epidemics of meningococcal disease have occurred in recent times in Brazil (serogroups A and C), Cuba (Serogroups B and C), New Dehli (serogroup A), Egypt (serogroup A), Sudan (Serogroup A) Mongolia (serogroup A), Nepal (serogroup A) South Africa (serogroup B) and Vietnam (serogroup C).

Tropical Africa remains the main focus of meningococcal infection. Within an area banded by Sudan in the east, Gambia in the west, the Sahara in the north and the tropical rainforest of central Africa, major epidemics of meningococcal disease have occurred once every 5-10 years since the beginning of the 20th Century.

A bivalent meningococcal meningitis vaccine composed of groups A and C polysacharide components is available (Mencevax [R] AC). This vaccine is recommended for travellers/short term residents who will be living in/backpacking through rural communities in Ghana, Burkina Faso (Upper Volta), Niger, Nigeria, Mali, Sudan, Chad, Egypt, Brazil, Nepal, Mongolia and Vietnam. The vaccine is available from the Commonwealth Serum Laboratories at the vaccinees own expense.

Experience with the vaccine in Africa has shown its effectiveness in epidemic control.

REFERENCES:

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2. Records of the Adelaide Children's Hospital, (1976) 1:57-60.

CORRIGENDUM - GONOCOCCAL SURVEILLANCE - AUSTRALIA

This report published in CDI 88/15 provided details of penicillin sensitivity of 566 (not 473 as stated) strains of gonococci isolated over the period 1 January to 31 March 1988 (not 1987 as stated).

There was also a slight aberration in the Brisbane Figures. These figures should have read:

	Percentage of isolates		
	Sensitive	Less sensitive	PPNG
Brisbane	23.0	58.0	7.0

Readers are asked to correct their copies.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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

Period 27-7-88 to 9-8-88.

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) NVH(ACT)
6. CODE 113 - PHH PCN(NSW)
7. CODE 114 - RAHC(NSW)
8. CODE 115 - STATE LAB(QLD)

		065	110	111	112	113	115	TOTAL
0100	ADENOVIRUS NOT TYPED	1	6	2	2	3	6	20
0101	ADENOVIRUS TYPE 1	1	3	0	0	0	0	4
0103	ADENOVIRUS TYPE 3	0	1	0	0	0	0	1
0107	ADENOVIRUS TYPE 7	0	0	0	1	0	0	1
0108	ADENOVIRUS TYPE 8	0	1	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	0	0	1	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	5	0	0	0	5
0201	INFLUENZA A VIRUS	32	12	59	59	11	0	173
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	0	1	0	0	4	5
0206	INFLUENZA A H1N1	0	7	0	33	0	56	96
0301	PARAINFLUENZA VIRUS TYPE 1	0	0	1	0	0	2	3
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	1	0	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	7	0	1	0	2	10
0304	PARAINFLUENZA VIRUS TYPE 4	1	0	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	34	47	31	5	1	21	139
0500	RHINOVIRUS (ALL TYPES)	3	7	4	1	0	3	18
0600	MYCOPLASMA PNEUMONIAE	4	14	12	1	1	0	32
0700	ORNITHOSIS-PSITTACOSIS	0	0	0	0	2	0	2
0809	COXSACKIEVIRUS A9	2	0	0	0	0	0	2
1003	ECHOVIRUS TYPE 3	2	0	0	0	0	0	2
1004	ECHOVIRUS TYPE 4	0	4	0	0	0	0	4
1009	ECHOVIRUS TYPE 9	1	0	0	0	1	0	2
1102	POLIOVIRUS TYPE 2	0	1	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	0	0	3	2	0	5
1301	HERPES SIMPLEX VIRUS - NOT TYP	3	0	0	0	0	0	3
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	12	0	0	4	2	0	18
1303	VARICELLA-ZOSTER VIRUS	4	1	0	0	1	0	6
1306	HERPES SIMPLEX TYPE 1	35	16	1	47	0	17	116
1307	HERPES SIMPLEX TYPE 2	54	19	0	116	0	32	221
1401	COXIELLA BURNETI	0	0	0	0	1	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	3	0	0	3	5	7	18
1521	MEASLES VIRUS	0	0	1	0	1	0	2
1522	RUBELLA VIRUS	1	0	0	4	0	0	5
1530	HEPATITIS A VIRUS (CHANGE TO 1	0	3	0	0	0	0	3
1532	HEPATITIS B ANTIGEN	4	11	0	48	4	34	101
1535	HEPATITIS A ANTIBODY	4	0	0	1	0	3	8
1541	CHLAMYDIA A - C. TRACHOMATIS	39	12	0	14	0	8	73
1552	RABIES VIRUS	0	0	0	1	0	0	1
1556	CMV - CYTOMEGALOVIRUS	6	7	5	13	12	21	64
1564	ROTAVIRUS	24	36	30	18	8	3	119
1565	CALICI VIRUS	0	0	0	1	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	0	10	0	9	0	19
9992	ROSS RIVER VIRUS	1	0	0	7	0	0	8
9994	SMALL VIRUS (LIKE) PARTICLE	1	0	0	0	0	0	1
9995	DENGUE	1	0	0	0	0	0	1
TOTAL		273	215	163	384	64	219	1318

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

Period 27-7-88 to 9-8-88.

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	5	6	7	8	9	10	11	TOTAL
0100	ADENOVIRUS NOT TYPED	2	9	0	0	0	0	8	0	0	0	0	19
0101	ADENOVIRUS TYPE 1	1	2	0	0	0	0	1	0	0	0	0	4
0107	ADENOVIRUS TYPE 7	0	0	0	0	0	0	1	0	0	0	0	1
0111	ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	0	0	1	0	1
0199	ADENOVIRUS TYPING PENDING	0	3	0	0	0	0	0	0	0	0	0	3
0201	INFLUENZA A VIRUS	16	128	1	0	0	0	0	0	0	0	2	147
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	5	0	0	0	0	0	0	0	0	0	5
0206	INFLUENZA A H1N1	2	94	0	0	0	0	0	0	0	0	0	96
0301	PARAINFLUENZA VIRUS TYPE 1	0	3	0	0	0	0	0	0	0	0	0	3
0302	PARAINFLUENZA VIRUS TYPE 2	0	1	0	0	0	0	0	0	0	0	0	1
0303	PARAINFLUENZA VIRUS TYPE 3	0	9	0	0	0	0	0	0	0	0	0	9
0304	PARAINFLUENZA VIRUS TYPE 4	0	1	0	0	0	0	0	0	0	0	0	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	2	136	0	0	0	0	0	0	0	0	0	13
0500	RHINOVIRUS (ALL TYPES)	0	17	0	0	0	0	0	0	0	0	0	1
0600	MYCOPLASMA PNEUMONIAE	3	22	0	0	0	0	0	0	0	0	0	25
0700	ORNITHOSIS-PSITTACOSIS	0	1	0	1	0	0	0	0	0	0	0	2
0809	COXSACKIEVIRUS A9	0	0	0	1	0	0	1	0	0	0	0	2
1003	ECHOVIRUS TYPE 3	0	1	0	1	0	0	0	0	0	0	0	2
1004	ECHOVIRUS TYPE 4	2	0	0	0	0	0	0	0	0	0	0	2
1009	ECHOVIRUS TYPE 9	0	0	0	2	0	0	0	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	2	0	0	0	0	1	0	0	0	0	1	4
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	0	1	0	0	0	0	0	1	2
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	10	1	0	0	0	0	0	1	0	0	0	12
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	0	0	5	5
1306	HERPES SIMPLEX TYPE 1	16	7	0	0	0	0	0	0	0	0	41	64
1307	HERPES SIMPLEX TYPE 2	21	0	0	0	0	0	0	0	0	0	43	64
1502	PICORNIA VIRUS - NOT TYPED = E	1	3	0	0	0	0	9	0	0	0	3	16
1521	MEASLES VIRUS	0	0	0	0	0	0	0	0	0	0	1	1
1522	RUBELLA VIRUS	1	0	0	0	0	0	0	0	0	0	2	3
1530	HEPATITIS A VIRUS (CHANGE TO 1	0	0	0	0	0	0	0	1	0	0	0	1
1532	HEPATITIS B ANTIGEN	35	0	0	0	0	0	0	62	0	0	0	97
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	8	0	0	0	8
1541	CHLAMYDIA A - C. TRACHOMATIS	6	0	0	0	0	0	0	0	0	0	1	7
1556	CMV - CYTOMEGALOVIRUS	9	32	0	0	0	1	0	0	1	4	0	47
1564	ROTAVIRUS	0	0	0	0	0	1	116	0	0	0	0	117
1565	CALICI VIRUS	0	0	0	0	0	0	1	0	0	0	0	1
1599	ENTEROVIRUS TYPING PENDING	0	10	0	1	0	0	6	0	0	0	0	17
9992	ROSS RIVER VIRUS	2	0	0	0	0	0	0	0	0	0	0	2
9994	SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	0	1	0	0	0	0	
TOTAL		131	485	1	6	1	3	144	72	1	5	100	949

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 3.

Period 27-7-88 to 9-8-88.

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

		12	13	14	15	16	17	18	19	20	21	TOTAL
0100	ADENOVIRUS NOT TYPED	0	0	0	0	0	0	0	0	1	0	1
0103	ADENOVIRUS TYPE 3	1	0	0	0	0	0	0	0	0	0	1
0108	ADENOVIRUS TYPE 8	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	0	2	0	0	2
0201	INFLUENZA A VIRUS	0	0	0	0	2	0	4	19	1	0	26
0303	PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	0	0	0	0	1	1
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	1	0	0	1
0500	RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	0	0	1	0	1
0600	MYCOPLASMA PNEUMONIAE	0	0	0	0	2	0	1	0	4	0	7
1004	ECHOVIRUS TYPE 4	0	0	0	0	0	0	0	0	2	0	2
1102	POLIOVIRUS TYPE 2	0	0	0	0	0	0	0	0	0	1	1
1300	HERPES VIRUS GROUP - NOT TYPED	1	0	0	0	0	0	0	0	0	0	1
1301	HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	0	0	0	0	0	1	0	1
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	0	1	2	0	0	0	0	3	0	0	6
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	1	0	1
1306	HERPES SIMPLEX TYPE 1	1	49	0	0	0	0	0	0	2	0	52
1307	HERPES SIMPLEX TYPE 2	0	156	1	0	0	0	0	0	0	0	157
1401	COXIELLA BURNETI	0	0	0	0	0	0	0	1	0	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	1	0	0	0	0	1	0	2
1521	MEASLES VIRUS	0	0	0	0	0	0	0	1	0	0	1
1522	RUBELLA VIRUS	0	0	0	2	0	0	0	0	0	0	2
1530	HEPATITIS A VIRUS (CHANGE TO 1	0	0	0	0	0	0	0	0	2	0	2
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	1	3	0	4
1541	CHLAMYDIA A - C. TRACHOMATIS	0	65	0	0	0	0	0	0	0	0	65
1552	RABIES VIRUS	0	0	0	0	0	0	0	1	0	0	1
1556	CMV - CYTOMEGALOVIRUS	0	1	0	1	0	3	0	9	3	0	17
1564	ROTAVIRUS	0	0	0	0	0	0	1	0	1	0	2
1599	ENTEROVIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	1	2
9992	ROSS RIVER VIRUS	0	0	0	0	3	0	0	3	0	0	6
9995	DENGUE	0	0	0	0	1	0	0	0	0	0	1
TOTAL		4	273	3	4	8	3	6	41	23	3	368