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Contents:

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME: A total of 1444 reports were processed during this period.

Ten cases of Q fever (7 males, 3 females) were reported during this period. Ages ranged form 17 to 63 years. The only patient with defined occupational risk was a 33 year old male slaughterman from Victoria.

Six reports of echovirus type 30 were received from Fairfield Hospital, Victoria. All six patients had meningitis (3 males, 3 females - aged 6-33 years, with 5 patients aged 21-33). Two isolations were from cerebrospinal fluid (one from a patient who had previously had the virus islolated from a faecal sample). A total of 96 cases of echovirus type 30 infection have been reported so far this year.

Rubella virus was isolated from a nasopharyngeal aspirate from a 2 week old boy from Victoria.

Chlamydia trachomatis was isolated from eye swabs and nasopharyngeal aspirate of a 2 month old girl with conjunctivitis, lower respiratory tract infection and diarrhoea.

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OVERSEAS BRIEF: JAPANESE ENCEPHALITIS

Epidemic Japanese encephalitis activity has been reported from Eastern Uttar Pradesh, India with 2883 cases and 871 deaths. Seven districts are particularly affected (Basti, Ballia, Gorakhpur, Gonda, Azamgarh, Deoria and Bahraich).

Epidemics of Japanese encephalitis have been reported every year since 1978 from North-Eastern India (Uttar Pradesh, Bihar and West Bengal Provinces). Epidemic activity has also been reported during this period from SE India (Karnataka, Tamil Nadu and Andhra Pradesh).

Epidemic activity in these areas usually extends to the end of December. Travellers to the above provinces should ensure that they take adequate precautions to prevent mosquito bites. Japanese encephalitis vaccine is available for travellers to and temporary residents of these provinces and the Terai districts of Nepal at risk of infection. Approval for obtaining the vaccine can be obtained from:

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OUTBREAK OF *HAEMOPHILUS INFLUENZAE* MENINGITIS

The CDI has received a report of increased *Haemophilus influenzae* activity from Dr J B Campbell, Consultant Paediatrician, St George Hospital, Kogarah, NSW. Four patients with *H. influenzae* meningitis were admitted to the children's ward of St George Hospital in just over a month. All cases had *H. influenzae* isolated from the CSF. Dr Campbell has advised that the hospital would normally admit around two cases of *H. influenzae* meningitis in a year.

This cluster of cases may represent a minor epidemic of the disease or may be due to chance. The CDI would be interested in hearing of any other increased activity of invasive *H. influenzae* infection this year.

Brief details of the four cases follow:

Case 1: A $2^{1}/_{2}$ year old boy was admitted on 12 September 1988. *H. influenzae* was isolated which was resistant to ampicillin but sensitive to cefotaxime and chloramphenicol. Fever was prolonged and the boy was slow to recover. Subsequent testing has detected profound nerve deafness.

Case 2: An 11 month old boy was admitted on 8 October 1988. *H. influenzae* was isolated which was sensitive to ampicillin, cefotaxime and chloramphenicol. Onset was acute and fever was prolonged. The patient made a full clinical recovery.

Case 3: An 11 month old girl was admitted on 13 October 1988. *H. influenzae* was isolated which was sensitive to cefotaxime and chloramphenicol and had borderline sensitivity to ampicillin. The patient has a prolonged intermittent fever. She was treated with cefotaxime. On discharge she was clinically well without overt neurological sequelae. Follow-up auditory testing is scheduled.

Case 4: An 13 month old boy was admitted on 15 October 1988. *H. influenzae* was isolated which was sensitive to ampicillin, cefotaxime and chloramphenicol. Fever was mild. The clinical outcome of this case has not yet been advised.

OUTBREAK OF MEASLES IN A UK PRIMARY SCHOOL

(Based on CDR 88/39, 30 September 1988)

During February 1988, a 10 year old school girl with clinical measles was admitted to the District General Hospital in Somerset, with a high fever and severe dyspnoea. She was extremely ill and died soon after admission. An autopsy revealed myocarditis but no encephalitis or pneumonia and IgM antibody against measles was detected in the serum using immunofluoresct techniques.

Six days later a general practitioner in the area notified the local health authority of an unusually high number of children who had attended his surgery with florid measles. All of these children attended the same primary school as the child who had died. The outbreak was then investigated.

The outbreak was localised to a single school in the area where the child who had died attended and was suspected as the primary case. A total of 30 cases of measles were diagnosed on clinical grounds out of 252 children at the school (age range of 6-12 years). Figure 1 shows the date of onset of cases and suggests that the child who died was the primary case and the mean incubation period for the outbreak was 10 days. The age distribution of cases is shown in Figure 2.

Figure 1: Date of onset of illness

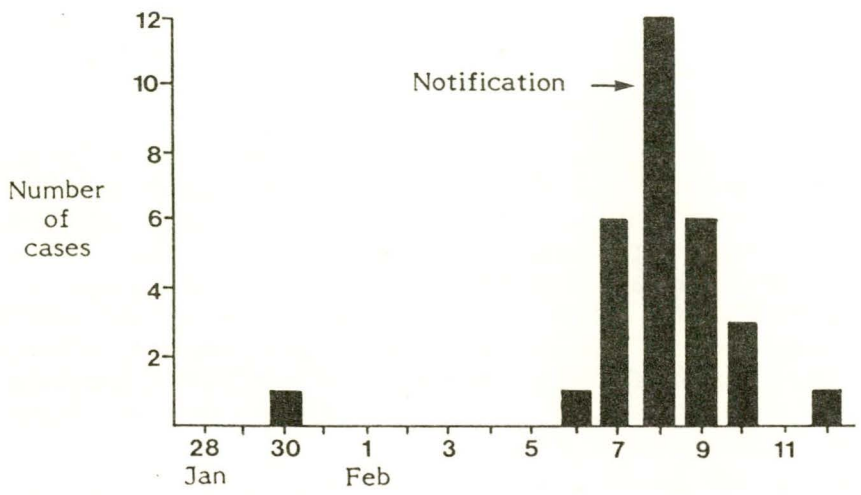
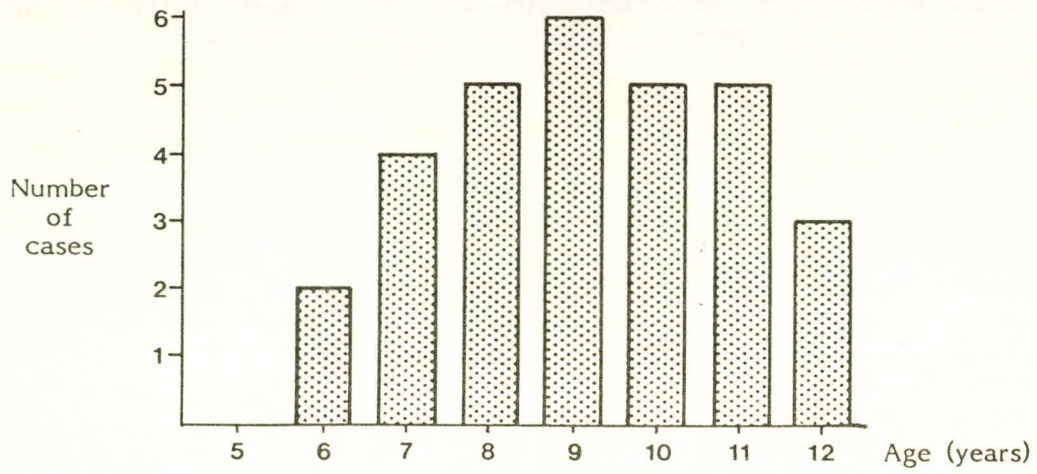


Figure 2: Age distribution of cases



Twenty six of the children with measles (including the child who died) had not previously been immunised. The attack rate among the non-immunised group was 66% compared with just under 2% for the immunised group (see Table 1), this rate was fairly constant in all age groups. The relative risk of catching measles for the previously immunised was 0.03 and the vaccine efficacy was 97%. Of the four vaccine failures, three had been vaccinated between the ages of 13 and 20 months and the fourth at 3 1/2 years.

Table 1: Immunisation status and illness in children at Somerset Primary School

	Immunised	Not immunised	Total
Ill	4	26	30
Not ill	209	13	222
Total	213	39	252
Attack rate	2%	66%	12%
Vaccination uptake rate	-	-	85%

The vaccination records of each child in Somerset have been computerised since the early 1970's. These records also contain details of vaccination status for each school in the county. Use of a local computer with immediate access for data retrieval proved invaluable. Within three hours of notification it was possible to have a detailed check on all children, so that they were able to supply the head teacher with a list of those not previously immunised. The records were found to be 97% accurate and only five children required follow-up to ascertain vaccination status.

Measles vaccine uptake rates in Somerset are among the highest in the country. For the children born there in 1985, 91% had received measles vaccination by the end of 1987. However, different cohorts have different uptake rates, and the children born in 1979 had an uptake rate of 74%. In the United States, were measles is virtually eliminated, occasional outbreaks still occur, most notably in high schools and college campuses[1]. One serious outbreak occurred in a secondary school in Texas in 1985, even when more than 99% of students had been vaccinated[2]. Outbreaks with similar epidemiological characteristics have been reported arising in college campuses.

These outbreaks[3] are much more likely to be due to primary vaccine failure, than waning immunity. High schools and college environments allow for substantial transmission of the virus. The combination of the school environment, primary vaccine failures and the presence of a cohort of unvaccinated children will allow for substantial transmission.

In this Somerset school outbreak, even though vaccine efficacy was 97%, itself indicative of a low primary vaccine failure rate, there was a large cohort of unvaccinated children, accounting for 15% of the total. With an effective vaccine such outbreaks should not be occurring.

The prompt notification of cases to the local health authority by the general practitioner led to immediate investigation and containment of the outbreak.

CDI Editorial Comment

Measles immunity levels of at least 95% are required to prevent epidemic activity of this virus in a community. In the United States it has been observed that, in a partially vaccinated population, the proportion of cases in older children and adults increased[1]. Thus older children who have not been previously vaccinated and with no documented history of measles should also receive vaccine. This is particularly important in areas where there has been little disease activity in recent years as this leads to a build up of susceptible populations.

In Australia, the National Campaign Against Measles has resulted in increased measles vaccine uptake in children 2 - 5 years of age from 68.4% in 1983 to 85.9% in 1987-88. However, promotional campaigns could only be expected to have a short-term effect and other methods such as the compulsory checking of immunisation status of children at school entry are necessary to ensure that a high level of vaccine uptake is achieved and maintained. Such mechanisms have existed in the United States, Canada and a number of European countries for a number of years[5]. In Australia only one State - Victoria - has legislation which requires proof of immunisation record at school entry (with exemptions for religious, medical and personal reasons) and allows the exclusion of unvaccinated children (for their own protection) during outbreaks of disease at that school. This legislation will be enforced in 1989.

Other States and Territories have had voluntary schemes of checking immunisation history at school entry. The National Health and Medical Research Council recommends that non-immunised contacts of measles cases be excluded unless immunised within 72 hours of first contact[6]. However this is difficult to enforce without adequate immunisation records and backup legislation.

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AIDS UPDATE - UNITED KINGDOM: 1982 - AUGUST 1988

(Based on CDR, 88/05, page 3, 5 February 1988)

To 31 August 1988, 1730 cases of AIDS meeting the surveillance case definition for AIDS have been reported to the PHLS Communicable Disease Surveillance Centre. The distribution of those cases by country and region of report (Table 1), by risk category (Table 2) and by age at diagnosis are shown below:

TABLE 1: AIDS cases by country and region of report.

	Cases	Deaths
ENGLAND		
Northern	45	29
Yorkshire	36	24
Trent	35	15
East Anglia	22	15
N W Thames	726	363
N E Thames	310	187
S E Thames	164	87
S W Thames	61	37
Wessex	38	21
Oxford	33	20
South Western	35	22
West Midlands	29	19
Mersey	24	16
North Western	66	45
Channel Islands	1	-
WALES	31	17
SCOTLAND	66	29
NORTHERN IRELAND	8	3
TOTALS	1730	949

TABLE 2: AIDS cases by risk category

Risk Group	Number of Cases Male	Female	Total	Number of Deaths
Homosexual/Bisexual	1426	-	1426	780
IV drug user	23	9	32	19
Homosexual/Bisexual male IV drug user	28	-	28	13
Blood transfusion recipient*	131	14	145	93
Heterosexual activity#	42	21	63	26
Child of at risk /infected parent	8	11	19	8
None of the above	15	2	17	10
TOTAL	1673	57	1730	949

* includes cases with haemophilia (112 males, 1 female, 70 deaths).

\# This includes 53 persons (38 males, 15 females, 19 deaths) presumed to have been infected abroad.

TABLE 3: AIDS cases by age at time of diagnosis

Age (Years)	Male	Female	Total
0-14	18	12	30
15-24	93	12	105
25-44	1182	27	1209
45-64	329	4	333
65 or more	19	1	20
Not stated	32	1	33
TOTAL	1673	57	1730

RECOMMENDATIONS FOR DIAGNOSING AND TREATING SYPHILIS IN HIV-INFECTED PATIENTS

(Based on MMWR (1988) 37: 600-2, 607-8)

The clinical manifestations, serological responses, efficacy of treatment, and occurrence of complications of syphilis may be altered in patients coinfected with human immunodeficiency virus (HIV). Because syphilis is a disease with a broad range of manifestations and variable course, assessing reports of unusual clinical or laboratory findings in HIV-coinfected patients is difficult [1]. On 21 and 22 March 1988, experts from academic medical centres and state and local health departments met at the Centers for Disease Control to discuss the diagnosis and treatment of syphilis in HIV-infected patients. The following recommendations were developed based on these discussions.

Diagnosis of syphilis in HIV-infected patients

Most HIV-infected patients appear to have a normal serological response to *Treponema pallidum* infection[2]. However, in some HIV-infected patients with biopsy-confirmed secondary syphilis, both nontreponemal and treponemal tests for syphilis are negative[3]. In addition, some patients infected with both *T. pallidum* and HIV have had unusually high titres on nontreponemal serological tests for syphilis (Centers for Disease Control, unpublished data, 1987-88), possibly because of HIV-related polyclonal B-cell stimulation. The frequency of unusual clinical and laboratory manifestations of syphilis in patients coinfected with HIV is unknown.

Recommendations

1. Persons with HIV infection acquired through sexual contact or intravenous (IV)-drug use should be tested for syphilis, and all sexually active persons with syphilis should be tested for HIV (with the informed consent of the patient). HIV test results are clinically important in managing patients with syphilis and, with appropriate confidentiality safeguards, should be made available to medical personnel who care for these patients.
2. When clinical findings suggest syphilis is present, but serological tests are negative, other tests should be used to determine whether syphilis is present. These tests include dark-field microscopy and direct fluorescent antibody for *T. pallidum* (DFA-TP) staining of lesion exudate and examination of biopsy tissue using DFA-TP or Steiner stain[4]. (Note: In evaluating biopsy specimens, histological stains [Warthin Starry Silver, Steiner] must be interpreted with caution since other spirochetes and artifacts may be misidentified as *T. pallidum* with these silver stains.)
3. Laboratories should titrate nontreponemal tests to a final end point, rather than reporting results as greater than an arbitrary cutoff (e.g., >1:512). Specific results permit more accurate determination of response to therapy and also help identify unusual serological responses to syphilis.
4. Neurosyphilis should be considered in the differential diagnosis of neurological disease in HIV-infected persons.
5. Consultation should be obtained to evaluate unusual serological test results in patients suspected of having syphilis or in those being followed for response to treatment.

Treatment and follow-up

Case reports have suggested that treatment failures, including progression to neurosyphilis, may occur more frequently in patients coinfected with HIV than in those with syphilis alone[5,6]. This has not yet been confirmed, but because an intact cellular immune response is important in the host response to *T. pallidum* infection[7] and because HIV infection impairs cellular immune response in some patients, an increased frequency of treatment failure is plausible.

Recommended treatment schedules for neurosyphilis have included benzathine penicillin[8], although treatment with benzathine penicillin in currently recommended dosages does not achieve treponemicidal antibiotic levels in the cerebrospinal fluid (CSF) of most patients with syphilis, and rare treatment failures have been reported[9-11].

Recommendations

1. No change in therapy for early syphilis for HIV-coinfected patients is recommended. However, there is disagreement on this issue, and some authorities have advised CSF examination and/or treatment with a regimen appropriate for neurosyphilis for all patients coinfected with syphilis and HIV, regardless of the clinical stage of syphilis[12]. In all cases, careful follow-up is necessary to assure adequacy of treatment.
2. Serological testing after treatment for early syphilis is important for all patients, regardless of HIV infection status. In patients coinfected with HIV, quantitative nontreponemal tests should be repeated at 1,2, and 3 months and at 3-month intervals thereafter until a satisfactory serological response to treatment occurs. If the titre does not decrease appropriately (two-dilution decrease by 3 months for primary syphilis or by 6 months for secondary syphilis)[13] or if a sustained two-dilution or greater increase occurs, the patient should be reevaluated to consider the possibility of treatment failure or reinfection, and CSF should be examined. Sexually transmitted disease (STD) clinics and others providing STD treatment should assure adequate follow-up.
3. A CSF examination should precede and guide treatment of HIV-infected patients with latent syphilis present for longer than 1 year or for unknown duration. If an examination is not possible, patients should be treated for presumed neurosyphilis.
4. Benzathine penicillin regimens should not be used to treat either asymptomatic or symptomatic neurosyphilis in HIV-infected patients. Patients should be treated for at least 10 days with either aqueous crystalline penicillin G, 2-4 million units IV every 4 hours (12-24 million units each day), or aqueous procaine penicillin G, 2.4 million units intramuscularly daily, plus probenecid 500 mg orally 4 times daily[8].

MMWR Editorial Note

The expert consultants also highlighted the following research priorities related to the diagnosis and treatment of syphilis in HIV-coinfected patients:

1. The effect of HIV infection on initial clinical and laboratory manifestations of syphilis and on the efficacy of current syphilis therapy should be prospectively studied.
2. A surveillance system should be developed to detect complications of syphilis, especially neurosyphilis, and unusual clinical and laboratory manifestations of syphilis in patients with and without HIV-coinfection.
3. The importance of CNS involvement in early syphilis should be determined in patients with and without HIV coinfection.

4. Better laboratory methods should be developed for detecting *T. pallidum* or *T. pallidum* antigens in CSF, blood, and lesions.
5. A better animal model of *T. pallidum* infection is needed to examine the effect of immunosuppression on the course of syphilis.

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INCREASE IN PNEUMONIA MORTALITY AMONG YOUNG ADULTS AND THE HIV EPIDEMIC - NEW YORK CITY, UNITED STATES

(Based on MMWR (1988) 37: 593-6.)

Most pneumonia-attributable deaths occur among the elderly. In New York City (NYC), however, the number and rate of such deaths among younger persons have increased in association with human immunodeficiency virus (HIV) infections in intravenous drug users (IVDUs)[1,2]. In addition, data from the Centers for Disease Control's (CDC's) 121 Cities Mortality Surveillance System (CMSS) suggest that similar trends may be occurring in other cities.

New York City

In NYC, concurrent with the high incidence of acquired immune deficiency syndrome (AIDS), mortality rates for pneumonia or bronchopneumonia not otherwise specified (International Classification of Diseases, Ninth Revision, codes 485.0-486.0) in persons 25-44 years of age increased from 4.2 deaths/100,000 population in 1978 to 19.1 in 1987 for males and from 2.4 to 6.5 for females. Investigations of 192 (83%) of 230 clinical records of persons 25-44 years of age who were hospitalised in 1986 and died from pneumonia revealed the following: 153 (80%) were in groups at increased risk for AIDS, 126 (82%) of whom were IVDUs; 50 (26%) had evidence of oral thrush on hospital admission, and 26 (14%) had a condition diagnosed that would fulfil the criteria of the revised surveillance case definition for AIDS[3].

121 Cities

To determine whether similar changes in pneumonia-attributable deaths may be occurring in other cities, trends in pneumonia and influenza (P&I) deaths were examined using a mortality surveillance system that provides more recent city-level data than are available from national vital records.

Each week, 121 cities, constituting one quarter of the U.S. population, report to CDC the total number of registered deaths and the number of P&I-attributable deaths by age ('pneumonia' being the immediate or underlying cause, 'influenza' appearing anywhere on the death certificate)[4]. The cities were ranked by cumulative AIDS incidence (total cases reported to CDC since 1981 per 100,000 population) into deciles from highest to lowest incidence, and trends in the age distribution of persons who died from P&I were examined for 1962 to 1987.

Following a gradual decline over the preceding 2 decades, the percentage of all P&I-attributable deaths and the absolute number of P&I-attributable deaths in persons 25-44 years of age (the group most affected by AIDS) increased markedly beginning in 1981 in cities in the highest decile of AIDS incidence, with smaller increases in this percentage of cities in the next highest decile and in all other cities (Figure 1). For example, in the highest decile cities in 1979-80, 4.1% (408/10,006) of P&I deaths were in persons 25-44 years of age, compared with 10.0% (1,127/11,280) in 1986-87. This is a 176% increase in the number of P&I-attributable deaths and an increase in P&I mortality rates from 5.2 to 13.7 deaths/100,000 population for the 25-44 year age group. (Note: Mortality rates were estimated using decennial U.S. census data for the 121 cities, with populations for intercensus years estimated by linear interpolation or extrapolation. As a result, actual mortality rates for the 121 cities may be slightly higher or lower than presented here.)

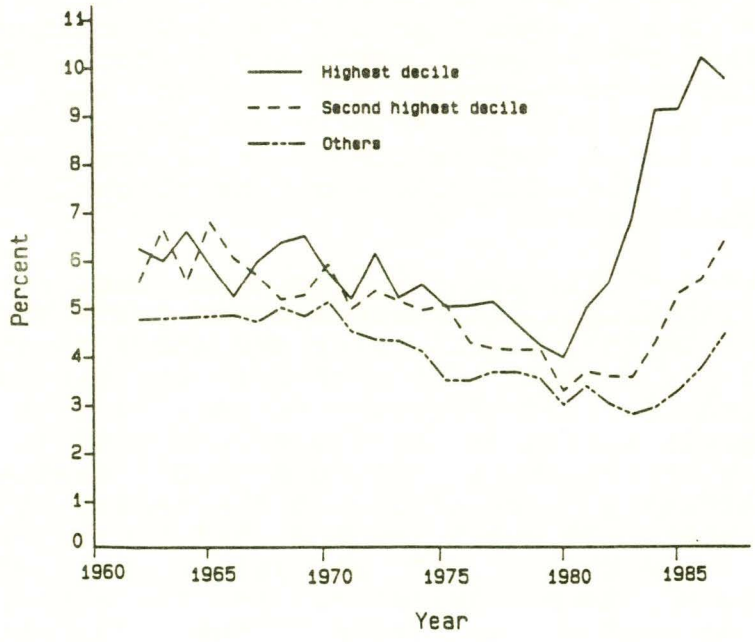
Cities in the highest decile included NYC, and the percentages of P&I-attributable deaths in persons 25-44 years of age were 3.6% in 1979-80 and 10.6% in 1986-87 for NYC and 4.7% and 9.2%, respectively, for the others. For cities in the second highest decile, the percentages of P&I-attributable deaths in the 25-44 year age group were 3.7% in 1979-80 and 6.0% in 1986-87, and P&I mortality rates were 3.7 and 9.2 deaths/100,000 population, respectively. For cities in the remaining deciles, these percentages were 3.2% and 4.1%, and P&I mortality rates were 5.7 and 9.1 deaths/100,000 population for 1979-80 and 1986-87, respectively. Among the latter, for the cities in the lowest decile of AIDS incidence, the percentage of P&I-attributable deaths in the 25-44 year age group declined slightly from 2.9% to 2.3%, while P&I mortality rates remained relatively stable at 3.5 and 3.7 deaths/100,000 population in 1979-80 and 1986-87, respectively.

In the cities in the highest decile of AIDS incidence, trends in the age distribution of P&I-attributable deaths varied according to the percentage of AIDS cases in IVDUs. In seven of these cities, more than one third of AIDS cases (range 35%-72%) were in IVDUs (heterosexual or homosexual/bisexual). In these seven cities, the percentage of P&I-attributable deaths in persons 25-44 years of age increased from 4.1% (274/6,704) in 1979-80 to 12.1% (922,7,646) in 1986-87, and P&I mortality rates increased from 6.0 to 19.8 deaths/100,000. In contrast, for the other for the other five cities in the highest AIDS decile, 9%-18% of cases were in IVDUs. In these five cities, the respective increase in the percentage of P&I deaths in the 25-44 year age group was less, from 4.1% (134/3,302) to 5.6% (205/3,634), with a smaller increase in P&I mortality rates as well, from 4.2 to 5.8 deaths/100,000 population.

The seasonal distribution of deaths in the 25-44 year age group was similar to that for other age groups for cities in the highest AIDS decile, with peaks occurring during the winter in bother groups for 1984-1987 combined (Figure 2).

The increases in P&I-attributable deaths could be due in part to *Pneumocystis carinii* pneumonia, a leading cause of death in AIDS patients. However, seven of the 12 cities in the highest AIDS decile reported excluding such deaths from P&I counts. In these seven cities, an increase in the number and percentage of P&I-attributable deaths in the 25-44 year age group was still observed, with 4.1% (373/9,091) of P&I deaths occurring in this age group in 1979-80, increasing to 9.3% (945/10,134) in 1986-87.

Figure 1: Percentage of pneumonia- and influenza-attributable deaths in persons aged 25-44 years, ranked by decile of AIDS incidence, by years - 121 cities, United States, 1962-1987



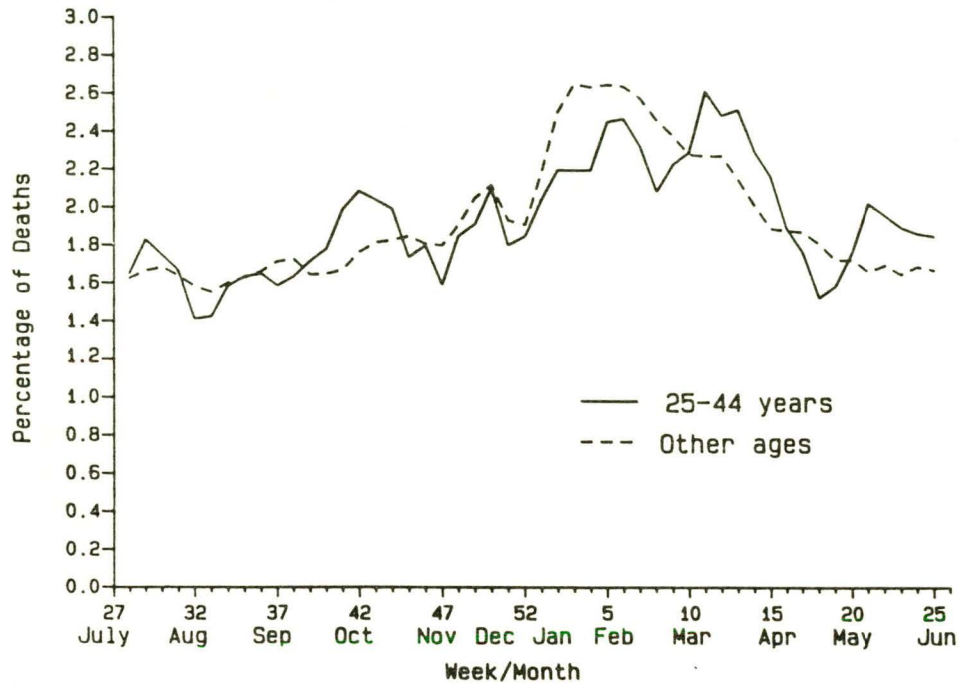
MMWR Editorial Note

In the past decade, an increase in pneumonia mortality rates has occurred in young adults in NYC. Many of these pneumonia deaths have occurred in IVDUs, a group at increased risk for HIV infection. Other investigations from NYC based on hospital data, medical examiner specimens, and cohorts of IVDUs have identified bacterial pneumonia as an important cause of death among HIV-infected IVDUs[1,2,5].

Data from the CMSS indicate that, during the 1980s, both the number and percentage of P&I-attributable deaths in persons 25-44 years of age, as well as the P&I mortality rate, have more than doubled in cities with a high incidence of AIDS. Lesser increases were observed in other cities, except those with the lowest AIDS incidence, where the P&I mortality rate in this age group was relatively stable. Among the cities with high AIDS incidence, shifts in the age distribution of P&I deaths and mortality rates in the 25-44 year age group have

been greatest in cities with a comparatively high proportion of IVDUs among persons reported to have AIDS. P&I deaths in the 25-44 year age group occur seasonally, as do those in other age groups. Seasonal peaks in P&I-attributable deaths have been associated with influenza infections[4]; however, the contribution of influenza to HIV-related mortality, if any, has not been determined. These data suggest that, in areas with a high incidence of AIDS, further investigations of P&I-attributable deaths should focus on the role of underlying HIV infection.

Figure 2: Seasonal distribution of pneumonia and influenza-attributable deaths in cities ranked by decile of AIDS incidence, by age group, and 3-week moving average - 121 cities, United States, 1984-1987 combined



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NOTIFIABLE DISEASES REPORTED IN AUSTRALIA

Period 6. 22 May 1988 - 18 June 1988

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Amoebiasis	2			1			1		4	26 *
Ankylostomiasis				1	1	1	NN		3	21
Anthrax										
Arbovirus infection	11	7	64		NN		3		85	408
Brucellosis										8
Campylobacter infection	113		NN	102	26	NN	20	NN	241	1847 *
Chancroid				NN						2
Cholera										
Congenital rubella syndrome			NN			NN		NN		2
Diphtheria	1						4		5	16
Donovanosis			5	NN	2		2		9	58
Giardiasis	30		NN	35	15	NN	NN	NN	80	872 *
Genital herpes	77		59		NN	NN	1	4	141	662
Gonococcal ophthalmia neonatorum		NN			NN	NN	1	NN	1	3
Gonnorhoea	38	6	64	18	68		42		236	1592
Hepatitis A (infectious)	9	2	1	1	20		2		35	296 *
Hepatitis B (serum)	15	22	10	3	39	2	1		92	612 *
Hepatitis - unspecified	2		3	2	NN	NN			7	44 *
Hydatid disease			1		1				2	7
Lassa fever			NN			NN		NN		
Legionnaires disease			NN	1		NN		NN	1	16
Leprosy	2								2	9
Leptospirosis	2		4		1				7	52
Lymphogranuloma venereum				NN	NN	NN		NN		
Marburg disease			NN			NN		NN		

DISEASE	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	TOTAL	CUMULATIVE TOTAL
Malaria	2	7	5	2	1	1	1	3	22	189 *
Measles	5		5	1	4				15	53 *
Meningococcal infections		2	3		1	NN			6	41 *
Non-specific urethritis	160		NN	NN	NN	NN	5	NN	165	1384
Ornithosis			49	2					51	85 *
Pertussis (whooping cough)	5		NN	3		NN		NN	8	64 *
Plague										
Poliomyelitis										
Q fever	20		4						24	194
Rabies				NN		NN		NN		
Salmonella infections	50	7	87	29	20	9	17		219	1822
Shigella infections	4	1	26	3	8		15		57	314
Smallpox										
Syphilis	24	4	133	10	18		49	2	240	963 *
Tetanus										2
Trachoma		NN		1	10	NN	NN		11	37 *
Tuberculosis (all forms)	29	23	17	3	5		2	2	81	526 *
Typhoid fever										19 *
Typhus (all forms)										4 *
Vibrio parahaemolyticus infection			NN			NN		NN		
Yellow fever										
Yersinia infections	11		NN	3		NN		NN	14	94 *

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

Amoebiasis	+4 South Australia	Meningococcal infect	+1 South Australia
Campylobacter infections	+1 South Australia	Ornithosis	+1 South Australia
Giardiasis	+36 South Australia	Pertussis	+3 South Australia
Hepatitis A (infectious)	+8 South Australia	Syphilis	-1 Northern Territory
Hepatitis B (serum)	+2 South Australia	Trachoma	+1 South Australia
Hepatitis unspecified	+1 South Australia	Tuberculosis	+4 South Australia
Malaria	+1 South Australia	Typhus	+1 South Australia
Measles	+4 Queensland	Yersinia infections	+1 South Australia

Note: Period 5 - Cumulative total for year for Yellow fever is a typographical error please ignore.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
BASED ON DATE OF REPORTING

PERIOD 15/10/88 TO 28/10/88

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	2	1	3	11	3	2	0	14	36
0101	ADENOVIRUS TYPE 1	1	0	7	0	1	0	0	0	9
0102	ADENOVIRUS TYPE 2	1	0	2	0	1	0	0	0	4
0104	ADENOVIRUS TYPE 4	4	0	0	0	0	0	0	0	4
0105	ADENOVIRUS TYPE 5	1	0	2	0	0	0	0	0	3
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
0122	ADENOVIRUS TYPE 22	0	0	0	0	1	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	2	0	0	1	0	1	0	0	4
0201	INFLUENZA A VIRUS	6	6	3	0	0	0	0	0	15
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	0	0	0	0	0	0	1	1
0301	PARAINFLUENZA VIRUS TYPE 1	0	1	0	1	0	0	0	0	2
0302	PARAINFLUENZA VIRUS TYPE 2	0	0	1	1	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	3	3	31	12	5	0	1	11	66
0400	RESPIRATORY SYNCYTIAL VIRUS (R	9	15	8	3	2	0	0	1	38
0500	RHINOVIRUS (ALL TYPES)	8	1	14	9	0	0	1	6	39
0600	MYCOPLASMA PNEUMONIAE	18	1	31	7	13	0	0	0	70
0700	ORNITHOSIS-PSITTACOSIS	2	0	1	0	0	0	0	0	3
0821	COXSACKIEVIRUS A21	3	0	0	0	0	0	0	0	3
0901	COXSACKIEVIRUS B1	0	0	0	0	0	0	1	0	1
0904	COXSACKIEVIRUS B4	3	0	0	0	0	1	0	0	4
0905	COXSACKIEVIRUS B5	1	0	0	0	0	0	0	0	1
1004	ECHOVIRUS TYPE 4	2	0	2	0	0	0	0	0	4
1009	ECHOVIRUS TYPE 9	2	8	0	0	1	0	0	0	11
1030	ECHOVIRUS TYPE 30	6	0	0	0	0	0	0	0	6
1101	POLIOVIRUS TYPE 1	0	0	2	0	1	0	1	0	4
1102	POLIOVIRUS TYPE 2	0	0	1	0	0	0	0	0	1
1103	POLIOVIRUS TYPE 3	0	0	1	0	0	0	0	0	1
1199	POLIOVIRUS TYPING PENDING	0	0	0	0	0	0	1	0	1
1200	MUMPS VIRUS	1	0	1	0	0	0	0	0	2
1300	HERPES VIRUS GROUP - NOT TYPED	4	1	0	0	116	0	0	1	122
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	7	0	0	1	0	2	0	11
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	7	6	18	0	2	0	3	0	36
1303	VARICELLA-ZOSTER VIRUS	2	4	0	0	3	0	0	0	9
1306	HERPES SIMPLEX TYPE 1	55	23	12	0	5	7	0	42	144
1307	HERPES SIMPLEX TYPE 2	68	36	17	0	37	17	0	82	257
1399	HERPES VIRUS TYPING PENDING	3	0	0	1	0	0	0	0	4
1401	COXIELLA BURNETI	2	0	0	0	8	0	0	0	10
1502	PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	0	7	7
1516	MILKERS NODULE VIRUS	1	0	0	0	0	0	0	0	1
1522	RUBELLA VIRUS	2	0	1	1	1	0	0	0	5
1532	HEPATITIS B ANTIGEN	27	9	17	0	41	6	1	25	126
1535	HEPATITIS A ANTIBODY	2	3	2	0	0	0	1	2	10
1541	CHLAMYDIA A - C. TRACHOMATIS	6	48	23	0	16	0	1	24	118
1543	CHLAMYDIA A - LGV TYPE	2	0	0	0	0	0	0	0	2
1556	CMV - CYTOMEGALOVIRUS	25	7	10	2	4	3	1	9	61
1564	ROTAVIRUS	17	17	41	33	29	10	14	8	169
1599	ENTEROVIRUS TYPING PENDING	0	0	0	6	0	5	1	0	12
9993	ASTROVIRUS	0	0	0	0	1	0	0	0	1
9998	ARBO. GROUP B. (UNSPECIFIED)	1	0	0	0	0	0	0	0	1
TOTAL		300	197	251	88	293	53	29	233	1444

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1.

PERIOD 15/10/88 TO 28/10/88

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	14	0	0	0	16	0	0	0	30
0101	ADENOVIRUS TYPE 1	0	6	0	0	0	1	0	0	1	8
0102	ADENOVIRUS TYPE 2	0	3	0	0	0	1	0	0	0	4
0104	ADENOVIRUS TYPE 4	0	1	1	0	0	0	0	0	0	2
0105	ADENOVIRUS TYPE 5	0	2	0	0	0	1	0	0	0	3
0199	ADENOVIRUS TYPING PENDING	0	1	0	0	0	0	0	0	0	1
0201	INFLUENZA A VIRUS	1	10	0	0	0	0	1	0	0	12
0202	INFLUENZA A VIRUS SUBTYPE H3N2	0	1	0	0	0	0	0	0	0	1
0301	PARAINFLUENZA VIRUS TYPE 1	0	2	0	0	0	0	0	0	0	2
0302	PARAINFLUENZA VIRUS TYPE 2	0	2	0	0	0	0	0	0	0	2
0303	PARAINFLUENZA VIRUS TYPE 3	1	65	0	0	0	0	0	0	0	66
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	36	0	0	0	0	0	0	0	36
0500	RHINOVIRUS (ALL TYPES)	0	38	0	0	1	0	0	0	0	39
0600	MYCOPLASMA PNEUMONIAE	11	48	0	0	0	0	0	0	2	61
0700	ORNITHOSIS-PSITTACOSIS	0	2	0	0	0	0	0	0	1	3
0821	COXSACKIEVIRUS A21	0	0	0	0	2	0	0	0	0	2
0904	COXSACKIEVIRUS B4	0	2	0	2	0	0	0	0	0	4
0905	COXSACKIEVIRUS B5	1	0	0	0	0	0	0	0	0	1
1004	ECHOVIRUS TYPE 4	0	0	0	3	0	0	0	0	0	3
1009	ECHOVIRUS TYPE 9	0	1	0	7	0	0	0	0	1	9
1030	ECHOVIRUS TYPE 30	0	0	1	5	0	0	0	0	0	6
1101	POLIOVIRUS TYPE 1	0	2	0	0	1	0	0	0	0	3
1102	POLIOVIRUS TYPE 2	0	1	0	0	0	0	0	0	0	1
1200	MUMPS VIRUS	1	0	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	24	0	0	0	0	0	0	1	24	49
1301	HERPES SIMPLEX VIRUS - NOT TYP	1	0	0	0	0	0	0	0	7	8
1302	EPSTEIN-BARR VIRUS (EB VIRUS)	6	3	0	0	0	0	0	0	0	9
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	6	6
1306	HERPES SIMPLEX TYPE 1	2	10	0	0	0	0	1	1	74	88
1307	HERPES SIMPLEX TYPE 2	5	1	0	0	0	0	0	0	71	77
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	1
1401	COXIELLA BURNETI	1	0	0	0	0	0	0	0	0	1
1502	PICORNIA VIRUS - NOT TYPED = E	0	3	0	0	1	3	0	0	0	7
1516	MILKERS NODULE VIRUS	0	0	0	0	0	0	0	0	1	1
1522	RUBELLA VIRUS	0	0	0	0	0	0	0	0	3	3
1532	HEPATITIS B ANTIGEN	66	0	0	0	0	0	51	0	0	117
1535	HEPATITIS A ANTIBODY	3	0	0	0	0	0	6	0	0	9
1541	CHLAMYDIA A - C. TRACHOMATIS	9	0	0	0	0	1	0	0	0	10
1543	CHLAMYDIA A - LGV TYPE	1	1	0	0	0	0	0	0	0	2
1556	CMV - CYTOMEGALOVIRUS	4	18	0	0	0	0	2	5	0	29
1564	ROTAVIRUS	0	0	0	0	0	169	0	0	0	169
1599	ENTEROVIRUS TYPING PENDING	0	6	0	1	0	3	0	0	0	10
9993	ASTROVIRUS	0	0	0	0	0	1	0	0	0	1
TOTAL		137	279	2	18	5	196	61	7	192	897

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2.

PERIOD 15/10/88 TO 28/10/88

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	2	1	0	6
0101	ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	1	0	0	1
0104	ADENOVIRUS TYPE 4	2	0	0	0	0	0	0	0	0	0	2
0111	ADENOVIRUS TYPE 11	0	1	0	0	0	0	0	0	0	0	1
0114	ADENOVIRUS TYPE 14	0	0	0	0	0	0	0	1	0	0	1
0122	ADENOVIRUS TYPE 22	1	0	0	0	0	0	0	0	0	0	1
0199	ADENOVIRUS TYPING PENDING	1	0	0	0	0	0	0	0	2	0	3
0201	INFLUENZA A VIRUS	0	0	0	0	0	0	0	2	1	0	3
0400	RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	0	0	1	1	0	2
0600	MYCOPLASMA PNEUMONIAE	0	0	1	0	0	0	2	1	5	0	9
0821	COXSACKIEVIRUS A21	0	1	0	0	0	0	0	0	0	0	1
0901	COXSACKIEVIRUS B1	0	0	0	0	0	0	0	1	0	0	1
1004	ECHOVIRUS TYPE 4	0	0	0	0	0	0	0	0	0	1	1
1009	ECHOVIRUS TYPE 9	0	0	0	0	0	0	0	1	1	0	2
1101	POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	0	1
1103	POLIOVIRUS TYPE 3	0	0	0	0	0	0	1	0	0	0	1
1199	POLIOVIRUS TYPING PENDING	0	0	0	0	0	0	0	0	1	0	1
1200	MUMPS VIRUS	0	0	1	0	0	0	0	0	0	0	1
1300	HERPES VIRUS GROUP - NOT TYPED	0	72	0	0	0	0	0	0	1	0	73
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	20	3	2	0	0	2	0	0	27
1303	VARICELLA-ZOSTER VIRUS	0	0	0	0	0	0	0	0	3	0	3
1306	HERPES SIMPLEX TYPE 1	5	45	0	0	0	1	0	2	3	0	56
1307	HERPES SIMPLEX TYPE 2	0	178	0	0	0	1	0	1	0	0	180
1399	HERPES VIRUS TYPING PENDING	0	0	0	0	0	0	0	1	2	0	3
1401	COXIELLA BURNETI	0	0	0	0	0	0	3	5	1	0	9
1522	RUBELLA VIRUS	0	0	1	0	0	1	0	0	0	0	2
1532	HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	0	9	0	9
1535	HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	0	1	0	1
1541	CHLAMYDIA A - C. TRACHOMATIS	3	105	0	0	0	0	0	0	0	0	108
1556	CMV - CYTOMEGALOVIRUS	1	0	0	1	0	3	0	7	20	0	32
1599	ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	0	1	0	1	2
9998	ARBO. GROUP B. (UNSPECIFIED)	0	0	0	0	0	0	1	0	0	0	1
TOTAL		16	404	23	5	2	6	7	29	53	2	547