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Epidemiologic Notes and Reports

Multi-State Outbreak of Yersiniosis

Between June 11 and July 29, 1982, a large interstate outbreak of enteritis caused by *Yersinia enterocolitica* occurred. State health departments became aware of a potential problem when hospitals reported increased numbers of *Y. enterocolitica* isolates. Epidemiologic investigation implicated milk pasteurized at a plant in Memphis, Tennessee, as the vehicle of infection.

One hundred seventy-two culture-positive *Y. enterocolitica* infections were identified: 67 in the Little Rock, Arkansas, area; 80 in Memphis, Tennessee, and its northern Mississippi suburbs; and 25 in the Greenwood, Mississippi, area. One hundred forty-eight (86%) patients had enteric infections with diarrhea and/or abdominal pain, usually accompanied by fever; 24 patients had extra-intestinal infections of throat, blood, urinary tract, central nervous system, and wounds. Forty-one percent of cases occurred among children less than 5 years of age. Most patients required hospitalization, and 17 underwent appendectomies. The epidemic strain is agglutinated most strongly by antisera to *Y. enterocolitica* O groups 13 and 18.

Separate case-control studies in each city showed that drinking milk pasteurized by a milk plant in Memphis was associated with illness (in Little Rock, $p = 0.03$; in Memphis, $p = 0.01$; in Greenwood, $p = 0.004$). Overall, 71% of cases and 39% of controls recalled drinking milk from the plant in the 2 weeks before onset of symptoms.

In an effort to estimate the size of the outbreak, a survey was made by telephone of 100 randomly chosen households in Greenwood. Heads of households were queried concerning illness and milk drinking history within the last two months. Eleven cases of yersiniosis-like illness, defined as either 1) fever $\geq$ 101 F (38.3 C) and diarrhea or 2) fever $\geq$ 101 F and abdominal pain at any time during the previous 6 weeks, were identified among the 260 members of these households. All patients resided in households that used milk from the implicated plant, and 10 of the 11 (91%) recalled drinking its milk within the previous 2 months. Illness occurred in 6 of 50 (12%) households that used milk from the implicated plant and in none of 50 that did not use its milk ($p=0.02$, Fisher's exact test). Of those individuals who drank milk from that plant, 8.7% had a yersiniosis-like illness. Based on a census of 20,115 and the number of the Memphis plant milk drinkers in Greenwood, it was estimated that 857 cases (95% confidence limits 363.5-1,351.7) may have occurred in Greenwood where only 3.9% of the plant's milk is sold. The total number of cases in all three states, therefore, would appear to be higher than the 172 cases reported.

The outbreak appeared to end spontaneously. Milk from suspected lots was not available for culture, and *Y. enterocolitica* was not isolated from subsequent lots. A Food and Drug Administration laboratory isolated *Y. enterocolitica* of the same serotype found in the outbreak from a

Yersiniosis — Continued

milk crate on a hog farm where outdated milk from the implicated plant is fed to hogs. Inspection of the plant identified neither a breach in pasteurizing technique nor an obvious source of contamination. Surveillance for new cases and surveillance of milk for *Yersinia* have continued.

Reported by JP Lofgren, MD, State Epidemiologist, Arkansas State Dept of Health; C Konigsberg, MD, R Rendtorff, MD, V Zee, MPH, Memphis-Shelby County Health Dept, RH Hutcheson, Jr, MD, State Epidemiologist, Tennessee State Dept of Public Health; A Rausa, MD, D Brower, District Health Office, Greenwood, WE Riecken, Jr, MD, State Epidemiologist, Mississippi Dept of Health; Food and Drug Administration; Field Services Div, Epidemiology Program Office, Family Planning Div, Center for Health Promotion and Education, Enteric Diseases Br, Div of Bacterial Diseases, Center for Infectious Diseases, CDC.

Editorial Note: In this investigation pasteurized milk was epidemiologically implicated as the vehicle of transmission of *Y. enterocolitica*. The temporal and geographic clustering of cases and the negative cultures of subsequent lots of milk are consistent with contamination of a single lot. The mechanism of contamination is unknown.

Y. enterocolitica may be found in raw milk (*1,2*); contaminated raw milk was responsible for an outbreak of yersiniosis among children in Montreal (*3*). The organism has also been found in pasteurized milk (*1,4*) although not associated with illness. *Y. enterocolitica* generally does not survive standard pasteurization (*5*); however, if present in large enough numbers, viable *Yersinia* may persist after pasteurization (*4-6*). Once present in a pasteurized product, the organism grows well at refrigeration temperature (*7*). Therefore, pasteurization and proper handling of pasteurized milk may not ensure against enteric disease due to *Y. enterocolitica*.

Only two other well documented food-borne outbreaks of *Y. enterocolitica* enteritis have been reported in the United States: one in New York state in 1976 caused by contaminated chocolate milk (*8*) and one in Washington state in 1982 caused by tofu (*9*). Food-borne transmission of yersiniosis has also been suspected in other outbreaks (*10-12*). This is the largest outbreak of yersiniosis ever reported in the United States.

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Current Trends

Update on Acquired Immune Deficiency Syndrome (AIDS) — United States

Between June 1, 1981, and September 15, 1982, CDC received reports of 593 cases of acquired immune deficiency syndrome (AIDS).* Death occurred in 243 cases (41%).

Analysis of reported AIDS cases shows that 51% had *Pneumocystis carinii* pneumonia (PCP) without Kaposi's sarcoma (KS) (with or without other "opportunistic" infections [OOI] predictive of cellular immunodeficiency); 30% had KS without PCP (with or without OOI); 7% had both PCP and KS (with or without OOI); and 12% had OOI with neither PCP nor KS. The overall mortality rate for cases of PCP without KS (47%) was more than twice that for cases of KS without PCP (21%), while the rate for cases of both PCP and KS (68%) was more than three times as great. The mortality rate for OOI with neither KS nor PCP was 48%.

The incidence of AIDS by date of diagnosis (assuming an almost constant population at risk) has roughly doubled every half-year since the second half of 1979 (Table 1). An average of one to two cases are now diagnosed every day. Although the overall case-mortality rate for the current total of 593 is 41%, the rate exceeds 60% for cases diagnosed over a year ago.

Almost 80% of reported AIDS cases in the United States were concentrated in six metropolitan areas, predominantly on the east and west coasts of the country (Table 2). This distribution was not simply a reflection of population size in those areas; for example, the number of cases per million population reported from June 1, 1981, to September 15, 1982, in New York City and San Francisco was roughly 10 times greater than that of the entire country. The 593 cases were reported among residents of 27 states and the District of Columbia, and CDC has received additional reports of 41 cases from 10 foreign countries.

Approximately 75% of AIDS cases occured among homosexual or bisexual males (Table 3), among whom the reported prevalence of intravenous drug abuse was 12%. Among the 20% of known heterosexual cases (males and females), the prevalence of intravenous drug abuse was about 60%. Haitians residing in the United States constituted 6.1% of all cases (*2*), and 50% of the cases in which both homosexual activity and intravenous drug abuse were denied. Among the 14 AIDS cases involving males under 60 years old who were not homosexuals, intravenous drug abusers, or Haitians, two (14%) had hemophilia A.† (*3*)

*Formerly referred to as Kaposi's sarcoma and opportunistic infections in previously healthy persons. (*1*)

†A third hemophiliac with pneumocystosis exceeded the 60-year age limit of the AIDS case definition.

TABLE 1. Reported cases and case-mortality rates of AIDS, by half-year of diagnosis,* 1979-1982, (as of September 15, 1982) — United States

Half-year of diagnosis		Cases	Deaths	Case-mortality rate (%)
1979	1st half	1	1	100
	2nd half	6	5	83
1980	1st half	17	13	76
	2nd half	26	22	85
1981	1st half	66	46	70
	2nd half	141	79	56
1982	1st half	249	67	27

*Excluding 4 cases with unknown dates of diagnosis

Immune Deficiency Syndrome — Continued

Reported AIDS cases may be separated into groups based on these risk factors: homosexual or bisexual males—75%, intravenous drug abusers with no history of male homosexual activity—13%, Haitians with neither a history of homosexuality nor a history of intravenous drug abuse—6%, persons with hemophilia A who were not Haitians, homosexuals, or intravenous drug abusers—0.3%, and persons in none of the other groups—5%.

Reported by the Task Force on Acquired Immune Deficiency Syndrome, CDC

Editorial Note: CDC defines a case of AIDS as a disease, at least moderately predictive of a defect in cell-mediated immunity, occurring in a person with no known cause for diminished resistance to that disease. Such diseases include KS, PCP, and serious OOI.[§] Diagnoses are considered to fit the case definition only if based on sufficiently reliable methods (generaliy histology or culture). However, this case definition may not include the full spectrum of AIDS manifestations, which may range from absence of symptoms (despite laboratory evidence of immune deficiency) to non-specific symptoms (e.g., fever, weight loss, generalized, persistent

[§]These infections include pneumonia, meningitis, or encephalitis due to one or more of the following: aspergillosis, candidiasis, cryptococcosis, cytomegalovirus, nocardiosis, strongyloidosis, toxoplasmosis, zygomycosis, or atypical mycobacteriosis (species other than tuberculosis or lepra); esophagitis due to candidiasis, cytomegalovirus, or herpes simplex virus; progressive multifocal leukoencephalopathy; chronic enterocolitis (more than 4 weeks) due to cryptosporidiosis; or unusually extensive mucocutaneous herpes simplex of more than 5 weeks duration.

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TABLE I. Summary—cases of specified notifiable diseases, United States

Disease	37th Week Ending			Cumulative, First 37 Weeks		
	September 18, 1982	September 19, 1981	Median 1977-1981	September 18, 1982	September 19, 1981	Median 1977-1981
Aseptic meningitis	367	438	293	5,245	6,042	4,537
Brucellosis	4	6	6	115	113	126
Encephalitis: Primary (arthropod-borne & unspec.)	68	68	57	837	914	714
Post-infectious	2	1	3	48	69	158
Gonorrhea: Civilian	18,119	21,040	21,040	665,540	709,948	700,978
Military	543	478	495	17,887	20,555	19,590
Hepatitis: Type A	494	442	561	15,561	17,855	20,311
Type B	416	384	353	14,795	14,445	11,740
Non A, Non B	43	N	N	1,533	N	N
Unspecified	189	207	187	6,320	7,756	7,139
Legionellosis	18	N	N	355	N	N
Leprosy	4	1	2	139	178	115
Malaria	35	18	18	739	1,022	530
Measles (rubeola)	10	16	43	1,230	2,597	12,864
Meningococcal infections: Total	41	44	30	2,179	2,621	1,982
Civilian	41	44	30	2,167	2,611	1,964
Military	-	-	-	12	10	14
Mumps	53	40	58	4,181	3,250	11,167
Pertussis	35	32	42	1,009	869	1,098
Rubella (German measles)	21	12	37	1,996	1,761	10,687
Syphilis (Primary & Secondary): Civilian	729	618	498	23,068	21,518	17,203
Military	16	9	9	311	266	226
Tuberculosis	509	558	537	18,077	19,016	19,645
Tularemia	6	7	5	174	188	152
Typhoid fever	10	7	11	281	358	348
Typhus fever, tick-borne (RMSF)	29	14	23	846	1,035	966
Rabies, animal	124	131	97	4,494	5,486	3,606

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1982		Cum. 1982
Anthrax	-	Poliomyelitis: Total	3
Botulism	55	Paralytic	3
Cholera	-	Psittacosis	85
Congenital rubella syndrome	5	Rabies, human	-
Diphtheria	2	Tetanus (Upst. NY 1)	58
Leptospirosis (Ohio 1; Fla. 1; Hawaii 1)	43	Trichinosis (Conn. 1; La. 1)	72
Plague	16	Typhus fever, flea-borne (endemic, murine)	24

TABLE III. Cases of specified notifiable diseases, United States, weeks ending September 18, 1982 and September 19, 1981 (37th week)

Reporting Area	Aseptic Meningitis	Brucellosis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	1982	Cum. 1982	Cum. 1982	Cum. 1982	Cum. 1982	Cum. 1981	1982	1982	1982	1982	1982	Cum. 1982
UNITED STATES	367	115	837	48	665,540	709,948	494	416	43	189	18	139
NEW ENGLAND	9	3	33	5	16,092	17,513	8	13	1	11	-	1
Maine	-	-	-	-	822	908	-	-	-	-	-	-
N.H.	-	-	5	-	473	634	1	1	-	-	-	-
Vt.	-	-	-	-	305	288	2	-	-	-	-	-
Mass.	6	-	13	-	7,275	7,387	4	3	-	10	-	-
R.I.	2	-	-	1	1,097	1,023	-	3	-	-	-	-
Conn.	1	3	15	4	6,120	7,273	1	6	1	1	-	1
MID. ATLANTIC	58	3	91	10	83,738	84,573	65	73	6	21	6	4
Upstate N.Y.	24	3	31	3	13,966	14,117	11	20	2	2	-	1
N.Y. City	7	-	15	-	34,245	34,742	9	10	-	5	-	1
N.J.	18	-	17	-	15,398	16,311	25	16	4	6	1	1
Pa.	9	-	28	7	20,129	19,403	20	27	-	8	5	1
E.N. CENTRAL	54	1	178	10	89,748	106,394	49	30	1	13	4	3
Ohio	25	1	77	4	26,520	33,250	26	16	-	7	3	-
Ind.	10	-	41	3	11,199	9,262	11	2	-	3	-	-
Ill.	1	-	9	1	20,271	30,801	2	2	1	-	-	3
Mich.	18	-	46	-	23,082	23,361	10	10	-	3	1	-
Wis.	-	-	5	2	8,676	9,720	-	-	-	-	-	-
W.N. CENTRAL	18	14	68	4	31,784	33,838	15	9	3	1	-	3
Minn.	1	1	24	1	4,570	5,234	10	-	-	-	-	1
Iowa	9	3	30	1	3,358	3,715	-	1	1	-	-	-
Mo.	1	4	6	-	15,106	15,750	5	4	2	1	-	1
N. Dak.	-	-	-	-	420	424	-	-	-	-	-	-
S. Dak.	-	1	-	1	871	944	-	3	-	-	-	1
Nebr.	-	2	4	-	1,941	2,550	-	-	-	-	-	-
Kans.	7	3	4	1	5,518	5,221	-	1	-	-	-	-
S. ATLANTIC	70	23	126	8	173,555	175,209	64	93	13	30	4	9
Del.	-	-	-	-	2,846	2,794	6	12	-	-	-	-
Md.	7	-	18	-	22,039	20,175	1	10	2	2	-	3
D.C.	-	-	-	-	10,174	10,036	-	-	-	-	-	-
Va.	16	7	28	1	13,910	16,057	11	16	2	12	3	1
W. Va.	3	-	11	-	2,008	2,657	2	-	-	-	-	-
N.C.	3	-	14	1	28,011	26,885	2	4	-	4	-	-
S.C.	5	2	-	-	17,222	17,058	12	10	-	3	-	-
Ga.	3	3	8	-	31,389	36,464	7	17	1	-	-	1
Fla.	33	11	47	6	45,956	43,083	23	24	8	9	1	4
E.S. CENTRAL	12	11	44	2	58,466	59,132	23	24	2	4	-	-
Ky.	3	-	-	-	7,872	7,350	14	7	-	2	-	-
Tenn.	5	6	20	-	22,957	22,447	8	10	1	1	-	-
Ala.	1	4	15	2	17,345	17,965	-	4	1	1	-	-
Miss.	3	1	9	-	10,292	11,370	1	3	-	-	-	-
W.S. CENTRAL	74	33	139	1	93,960	94,184	120	48	2	52	1	24
Ark.	2	7	10	-	7,696	7,026	-	1	-	10	-	-
La.	5	8	15	-	17,393	16,350	16	9	2	1	-	-
Okla.	48	5	30	-	10,261	10,182	39	16	-	3	1	-
Tex.	19	13	84	1	58,610	60,626	65	22	-	38	-	24
MOUNTAIN	21	-	28	3	22,844	27,575	66	20	3	14	1	2
Mont.	-	-	-	-	942	1,003	-	-	-	-	-	-
Idaho	2	-	-	-	1,111	1,259	3	-	-	-	-	1
Wyo.	-	-	-	-	680	680	2	1	-	2	-	-
Colo.	12	-	14	1	6,144	7,442	8	4	2	4	-	-
N. Mex.	-	-	-	-	3,011	2,902	12	-	-	1	-	-
Ariz.	-	-	6	-	5,960	8,258	32	6	1	-	-	-
Utah	6	-	4	2	1,105	1,347	5	3	-	6	1	1
Nev.	1	-	4	-	3,891	4,684	4	6	-	1	-	-
PACIFIC	51	27	130	5	95,353	111,530	84	106	12	43	2	93
Wash.	3	1	11	-	7,997	9,281	5	4	-	2	2	6
Oreg.	4	-	3	-	5,524	6,605	7	2	-	-	-	1
Calif.	44	25	110	5	77,586	90,633	71	97	12	41	-	64
Alaska	-	1	4	-	2,397	2,795	1	-	-	-	-	1
Hawaii	-	-	2	-	1,849	2,216	-	3	-	-	-	21
Guam	U	-	-	-	81	87	U	U	U	U	U	-
P.R.	3	-	1	-	1,988	2,375	9	10	-	1	-	1
V.I.	-	-	-	-	162	157	-	1	-	-	-	-
Pac. Trust Terr.	U	-	-	-	245	322	U	U	U	U	U	12

N: Not notifiable U: Unavailable

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending September 18, 1982 and September 19, 1981 (37th week)

Reporting Area	Malaria		Measles (Rubeola)			Meningococcal Infections (Total)		Mumps		Pertussis	Rubella		
	1982	Cum. 1982	1982	Cum. 1982	Cum. 1981	1982	Cum. 1982	1982	Cum. 1982	1982	1982	Cum. 1982	Cum. 1981
UNITED STATES	35	739	10	1,230	2,597	41	2,179	53	4,181	35	21	1,996	1,761
NEW ENGLAND	2	39	-	11	77	2	116	2	171	1	-	18	113
Maine	-	-	-	-	5	-	9	1	39	-	-	-	33
N.H.	-	1	-	2	6	-	15	1	14	-	-	8	45
Vt.	-	-	-	2	3	1	8	-	7	-	-	-	-
Mass.	1	24	-	4	55	1	29	-	79	1	-	6	23
R.I.	1	3	-	-	-	-	13	-	15	-	-	1	-
Conn.	-	11	-	3	8	-	42	-	17	-	-	3	12
MID. ATLANTIC	12	123	3	161	823	4	393	2	265	8	2	98	207
Upstate N.Y.	2	25	-	110	207	1	139	2	61	5	1	48	99
N.Y. City	6	46	3	43	76	-	72	-	45	1	1	32	51
N.J.	-	26	-	4	56	2	81	-	38	2	-	17	46
Pa.	4	26	-	4	484	1	101	-	121	-	-	1	11
E.N. CENTRAL	1	51	-	74	80	5	255	8	2,167	8	1	165	367
Ohio	-	11	-	1	16	1	91	6	1,562	3	1	1	3
Ind.	-	2	-	2	8	2	26	-	37	-	-	27	127
Ill.	-	11	-	23	23	1	69	-	174	1	-	58	90
Mich.	1	25	-	48	30	1	57	-	296	2	-	48	34
Wis.	-	2	-	-	3	-	12	2	98	2	-	31	113
W.N. CENTRAL	-	19	-	49	10	2	95	19	564	3	-	56	76
Minn.	-	2	-	-	3	2	24	19	437	1	-	5	7
Iowa	-	6	-	-	1	-	7	-	31	1	-	-	4
Mo.	-	5	-	2	1	-	26	-	16	-	-	38	2
N. Dak.	-	1	-	-	-	-	6	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	4	-	1	-	-	1	-
Nebr.	-	3	-	3	4	-	12	-	-	-	-	-	1
Kans.	-	2	-	44	1	-	16	-	79	1	-	12	62
S. ATLANTIC	1	107	-	41	364	11	452	4	243	12	-	75	134
Del.	-	4	-	-	-	-	-	-	10	1	-	1	1
Md.	-	16	-	3	5	1	28	2	27	3	-	34	1
D.C.	-	4	-	1	1	-	2	-	-	-	-	-	-
Va.	-	32	-	14	7	2	55	-	33	3	-	13	6
W. Va.	-	7	-	3	9	1	10	1	88	2	-	1	22
N.C.	-	3	-	-	3	-	84	-	12	1	-	1	5
S.C.	-	4	-	-	2	1	52	-	15	-	-	1	8
Ga.	-	14	-	-	111	1	92	1	13	1	-	10	36
Fla.	1	23	-	20	226	5	129	-	45	1	-	14	55
E.S. CENTRAL	-	7	-	8	5	2	141	-	47	1	-	44	35
Ky.	-	4	-	1	1	-	24	-	15	-	-	26	21
Tenn.	-	-	-	6	2	2	61	-	18	-	-	2	13
Ala.	-	-	-	-	2	-	46	-	8	-	-	-	1
Miss.	-	3	-	1	-	-	10	-	6	1	-	16	-
W.S. CENTRAL	1	53	3	45	846	2	265	4	173	1	1	95	148
Ark.	-	4	-	-	1	1	13	-	6	-	-	1	3
La.	-	4	-	2	4	-	52	-	6	-	-	1	9
Okla.	-	8	3	29	5	-	25	-	-	-	-	3	-
Tex.	1	37	-	14	836	1	175	4	161	1	1	90	136
MOUNTAIN	2	23	-	11	34	1	99	2	86	-	-	76	87
Mont.	-	1	-	-	-	-	4	-	3	-	-	5	3
Idaho	1	2	-	-	1	1	7	-	4	-	-	6	4
Wyo.	-	-	-	-	-	-	5	-	2	-	-	7	10
Colo.	-	9	-	6	10	-	41	-	15	-	-	6	30
N. Mex.	-	3	-	-	8	-	14	-	-	-	-	6	5
Ariz.	-	5	-	5	5	-	18	2	37	-	-	14	20
Utah	1	3	-	-	-	-	8	-	19	-	-	21	5
Nev.	-	-	-	-	10	-	2	-	6	-	-	11	10
PACIFIC	16	317	4	830	358	12	363	12	465	1	17	1,369	594
Wash.	1	17	-	39	3	3	40	3	64	-	1	38	89
Oreg.	-	11	-	15	4	-	68	-	-	-	-	6	53
Calif.	14	286	3	770	344	9	240	8	385	1	16	1,312	436
Alaska	1	1	-	1	-	-	11	1	7	-	-	5	1
Hawaii	-	2	1	5	7	-	4	-	9	-	-	8	15
Guam	U	1	U	6	6	U	2	U	3	U	U	2	1
P.R.	-	4	1	103	270	-	8	4	58	-	3	11	3
V.I.	-	-	-	-	24	-	-	-	3	-	-	-	1
Pac. Trust Terr.	U	-	U	-	1	U	2	U	4	U	U	-	1

U: Unavailable

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending September 18, 1982 and September 19, 1981 (37th week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Tuberculosis		Tula-remia	Typhoid Fever		Typhus Fever (Tick-borne) (RMSF)		Rabies, Animal
	Cum. 1982	Cum. 1981	1982	Cum. 1982	Cum. 1982	1982	Cum. 1982	1982	Cum. 1982	Cum. 1982
UNITED STATES	23,068	21,518	509	18,077	174	10	281	29	846	4,494
NEW ENGLAND	397	418	27	500	5	-	16	-	8	36
Maine	4	4	2	42	-	-	-	-	-	26
N.H.	1	12	2	17	-	-	-	-	1	-
Vt.	2	13	1	13	-	-	2	-	-	1
Mass.	263	275	15	320	5	-	12	-	4	5
R.I.	19	24	3	23	-	-	-	-	2	-
Conn.	108	90	4	85	-	-	2	-	1	4
MID. ATLANTIC	3,161	3,141	105	3,070	7	6	51	2	33	148
Upstate N.Y.	309	294	20	535	7	1	7	1	11	72
N.Y. City	1,900	1,861	33	1,165	-	2	26	-	1	-
N.J.	434	438	25	600	-	-	11	1	13	14
Pa.	518	548	27	770	-	3	7	-	8	62
E.N. CENTRAL	1,186	1,573	46	2,715	1	-	22	-	77	466
Ohio	222	221	3	459	-	-	11	-	72	67
Ind.	143	198	4	347	-	-	-	-	-	69
Ill.	538	822	28	1,128	-	-	3	-	5	244
Mich.	215	262	5	631	-	-	7	-	-	4
Wis.	68	70	6	150	1	-	1	-	-	82
W.N. CENTRAL	398	447	3	514	26	-	10	-	31	970
Minn.	85	150	-	87	-	-	5	-	-	165
Iowa	22	16	-	54	2	-	1	-	4	311
Mo.	235	245	2	251	18	-	2	-	10	94
N. Dak.	7	7	-	9	-	-	-	-	-	82
S. Dak.	1	2	1	22	1	-	-	-	4	81
Nebr.	11	6	-	20	2	-	1	-	2	106
Kans.	37	21	-	71	3	-	1	-	11	131
S. ATLANTIC	6,306	5,694	124	3,741	10	1	35	17	462	811
Del.	16	11	3	35	-	-	-	-	-	2
Md.	348	433	14	433	1	-	9	1	44	35
D.C.	342	459	1	144	-	-	-	-	-	-
Va.	431	495	15	409	2	1	3	5	73	421
W. Va.	21	17	7	116	-	-	3	-	7	37
N.C.	503	429	30	606	-	-	1	6	198	58
S.C.	373	379	20	361	6	-	3	1	97	47
Ga.	1,317	1,446	15	567	-	-	-	4	40	154
Fla.	2,955	2,025	19	1,070	1	-	16	-	3	57
E.S. CENTRAL	1,618	1,425	37	1,649	6	2	16	3	76	526
Ky.	86	78	15	439	-	1	1	-	1	104
Tenn.	444	521	10	528	4	1	3	-	48	292
Ala.	603	420	9	459	-	-	9	-	12	123
Miss.	485	406	3	223	2	-	3	3	15	7
W.S. CENTRAL	6,090	5,228	79	2,190	90	-	27	7	143	855
Ark.	151	112	13	245	55	-	3	3	25	114
La.	1,399	1,210	3	337	3	-	3	-	2	29
Okla.	128	115	-	253	26	-	2	-	68	154
Tex.	4,412	3,791	63	1,355	6	-	19	4	48	558
MOUNTAIN	573	548	20	510	22	-	11	-	10	216
Mont.	3	11	-	32	2	-	-	-	3	71
Idaho	24	17	-	25	1	-	-	-	2	8
Wyo.	15	7	-	2	2	-	-	-	1	21
Colo.	161	169	3	58	4	-	3	-	1	41
N. Mex.	142	96	-	94	2	-	-	-	1	18
Ariz.	121	135	8	216	-	-	5	-	-	40
Utah	16	21	9	34	11	-	2	-	-	14
Nev.	91	92	-	49	-	-	1	-	2	3
PACIFIC	3,339	3,044	68	3,188	7	1	93	-	6	466
Wash.	109	125	2	202	1	-	6	-	-	5
Oreg.	82	70	3	123	-	-	4	-	1	2
Calif.	3,059	2,789	56	2,588	5	-	79	-	5	381
Alaska	9	10	-	65	1	-	1	-	-	78
Hawaii	80	50	7	210	-	1	3	-	-	-
Guam	1	-	U	34	-	U	-	U	-	-
P.R.	500	483	2	291	-	-	2	-	-	41
V.I.	21	13	-	1	-	-	-	-	-	-
Pac. Trust Terr.	-	-	U	85	-	U	-	U	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending September 18, 1982 (37th week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	640	423	150	30	16	21	33
Boston, Mass.	166	95	49	8	7	7	14
Bridgeport, Conn.	40	26	8	3	-	3	4
Cambridge, Mass.	35	27	6	1	1	-	1
Fall River, Mass.	30	21	7	-	-	2	-
Hartford, Conn.	44	36	5	1	1	1	2
Lowell, Mass.	27	21	6	-	-	-	1
Lynn, Mass.	15	11	1	1	1	1	-
New Bedford, Mass.	30	18	8	2	1	1	1
New Haven, Conn.	51	33	10	4	2	2	1
Providence, R.I.	66	37	22	4	1	2	1
Somerville, Mass.	7	7	-	-	-	-	-
Springfield, Mass.	42	25	10	4	1	2	6
Waterbury, Conn.	31	23	8	-	-	-	2
Worcester, Mass.	56	43	10	2	1	-	-
MID. ATLANTIC	2,599	1,663	588	196	69	83	91
Albany, N.Y.	58	38	13	3	1	3	1
Allentown, Pa.	20	15	5	-	-	-	-
Buffalo, N.Y.	117	75	23	9	7	3	5
Camden, N.J.	38	24	8	4	1	1	2
Elizabeth, N.J.	36	24	9	3	-	-	2
Erie, Pa.†	45	31	9	3	1	1	2
Jersey City, N.J.	52	33	10	3	5	1	-
N.Y. City, N.Y.	1,432	920	301	130	37	44	46
Newark, N.J.	63	35	19	4	2	3	5
Paterson, N.J.	25	17	5	1	-	2	1
Philadelphia, Pa.†	296	187	69	19	5	16	16
Pittsburgh, Pa.†	79	48	27	2	1	1	1
Reading, Pa.	31	23	7	-	1	-	3
Rochester, N.Y.	109	70	31	5	1	2	1
Schenectady, N.Y.	29	22	5	2	-	-	2
Scranton, Pa.†	23	15	5	2	-	1	-
Syracuse, N.Y.	82	46	24	2	6	4	2
Trenton, N.J.	27	17	7	1	1	1	-
Utica, N.Y.	23	13	8	2	-	-	-
Yonkers, N.Y.	14	10	3	1	-	-	2
E.N. CENTRAL	2,193	1,397	510	135	71	80	68
Akron, Ohio	55	41	12	-	-	2	-
Canton, Ohio	37	27	8	2	-	-	1
Chicago, Ill	495	309	98	45	22	21	7
Cincinnati, Ohio	126	84	30	4	5	3	9
Cleveland, Ohio	151	97	38	6	4	6	-
Columbus, Ohio	139	73	35	10	8	13	1
Dayton, Ohio	92	53	33	3	2	1	3
Detroit, Mich.	284	172	64	29	10	9	7
Evansville, Ind.	45	31	11	3	-	-	2
Fort Wayne, Ind.	49	33	9	2	4	1	5
Gary, Ind.	34	20	8	3	2	1	2
Grand Rapids, Mich.	60	38	12	4	4	2	7
Indianapolis, Ind.	174	109	50	5	-	10	2
Madison, Wis.	25	18	5	-	1	1	1
Milwaukee, Wis.	123	90	26	3	2	2	6
Peoria, Ill.	37	27	5	3	1	1	4
Rockford, Ill.	41	26	8	2	3	2	2
South Bend, Ind.	45	27	11	5	1	1	5
Toledo, Ohio	117	74	33	6	-	4	3
Youngstown, Ohio	64	48	14	-	2	-	1
W.N. CENTRAL	757	524	155	36	17	24	32
Des Moines, Iowa§	53	51	-	-	1	-	-
Duluth, Minn.	29	20	8	1	-	-	-
Kansas City, Kans.	36	25	6	3	-	2	3
Kansas City, Mo.	125	77	27	7	5	9	5
Lincoln, Nebr.	33	24	6	1	1	1	4
Minneapolis, Minn.	88	63	15	3	3	4	2
Omaha, Nebr.	85	52	27	4	1	1	3
St. Louis, Mo.	182	122	36	14	5	5	8
St. Paul, Minn.	69	49	16	2	1	1	3
Wichita, Kans.	57	41	14	1	-	1	4

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,068	665	241	79	34	49	31
Atlanta, Ga.	163	109	32	15	6	1	-
Baltimore, Md.	204	125	44	12	10	13	7
Charlotte, N.C.	68	40	21	2	1	4	2
Jacksonville, Fla.	124	72	30	12	3	7	4
Miami, Fla.	72	47	15	5	4	1	2
Norfolk, Va.	55	32	12	1	2	8	3
Richmond, Va.	79	42	20	9	4	4	2
Savannah, Ga.	43	20	18	4	1	-	-
St. Petersburg, Fla.	83	73	6	2	1	1	5
Tampa, Fla.	79	48	13	8	2	8	2
Washington, D.C.	31	15	12	2	-	2	-
Wilmington, Del.	67	42	18	7	-	-	4
E.S. CENTRAL	716	445	156	57	20	38	26
Birmingham, Ala.	92	55	24	8	1	4	2
Chattanooga, Tenn.	62	46	10	4	1	1	3
Knoxville, Tenn.	53	37	12	3	1	-	1
Louisville, Ky.	108	60	25	14	3	6	4
Memphis, Tenn.	166	99	35	13	6	13	8
Mobile, Ala.	62	40	12	7	2	1	3
Montgomery, Ala.	56	42	11	1	1	1	1
Nashville, Tenn.	117	66	27	7	5	12	4
W.S. CENTRAL	1,257	727	290	115	76	48	34
Austin, Tex.	59	30	18	6	5	-	2
Baton Rouge, La.	72	52	11	5	2	2	3
Corpus Christi, Tex.	38	26	4	2	1	5	-
Dallas, Tex.	181	99	45	19	13	5	3
El Paso, Tex.	62	26	23	8	3	1	3
Fort Worth, Tex.	114	71	29	9	5	-	3
Houston, Tex.	252	106	73	33	28	12	-
Little Rock, Ark.	68	41	13	7	4	3	3
New Orleans, La.	91	58	20	7	3	3	-
San Antonio, Tex.	155	100	33	8	4	10	9
Shreveport, La.	61	46	9	1	3	2	2
Tulsa, Okla.	104	72	12	10	5	5	6
MOUNTAIN	631	377	156	50	23	25	18
Albuquerque, N.Mex.	62	38	18	2	2	2	3
Colo. Springs, Colo.	32	21	7	2	-	2	2
Denver, Colo.	132	88	26	11	5	2	4
Las Vegas, Nev.	81	38	24	12	4	3	-
Ogden, Utah	14	8	2	2	-	2	-
Phoenix, Ariz.	134	81	35	6	7	5	1
Pueblo, Colo.	23	14	5	2	1	1	1
Salt Lake City, Utah	52	27	13	5	2	5	2
Tucson, Ariz.	101	62	26	8	2	3	5
PACIFIC	1,787	1,148	373	128	85	51	81
Berkeley, Calif.	27	18	4	3	1	1	-
Fresno, Calif.	60	46	7	2	5	-	4
Glendale, Calif.	27	21	5	-	1	-	-
Honolulu, Hawaii	63	32	18	5	2	6	4
Long Beach, Calif.	80	52	17	8	2	1	5
Los Angeles, Calif.	480	293	106	40	29	11	13
Oakland, Calif.	65	42	17	2	2	2	7
Pasadena, Calif.	34	19	8	-	1	6	-
Portland, Oreg.	148	95	34	8	8	3	3
Sacramento, Calif.	78	49	13	6	5	5	6
San Diego, Calif.	144	96	32	7	6	2	13
San Francisco, Calif.	173	104	42	18	5	4	4
San Jose, Calif.	177	119	33	14	7	4	14
Seattle, Wash.	147	101	25	11	7	3	3
Spokane, Wash.	49	37	5	2	3	2	4
Tacoma, Wash.	35	24	7	2	1	1	1
TOTAL	11,648††	7,369	2,619	826	411	419	414

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza

† Because of changes in reporting methods in these 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Immune Deficiency Syndrome — Continued

lymphadenopathy) (*4*) to specific diseases that are insufficiently predictive of cellular immunodeficiency to be included in incidence monitoring (e.g., tuberculosis, oral candidiasis, herpes zoster) to malignant neoplasms that cause, as well as result from, immunodeficiency¶ (*5*). Conversely, some patients who are considered AIDS cases on the basis of diseases only moderately predictive of cellular immunodeficiency may not actually be immunodeficient and may not be part of the current epidemic. Absence of a reliable, inexpensive, widely available test for AIDS, however, may make the working case definition the best currently available for incidence monitoring.

Two points in this update deserve emphasis. First, the eventual case-mortality rate of AIDS, a few years after diagnosis, may be far greater than the 41% overall case-mortality rate noted

¶CDC encourages reports of any cancer among persons with AIDS and of selected rare lymphomas (Burkitt's or diffuse, undifferentiated non-Hodgkins lymphoma) among persons with a risk factor for AIDS. This differs from the request for reports of AIDS cases regardless of the absence of risk factors.

TABLE 2. AIDS cases per million population,* by standard metropolitan statistical area (SMSA) of residence, reported from June 1, 1981 to September 15, 1982 — United States

SMSA of residence	Cases	Percentage of total	Cases per million population
New York, N.Y.	288	48.6	31.6
San Francisco, Calif.	78	13.2	24.0
Miami, Fla.	31	5.2	19.1
Newark, N.J.	15	2.5	7.6
Houston, Texas	15	2.5	5.2
Los Angeles, Calif.	37	6.2	4.9
Elsewhere (irrespective of SMSA)	129	21.8	0.6
Total	593	100.0	2.6

*From the 1980 Census

TABLE 3. Cases of AIDS, by sexual orientation and intravenous drug abuse, reported from June 1, 1981, to September 15, 1982 — United States

Sex	Sexual orientation	Cases	Percentage distribution by sexual orientation	Intravenous drug abuse*			Percentage using IV drugs†
				Yes	No	Unknown	
Male	Homosexual or bisexual	445	75.0	42	300	103	12.3
	Heterosexual	84	14.2	49	33	2	59.8
	Unknown	30	5.1	11	11	8	50.0
Female	Heterosexual	34	5.7	20	12	2	62.5
Total		593	100.0	122	356	115	25.5

*Regardless of when the last such activity occurred.

†Excluding cases with unknown history of IV drug abuse.

Immune Deficiency Syndrome – Continued

above. Second, the reported incidence of AIDS has continued to increase rapidly. Only a small percentage of cases have none of the identified risk factors (male homosexuality, intravenous drug abuse, Haitian origin, and perhaps hemophilia A). To avoid a reporting bias, physicians should report cases regardless of the absence of these factors.

Physicians aware of patients fitting the case definition for AIDS are requested to report such cases to CDC through their local or state health departments.

References

1. CDC. Update on Kaposi's sarcoma and opportunistic infections in previously healthy persons - United States. MMWR 1982;31:294, 300-1.
2. CDC. Opportunistic infections and Kaposi's sarcoma among Haitians in the United States. MMWR 1982;31:353-4, 360-1.
3. CDC. *Pneumocystis carinii* pneumonia among persons with hemophilia A. MMWR 1982;31:365-7.
4. CDC. Persistent, generalized lymphadenopathy among homosexual males. MMWR 1982;31:249-51.
5. CDC. Diffuse, undifferentiated non-Hodgkins lymphoma among homosexual males—United States. MMWR 1982;31:277-9.

Clarification, Vol. 31, No. 35

p. 477. In the article, "Rubella Vaccination During Pregnancy—United States, 1971-1981," the second-to-last paragraph on page 480 should read, "Nevertheless, rubella vaccine should not be administered to pregnant females. Reasonable precautions before administering rubella vaccine to women of child-bearing age include asking whether they are pregnant and excluding those who say they are. Those who say they are not pregnant are advised not to become pregnant for 3 months after vaccination."

Erratum, Vol. 31, No. 36

p. 494 In the article "Influenza—Worldwide," incorrect dates were given in the editorial note on page 495 for the first circulation of H1N1 viruses in the United States (early 1978, not early 1977); and for the last major epidemics of influenza A(H3N2) virus in the United States (1980-1981, not 1979-1980).

The Morbidity and Mortality Weekly Report, circulation 111,104, is published by the Centers for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts on interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Attn: Editor, Morbidity and Mortality Weekly Report, Centers for Disease Control, Atlanta, Georgia 30333.

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