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MORBIDITY AND MORTALITY WEEKLY REPORT

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Epidemiologic Notes and Reports

Arboviral Encephalitis — United States, 1983

Thus far in 1983, 22 cases of arboviral encephalitis in humans have been reported in the United States; additional cases have been reported in horses, chickens, and wild birds.

Eastern Equine Encephalitis (EEE): Nine human cases of EEE have been diagnosed by virus isolation or serology. Three cases occurred in Florida: a 12-year-old boy from Marion County developed symptoms on July 12 and has recovered with mild residual hemiparesis; a 66-year-old woman from Walton County had onset July 16 and died July 26; a 7-year-old girl from Pensacola had onset of a relatively mild illness July 14 and has recovered. Five confirmed cases have been reported from Massachusetts. Three had presumed exposure in the southeastern part of the state (Plymouth and Bristol Counties): a 64-year-old man with onset August 4 had a fatal case; a 28-year-old woman who developed symptoms about August 11; and an 11-year-old boy with onset August 12 have recovered. A fourth case occurred in a 53-year-old Massachusetts man from Randolph who had onset between August 15 and 17 and remains comatose. A fifth case occurred August 18 in a 58-year-old Norwood woman who recovered. A confirmed case occurred in a 49-year-old woman from Lowndes County, Georgia, who had onset July 14; she recovered but has neurological sequelae.

Cases of EEE in horses have been reported from Florida (55 cases), Louisiana (6), New York (6), New Jersey (5), Massachusetts (4), Rhode Island (4), Michigan (3), Alabama (2), Mississippi (2), Tennessee (2), Georgia (1), and Maryland (1).

Western Equine Encephalitis (WEE): No human cases have been reported. Cases in horses have occurred in South Dakota (6 cases with laboratory evidence), North Dakota (3), California (2), Kansas (2), Minnesota (2), Montana (2), Texas (2), Arizona (1), and New Mexico (1). WEE virus transmission is at a high level, as reflected by isolations from *Culex tarsalis* mosquitoes in parts of Arizona, California, Minnesota, and North Dakota. Vector control efforts have been undertaken in some areas; aerial spraying of malathion has been initiated in a 29-county area of west-central and northwestern Minnesota.

St. Louis Encephalitis (SLE): Two serologically confirmed, non-fatal cases of SLE have been reported (one in a 24-year-old woman from near Yuma, Arizona, with onset June 20, and a second in a 3-year-old boy from Bard, California, with onset July 26). A high rate of SLE virus transmission in flooded areas of southern Arizona has been demonstrated by testing *Cx. tarsalis* collected in early August. In the central and southeastern United States (Alabama, Florida, Illinois, Indiana, Kentucky, Mississippi, Ohio, and Tennessee) SLE virus activity deter-

Arboviral Encephalitis – Continued

mined by serologic surveillance of wild birds and sentinel chickens has been minimal. In Texas, the virus has been recovered from *Cx. pipiens* mosquitoes in Harris County.

California Virus Group Encephalitis: Eleven confirmed and presumptive human cases have been reported. Five cases occurred in Illinois (an 11-year-old boy, Peoria County, onset June 14; a 6-year-old boy, Du Page County, July 12; a 4-year-old boy, Woodford County, July 20; a 14-year-old girl, Edgar County, July 22; and a 12-year-old girl, Marion County, July 24). Five cases occurred in Ohio (a 7-year-old boy, Licking County, onset July 13; a 6-year-old girl, Franklin County, July 16; an 8-year-old girl, Cuyahoga County, late July; a 9-year-old boy, Hawking County, early August; and a 5-year-old girl, Sandusky County, early August). One case occurred in Wisconsin (a 22-month-old boy from Vernon County, onset July 15).

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Editorial Note: In 1982, there were 13 reported cases of EEE in the United States, the largest number since 1959 (when 36 cases occurred, most during an outbreak in coastal New Jersey). Increased EEE virus activity has often occurred in two successive years. In 1983, EEE virus transmission appeared earlier than in previous years in some areas. The first equine case in New Jersey, with onset July 8, was the earliest ever recorded in the state.

The area affected in southeastern Massachusetts is characterized by fresh-water marshes, wooded swamps, and small lakes and ponds, where EEE virus is transmitted every summer in its enzootic cycle involving birds and *Culiseta melanura* mosquitoes. Other vector species, including *Coquillettidia perturbans* and *Aedes* species, are responsible for spreading the virus from the enzootic cycle to clinical hosts (horses and humans). Climatologic factors appear important in amplifying EEE virus activity. In southeastern Massachusetts, the danger of an EEE outbreak is associated with the second consecutive year of excessive rainfall (1,2), and this pattern has been seen in outbreak years (1955, 1973, and 1983).

References

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DDT Exposures in a Natural History Museum — Colorado

In October 1981, the Denver Museum of Natural History, Denver, Colorado, requested assistance from the National Institute for Occupational Safety and Health (NIOSH) in evaluating occupational exposures to dichlorodiphenyl trichloroethane (DDT) because of concern about possible health hazards (1). Workers potentially exposed to DDT included curators, preparators, and museum assistants involved in cleaning, packaging, and storing animal skeletons coated with the pesticide.

During a 3-day cleanup and renovation period in November 1982, NIOSH investigators collected environmental air samples for testing for DDT both from the general workplace environment and from personal breathing zones. Test results showed these air samples (range 0.001-0.1 mg/m³) were below both the Occupational Safety and Health Administration's (OSHA) standard for occupational exposure to DDT (1.0 mg/m³) (2) and the level currently recommended by NIOSH (0.5 mg/m³) (3). Bulk samples of dust, dirt, and scrapings from the skeletons were collected from several locations in the storage area. DDT levels ranged from 4 to 5,500 µg/g.

Before and during the cleanup, the museum implemented a NIOSH-recommended program designed to reduce exposures to DDT at the museum, consisting of: (1) preventive work practices (e.g., wearing impervious coveralls, boots, and gloves and using NIOSH-approved respirators); (2) appropriate personal hygiene (e.g., showering at the end of the workday and washing hands and face before eating, drinking, or smoking); (3) engineering controls (e.g., an enclosure to collect DDT waste materials during the cleaning of the bones, an exhaust ventilation system to prevent airborne particulates from reaching the employees' breathing zones, and a vacuum system to remove DDT-laden dust from the room during the final stages of cleaning).

Reported by Region VIII and Hazard Evaluations and Technical Assistance Br, Div of Surveillance, Hazard Evaluations, and Field Studies, NIOSH, CDC.

Editorial Note: Once widely used in the United States, DDT, a chlorinated hydrocarbon insecticide, has been banned from sale in this country since December 31, 1972. Before this time, it was widely used as a disinfectant on animal specimens shipped to museums throughout the United States. Potential exposures to DDT occurred when a curator or preparator cleaned the materials in preparation for display. The renovation of the Denver museum necessitated the complete cleaning and packing of all specimens, as well as decontamination of the old storage area.

Because DDT is more persistent in the environment than most synthetic organic pesticides (e.g., organophosphates, carbamates), concern continues about its chronic absorption, particularly as a residue in food. In general, chlorinated hydrocarbons may stimulate or depress the central nervous system. Mild poisoning with chlorinated hydrocarbons causes dizziness, nausea, abdominal pain, and vomiting; other symptoms include confusion, malaise, headaches, and irritation of the eyes and skin. Both OSHA and NIOSH recommend that skin contact with DDT be avoided.

Arsenic is also used for preserving animal specimens (4,5) and may pose an occupational hazard for taxidermists and museum workers. Wherever appropriate, steps should be taken to limit exposures to this hazard as well.

References

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DDT Exposures — Continued

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Current Trends

Shigellosis — United States, 1982

In 1982, 13,523 *Shigella* isolations from humans were reported to CDC. This represents a 9.9% decrease from the 15,006 isolations reported in 1981. The number of isolations has continued to decline from the 15,334 reported during the peak year, 1978 (Figure 1).

Shigella serotypes were reported for 12,818 of the 13,523 isolates and were distributed by serotype as follows: *S. sonnei*—8,228 (64.2%), *S. flexneri*—4,165 (32.5%), *S.* (Continued on page 449)

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

Disease	34th Week Ending			Cumulative, 34th Week Ending		
	August 27, 1983	August 28, 1982	Median 1978-1982	August 27, 1983	August 28, 1982	Median 1978-1982
Aseptic meningitis	508	361	407	5,340	4,596	3,622
Encephalitis: Primary (arthropod-borne & unspec.)	56	58	45	832	782	623
Post-infectious	-	1	2	58	59	146
Gonorrhea: Civilian	17,665	19,332	21,472	576,275	618,549	638,780
Military	394	336	373	15,697	17,582	17,723
Hepatitis: Type A	433	462	490	13,880	14,488	17,931
Type B	519	440	364	14,744	13,879	11,254
Non A, Non B	47	55	N	2,184	1,508	N
Unspecified	141	149	188	5,049	5,586	6,525
Legionellosis	12	21	N	461	357	N
Leprosy	2	2	4	163	136	124
Malaria	21	43	17	503	701	701
Measles: Total	3	16	25	1,178	1,183	11,899
Indigenous	1	N	N	980	N	N
Imported*	2	N	N	198	N	N
Meningococcal infections: Total	32	36	33	1,983	2,129	1,900
Civilian	32	36	33	1,968	2,117	1,885
Military	-	-	-	15	12	14
Mumps	20	17	38	2,400	4,153	6,963
Pertussis	51	63	50	1,402	930	930
Rubella (German measles)	7	11	26	758	1,953	3,179
Syphilis (Primary & Secondary): Civilian	722	734	534	21,034	21,571	17,015
Military	8	6	6	268	273	217
Toxic-shock syndrome	3	N	N	271	N	N
Tuberculosis	519	502	544	15,190	16,430	17,655
Tularemia	8	7	6	208	153	134
Typhoid fever	13	15	9	252	258	306
Typhus fever, tick-borne (RMSF)	50	21	39	904	737	775
Rabies, animal	90	157	134	3,964	4,195	4,195

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1983		Cum. 1983
Anthrax	-	Plague	27
Botulism: Foodborne	13	Poliomyelitis: Total	4
Infant	38	Paralytic	4
Other	-	Psittacosis (Upstate N.Y. 3, Iowa 1, Md. 1, Oreg. 1)	82
Brucellosis (Mo. 1, Kans. 1, Tex. 2, Calif. 1)	131	Rabies, human	2
Cholera	1	Tetanus (Ark. 1)	48
Congenital rubella syndrome	16	Trichinosis (N.Y. City 1, Pa. 1)	26
Diphtheria	-	Typhus fever, flea-borne (endemic, murine) (Tex. 1)	33
Leptospirosis (La. 1)	32		

*One of the three reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 27, 1983 and August 28, 1982 (34th week)

Reporting Area	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leptosy	Malaria
		Primary	Post-infectious			A	B	NA,NB	Unspecified			
		1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1982	1983	1983	1983	1983	1983	Cum. 1983
UNITED STATES	508	832	58	576,275	618,549	433	519	47	141	12	163	503
NEW ENGLAND	25	33	-	14,864	14,860	10	26	3	10	-	3	26
Maine	1	-	-	723	752	1	1	-	1	-	-	1
N.H.	2	5	-	460	517	-	1	-	-	-	2	-
Vt.	6	1	-	275	276	-	1	1	-	-	-	1
Mass.	6	14	-	6,370	6,731	-	3	-	9	-	-	12
R.I.	1	-	-	809	995	2	7	-	-	-	-	3
Conn.	9	13	-	6,227	5,589	7	13	2	-	-	1	9
MID ATLANTIC	78	76	5	73,650	76,175	78	94	1	27	3	20	69
Upstate N.Y.	32	19	-	11,415	12,099	10	18	1	6	-	-	21
N.Y. City	7	9	-	29,857	31,973	28	17	-	3	3	19	19
N.J.	25	16	-	13,644	13,757	11	32	-	14	-	-	22
Pa.	14	32	5	18,734	18,346	29	27	-	4	-	1	7
EN. CENTRAL	120	256	18	80,208	89,054	24	50	4	6	3	5	37
Ohio	36	82	7	21,788	24,244	14	18	3	2	1	1	6
Ind.	26	79	1	8,655	10,562	2	10	-	3	-	-	-
Ill.	5	16	7	20,134	25,302	1	2	-	1	-	2	14
Mich.	53	61	-	22,386	20,984	7	20	1	-	2	2	14
Wis.	-	18	3	7,265	7,962	-	-	-	-	-	-	3
W.N. CENTRAL	48	64	7	26,382	29,110	5	21	3	2	1	5	20
Minn.	-	19	1	3,737	4,236	-	5	1	1	-	4	6
Iowa	11	34	-	2,989	3,071	-	-	1	1	-	-	3
Mo.	23	7	-	12,524	13,819	1	12	1	-	1	-	2
N. Dak.	-	-	-	281	390	-	-	-	-	-	-	2
S. Dak.	4	-	2	731	803	1	-	-	-	-	-	1
Nebr.	-	3	-	1,756	1,775	-	1	-	-	-	-	1
Kans.	10	1	4	4,364	5,016	3	3	-	-	-	1	5
S. ATLANTIC	78	127	15	150,152	161,895	42	117	7	14	2	9	75
Del.	-	-	-	2,703	2,594	-	9	-	-	-	-	1
Md.	23	16	-	19,313	20,616	4	33	3	3	1	1	13
D.C.	2	-	-	10,260	9,067	-	2	1	-	-	-	11
Va.	10	27	2	13,322	12,802	2	4	-	2	-	1	13
W. Va.	1	16	-	1,515	1,790	-	3	-	-	-	-	1
N.C.	25	31	-	22,895	25,781	6	11	-	5	-	-	3
S.C.	3	2	-	14,211	15,627	5	20	-	-	-	-	5
Ga.	2	6	1	30,132	30,989	3	13	-	-	-	1	7
Fla.	12	29	12	35,801	42,629	22	22	3	4	1	6	21
E.S. CENTRAL	17	32	1	48,360	53,206	53	25	5	2	1	-	7
Ky.	7	1	-	5,667	7,256	34	1	1	1	-	-	-
Tenn.	7	7	-	19,834	20,972	5	13	3	1	-	-	-
Ala.	3	21	-	14,951	15,542	11	4	1	-	-	-	5
Miss.	-	3	1	7,908	9,436	3	7	-	-	1	-	2
W.S. CENTRAL	49	99	2	82,550	84,509	78	49	1	53	1	20	47
Ark.	-	6	-	6,313	6,976	1	2	-	1	1	-	1
La.	-	8	-	15,553	15,253	12	7	1	5	-	1	5
Okla.	10	24	1	9,565	9,456	19	6	-	2	-	-	9
Tex.	39	61	1	51,119	52,824	46	34	-	45	-	19	32
MOUNTAIN	40	41	4	18,479	21,070	42	36	5	10	-	12	23
Mont.	-	-	-	781	863	2	5	1	2	-	-	-
Idaho	2	-	-	772	951	3	4	-	-	-	-	2
Wyo.	-	2	-	486	601	1	-	-	-	-	-	1
Colo.	27	22	-	5,203	5,686	8	7	2	-	-	2	8
N. Mex.	-	1	-	2,285	2,729	5	4	-	-	-	-	5
Ariz.	2	7	4	5,261	5,655	20	10	1	7	-	9	4
Utah	5	9	-	870	995	1	-	1	1	-	1	3
Nev.	4	-	-	2,821	3,590	2	6	-	-	-	-	-
PACIFIC	53	104	6	81,630	88,670	101	101	18	17	1	89	199
Wash.	2	8	1	6,218	7,374	4	4	-	-	-	12	6
Oreg.	-	-	2	4,446	5,053	24	8	2	2	1	1	6
Calif.	42	89	3	67,162	72,355	69	89	16	15	-	52	187
Alaska	-	-	-	2,145	2,199	4	-	-	-	-	-	-
Hawaii	9	7	-	1,659	1,689	-	-	-	-	-	24	-
Guam	U	-	-	74	97	U	U	U	U	U	-	2
P.R.	12	-	1	1,708	1,904	1	2	-	4	-	-	2
V.I.	-	-	-	172	180	-	-	-	-	-	-	-
Pac. Trust Terr.	U	-	-	-	317	U	U	U	U	U	-	-

N: Not notifiable

U: Unavailable

TABLE III. (Cont'd). Cases of specified notifiable diseases, United States, weeks ending August 27, 1983 and August 28, 1982 (34th week)

Reporting Area	Measles (Rubeola)					Menin- gococcal infections	Mumps			Pertussis			Rubella		
	Indigenous		Imported*		Total		1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982
	1983	Cum. 1983	1983	Cum. 1983	Cum. 1982										
UNITED STATES	1	980	2	198	1,183	1,983	20	2,400	4,153	51	1,402	930	7	758	1,953
NEW ENGLAND	-	2	1	14	13	98	1	96	158	1	44	37	-	11	14
Maine	-	-	-	-	-	8	1	16	36	-	4	3	-	-	-
N.H.	-	-	-	3	2	3	-	18	13	-	6	4	-	3	8
Vt.	-	-	-	-	2	7	-	14	7	-	7	2	-	3	-
Mass.	-	2	1†	3	3	32	-	23	70	1	22	16	-	5	2
R.I.	-	-	-	-	-	8	-	12	15	-	5	10	-	-	1
Conn.	-	-	-	8	6	40	-	13	17	-	-	2	-	-	3
MID ATLANTIC	1	68	-	24	154	332	3	191	257	8	281	164	-	134	92
Upstate N.Y.	-	1	-	8	109	103	2	73	58	2	91	76	-	25	45
N.Y. City	1	41	-	12	37	60	1	33	44	4	45	23	-	86	31
N.J.	-	26	-	1	4	55	-	33	36	-	16	17	-	3	16
Pa.	-	-	-	3	4	114	-	52	119	2	129	48	-	20	-
E.N. CENTRAL	-	556	-	56	74	369	3	1,176	2,236	5	282	209	-	107	175
Ohio	-	72	-	13	1	113	2	538	1,556	-	86	54	-	2	-
Ind.	-	384	-	4	2	45	1	33	37	2	35	15	-	23	27
Ill.	-	98	-	33	24	106	-	121	250	-	99	89	-	45	65
Mich.	-	2	-	5	47	66	-	419	294	2	23	18	-	15	48
Wis.	-	-	-	1	-	39	-	65	99	1	39	33	-	22	35
W.N. CENTRAL	-	-	1	1	49	111	2	138	537	1	87	46	1	31	55
Minn.	-	-	-	-	-	16	-	27	416	-	33	16	-	6	5
Iowa	-	-	-	-	-	12	-	35	30	-	5	5	-	-	-
Mo.	-	-	1§	1	2	55	-	21	9	-	12	12	-	-	38
N. Dak.	-	-	-	-	-	3	-	-	-	-	1	-	-	-	-
S. Dak.	-	-	-	-	-	4	-	-	1	1	6	4	-	-	1
Nebr.	-	-	-	-	3	1	-	2	-	-	-	1	-	-	-
Kans.	-	-	-	-	44	20	2	53	81	-	30	8	1	25	11
S. ATLANTIC	-	163	-	26	40	415	3	157	236	-	179	168	2	93	69
Del.	-	-	-	-	-	-	-	8	10	-	3	5	-	1	1
Md.	-	6	-	4	2	43	-	24	24	-	14	42	2	3	33
D.C.	-	-	-	-	1	4	-	-	-	-	-	1	-	-	-
Va.	-	10	-	13	14	59	1	30	33	-	45	18	-	2	12
W. Va.	-	-	-	-	3	2	1	36	88	-	5	5	-	-	1
N.C.	-	-	-	1	-	84	1	9	11	-	21	19	-	10	1
S.C.	-	-	-	4	-	44	-	8	13	-	13	16	-	1	1
Ga.	-	8	-	-	-	68	-	42	12	-	54	30	-	11	6
Fla.	-	139	-	4	20	111	-	-	45	-	24	32	-	66	14
E.S. CENTRAL	-	1	-	5	7	122	-	46	41	1	19	36	-	11	44
Ky.	-	-	-	1	1	26	-	21	14	1	7	5	-	10	26
Tenn.	-	-	-	-	6	42	-	20	15	-	5	18	-	-	2
Ala.	-	1	-	4	-	37	-	2	6	-	3	4	-	1	-
Miss.	-	-	-	-	-	17	-	3	6	-	4	9	-	-	16
W.S. CENTRAL	-	39	-	34	37	213	2	200	163	15	283	64	1	103	91
Ark.	-	5	-	7	-	17	-	2	6	1	16	3	-	-	1
La.	-	-	-	25	2	43	-	45	5	-	6	9	-	9	1
Okla.	-	1	-	-	21	25	-	-	-	13	205	5	-	-	3
Tex.	-	33	-	2	14	128	2	153	152	1	56	47	1	94	86
MOUNTAIN	-	1	-	3	11	73	2	98	81	13	149	55	1	30	75
Mont.	-	-	-	-	-	11	-	2	3	-	1	1	1	6	5
Idaho	-	-	-	-	-	6	-	6	3	1	6	11	-	8	6
Wyo.	-	-	-	1	2	-	-	2	-	-	6	2	-	2	7
Colo.	-	-	-	2	8	25	2	12	15	10	98	14	-	-	6
N. Mex.	-	-	-	-	-	6	-	-	-	-	10	5	-	-	6
Ariz.	-	-	-	1	2	14	-	68	33	-	14	21	-	6	14
Utah	-	-	-	-	-	8	-	6	19	2	14	1	-	7	20
Nev.	-	1	-	-	-	1	-	4	6	-	-	-	-	1	11
PACIFIC	-	150	-	35	798	250	4	298	444	7	78	151	2	238	1,338
Wash.	-	1	-	4	39	33	-	38	61	-	13	20	-	12	37
Oreg.	-	7	-	2	6	38	-	-	-	-	6	24	-	13	6
Calif.	-	141	-	27	748	170	4	233	368	6	57	79	1	211	1,283
Alaska	-	-	-	2	1	2	-	12	6	-	-	-	-	1	5
Hawaii	-	1	-	-	4	7	-	15	9	1	2	28	1	1	7
Guam	U	1	U	1	6	1	U	-	3	U	-	-	U	-	2
P.R.	-	83	-	-	94	11	-	109	53	-	9	17	1	4	8
V.I.	-	-	-	5	-	-	-	-	2	-	-	-	-	2	-
Pac. Trust Terr.	U	-	U	-	-	-	U	-	5	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international imports.

U Unavailable

† International

§ Out-of-state

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending August 27, 1983 and August 28, 1982 (34th week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1983	Cum. 1982	1983	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983
UNITED STATES	21,034	21,371	3	519	15,190	208	252	904	3,964
NEW ENGLAND	443	361	1	11	438	4	10	6	21
Maine	15	3	1	-	27	-	-	-	6
N.H.	17	4	-	-	29	-	-	1	2
Vt.	2	1	-	-	9	-	-	-	1
Mass.	272	246	-	8	233	3	8	2	7
R.I.	15	19	-	-	28	1	-	-	-
Conn.	122	88	-	3	112	-	2	3	5
MID ATLANTIC	2,648	2,991	1	63	2,702	-	43	24	166
Upstate N.Y.	165	319	-	8	447	-	6	6	56
N.Y. City	1,600	1,776	-	22	1,086	-	16	1	-
N.J.	521	408	-	13	567	-	16	8	14
Pa.	362	488	1	20	602	-	5	9	96
E.N. CENTRAL	1,063	1,313	1	73	2,048	2	44	66	351
Ohio	302	197	1	-	304	-	11	42	43
Ind.	87	133	-	14	215	-	2	6	26
Ill.	474	734	-	16	897	1	22	12	187
Mich.	146	185	-	38	527	1	9	6	8
Wis.	54	64	-	5	105	-	-	-	87
W.N. CENTRAL	251	369	-	17	485	66	9	45	601
Minn.	103	74	-	12	104	-	2	-	106
Iowa	13	21	-	1	40	-	-	-	153
Mo.	93	218	-	-	235	52	6	22	85
N. Dak.	2	7	-	-	5	-	-	1	58
S. Dak.	9	1	-	1	32	3	-	4	82
Nebr.	11	11	-	1	20	5	-	2	56
Kans.	20	37	-	2	49	6	1	16	61
S. ATLANTIC	5,614	5,807	-	106	3,082	13	36	373	1,344
Del.	23	10	-	-	27	-	-	3	4
Md.	358	315	-	8	250	5	6	34	555
D.C.	245	327	-	7	125	-	1	-	1
Va.	388	399	-	11	323	1	7	47	490
W. Va.	17	20	-	4	94	-	2	11	96
N.C.	525	446	-	14	442	6	3	150	16
S.C.	350	344	-	5	270	-	1	64	19
Ga.	1,038	1,188	-	26	581	1	2	60	144
Fla.	2,670	2,758	-	31	970	-	14	4	19
E.S. CENTRAL	1,450	1,492	-	46	1,358	14	6	64	275
Ky.	100	78	-	1	320	-	3	9	63
Tenn.	404	411	-	30	423	9	1	35	162
Ala.	569	544	-	10	356	-	1	17	50
Miss.	377	459	-	5	259	5	1	3	-
W.S. CENTRAL	5,567	5,571	-	88	1,798	89	34	314	782
Ark.	136	138	-	16	212	58	2	27	131
La.	1,167	1,261	-	-	242	2	3	1	21
Okla.	144	119	-	13	164	23	2	203	86
Tex.	4,120	4,053	-	59	1,180	6	27	83	544
MOUNTAIN	438	546	-	16	406	16	7	10	158
Mont.	6	3	-	-	34	5	1	5	66
Idaho	6	24	-	1	23	2	-	2	6
Wyo.	10	14	-	-	10	3	-	2	7
Colo.	101	148	-	4	53	1	1	-	18
N. Mex.	127	135	-	-	82	2	-	-	7
Ariz.	108	119	-	8	164	1	3	-	32
Utah	16	15	-	3	27	1	1	-	5
Nev.	64	88	-	-	13	1	1	1	17
PACIFIC	3,560	3,121	-	99	2,873	4	63	2	266
Wash.	113	105	-	6	154	2	3	-	2
Oreg.	92	73	-	4	123	1	3	-	1
Calif.	3,301	2,856	-	89	2,408	1	55	2	248
Alaska	9	8	-	-	36	-	-	-	15
Hawaii	45	79	-	-	152	-	2	-	-
Guam	-	1	U	U	3	-	-	-	-
P.R.	499	443	-	11	330	-	-	-	36
V.I.	16	21	-	-	2	-	-	-	-
Pac. Trust Terr.	-	-	U	U	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending
August 27, 1983 (34th week)

Reporting Area	All Causes, By Age (Years)						P&I** Total	Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	648	439	137	38	18	16	50	S. ATLANTIC	1,044	637	265	71	29	42	40
Boston, Mass.	183	111	45	16	5	6	22	Atlanta, Ga.	171	92	48	21	5	5	1
Bridgeport, Conn.	36	21	13	1	1	-	3	Baltimore, Md.	170	104	39	14	5	8	4
Cambridge, Mass.	18	15	2	1	-	-	1	Charlotte, N.C.	53	31	15	3	1	3	2
Fall River, Mass.	24	18	5	1	-	-	1	Jacksonville, Fla.	89	61	17	4	5	2	6
Hartford, Conn.	68	41	19	5	1	2	2	Miami, Fla.	98	56	31	5	2	4	2
Lowell, Mass.	34	26	5	-	3	-	2	Norfolk, Va.	54	33	10	5	2	4	6
Lynn, Mass.	22	17	5	-	-	-	2	Richmond, Va.	61	39	16	3	1	2	5
New Bedford, Mass.	28	26	1	-	-	1	-	Savannah, Ga.	44	29	11	1	-	3	4
New Haven, Conn.	45	35	3	3	1	3	1	St. Petersburg, Fla.	104	80	17	3	1	3	2
Providence, R.I.	63	40	12	3	5	3	4	Tampa, Fla.	55	26	16	5	2	6	2
Somerville, Mass.	3	3	-	-	-	-	-	Washington, D.C.	94	50	33	4	5	2	4
Springfield, Mass.	38	29	7	1	-	1	5	Wilmington, Del.	51	36	12	3	-	-	2
Waterbury, Conn.	23	17	4	2	-	-	2	E.S. CENTRAL	686	444	167	38	16	21	37
Worcester, Mass.	63	40	16	5	2	-	5	Birmingham, Ala.	106	66	24	5	3	8	3
MID. ATLANTIC	2,506	1,639	540	185	70	72	81	Chattanooga, Tenn.	67	42	20	4	-	1	6
Albany, N.Y.	53	36	11	4	1	1	2	Knoxville, Tenn.	32	22	9	1	-	-	1
Allentown, Pa.	24	15	7	2	-	-	-	Louisville, Ky.	105	66	20	7	4	8	9
Buffalo, N.Y.	123	74	26	12	5	6	7	Memphis, Tenn.	108	74	22	9	2	1	6
Camden, N.J.	45	23	12	5	-	5	1	Mobile, Ala.	82	60	17	3	1	1	7
Elizabeth, N.J.	23	13	7	2	-	1	2	Montgomery, Ala.	55	37	12	4	2	-	-
Erie, Pa.†	44	27	14	-	1	2	2	Nashville, Tenn.	131	77	43	5	4	2	5
Jersey City, N.J.	52	34	15	1	1	1	1	W.S. CENTRAL	1,125	668	279	75	55	47	33
N.Y. City, N.Y.	1,432	937	299	121	43	32	42	Austin, Tex.	49	32	12	4	1	-	-
Newark, N.J.	60	27	15	5	2	11	3	Baton Rouge, La.	38	21	8	4	3	2	2
Paterson, N.J.	39	28	2	2	3	4	3	Corpus Christi, Tex.	59	40	11	3	1	4	1
Philadelphia, Pa.†	192	120	52	14	4	2	8	Dallas, Tex.	168	105	32	11	8	12	1
Pittsburgh, Pa.†	53	34	13	3	1	2	3	El Paso, Tex.	60	31	18	5	4	1	7
Reading, Pa.	43	33	4	3	2	1	-	Fort Worth, Tex.	89	67	17	4	1	-	1
Rochester, N.Y.	108	83	17	2	3	3	2	Houston, Tex.	192	98	58	21	11	4	3
Schenectady, N.Y.	28	20	6	2	-	-	1	Little Rock, Ark.	67	40	18	4	2	3	7
Scranton, Pa.†	27	19	6	2	-	-	1	New Orleans, La.	129	77	35	6	6	5	-
Syracuse, N.Y.	80	54	20	2	3	1	2	San Antonio, Tex.	156	78	50	7	11	10	9
Trenton, N.J.	38	29	6	2	1	-	1	Shreveport, La.	50	34	6	4	4	2	-
Utica, N.Y.	18	15	3	-	-	-	-	Tulsa, Okla.	68	45	14	2	3	4	2
Yonkers, N.Y.	24	18	5	1	-	-	-	MOUNTAIN	582	366	126	42	25	23	23
E.N. CENTRAL	2,136	1,327	506	157	63	83	52	Albuquerque, N.Mex.	69	44	13	7	3	2	4
Akron, Ohio	56	37	9	4	5	1	-	Colo. Springs, Colo.	35	22	8	2	2	1	4
Canton, Ohio	43	28	12	2	1	-	1	Denver, Colo.	93	56	19	10	3	5	4
Chicago, Ill.	453	280	113	31	13	16	7	Las Vegas, Nev.	84	45	24	4	6	5	4
Cincinnati, Ohio	128	88	28	6	2	4	8	Ogden, Utah	22	16	3	2	1	-	1
Cleveland, Ohio	165	100	43	10	6	6	4	Phoenix, Ariz.	124	76	32	6	6	4	3
Columbus, Ohio	133	80	21	15	6	11	5	Pueblo, Colo.	25	15	8	1	1	-	2
Dayton, Ohio	122	73	36	8	3	2	1	Salt Lake City, Utah	44	30	7	1	3	3	1
Detroit, Mich.	244	145	52	32	7	8	4	Tucson, Ariz.	86	62	12	9	-	3	5
Evansville, Ind.	49	29	14	1	1	4	2	PACIFIC	1,934	1,240	396	147	81	69	85
Fort Wayne, Ind.	53	36	10	4	2	1	2	Berkeley, Calif.	18	16	1	-	1	-	-
Gary, Ind.	18	5	7	5	1	-	1	Fresno, Calif.	43	25	12	2	2	2	3
Grand Rapids, Mich.	53	29	19	3	1	1	-	Glendale, Calif.	37	32	4	1	-	-	1
Indianapolis, Ind.	162	89	47	8	5	13	1	Honolulu, Hawaii	71	41	19	5	5	1	3
Madison, Wis.	40	27	6	3	-	4	1	Long Beach, Calif.	90	54	24	4	3	5	-
Milwaukee, Wis.	128	89	21	12	4	2	3	Los Angeles, Calif.	686	447	133	63	26	17	16
Peoria, Ill.	53	33	16	1	-	3	5	Oakland, Calif.	63	38	15	3	3	4	3
Rockford, Ill.	42	29	7	2	1	3	3	Pasadena, Calif. §	31	29	-	1	-	1	2
South Bend, Ind.	44	31	10	2	1	-	3	Portland, Ore.	104	65	21	7	5	6	3
Toledo, Ohio	95	64	22	5	2	2	1	Sacramento, Calif.	61	32	20	4	1	3	4
Youngstown, Ohio	55	35	13	3	2	2	-	San Diego, Calif.	167	102	35	12	8	10	17
W.N. CENTRAL	735	527	134	35	17	20	32	San Francisco, Calif.	153	93	37	13	2	8	5
Des Moines, Iowa	40	33	6	1	-	-	7	San Jose, Calif.	146	86	29	14	11	6	14
Duluth, Minn.	27	21	3	2	-	1	2	Seattle, Wash.	150	101	30	9	6	4	7
Kansas City, Kans.	45	27	11	3	1	3	2	Spokane, Wash.	58	42	7	5	3	1	5
Kansas City, Mo.	104	72	20	6	2	2	5	Tacoma, Wash.	56	37	9	4	5	1	2
Lincoln, Neb.	33	28	4	-	-	1	4	TOTAL	11,396 ^{††}	7,287	2,550	788	374	393	433
Minneapolis, Minn.	87	64	13	6	2	2	-								
Omaha, Neb.	103	73	19	2	8	1	2								
St. Louis, Mo.	138	100	25	7	-	6	5								
St. Paul, Minn.	74	56	14	3	-	1	-								
Wichita, Kans.	84	53	19	5	4	3	5								

* 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.

Shigellosis — Continued

boydii—294 (2.3%), and *S. dysenteriae*—131 (1.0%). *S. flexneri* 1a, 1b, 2a, 3a, and 6 comprised 27.3% of all *S. flexneri* subtyped. When compared with 1981, reported *S. boydii* isolations decreased by 42.4%; *S. dysenteriae*, by 35.8%; and *S. sonnei*, by 12.7%. The number of *S. flexneri* isolations remained relatively constant.

The decreases were not confined to one state or region. From 1981 to 1982, *S. sonnei* decreased notably in Florida (166 to 92), Georgia (349 to 135), Hawaii (128 to 46), Indiana (102 to 35), Louisiana (357 to 147), Missouri (128 to 35), and Virginia (889 to 81); *S. boydii*, in Arizona (38 to 16) and Texas (82 to 45); and *S. dysenteriae*, in California (129 to 71).

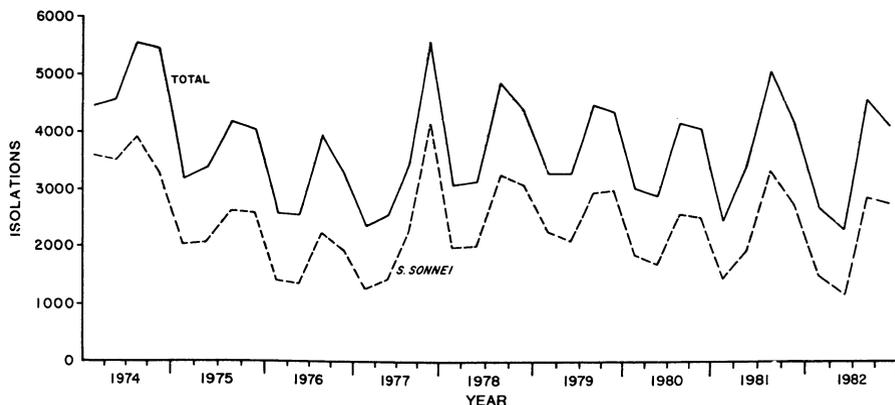
In the reported age distribution of persons from whom isolates were obtained, the age-specific attack rate was highest for 2-year-old children, markedly lower for older children, and slightly lower for adults, except for a slight increase for 20- to 29-year-olds (Figure 2). In the 20- to 29-year age groups, a slightly higher isolation rate was reported for females than for males. The isolation rates by sex were similar for the remaining age groups. The median ages of persons from whom isolates were reported were *S. boydii*—13 years, *S. dysenteriae*—24, *S. flexneri*—11, and *S. sonnei*—7.

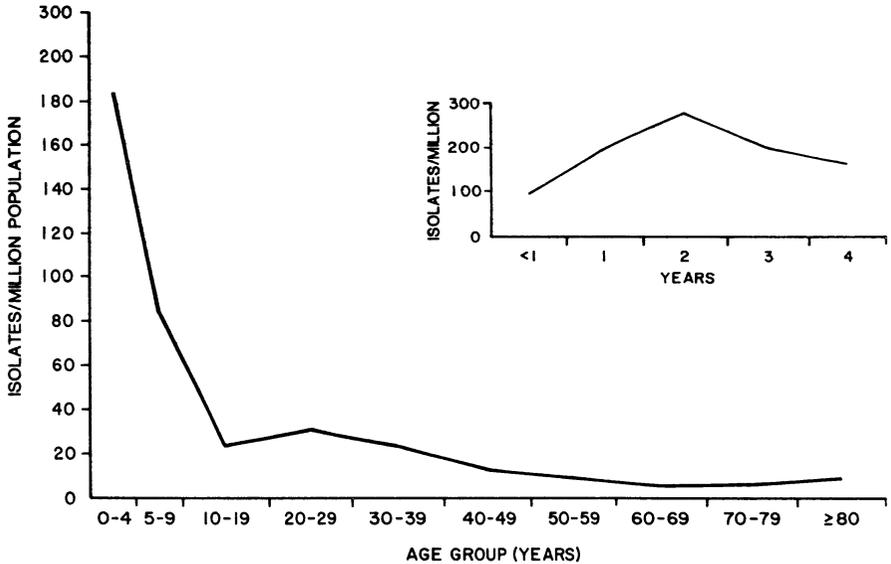
Since shigellosis is a more important problem for some population groups than for others, data were tabulated separately for patients residing in certain institutions (e.g., nursing homes, facilities for the mentally ill, and other resident-care centers) and on American Indian reservations. Thirty-one percent of the reports included data on patient residence at the time of onset of illness. Of those specified, 1.2% lived in institutions and 2.7% on Indian reservations. Sixty-nine percent of the reported isolates from residents of institutions were *S. sonnei*, and 30.8% were *S. flexneri*. Fifty-nine percent of the isolates from residents of Indian reservations were *S. flexneri*, and 40.9% were *S. sonnei*. *S. sonnei* accounted for 74.4% of the isolates with known residence; *S. flexneri*, for 22.9%; *S. boydii*, for 1.2%; and *S. dysenteriae*, for 0.5%.

Reported by Statistical Svcs Activity and Enteric Diseases Br, Div of Bacterial Diseases, Center for Infectious Diseases, CDC.

Editorial Note: This report is based on CDC's Shigella Surveillance Activity, a passive, laboratory-based system that receives reports from the 50 states and the District of Columbia. These reports do not distinguish between clinical or sub-clinical infections or between chronic or convalescent carriers.

FIGURE 1. *Shigella*: Reported isolations from humans, by quarter — United States, 1974-1982



Shigellosis — ContinuedFIGURE 2. *Shigella*: Rate of reported isolates, by age — United States,* 1982

*Age data unavailable for California.

Current Trends

Acquired Immunodeficiency Syndrome (AIDS): Precautions for Health-Care Workers and Allied Professionals

Acquired immunodeficiency syndrome (AIDS) was first recognized in 1981. The epidemiology of AIDS is consistent with the hypothesis that it is caused by a transmissible infectious agent (1-3). AIDS appears to be transmitted by intimate sexual contact or by percutaneous inoculation of blood or blood products. There has been no evidence of transmission by casual contact or airborne spread, nor have there been cases of AIDS in health-care or laboratory personnel that can be definitely ascribed to specific occupational exposures (4).

CDC has published recommended precautions for clinical and laboratory personnel who work with AIDS patients (5). Precautions for these and allied professionals are designed to minimize the risk of mucosal or parenteral exposure to potentially infective materials. Such exposure can occur during direct patient care or while working with clinical or laboratory specimens and from inadvertent or unknowing exposure to equipment, such as needles, contaminated with potentially infective materials. Caution should be exercised in handling secretions or excretions, particularly blood and body fluids, from the following: (1) patients who meet the existing surveillance definition of AIDS (1); (2) patients with chronic, generalized lymphadenopathy, unexplained weight loss, and/or prolonged unexplained fever when the pa-

AIDS – Continued

tient's history suggests an epidemiologic risk for AIDS (1,2); and (3) all hospitalized patients with possible AIDS.

These principles for preventing AIDS transmission also need to be adopted by allied professionals not specifically addressed in the previous publications but whose work may bring them into contact with potentially infective material from patients with the illnesses described in the above three groups.

The following precautions are recommended for those who provide dental care, perform postmortem examinations, and perform work as morticians when working with persons with histories of illnesses described in the above three groups:

DENTAL-CARE PERSONNEL

1. Personnel should wear gloves, masks, and protective eyewear when performing dental or oral surgical procedures.
2. Instruments used in the mouths of patients should be sterilized after use (5-9).

PERSONS PERFORMING NECROPSIES OR PROVIDING MORTICIANS' SERVICES

1. As part of immediate postmortem care, deceased persons should be identified as belonging to one of the above three groups, and that identification should remain with the body.
2. The procedures followed before, during, and after the postmortem examination are similar to those for hepatitis B. All personnel involved in performing an autopsy should wear double gloves, masks, protective eyewear, gowns, waterproof aprons, and waterproof shoe coverings. Instruments and surfaces contaminated during the postmortem examination should be handled as potentially infective items (5-7).
3. Morticians should evaluate specific procedures used in providing mortuary care and take appropriate precautions to prevent the parenteral or mucous-membrane exposure of personnel to body fluids.

These and earlier recommendations outline good infection control and laboratory practices and are similar to the recommendations for prevention of hepatitis B. As new information becomes available on the cause and transmission of AIDS, these precautions will be revised as necessary.

Reported by AIDS Activity, Div of Host Factors, Div of Viral Diseases, Hospital Infections Program, Center for Infectious Diseases, Office of Biosafety, CDC

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Erratum: Vol. 32, No. 32

- p. 417 In the article, "Plague—South Carolina," the second sentence in the first full paragraph on p. 418 should read, "However, since 1975, four persons have developed primary pneumonic plague, presumably from exposure to household pets with secondary plague pneumonia (2,3)."

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The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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