



Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS

HERPES ZOSTER IN IMMUNO-DEFICIENT PATIENTS
Washington

Between Aug. 25 and Sept. 30, 1972, seven cases of herpes zoster occurred in patients seen at the Leukemia Research Center (LRC) of the Seattle Public Health Service Hospital. The index case was in a 17-year-old male who had undergone bone marrow transplantation for aplastic anemia on May 2, 1972. On August 20, he developed right-sided chest pain and on August 25 developed herpes zoster of the T 7-9 dermatomes on the right. He was admitted to the Seattle PHS Hospital on August 30 with scattered vesicles of mild generalized herpes zoster. His hospital course was otherwise uneventful, and he was discharged on September 7.

Over the next 4 weeks, there were six additional cases of herpes zoster diagnosed in inpatients and outpatients of the LRC. Four of these cases occurred in patients with

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previous bone marrow transplants, one case was in a leukemic patient admitted for transplant, and one was in a patient followed after treatment for ovarian carcinoma.

Between March 1969 and September 1972, there were 67 bone marrow transplants performed at the LRC, with one previous case of herpes zoster in this group. Review of LRC records revealed a total of four cases of herpes zoster in other oncology patients in the preceding 13 months (Figure 1).

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	46th WEEK ENDING		MEDIAN 1967-1971	CUMULATIVE, FIRST 46 WEEKS		
	November 18, 1972	November 20, 1971		1972	1971	MEDIAN 1967-1971
Aseptic meningitis	103	81	81	3,810	4,696	3,975
Brucellosis	5	5	3	171	151	199
Chickenpox	1,890	---	---	122,417	---	---
Diphtheria	7	9	9	104	167	167
Encephalitis, primary:						
Arthropod-borne and unspecified	28	28	28	1,013	1,368	1,368
Encephalitis, post-infectious	4	4	5	246	306	351
Hepatitis, serum (Hepatitis B)	168	207	110	7,986	7,727	4,703
Hepatitis, infectious (Hepatitis A)	1,130	1,206	1,080	48,646	53,716	42,209
Malaria	4	30	65	783	2,686	2,686
Measles (rubeola)	278	467	310	28,672	72,507	42,450
Meningococcal infections, total	20	18	28	1,187	1,994	2,181
Civilian	20	17	26	1,142	1,783	1,951
Military	---	1	1	45	211	211
Mumps	1,117	1,986	---	63,065	110,292	---
Rubella (German measles)	188	303	319	23,058	41,393	46,405
Tetanus	4	1	4	106	98	147
Tuberculosis, new active	657	---	---	29,800	---	---
Tularemia	4	1	1	119	168	150
Typhoid fever	14	6	6	338	375	354
Typhus, tick-borne (Rky. Mt. spotted fever)	2	3	1	512	397	332
Venereal Diseases:†						
Gonorrhoea	16,245	13,939	---	668,556	586,631	---
Syphilis, primary and secondary	589	471	---	22,511	20,951	---
Rabies in animals	53	68	53	3,643	3,562	3,038

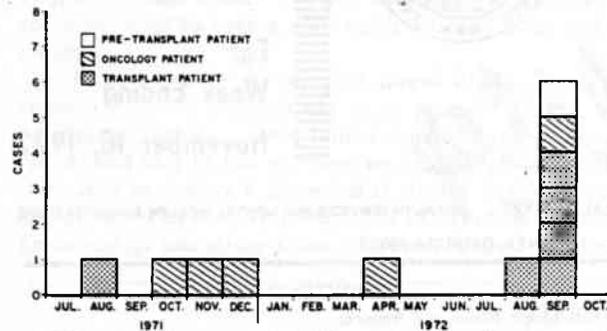
TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total:	21
Botulism:	8	Paralytic:	19
Congenital rubella syndrome:	30	Psittacosis: Minn. - 1	33
Leprosy: Tex. - 1	110	Rabies in man:	1
Leptospirosis:	33	Trichinosis: Calif. - 2	75
Plague:	1	Typhus, murine:	13

†Numbers for 1971 are estimated from quarterly reports to the Venereal Disease Branch, CDC

HERPES ZOSTER - Continued

Figure 1

CASES OF HERPES ZOSTER, BY MONTH OF ONSET
LEUKEMIA RESEARCH CENTER - JULY 1971-SEPTEMBER 1972

The clinical course of the five transplanted patients was similar. Each initially developed zoster confined to one or two dermatomes, followed within a week by mild generalized zoster. All five had a previous history of varicella in childhood. None of the patients had similar patterns of previous drug or radiation therapy. There were no known cases of herpes zoster occurring in bone marrow donors. The two patients who had not been transplanted developed localized zoster; one of them had a history of previous varicella infection.

Five of the seven zoster patients showed a 4-fold or greater rise in complement-fixing (CF) antibody titer or had a single CF antibody titer compatible with recent infection. Tests on convalescent sera are pending on the other two

patients, but varicella-zoster virus was recovered from the lesions of both of these patients.

Epidemiologic investigation revealed that the first four patients had no known contact with other persons with clinically apparent varicella-zoster illness either in the clinic or at home. The fifth case was exposed to one of the first four cases and developed zoster 9 days later. The last two patients to become ill were multiply-exposed, with incubation periods between 15 and 27 days, to several of the first five cases. No additional cases have occurred since September. (Reported by E. Donnell Thomas, M.D., Head, Division of Oncology, Donald Funk, M.D., Chief of Hematology, and Peter Wasserman, M.D., Fellow, Division of Oncology, U.S. Public Health Service Hospital, Seattle; A. Pedersen, M.D., Director, Adult Health Division, Seattle-King County Health Department; John A. Beare, Acting State Epidemiologist, Washington State Department of Social and Health Services, Health Services Division; and an EIS Officer.)

Editorial Note

Each of the transplant patients was negative to dinitrochlorobenzene (DNCB) skin testing, a parameter of delayed hypersensitivity and cellular immunity that is positive in normal persons. Similarly, a recent study of herpes zoster in patients with Hodgkin's Disease reported that those with generalized zoster were more often negative to DNCB testing than patients with localized zoster (1).

Reference

1. Schimpff S, Serpick A, Stoler B, et al: Varicella-zoster infection in patients with cancer. *Ann Intern Med* 76:241, 1972

INTERNATIONAL NOTES

CHOLERA - Australia, Bahrain, Germany, United Kingdom

Australia

Further information has been provided concerning the importation of cholera into Australia (MMWR, Vol. 21, No. 45). Infection occurred during a scheduled flight of some 374 passengers and 19 crew which arrived in Sydney from London on November 4. All passengers remaining in Australia have been investigated, and as of November 15, there were 40 confirmed cases. All cases have been relatively mild, and there has been no secondary spread. Among 37 passengers who continued their journey to New Zealand, there have been three suspect cases, one of them fatal.

Epidemiologic investigation suggests that a meal prepared in the air-company kitchen in Bahrain and served to economy class passengers was the source of infection. Only economy class passengers became ill, and they were the only ones to receive the meal in question. (The same meal was served in a flight from Sydney to London and is believed to be the source of infection of two imported cases into the United Kingdom.) Since meals for the two aircraft were required at the same time, it is believed that refrigeration space in the company kitchen was possibly insufficient. Bacteriologic examination in Sydney of water taken aboard at Bahrain and available to all passengers was negative. All precautionary measures to prevent secondary infection have been undertaken, and the aircraft in question was completely

disinfected before being returned to routine service.

Bahrain

As of November 15, there were a total of 55 cases of cholera reported in Bahrain, including two deaths. Intensive control measures and surveillance of all diarrheal diseases have been implemented, and one new case has been reported.

Germany

Two imported cases of bacteriologically-confirmed cholera have been reported from Wuppertal, North Rhine-Westphalia. The patients, a 59-year-old man and his wife, arrived by air from Angola via Lisbon on November 6 and were hospitalized in Wuppertal on November 8. The infection due to *Vibrio cholerae* biotype El Tor was mild. Both patients are recovering.

United Kingdom

Two confirmed imported cases of *V. cholerae* biotype El Tor serotype Inaba have been reported, one from Gateshead and one from London. These cases are linked to the epidemiologic situation reported above.

The attention of health administrations is drawn to the fact that no part of Australia, the Federal Republic of Germany, New Zealand, or the United Kingdom should be considered infected as a result of these importations.

(Reported by the World Health Organization: Weekly Epidemiological Record, Vol. 47, No. 46.)

QUARANTINE MEASURES

The Australian Government has announced that Australia now requires vaccination against cholera for all arrivals (over 12 months of age) except persons having been in the United States or Canada for 7 days preceding arrival in Australia direct from the United States or through the South

Pacific. Travelers arriving in Australia from any other countries will be required to possess valid International Certificates of Vaccination against Cholera, be vaccinated, or be placed in quarantine for 5 days.

(Reported by the Foreign Quarantine Program, CDC.)

SURVEILLANCE SUMMARY
BRUCELLOSIS - United States, 1971

In 1971, 190 human cases of brucellosis were reported to CDC. This represented a decrease of 46 cases from the 236 reported in 1970 and follows the decline of cases in the United States noted in the last 20 years (Figure 2). No deaths due to brucellosis were reported.

In 1971, the seasonal incidence varied somewhat from the trend in previous years. Twenty-nine percent of the 160 cases for which date of onset was known occurred in the spring, compared with 37% of the 1,250 cases reported in the period 1965-70. Fifty percent of the cases in 1971 occurred between April and August, compared with 59% for the same period in 1965-70.

Thirty-three states reported brucellosis cases in 1971, compared with 34 in 1970 and 30 in 1969. In 1971, California, Iowa, and Virginia accounted for 33% of the reported cases compared with 51% in 1970. Five states, California, Iowa, Illinois, Texas, and Virginia reported 54% of the year's total cases. The greatest increase in total cases (7) was reported from Illinois, while Iowa reported the greatest decrease (30).

As in past years, brucellosis predominantly affected adult males; 135 (79%) were in males, and 113 (84%) of the

135 male cases were in persons between 20 and 60 years of age (Table 1). There were a few cases in females in all age groups except the 25-29 year olds, which had no cases.

The trend of brucellosis to occur principally in people associated with meat processing and in particular the slaughter of swine continued in 1971. Ninety (53%) of the 171 case reports received in 1971 were on individuals working in packing plants. Swine were the source of infection in 80 (89%) of the 90 cases.

Results of blood cultures on 65 patients were reported to CDC. Thirty-two were positive for *Brucella spp.*: 33 were negative. Of the 32 isolates, 14 were *B. suis*, the species commonly found in swine, eight were *B. abortus*, and 10 were untyped. There were no isolations of *B. melitensis* or *B. canis*.

Table 1
Age and Sex Distribution of 171 Cases of Brucellosis in Humans
United States, 1971*

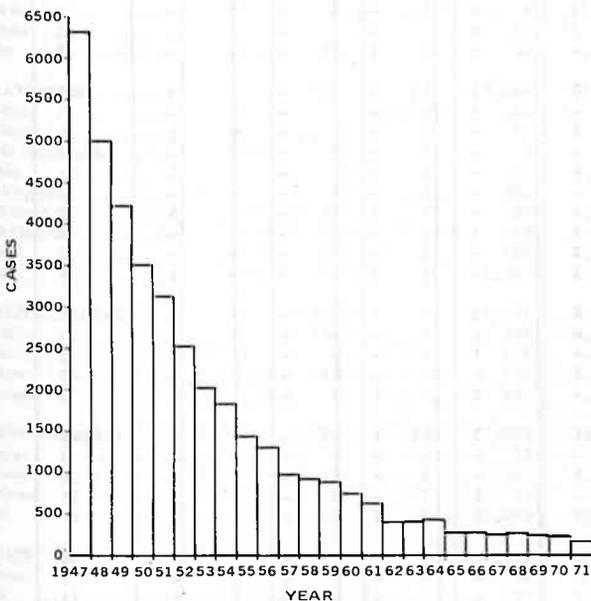
Age Group (Years)	Sex		Total	Percent of Total
	Male	Female		
0-4	2	1	3	1.8
5-9	2	1	3	1.8
10-14	2	2	4	2.3
15-19	4	4	8	4.7
20-24	16	2	18	10.5
25-29	21	0	21	12.2
30-34	15	4	19	11.1
35-39	23	5	28	16.4
40-44	14	2	16	9.3
45-49	9	5	14	8.2
50-54	11	2	13	7.6
55-59	4	1	5	2.9
60-64	1	2	3	1.8
65+	6	2	8	4.7
Unknown	5	3	8	4.7
Totals	135	36	171	
Percent of Totals	79.0	21.0	100.0	100.0

*171 reports received with age and sex data of the 190 cases reported.

(Reported by the Bacterial Zoonoses Section, Bacterial Diseases Branch, Epidemiology Program, CDC.)

A copy of the original report from which these data were derived is available on request from
Center for Disease Control
Attn: Bacterial Zoonoses Section
Bacterial Diseases Branch, Epidemiology Program
Atlanta, Georgia 30333

Figure 2
HUMAN BRUCELLOSIS, UNITED STATES, 1947-1971



EPIDEMIOLOGIC NOTES AND REPORTS
EPIDEMIC RINGWORM - California

In August 1972, Sacramento County experienced three unrelated outbreaks of epidemic ringworm involving 74 persons. Outbreak 1 affected 43 of 120 residents and staff of a children's home. Outbreak 2 affected 14 persons in four families, and Outbreak 3 affected 17 persons in nine families. Skin lesions were typical of tinea corporis with distribution over torso, arms, and face. Only two persons had scalp lesions. Patients ranged in age from 3 months to 35 years; 53% were under 13. *Microsporum canis* was the only dermatophyte isolated from infected humans and pets in all three outbreaks.

Dogs were implicated in Outbreak 1, kittens were responsible in Outbreak 2, and both a dog and a kitten evidenced the disease in Outbreak 3. The mode of transmission in all three episodes appeared to be from pets to humans, however, secondary human-to-human transmission could not be ruled out entirely. There was no evidence for indirect fomite spread. (Reported by Stephan Billstein, M.D., Chief, Division Disease Control, Sacramento County Health Department; James Chin, M.D., State Epidemiologist, California State Department of Public Health.)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
 FOR WEEKS ENDING NOVEMBER 18, 1972 AND NOVEMBER 20, 1971 (46th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post In- fectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
						1972	1971	1972	1972	1972	1971
UNITED STATES	103	5	1,890	7	104	28	28	4	168	1,130	1,206
NEW ENGLAND	5	-	192	-	-	2	1	-	3	72	97
Maine *	-	-	4	-	-	-	-	-	-	1	10
New Hampshire	1	-	7	-	-	-	-	-	-	6	6
Vermont	-	-	5	-	-	-	-	-	-	6	6
Massachusetts	3	-	66	-	-	-	1	-	1	37	54
Rhode Island	-	-	42	-	-	-	-	-	1	6	9
Connecticut	1	-	68	-	-	2	-	-	1	16	12
MIDDLE ATLANTIC	16	1	38	-	3	-	3	-	52	174	265
Upstate New York	3	-	-	-	1	-	2	-	12	40	62
New York City	10	1	34	-	2	-	-	-	14	41	47
New Jersey *	-	-	NN	-	-	-	-	-	19	53	58
Pennsylvania	3	-	4	-	-	-	1	-	7	40	98
EAST NORTH CENTRAL	23	-	717	-	4	12	9	1	22	172	131
Ohio *	5	-	115	-	-	2	4	-	5	34	45
Indiana	1	-	83	-	-	-	4	-	1	10	5
Illinois	8	-	-	-	3	2	-	1	2	46	60
Michigan	9	-	169	-	1	5	-	-	14	71	9
Wisconsin	-	-	350	-	-	3	1	-	-	11	12
WEST NORTH CENTRAL	10	-	414	6	17	2	5	-	3	30	35
Minnesota	10	-	22	-	-	-	1	-	2	3	3
Iowa	-	-	296	-	-	2	-	-	-	5	4
Missouri	-	-	4	-	-	-	3	-	1	14	9
North Dakota	-	-	-	-	-	-	-	-	-	2	-
South Dakota	-	-	1	6	14	-	-	-	-	1	11
Nebraska	-	-	49	-	3	-	-	-	-	3	2
Kansas	-	-	42	-	-	-	1	-	-	2	6
SOUTH ATLANTIC	25	1	197	-	10	1	2	-	14	163	158
Delaware	1	-	3	-	-	-	-	-	-	3	1
Maryland	1	-	5	-	1	-	-	-	2	20	23
District of Columbia	-	-	-	-	-	-	-	-	-	1	1
Virginia	2	1	5	-	-	-	-	-	1	11	27
West Virginia *	-	-	176	-	-	-	-	-	-	13	11
North Carolina *	12	-	NN	-	-	-	1	-	5	37	24
South Carolina	-	-	8	-	1	1	-	-	-	4	8
Georgia	-	-	-	-	3	-	-	-	-	25	7
Florida	9	-	-	-	5	-	1	-	6	49	56
EAST SOUTH CENTRAL	3	1	14	-	7	3	1	-	8	101	63
Kentucky	-	1	8	-	-	-	-	-	1	24	36
Tennessee	-	-	NN	-	-	1	-	-	6	32	18
Alabama	-	-	5	-	7	-	-	-	-	43	5
Mississippi	3	-	1	-	-	2	1	-	1	2	4
WEST SOUTH CENTRAL	6	2	44	-	41	3	1	-	5	147	101
Arkansas	1	1	-	-	-	-	-	-	-	7	1
Louisiana *	2	1	NN	-	5	-	-	-	1	29	8
Oklahoma	1	-	-	-	-	1	-	-	1	21	16
Texas	2	-	44	-	36	2	1	-	3	90	76
MOUNTAIN	1	-	180	1	6	-	-	-	2	56	55
Montana	-	-	12	-	-	-	-	-	-	4	8
Idaho	-	-	-	-	2	-	-	-	1	14	2
Wyoming	-	-	47	-	-	-	-	-	-	1	2
Colorado	-	-	61	-	-	-	-	-	-	7	10
New Mexico	-	-	45	1	2	-	-	-	-	15	10
Arizona	-	-	14	-	2	-	-	-	1	10	14
Utah	1	-	1	-	-	-	-	-	-	5	9
Nevada	-	-	-	-	-	-	-	-	-	-	-
PACIFIC	14	-	94	-	16	5	6	3	59	215	301
Washington	-	-	80	-	12	-	1	-	-	31	55
Oregon	2	-	1	-	1	-	-	1	2	26	37
California	12	-	-	-	1	5	5	2	54	134	205
Alaska	-	-	-	-	2	-	-	-	3	18	2
Hawaii	-	-	13	-	-	-	-	-	-	6	2
Guam	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	10	-	-	-	-	-	1	24	15
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-

*Delayed reports: Aseptic meningitis: W. Va. delete 1
 Chickenpox: Me. 16

Encephalitis, primary: W. Va. 1
 Hepatitis A: Me. 12, N.J. delete 2, Ohio delete 1, W. Va. delete 2, N.C. delete 1, La. delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 18, 1972 AND NOVEMBER 20, 1971 (46th WEEK) - Continued

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1972	Cum. 1972	1972	Cumulative		1972	Cumulative		1972	Cum. 1972	1972	Cum. 1972
				1972	1971		1972	1971				
UNITED STATES	4	783	278	28,672	72,507	20	1,187	1,994	1,117	63,065	188	23,058
NEW ENGLAND	-	28	98	3,567	3,489	2	53	96	52	2,771	9	1,029
Maine *	-	2	-	249	1,481	-	4	9	3	302	-	76
New Hampshire *	-	4	66	463	212	-	3	21	1	191	-	33
Vermont	-	1	-	128	118	-	-	-	-	138	-	70
Massachusetts	-	10	32	898	252	2	23	35	17	680	3	483
Rhode Island	-	1	-	524	238	-	12	3	2	409	-	92
Connecticut	-	10	-	1,305	1,188	-	11	28	29	1,051	6	275
MIDDLE ATLANTIC	1	74	8	1,087	7,671	2	143	267	93	3,785	10	1,945
Upstate New York	-	17	2	132	696	1	33	81	NN	NN	3	246
New York City	-	17	6	394	3,793	-	43	55	60	2,163	2	249
New Jersey *	-	19	-	498	1,254	-	27	59	24	833	2	1,177
Pennsylvania	1	21	-	63	1,928	1	40	72	9	789	3	273
EAST NORTH CENTRAL	1	87	104	11,639	16,227	2	180	232	339	17,122	51	5,941
Ohio	-	19	4	275	4,046	1	72	75	52	2,317	6	424
Indiana	-	1	15	1,308	2,857	1	13	17	19	1,125	15	752
Illinois	-	32	16	4,264	3,183	-	39	66	26	2,965	6	1,078
Michigan	1	32	24	2,165	2,505	-	48	59	94	3,092	12	1,363
Wisconsin	-	3	45	3,627	3,636	-	8	15	148	7,623	12	2,324
WEST NORTH CENTRAL	-	50	16	1,024	7,085	4	86	142	116	9,047	12	1,333
Minnesota	-	8	1	23	57	-	24	26	2	703	2	497
Iowa	-	3	11	709	2,500	-	6	12	111	6,262	7	414
Missouri	-	12	2	166	2,606	1	26	49	2	570	2	115
North Dakota	-	1	1	58	238	-	-	6	1	400	1	49
South Dakota	-	4	1	8	221	-	2	6	-	120	-	13
Nebraska	-	3	-	23	69	1	10	15	-	271	-	54
Kansas	-	19	-	37	1,394	2	18	28	-	721	-	191
SOUTH ATLANTIC	-	121	13	2,266	8,708	4	261	349	65	5,853	12	2,316
Delaware	-	-	-	53	42	-	1	2	3	119	-	8
Maryland	-	9	-	15	554	-	39	51	16	436	1	54
District of Columbia	-	7	-	2	15	-	11	13	-	27	-	7
Virginia	-	9	2	71	1,611	1	58	42	12	1,205	-	72
West Virginia	-	2	2	300	547	-	8	11	21	2,535	2	420
North Carolina	-	39	1	38	1,955	1	31	59	NN	NN	1	33
South Carolina	-	12	1	217	920	2	22	20	-	181	-	50
Georgia	-	28	2	185	1,133	-	19	24	-	24	-	58
Florida	-	15	5	1,385	1,931	-	72	127	13	1,326	8	1,614
EAST SOUTH CENTRAL	1	169	-	1,071	8,416	2	93	182	61	3,243	22	1,613
Kentucky	-	146	-	538	3,964	-	28	53	6	488	3	887
Tennessee	-	-	-	194	1,025	1	30	71	22	2,036	2	545
Alabama	-	18	-	154	1,954	-	20	32	33	599	17	68
Mississippi	1	5	-	185	1,473	1	15	26	-	120	-	113
WEST SOUTH CENTRAL	1	86	13	1,622	12,643	1	140	176	41	5,298	9	1,665
Arkansas	-	5	-	13	778	-	11	5	-	167	-	35
Louisiana	1	7	6	105	1,701	1	43	65	2	325	1	95
Oklahoma	-	6	1	11	757	-	9	10	-	163	-	39
Texas	-	68	6	1,493	9,407	-	77	96	39	4,643	8	1,496
MOUNTAIN	-	49	7	1,933	3,498	-	29	60	62	3,243	8	1,155
Montana	-	2	-	16	925	-	4	7	-	200	-	34
Idaho	-	3	1	152	274	-	8	11	3	217	1	35
Wyoming	-	1	-	51	85	-	1	2	23	298	-	8
Colorado	-	31	1	535	839	-	5	7	12	780	5	529
New Mexico	-	3	2	129	400	-	3	5	10	644	-	119
Arizona	-	7	3	891	632	-	1	8	13	918	2	393
Utah	-	2	-	158	336	-	6	17	-	138	-	34
Nevada	-	-	-	1	7	-	1	3	1	48	-	3
PACIFIC	-	119	19	4,463	4,770	3	202	490	288	12,703	55	6,061
Washington	-	1	1	984	1,091	-	17	31	48	3,873	6	883
Oregon	-	11	9	150	377	-	14	39	61	1,794	4	421
California	-	92	9	3,218	2,740	2	159	410	153	6,562	44	4,675
Alaska	-	3	-	13	63	1	9	1	24	177	1	23
Hawaii	-	12	-	98	499	-	3	9	2	297	-	59
Guam	-	2	-	16	---	-	13	---	-	10	-	12
Puerto Rico	-	5	55	891	582	-	4	10	22	911	-	30
Virgin Islands	-	-	-	3	17	-	2	-	-	130	-	3

*Delayed reports: Measles: N.H. delete 1
Mumps: N.J. 35
Rubella: Me. 1

Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 18, 1972 AND NOVEMBER 20, 1971 (46th WEEK) - Continued

AREA	TETANUS	TB (New Active)	TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
									GONOR- RHEA	SYPHILIS (Pri. & Sec.)		
1972	1972	1972	Cum. 1972	1972	Cum. 1972	1972	Cum. 1972	1972	1972	1972	Cum. 1972	
UNITED STATES	4	657	4	119	14	338	2	512	16,245	589	53	3,643
NEW ENGLAND	-	30	-	-	1	16	-	2	556	16	5	109
Maine	-	1	-	-	-	-	-	-	30	-	5	85
New Hampshire *	-	1	-	-	-	2	-	-	5	-	-	4
Vermont	-	1	-	-	-	-	-	-	27	-	-	9
Massachusetts	-	18	-	-	1	12	-	2	355	5	-	4
Rhode Island	-	-	-	-	-	-	-	-	32	1	-	2
Connecticut	-	9	-	-	-	2	-	-	107	10	-	5
MIDDLE ATLANTIC	-	116	-	1	2	54	1	38	2,059	133	-	96
Upstate New York	-	17	-	-	-	15	-	6	265	11	-	43
New York City	-	42	-	-	-	27	-	2	1,093	85	-	-
New Jersey	-	28	-	1	2	8	1	16	210	33	-	-
Pennsylvania *	-	29	-	-	-	4	-	14	491	4	-	53
EAST NORTH CENTRAL	1	123	2	3	1	23	-	27	1,587	22	10	364
Ohio *	-	22	-	1	-	7	-	23	426	7	2	99
Indiana	-	20	-	-	1	1	-	-	161	1	1	70
Illinois	1	49	2	2	-	6	-	3	257	-	2	60
Michigan	-	22	-	-	-	7	-	-	585	9	-	9
Wisconsin	-	10	-	-	-	2	-	1	158	5	5	126
WEST NORTH CENTRAL	-	60	-	28	-	8	-	19	1,075	5	14	1,029
Minnesota	-	2	-	-	-	1	-	-	225	-	6	252
Iowa	-	5	-	-	-	-	-	2	137	-	3	292
Missouri	-	16	-	21	-	3	-	11	415	4	2	91
North Dakota	-	-	-	-	-	-	-	-	9	-	1	139
South Dakota	-	2	-	1	-	-	-	4	23	-	1	114
Nebraska	-	1	-	1	-	1	-	-	87	-	-	16
Kansas *	-	34	-	5	-	3	-	2	179	1	1	125
SOUTH ATLANTIC	-	138	2	12	4	45	-	254	4,450	199	2	374
Delaware	-	3	-	-	1	1	-	1	122	1	-	10
Maryland	-	21	-	1	-	9	-	31	444	13	-	18
District of Columbia	-	6	-	-	-	3	-	1	394	23	-	-
Virginia	-	17	2	9	-	11	-	56	462	66	-	97
West Virginia	-	3	-	-	-	1	-	3	65	-	-	55
North Carolina	-	25	-	-	-	-	-	119	542	7	-	3
South Carolina	-	18	-	-	-	3	-	20	567	28	-	13
Georgia	-	8	-	1	3	7	-	22	998	24	-	100
Florida	-	37	-	1	-	10	-	1	856	37	2	78
EAST SOUTH CENTRAL	-	49	-	8	-	39	1	99	1,609	56	6	591
Kentucky	-	14	-	-	-	13	-	4	149	30	2	230
Tennessee	-	19	-	7	-	11	-	60	534	12	4	296
Alabama	-	6	-	1	-	10	-	19	681	3	-	62
Mississippi	-	10	-	-	-	5	1	16	245	11	-	3
WEST SOUTH CENTRAL	1	46	-	53	-	40	-	62	1,865	52	12	730
Arkansas	-	9	-	29	-	13	-	15	112	1	-	101
Louisiana *	1	-	-	4	-	7	-	-	373	20	3	42
Oklahoma	-	10	-	11	-	3	-	34	205	2	4	275
Texas	-	27	-	9	-	17	-	13	1,175	29	5	312
MOUNTAIN	-	20	-	10	1	13	-	9	527	15	1	93
Montana	-	-	-	1	-	-	-	2	23	-	-	7
Idaho	-	1	-	-	-	-	-	6	45	-	-	-
Wyoming	-	-	-	-	-	-	-	-	13	2	-	1
Colorado	-	4	-	1	-	2	-	-	166	11	-	-
New Mexico	-	3	-	-	-	1	-	-	72	-	-	23
Arizona *	-	9	-	2	-	7	-	-	121	2	-	52
Utah	-	3	-	6	1	3	-	1	54	-	1	8
Nevada	-	-	-	-	-	-	-	-	33	-	-	2
PACIFIC	2	75	-	4	5	100	-	2	2,517	91	3	257
Washington	-	4	-	-	-	2	-	1	249	2	-	-
Oregon	-	3	-	1	-	-	-	1	242	1	-	4
California	2	60	-	2	5	94	-	-	1,927	77	3	245
Alaska	-	-	-	1	-	-	-	-	60	11	-	8
Hawaii	-	8	-	-	-	4	-	-	39	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	11	-	-	-	7	-	-	70	7	1	48
Virgin Islands	-	-	-	-	-	-	-	-	7	2	-	-

*Delayed reports: TB: N.H. 1, Ohio delete 2

RMSF: Pa. delete 1, Kans. delete 1

Gonorrhea: La. delete 8, Ariz. 11

Syphilis: Ariz. 2

Morbidity and Mortality Weekly Report

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING NOVEMBER 18, 1972

Week No.
46

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes			Pneumonia and Influenza All Ages	Area	All Causes			Pneumonia and Influenza All Ages
	All Ages	65 years and over	Under 1 year			All Ages	65 years and over	Under 1 year	
NEW ENGLAND	715	420	32	49	SOUTH ATLANTIC	1,326	700	48	44
Boston, Mass.	249	132	12	27	Atlanta, Ga.	124	53	5	5
Bridgeport, Conn.	42	22	3	3	Baltimore, Md.	222	119	5	2
Cambridge, Mass.	31	26	-	5	Charlotte, N. C.	46	16	2	-
Fall River, Mass.	31	24	-	-	Jacksonville, Fla.	110	45	5	1
Hartford, Conn.	50	35	1	2	Miami, Fla.	110	63	6	1
Lowell, Mass.	18	10	1	3	Norfolk, Va.	60	32	8	6
Lynn, Mass.	27	15	1	1	Richmond, Va.	86	40	-	7
New Bedford, Mass.	18	12	-	2	Savannah, Ga.	32	15	2	1
New Haven, Conn.	39	16	7	1	St. Petersburg, Fla.	188	154	1	6
Providence, R. I.	62	32	3	2	Tampa, Fla.	72	39	4	5
Somerville, Mass.	8	7	-	-	Washington, D. C.	220	97	5	9
Springfield, Mass.	59	36	2	-	Wilmington, Del.	56	27	5	1
Waterbury, Conn.	29	17	-	-	EAST SOUTH CENTRAL	657	362	30	24
Worcester, Mass.	52	36	2	3	Birmingham, Ala.	103	53	5	1
MIDDLE ATLANTIC	3,460	2,099	106	162	Chattanooga, Tenn.	84	55	4	7
Albany, N. Y.	51	34	-	1	Knoxville, Tenn.	37	25	-	1
Allentown, Pa.	32	24	-	2	Louisville, Ky.	118	64	9	7
Buffalo, N. Y.	146	85	5	8	Memphis, Tenn.	132	69	7	1
Camden, N. J.	40	22	3	1	Mobile, Ala.	40	25	-	2
Elizabeth, N. J.	25	21	-	1	Montgomery, Ala.	53	28	2	2
Erie, Pa.	43	24	-	4	Nashville, Tenn.	90	43	3	3
Jersey City, N. J.	57	41	-	6	WEST SOUTH CENTRAL	1,309	692	71	48
Newark, N. J.	87	36	8	3	Austin, Tex.	39	27	4	2
New York City, N. Y. *	1,744	1,064	47	78	Baton Rouge, La.	52	35	1	2
Paterson, N. J.	38	22	3	4	Corpus Christi, Tex.	46	27	6	3
Philadelphia, Pa.	507	288	21	6	Dallas, Tex.	181	86	9	1
Pittsburgh, Pa.	244	147	5	17	El Paso, Tex.	42	34	-	5
Reading, Pa.	46	35	-	4	Fort Worth, Tex.	82	38	6	3
Rochester, N. Y.	132	84	6	13	Houston, Tex.	254	111	12	7
Schenectady, N. Y.	19	12	-	1	Little Rock, Ark.	99	59	2	7
Scranton, Pa.	48	29	2	1	New Orleans, La.	150	73	12	1
Syracuse, N. Y.	82	51	3	3	Oklahoma City, Okla. *	93	53	5	2
Trenton, N. J.	44	24	3	1	San Antonio, Tex.	129	70	7	3
Utica, N. Y.	31	27	-	6	Shreveport, La.	66	32	4	4
Yonkers, N. Y.	44	29	-	2	Tulsa, Okla.	76	47	3	8
EAST NORTH CENTRAL	2,531	1,433	108	71	MOUNTAIN	542	292	30	24
Akron, Ohio	64	43	2	-	Albuquerque, N. Mex.	51	26	2	6
Canton, Ohio	41	28	-	3	Colorado Springs, Colo.	32	19	2	3
Chicago, Ill.	729	413	22	18	Denver, Colo.	123	65	9	3
Cincinnati, Ohio	140	84	4	4	Las Vegas, Nev.	23	11	1	-
Cleveland, Ohio	209	106	11	3	Ogden, Utah	17	7	-	3
Columbus, Ohio	139	84	8	-	Phoenix, Ariz.	135	81	4	1
Dayton, Ohio	94	59	1	1	Pueblo, Colo.	23	15	-	3
Detroit, Mich.	331	135	14	9	Salt Lake City, Utah	61	31	6	4
Evansville, Ind.	40	29	1	1	Tucson, Ariz.	77	37	6	1
Fort Wayne, Ind.	49	24	1	5	PACIFIC	1,808	1,161	45	28
Gary, Ind.	34	22	2	1	Berkeley, Calif.	10	7	-	-
Grand Rapids, Mich.	47	28	3	4	Fresno, Calif.	59	32	4	2
Indianapolis, Ind.	154	81	11	4	Glendale, Calif.	35	24	-	1
Madison, Wis.	43	24	3	2	Honolulu, Hawaii	39	14	2	-
Milwaukee, Wis.	123	89	8	4	Long Beach, Calif.	111	76	1	-
Peoria, Ill.	63	32	7	-	Los Angeles, Calif.	624	422	10	9
Rockford, Ill.	41	25	3	8	Oakland, Calif.	69	49	2	1
South Bend, Ind.	40	26	2	2	Pasadena, Calif.	43	25	1	-
Toledo, Ohio	100	68	5	1	Portland, Oreg.	141	100	1	2
Youngstown, Ohio	50	33	-	1	Sacramento, Calif.	63	42	1	-
WEST NORTH CENTRAL	800	510	37	18	San Diego, Calif.	138	88	6	3
Des Moines, Iowa	46	32	1	1	San Francisco, Calif.	189	105	6	3
Duluth, Minn.	32	19	1	2	San Jose, Calif.	42	29	2	-
Kansas City, Kans.	32	14	5	-	Seattle, Wash.	145	86	4	3
Kansas City, Mo.	112	69	6	-	Spokane, Wash.	53	35	4	2
Lincoln, Nebr.	35	21	-	5	Tacoma, Wash.	47	27	1	2
Minneapolis, Minn.	111	76	3	1	Total	13,148	7,669	507	468
Omaha, Nebr.	80	53	3	-	Expected Number	12,690	7,315	557	442
St. Louis, Mo.	202	126	5	2	Cumulative Total (includes reported corrections for previous weeks)	582,366	338,859	23,046	22,335
St. Paul, Minn.	73	52	8	3					
Wichita, Kans.	77	48	5	4					

* Estimate based on average percent of divisional total

EPIDEMIOLOGIC NOTES AND REPORTS
AFRICAN TRYPANOSOMIASIS — Minnesota

On Sept. 12, 1972, a 24-year-old student at MacAlister College in St. Paul, Minnesota, suffering severe left temporal headache, consulted a local physician. His headache was temporarily relieved by analgesics, but within 2 weeks, the patient developed malaise, lassitude, and persistent chilliness. In early November, he was observed to fall asleep frequently in classes, even while being addressed by the instructor, and he again consulted the same physician. He was admitted to a hospital in St. Paul with a diagnosis of narcolepsy of unknown etiology.

Physical examination revealed a temperature of 99 to 100°F., two firm posterior cervical lymph nodes, positive suck and snout reflexes, and significantly decreased level of consciousness, without disorientation, or memory or thinking disorder. Examination of a peripheral blood smear revealed the presence of trypanosomes. The cerebrospinal fluid had rare trypanosomes and a protein of 99 mg%, but a normal cell count of 2/mm³.

Epidemiologic investigation revealed that the patient had left his home in the forested interior of Liberia in late August 1972 to come to the United States and had never traveled out of Liberia previously. He denied that cases of trypanosomiasis occurred in the vicinity of his village, but the disease is known to be endemic in many highly localized areas of West Africa.

The travel history and predominance of neurologic symptoms without acute systemic illness indicated a diagnosis of *Trypanosoma gambiense* infection with central nervous sys-

tem invasion. Therapy with Melarsoprol*, a trivalent organic antimonial, was initiated on November 11. Ten days after the initial dose, the patient had exhibited no signs of the characteristic toxic encephalopathy or of other toxic effects, and significant improvement in level of consciousness was observed. Serum and cerebrospinal fluid will be examined for the characteristic striking elevation of IgM antibody.

(Reported by William H. A. Watson, M.D., Midway Hospital, St. Paul; Robert J. Gumnit, M.D., Head, Department of Neurology and Robert Gruninger, M.D., Professor of Medicine, St. Paul-Ramsey Hospital, St. Paul; D. S. Fleming, M.D., State Epidemiologist, Minnesota State Department of Health; and an EIS Officer.)

Editorial Note

Approximately one case of African trypanosomiasis is diagnosed in the United States each year. Physicians in any area of the United States should consider this diagnosis in a native or recent returnee from tropical Africa who is severely ill with adenopathy and fever of unknown origin or with unexplainable mental or neurologic changes. Drugs specific for the treatment of this disease may be obtained from the Parasitic Disease Drug Service, CDC.

*Inclusion of trade names does not imply endorsement by the Public Health Service or the U.S. Department of Health, Education, and Welfare.

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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.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

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