



# Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE  
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**SURVEILLANCE SUMMARY**  
**SMALLPOX - Worldwide 1973**

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For the year 1973, a total of 132,339 cases of smallpox had been reported to the World Health Organization, as of January 8, 1974. Although the final total of cases for the year will be somewhat higher than this and over twice the number of cases recorded in 1972, this increase is due primarily to better reporting and improved surveillance. The number of countries reporting 1 or more cases each month continued to decline. The increase in the number of reported cases is primarily accounted for by India and Bangladesh, each of which recorded approximately a 3-fold increase in incidence during 1973. (India's total increased from 27,407 cases in 1972 to more than 84,000 cases in 1973 and the total in Bangladesh, from 10,754 cases to 32,674 cases.) In Pakistan, the number of reported cases also increased from

7,053 to 9,259 of which 85% were reported from only 1 of its 4 provinces. Elsewhere in the world, the overall total of cases declined by 71%. A proportion of the overall increase in incidence during 1973 can be attributed to more complete notification, especially during the period October-December when health personnel throughout India and Pakistan participated in village by village search programs to detect cases.

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

DISEASE	3rd WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 3 WEEKS		
	January 19, 1974	January 20, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	31	70	41	96	143	125
Brucellosis	2	3	2	4	4	4
Chickenpox	3,313	5,271	--	7,271	12,147	--
Diphtheria	--	3	3	3	5	7
Encephalitis:						
Primary: Arthropod-borne and unspecified	15	19	19	41	38	48
Post-Infectious	2	4	5	4	7	15
Hepatitis, Viral:						
Type B	139	137	137	380	378	382
Type A	938	1,095	1,095	2,215	2,717	3,102
Type unspecified	151	--	--	354	--	--
Malaria	1	--	31	5	6	143
Measles (rubeola)	402	564	714	1,026	1,550	1,913
Meningococcal infections, total	27	33	49	76	84	166
Civilian	27	32	45	76	78	155
Military	--	1	1	--	6	6
Mumps	1,678	2,451	2,459	4,019	4,891	6,014
Pertussis	20	--	--	51	--	--
Rubella (German measles)	196	404	526	486	872	1,147
Tetanus	--	2	2	3	2	2
Tuberculosis, new active	505	578	--	1,392	1,313	--
Tularemia	1	4	4	6	8	8
Typhoid fever	6	3	3	17	10	11
Typhus, tick-borne (Rky. Mt. spotted fever)	--	1	1	9	2	1
Veneral Diseases:						
Gonorrhea	16,536	15,832	--	45,533	41,048	--
Syphilis, primary and secondary	431	601	--	1,120	1,541	--
Rabies in animals	37	59	59	105	142	142

**TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY**

	Cum.		Cum.
Anthrax:	1	Poliomyelitis, total:	--
Botulism:	--	Paralytic:	--
Congenital rubella syndrome: * Tex.-1	3	Psittacosis: *	--
Leprosy:	3	Rabies in man:	--
Leptospirosis: Calif.-2, Ore.-2	4	Trichinosis: Ky.-2, N.J.-3	9
Plague:	--	Typhus, murine: *	--

\* Delayed Reports: (1973)  
 Congenital rubella syndrome: Kansas 60, Mich. 1, Texas 1  
 Psittacosis: Texas 1  
 Typhus, murine: Texas 3

## SMALLPOX – Continued

However, it was also apparent that the epidemics of smallpox this year in Bangladesh, the contiguous states of northern and eastern India and the provinces of Sind and Baluchistan in Pakistan were more severe than in recent years.

Since April 1968, when 31 countries reported cases, the number of countries reporting cases each month has steadily, if irregularly, decreased, reaching its lowest point in December 1973 when 6 countries recorded 1 or more cases. During all of 1973, 1 or more cases were reported by only 11 countries, 8 fewer than the 19 countries which recorded cases in 1972 and 32 less than the number that recorded cases in 1967, the first year of the global eradication program.

In 1967, smallpox was considered to be endemic in 30 countries of Asia, Africa, and South America. In January 1974, continuing transmission is believed to be limited to 4 countries—Bangladesh, Ethiopia, India, and Pakistan. Even in the endemic countries, smallpox is confined now to provinces, states, and districts which comprise less than half the geographical area of the countries concerned. In fact, over 87% of all cases in 1973 occurred in areas inhabited by less than 300 million of the 740 million residents of these 4 countries.

Importations in 1973 affected primarily countries adjacent to the endemic areas, these areas having been infected by travelers moving overland. In this manner, Pakistan was

the source for cases in Afghanistan, Ethiopia for cases in Somalia and the French Territory of the Afars and the Issas, and India and Bangladesh for cases in Nepal. One case each occurred in the United Kingdom and Japan in residents returning by air from India and Bangladesh, respectively. An additional 4 cases occurred in the United Kingdom as the result of a laboratory-acquired infection.

Botswana, which appeared to have interrupted transmission at the end of 1972, detected 27 additional cases in 1973 in members of a small but scattered religious group who objected to vaccination and acted to hide cases from health officials. A barely sustained chain of transmission extended until December, but vigorous measures taken by national health authorities appear to have been successful in finally stopping the spread of disease.

In the Americas, in August 1973, 28 months after the last known case of smallpox, an international commission reviewed in detail the nature and extent of the smallpox eradication activities and declared themselves satisfied that the disease had been eradicated from the Americas—almost 450 years after the disease had first been introduced into the western hemisphere. This is the first of the 4 epidemiologic target areas to have achieved eradication. The second, Indonesia, is expected to achieve a similar status within months, its last case of smallpox having occurred in January 1972.

(Reported by the World Health Organization: Weekly Epidemiological Record 49:9-11, 11 Jan 1974.)

## MALARIA – United States, 1972

In 1972, 588 cases of malaria were reported in the United States (Figure 1). This represents a 80.7% decrease, compared with the 3,047 cases reported for a similar period in 1971. This decline was due almost entirely to decreasing

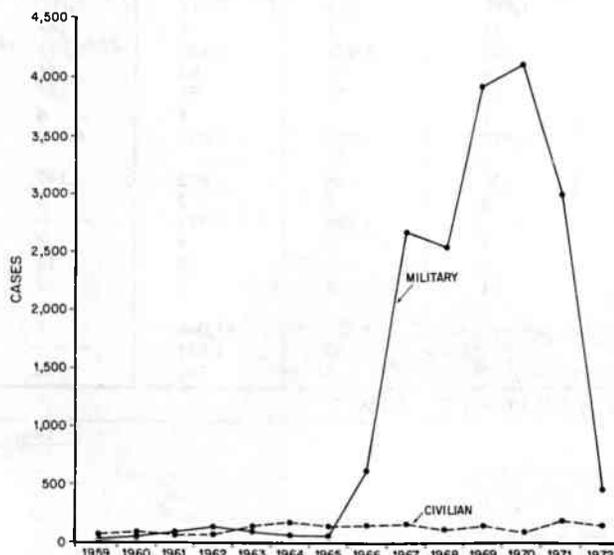
numbers of military cases imported from Vietnam. A total of 435 cases (74.0% of all cases reported in the United States) were acquired in Vietnam in 1972, the smallest number since 1965. Army personnel accounted for 87.4% of the military malaria from Vietnam and Marine Corps personnel for 3.5%. As in previous years, imported *Plasmodium vivax* infections were more common than *P. falciparum* (77.0% vs 11.7%).

There were 146 civilian cases of malaria reported in 1972 compared with 191 cases for 1971. In 7 cases, infection was acquired in the United States—in 3 by blood transfusion, in 2 by illicit use of heroin, in 1 by congenital transmission, and in 1 case the source of infection was cryptic.

Only 1 malaria death was reported in 1972, compared with 9 deaths in 1971. The fatal case was in a European merchant seaman returning from West Africa who became ill with *P. falciparum* malaria. His illness was not diagnosed until 6 days after onset; he died 1 day later.

(Reported by the Parasitic Diseases and Veterinary Public Health Division, Bureau of Epidemiology, CDC.)

Figure 1  
MILITARY AND CIVILIAN CASES OF MALARIA  
UNITED STATES – 1959-1972



A copy of the original report from which these data were derived is available on request from

Center for Disease Control  
Attn: Malaria Surveillance  
Parasitic Diseases & Vet. Public Health Div.  
Bureau of Epidemiology  
Atlanta, Georgia 30333

# Morbidity and Mortality Weekly Report

**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JANUARY 19, 1974 AND JANUARY 20, 1973 (3rd WEEK) - Continued**

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1974	1973	1974	1974	1974	1974		
UNITED STATES	31	2	3,313	-	3	15	19	2	139	938	151	1	5
NEW ENGLAND	3	-	616	-	-	1	1	-	4	58	31	-	-
Maine*	1	-	19	-	-	-	-	-	-	2	1	-	-
New Hampshire*	-	-	61	-	-	-	-	-	1	5	1	-	-
Vermont	-	-	31	-	-	-	-	-	-	9	-	-	-
Massachusetts	1	-	210	-	-	1	1	-	2	10	29	-	-
Rhode Island	1	-	131	-	-	-	-	-	1	10	-	-	-
Connecticut	-	-	164	-	-	-	-	-	-	22	-	-	-
MIDDLE ATLANTIC	4	-	109	-	-	5	2	1	17	100	12	-	-
Upstate New York	2	-	19	-	-	5	-	1	5	47	1	-	-
New York City	2	-	42	-	-	-	2	-	6	26	-	-	-
New Jersey*	-	-	NN	-	-	-	-	-	4	26	11	-	-
Pennsylvania	-	-	48	-	-	-	-	-	2	1	-	-	-
EAST NORTH CENTRAL	5	1	1,307	-	-	3	6	-	16	97	17	-	-
Ohio*	2	-	247	-	-	2	-	-	2	25	-	-	-
Indiana	---	---	---	---	---	---	---	---	---	---	---	---	---
Illinois	-	-	-	-	-	-	-	-	-	9	2	-	-
Michigan	3	1	468	-	-	1	5	-	14	63	15	-	-
Wisconsin	-	-	592	-	-	-	1	-	-	-	-	-	-
WEST NORTH CENTRAL	-	1	326	-	-	-	-	-	3	29	6	-	-
Minnesota*	-	-	20	-	-	-	-	-	-	1	1	-	-
Iowa	-	-	246	-	-	-	-	-	1	-	-	-	-
Missouri*	-	1	1	-	-	-	-	-	2	11	5	-	-
North Dakota	-	-	48	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	5	-	-	-	-	-	-	14	-	-	-
Nebraska	-	-	6	-	-	-	-	-	-	1	-	-	-
Kansas*	-	-	-	-	-	-	-	-	-	2	-	-	-
SOUTH ATLANTIC	5	-	123	-	-	-	2	-	22	182	20	-	1
Delaware	-	-	5	-	-	-	-	-	-	-	2	-	-
Maryland	1	-	7	-	-	-	-	-	4	8	2	-	-
District of Columbia	-	-	1	-	-	-	-	-	-	-	-	-	1
Virginia	-	-	10	-	-	-	1	-	3	11	3	-	-
West Virginia	-	-	95	-	-	-	-	-	2	2	-	-	-
North Carolina	-	-	NN	-	-	-	-	-	-	21	4	-	-
South Carolina	2	-	5	-	-	-	-	-	1	6	2	-	-
Georgia*	-	-	-	-	-	-	-	-	-	15	-	-	-
Florida	2	-	-	-	-	-	1	-	12	119	7	-	-
EAST SOUTH CENTRAL	3	-	93	-	-	1	1	-	6	84	8	-	-
Kentucky	1	-	72	-	-	1	-	-	1	27	8	-	-
Tennessee	-	-	NN	-	-	-	1	-	1	37	-	-	-
Alabama	2	-	21	-	-	-	-	-	4	15	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	5	-	-	-
WEST SOUTH CENTRAL	4	-	296	-	-	3	-	1	5	153	9	-	-
Arkansas	-	-	5	-	-	-	-	1	-	14	-	-	-
Louisiana*	1	-	NN	-	-	-	-	-	5	15	5	-	-
Oklahoma*	-	-	19	-	-	1	-	-	-	28	4	-	-
Texas*	3	-	272	-	-	2	-	-	-	96	-	-	-
MOUNTAIN	-	-	77	-	-	1	1	-	3	59	9	-	-
Montana	-	-	21	-	-	-	-	-	-	19	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	2	-	-	-
Wyoming	---	---	---	---	---	---	1	---	---	---	---	---	---
Colorado	-	-	27	-	-	-	-	-	-	-	2	-	-
New Mexico*	-	-	28	-	-	1	-	-	-	13	-	-	-
Arizona	-	-	-	-	-	-	-	-	2	20	2	-	-
Utah	-	-	1	-	-	-	-	-	1	1	5	-	-
Nevada	-	-	-	-	-	-	-	-	-	4	-	-	-
PACIFIC	7	-	366	-	3	1	6	-	63	176	39	1	4
Washington	-	-	315	-	3	-	-	-	2	25	14	-	-
Oregon	-	-	1	-	-	-	1	-	4	11	2	-	-
California	6	-	-	-	-	1	5	-	53	134	23	1	4
Alaska	-	-	24	-	-	-	-	-	3	2	-	-	-
Hawaii	1	-	26	-	-	-	-	-	1	4	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	---	---	---	---	---	---	---	---	---	---	---	---	---
Virgin Islands	-	-	10	-	-	-	-	-	-	-	-	-	-

\*Delayed Reports:

Aseptic Meningitis: N.J. 6 (1973), Texas 3 (1973), Mo. delete 3  
 Brucellosis: Texas 2 (1973)  
 Chickenpox: Me. 2 (1973), Minn. 53 (1973), N.H. 15  
 Diphtheria: N.M. 7 (1973), N.M. delete 7

Encephalitis, primary: N.J. 2 (1973), Okla. 1 (1973), Texas 2 (1973)  
 Hepatitis B: Okla. 4 (1973), La. delete 2 (1973)  
 Hepatitis A: Me. 6 (1973), Ohio delete 1 (1973), Kansas 6 (1973),  
 Ga. 9 (1973), Okla. 5 (1973), La. delete 4 (1973), Me. 1  
 Malaria: Texas 1 (1973)

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JANUARY 19, 1974 AND JANUARY 20, 1973 (3rd WEEK) - Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	402	1,026	1,550	27	76	84	1,678	4,019	20	196	486	3
NEW ENGLAND	41	116	616	1	6	6	187	549	-	17	31	-
Maine *	-	3	2	-	-	-	32	102	-	-	-	-
New Hampshire*	28	71	92	-	1	1	8	53	-	1	2	-
Vermont	-	-	1	-	-	-	-	2	-	2	3	-
Massachusetts	4	16	337	-	1	3	34	100	-	9	15	-
Rhode Island	8	25	4	1	3	-	62	165	-	1	4	-
Connecticut	1	1	180	-	1	2	51	127	-	4	7	-
MIDDLE ATLANTIC	156	338	133	3	9	15	121	321	-	9	35	1
Upstate New York	3	4	14	1	1	1	15	72	-	2	12	-
New York City	3	25	77	-	4	6	22	63	-	3	12	-
New Jersey*	126	237	31	2	3	4	20	85	-	4	8	1
Pennsylvania	24	72	11	-	1	4	64	101	-	-	3	-
EAST NORTH CENTRAL	70	253	413	1	5	3	414	1,217	1	65	162	-
Ohio	13	115	18	1	3	3	104	381	-	5	32	-
Indiana	---	7	40	---	-	-	---	54	---	---	15	-
Illinois	19	48	165	-	-	-	77	116	1	6	14	-
Michigan	24	55	105	-	2	-	155	489	-	49	86	-
Wisconsin	14	28	85	-	-	-	78	177	-	6	15	-
WEST NORTH CENTRAL	40	51	44	4	4	6	174	247	-	3	5	-
Minnesota*	40	41	3	2	2	-	-	-	-	-	-	-
Iowa	-	2	40	1	1	3	155	188	-	2	2	-
Missouri *	-	4	1	-	-	1	12	41	-	-	2	-
North Dakota	-	3	-	-	-	-	-	-	-	-	-	-
South Dakota	-	1	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	7	18	-	1	1	-
Kansas *	-	-	-	1	1	2	-	-	-	-	-	-
SOUTH ATLANTIC	16	29	58	6	14	13	105	260	1	14	35	-
Delaware	-	-	-	-	3	-	-	6	-	-	1	-
Maryland	-	-	-	1	2	4	2	5	-	-	-	-
District of Columbia	-	-	-	-	-	1	1	11	-	-	-	-
Virginia	-	2	5	2	5	2	15	31	-	-	-	-
West Virginia	4	8	21	-	-	-	44	133	-	10	23	-
North Carolina	-	-	2	1	1	5	NN	NN	-	-	1	-
South Carolina	-	6	2	1	1	1	2	2	1	-	-	-
Georgia	-	1	1	-	-	-	-	-	-	-	2	-
Florida	12	12	27	1	2	-	41	72	-	4	8	-
EAST SOUTH CENTRAL	3	5	34	2	5	7	199	429	5	9	44	1
Kentucky	3	5	10	2	2	3	131	157	1	4	7	-
Tennessee	-	-	10	-	2	2	46	217	1	5	30	1
Alabama	-	-	-	-	1	1	20	42	3	-	4	-
Mississippi	-	-	14	-	-	1	2	13	-	-	3	-
WEST SOUTH CENTRAL	6	14	61	8	19	8	154	303	8	5	12	-
Arkansas *	-	-	2	1	3	1	41	43	-	-	1	-
Louisiana *	-	1	-	3	4	1	-	20	-	-	-	-
Oklahoma*	1	3	4	-	3	-	5	14	-	1	5	-
Texas	5	10	55	4	9	6	108	226	8	4	6	-
MOUNTAIN	23	93	33	-	1	8	56	182	-	5	60	-
Montana	18	85	1	-	-	-	11	35	-	1	46	-
Idaho	-	-	3	-	-	-	1	55	-	-	-	-
Wyoming	---	-	-	---	-	-	---	-	---	---	-	-
Colorado	2	3	8	-	-	2	42	63	-	2	4	-
New Mexico	2	4	17	-	-	1	1	28	-	2	9	-
Arizona	1	1	4	-	-	2	-	-	-	-	-	-
Utah	-	-	-	-	1	1	1	1	-	-	-	-
Nevada	-	-	-	-	-	2	-	-	-	-	1	-
PACIFIC	47	127	158	2	13	18	268	511	5	69	102	1
Washington	-	2	92	1	2	2	124	180	-	46	59	-
Oregon	-	-	29	-	3	2	26	152	2	-	4	-
California	47	125	35	1	8	14	109	151	3	22	37	1
Alaska	-	-	-	-	-	-	8	27	-	-	-	-
Hawaii	-	-	2	-	-	-	1	1	-	1	2	-
Guam	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	---	8	95	---	-	-	---	7	---	---	-	-
Virgin Islands	-	3	-	-	-	-	-	2	-	-	-	-

\* Delayed Reports:

Measles: Me. delete 1 (1973), N.J. delete 7 (1973), Ark. delete 2 (1973)  
Meningococcal infections: N.J. 1 (1973), Kansas 1 (1973), La. delete 1 (1973)Mumps: Me. delete 1 (1973), Minn. 4 (1973), Okla. 1 (1973),  
N.H. 7, Mo. delete 1

Rubella: Ark. 2 (1973), Okla. 1 (1973)

Tetanus: Texas 1 (1973)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDING JANUARY 19, 1974 AND JANUARY 20, 1973 (3rd WEEK) - Continued

AREA	TUBERCULOSIS (New Active)		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES					RABIES IN ANIMALS	
	1974	Cum. 1974	Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	GONORRHEA		SYPHILIS (Pri. & Sec.)		Cum. 1974		
								1974	Cumulative 1974 1973	1974	Cumulative 1974 1973			
UNITED STATES	505	1,392	6	6	17	-	9	16,536	45,533	41,048	431	1,120	1,541	105
NEW ENGLAND	14	55	-	-	-	-	-	412	1,224	1,088	10	25	27	1
Maine	2	5	-	-	-	-	-	43	127	63	1	1	1	-
New Hampshire	2	3	-	-	-	-	-	13	38	32	-	-	1	-
Vermont *	1	1	-	-	-	-	-	9	33	16	-	-	1	-
Massachusetts	8	42	-	-	-	-	-	156	517	488	4	9	12	-
Rhode Island	1	4	-	-	-	-	-	30	82	164	2	2	1	1
Connecticut	-	-	-	-	-	-	-	161	427	325	3	13	11	-
MIDDLE ATLANTIC	61	167	1	1	7	-	9	2,070	5,800	6,071	115	247	306	2
Upstate New York	4	4	1	-	-	-	-	355	743	1,295	14	18	17	1
New York City	28	87	-	1	7	-	-	953	2,797	2,667	62	152	197	-
New Jersey *	7	54	-	-	-	-	-	307	990	783	15	32	46	-
Pennsylvania	22	22	-	-	-	-	9	455	1,270	1,326	24	45	46	1
EAST NORTH CENTRAL	75	229	-	1	1	-	-	1,817	5,171	4,750	8	48	67	9
Ohio *	33	91	-	-	-	-	-	739	2,172	1,661	1	15	9	-
Indiana	-	14	-	-	-	-	-	-	234	460	-	6	14	1
Illinois	12	55	-	-	-	-	-	176	558	700	-	7	11	1
Michigan	30	69	-	1	1	-	-	688	1,636	1,546	6	17	32	-
Wisconsin	-	-	-	-	-	-	-	214	571	383	1	3	1	7
WEST NORTH CENTRAL	21	42	1	1	1	-	-	967	2,122	2,339	1	16	12	32
Minnesota *	2	10	-	1	1	-	-	238	522	569	-	3	7	13
Iowa	4	7	-	-	-	-	-	126	128	215	1	1	-	7
Missouri *	10	16	1	-	-	-	-	301	769	1,131	-	10	4	-
North Dakota	-	1	-	-	-	-	-	14	37	34	-	-	-	7
South Dakota	-	1	-	-	-	-	-	36	109	136	-	-	-	-
Nebraska	-	1	-	-	-	-	-	83	162	142	-	-	1	-
Kansas *	5	6	-	-	-	-	-	169	395	112	-	2	-	5
SOUTH ATLANTIC	112	263	1	1	2	-	-	3,782	11,562	11,069	141	383	543	10
Delaware	2	8	-	-	-	-	-	21	148	146	4	12	1	-
Maryland	16	36	-	-	1	-	-	639	1,359	918	8	43	86	-
District of Columbia	7	12	-	-	-	-	-	282	879	1,042	16	34	39	-
Virginia	32	55	1	-	-	-	-	386	1,215	1,011	19	51	167	4
West Virginia	6	13	-	-	-	-	-	40	132	195	1	1	3	2
North Carolina *	23	42	-	-	-	-	-	324	1,412	1,339	14	22	22	-
South Carolina	21	57	-	-	-	-	-	397	1,618	1,451	29	63	39	-
Georgia *	5	5	-	-	-	-	-	905	2,386	2,025	12	37	98	2
Florida	-	35	-	1	1	-	-	788	2,413	2,942	38	120	88	2
EAST SOUTH CENTRAL	51	123	1	-	-	-	-	1,676	3,660	3,332	28	77	121	16
Kentucky	13	26	1	-	-	-	-	195	487	421	3	13	63	10
Tennessee	21	48	-	-	-	-	-	657	1,592	1,415	13	33	22	4
Alabama	12	36	-	-	-	-	-	575	877	711	4	13	10	2
Mississippi	5	13	-	-	-	-	-	249	704	785	8	18	26	-
WEST SOUTH CENTRAL	90	238	2	-	-	-	-	2,607	7,374	4,410	47	115	152	18
Arkansas	22	39	-	-	-	-	-	192	469	502	5	9	10	2
Louisiana *	20	35	1	-	-	-	-	528	1,219	764	20	29	45	1
Oklahoma	8	17	-	-	-	-	-	246	593	447	-	5	6	5
Texas	40	147	1	-	-	-	-	1,641	5,093	2,697	22	72	91	10
MOUNTAIN	5	34	-	-	-	-	-	674	1,810	1,445	7	15	42	2
Montana	1	1	-	-	-	-	-	44	120	113	-	-	-	-
Idaho	-	-	-	-	-	-	-	68	160	103	-	-	2	-
Wyoming	-	1	-	-	-	-	-	-	26	11	-	1	1	-
Colorado	-	-	-	-	-	-	-	207	571	381	-	1	12	-
New Mexico	3	12	-	-	-	-	-	83	261	223	-	-	7	1
Arizona	-	18	-	-	-	-	-	192	493	407	5	8	18	1
Utah	1	1	-	-	-	-	-	13	39	73	-	-	-	-
Nevada	-	1	-	-	-	-	-	67	140	134	2	5	2	-
PACIFIC	76	241	-	2	6	-	-	2,531	6,810	6,544	74	194	271	15
Washington	9	21	-	-	1	-	-	247	561	637	-	-	13	-
Oregon	-	1	-	-	-	-	-	195	493	629	2	6	6	-
California	63	202	-	2	5	-	-	1,963	5,396	4,980	71	186	238	15
Alaska	-	-	-	-	-	-	-	60	178	126	-	-	8	-
Hawaii	4	17	-	-	-	-	-	66	182	172	1	2	6	-
Guam	-	-	-	-	-	-	-	-	-	33	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-	-	164	-	-	-	-
Virgin Islands	-	14	-	-	-	-	-	-	112	14	-	30	36	2
*Delayed Reports:	-	-	-	-	-	-	-	3	4	14	-	-	-	-

Tuberculosis: Ohio delete 5 (1973), Minn. 5 (1973), Kansas 4 (1973), N.C. delete 2 (1973) Ga. 16 (1973), Mo. 5, Ga. delete 8 Typhoid fever: N.J. 14 (1973) Gonorrhea: La. delete 4 (1973), Vt. 15

Syphilis: La. delete 1 (1973) Rabies: Kansas: 5 (1973), La. delete 1 (1973)

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING JANUARY 19, 1974

Week No.  
3

(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	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
<b>NEW ENGLAND</b>	846	548	211	34	27	44	<b>SOUTH ATLANTIC</b>	1,443	794	440	122	47	54
Boston, Mass.	277	171	69	18	9	16	Atlanta, Ga.	127	75	38	9	1	5
Bridgeport, Conn.	45	31	11	1	1	5	Baltimore, Md.	262	139	82	26	8	7
Cambridge, Mass.	33	21	10	1	—	6	Charlotte, N. C.	74	40	22	5	3	—
Fall River, Mass.	33	24	8	—	—	2	Jacksonville, Fla.	89	49	24	9	3	—
Hartford, Conn.	69	45	16	4	3	—	Miami, Fla.	105	52	35	10	4	2
Lowell, Mass.	24	16	7	—	1	3	Norfolk, Va.	71	33	22	9	5	6
Lynn, Mass.	26	16	8	2	—	1	Richmond, Va.	108	59	35	10	4	5
New Bedford, Mass.	46	29	10	1	1	—	Savannah, Ga.	67	31	24	6	3	7
New Haven, Conn.	62	42	14	1	2	1	St. Petersburg, Fla.	110	89	17	—	4	5
Providence, R. I.	70	35	24	1	6	5	Tampa, Fla.	82	49	27	2	2	5
Somerville, Mass.	18	13	5	—	—	2	Washington, D. C.	284	138	94	35	9	10
Springfield, Mass.	50	33	13	1	3	3	Wilmington, Del.	64	40	20	1	1	2
Waterbury, Conn.	28	21	6	1	—	—							
Worcester, Mass.	65	51	10	2	1	—	<b>EAST SOUTH CENTRAL</b>	842	465	257	53	34	26
<b>MIDDLE ATLANTIC</b>	3,280	2,040	836	207	94	155	Birmingham, Ala.	102	60	31	3	3	2
Albany, N. Y.	60	35	18	3	3	4	Chattanooga, Tenn.	74	40	23	5	2	3
Allentown, Pa.	21	14	5	1	1	4	Knoxville, Tenn.	52	31	14	6	—	1
Buffalo, N. Y.	152	81	47	12	10	11	Louisville, Ky.	144	77	38	11	11	11
Camden, N. J.	30	16	12	2	—	2	Memphis, Tenn.	261	146	80	17	8	5
Elizabeth, N. J.	28	18	8	1	1	1	Mobile, Ala.	54	30	19	—	4	1
Eric, Pa.	32	22	7	2	1	5	Montgomery, Ala.	35	22	7	1	2	—
Jersey City, N. J.	81	55	20	4	2	5	Nashville, Tenn.	120	59	45	10	4	3
Newark, N. J.	35	16	8	4	4	3	<b>WEST SOUTH CENTRAL</b>	1,450	831	402	104	60	57
New York City, N. Y.	1,798	1,124	436	125	49	74	Austin, Tex.	50	29	14	4	1	1
Paterson, N. J.	48	34	13	1	—	3	Baton Rouge, La.	60	35	18	4	1	3
Philadelphia, Pa.	405	249	108	27	11	9	Corpus Christi, Tex.	48	23	16	4	4	3
Pittsburgh, Pa.	184	104	62	9	4	10	Dallas, Tex.	196	110	64	9	7	1
Reading, Pa.	41	29	8	1	1	2	El Paso, Tex.	74	45	15	3	6	3
Rochester, N. Y.	124	89	24	6	2	8	Fort Worth, Tex.	93	55	26	5	5	3
Schenectady, N. Y.	25	13	10	2	—	1	Houston, Tex.	341	171	101	38	13	10
Scranton, Pa.	48	30	10	1	2	3	Little Rock, Ark.	92	52	25	7	3	4
Syracuse, N. Y.	82	52	20	4	2	2	New Orleans, La.	172	104	49	10	5	6
Trenton, N. J.	35	23	10	1	—	5	San Antonio, Tex.	172	105	36	13	12	10
Utica, N. Y.	19	15	3	—	1	1	Shreveport, La.	69	48	13	5	2	12
Yonkers, N. Y.	32	21	7	1	—	2	Tulsa, Okla.	83	54	25	2	1	12
<b>EAST NORTH CENTRAL</b>	2,823	1,673	759	175	118	86	<b>MOUNTAIN</b>	558	353	135	32	20	27
Akron, Ohio	97	59	31	4	3	—	Albuquerque, N. Mex.	51	27	12	4	4	10
Canton, Ohio	49	28	18	3	—	5	Colorado Springs, Colo.	29	21	4	3	1	6
Chicago, Ill.	731	416	199	60	31	16	Denver, Colo.	136	89	33	10	1	1
Cincinnati, Ohio	186	103	58	11	6	3	Las Vegas, Nev.	30	15	9	2	3	—
Cleveland, Ohio	235	129	75	12	6	8	Ogden, Utah	20	16	3	1	—	—
Columbus, Ohio	180	103	43	12	9	2	Phoenix, Ariz.	135	80	42	4	5	—
Dayton, Ohio	106	67	26	8	2	2	Pueblo, Colo.	24	18	4	1	1	—
Detroit, Mich.	338	181	98	27	18	5	Salt Lake City, Utah	59	38	12	3	3	—
Evansville, Ind.	54	37	10	1	4	6	Tucson, Ariz.	74	49	16	4	2	—
Fort Wayne, Ind.	74	50	15	2	4	9							
Gary, Ind.	20	10	7	2	1	4	<b>PACIFIC</b>	1,845	1,167	470	107	43	44
Grand Rapids, Mich.	62	40	18	2	2	4	Berkeley, Calif.	17	13	3	—	—	—
Indianapolis, Ind.	181	107	50	7	11	2	Fresno, Calif.	51	33	12	2	1	—
Madison, Wis.	42	25	11	2	2	8	Glendale, Calif.	28	20	6	1	—	—
Milwaukee, Wis.	138	96	31	5	6	2	Honolulu, Hawaii	60	29	21	8	1	—
Peoria, Ill.	45	27	8	2	6	1	Long Beach, Calif.	132	82	46	1	1	—
Rockford, Ill.	32	18	8	3	2	3	Los Angeles, Calif.	607	373	151	47	13	—
South Bend, Ind.	51	38	7	4	—	2	Oakland, Calif.	97	63	21	4	2	—
Toledo, Ohio	125	87	27	7	1	1	Pasadena, Calif.	42	23	12	5	—	—
Youngstown, Ohio	77	52	19	1	4	3	Portland, Oreg.	138	89	40	5	2	—
<b>WEST NORTH CENTRAL</b>	940	590	232	50	28	40	Sacramento, Calif.	74	48	16	3	5	—
Des Moines, Iowa	65	42	13	1	4	3	San Diego, Calif.	109	69	21	11	5	—
Duluth, Minn.	28	20	6	—	—	5	San Francisco, Calif.	186	116	51	11	1	—
Kansas City, Kans.	37	18	13	3	—	3	San Jose, Calif.	56	38	14	2	2	—
Kansas City, Mo.	158	105	37	9	3	4	Seattle, Wash.	144	97	36	4	5	—
Lincoln, Nebr.	38	24	11	3	—	2	Spokane, Wash.	60	43	9	2	4	—
Minneapolis, Minn.	117	73	28	8	3	3	Tacoma, Wash.	44	31	11	1	1	—
Omaha, Nebr.	114	69	30	4	4	2							
St. Louis, Mo.	232	141	63	14	9	11	<b>Total</b>	14,027	8,461	3,742	884	471	531
St. Paul, Minn.	87	61	17	2	4	—	<b>Expected Number</b>	13,202	7,874	3,550	827	464	531
Wichita, Kans.	64	37	14	6	1	7							

\* Delayed report for week ending January 12, 1974.

EPIDEMIOLOGIC NOTES AND REPORTS  
SALMONELLA READING GASTROENTERITIS - Virginia

Beginning Friday, November 30, 1973, and extending over the weekend, approximately 468 of 891 students and staff members at a high school in Grundy, Virginia, sought medical attention for vomiting and diarrhea; approximately 70 were hospitalized. There were no deaths. Stool specimens from 10 students and staff members at the school were positive for *Salmonella reading*.

Food histories on 82 students and staff members implicated turkey salad served in the school cafeteria on November 30 as the vehicle in the outbreak (Table 1). Approximately 570 turkey salad lunches had been served that day. *S. reading* was subsequently recovered from samples of the salad and from peaches served at the same meal.

The turkey salad had been made from part of a store of 18 turkeys originally bought for a pre-Thanksgiving meal on November 21. Twelve turkeys had been cooked overnight November 19, boned on November 20, and served on November 21. The other 6 had been cooked overnight November 20, boned at approximately 8:30 the next morning by all the kitchen staff working together, and held warm until 1:00 p.m. in a large serving pan. The latter 6 turkeys were never served, however, and most of this meat was placed in a large pan approximately 8 inches deep, covered with aluminum foil, and frozen. A smaller portion was placed in a plastic bag and frozen.

Two members of the kitchen staff took some of the unserved turkey home and gave it to their families on November 22. At least 2 of 5 family members who ate the turkey became violently ill with fever, vomiting, and diarrhea within 12 hours after eating. At the time, the illnesses were assumed to represent nonspecific gastroenteritis, and no connection with the turkey was made. One of the members of the involved families was found in the third week of December to have a positive stool culture for *S. reading*.

On November 28, the frozen turkey in the pan, and on November 29, the turkey in the plastic bag were placed in a refrigerator to thaw. At 8:00 a.m. on November 30, parts of both portions were still frozen, so the meat was placed in roasting pans and warmed in an oven for approximately 20 minutes. The turkey was then put through a meat chopper at 10 a.m. and mixed with chopped boiled eggs, chopped pickles, and salad dressing. One woman who ate turkey from the roasting pan before it was chopped up later became ill with typical symptoms of salmonellosis. The salad was then placed on a warming table and served from 10:30 a.m. to 12:30 p.m.

Between December 12 and 17, a questionnaire survey yielded information on possible secondary spread of illness in 774 families of 872 high school students and staff members on whom information was available. There were 19 cas-

es of diarrhea between November 30 and December 10 in the family contacts of 307 students and staff members who had diarrhea during the same time period; 3 of these were in the family of 1 of the cafeteria cooks. The 16 cases in persons with no opportunity for exposure to the turkey salad vehicle represented fewer than 2% of the household contacts of students and staff who developed diarrhea. Three additional diarrhea cases occurred in the households of students and staff who denied having had diarrhea themselves.

(Reported by Hilliard Clevinger, Jr., Leslie Clevinger, and Jonah Stiltner, Sanitarians, William A Cover, M.D., Health Officer, Buchanan County Health Department; Robert Hacker, Epidemiology Technician, Appalachian Health Services; Robert S. Jackson, M.D., State Epidemiologist, Virginia State Department of Health; and 2 EIS Officers.)

#### Editorial Note

Epidemiologic evidence suggests that turkey salad was the vehicle of infection in this outbreak. *S. reading* apparently multiplied to a concentration sufficient to cause illness before the unused turkey was refrozen on November 21, as suggested by the illnesses in relatives of the cafeteria cooks who ate the turkey on November 22. *Salmonella* has previously been shown to survive in frozen food (1).

The fact that few family contacts of ill students and staff members (excluding relatives of cafeteria cooks) developed diarrhea suggests that adolescent and adult patients with salmonella gastroenteritis do not pose a great risk of transmitting their illness to their close contacts. The cases of diarrhea in household contacts may not all have been secondary cases of *S. reading* infection since no attempt was made to exclude incidental and unrelated diarrheal illness among contacts of the students and staff.

#### Reference

1. Committee on Salmonella, Division of Biology and Agriculture, National Research Council: An Evaluation of the Salmonella Problem. Washington, National Academy of Sciences, 1969, pp. 128-129

Table 1  
Food-Specific Attack Rates of Gastroenteritis  
Grundy, Virginia 1973

Food	Ate			Did Not Eat				
	Ill	Not Ill	Total	Attack Rate (%)	Ill	Not Ill	Total	Attack Rate (%)
Green beans	60	7	67	90	11	3	14	79
Peaches	56	4	60	93	16	6	22	73
Potatoes	63	6	69	91	8	4	12	67
Turkey salad	71	3	74	96	0	7	7	0*

\*p < 0.0000004

#### INTERNATIONAL NOTES SIGNING OF VACCINATION CERTIFICATES

The International Health Regulations concerning the signing of International Certificates of Vaccination were amended effective January 1, 1974, as follows:

"International Certificates of Vaccination must be signed in his own hand by a medical practitioner or other person authorized by the national health administration; his official stamp is not an accepted substitute for his signature."

The Regulations previously required that Certificates be signed by a medical practitioner. The amendment enables the Public Health Service to authorize a physician to designate other persons under his supervision to sign the Certificates.

(Reported by the Quarantine Division, Bureau of Epidemiology, CDC.)

**INTERNATIONAL NOTES  
QUARANTINE MEASURES**

The following change should be made in the "Supplement - United States Designated Yellow Fever Vaccination Centers," MMWR, Vol. 22, No. 32:

New York  
Rochester

Delete:  
University Health Service  
Strong Memorial Hospital  
260 Crittenden Blvd. 14620

Insert:  
Diagnostic Clinic  
The University of Rochester  
260 Crittenden Blvd.  
U Ground 14642

**Errata**

Vol. 23, No. 2, p. 19

In the article "Change in Cholera Vaccination Requirements", line 1, change the number 70 countries to 170 countries.

**Errata (continued)**

Vol. 22, No. 49, p. 407

In the article "Human Lead Absorption - Texas", Editorial Note, line 2, change the number 2,700 persons to 2,500 persons. Also, substitute the following table for Table 2.

**Table 2**  
Estimated Numbers of Persons 1-19 Years With Blood Lead Levels  $\geq 40 \mu\text{G}\%$ , by Distance from Smelter  
El Paso, Texas - August 1972

Distance from Smelter (Miles)	Sample Group		Population 1-19 Years*	
	No. Tested	% With Blood Lead $\geq 40 \mu\text{G}\%$	No. of Children	Projected No. with Blood Lead $\geq 40 \mu\text{G}\%$
0-1.0	259	43.2	420	181
1.1-2.4	246	10.2	12,619	1,287
2.5-4.1	253	9.5	11,486	1,091
Total	758	21.2	24,525	2,559

\*From 1970 U.S. Census Data

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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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