CENTER FOR DISEASE CONTROL

Morbidity and Mortality

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WEEKLY REPORT

For Week Ending January 15, 1972

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

MEASLES – Iowa

Between Aug. 1, 1971, and Jan. 8, 1972, 518 cases of measles occurred in Des Moines County, Iowa (Figure 1), a semi-rural county in the southeast corner of the state. The county population is 46,982 (1970 census); 33,285 persons live in Burlington, the county seat. In August 1971, after many months with no measles cases noted, four cases occurred. In the third week of September, however, 2 weeks after the opening of schools, the number of cases increased rapidly and reached approximately 50 per week from mid-October to early December. A vaccination campaign was conducted on November 23 and reached over 3,600 children aged 1-12. The number of reported cases declined sharply 2 weeks later. Only 10 cases were reported in the week ending December 18, eight in the week ending December 25, and five in the first 2 weeks in January 1972.

A total of 384 cases occurred in Burlington, and 273 (71%) of these involved school-aged children. Thirty-six of the 111 preschool patients attended either Headstart or a day-care center. Of the 127 cases in rural communities surrounding Burlington, 108 (85%) occurred in school-aged children. Only five cases were reported in adults.

Although the socio-economic character of the community and the prior level of immunity were fairly uniform, the distribution of cases in the county was not. The schools in several middle-class areas on the south side of the city and in two outlying rural communities to the north and west were the most heavily affected, with attack rates of up to 15%. Other schools had few or no cases.

CONTENTS

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

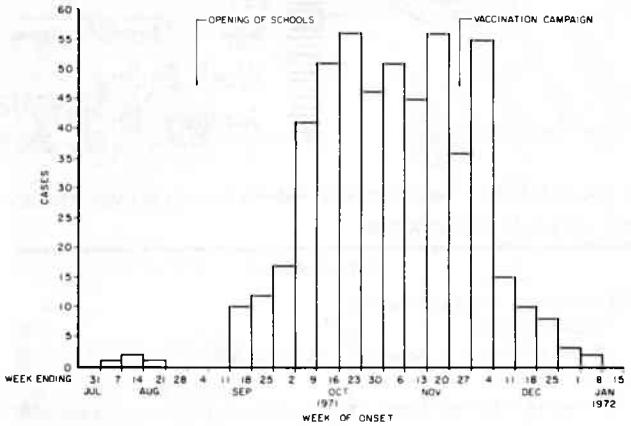
DISEASE	2nd WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 2 WEEKS		
	January 15, 1972	January 16, 1971	1967-1971	1972	1971	MEDIAN 1967-1971
Aseptic meningitis	36	58	27	80	121	53
Brucellosis	4	–	1	4	–	2
Chickenpox	2,526	---	---	3,576	---	---
Diphtheria	4	12	2	4	13	4
Encephalitis, primary:						
Arthropod-borne & unspecified	17	15	21	28	37	37
Encephalitis, post-infectious	1	2	4	5	13	13
Hepatitis, serum	164	155	89	328	311	177
Hepatitis, infectious	1,101	1,265	711	2,024	2,417	1,357
Malaria	105	50	45	142	109	76
Measles (rubeola)	650	866	866	1,198	1,925	1,470
Meningococcal infections, total	27	67	67	64	117	116
Civilian	26	62	67	61	110	113
Military	1	5	3	3	7	7
Mumps	2,257	2,809	---	3,829	5,037	---
Rubella (German measles)	376	456	456	610	825	753
Tetanus	–	1	1	–	1	1
Tuberculosis, new active	423	---	---	715	---	---
Tularemia	2	–	2	4	4	4
Typhoid fever	5	4	5	7	10	10
Typhus, tick-fever (Rky. Mt. spotted fever)	2	–	–	4	–	1
Venereal Diseases:						
Gonorrhea	13,174	---	---	24,631	---	---
Syphilis, primary and secondary	444	---	---	710	---	---
Rabies in animals	51	80	66	111	130	80

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	–	Poliomyelitis, total:	–
Botulism:	–	Paralytic:	–
Congenital rubella syndrome:	–	Psittacosis: Calif.-1	1
Leprosy: Calif.-1, Hawaii-1	5	Rabies in man:	–
Leptospirosis:	–	Trichinosis: Mass.-1	6
Plague:	–	Typhus, murine: Tex.-2	2

MEASLES – Continued

Figure 1
MEASLES CASES, BY WEEK OF ONSET
DES MOINES COUNTY, IOWA – JULY 31, 1971-JAN. 15, 1972



School nurses in Des Moines County have kept records for 2 or more years on previous measles history or measles vaccination for children entering schools. Based on these records, the level of immunity to measles in children aged 1-9 years in the county prior to the outbreak was estimated to be 63%. A total of 50 cases of measles occurred in children with a definite history of previous measles vaccination (Table 1); however, 23 of these children had been vaccinated before the age of 1 year. Vaccine efficacy was calculated to be 93.5%.

(Reported by the staff of the Des Moines County Health Department; Reed Davis, Administrator, Des Moines County Health Center; Arnold M. Reeve, M.D., Commissioner of Public Health, Stanley L. Hendricks, D.V.M., Chief, Preventive Medical Services, Iowa Department of Health; a 4th year medical student, Baylor College of Medicine, Houston, Texas; and two EIS Officers.)

Table 1
Measles Attack Rates in Children, by Vaccination Status
(Ages 1-9 years)
Des Moines County, Iowa – Aug. 1, 1971-Jan. 8, 1972

	Number of Cases	Population at Risk	Attack Rate (Percent)
Unimmunized Children	445	2,860	15.5
Immunized Children	50	4,860	1.0
Total	495	7,720	6.4

Editorial Note

Des Moines County, like many other areas of the United States, conducted its last mass measles vaccination campaign several years ago, in 1966. Since then, because of insufficient vaccination, immunity levels had declined to below 70%. There is no law in Iowa requiring measles vaccination for school entry. This outbreak involved primarily young school children, a pattern characteristic of measles in suburban and rural areas.

The vaccine efficacy of well over 90% in Des Moines County is comparable to that observed in a number of other recent outbreaks. The overwhelming majority of cases continues to occur in unvaccinated children. The effectiveness of the vaccine was also demonstrated by the sharp decline in the number of cases 2 weeks after the vaccination campaign.

CURRENT TRENDS
INFLUENZA – United States, 1972

The fourth influenza telephone survey of State Epidemiologists was conducted on Jan. 17, 1972, by the Viral Diseases Branch, Epidemiology Program, CDC. Isolated outbreaks of influenza-like illness without laboratory confirmation were reported from Arizona, Arkansas, Indiana, Kentucky, Mississippi, New Hampshire, New Mexico, North Dakota, Virginia, West Virginia, and Puerto Rico. Isolated outbreaks of influenza were confirmed in Alabama, California, Florida, Georgia, Hawaii, Illinois, Missouri, Oklahoma, Pennsylvania, South Carolina, Tennessee, Utah, Vermont, and Washington. Outbreaks involving contiguous counties but less than half of a state's counties were reported from Idaho, Iowa, Kansas, Louisiana, Maryland, Michigan, Minnesota, Montana, New York, North Carolina, Ohio, Oregon, South Dakota, Texas, and Wisconsin. Widespread influenza was observed in New York City, the District of Columbia, and eight states: Colorado, Connecticut, Delaware, Maine, Massachusetts, Nebraska, New Jersey, and Rhode Island. A significant increase in mortality due to pneumonia and influenza has been noted in the areas that were affected by influenza early in the season, namely, New England, the East North Central, and Mountain states (Figure 2). Although increased mortality was reported from the Middle Atlantic, West North Central, Pacific, and West South Central states, a sustained increase of 2 weeks duration over the epidemic threshold is required to be statistically significant (MMWR, Vol. 14, No. 1).

Since the telephone survey of Jan. 3-4, 1972, the incidence of confirmed influenza has increased markedly as children have returned to school, as holiday reporting artifacts have diminished, and as laboratory results of confirmed cases have become available.

Each confirmed outbreak has been due to A2/Hong Kong virus, and the World Health Organization (WHO) International Influenza Center for the Americas reported that 52 virus strains from 17 laboratories throughout the country have not shown a significant difference in antigenicity from the prototype strain A/Hong Kong/8/68 (H_3N_2).* Moreover, many states have reported milder disease than was seen with previous Hong Kong outbreaks; for example, in Massachusetts, although illness was reported across the state, attack rates have been relatively low, and the clinical illness has usually been mild.

(Reported by the Viral Diseases Branch, Epidemiology Program, CDC.)

*These symbols for the surface antigens, the hemagglutinin and neuraminadase, follow the recommendations of the WHO for influenza virus nomenclature (1).

Reference

1. Bull. Wld Hlth Org 45: 119, 1971

Figure 2
PNEUMONIA-INFLUENZA DEATHS IN 122 UNITED STATES CITIES

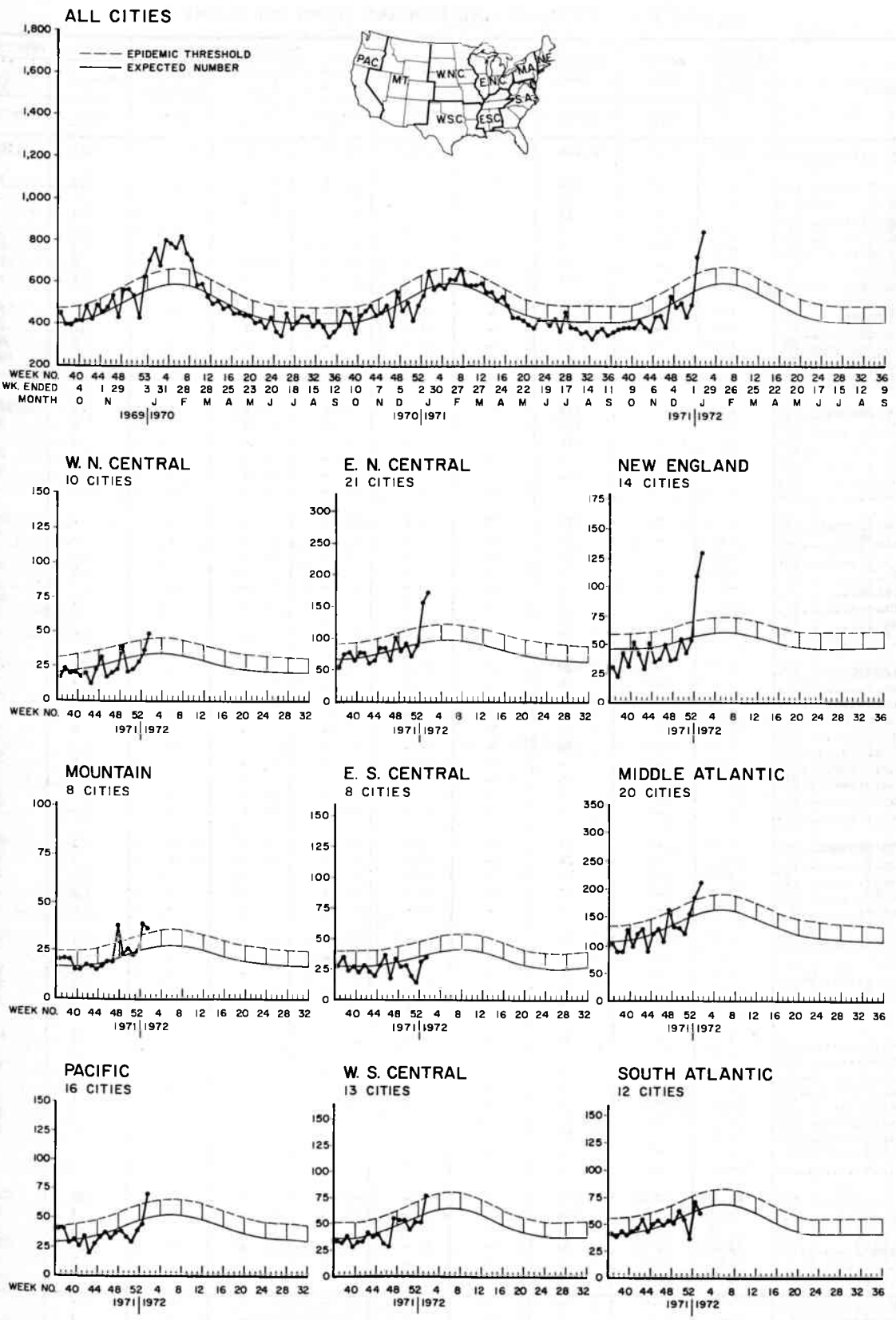


TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JANUARY 15, 1972 AND JANUARY 16, 1971 (2nd WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unsp. cases		Post Infectious	Serum	Infectious	
	1972	1972	1972	1972	Cum. 1972	1972	1971	1972	1972	1972	1971
UNITED STATES.....	36	4	2,526	4	4	17	15	1	164	1,101	1,265
NEW ENGLAND.....	–	–	328	–	–	1	–	–	10	73	134
Maine.....	–	–	57	–	–	–	–	–	–	9	14
New Hampshire.....	–	–	23	–	–	–	–	–	1	3	11
Vermont.....	–	–	5	–	–	–	–	–	–	5	25
Massachusetts.....	–	–	–	–	–	1	–	–	3	25	27
Rhode Island.....	–	–	99	–	–	–	–	–	2	15	23
Connecticut.....	–	–	144	–	–	–	–	–	4	16	34
MIDDLE ATLANTIC.....	5	–	3	–	–	–	3	–	48	185	247
New York City.....	–	–	–	–	–	–	1	–	22	31	65
New York, Up-State...	3	–	2	–	–	–	–	–	9	46	29
New Jersey.....	2	–	NN	–	–	–	–	–	17	108	86
Pennsylvania.*	–	–	1	–	–	–	2	–	–	–	67
EAST NORTH CENTRAL.....	6	–	799	–	–	9	5	1	27	129	191
Ohio.*	2	–	118	–	–	9	2	–	6	33	34
Indiana.....	–	–	219	–	–	–	–	–	–	2	4
Illinois.....	1	–	–	–	–	–	–	1	4	27	45
Michigan.....	3	–	462	–	–	–	2	–	17	62	100
Wisconsin.....	–	–	–	–	–	–	1	–	–	5	8
WEST NORTH CENTRAL.....	–	1	432	2	2	–	–	–	7	52	67
Minnesota.*	–	–	41	–	–	–	–	–	–	2	12
Iowa.....	–	1	368	–	–	–	–	–	–	7	17
Missouri.*	–	–	–	–	–	–	–	–	6	20	19
North Dakota.....	–	–	–	–	–	–	–	–	–	1	4
South Dakota.....	–	–	3	2	2	–	–	–	1	14	–
Nebraska.....	–	–	10	–	–	–	–	–	–	1	5
Kansas.*	–	–	10	–	–	–	–	–	–	7	10
SOUTH ATLANTIC.....	4	–	423	2	2	1	1	–	16	170	152
Delaware.....	–	–	6	–	–	–	–	–	1	4	2
Maryland.*	–	–	24	–	–	–	–	–	2	36	26
Dist. of Columbia....	–	–	4	–	–	–	–	–	2	–	1
Virginia.....	–	–	7	–	–	–	–	–	6	15	26
West Virginia.....	–	–	378	–	–	–	–	–	–	31	12
North Carolina.....	1	–	–	–	–	–	–	–	5	27	18
South Carolina.....	1	–	4	–	–	1	–	–	–	14	11
Georgia.....	–	–	–	–	–	–	–	–	–	12	9
Florida.....	2	–	–	2	2	–	1	–	–	31	47
EAST SOUTH CENTRAL.....	5	–	29	–	–	3	–	–	5	63	67
Kentucky.....	–	–	24	–	–	–	–	–	1	19	18
Tennessee.....	3	–	NN	–	–	1	–	–	–	36	37
Alabama.*	2	–	1	–	–	2	–	–	4	5	9
Mississippi.....	–	–	4	–	–	–	–	–	–	3	3
WEST SOUTH CENTRAL.....	1	–	34	–	–	1	–	–	7	112	64
Arkansas.....	–	–	–	–	–	–	–	–	–	6	1
Louisiana.....	–	–	–	–	–	–	–	–	–	14	18
Oklahoma.*	–	–	26	–	–	–	–	–	3	20	12
Texas.....	1	–	8	–	–	1	–	–	4	72	33
MOUNTAIN.....	1	1	160	–	–	–	–	–	4	66	64
Montana.*	–	–	61	–	–	–	–	–	1	2	6
Idaho.....	–	1	–	–	–	–	–	–	–	10	7
Wyoming.....	–	–	3	–	–	–	–	–	–	–	1
Colorado.....	–	–	–	–	–	–	–	–	1	1	–
New Mexico.....	1	–	42	–	–	–	–	–	2	25	16
Arizona.....	–	–	50	–	–	–	–	–	–	17	25
Utah.....	–	–	4	–	–	–	–	–	–	4	9
Nevada.....	–	–	–	–	–	–	–	–	–	7	–
PACIFIC.....	14	2	318	–	–	2	6	–	40	251	279
Washington.....	1	–	318	–	–	–	–	–	1	13	35
Oregon.....	–	–	–	–	–	–	–	–	1	36	36
California.....	12	2	–	–	–	2	6	–	36	183	185
Alaska.....	–	–	–	–	–	–	–	–	2	5	3
Hawaii.....	1	–	–	–	–	–	–	–	–	14	20
Puerto Rico.....	–	–	–	–	–	–	–	–	–	–	8
Virgin Islands.....	–	–	–	–	–	–	–	–	1	–	1

*Delayed reports: Aseptic meningitis: (1971) Pa. 2, Ohio delete 1, Minn. 1, Md. 19
Brucellosis: (1971) Ala. delete 1
Chickenpox: (1972) Mont. 44
Encephalitis, primary: (1971) Pa. 1, Md. 6, Okla. delete 1
Hepatitis, serum: (1971) Pa. 12, Md. 3, (1972) Mont. 1
Hepatitis, infectious: (1971) Pa. 26, Minn. 2, Mo. 51, Kans. 6, Md. 19, Okla. delete 1, (1972) Mont. 5

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JANUARY 15, 1972 AND JANUARY 16, 1971 (2nd 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	105	142	650	1,198	1,925	27	64	117	2,257	3,829	376	610
NEW ENGLAND	1	1	21	34	66	2	2	3	79	142	8	13
Maine.*	–	–	1	4	42	1	1	1	1	2	1	1
New Hampshire.*	1	1	1	1	–	–	–	1	3	5	–	–
Vermont	–	–	–	–	–	–	–	–	7	21	–	–
Massachusetts	–	–	1	1	22	–	–	–	26	35	5	8
Rhode Island	–	–	17	23	2	1	1	1	8	17	–	1
Connecticut	–	–	1	5	–	–	–	–	34	62	2	3
MIDDLE ATLANTIC	1	2	92	132	247	2	3	13	85	249	30	40
New York City	–	–	5	14	137	–	1	2	44	79	6	6
New York, Up-State	–	–	–	1	25	2	2	1	NN	NN	4	6
New Jersey	1	2	85	115	10	–	–	2	25	146	15	23
Pennsylvania.*	–	–	2	2	75	–	–	8	16	24	5	5
EAST NORTH CENTRAL	1	3	249	491	229	8	10	5	625	920	62	144
Ohio	–	–	6	15	115	4	6	3	78	145	8	23
Indiana.*	–	–	97	123	2	1	1	–	73	103	20	47
Illinois	–	–	42	180	16	1	1	1	92	140	6	28
Michigan	1	3	14	43	26	2	2	1	73	85	9	22
Wisconsin	–	–	90	130	70	–	–	–	309	447	19	24
WEST NORTH CENTRAL	1	2	15	21	26	1	4	11	511	742	37	39
Minnesota.*	–	–	1	1	2	–	–	2	58	62	4	4
Iowa	–	1	12	16	18	–	–	1	415	610	12	13
Missouri	–	–	1	3	2	–	–	4	14	19	17	17
North Dakota	–	–	1	1	1	–	–	1	11	31	–	1
South Dakota	–	–	–	–	–	1	1	2	2	4	2	2
Nebraska	1	1	–	–	2	–	1	–	7	12	2	2
Kansas.*	–	–	–	–	1	–	2	1	4	4	–	–
SOUTH ATLANTIC	4	15	71	187	353	2	16	7	197	345	41	56
Delaware	–	–	–	–	2	–	1	–	–	1	1	1
Maryland.*	–	–	1	1	3	–	–	1	11	19	1	1
Dist. of Columbia	–	–	–	–	1	–	–	1	–	–	–	–
Virginia	–	1	–	–	220	1	4	–	14	29	1	6
West Virginia	–	1	2	3	13	1	3	1	145	256	23	27
North Carolina	1	6	1	5	67	–	4	–	NN	NN	–	–
South Carolina	–	2	7	11	45	–	2	–	11	24	2	4
Georgia	–	2	19	19	–	–	–	1	–	–	1	1
Florida	3	3	41	148	2	–	2	3	16	16	12	16
EAST SOUTH CENTRAL	90	106	60	80	367	3	5	11	83	156	9	50
Kentucky	90	106	52	58	238	1	3	4	7	7	4	29
Tennessee	–	–	–	12	36	–	–	3	73	127	5	19
Alabama	–	–	8	10	83	2	2	3	2	20	–	2
Mississippi	–	–	–	–	10	–	–	1	1	2	–	–
WEST SOUTH CENTRAL	2	4	26	47	494	5	5	13	176	334	37	71
Arkansas	1	2	1	1	2	–	–	–	5	6	1	1
Louisiana	–	–	–	–	21	2	2	4	–	–	–	–
Oklahoma	–	1	–	1	67	–	–	–	13	18	–	1
Texas	1	1	25	45	404	3	3	9	158	310	36	69
MOUNTAIN	–	–	31	82	57	–	1	10	109	158	10	13
Montana.*	–	–	1	1	22	–	–	–	18	28	2	2
Idaho	–	–	–	–	7	–	–	–	10	12	–	–
Wyoming	–	–	–	–	–	–	1	–	24	26	–	–
Colorado	–	–	17	56	1	–	–	3	16	29	–	–
New Mexico	–	–	1	1	18	–	–	–	15	19	–	–
Arizona	–	–	12	24	8	–	–	4	26	43	7	10
Utah	–	–	–	–	1	–	–	2	–	1	1	1
Nevada	–	–	–	–	–	–	–	1	–	–	–	–
PACIFIC	5	9	85	124	86	4	18	44	392	783	142	184
Washington	–	–	9	26	6	–	–	1	154	323	37	44
Oregon	–	1	2	3	16	–	–	2	53	101	11	23
California	5	8	72	93	58	4	18	39	182	345	90	113
Alaska	–	–	–	–	–	–	–	–	3	9	–	–
Hawaii	–	–	2	2	6	–	–	2	–	5	4	4
Puerto Rico	–	–	–	–	5	–	–	–	11	11	–	–
Virgin Islands	–	–	–	–	1	–	–	–	4	4	–	–

*Delayed reports: Measles: (1971) Me. 1
Meningococcal infections: (1971) Pa. 2, Ind. delete 1, Minn. 1, Kans. 1
Mumps: (1971) Me. 3, N.H. 2, Minn. 2, Md. 37, (1972) Mont. 10
Rubella: (1971) Me. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JANUARY 15, 1972 AND JANUARY 16, 1971 (2nd WEEK) - CONTINUED

AREA	TETANUS	NEW ACTIVE TB	TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		VENEREAL DISEASES		RABIES IN ANIMALS	
									GONORRHEA	SYPHILIS (Pri. & Sec.)		
	1972	1972	1972	Cum. 1972	1972	Cum. 1972	1972	Cum. 1972	1972	1972	1972	Cum. 1972
UNITED STATES	-	423	2	4	5	7	2	4	13,174	444	51	111
NEW ENGLAND	-	5	-	-	-	-	-	-	394	19	1	4
Maine	-	1	-	-	-	-	-	-	8	-	1	4
New Hampshire		-	-	-	-	-	-	-	11	-	-	-
Vermont	-	-	-	-	-	-	-	-	9	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	209	4	-	-
Rhode Island	-	4	-	-	-	-	-	-	25	-	-	-
Connecticut	-	-	-	-	-	-	-	-	132	15	-	-
MIDDLE ATLANTIC		77	-	-	-	-	-	1	1,246	37	1	4
New York City	-	-	-	-	-	-	-	-	-	-	-	-
New York, Up-State	-	27	-	-	-	-	-	-	383	5	1	2
New Jersey	-	28	-	-	-	-	-	1	392	25	-	-
Pennsylvania	-	22		-	-	-	-	-	471	7	-	2
EAST NORTH CENTRAL	-	53	-	-	-	-	-	-	1,578	27	4	5
Ohio	-	32	-	-	-	-	-	-	745	2	1	1
Indiana	-	-	-	-	-	-	-	-	144	3	-	1
Illinois	-	5	-	-	-	-	-	-	247	2	-	-
Michigan		14	-	-	-	-	-	-	374	18	-	-
Wisconsin	-	2	-	-	-	-	-	-	68	2	3	3
WEST NORTH CENTRAL	-	10	1	1	-	-	-	-	1,002	9	15	30
Minnesota*	-	-	-	-	-	-	-	-	217	-	4	6
Iowa	-	1	-	-	-	-	-	-	104	-	3	9
Missouri	-	4	1	1	-	-	-	-	358	8	1	5
North Dakota	-	-	-	-	-	-	-	-	9	-	6	9
South Dakota	-	-	-	-	-	-	-	-	46	-	-	-
Nebraska	-	-	-	-	-	-	-	-	95	1	-	-
Kansas	-	5	-	-	-	-	-	-	173	-	1	1
SOUTH ATLANTIC	-	111	1	1	1	1	-	1	3,210	155	5	10
Delaware	-	-	-	-	-	-	-	-	106	-	-	-
Maryland	-	14	-	-	-	-	-	-	260	27	-	-
Dist. of Columbia	-	1	-	-	-	-	-	-	270	7	-	-
Virginia	-	42	1	1	1	1	-	-	398	29	2	4
West Virginia	-	6	-	-	-	-	-	-	24	-	1	1
North Carolina	-	14	-	-	-	-	-	1	288	22	-	-
South Carolina	-	-	-	-	-	-	-	-	560	21	-	-
Georgia	-	-	-	-	-	-	-	-	591	30	2	4
Florida	-	34	-	-	-	-	-	-	713	19	-	1
EAST SOUTH CENTRAL	-	58	-	1	-	-	-	-	1,527	29	16	34
Kentucky	-	10	-	-	-	-	-	-	124	1	8	16
Tennessee	-	14	-	-	-	-	-	-	673	17	7	15
Alabama	-	28	-	1	-	-	-	-	419	-	1	3
Mississippi	-	6	-	-	-	-	-	-	311	11	-	-
WEST SOUTH CENTRAL	-	26	-	-	-	-	2	2	1,544	58	8	20
Arkansas	-	6	-	-	-	-	-	-	59	10	1	6
Louisiana	-	-	-	-	-	-	-	-	290	16	-	-
Oklahoma	-	11	-	-	-	-	-	-	120	4	3	6
Texas	-	9	-	-	-	-	2	2	1,075	28	4	8
MOUNTAIN	-	1	-	-	1	2	-	-	299	13	1	2
Montana*	-	-	-	-	-	-	-	-	23	-	-	-
Idaho	-	-	-	-	-	-	-	-	25	-	-	-
Wyoming	-	-	-	-	-	-	-	-	4	-	-	-
Colorado	-	-	-	-	-	-	-	-	74	2	-	-
New Mexico	-	1	-	-	1	1	-	-	49	5	-	-
Arizona	-	-	-	-	-	1	-	-	109	5	1	2
Utah	-	-	-	-	-	-	-	-	11	-	-	-
Nevada	-	-	-	-	-	-	-	-	4	1	-	-
PACIFIC	-	82	-	1	3	4	-	-	2,374	97	-	2
Washington	-	1	-	-	-	-	-	-	101	5	-	-
Oregon	-	3	-	-	-	-	-	-	174	-	-	-
California	-	75	-	-	2	3	-	-	2,096	92	-	2
Alaska	-	2	-	1	-	-	-	-	3	-	-	-
Hawaii	-	1	-	-	1	1	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-	-	1	-	-

*Delayed reports: Gonorrhea: (1972) Mont. 8
Rabies in animals: (1971) Minn. 3

Week No. 2

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JANUARY 15, 1972

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

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	910	592	129	28
Boston, Mass.	269	158	44	9
Bridgeport, Conn.	48	33	10	1
Cambridge, Mass.	42	28	10	–
Fall River, Mass.	38	28	6	–
Hartford, Conn.	67	39	1	3
Lowell, Mass.	28	19	5	1
Lynn, Mass.	23	13	1	–
New Bedford, Mass.	34	27	4	–
New Haven, Conn.	74	47	8	4
Providence, R. I.	90	57	10	7
Somerville, Mass.	23	17	3	–
Springfield, Mass.	66	50	14	1
Waterbury, Conn.	38	25	–	1
Worcester, Mass.	70	51	13	1
MIDDLE ATLANTIC:	3,804	2,350	212	80
Albany, N. Y.	82	49	9	–
Allentown, Pa.	49	30	7	1
Buffalo, N. Y.	190	110	9	8
Camden, N. J.	64	35	3	3
Elizabeth, N. J.	33	21	6	1
Erie, Pa.	49	34	11	1
Jersey City, N. J.	80	48	5	1
Newark, N. J.	124	47	6	32
New York City, N. Y.	1,798†	1,119**	73†	NA
Paterson, N. J.	61	38	6	1
Philadelphia, Pa.	604	362	8	12
Pittsburgh, Pa.	128	79	13	6
Reading, Pa.	49	32	4	1
Rochester, N. Y.	159	120	24	4
Schenectady, N. Y.	30	23	4	–
Scranton, Pa.	62	34	3	1
Syracuse, N. Y.	107	72	5	5
Trenton, N. J.	59	40	4	1
Utica, N. Y.	33	28	6	–
Yonkers, N. Y.	43	29	6	2
EAST NORTH CENTRAL:	3,178	1,895	172	146
Akron, Ohio	87	55	2	2
Canton, Ohio	42	22	6	1
Chicago, Ill.	850	480	32	54
Cincinnati, Ohio	185	118	2	4
Cleveland, Ohio	287	176	16	18
Columbus, Ohio	186	104	6	6
Dayton, Ohio	109	71	6	2
Detroit, Mich.	454	257	29	17
Evansville, Ind.	57	33	8	2
Flint, Mich.	64	36	4	5
Fort Wayne, Ind.	42	24	4	1
Gary, Ind.	25	8	2	2
Grand Rapids, Mich.	75	51	13	3
Indianapolis, Ind.	147	83	2	8
Madison, Wis.	67	44	13	3
Milwaukee, Wis.	169	120	4	3
Peoria, Ill.	47	30	6	4
Rockford, Ill.	49	35	8	2
South Bend, Ind.	45	28	4	1
Toledo, Ohio	108	69	5	5
Youngstown, Ohio	83	51	–	3
WEST NORTH CENTRAL:	997	613	49	42
Des Moines, Iowa	65	45	2	1
Duluth, Minn.	18	10	2	2
Kansas City, Kans.	66	41	4	5
Kansas City, Mo.	141	79	10	3
Lincoln, Nebr.	54	37	8	2
Minneapolis, Minn.	112	71	5	5
Omaha, Nebr.	112	65	5	6
St. Louis, Mo.	234	141	7	13
St. Paul, Minn.	99	64	2	3
Wichita, Kans.	96	60	4	2
Las Vegas, Nev.*	---	---	---	---

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
SOUTH ATLANTIC:	1,497	791	60	47
Atlanta, Ga.	161	77	4	6
Baltimore, Md.	291	152	7	3
Charlotte, N. C.	41	23	1	3
Jacksonville, Fla.	97	50	1	7
Miami, Fla.	127	70	4	3
Norfolk, Va.	63	30	2	5
Richmond, Va.	127	66	8	3
Savannah, Ga.	51	24	7	–
St. Petersburg, Fla.	122	96	10	1
Tampa, Fla.	76	46	4	1
Washington, D. C.	320	142	11	14
Wilmington, Del.	21	15	1	1
EAST SOUTH CENTRAL:	762	417	35	30
Birmingham, Ala.	115	60	2	7
Chattanooga, Tenn.	45	23	4	4
Knoxville, Tenn.	40	23	–	–
Louisville, Ky.	139	82	13	2
Memphis, Tenn.	195	101	7	8
Mobile, Ala.	62	34	4	–
Montgomery, Ala.	46	28	3	2
Nashville, Tenn.	120	66	2	7
WEST SOUTH CENTRAL:	1,576	792	77	102
Austin, Tex.	45	22	4	1
Baton Rouge, La.	41	19	–	1
Corpus Christi, Tex.	41	17	–	2
Dallas, Tex.	221	109	10	5
El Paso, Tex.	79	44	10	7
Fort Worth, Tex.	137	80	5	11
Houston, Tex.	342	154	20	29
Little Rock, Ark.	66	41	2	2
New Orleans, La.	211	105	11	15
Oklahoma City, Okla.	109	58	3	7
San Antonio, Tex.	144	70	4	14
Shreveport, La.	72	36	1	5
Tulsa, Okla.	68	37	7	3
MOUNTAIN:	588	362	37	19
Albuquerque, N. Mex.	59	38	5	1
Colorado Springs, Colo.	34	20	7	3
Denver, Colo.	147	89	7	1
Ogden, Utah	26	13	4	2
Phoenix, Ariz.	134	82	1	5
Pueblo, Colo.	28	18	2	2
Salt Lake City, Utah	79	51	6	4
Tucson, Ariz.	81	51	5	1
PACIFIC:	1,871	1,185	72	63
Berkeley, Calif.	21	14	1	–
Fresno, Calif.	56	33	1	3
Glendale, Calif.	33	25	2	–
Honolulu, Hawaii**	60	31	3	4
Long Beach, Calif.	111	63	8	2
Los Angeles, Calif.	527	353	20	13
Oakland, Calif.	117	76	3	6
Pasadena, Calif.	41	27	–	2
Portland, Oreg.	175	116	3	6
Sacramento, Calif.	72	46	1	4
San Diego, Calif.	105	74	6	4
San Francisco, Calif.	226	130	7	6
San Jose, Calif.	70	55	3	1
Seattle, Wash.	158	89	5	6
Spokane, Wash.	52	28	6	4
Tacoma, Wash.	47	25	3	2
Total	15,183	8,997	843	557
Expected Number	13,512	7,857	575	595
Cumulative Total (includes reported corrections for previous weeks)	30,257	17,912	1,561	1,086

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

†Delayed report for week ended Jan. 8, 1972

**Estimate

EPIDEMIOLOGIC NOTES AND REPORTS

SHELLFISH-ASSOCIATED HEPATITIS – Massachusetts

On July 30-31, 1971, 12 persons attended a family reunion in Cape Cod, Massachusetts. Five persons subsequently became ill with hepatitis between August 9 and September 5. Their symptoms included malaise, anorexia, and mild icterus. All patients had abnormal liver function tests. Serologic testing for hepatitis associated antigen performed on one patient was negative. All patients recovered uneventfully. The patients' family members received gamma globulin; no secondary cases occurred.

All patients denied a history of exposure to hepatitis, blood transfusions, parenteral drug use, and recent foreign travel. At the reunion, however, the patients had shared one meal together at which only steamed clams were served. Six persons ate the clams, and five subsequently became ill. The person who ate clams but did not become ill received gamma globulin soon after the first cases were recognized. The six persons who did not eat clams remained well.

The clams had been purchased from a merchant in nearby Chatham, Massachusetts, and prepared at home. They were added to a pot of boiling water, heated until they opened, and then served. The original source of the clams could not be determined, since the merchant purchases his clams from many sources. No other outbreaks of possible shellfish-associated hepatitis have been reported in Massachusetts.

(Reported by Harris A. Berman, M.D., Chief, Professional Services, The Matthew Thornton Health Plan, Inc., Nashua, New Hampshire; George Waterman, M.D., Assistant Health Director, Division of Communicable Diseases, and Nicholas J. Fiumara, State Epidemiologist, Massachusetts Department of Public Health.)

Editorial Note

The occurrence of five cases of hepatitis within a 4-week period, the high attack rate (five of six) for those eating the steamed clams, and the zero attack rate for those who did not, suggest a common-source outbreak of shellfish-associated hepatitis. Since the large shellfish-associated hepatitis outbreaks of the early and mid 1960's, only small sporadic outbreaks, such as this one, have been reported to CDC. This is the first report of an outbreak of viral hepatitis attributed to the ingestion of only steamed clams.

When clams are steamed only until the shells open, the internal temperature is not high enough to inactivate the infectious agent of hepatitis *(1)*. The minimum period of steaming needed to ensure safety has not been determined, but the temperature of boiling water for 20 minutes was effective in early studies of the temperature stability of the hepatitis agents *(2)*.

References

1. Koff RS, Sears HS: Internal temperature of steamed clams. New Engl J Med 276:737, 1967
2. Mosley JW, Galambos JT: Viral hepatitis. In Diseases of the Liver, 3d ed, edited by Schiff. Philadelphia, JB Lippincott, 1969, p 417

Erratum, Vol. 20, No. 51, p. 461

In the article "Human Leptospirosis – United States, 1970," correct the last sentence in the last paragraph to read "In 1970, there were 13,102 reported cases of leptospirosis in cattle in 3,124 herds."

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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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