

Morbidity and Mortality



Vol. 19, No. 51
WEEKLY REPORT
For Week Ending
December 26, 1970

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

DATE OF RELEASE: JANUARY 1, 1971 - ATLANTA, GEORGIA 30333

EPIDEMIOLOGIC NOTES AND REPORTS

BRUCELLOSIS - Dubuque, Iowa

From January through December 1970, 53 cases of human brucellosis were reported from a large abattoir in Dubuque, Iowa (Figure 1), representing approximately 25 percent of all the cases reported in the United States this year. The cases were documented by clinical symptoms plus seroconversion and/or a positive blood culture for *Brucella* sp.

Nearly all patients had fever, chills, sweats, weakness, and malaise. Approximately 65 percent experienced body aches, anorexia, and weight loss, which ranged from 3-44 pounds, with a median of 10 pounds. Fifty-five percent of the patients also noted headache. Less common symptoms included cough, arthralgia, dysuria, and testicular pain. Lymphadenopathy and splenomegaly were present in 10-20 percent of the patients, and epididymitis occurred in one patient. The average time lost from work was 40 days.

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All cases occurred in males, and of the 40 patients whose type of animal exposure could be determined, 34 (85 percent) were exposed only to hogs. A random serologic survey confirmed a much higher rate of seropositivity in those who worked in the hog-kill department (21 percent, 11/52) than in those in the beef, calf, and sheep-kill departments (2 percent, 1/56). The seropositivity rate for those hog-kill employees working with opened hogs was 42 percent, compared with 6 percent for hog-kill employees
 (Continued on page 488)

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

DISEASE	51st WEEK ENDED		MEDIAN 1965 - 1969	CUMULATIVE, FIRST 51 WEEKS		
	December 26, 1970	December 20, 1969		1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis	57	49	45	6,091	3,458	2,969
Brucellosis	2	3	4	205	226	243
Diphtheria	2	16	7	436	207	204
Encephalitis, primary:						
Arthropod-borne & unspecified	19	20	25	1,544	1,295	1,566
Encephalitis, post-infectious	3	12	8	367	308	641
Hepatitis, serum	116	123	842	7,188	5,271	40,366
Hepatitis, infectious	825	1,037		55,620	47,434	
Malaria	71	103	27	3,416	3,204	2,058
Measles (rubeola)	894	509	509	46,775	24,786	61,856
Meningococcal infections, total	47	67	47	2,424	2,886	2,886
Civilian	29	53	41	2,122	2,630	2,630
Military	18	14	6	302	256	215
Mumps	2,038	2,302	---	100,461	86,983	---
Poliomyelitis, total	1	---	---	31	18	57
Paralytic	---	---	---	28	17	46
Rubella (German measles)	286	629	---	54,885	54,739	---
Tetanus	1	2	3	134	166	198
Tularemia	9	1	2	162	141	172
Typhoid fever	6	7	6	356	335	392
Typhus, tick-borne (Rky. Mt. spotted fever)	1	1	1	338	451	277
Rabies in animals	46	55	45	2,943	3,263	3,908

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	2	Psittacosis: *	35
Botulism:	12	Rabies in Man:	2
Leptosp. Calif.-2	123	Rubella congenital syndrome:	65
Leptospirosis: N.Y.Ups.-1	45	Trichinosis: Ill.-2, Pa.-1	111
Plague:	12	Typhus, murine:	34

*Delayed reports: Psittacosis: Ohio delete 1

BRUCELLOSIS - (Continued from front page)

Figure 1
53 BRUCELLOSIS CASES, BY MONTH OF ONSET
DUBUQUE, IOWA - 1970

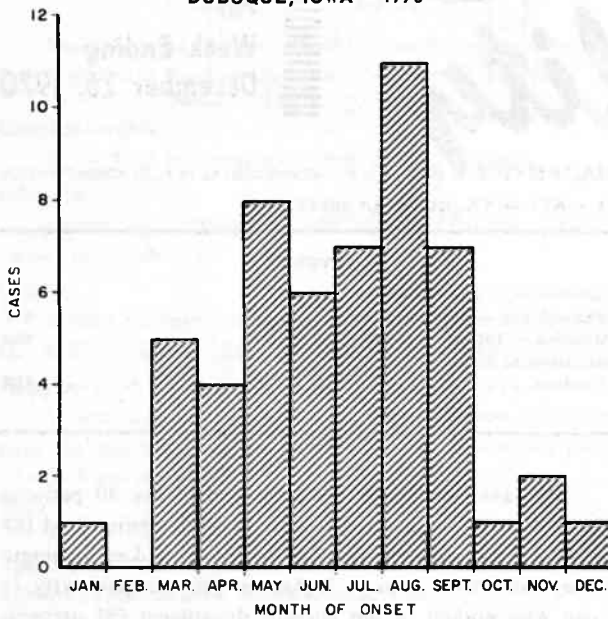
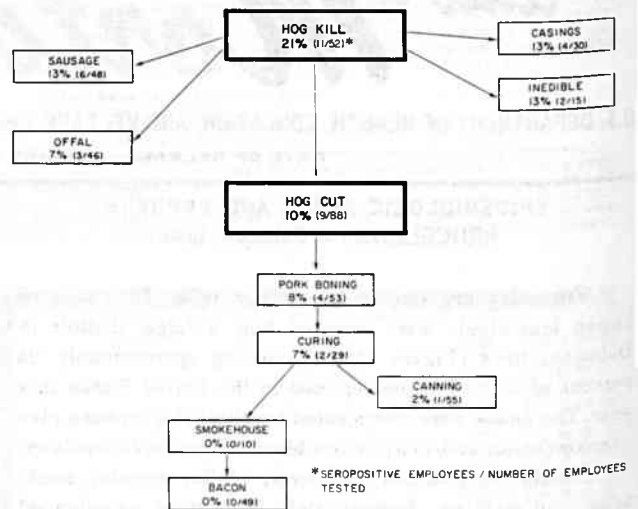


Figure 2
SEROPOSITIVITY RATES OF EMPLOYEES
BY TYPE OF EXPOSURE TO HOGS
DUBUQUE, IOWA - 1970



* SEROPOSITIVE EMPLOYEES / NUMBER OF EMPLOYEES TESTED

working with unopened hogs. For persons working with hogs in departments other than the hog-kill department, seropositivity rates decreased as the degree of contact with fresh hog blood or lymph decreased (Figure 2). Those employees who handled only hog products, in forms ready for distribution to the consumer (i.e., cured and smoked bacon, canned hams), were seronegative.

When the hog-related* cases are plotted by week of onset, there are several clusters of cases separated by 3-7 week intervals (Figure 3). This distribution and the fact that most cases of brucellosis usually occur within a 30-day incubation period suggest that several groups of infected hogs were responsible for this outbreak.

Further investigations are being conducted to discover sources of infected hogs and routes by which the employees became infected and to explain why all cases have occurred in males.

(Reported by L. C. Faber, M.D., Surgeon, Dubuque, Iowa; Bertrand O. Combs, D.V.M., Officer in Charge, Dubuque

*Cases of brucellosis which occurred in persons whose only animal contact was with hogs.

Circuit Meat and Poultry Inspection; Lawrence F. Good, D.V.M., Assistant to the Veterinarian in Charge, Des Moines, Iowa; Stanley L. Hendricks, D.V.M., Director of Veterinary Public Health, Acting Chief, Preventive Medical Service, Iowa State Department of Health; and an EIS Officer.)

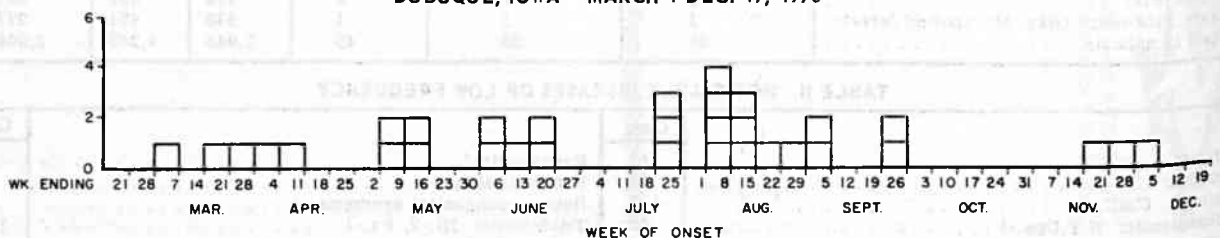
Editorial Note:

Brucellosis in the United States has recently become a predominantly abattoir-associated disease (1). In 1969, 71 percent of the brucellosis cases were in slaughterhouse workers, compared with 24 percent in 1959. Of 519 slaughterhouse workers who contracted brucellosis in 1965-1969 and for whom a probable source of infection was listed on their case surveillance report, 335 (65 percent) worked only with hogs and 117 (23 percent) worked with both hogs and cattle. Of 100 isolates of *Brucella sp.* obtained from the blood of abattoir workers in 1965-1969, 71 (or 87 percent of the isolates for which a species was identified) were *B. suis*, the species of brucella seen most commonly in hogs.

Reference:

1. Center for Disease Control Zoonoses Surveillance, 1969 Annual Brucellosis Summary, June 1970

Figure 3
BRUCELLOSIS CASES RELATED TO EXPOSURE TO HOGS, BY WEEK OF ONSET
DUBUQUE, IOWA - MARCH 1-DEC. 19, 1970



INTERNATIONAL NOTES
CHOLERA

The World Health Organization now reports cholera in the countries listed in Table 1. Dahomey has been added to the list in the past week.

(Reported by the Bacterial Diseases Branch, Epidemiology Program, and the Foreign Quarantine Program, CDC.)

Editorial Note:

Inquiries have been received about the recent statement that the United States will no longer require cholera vaccinations for travelers coming to the United States from cholera-infected areas (MMWR, Special Supplement to Vol. 19, No. 49). It must be re-emphasized that cholera vaccina-

tion requirements for countries other than the United States have not changed. Travelers are still advised to have two cholera inoculations in order to facilitate their travel in countries in which requirements still exist (MMWR, Vol. 19, No. 41).

References:

1. Weekly Epidemiological Record, WHO, Vol. 45, No. 51, and WHO Radiotelegraphic Epidemiological Bulletin, Dec. 28, 1970.
2. Weekly Epidemiological Record, WHO, Vol. 45, Nos. 1-51, and WHO Radiotelegraphic Epidemiological Bulletin, Dec. 28, 1970.

Table 1
Countries and Areas Officially Reporting Cholera on Dec. 30, 1970

Geographic Area	Currently Reporting (1)	Previously Reporting (2)	Imported Cases Only
I. Asia	Burma India Indonesia Nepal Pakistan Philippines Vietnam	Brunei Malaysia Singapore South Korea	Japan
II. Middle East	Gaza Strip Syria Trucial Oman (Dubai)	Israel Jordan Kuwait Lebanon Saudi Arabia Turkey	
III. Africa	French Territory of Affars and Issas (formerly French Somaliland) Dahomey Ghana Ivory Coast Liberia Mali Sierra Leone Togo	Libya Tunisia Ethiopia	Upper Volta
IV. Europe		Czechoslovakia U.S.S.R.	Wales (U.K.)

EPIDEMIOLOGIC NOTES AND REPORTS
MEASLES - Jefferson County, Alabama

From Sept. 1 to Dec. 18, 1970, 254 cases of measles were reported to the Jefferson County Department of Health, Birmingham, Alabama. A total of 239 of these cases were in county residents (Figure 4), with 161 (68 percent) occurring in children under 5 years of age. Non-whites accounted for 76 percent of the total; cases were equally distributed between the sexes.

An analysis of the geographic distribution of the reported cases in the county showed concentrations in four

lower socioeconomic areas which were predominantly non-white. In an effort to control this outbreak, special clinics were scheduled in the four areas for the afternoon and evening of December 22. Five thousand doses of live attenuated measles virus vaccine from the CDC epidemic stockpile were used in these clinics. The last county-wide rubeola immunization campaign was conducted in December 1967.

(Continued on page 494)

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED
DECEMBER 26, 1970 AND DECEMBER 20, 1969 (51st WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPH- THERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post In- fectious	Serum	Infectious		1970	Cum. 1970
				1970	1969	1970	1970	1970	1969		
UNITED STATES.....	57	2	2	19	20	3	116	825	1,037	71	3,416
NEW ENGLAND.....	3	-	-	-	1	-	3	89	127	1	89
Maine.....	-	-	-	-	-	-	-	6	11	-	11
New Hampshire.....	-	-	-	-	-	-	-	6	3	-	6
Vermont.....	-	-	-	-	-	-	-	13	8	-	5
Massachusetts.....	1	-	-	-	1	-	1	17	58	-	42
Rhode Island.....	2	-	-	-	-	-	-	19	13	-	9
Connecticut.....	-	-	-	-	-	-	2	28	34	1	16
MIDDLE ATLANTIC.....	13	-	-	5	3	-	70	188	197	4	326
New York City.....	3	-	-	2	2	-	39	44	57	-	42
New York, Up-State...	1	-	-	-	1	-	5	29	62	-	94
New Jersey.....	4	-	-	-	-	-	21	60	41	4	87
Pennsylvania.....	5	-	-	3	-	-	5	55	37	-	103
EAST NORTH CENTRAL.....	3	1	-	8	4	-	8	147	165	4	208
Ohio.....	3	-	-	6	2	-	4	32	63	-	32
Indiana.....	-	1	-	-	-	-	-	5	7	1	25
Illinois.....	-	-	-	-	1	-	2	22	25	1	62
Michigan.....	-	-	-	2	1	-	2	79	53	2	89
Wisconsin.....	-	-	-	-	-	-	-	9	17	-	-
WEST NORTH CENTRAL.....	1	-	1	-	-	1	-	24	26	6	360
Minnesota.....	1	-	-	-	-	-	-	4	8	-	46
Iowa.....	-	-	-	-	-	-	-	2	5	-	28
Missouri.....	-	-	-	-	-	-	-	6	8	-	34
North Dakota.....	-	-	-	-	-	-	-	3	2	-	4
South Dakota.....	-	-	1	-	-	-	-	-	1	-	2
Nebraska.....	-	-	-	-	-	-	-	2	-	-	9
Kansas.....	-	-	-	-	-	1	-	7	2	6	237
SOUTH ATLANTIC.....	5	-	-	1	3	-	8	86	92	12	609
Delaware.....	-	-	-	-	-	-	1	2	-	-	2
Maryland.....	-	-	-	-	-	-	3	21	16	4	80
Dist. of Columbia...	1	-	-	-	-	-	-	1	2	-	2
Virginia.....	4	-	-	1	1	-	3	34	9	-	82
West Virginia.....	-	-	-	-	-	-	-	6	3	1	13
North Carolina.....	-	-	-	-	-	-	-	6	25	-	221
South Carolina.....	-	-	-	-	-	-	1	7	12	-	53
Georgia.....	-	-	-	-	-	-	-	9	-	7	101
Florida.....	---	---	---	---	2	---	---	---	25	---	55
EAST SOUTH CENTRAL.....	3	1	-	-	1	-	2	30	77	9	205
Kentucky.....	1	-	-	-	-	-	-	9	47	5	163
Tennessee.....	1	1	-	-	1	-	1	19	17	-	-
Alabama.....	1	-	-	-	-	-	1	1	10	-	26
Mississippi.....	-	-	-	-	-	-	-	1	3	4	16
WEST SOUTH CENTRAL.....	3	-	-	1	2	-	4	39	83	8	613
Arkansas.....	-	-	-	-	1	-	2	2	4	-	15
Louisiana.....	-	-	-	-	-	-	-	3	8	1	49
Oklahoma.....	-	-	-	1	1	-	-	1	2	-	106
Texas.....	3	-	-	-	-	-	2	33	69	7	443
MOUNTAIN.....	-	-	1	1	-	-	2	37	36	-	364
Montana.....	-	-	-	-	-	-	-	13	1	-	10
Idaho.....	-	-	-	-	-	-	-	1	1	-	8
Wyoming.....	-	-	-	-	-	-	-	-	5	-	-
Colorado.....	-	-	-	-	-	-	-	-	5	-	322
New Mexico.....	-	-	-	-	-	-	-	-	4	-	10
Arizona.....	-	-	1	-	-	-	-	17	14	-	10
Utah.....	-	-	-	1	-	-	2	5	3	-	4
Nevada.....	-	-	-	-	-	-	-	1	3	-	-
PACIFIC.....	26	-	-	3	6	2	19	185	234	27	642
Washington.....	1	-	-	-	-	-	-	13	16	1	51
Oregon.....	1	-	-	-	1	-	1	32	22	-	25
California.....	22	-	-	3	5	2	18	132	192	25	422
Alaska.....	-	-	-	-	-	-	-	2	2	-	2
Hawaii.....	2	-	-	-	-	-	-	6	2	1	142
Puerto Rico.....	---	---	---	---	-	---	---	---	15	---	28
Virgin Islands.....	-	-	-	-	-	-	-	-	-	-	-

* Delayed reports: Aseptic meningitis: Minn. 1
Diphtheria: Ariz. 2
Encephalitis, primary: Minn. 2, La. delete 1

Encephalitis, post-infectious: La. 1
Hepatitis, infectious: N.J. delete 1, Ohio delete 1,
Ind. delete 5, Wash. 2
Malaria: Iowa 1

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
DECEMBER 26, 1970 AND DECEMBER 20, 1969 (51st WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
	1970	Cumulative		1970	Cumulative		1970	Cum. 1970	Total 1970	Paralytic	
		1970	1969		1970	1969				1970	Cum. 1970
UNITED STATES.....	894	46,775	24,786	47	2,424	2,886	2,038	100,461	1	-	28
NEW ENGLAND.....	20	1,229	1,198	-	102	112	170	11,393	-	-	-
Maine.....	7	430	10	-	5	8	3	860	-	-	-
New Hampshire.....	-	61	245	-	9	5	6	442	-	-	-
Vermont.....	-	9	3	-	8	-	2	727	-	-	-
Massachusetts.....	12	493	256	-	40	44	40	3,413	-	-	-
Rhode Island.....	-	120	27	-	7	14	36	2,260	-	-	-
Connecticut.....	1	116	657	-	33	41	83	3,691	-	-	-
MIDDLE ATLANTIC.....	60	5,386	8,094	4	442	478	147	9,416	-	-	-
New York City.....	22	1,119	5,028	-	90	89	15	3,071	-	-	-
New York, Up-State...	4	422	633	1	85	97	NN	NN	-	-	-
New Jersey.....	2	1,729	1,187	3	182	186	53	2,766	-	-	-
Pennsylvania.....	32	2,116	1,246	-	85	106	79	3,579	-	-	-
EAST NORTH CENTRAL.....	146	10,843	3,127	3	278	391	908	28,576	1	-	2
Ohio*.....	40	4,034	553	2	102	139	136	4,921	1	-	-
Indiana.....	-	280	485	1	27	52	80	2,459	-	-	-
Illinois.....	41	3,309	1,014	-	68	56	47	2,229	-	-	-
Michigan.....	5	1,847	398	-	68	116	389	7,600	-	-	1
Wisconsin.....	60	1,373	677	-	13	28	256	11,367	-	-	1
WEST NORTH CENTRAL.....	12	3,947	1,610	9	132	139	172	5,457	-	-	1
Minnesota.....	-	40	11	2	24	29	22	603	-	-	-
Iowa.....	8	1,183	360	-	14	21	141	3,454	-	-	-
Missouri.....	1	1,280	32	4	68	56	3	413	-	-	1
North Dakota.....	-	321	81	-	5	2	3	376	-	-	-
South Dakota.....	2	106	51	-	1	1	2	54	-	-	-
Nebraska.....	1	946	1,066	-	8	13	1	402	-	-	-
Kansas.....	-	71	9	3	12	17	-	155	-	-	-
SOUTH ATLANTIC.....	173	7,780	3,015	3	467	503	87	10,451	-	-	-
Delaware.....	-	269	508	-	3	17	2	375	-	-	-
Maryland.....	4	1,391	100	-	47	41	21	1,140	-	-	-
Dist. of Columbia...	-	345	80	-	3	9	3	219	-	-	-
Virginia.....	155	2,311	999	1	49	60	45	2,260	-	-	-
West Virginia.....	-	338	226	-	13	24	10	2,568	-	-	-
North Carolina.....	11	957	354	-	99	97	NN	NN	-	-	-
South Carolina.....	3	641	134	1	49	68	6	1,009	-	-	-
Georgia.....	-	18	2	1	46	78	-	3	-	-	-
Florida.....	-	1,510	612	-	158	109	-	2,877	-	-	-
EAST SOUTH CENTRAL.....	143	2,183	131	2	169	211	94	6,040	-	-	-
Kentucky.....	8	1,085	75	-	60	85	16	2,217	-	-	-
Tennessee.....	78	549	21	-	70	77	78	3,353	-	-	-
Alabama.....	46	424	11	1	26	28	-	401	-	-	-
Mississippi.....	11	125	24	1	13	21	-	69	-	-	-
WEST SOUTH CENTRAL.....	286	9,593	5,195	1	293	380	92	8,959	-	-	22
Arkansas.....	-	32	16	-	25	34	-	160	-	-	-
Louisiana.....	77	319	125	-	72	101	-	50	-	-	-
Oklahoma.....	4	944	143	-	23	36	1	2,704	-	-	-
Texas.....	205	8,298	4,911	1	173	209	91	6,045	-	-	22
MOUNTAIN.....	18	2,293	1,183	4	57	59	45	4,405	-	-	1
Montana.....	-	114	122	-	1	8	2	808	-	-	-
Idaho.....	3	484	90	-	7	13	5	110	-	-	-
Wyoming.....	-	11	-	-	2	-	-	42	-	-	-
Colorado.....	-	306	142	-	18	13	26	1,545	-	-	1
New Mexico.....	8	310	290	3	5	8	3	790	-	-	-
Arizona.....	5	1,009	527	1	17	10	9	978	-	-	-
Utah.....	2	38	11	-	6	5	-	132	-	-	-
Nevada.....	-	21	1	-	1	2	-	-	-	-	-
PACIFIC.....	36	3,521	1,233	21	484	613	323	15,764	-	-	2
Washington*.....	15	774	69	-	49	59	111	6,087	-	-	-
Oregon.....	5	453	201	1	33	22	55	1,369	-	-	-
California.....	16	1,961	897	20	397	511	141	6,304	-	-	2
Alaska.....	-	141	14	-	-	11	-	399	-	-	-
Hawaii.....	-	192	52	-	5	10	16	1,605	-	-	-
Puerto Rico.....	-	984	2,131	-	5	19	-	925	-	-	-
Virgin Islands.....	-	8	58	-	3	-	-	3	-	-	-

*Delayed reports: Measles: Colo. 108, Wash. 30
Meningococcal infections: Ohio delete 1, Colo. 1
Mumps: Wash. 2

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TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
DECEMBER 26, 1970 AND DECEMBER 20, 1969 (51st WEEK) - CONTINUED

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970
UNITED STATES.....	286	54,885	1	134	9	162	6	356	1	338	46	2,943
NEW ENGLAND.....	23	2,804	-	4	-	1	-	14	-	-	3	115
Maine.....	17	547	-	-	-	-	-	-	-	-	1	49
New Hampshire.....	-	155	-	-	-	-	-	-	-	-	-	1
Vermont.....	-	68	-	-	-	-	-	-	-	-	2	56
Massachusetts.....	6	1,285	-	2	-	1	-	10	-	-	-	4
Rhode Island.....	-	128	-	-	-	-	-	-	-	-	-	1
Connecticut.....	-	621	-	2	-	-	-	4	-	-	-	4
MIDDLE ATLANTIC.....	20	4,251	1	21	-	2	1	65	-	14	2	260
New York City.....	2	677	1	13	-	-	1	25	-	-	-	-
New York, Up-State..	6	481	-	4	-	1	-	20	-	6	2	244
New Jersey.....	4	898	-	3	-	-	-	10	-	4	-	-
Pennsylvania.....	8	2,195	-	1	-	1	-	10	-	4	-	16
EAST NORTH CENTRAL....	79	11,326	-	26	-	22	3	53	-	10	2	230
Ohio.....	19	2,170	-	2	-	4	-	18	-	9	-	58
Indiana.....	6	2,056	-	8	-	13	-	4	-	-	1	26
Illinois.....	4	1,791	-	7	-	3	-	10	-	1	-	63
Michigan.....	37	3,006	-	8	-	-	1	14	-	-	1	27
Wisconsin.....	13	2,303	-	1	-	2	2	7	-	-	-	56
WEST NORTH CENTRAL....	12	3,452	-	5	-	31	1	12	-	4	11	638
Minnesota.....	-	127	-	1	-	1	-	1	-	-	2	127
Iowa.....	4	2,082	-	-	-	-	-	1	-	1	-	132
Missouri.....	4	447	-	1	-	27	-	3	-	3	1	119
North Dakota.....	-	156	-	-	-	1	-	2	-	-	3	56
South Dakota.....	-	3	-	1	-	1	-	-	-	-	-	85
Nebraska.....	3	583	-	-	-	-	-	2	-	-	-	7
Kansas.....	1	54	-	-	-	1	1	3	-	-	5	112
SOUTH ATLANTIC.....	7	6,835	-	31	8	27	-	48	-	224	8	586
Delaware.....	-	46	-	-	-	-	-	-	-	5	-	-
Maryland.....	-	335	-	1	-	-	-	14	-	24	-	3
Dist. of Columbia...	-	23	-	1	-	-	-	1	-	-	-	-
Virginia.....	7	777	-	2	8	16	-	9	-	57	2	215
West Virginia.....	-	1,423	-	-	-	2	-	-	-	5	1	151
North Carolina.....	-	47	-	3	-	5	-	3	-	88	-	3
South Carolina.....	-	675	-	2	-	-	-	3	-	35	-	-
Georgia.....	-	-	-	6	-	3	-	8	-	9	5	120
Florida.....	-	3,509	-	16	-	1	-	10	-	1	-	94
EAST SOUTH CENTRAL....	9	3,005	-	16	1	15	-	42	1	40	9	239
Kentucky.....	1	973	-	2	-	2	-	12	-	3	7	134
Tennessee.....	8	1,539	-	6	1	12	-	20	-	22	2	65
Alabama.....	-	395	-	6	-	-	-	8	1	12	-	37
Mississippi.....	-	98	-	2	-	1	-	2	-	3	-	3
WEST SOUTH CENTRAL....	33	9,376	-	16	-	39	-	34	-	38	8	457
Arkansas.....	-	36	-	4	-	18	-	10	-	6	1	74
Louisiana.....	1	158	-	4	-	6	-	10	-	1	1	69
Oklahoma.....	1	825	-	-	-	6	-	1	-	24	2	96
Texas.....	31	8,357	-	8	-	9	-	13	-	7	4	218
MOUNTAIN.....	5	2,147	-	-	-	15	-	17	-	6	-	84
Montana.....	1	342	-	-	-	3	-	1	-	1	-	1
Idaho.....	1	207	-	-	-	-	-	-	-	2	-	-
Wyoming.....	-	136	-	-	-	-	-	2	-	1	-	3
Colorado.....	-	430	-	-	-	-	-	4	-	2	-	34
New Mexico.....	-	237	-	-	-	-	-	6	-	-	-	16
Arizona.....	2	622	-	-	-	-	-	2	-	-	-	14
Utah.....	1	173	-	-	-	12	-	2	-	-	-	2
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	14
PACIFIC.....	98	11,689	-	15	-	10	1	71	-	2	3	334
Washington.....	18	4,983	-	2	-	2	-	4	-	-	-	9
Oregon.....	6	996	-	3	-	2	-	1	-	-	-	4
California.....	74	5,372	-	10	-	6	1	62	-	2	3	310
Alaska.....	-	112	-	-	-	-	-	3	-	-	-	11
Hawaii.....	-	226	-	-	-	-	-	1	-	-	-	-
Puerto Rico.....	-	27	-	16	-	-	-	5	-	-	-	48
Virgin Islands.....	-	1	-	-	-	-	-	1	-	-	-	-

* Delayed reports: Tetanus: N.Y.C. delete 1

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 26, 1970

Week No.
51

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

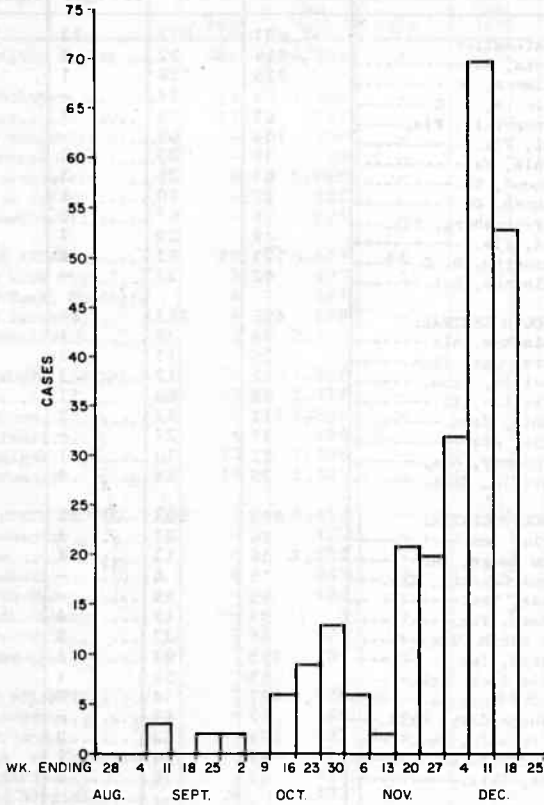
Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	674	432	44	18	SOUTH ATLANTIC:	1,037	572	33	49
Boston, Mass. ++	214	127	13	6	Atlanta, Ga.-----	159	82	2	3
Bridgeport, Conn.-----	42	27	5	-	Baltimore, Md.-----	225	126	1	11
Cambridge, Mass. ++	26	18	5	1	Charlotte, N. C.-----	24	14	-	2
Fall River, Mass.-----	22	14	1	-	Jacksonville, Fla.-----	61	31	3	3
Hartford, Conn.-----	45	23	2	1	Miami, Fla.-----	104	62	-	2
Lowell, Mass.-----	25	15	2	-	Norfolk, Va.-----	35	23	3	1
Lynn, Mass. ++	18	18	1	-	Richmond, Va.-----	61	35	3	5
New Bedford, Mass.-----	31	21	2	-	Savannah, Ga.-----	27	10	4	1
New Haven, Conn.-----	53	37	1	4	St. Petersburg, Fla.-----	79	67	6	2
Providence, R. I.-----	62	37	4	3	Tampa, Fla.-----	49	20	7	5
Somerville, Mass.-----	13	9	-	-	Washington, D. C. ++	171	81	4	11
Springfield, Mass.-----	50	33	3	1	Wilmington, Del.-----	42	21	-	3
Waterbury, Conn.-----	34	24	-	2	EAST SOUTH CENTRAL:	455	263	26	11
Worcester, Mass.-----	39	29	5	-	Birmingham, Ala.-----	64	39	4	3
MIDDLE ATLANTIC:	3,143	1,827	119	127	Chattanooga, Tenn.-----	25	11	2	3
Albany, N. Y.-----	48	30	-	3	Knoxville, Tenn.-----	22	17	2	-
Allentown, Pa.-----	41	21	7	2	Louisville, Ky.-----	98	59	11	1
Buffalo, N. Y.-----	128	75	5	4	Memphis, Tenn.-----	118	67	2	1
Camden, N. J.-----	73	39	7	2	Mobile, Ala.-----	31	21	-	1
Elizabeth, N. J. ++	31	18	1	1	Montgomery, Ala.-----	22	10	1	1
Erie, Pa.-----	33	17	5	-	Nashville, Tenn.-----	75	39	4	1
Jersey City, N. J.-----	50	28	3	1	WEST SOUTH CENTRAL:	896	507	32	51
Newark, N. J.-----	76	39	4	4	Austin, Tex.-----	28	21	4	1
New York City, N. Y. ±	1,640	963	58	63	Baton Rouge, La.-----	36	17	4	-
Paterson, N. J.-----	30	20	3	-	Corpus Christi, Tex.-----	15	6	-	3
Philadelphia, Pa.-----	401	228	4	23	Dallas, Tex.-----	95	39	-	4
Pittsburgh, Pa.-----	163	88	7	6	El Paso, Tex.-----	31	19	4	3
Reading, Pa.-----	43	32	-	-	Fort Worth, Tex.-----	64	37	3	8
Rochester, N. Y.-----	118	69	7	9	Houston, Tex.-----	190	124	4	7
Schenectady, N. Y.-----	32	23	3	-	Little Rock, Ark.-----	55	37	1	3
Scranton, Pa.-----	44	26	1	-	New Orleans, La.-----	121	54	7	11
Syracuse, N. Y.-----	93	53	-	3	Oklahoma City, Okla.-----	82	49	-	2
Trenton, N. J.-----	40	22	2	1	San Antonio, Tex.-----	109	62	2	5
Utica, N. Y.-----	27	17	1	3	Shreveport, La.-----	47	26	1	3
Yonkers, N. Y.-----	32	19	1	2	Tulsa, Okla.-----	23	16	2	1
EAST NORTH CENTRAL:	2,357	1,357	81	125	MOUNTAIN:	425	253	28	27
Akron, Ohio-----	54	35	1	3	Albuquerque, N. Mex.-----	40	20	4	2
Canton, Ohio-----	39	25	-	-	Colorado Springs, Colo.-----	30	16	2	3
Chicago, Ill.-----	692	366	16	32	Denver, Colo.-----	97	57	6	10
Cincinnati, Ohio-----	141	86	5	9	Ogden, Utah-----	20	11	5	1
Cleveland, Ohio-----	173	91	-	13	Phoenix, Ariz.-----	104	65	-	5
Columbus, Ohio-----	140	81	7	12	Pueblo, Colo.-----	22	16	4	1
Dayton, Ohio-----	59	37	-	1	Salt Lake City, Utah-----	62	41	3	3
Detroit, Mich.-----	334	188	7	12	Tucson, Ariz.-----	50	27	4	2
Evansville, Ind.-----	25	16	1	1	PACIFIC:	1,409	881	24	54
Flint, Mich.-----	46	30	2	4	Berkeley, Calif.-----	21	14	-	-
Fort Wayne, Ind.-----	26	12	2	2	Fresno, Calif.-----	39	19	-	5
Gary, Ind.-----	28	16	4	4	Glendale, Calif.-----	18	14	1	-
Grand Rapids, Mich.-----	50	34	5	2	Honolulu, Hawaii-----	42	21	-	3
Indianapolis, Ind.-----	148	82	8	10	Long Beach, Calif.-----	93	56	3	3
Madison, Wis.-----	35	17	10	4	Los Angeles, Calif.-----	400	275	11	10
Milwaukee, Wis.-----	103	74	-	2	Oakland, Calif.-----	73	38	1	1
Peoria, Ill.-----	36	18	3	3	Pasadena, Calif.-----	31	23	-	-
Rockford, Ill.-----	33	18	6	3	Portland, Oreg.-----	159	92	1	12
South Bend, Ind.-----	33	26	-	1	Sacramento, Calif.-----	53	31	1	2
Toledo, Ohio-----	103	68	3	4	San Diego, Calif.-----	115	74	1	3
Youngstown, Ohio-----	59	37	1	1	San Francisco, Calif.-----	124	75	2	5
WEST NORTH CENTRAL:	787	468	27	40	San Jose, Calif.-----	42	27	-	1
Des Moines, Iowa-----	40	24	1	2	Seattle, Wash.-----	112	61	1	5
Duluth, Minn.-----	25	20	4	1	Spokane, Wash. ++	45	31	1	2
Kansas City, Kans.-----	47	24	4	4	Tacoma, Wash.-----	42	30	1	2
Kansas City, Mo.-----	132	70	3	4	Total	11,183	6,560	414	502
Lincoln, Nebr.-----	21	13	2	1	Expected Number	13,463	7,831	536	571
Minneapolis, Minn.-----	115	69	3	10	Cumulative Total (includes reported corrections for previous weeks)	652,795	372,922	25,109	31,045
Omaha, Nebr.-----	90	62	-	4					
St. Louis, Mo.-----	211	118	7	10					
St. Paul, Minn.-----	51	35	-	2					
Wichita, Kans.-----	55	33	3	2					
Las Vegas, Nev.*	---	---	---	---					

*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 December 19, 1970
++ Estimate based on average per cent of divisional total

MEASLES - (Continued from page 489)

Figure 4
REPORTED CASES OF MEASLES IN COUNTY RESIDENTS,
BY WEEK OF REPORT
JEFFERSON COUNTY, ALABAMA - AUG. 28-DEC. 25, 1970



(Reported by George E. Hardy, Jr., M.D., Health Officer, Jefferson County Department of Health, Birmingham, Alabama, and Frederick S. Wolf, M.D., Director, Bureau of Preventable Diseases, Alabama State Department of Public Health.)

Editorial Note:

This outbreak points out the existence of groups with low levels of immunization, particularly in lower socio-economic segments of urban populations.

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 21,000 IS PUBLISHED AT THE CENTER FOR DISEASE CONTROL, ATLANTA, GEORGIA.

DIRECTOR, CENTER FOR DISEASE CONTROL: DAVID J. SENCER, M.D.
DIRECTOR, EPIDEMIOLOGY PROGRAM: PHILIP S. BRACHMAN, M.D.
EDITOR: MICHAEL B. GREGG, M.D.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE CENTER FOR DISEASE CONTROL WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CENTER FOR DISEASE CONTROL. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

CENTER FOR DISEASE CONTROL
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL 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.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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