



# Morbidity and Mortality

DEC 27 1965

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

## VIBRIO FETUS INFECTIONS IN HUMANS - OREGON

During November 1965, two cases of *Vibrio fetus* infection in children were brought to the attention of the Oregon State Board of Health by the Bacteriology Laboratory of the Pediatrics Department of the University of Oregon Medical School.

The first case reported was in a 24 to 28 week premature baby born in the Medical School Hospital on August 25, 1965. At delivery, the lower extremities, back and abdomen of the infant showed extensive petechiae and the body surface was covered by a foul smelling oily film. A few hours after birth the baby developed respiratory distress with rales noted in the chest; it died after 14

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hours. Spinal fluid and blood from the baby were positive on culture for *Vibrio fetus* at the Pediatrics Department Laboratory; these findings were later confirmed by the by the Laboratory Branch of CDC. Blood cultures from the mother were negative but her serum at 1:1280 agglutinated the vibrios cultured from the baby.

(Continued on page 426)

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

DISEASE	50th WEEK ENDED		MEDIAN 1960-1964	CUMULATIVE, FIRST 50 WEEKS		
	DECEMBER 18, 1965	DECEMBER 12, 1964		1965	1964	MEDIAN 1960-1964
Aseptic meningitis . . . . .	38	35	34	2,052	2,076	2,475
Brucellosis . . . . .	5	3	6	240	383	388
Diphtheria . . . . .	3	11	12	154	286	444
Encephalitis, primary infectious . . . . .	30	50	---	1,828	3,120	---
Encephalitis, post-infectious . . . . .	9	3	---	634	763	---
Hepatitis, infectious including serum hepatitis . . . . .	609	747	945	32,430	36,415	41,385
Measles . . . . .	2,866	3,249	3,939	259,309	481,767	421,463
Meningococcal infections . . . . .	66	64	45	2,918	2,683	2,116
Poliomyelitis, Total . . . . .	2	—	6	57	114	862
Paralytic . . . . .	2	—	5	41	89	683
Nonparalytic . . . . .	—	—	---	10	14	---
Unspecified . . . . .	—	—	---	6	11	---
Streptococcal Sore Throat and Scarlet fever . . . . .	7,917	8,887	7,711	375,078	377,392	304,988
Tetanus . . . . .	3	5	---	269	266	---
Tularemia . . . . .	3	3	---	236	313	---
Typhoid fever . . . . .	4	8	9	435	436	611
Rabies in Animals . . . . .	67	120	51	4,115	4,356	3,470

## NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax: . . . . .	7	Rabies in Man: . . . . .	1
Botulism: . . . . .	18	Smallpox: . . . . .	—
Leptospirosis: Mass. - 1, Hawaii - 3, Iowa - 4, Calif. - 2 . . . . .	64	Trichinosis: . . . . .	107
Malaria: Pa. - 2 . . . . .	81	Typhus -	
Plague: . . . . .	6	Murine: . . . . .	26
Psittacosis: . . . . .	48	Rky. Mt. Spotted: . . . . .	260
Cholera: . . . . .	2		

## VIBRIO FETUS INFECTIONS IN HUMANS - OREGON

(Continued from front page)

The mother gave no history of recent illness. In the past she had had two miscarriages but during this pregnancy the only unusual event until the premature birth had been a temporary heavy blood-stained discharge during the fourth month. At the time of the delivery there had been a low grade temperature which soon returned to normal without any treatment being given. The family lives on a farm which has a few cattle and swine but the mother gave no history of direct contact with the animals. However, in view of the serological findings associated with a premature birth she is presumed to have been a subclinical case of *Vibrio fetus* infection.

The second case reported was in a 2½-year-old child admitted to the same hospital on September 1 of this year. The history prior to admission was of a 3 weeks-fever of inconstant pattern, the highest temperature noted being 102°F. There had been an increasing anorexia for 3 or 4 days with rhinorrhea and mild joint and muscle pains. This was followed by the appearance of several small swellings in the left side of the neck. When examined on entry to the hospital there was a large, soft submandibular swelling associated with a few discrete and firm nodules in the left side of the neck. There was no general adenopathy and no other abnormal findings were noted.

The child's temperature later rose to 104°F and there was an increase in the white count to 24,000 with a 29 percent lymphocytosis. Skin tests were tuberculin negative and were also negative for brucellosis, coccidiomycosis and histoplasmosis. Four blood cultures were also made and the fourth proved positive for *Vibrio fetus* after 6 days. The child was then given penicillin intramuscularly in daily doses of 600,000 units. The fever quickly resolved, there was a gradual decrease in the size of the lymph nodes and the child made a good recovery.

This child's family also lived on a farm and there was a history of drinking raw milk for some time prior to the illness.

Epidemiological investigations at the two farms, which are 35 miles apart, included blood cultures and vaginal smears from cattle and swine. The latter were all negative for *Vibrio fetus* and no primary source of infection has been identified.

(Reported by Dr. Monroe A. Holmes, Acting Director, Epidemiology Section, Oregon State Board of Health; the Professional Staff of the Pediatrics Department of the University of Oregon Medical School; Dr. Gerda Benda and Dr. William Austin, Attending Physicians of the two patients; and the Laboratory Branch of the CDC.)

**Editorial Note:** *Vibrio fetus* infections cause vibriosis in cattle and sheep which is a common cause of abortion and sterility in infected herds. The infection is uncommon in man and according to Hull (1963), only 22 human infections, all in adults, had been recorded up to that time; eight were in France and the remainder in the United States. Four of these cases occurred in women, placentitis and abortion with fever being the predominant symptoms. As far as is known the two laboratory confirmed cases above are the first to be described in children. The first documented human strain of *V. fetus* was isolated in 1947.

## Reference:

Hull, Thomas G.: Diseases transmitted from animals to man. Thomas Press, Springfield, Illinois, 1963, V:pp 170-185.

## SURVEILLANCE SUMMARY

SHIGELLOSIS - July 1 - September 30, 1965

During the third quarter of the year, 2,248 shigella isolations from human sources have been reported from 52 centers. Compared to the total reported from 49 centers during the previous quarter, this represents an increase of 733 isolations (MMWR, Vol. 14, No. 42). The numbers of isolations reported indicate a seasonal pattern of increased activity in July going on to a peak of incidence in September. Since reporting was first instituted in January 1964, seventeen States have been reporting shigella isolations consistently. The data from these

States indicate a decrease in the totals reported during the first 9 months of 1965 although the seasonal distribution is similar to the comparable period in 1964.

The age and sex distribution of isolations during the third quarter is consistent with past experience as is the high concentration of isolations among children. Almost 70 percent of isolations were from children under 10 years of age, with children between the ages of 1 and 4 accounting for 40 percent of the total. Accumulating

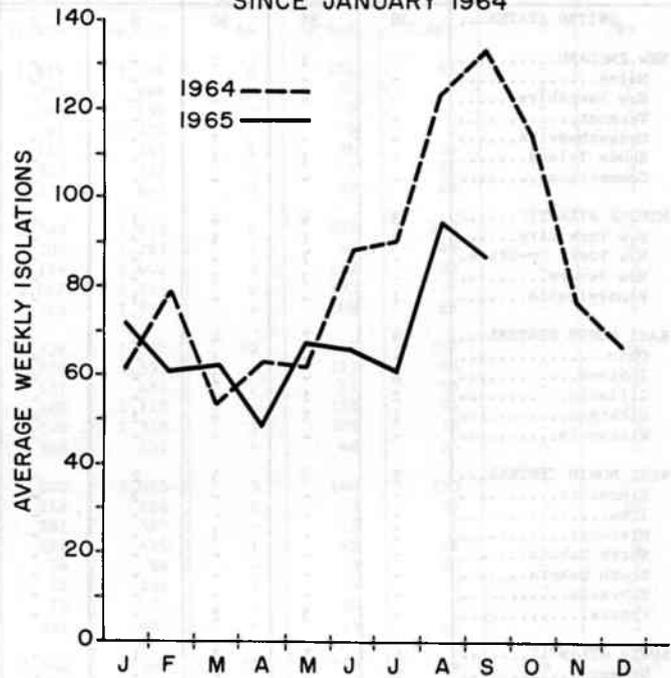
evidence suggests that there is no difference in the frequency of occurrence of shigellosis in the two sexes.

Isolations from family groups with more than one member infected account for 26.8 percent of the total during the quarter.

There were 13 different serotypes of human shigellae determined and of these, 6 serotypes accounted for 85 percent of all isolations. Table 1 shows the order of frequency of the six most common serotypes during the third quarter, in comparison to the second quarter. The major numbered subgroups of *S. flexneri* only have been indicated for these two quarters as all States do not undertake final serotyping. The 24-month distribution in the last column is, however, based on final serotyping.

Figure 1.

SEASONAL INCIDENCE OF REPORTED SHIGELLA ISOLATIONS FOR 17 STATES\* WHICH HAVE REPORTED SINCE JANUARY 1964



\*ALASKA, ARIZONA, HAWAII, ILLINOIS, KANSAS, MARYLAND, NEW JERSEY, NEW MEXICO, NORTH CAROLINA, NORTH DAKOTA, OHIO, OKLAHOMA, OREGON, SOUTH DAKOTA, TENNESSEE, TEXAS, VERMONT.

Table 1  
Frequency of Shigella Serotypes - Human Sources

Rank	Third Quarter		Previous Quarter*	24-Month Period
	Serotype	No. %		
1	<i>S. sonnei</i>	728 32.4	34.1	37.9
2	<i>S. flexneri</i> 2	604 26.9	25.8	(2a) 24.9
3	<i>S. flexneri</i> 3	270 12.0	11.0	(3a) 9.8
4	<i>S. flexneri</i> 4	176 7.9	6.3	(4a) 6.1
5	<i>S. flexneri</i> 6	86 3.8	3.6	6.0
6	<i>S. flexneri</i> 1	81 3.6	5.7	(2b) 5.5

\*The 24-month period figures give a percentage of the total of 12,474 isolations which is calculated according to the distribution of a sample finally serotyped.

The regional differences in distribution of the *S. flexneri* and *S. sonnei* isolations remain much the same as in previous surveillance summaries. In the southern States, *S. flexneri* accounts for between 70 and 80 percent of all isolations while in the northern States the range is between 40 and 60 percent, reflecting an apparently greater seasonal incidence in the third quarter. *S. sonnei* isolations throughout the United States have been reported at a relatively constant rate.

The 26 isolations of shigella from nonhuman sources during the third quarter of 1965 is in Table 2.

(Reported by the Shigella Surveillance Unit, CDC.)

Table 2  
Frequency of Shigella Serotypes - Nonhuman Sources

Serotype	No. of Isolations	Reporting Center	Source
<i>S. flexneri</i>	5	Mich.	Monkeys
<i>S. flexneri</i> 2a	3	Texas	Lab. stock cultures
<i>S. flexneri</i> 2b	2	Texas	Lab. stock cultures
<i>S. flexneri</i> 3	13	Md.	Monkeys
	1	Pa.	Monkey
<i>S. flexneri</i> 4b	1	Ill.	Monkey
<i>S. sonnei</i>	1	Ill.	Monkey
TOTAL	26		

BOTULISM - FULLERTON, CALIFORNIA

Two cases of botulism, following the ingestion of home-canned albacore in a salad, were reported in the MMWR, Vol. 14, No. 40. Laboratory investigations were conducted at the California Department of Public Health

Laboratory, the Hooper Foundation and the CDC Laboratory.

An extract of the salad examined at each of the laboratories proved to be toxic to mice. The toxin was (Continued on page 432)



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## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 18, 1965 AND DECEMBER 12, 1964 (50th WEEK) - Continued

Area	Brucel- losis	Infectious Hepatitis including Serum Hepatitis					Meningococcal Infections			Tetanus	
		Total incl. unk.	Under 20 years	20 years and over	Cumulative Totals		1965	Cumulative		1965	Cum.
					1965	1964		1965	1964		
UNITED STATES...	5	609	309	280	32,430	36,415	66	2,918	2,683	3	269
NEW ENGLAND.....	-	20	13	6	1,819	3,226	4	151	91	-	7
Maine.....	-	5	3	1	321	996	-	18	7	-	-
New Hampshire.....	-	1	-	1	167	256	-	9	2	-	2
Vermont.....	-	-	-	-	91	375	-	8	4	-	-
Massachusetts.....	-	5	3	2	722	741	1	56	38	-	4
Rhode Island.....	-	5	3	2	203	217	-	18	11	-	-
Connecticut.....	-	4	4	-	315	641	3	42	29	-	1
MIDDLE ATLANTIC.....	1	127	52	75	5,789	7,933	6	387	343	1	22
New York City.....	-	24	5	19	1,200	1,261	1	64	48	-	4
New York, Up-State.	1	52	24	28	2,174	3,440	3	112	103	1	7
New Jersey.....	-	9	5	4	1,047	1,295	2	103	107	-	2
Pennsylvania.....	-	42	18	24	1,368	1,937	-	108	85	-	9
EAST NORTH CENTRAL...	1	134	83	47	6,336	5,852	10	443	357	-	35
Ohio.....	-	39	20	17	1,709	1,532	3	121	93	-	3
Indiana.....	1	15	12	3	531	485	2	51	55	-	9
Illinois.....	-	16	11	5	1,189	1,118	-	118	96	-	16
Michigan.....	-	58	36	22	2,509	2,316	5	105	78	-	3
Wisconsin.....	-	6	4	-	398	401	-	48	35	-	4
WEST NORTH CENTRAL...	1	22	13	9	1,802	2,020	3	140	150	1	23
Minnesota.....	-	2	-	2	218	226	1	33	33	1	10
Iowa.....	1	6	3	3	581	383	-	12	9	-	4
Missouri.....	-	3	2	1	397	496	1	55	68	-	4
North Dakota.....	-	-	-	-	34	64	-	13	20	-	1
South Dakota.....	-	-	-	-	22	135	1	4	3	-	-
Nebraska.....	-	1	1	-	99	74	-	10	7	-	2
Kansas.....	-	10	7	3	451	642	-	13	10	-	2
SOUTH ATLANTIC.....	-	60	32	25	3,340	3,374	14	552	524	-	63
Delaware.....	-	1	1	-	87	76	-	11	7	-	-
Maryland.....	-	11	6	5	598	620	1	54	41	-	3
Dist. of Columbia..	-	-	-	-	50	69	-	11	17	-	-
Virginia.....	-	12	6	3	767	543	1	73	64	-	6
West Virginia.....	-	13	11	2	453	482	-	29	35	-	1
North Carolina.....	-	9	4	5	365	543	7	119	94	-	11
South Carolina.....	-	1	-	1	141	152	2	67	59	-	7
Georgia.....	-	2	1	1	118	112	2	63	87	-	10
Florida.....	-	11	3	8	761	777	1	125	120	-	25
EAST SOUTH CENTRAL...	-	31	16	15	2,294	2,473	8	229	199	-	34
Kentucky.....	-	8	7	1	828	872	1	87	68	-	8
Tennessee.....	-	14	6	8	779	873	4	72	62	-	12
Alabama.....	-	6	1	5	400	479	3	43	43	-	12
Mississippi.....	-	3	2	1	287	249	-	27	26	-	2
WEST SOUTH CENTRAL...	2	30	12	17	2,692	2,859	7	366	300	1	59
Arkansas.....	1	3	-	3	342	288	1	19	33	-	13
Louisiana.....	-	4	-	4	455	675	4	198	129	1	11
Oklahoma.....	-	1	-	1	55	132	1	22	15	-	1
Texas.....	1	22	12	9	1,840	1,764	1	127	123	-	34
MOUNTAIN.....	-	44	24	12	1,771	2,238	4	106	101	-	3
Montana.....	-	3	3	-	156	190	-	2	1	-	-
Idaho.....	-	-	-	-	196	316	-	13	4	-	-
Wyoming.....	-	3	1	2	54	93	-	6	5	-	-
Colorado.....	-	6	3	3	374	588	2	30	22	-	2
New Mexico.....	-	9	7	2	383	324	-	11	43	-	-
Arizona.....	-	7	-	-	372	487	1	21	8	-	1
Utah.....	-	15	10	5	220	189	1	18	7	-	-
Nevada.....	-	1	-	-	16	51	-	5	11	-	-
PACIFIC.....	-	141	64	74	6,587	6,440	10	544	618	-	23
Washington.....	-	11	4	7	509	647	-	47	48	-	-
Oregon.....	-	16	10	5	572	644	-	37	27	-	4
California.....	-	111	50	61	5,185	4,736	10	434	523	-	19
Alaska.....	-	2	-	-	235	290	-	18	7	-	-
Hawaii.....	-	1	-	1	86	123	-	8	13	-	-
Puerto Rico	-	14	12	2	1,358	975	-	11	36	-	57

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
DECEMBER 18, 1965 AND DECEMBER 12, 1964 (50th WEEK) - Continued

Area	Measles			Strept. Sore Th. & Scarlet Fev.	Tularemia		Typhoid Fever		Rabies in Animals	
	1965	Cumulative			1965	Cum.	1965	Cum.	1965	Cum.
		1965	1964							
UNITED STATES...	2,866	259,309	481,767	7,917	3	236	4	435	67	4,115
NEW ENGLAND.....	140	37,371	21,261	973	-	2	-	7	-	48
Maine.....	14	2,933	3,654	148	-	-	-	-	-	4
New Hampshire.....	-	383	809	9	-	-	-	-	-	5
Vermont.....	13	1,420	2,417	5	-	-	-	-	-	32
Massachusetts.....	94	19,468	6,777	154	-	2	-	3	-	2
Rhode Island.....	13	3,970	2,419	43	-	-	-	1	-	1
Connecticut.....	6	9,197	5,185	614	-	-	-	3	-	4
MIDDLE ATLANTIC.....	358	17,714	53,296	167	-	1	-	68	11	256
New York City.....	182	3,443	15,504	7	-	-	-	30	-	-
New York, up-State..	24	4,431	13,096	121	-	1	-	16	11	240
New Jersey.....	152	3,577	12,342	39	-	-	-	7	-	-
Pennsylvania.....	-	6,263	12,354	-	-	-	-	15	-	16
EAST NORTH CENTRAL...	1,283	62,349	105,693	593	2	16	-	50	11	632
Ohio.....	32	9,162	20,046	35	-	-	-	10	5	338
Indiana.....	38	2,351	23,161	118	1	6	-	16	1	74
Illinois.....	411	4,042	16,772	98	1	7	-	11	1	91
Michigan.....	73	27,686	29,954	228	-	2	-	7	3	63
Wisconsin.....	729	19,108	15,760	114	-	1	-	6	1	66
WEST NORTH CENTRAL...	96	17,399	31,312	369	-	30	-	17	7	811
Minnesota.....	39	847	345	17	-	1	-	1	3	178
Iowa.....	25	9,286	23,615	116	-	-	-	2	-	225
Missouri.....	17	2,678	1,094	103	-	20	-	11	2	124
North Dakota.....	12	4,007	5,350	111	-	-	-	-	-	48
South Dakota.....	-	116	67	15	-	3	-	-	1	59
Nebraska.....	3	465	841	5	-	2	-	3	-	36
Kansas.....	NN	NN	NN	2	-	4	-	-	1	141
SOUTH ATLANTIC.....	254	26,768	40,133	864	-	35	1	80	11	536
Delaware.....	-	516	419	42	-	-	1	5	-	-
Maryland.....	20	1,260	3,442	114	-	-	-	21	-	27
Dist. of Columbia..	1	128	357	9	-	-	-	-	-	-
Virginia.....	86	4,280	12,957	243	-	9	-	9	6	326
West Virginia.....	84	14,743	9,746	137	-	-	-	3	2	27
North Carolina.....	3	415	1,263	26	-	8	-	16	-	3
South Carolina.....	23	1,190	4,301	100	-	3	-	9	-	3
Georgia.....	-	628	214	6	-	15	-	12	2	72
Florida.....	37	3,608	7,434	187	-	-	-	5	1	78
EAST SOUTH CENTRAL...	373	15,894	69,148	1,147	1	25	1	47	15	826
Kentucky.....	186	3,659	18,835	75	-	3	-	10	2	95
Tennessee.....	185	8,732	25,051	798	1	21	1	19	12	673
Alabama.....	1	2,354	18,502	104	-	1	-	10	-	16
Mississippi.....	1	1,149	6,760	170	-	-	-	8	1	42
WEST SOUTH CENTRAL...	102	32,035	73,657	825	-	97	-	60	12	671
Arkansas.....	6	1,194	1,154	1	-	66	-	15	-	97
Louisiana.....	8	129	121	9	-	8	-	11	3	86
Oklahoma.....	1	234	1,058	12	-	11	-	10	1	137
Texas.....	87	30,478	71,324	803	-	12	-	24	8	351
MOUNTAIN.....	115	20,822	21,287	1,566	-	16	1	33	-	95
Montana.....	7	3,901	4,059	23	-	4	-	1	-	5
Idaho.....	10	2,995	2,181	84	-	-	-	-	-	-
Wyoming.....	2	873	285	23	-	4	-	1	-	-
Colorado.....	32	5,989	3,393	760	-	-	-	1	-	9
New Mexico.....	3	691	1,116	429	-	-	1	13	-	21
Arizona.....	56	1,507	6,760	109	-	-	-	14	-	57
Utah.....	5	4,641	2,480	138	-	8	-	1	-	2
Nevada.....	-	225	1,013	-	-	-	-	2	-	1
PACIFIC.....	145	28,957	65,980	1,413	-	14	1	73	-	240
Washington.....	41	7,535	20,954	421	-	-	-	7	-	8
Oregon.....	22	3,469	8,944	29	-	5	-	8	-	9
California.....	80	13,694	34,070	851	-	9	1	57	-	221
Alaska.....	2	207	1,152	26	-	-	-	-	-	2
Hawaii.....	-	4,052	860	86	-	-	-	1	-	-
Puerto Rico	46	2,872	7,273	3	-	-	1	16	-	14

# Morbidity and Mortality Weekly Report

Vol. 14, No. 51

Week No. **Table 4. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 18, 1965**

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

Area	All Causes				Area	All Causes			
	All Ages	65 years and over	Pneumonia and Influenza All Ages	Under 1 year All Causes		All Ages	65 years and over	Pneumonia and Influenza All Ages	Under 1 year All Causes
<b>NEW ENGLAND:</b>	807	524	40	36	<b>SOUTH ATLANTIC:</b>	1,103	547	65	91
Boston, Mass.-----	276	178	6	8	Atlanta, Ga.-----	139	65	6	15
Bridgeport, Conn.-----	39	25	4	-	Baltimore, Md.-----	243	117	7	21
Cambridge, Mass.-----	35	26	7	-	Charlotte, N. C.-----	46	14	3	5
Fall River, Mass.-----	28	16	-	-	Jacksonville, Fla.-----	62	31	1	8
Hartford, Conn.-----	46	26	3	3	Miami, Fla.-----	66	37	4	3
Lowell, Mass.-----	39	26	4	4	Norfolk, Va.-----	58	30	7	-
Lynn, Mass.-----	18	12	-	-	Richmond, Va.-----	68	34	3	8
New Bedford, Mass.-----	37	28	1	-	Savannah, Ga.-----	37	16	4	2
New Haven, Conn.-----	64	36	-	9	St. Petersburg, Fla.-----	76	61	5	3
Providence, R. I.-----	78	49	6	1	Tampa, Fla.*-----	71	39	10	5
Somerville, Mass.-----	18	11	2	4	Washington, D. C.-----	195	87	11	18
Springfield, Mass.-----	50	33	4	2	Wilmington, Del.-----	42	16	4	3
Waterbury, Conn.-----	31	22	-	2					
Worcester, Mass.-----	48	36	3	3	<b>EAST SOUTH CENTRAL:</b>	676	351	36	46
<b>MIDDLE ATLANTIC:</b>	3,429	2,008	157	182	Birmingham, Ala.-----	124	56	3	13
Albany, N. Y.-----	51	29	-	3	Chattanooga, Tenn.-----	60	32	5	2
Allentown, Pa.-----	39	22	-	-	Knoxville, Tenn.-----	49	31	3	2
Buffalo, N. Y.-----	171	99	8	8	Louisville, Ky.-----	130	74	17	5
Camden, N. J.-----	47	28	3	3	Memphis, Tenn.-----	127	62	1	12
Elizabeth, N. J.-----	44	25	2	2	Mobile, Ala.-----	48	21	1	4
Erie, Pa.-----	40	22	2	3	Montgomery, Ala.-----	30	19	3	1
Jersey City, N. J.-----	64	40	13	-	Nashville, Tenn.-----	108	56	3	7
Newark, N. J.-----	93	49	3	4	<b>WEST SOUTH CENTRAL:</b>	1,193	591	66	83
New York City, N. Y.-----	1,768	1,047	80	79	Austin, Tex.-----	32	18	5	3
Paterson, N. J.-----	42	27	2	-	Baton Rouge, La.-----	38	23	-	2
Philadelphia, Pa.-----	526	283	15	40	Corpus Christi, Tex.-----	35	10	-	6
Pittsburgh, Pa.-----	190	114	5	12	Dallas, Tex.-----	168	73	12	8
Reading, Pa.-----	48	30	4	2	El Paso, Tex.-----	46	26	1	3
Rochester, N. Y.-----	91	56	9	9	Fort Worth, Tex.-----	74	41	-	4
Schenectady, N. Y.-----	26	13	2	4	Houston, Tex.-----	228	104	12	18
Scranton, Pa.-----	34	20	1	2	Little Rock, Ark.-----	65	26	4	5
Syracuse, N. Y.-----	54	39	1	3	New Orleans, La.-----	176	87	8	11
Trenton, N. J.-----	46	26	1	4	Oklahoma City, Okla.-----	82	43	6	6
Utica, N. Y.-----	21	14	2	1	San Antonio, Tex.-----	132	75	6	8
Yonkers, N. Y.-----	34	25	4	3	Shreveport, La.-----	59	33	5	7
					Tulsa, Okla.-----	58	32	7	2
<b>EAST NORTH CENTRAL:</b>	2,577	1,443	119	147	<b>MOUNTAIN:</b>	416	242	36	23
Akron, Ohio-----	69	35	2	7	Albuquerque, N. Mex.-----	46	25	6	1
Canton, Ohio-----	39	22	6	-	Colorado Springs, Colo.-----	18	14	2	1
Chicago, Ill.-----	796	433	36	40	Denver, Colo.-----	126	72	14	10
Cincinnati, Ohio-----	107	69	2	2	Ogden, Utah-----	18	10	3	1
Cleveland, Ohio-----	211	124	4	8	Phoenix, Ariz.-----	81	45	8	6
Columbus, Ohio-----	121	68	3	11	Pueblo, Colo.-----	20	19	-	-
Dayton, Ohio-----	69	39	4	4	Salt Lake City, Utah-----	59	35	2	2
Detroit, Mich.-----	368	197	18	29	Tucson, Ariz.-----	48	22	1	2
Evansville, Ind.-----	52	38	5	2					
Flint, Mich.-----	49	25	2	5	<b>PACIFIC:</b>	1,608	999	46	71
Fort Wayne, Ind.-----	43	22	4	2	Berkeley, Calif.-----	24	20	-	-
Gary, Ind.-----	22	8	-	2	Fresno, Calif.*-----	48	28	1	3
Grand Rapids, Mich.-----	57	33	5	2	Glendale, Calif.-----	32	24	1	2
Indianapolis, Ind.-----	166	88	11	14	Honolulu, Hawaii*-----	43	21	1	4
Madison, Wis.-----	21	15	-	1	Long Beach, Calif.-----	66	47	1	2
Milwaukee, Wis.-----	108	70	8	2	Los Angeles, Calif.-----	621	375	20	25
Peoria, Ill.-----	43	19	-	4	Oakland, Calif.-----	8	4	2	1
Rockford, Ill.-----	24	10	2	1	Pasadena, Calif.-----	36	29	-	1
South Bend, Ind.-----	41	25	3	-	Portland, Ore.*-----	116	76	2	4
Toledo, Ohio-----	116	69	3	7	Sacramento, Calif.-----	81	50	1	2
Youngstown, Ohio-----	55	34	1	4	San Diego, Calif.-----	91	51	2	6
					San Francisco, Calif.-----	174	113	4	4
<b>WEST NORTH CENTRAL:</b>	799	468	22	37	San Jose, Calif.*-----	39	25	4	2
Des Moines, Iowa-----	61	39	2	-	Seattle, Wash.-----	120	67	5	7
Duluth, Minn.-----	16	10	-	-	Spokane, Wash.-----	64	43	2	4
Kansas City, Kans.-----	39	18	7	4	Tacoma, Wash.-----	45	26	-	4
Kansas City, Mo.-----	149	90	3	4					
Lincoln, Nebr.-----	26	13	1	5	<b>Total</b>	<b>12,608</b>	<b>7,173</b>	<b>587</b>	<b>716</b>
Minneapolis, Minn.-----	104	62	2	3					
Omaha, Nebr.-----	73	46	2	4					
St. Louis, Mo.-----	237	142	2	11					
St. Paul, Minn.-----	60	35	1	2					
Wichita, Kans.-----	34	13	2	4					

\*Estimate - based on average percent of divisional total.

**Cumulative Totals**  
including reported corrections for previous weeks

All Causes, All Ages -----	615,545
All Causes, Age 65 and over-----	347,646
Pneumonia and Influenza, All Ages-----	24,907
All Causes, Under 1 Year of Age-----	36,232

