

# Morbidity and Mortality



Vol. 18, No. 6  
**WEEKLY REPORT**  
 For  
 Week Ending  
 February 8, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
 DATE OF RELEASE: FEBRUARY 14, 1969 - ATLANTA, GEORGIA 30333

**EPIDEMIOLOGIC NOTES AND REPORTS**  
**INFLUENZA - United States**

During the past week, except in a few areas, reported influenza-like disease continued to decline in the United States. Additional information from Kansas indicates that the increase in influenza-like disease reported last week (MMWR, Vol. 18, No. 5) occurred in areas that had experienced little influenza activity in this influenza season. In early December, Johnson and Wyandotte Counties, Kansas, reported significant influenza activity, while the increased influenza activity reported in late January occurred predominantly in Clay and Jackson Counties, Missouri; all four counties comprise the Kansas City area. A high incidence of febrile respiratory illness primarily involving elementary and high school students is scattered throughout Kansas. Absenteeism rates of 20-50 percent

**CONTENTS**

Epidemiologic Notes and Reports  
 Influenza - United States . . . . . 45  
 Shellfish-Associated Gastroenteritis -  
   New Haven, Connecticut . . . . . 46  
 Food Poisoning - Seattle, Washington . . . . . 47  
 Surveillance Summary  
   Salmonellosis - October, November, and  
   December, 1968 . . . . . 47

were reported. Laboratory studies confirmed influenza A activity.

During the past week, total mortality and pneumonia-influenza deaths from 122 U.S. cities decreased for the fourth consecutive week. While pneumonia-influenza mortality in three of the nine geographic divisions was below the epidemic threshold, three other divisions had a slight increase (Figure 1).

*(Continued on page 46)*

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

| DISEASE   | 6th WEEK ENDED      |                      | MEDIAN<br>1964 - 1968 | CUMULATIVE, FIRST 6 WEEKS |        |                       |
|---|---------------------|----------------------|-----------------------|---------------------------|--------|-----------------------|
|   | February 8,<br>1969 | February 10,<br>1968 |                       | 1969                      | 1968   | MEDIAN<br>1964 - 1968 |
| Aseptic meningitis . . . . .                          | 35                  | 20                   | 25                    | 151                       | 158    | 158                   |
| Brucellosis . . . . .                                 | -                   | -                    | 3                     | 7                         | 5      | 22                    |
| Diphtheria . . . . .                                  | 6                   | 5                    | 4                     | 18                        | 12     | 16                    |
| Encephalitis, primary:                                |                     |                      |                       |                           |        |                       |
| Arthropod-borne & unspecified . . . . .               | 25                  | 10                   | 24                    | 122                       | 84     | 137                   |
| Encephalitis, post-infectious . . . . .               | 4                   | 11                   | 11                    | 26                        | 50     | 58                    |
| Hepatitis, serum . . . . .                            | 98                  | 72                   | 827                   | 571                       | 393    | 4,791                 |
| Hepatitis, infectious . . . . .                       | 893                 | 859                  | 9                     | 4,837                     | 4,747  | 35                    |
| Malaria . . . . .                                     | 40                  | 35                   | 9                     | 243                       | 278    | 33,022                |
| Measles (rubcola) . . . . .                           | 435                 | 645                  | 7,019                 | 1,965                     | 2,984  | 386                   |
| Meningococcal infections, total . . . . .             | 83                  | 84                   | 70                    | 466                       | 499    | ---                   |
| Civilian . . . . .                                    | 80                  | 83                   | ---                   | 446                       | 474    | ---                   |
| Military . . . . .                                    | 3                   | 1                    | ---                   | 20                        | 25     | ---                   |
| Mumps . . . . .                                       | 2,506               | 5,238                | ---                   | 12,574                    | 27,748 | ---                   |
| Poliomyelitis, total . . . . .                        | -                   | -                    | 1                     | 1                         | -      | 1                     |
| Paralytic . . . . .                                   | -                   | -                    | 1                     | 1                         | -      | 1                     |
| Rubella (German measles) . . . . .                    | 813                 | 889                  | ---                   | 2,952                     | 3,580  | ---                   |
| Streptococcal sore throat & scarlet fever . . . . .   | 10,736              | 11,468               | 12,072                | 63,970                    | 68,120 | 62,769                |
| Tetanus . . . . .                                     | 1                   | 2                    | 3                     | 8                         | 10     | 15                    |
| Tularemia . . . . .                                   | -                   | 4                    | 4                     | 9                         | 12     | 24                    |
| Typhoid fever . . . . .                               | 1                   | 3                    | 6                     | 25                        | 23     | 34                    |
| Typhus, tick-borne (Rky. Mt. spotted fever) . . . . . | -                   | -                    | -                     | 1                         | 3      | 4                     |
| Rabies in animals . . . . .                           | 60                  | 85                   | 89                    | 340                       | 442    | 441                   |

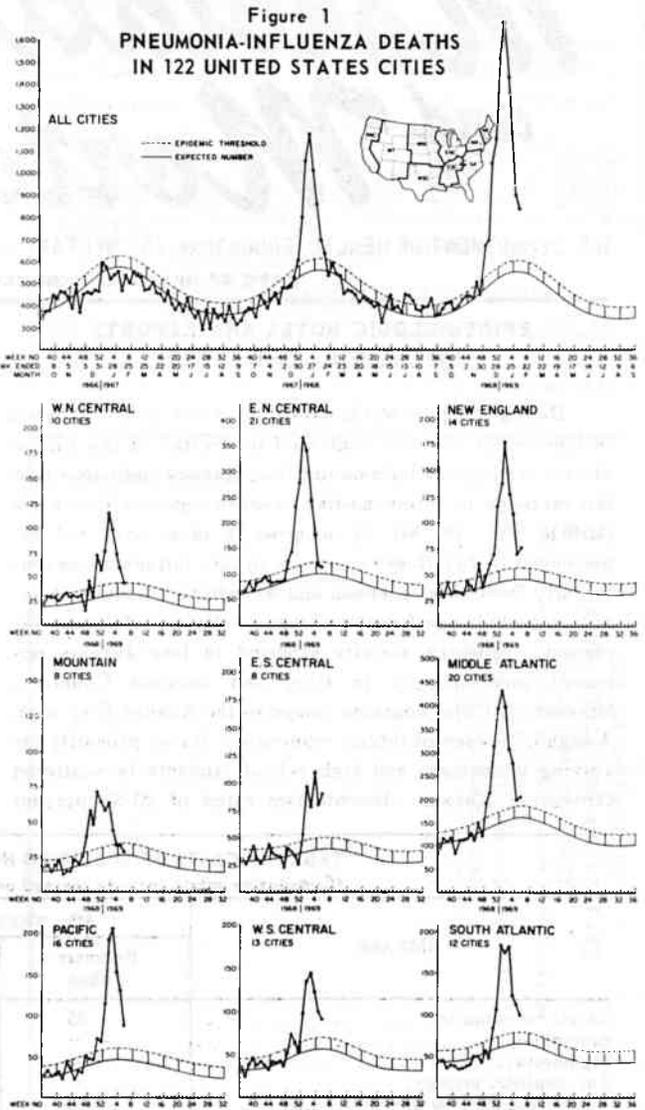
**TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY**

|                          | Cum. |  | Cum. |
|--------------------------|------|--|------|
| Anthrax: . . . . .       | -    | Rabies in man: . . . . .               | -    |
| Botulism: . . . . .      | -    | Rubella congenital syndrome: . . . . . | -    |
| Leptospirosis: . . . . . | 4    | Trichinosis: . . . . .                 | 11   |
| Plague: . . . . .        | -    | Typhus, murine: . . . . .              | -    |
| Psittacosis: . . . . .   | 4    |  |      |

## INFLUENZA - (Continued from front page)

During this influenza season, some influenza B has been reported. In Washington, in 10 of the 37 counties, 24 cases of influenza B, documented by a fourfold rise in CF antibody titer, occurred. The first two cases occurred in Chelan County in early December and were associated with an outbreak of influenza-like illness in an elementary school with an absenteeism rate of 25 percent. Three additional influenza B cases occurred in a junior high, a high school student, and an adult in the same town. Influenza A activity was also documented in this community. In Kansas, one case of influenza B documented by a fourfold rise in complement fixation (CF) antibody titer was reported. In Florida, three isolated cases of influenza B were reported between November 1968 and January 1969. In general, these influenza B cases have been sporadic and occurred in areas with influenza A activity.

(Reported by Donald E. Wilcox, M.D., Director, Section of Epidemiology, Kansas State Department of Health; Byron J. Francis, M.D., Chief, Division of Epidemiology, Washington State Department of Health; E. Charlton Prather, M.D., Director, Division of Epidemiology, Florida State Board of Health; Ecological Investigations Program, NCDC, Kansas City; and the Statistics Section, and Respiratory Section, Epidemiology Program, NCDC.)



## SHELLFISH-ASSOCIATED GASTROENTERITIS - New Haven, Connecticut

An outbreak of gastroenteritis occurred on November 16, 1968, following a shellfish sanitation association meeting in New Haven; 17 persons became ill 31 to 53 hours (mean 38.9 hours) after a cocktail party where mixed drinks, raw oysters and hard clams, potato chips, cheese snacks, and a hot sauce were served. The illness was characterized by nausea, vomiting, fever, and diarrhea with 16 of the 17 persons having diarrhea. Of 12 families surveyed with index cases, five reported secondary cases with these same symptoms. One other case occurred in the man who delivered the clams to the party and who consumed a dozen of them on November 13. He became ill 32 hours later on November 14.

Food histories from 23 persons at the party showed that 19 ate clams and 20 ate oysters. The one person who

ate only clams became ill while the two persons who ate only oysters did not become ill. Of all good items, only the clams were found to be significantly associated with illness.

The clams were part of 11 1/2 bushels of cherrystones and little necks harvested by a shellfish dealer on November 12 from a bed 3 miles southwest of Norwalk, Connecticut. One bushel was used at the party and the other 10 1/2 were sent to a retail market in Yonkers, New York. On November 22, investigation showed that the clam bed had 1,100 total coliforms per 100 ml of water and, as a result, was closed to further harvesting. From December 2 through 6, samples taken twice a day from the bed also revealed abnormal contamination. In late October, waters near the bed had had acceptable coliform counts. The Yonkers

health department was notified, but no increase in gastroenteritis cases was noted in Yonkers in November.

The probable source for the contamination was a sewage treatment plant located in eastern Norwalk that discharges the plant effluent 4.4 miles upstream from the bed. On November 11, the plant had no electricity for 4 1/2 hours. Consequently, because the storage capacity of the system is 2 hours, there was a major overflow of the storage system for at least 2 1/2 hours. During the power failure, attempts were made to chlorinate the major overflow points with hypochlorite powder.

Because of the possibility of hepatitis developing following the ingestion of contaminated raw shellfish, most of the persons at the party received immune serum globulin and were observed for 2 to 6 weeks. Weekly serum specimens for 3 weeks were obtained for SGOT determination from 18 persons at the meeting. Two of these 18 had a

previous history of hepatitis infection. None of the 18 had abnormal SGOT's. Frozen stool specimens for virus isolation and rectal swabs for bacterial culture were also solicited, and additional clams were harvested from the contaminated bed for virus studies. To date, no pathogens have been identified.

(Reported by James C. Hart, M.D., Director, Division of Preventable Diseases, the Environmental Health Services Division, and the Laboratory Division, Connecticut State Department of Health; William M. Prince, M.D., Director, Division of Communicable Disease, New Hampshire State Department of Health and Welfare; Julia Freitag, M.D., Director, Bureau of Epidemiology, New York State Department of Health; Joseph E. Cannon, M.D., Director of Health, Rhode Island Department of Health; a PHS Regional Shellfish Consultant and a Sanitary Engineer, Region I, Boston; and 3 EIS Officers.)

FOOD POISONING – Seattle, Washington

An outbreak of food poisoning occurred on October 17, 1968, in Seattle, after a turkey dinner at a charity bazaar. Of an estimated 300 persons who ate the meal, 81 (27 percent) were located and 21 reported illnesses (attack rate 26 percent) characterized by nausea, vomiting, diarrhea, and less frequently abdominal pain and headache, 1 1/2 to 6 hours (median 3 1/2 hours) after the meal. Those who ate later in the evening appeared to be at greater risk (Table 1). Coagulase positive staphylococci, phage type 6/47/53/85, that produced enterotoxins A and D, were grown from leftover turkey, dressing containing turkey particles, acute diarrheal stools from four patients, and the nasopharynx of one lady food worker.

On October 16, the seven turkeys were sliced and deboned by hand at room temperature, weighed into 4-oz servings, and placed into three roasting pans. The turkey was reheated the next afternoon and served between 5:30 and 8:30 p.m. It was postulated that the turkey was contaminated during preparation and that reheating several times facilitated staphylococcal enterotoxin production. (Reported by Herbert W. Anderson, R.S., Environmental Epidemiologist, Donald R. Peterson, M.D., M.P.H., Divi-

Table 1  
Attack Rate Among Persons Eating at Bazaar  
by Time of Eating

| Time of Eating (p.m.) | Persons Interviewed | Number of Persons Ill | Attack Rate (Percent) |
|-----------------------|---------------------|-----------------------|-----------------------|
| 5:30                  | 13                  | 0                     | 0                     |
| 6:00                  | 24                  | 0                     | 0                     |
| 6:30                  | 11                  | 0                     | 0                     |
| 7:00                  | 12                  | 6                     | 50                    |
| 7:30                  | 14                  | 9                     | 64                    |
| 8:00                  | 7                   | 6                     | 86                    |
| Total                 | 81                  | 21                    | 26                    |

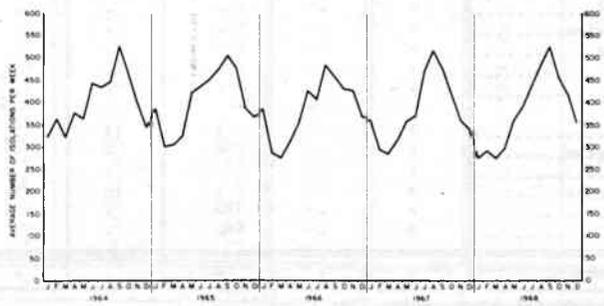
sion of Epidemiology, Thomas M. Green, Senior Medical Student, University of Washington, and the Laboratory, Seattle-King County Department of Public Health; Food and Drug Administration Laboratory, Washington, D.C.; and the Bacterial Reference Unit, Laboratory Program, NCDC.)

SURVEILLANCE SUMMARY  
SALMONELLOSIS – October, November, and December 1968

During October, November, and December 1968, the total numbers of salmonella isolations from humans were 2,292, 1,652, and 1,408, respectively, and the weekly averages for the 3 months were 458, 414, and 352, respectively (Figure 2). For the same 3 months, 714, 509, and 350 nonhuman isolations were reported (Table 2).

The frequency of isolation of *Salmonella enteritidis* from humans increased during 1968 from a low of 5.8 percent of all salmonella isolations from humans in January to a high of 10.8 percent in December (Table 3). A similar increase in nonhuman isolations of *S. enteritidis* was not noted until December when 4.3 percent of all nonhuman isolations were of this serotype – a marked increase over (Continued on page 52)

Figure 2  
REPORTED HUMAN ISOLATIONS OF SALMONELLA  
IN THE UNITED STATES



## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
FEBRUARY 8, 1969 AND FEBRUARY 10, 1968 (6th WEEK)

| AREA                     | ASEPTIC<br>MENIN-<br>GITIS | BRUCEL-<br>LOSIS | DIPHThERIA | ENCEPHALITIS |                          |                     | HEPATITIS |            | MALARIA |      |              |
|--------------------------|----------------------------|------------------|------------|--------------|--------------------------|---------------------|-----------|------------|---------|------|--------------|
|                          |                            |                  |            | Primary      | including<br>unsp. cases | Post-<br>Infectious | Serum     | Infectious |         | 1969 | Cum.<br>1969 |
|                          |                            |                  |            |              |                          |                     |           | 1969       | 1968    |      |              |
| UNITED STATES...         | 35                         | -                | 6          | 25           | 10                       | 4                   | 98        | 893        | 859     | 40   | 243          |
| NEW ENGLAND.....         | 3                          | -                | -          | -            | 2                        | -                   | 2         | 66         | 34      | 3    | 19           |
| Maine.*.....             | -                          | -                | -          | -            | -                        | -                   | -         | 6          | 7       | -    | -            |
| New Hampshire.*.....     | -                          | -                | -          | -            | -                        | -                   | -         | -          | -       | -    | 1            |
| Vermont.....             | -                          | -                | -          | -            | -                        | -                   | -         | -          | -       | -    | -            |
| Massachusetts.....       | 1                          | -                | -          | -            | -                        | -                   | -         | 38         | 20      | 2    | 17           |
| Rhode Island.....        | 2                          | -                | -          | -            | 2                        | -                   | -         | 7          | 4       | -    | -            |
| Connecticut.....         | -                          | -                | -          | -            | -                        | -                   | 2         | 15         | 3       | 1    | 1            |
| MIDDLE ATLANTIC.....     | 4                          | -                | -          | 3            | -                        | 1                   | 44        | 128        | 114     | 6    | 13           |
| New York City.....       | 1                          | -                | -          | 1            | -                        | -                   | 30        | 65         | 34      | -    | -            |
| New York, up-State*..... | -                          | -                | -          | 1            | -                        | 1                   | 7         | 20         | 34      | 1    | 2            |
| New Jersey.*.....        | -                          | -                | -          | -            | -                        | -                   | 5         | 31         | 20      | 5    | 6            |
| Pennsylvania.....        | 3                          | -                | -          | 1            | -                        | -                   | 2         | 12         | 26      | -    | 5            |
| EAST NORTH CENTRAL...    | 10                         | -                | -          | 7            | 4                        | 1                   | 10        | 175        | 154     | -    | 12           |
| Ohio.....                | 1                          | -                | -          | 7            | -                        | 1                   | 1         | 40         | 50      | -    | 1            |
| Indiana.....             | -                          | -                | -          | -            | 1                        | -                   | 1         | 23         | 11      | -    | -            |
| Illinois.....            | 4                          | -                | -          | -            | -                        | -                   | 2         | 41         | 53      | -    | 1            |
| Michigan.....            | 4                          | -                | -          | -            | 3                        | -                   | 6         | 62         | 33      | -    | 9            |
| Wisconsin.....           | 1                          | -                | -          | -            | -                        | -                   | -         | 9          | 7       | -    | 1            |
| WEST NORTH CENTRAL...    | -                          | -                | -          | -            | -                        | -                   | 1         | 35         | 67      | 1    | 15           |
| Minnesota.....           | -                          | -                | -          | -            | -                        | -                   | -         | 9          | 14      | -    | -            |
| Iowa.*.....              | -                          | -                | -          | -            | -                        | -                   | -         | 5          | 23      | -    | 3            |
| Missouri.....            | -                          | -                | -          | -            | -                        | -                   | -         | 9          | 20      | -    | 2            |
| North Dakota.....        | -                          | -                | -          | -            | -                        | -                   | -         | 2          | 3       | -    | -            |
| South Dakota.....        | -                          | -                | -          | -            | -                        | -                   | -         | 1          | 1       | -    | -            |
| Nebraska.....            | -                          | -                | -          | -            | -                        | -                   | -         | -          | 2       | -    | 1            |
| Kansas.....              | -                          | -                | -          | -            | -                        | -                   | 1         | 9          | 4       | 1    | 9            |
| SOUTH ATLANTIC.....      | 5                          | -                | -          | -            | -                        | 1                   | 1         | 79         | 98      | 22   | 77           |
| Delaware.....            | -                          | -                | -          | -            | -                        | -                   | -         | 1          | 7       | -    | -            |
| Maryland.....            | 2                          | -                | -          | -            | -                        | 1                   | 1         | 24         | 25      | -    | 1            |
| Dist. of Columbia..      | -                          | -                | -          | -            | -                        | -                   | -         | -          | 1       | -    | -            |
| Virginia.*.....          | -                          | -                | -          | -            | -                        | -                   | -         | 7          | 19      | -    | 2            |
| West Virginia.....       | -                          | -                | -          | -            | -                        | -                   | -         | 5          | 14      | -    | -            |
| North Carolina.....      | 1                          | -                | -          | -            | -                        | -                   | -         | 7          | 3       | 12   | 50           |
| South Carolina.....      | -                          | -                | -          | -            | -                        | -                   | -         | 1          | -       | 5    | 13           |
| Georgia.....             | -                          | -                | -          | -            | -                        | -                   | -         | 16         | 24      | 5    | 8            |
| Florida.....             | 2                          | -                | -          | -            | -                        | -                   | -         | 18         | 5       | -    | 3            |
| EAST SOUTH CENTRAL...    | 4                          | -                | -          | 2            | 1                        | -                   | -         | 82         | 59      | -    | 2            |
| Kentucky.....            | 3                          | -                | -          | -            | -                        | -                   | -         | 35         | 8       | -    | 1            |
| Tennessee.....           | 1                          | -                | -          | 2            | -                        | -                   | -         | 22         | 18      | -    | -            |
| Alabama.....             | -                          | -                | -          | -            | -                        | -                   | -         | 22         | 11      | -    | 1            |
| Mississippi.....         | -                          | -                | -          | -            | 1                        | -                   | -         | 3          | 22      | -    | -            |
| WEST SOUTH CENTRAL...    | 2                          | -                | 5          | -            | -                        | -                   | 2         | 89         | 86      | -    | 5            |
| Arkansas.....            | 2                          | -                | -          | -            | -                        | -                   | -         | 12         | 1       | -    | 2            |
| Louisiana.....           | -                          | -                | -          | -            | -                        | -                   | -         | 22         | 12      | -    | 3            |
| Oklahoma.....            | -                          | -                | -          | -            | -                        | -                   | -         | 10         | 8       | -    | -            |
| Texas.*.....             | -                          | -                | 5          | -            | -                        | -                   | 2         | 45         | 65      | -    | -            |
| MOUNTAIN.....            | -                          | -                | -          | 2            | 1                        | -                   | 2         | 44         | 42      | 1    | 20           |
| Montana.....             | -                          | -                | -          | 2            | -                        | -                   | -         | 6          | 2       | -    | -            |
| Idaho.....               | -                          | -                | -          | -            | -                        | -                   | -         | -          | 3       | -    | -            |
| Wyoming.*.....           | -                          | -                | -          | -            | -                        | -                   | -         | 2          | 2       | -    | -            |
| Colorado.....            | -                          | -                | -          | -            | -                        | -                   | -         | 20         | 11      | 1    | 18           |
| New Mexico.....          | -                          | -                | -          | -            | 1                        | -                   | 2         | 5          | 2       | -    | 1            |
| Arizona.....             | -                          | -                | -          | -            | -                        | -                   | -         | 7          | 14      | -    | 1            |
| Utah.....                | -                          | -                | -          | -            | -                        | -                   | -         | 4          | 7       | -    | -            |
| Nevada.....              | -                          | -                | -          | -            | -                        | -                   | -         | -          | 1       | -    | -            |
| PACIFIC.....             | 7                          | -                | 1          | 11           | 2                        | 1                   | 36        | 195        | 205     | 7    | 80           |
| Washington.....          | -                          | -                | -          | -            | -                        | -                   | -         | 9          | 14      | -    | -            |
| Oregon.....              | 1                          | -                | -          | 1            | -                        | -                   | 3         | 13         | 9       | -    | 1            |
| California.....          | 4                          | -                | 1          | 10           | 2                        | -                   | 33        | 169        | 176     | 7    | 71           |
| Alaska.....              | -                          | -                | -          | -            | -                        | 1                   | -         | 3          | 2       | -    | -            |
| Hawaii.....              | 2                          | -                | -          | -            | -                        | -                   | -         | 1          | 4       | -    | 8            |
| Puerto Rico.....         | -                          | -                | -          | -            | -                        | -                   | -         | 9          | 11      | -    | -            |

\*Delayed reports: Brucellosis: Tex. 1 (1968)

Diphtheria: Tex. 5 (1968)

Encephalitis, primary: Iowa 1

Hepatitis, serum: N.Y. Ups. delete 60, N. J. delete 2 (1968), Wyo.1(1968)

Hepatitis, infectious: Me. 1, N.J. delete 9 (1968), Va. 5

Malaria: N. H. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
FEBRUARY 8, 1969 AND FEBRUARY 10, 1968 (6th WEEK) CONTINUED

| AREA                  | MEASLES (Rubeola) |       |       | MENINGOCOCCAL INFECTIONS, TOTAL |      |      | MUMPS | POLIOMYELITIS |           |           | RUBELLA |
|-----------------------|-------------------|-------|-------|---------------------------------|------|------|-------|---------------|-----------|-----------|---------|
|                       | Cumulative        |       | 1969  | Cumulative                      |      | 1969 |       | Total         | Paralytic |           |         |
|                       | 1969              | 1968  |       | 1969                            | 1968 |      |       | 1969          | 1969      | Cum. 1969 |         |
| UNITED STATES...      | 435               | 1,965 | 2,984 | 83                              | 466  | 499  | 2,506 | -             | -         | 1         | 813     |
| NEW ENGLAND.....      | 30                | 89    | 116   | 1                               | 15   | 30   | 348   | -             | -         | 1         | 70      |
| Maine.*.....          | -                 | 2     | 7     | -                               | 1    | 2    | 31    | -             | -         | 1         | 1       |
| New Hampshire.*....   | 5                 | 6     | 16    | -                               | -    | 2    | -     | -             | -         | -         | 1       |
| Vermont.....          | -                 | -     | -     | -                               | -    | 1    | 40    | -             | -         | -         | 4       |
| Massachusetts.....    | 12                | 29    | 55    | 1                               | 7    | 12   | 146   | -             | -         | -         | 42      |
| Rhode Island.....     | -                 | -     | 1     | -                               | 2    | 4    | 26    | -             | -         | -         | 1       |
| Connecticut.....      | 13                | 52    | 37    | -                               | 5    | 9    | 105   | -             | -         | -         | 21      |
| MIDDLE ATLANTIC.....  | 110               | 567   | 322   | 10                              | 60   | 55   | 73    | -             | -         | -         | 62      |
| New York City.....    | 67                | 359   | 55    | 6                               | 14   | 8    | 26    | -             | -         | -         | 17      |
| New York, Up-State..  | 8                 | 46    | 188   | 2                               | 13   | 4    | NN    | -             | -         | -         | 5       |
| New Jersey.*.....     | 7                 | 65    | 54    | -                               | 18   | 19   | 47    | -             | -         | -         | 14      |
| Pennsylvania.....     | 28                | 97    | 25    | 2                               | 15   | 24   | NN    | -             | -         | -         | 26      |
| EAST NORTH CENTRAL... | 65                | 208   | 829   | 5                               | 62   | 52   | 712   | -             | -         | -         | 206     |
| Ohio.....             | 5                 | 27    | 88    | 2                               | 17   | 14   | 65    | -             | -         | -         | 22      |
| Indiana.....          | 14                | 43    | 113   | 1                               | 8    | 9    | 113   | -             | -         | -         | 29      |
| Illinois.....         | 15                | 30    | 394   | 1                               | 7    | 8    | 65    | -             | -         | -         | 16      |
| Michigan.....         | 12                | 25    | 50    | -                               | 25   | 16   | 161   | -             | -         | -         | 69      |
| Wisconsin.....        | 19                | 83    | 184   | 1                               | 5    | 5    | 308   | -             | -         | -         | 70      |
| WEST NORTH CENTRAL... | 6                 | 47    | 66    | 2                               | 22   | 26   | 362   | -             | -         | -         | 100     |
| Minnesota.....        | -                 | -     | -     | 1                               | 6    | 5    | 39    | -             | -         | -         | 4       |
| Iowa.....             | 3                 | 23    | 19    | 1                               | 3    | 2    | 296   | -             | -         | -         | 91      |
| Missouri.....         | -                 | -     | 4     | -                               | 8    | 4    | 1     | -             | -         | -         | -       |
| North Dakota.....     | 1                 | 2     | 27    | -                               | -    | 1    | 25    | -             | -         | -         | -       |
| South Dakota.....     | -                 | -     | 3     | -                               | -    | 3    | NN    | -             | -         | -         | -       |
| Nebraska.....         | 2                 | 22    | 9     | -                               | 2    | 1    | 1     | -             | -         | -         | 5       |
| Kansas.....           | -                 | -     | 4     | -                               | 3    | 10   | -     | -             | -         | -         | -       |
| SOUTH ATLANTIC.....   | 70                | 336   | 231   | 16                              | 92   | 113  | 164   | -             | -         | -         | 89      |
| Delaware.....         | 1                 | 2     | -     | -                               | 3    | -    | -     | -             | -         | -         | 11      |
| Maryland.....         | -                 | 1     | 12    | 1                               | 8    | 7    | 12    | -             | -         | -         | 10      |
| Dist. of Columbia..   | -                 | -     | 4     | 1                               | 2    | 3    | 6     | -             | -         | -         | 1       |
| Virginia.*.....       | 14                | 47    | 40    | 2                               | 15   | 10   | 25    | -             | -         | -         | 5       |
| West Virginia.....    | 4                 | 27    | 64    | 1                               | 3    | 3    | 44    | -             | -         | -         | 31      |
| North Carolina.....   | 26                | 31    | 24    | 1                               | 11   | 25   | NN    | -             | -         | -         | -       |
| South Carolina.....   | 6                 | 28    | 7     | 2                               | 11   | 19   | 16    | -             | -         | -         | 8       |
| Georgia.....          | -                 | -     | 2     | 3                               | 15   | 14   | -     | -             | -         | -         | -       |
| Florida.....          | 19                | 200   | 78    | 5                               | 24   | 32   | 61    | -             | -         | -         | 23      |
| EAST SOUTH CENTRAL... | -                 | 23    | 73    | 2                               | 18   | 34   | 104   | -             | -         | -         | 34      |
| Kentucky.....         | -                 | 6     | 26    | -                               | 6    | 8    | 44    | -             | -         | -         | 5       |
| Tennessee.....        | -                 | 4     | 15    | 2                               | 11   | 12   | 51    | -             | -         | -         | 28      |
| Alabama.....          | -                 | -     | 20    | -                               | 1    | 4    | 3     | -             | -         | -         | -       |
| Mississippi.....      | -                 | 13    | 12    | -                               | -    | 10   | 6     | -             | -         | -         | 1       |
| WEST SOUTH CENTRAL... | 112               | 522   | 691   | 18                              | 63   | 134  | 228   | -             | -         | -         | 89      |
| Arkansas.....         | -                 | 2     | -     | 8                               | 8    | 4    | 1     | -             | -         | -         | -       |
| Louisiana.....        | 1                 | 1     | 1     | 2                               | 20   | 33   | 1     | -             | -         | -         | 3       |
| Oklahoma.....         | 4                 | 5     | 42    | -                               | 2    | 31   | 14    | -             | -         | -         | 11      |
| Texas*.....           | 107               | 514   | 648   | 8                               | 33   | 66   | 212   | -             | -         | -         | 75      |
| MOUNTAIN.....         | 8                 | 51    | 116   | -                               | 14   | 5    | 110   | -             | -         | -         | 53      |
| Montana.....          | -                 | -     | 3     | -                               | -    | 1    | 31    | -             | -         | -         | 1       |
| Idaho.....            | -                 | -     | 6     | -                               | 2    | 2    | 2     | -             | -         | -         | -       |
| Wyoming.....          | -                 | -     | 22    | -                               | -    | -    | 1     | -             | -         | -         | 2       |
| Colorado.*.....       | 1                 | 6     | 42    | -                               | -    | 1    | 14    | -             | -         | -         | 15      |
| New Mexico.....       | 7                 | 16    | 16    | -                               | 4    | -    | 13    | -             | -         | -         | 9       |
| Arizona.*.....        | -                 | 28    | 24    | -                               | 5    | 1    | 45    | -             | -         | -         | 24      |
| Utah.....             | -                 | -     | 1     | -                               | 1    | -    | 4     | -             | -         | -         | 2       |
| Nevada.....           | -                 | 1     | 2     | -                               | 2    | -    | -     | -             | -         | -         | -       |
| PACIFIC.....          | 34                | 122   | 540   | 29                              | 120  | 50   | 405   | -             | -         | -         | 110     |
| Washington.....       | 2                 | 8     | 166   | -                               | 3    | 8    | 75    | -             | -         | -         | 22      |
| Oregon.....           | 7                 | 32    | 132   | 1                               | 4    | 3    | 4     | -             | -         | -         | 7       |
| California.....       | 24                | 78    | 223   | 28                              | 110  | 38   | 267   | -             | -         | -         | 67      |
| Alaska.....           | 1                 | 4     | -     | -                               | -    | -    | 42    | -             | -         | -         | 8       |
| Hawaii.....           | -                 | -     | 19    | -                               | 3    | 1    | 17    | -             | -         | -         | 6       |
| Puerto Rico.....      | 9                 | 55    | 37    | -                               | 2    | -    | 12    | -             | -         | -         | 1       |

\*Delayed reports: Measles: N.J. 2, Va. 4, Colo. 3, Ariz. delete 28  
Meningococcal infections: Va. 6  
Mumps: Me. 4, N.H. 6, Va. 12  
Poliomyelitis, paralytic: Tex. 1 (1968)  
Rubella: Va. 8, Ariz. 28

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
FEBRUARY 8, 1969 AND FEBRUARY 10, 1968 (6th WEEK) CONTINUED

| AREA                  | STREPTOCOCCAL<br>SORE THROAT &<br>SCARLET FEVER | TETANUS |              | TULAREMIA |              | TYPHOID<br>FEVER |              | TYPHUS FEVER<br>TICK-BORNE<br>(Rky. Mt. Spotted) |              | RABIES IN<br>ANIMALS |              |
|-----------------------|---|---------|--------------|-----------|--------------|------------------|--------------|--|--------------|----------------------|--------------|
|                       | 1969  | 1969    | Cum.<br>1969 | 1969      | Cum.<br>1969 | 1969             | Cum.<br>1969 | 1969   | Cum.<br>1969 | 1969                 | Cum.<br>1969 |
| UNITED STATES...      | 10,736  | 1       | 8            | -         | 9            | 1                | 25           | -  | 1            | 60                   | 340          |
| NEW ENGLAND.....      | 1,332   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 2            |
| Maine.*.....          | 28  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 1            |
| New Hampshire.*....   | 56  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Vermont.....          | 53  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 1            |
| Massachusetts.....    | 225   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Rhode Island.....     | 98  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Connecticut.....      | 872   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| MIDDLE ATLANTIC.....  | 298   | -       | -            | -         | 1            | -                | 2            | -  | -            | 1                    | 3            |
| New York City.....    | 15  | -       | -            | -         | 1            | -                | 1            | -  | -            | -                    | -            |
| New York, Up-State.   | 174   | -       | -            | -         | -            | -                | 1            | -  | -            | 1                    | 3            |
| New Jersey.....       | NN  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Pennsylvania.....     | 109   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| EAST NORTH CENTRAL... | 982   | 1       | 3            | -         | -            | -                | -            | -  | -            | 2                    | 14           |
| Ohio.....             | 103   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 1            |
| Indiana.....          | 178   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 3            |
| Illinois.....         | 254   | -       | 1            | -         | -            | -                | -            | -  | -            | -                    | 1            |
| Michigan.....         | 290   | 1       | 2            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Wisconsin.....        | 157   | -       | -            | -         | -            | -                | -            | -  | -            | 2                    | 9            |
| WEST NORTH CENTRAL... | 476   | -       | -            | -         | 1            | -                | -            | -  | -            | 8                    | 46           |
| Minnesota.....        | 33  | -       | -            | -         | -            | -                | -            | -  | -            | 2                    | 9            |
| Iowa.....             | 130   | -       | -            | -         | -            | -                | -            | -  | -            | 3                    | 10           |
| Missouri.....         | 4   | -       | -            | -         | 1            | -                | -            | -  | -            | 2                    | 16           |
| North Dakota.....     | 120   | -       | -            | -         | -            | -                | -            | -  | -            | 1                    | 10           |
| South Dakota.....     | 32  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Nebraska.....         | 111   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Kansas.....           | 46  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 1            |
| SOUTH ATLANTIC.....   | 1,271   | -       | 1            | -         | 2            | -                | 2            | -  | -            | 22                   | 115          |
| Delaware.....         | 27  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Maryland.....         | 192   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Dist. of Columbia..   | -   | -       | 1            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Virginia.*.....       | 407   | -       | -            | -         | -            | -                | -            | -  | -            | 16                   | 80           |
| West Virginia.....    | 190   | -       | -            | -         | 2            | -                | -            | -  | -            | 2                    | 14           |
| North Carolina.....   | 25  | -       | -            | -         | -            | -                | 1            | -  | -            | -                    | -            |
| South Carolina.....   | 146   | -       | -            | -         | -            | -                | 1            | -  | -            | -                    | -            |
| Georgia.....          | 10  | -       | -            | -         | -            | -                | -            | -  | -            | 3                    | 10           |
| Florida.....          | 274   | -       | -            | -         | -            | -                | -            | -  | -            | 1                    | 11           |
| EAST SOUTH CENTRAL... | 1,855   | -       | -            | -         | 2            | -                | 2            | -  | 1            | 9                    | 67           |
| Kentucky.....         | 210   | -       | -            | -         | -            | -                | -            | -  | -            | 6                    | 43           |
| Tennessee.....        | 1,401   | -       | -            | -         | 2            | -                | 2            | -  | 1            | 3                    | 18           |
| Alabama.....          | 90  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 6            |
| Mississippi.....      | 154   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| WEST SOUTH CENTRAL... | 906   | -       | 2            | -         | 1            | -                | 3            | -  | -            | 8                    | 40           |
| Arkansas.....         | -   | -       | -            | -         | -            | -                | 3            | -  | -            | -                    | 2            |
| Louisiana.....        | 11  | -       | 1            | -         | -            | -                | -            | -  | -            | -                    | 3            |
| Oklahoma.....         | 211   | -       | 1            | -         | 1            | -                | -            | -  | -            | 2                    | 6            |
| Texas.....            | 684   | -       | -            | -         | -            | -                | -            | -  | -            | 6                    | 29           |
| MOUNTAIN.....         | 2,366   | -       | -            | -         | 2            | -                | 10           | -  | -            | -                    | 12           |
| Montana.....          | 44  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Idaho.....            | 151   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Wyoming.*.....        | 588   | -       | -            | -         | -            | -                | 5            | -  | -            | -                    | 3            |
| Colorado.....         | 1,116   | -       | -            | -         | -            | -                | 1            | -  | -            | -                    | 1            |
| New Mexico.....       | 276   | -       | -            | -         | 1            | -                | -            | -  | -            | -                    | 4            |
| Arizona.*.....        | 133   | -       | -            | -         | -            | -                | 3            | -  | -            | -                    | 1            |
| Utah.....             | 58  | -       | -            | -         | 1            | -                | -            | -  | -            | -                    | -            |
| Nevada.....           | -   | -       | -            | -         | -            | -                | 1            | -  | -            | -                    | 3            |
| PACIFIC.....          | 1,250   | -       | 2            | -         | -            | 1                | 6            | -  | -            | 10                   | 41           |
| Washington.....       | 497   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Oregon.....           | 128   | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| California.....       | 501   | -       | 2            | -         | -            | 1                | 6            | -  | -            | 10                   | 41           |
| Alaska.....           | 45  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Hawaii.*.....         | 79  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | -            |
| Puerto Rico.....      | 14  | -       | -            | -         | -            | -                | -            | -  | -            | -                    | 1            |

\*Delayed reports: SST: Me. 6, N.H. 8, Va. 299, Hawaii 221

Typhoid fever: Wyo. 5

Rabies in animals: Va. 17, Ariz. 1

# Morbidity and Mortality Weekly Report

51

Week No.

**TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED FEBRUARY 8, 1969**

6

(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 |                                  |                         |
| <b>NEW ENGLAND:</b>        | 824        | 541               | 76                               | 25                      | <b>SOUTH ATLANTIC:</b>                            | 1,271         | 713               | 100                              | 58                      |
| Boston, Mass.-----         | 308        | 202               | 31                               | 7                       | Atlanta, Ga.-----                                 | 126           | 75                | 13                               | 4                       |
| Bridgeport, Conn.-----     | 53         | 37                | 7                                | 2                       | Baltimore, Md.-----                               | 276           | 135               | 10                               | 8                       |
| Cambridge, Mass.-----      | 37         | 24                | 13                               | -                       | Charlotte, N. C.-----                             | 64            | 39                | 6                                | 9                       |
| Fall River, Mass.-----     | 33         | 22                | 2                                | 2                       | Jacksonville, Fla.-----                           | 77            | 38                | 3                                | 4                       |
| Hartford, Conn.-----       | 55         | 30                | 1                                | 3                       | Miami, Fla.-----                                  | 94            | 62                | 3                                | 3                       |
| Lowell, Mass.-----         | 35         | 26                | 3                                | 3                       | Norfolk, Va.-----                                 | 60            | 28                | 4                                | 3                       |
| Lynn, Mass.-----           | 16         | 9                 | -                                | 1                       | Richmond, Va.-----                                | 88            | 54                | 8                                | 4                       |
| New Bedford, Mass.-----    | 29         | 22                | 3                                | -                       | Savannah, Ga.-----                                | 61            | 30                | 14                               | 2                       |
| New Haven, Conn.-----      | 59         | 36                | 2                                | 1                       | St. Petersburg, Fla.-----                         | 90            | 79                | 9                                | 1                       |
| Providence, R. I.-----     | 48         | 28                | 2                                | -                       | Tampa, Fla.-----                                  | 80            | 53                | 18                               | 3                       |
| Somerville, Mass.-----     | 12         | 10                | 1                                | -                       | Washington, D. C.-----                            | 197           | 92                | 10                               | 14                      |
| Springfield, Mass.-----    | 52         | 38                | 6                                | 2                       | Wilmington, Del.-----                             | 58            | 28                | 2                                | 3                       |
| Waterbury, Conn.-----      | 32         | 22                | 1                                | 2                       |   |               |                   |                                  |                         |
| Worcester, Mass.-----      | 55         | 35                | 4                                | 2                       | <b>EAST SOUTH CENTRAL:</b>                        | 802           | 433               | 90                               | 31                      |
| <b>MIDDLE ATLANTIC:</b>    | 3,546      | 2,127             | 205                              | 169                     | Birmingham, Ala.-----                             | 133           | 74                | 2                                | 7                       |
| Albany, N. Y.-----         | 50         | 38                | -                                | 1                       | Chattanooga, Tenn.-----                           | 72            | 32                | 14                               | 3                       |
| Allentown, Pa.-----        | 44         | 30                | 4                                | 3                       | Knoxville, Tenn.-----                             | 36            | 21                | 3                                | -                       |
| Buffalo, N. Y.-----        | 114        | 72                | 1                                | 3                       | Louisville, Ky.-----                              | 182           | 109               | 34                               | 4                       |
| Camden, N. J.-----         | 45         | 26                | 5                                | 2                       | Memphis, Tenn.-----                               | 183           | 89                | 8                                | 11                      |
| Elizabeth, N. J.-----      | 38         | 21                | 1                                | 1                       | Mobile, Ala.-----                                 | 50            | 27                | 3                                | 2                       |
| Erie, Pa.-----             | 56         | 32                | 7                                | 3                       | Montgomery, Ala.-----                             | 37            | 17                | 6                                | -                       |
| Jersey City, N. J.-----    | 80         | 45                | 5                                | 2                       | Nashville, Tenn.-----                             | 109           | 64                | 20                               | 4                       |
| Newark, N. J.-----         | 102        | 40                | 1                                | 18                      | <b>WEST SOUTH CENTRAL:</b>                        | 1,307         | 701               | 90                               | 74                      |
| New York City, N. Y.-----  | 1,849      | 1,112             | 117                              | 94                      | Austin, Tex.-----                                 | 40            | 22                | 9                                | 5                       |
| Paterson, N. J.-----       | 36         | 18                | -                                | 1                       | Baton Rouge, La.-----                             | 55            | 32                | 2                                | -                       |
| Philadelphia, Pa.-----     | 501        | 292               | 5                                | 23                      | Corpus Christi, Tex.-----                         | 41            | 28                | 4                                | 2                       |
| Pittsburgh, Pa.-----       | 191        | 108               | 24                               | 8                       | Dallas, Tex.-----                                 | 197           | 98                | 7                                | 9                       |
| Reading, Pa.-----          | 53         | 36                | 7                                | -                       | El Paso, Tex.-----                                | 40            | 25                | -                                | 1                       |
| Rochester, N. Y.-----      | 117        | 77                | 10                               | 1                       | Fort Worth, Tex.-----                             | 78            | 41                | 5                                | 4                       |
| Schenectady, N. Y.-----    | 29         | 23                | 4                                | 1                       | Houston, Tex.-----                                | 258           | 118               | 16                               | 16                      |
| Scranton, Pa.-----         | 34         | 19                | 5                                | 1                       | Little Rock, Ark.-----                            | 62            | 32                | 10                               | 7                       |
| Syracuse, N. Y.-----       | 100        | 69                | 3                                | 3                       | New Orleans, La.-----                             | 184           | 82                | 5                                | 12                      |
| Trenton, N. J.-----        | 42         | 29                | 3                                | -                       | Oklahoma City, Okla.-----                         | 63            | 42                | 4                                | 3                       |
| Utica, N. Y.-----          | 27         | 16                | 2                                | 1                       | San Antonio, Tex.-----                            | 122           | 76                | 7                                | 4                       |
| Yonkers, N. Y.-----        | 38         | 24                | 1                                | 3                       | Shreveport, La.-----                              | 66            | 42                | 7                                | 4                       |
|                            |            |                   |                                  |                         | Tulsa, Okla.-----                                 | 101           | 63                | 14                               | 7                       |
| <b>EAST NORTH CENTRAL:</b> | 2,619      | 1,508             | 115                              | 127                     | <b>MOUNTAIN:</b>                                  | 510           | 297               | 28                               | 39                      |
| Akron, Ohio-----           | 56         | 37                | 4                                | 3                       | Albuquerque, N. Mex.-----                         | 45            | 26                | 3                                | 2                       |
| Canton, Ohio-----          | 29         | 18                | 3                                | 3                       | Colorado Springs, Colo.-----                      | 39            | 20                | 7                                | 6                       |
| Chicago, Ill.-----         | 752        | 416               | 36                               | 37                      | Denver, Colo.-----                                | 141           | 89                | 5                                | 12                      |
| Cincinnati, Ohio-----      | 198        | 120               | 8                                | 4                       | Ogden, Utah-----                                  | 14            | 8                 | 2                                | 1                       |
| Cleveland, Ohio-----       | 182        | 95                | 8                                | 8                       | Phoenix, Ariz.-----                               | 134           | 76                | 3                                | 8                       |
| Columbus, Ohio-----        | 145        | 80                | 9                                | 11                      | Pueblo, Colo.-----                                | 25            | 13                | 3                                | 3                       |
| Dayton, Ohio-----          | 70         | 21                | 4                                | 1                       | Salt Lake City, Utah-----                         | 61            | 31                | 4                                | 6                       |
| Detroit, Mich.-----        | 340        | 191               | 11                               | 11                      | Tucson, Ariz.-----                                | .51           | 34                | 1                                | 1                       |
| Evansville, Ind.-----      | 43         | 31                | 1                                | 1                       | <b>PACIFIC:</b>                                   | 1,935         | 1,171             | 88                               | 69                      |
| Flint, Mich.-----          | 64         | 41                | 5                                | 6                       | Berkeley, Calif.-----                             | 21            | 16                | 2                                | 1                       |
| Fort Wayne, Ind.-----      | 56         | 37                | -                                | 1                       | Fresno, Calif.-----                               | 48            | 31                | 2                                | 1                       |
| Gary, Ind.-----            | 33         | 14                | 3                                | 2                       | Glendale, Calif.-----                             | 35            | 22                | 3                                | 3                       |
| Grand Rapids, Mich.-----   | 64         | 42                | 7                                | 4                       | Honolulu, Hawaii-----                             | 53            | 26                | 2                                | 4                       |
| Indianapolis, Ind.-----    | 163        | 82                | 6                                | 13                      | Long Beach, Calif.-----                           | 108           | 66                | 3                                | 4                       |
| Madison, Wis.-----         | 36         | 19                | 3                                | 2                       | Los Angeles, Calif.-----                          | 586           | 345               | 25                               | 21                      |
| Milwaukee, Wis.-----       | 121        | 82                | 2                                | 7                       | Oakland, Calif.-----                              | 78            | 51                | -                                | 2                       |
| Peoria, Ill.-----          | 40         | 23                | 1                                | 3                       | Pasadena, Calif.-----                             | 51            | 43                | 2                                | 1                       |
| Rockford, Ill.-----        | 26         | 16                | 2                                | 1                       | Portland, Oreg.-----                              | 194           | 120               | 9                                | 7                       |
| South Bend, Ind.-----      | 25         | 12                | 1                                | -                       | Sacramento, Calif.-----                           | 87            | 53                | 2                                | -                       |
| Toledo, Ohio-----          | 107        | 63                | 1                                | 6                       | San Diego, Calif.-----                            | 108           | 53                | 7                                | 4                       |
| Youngstown, Ohio-----      | 69         | 48                | -                                | 3                       | San Francisco, Calif.-----                        | 213           | 131               | 7                                | 12                      |
| <b>WEST NORTH CENTRAL:</b> | 920        | 574               | 43                               | 39                      | San Jose, Calif.-----                             | 50            | 33                | 6                                | 3                       |
| Des Moines, Iowa-----      | 53         | 30                | 1                                | 3                       | Seattle, Wash.-----                               | 189           | 108               | 13                               | 4                       |
| Duluth, Minn.-----         | 19         | 13                | 4                                | -                       | Spokane, Wash.-----                               | 56            | 35                | 4                                | -                       |
| Kansas City, Kans.-----    | 51         | 35                | 4                                | 3                       | Tacoma, Wash.-----                                | 58            | 38                | 1                                | 2                       |
| Kansas City, Mo.-----      | 161        | 98                | 7                                | 9                       |   |               |                   |                                  |                         |
| Lincoln, Nebr.-----        | 31         | 21                | 5                                | -                       | <b>Total</b>                                      | <b>13,734</b> | <b>8,065</b>      | <b>835</b>                       | <b>631</b>              |
| Minneapolis, Minn.-----    | 107        | 69                | 2                                | 2                       | <b>Cumulative Totals</b>                          |               |                   |                                  |                         |
| Omaha, Nebr.-----          | 98         | 57                | 2                                | 5                       | including reported corrections for previous weeks |               |                   |                                  |                         |
| St. Louis, Mo.-----        | 265        | 161               | 14                               | 13                      | All Causes, All Ages-----                         |               |                   | 93,575                           |                         |
| St. Paul, Minn.-----       | 80         | 55                | 4                                | 3                       | All Causes, Age 65 and over-----                  |               |                   | 53,950                           |                         |
| Wichita, Kans.-----        | 55         | 35                | -                                | 1                       | Pneumonia and Influenza, All Ages-----            |               |                   | 7,594                            |                         |
|                            |            |                   |                                  |                         | All Causes, Under 1 Year of Age-----              |               |                   | 4,148                            |                         |

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

## SALMONELLOSIS — (Continued from page 47)

Table 2  
10 Most Frequently Reported Salmonella Serotypes  
from Humans and Nonhumans  
October, November, and December 1968

| Human                                |        |         |
|--------------------------------------|--------|---------|
| Serotype                             | Number | Percent |
| <i>typhimurium</i> *                 | 1,475  | 27.5    |
| <i>enteritidis</i>                   | 520    | 9.7     |
| <i>newport</i>                       | 392    | 7.3     |
| <i>saint-paul</i>                    | 305    | 5.7     |
| <i>heidelberg</i>                    | 300    | 5.6     |
| <i>infantis</i>                      | 237    | 4.4     |
| <i>thompson</i>                      | 197    | 3.7     |
| <i>javiana</i>                       | 186    | 3.5     |
| <i>typhi</i>                         | 160    | 3.0     |
| <i>blockley</i>                      | 125    | 2.3     |
| Subtotal                             | 3,897  | 72.7    |
| Total all serotypes                  | 5,358  |         |
| Nonhuman                             |        |         |
| Serotype                             | Number | Percent |
| <i>typhimurium</i> *                 | 210    | 13.4    |
| <i>heidelberg</i>                    | 92     | 5.8     |
| <i>anatum</i>                        | 76     | 4.8     |
| <i>saint-paul</i>                    | 76     | 4.8     |
| <i>cholerae-suis var. kunzendorf</i> | 70     | 4.5     |
| <i>montevideo</i>                    | 68     | 4.3     |
| <i>infantis</i>                      | 63     | 4.0     |
| <i>derby</i>                         | 51     | 3.2     |
| <i>muenchen</i>                      | 50     | 3.2     |
| <i>livingstone</i>                   | 44     | 2.8     |
| Subtotal                             | 800    | 50.9    |
| Total all serotypes                  | 1,573  |         |

\*Includes var. copenhagen.

Table 3  
*S. enteritidis* Isolations: Percentage of Total  
Human and Nonhuman Isolations by Month, 1968

| Month     | Human | Nonhuman |
|-----------|-------|----------|
| January   | 5.8   | 2.6      |
| February  | 6.3   | 2.4      |
| March     | 7.3   | 2.1      |
| April     | 6.7   | 1.5      |
| May       | 9.0   | 0.6      |
| June      | 8.5   | 1.2      |
| July      | 10.3  | 2.0      |
| August    | 8.4   | 1.7      |
| September | 10.1  | 0.6      |
| October   | 8.5   | 1.3      |
| November  | 10.5  | 1.0      |
| December  | 10.8  | 4.3      |

preceding months. Further study will be necessary to attempt to explain these changing patterns of salmonella isolation.

(Reported by the Salmonellosis Unit, Bacterial Diseases Section, Epidemiology Program.)

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000 IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER  
DAVID J. SENCER, M.D.  
CHIEF, EPIDEMIOLOGY PROGRAM  
A. D. LANGMUIR, M.D.  
CHIEF, STATISTICS SECTION  
IDA L. SHERMAN, M.S.  
EDITOR  
MICHAEL B. GREGG, M.D.  
MANAGING EDITOR  
PRISCILLA B. HOLMAN

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

NATIONAL COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333  
ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC 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  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
NATIONAL  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333  
OFFICIAL BUSINESS



POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF H. E. W.