

# MNWR

## MORBIDITY AND MORTALITY WEEKLY REPORT

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### Epidemiologic Notes and Reports

#### Rocky Mountain Spotted Fever — Georgia

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A private physician in rural northeast Georgia reported in May 1976 that 4 persons from one 7-member family had been hospitalized with suspected Rocky Mountain spotted fever. Subsequent laboratory tests confirmed the diagnoses.

The index case was a 58-year-old man who became ill on May 4 with low grade fever and headache. Three days later he visited his physician complaining of chills, fever, myalgia, and a severe headache. At that time his temperature was 102.4 F, and tachycardia and a macular rash around the belt line and under the arms were noted. He gave a history of removing a tick from his hand on May 1.

The patient was hospitalized and penicillin therapy begun. By May 10, the rash had spread to his entire body and to the palms of his hands, and antibiotic therapy was changed to tetracycline (500 mg/6 hours). The clinical improvement was immediate, and the patient's recovery was uneventful. Complement fixation tests performed on acute and convalescent sera confirmed Rocky Mountain spotted fever as the cause of illness.

The second case was the first patient's 7-year-old son, who became ill on May 5 with a temperature of 102.4 F, myalgia, and a severe headache. A rash appeared on the axillary region the next day and spread by May 10 to the entire body and palms. The signs and symptoms persisted, and his condition worsened. He was semi-comatose when admitted to the hospital on May 11. The third and milder case was in the 46-year-old wife of the index case, who had onset May 5 of fever, chills, severe headache, diarrhea, and vomiting. A rash appeared at the belt line for 2 days, and she was hospitalized on May 12 with a fever of 102.4 F. The last case was the 12-year-old son, who became ill on May 19 with symptoms of anorexia, generalized myalgia,

dizziness, and a temperature of 104.8 F. The patient was admitted to the hospital the next day when a very light macular rash appeared on his lower extremities and face.

All 4 patients were treated with tetracycline, and all recovered. Ticks had been removed from 3 of the 4 family members on May 1. All 4 cases were laboratory confirmed by complement fixation tests as Rocky Mountain spotted fever. Tests for murine typhus were negative.

Tick collection was attempted in the family's home, a farmhouse in an unwooded area of the family's poultry farm. Two yard-dragging attempts — both unsuccessful — were undertaken, since the patients gave no history of travel into wooded areas. Three ticks were collected from the family's pet dog. These ticks, *Dermacentor variabilis*, were negative for rickettsia by hemolymph test. The first patient sprayed pesticide on approximately May 25 both inside his home and in the entire area within 50 feet of the house.

*Reported by TB Gibson, MD, Winterville, Georgia; JK Larkins, District 10, Athens, JE McCroan, PhD, State Epidemiologist, and JD Smith, Georgia Dept of Human Resources; Viral Diseases Div, Bur of Epidemiology, CDC.*

**Editorial Note:** Approximately 5% of Rocky Mountain spotted fever cases reported to CDC have associated cases in the same household. However, the combination of 4 cases from 1 household together with the temporal clustering in this outbreak are unusual.

Reported cases of Rocky Mountain spotted fever have continued to increase this year. To date, a total of 825 cases have been reported to CDC, compared with 776 cases in the corresponding period of 1975.

#### Serogroup A Meningococcal Disease — Alaska

Five confirmed cases and 1 suspected case of serogroup A meningococcal meningitis or septicemia have been reported to the Alaska Division of Public Health since February 1976. There had been no serogroup A cases identified in the preceding 7 years. Three of the confirmed cases and the 1 suspected serogroup A case were adults, and 2 were children. There was 1 death. Two isolates have been tested

for sulfonamide sensitivity, and both are sensitive. The last reported group A case occurred on August 9.

Three of the confirmed serogroup A cases and the case suspected to be due to serogroup A were in adults who were heavy users of alcohol. Two of the confirmed cases occurred in adults living in 1 area of downtown Anchorage with many characteristics of skid row and inhabited by ap-

*Rocky Mountain Spotted Fever — Continued*

proximately 500 people. The case suspected to be caused by serogroup A was an adult household contact of 1 of the Anchorage cases; he had had meningococcal meningitis 3 weeks earlier. The other adult and 2 children lived in other cities, and there was no other known contact between cases.

*Reported by F. Pauls, PhD, Section of Laboratories, JP Middaugh, MD, Acting State Epidemiologist, R. I. Fraser, MD, Alaska Division of Public Health; Special Pathogens Br, Bacterial Disease Div, Bur of Epidemiology, CDC.*

**Editorial Note:** In the last year there have been small outbreaks of group A meningococcal disease in Seattle, Washington, and Portland, Oregon (1,2). Most cases have occurred in the skid row communities of those cities in persons who are heavy alcohol users. There is a great deal

of travel between Alaska and the rest of the northwest United States, which may have contributed to this unusual incidence of group A cases. However, no direct link between this outbreak and the earlier ones in Seattle and Portland has been demonstrated.

Group A meningococcal vaccine is available for control of meningococcal disease in populations with clearly demonstrated high risk. Household contacts of cases should receive chemoprophylaxis and, if the index case is known to have had serogroup A disease, the use of group A vaccine in household contacts should be considered (3).

*References*

1. MMWR 25(15):123, Apr 23, 1976
2. MMWR 25(35):277-278, Sep 10, 1976
3. Advisory Committee on Immunization Practices: Meningococcal polysaccharide vaccines. MMWR 24(45):381-382, 1975

*International Notes***Follow-up on Hemorrhagic Fever — Zaire, Sudan**

In Zaire, as of October 16, there had been 259 deaths confined to the area of Yambuku associated with a viral hemorrhagic fever caused by a Marburg-like virus (MMWR 25[40, 42]). Of these, 202 were adults and 57 children. There were also 2 deaths in Bumba, and 1 in Kinshasa of patients moved to these cities. No further deaths have been reported from the focus in southern Sudan.

The World Health Organization has assisted in arranging for 2 epidemiologic teams, including virologists, to undertake detailed investigations in the 2 areas concerned.

*Reported by the World Health Organization in the Weekly Epidemiological Record 41(43):337, 1976.*

**Table I. Summary—Cases of Specified Notifiable Diseases: United States**

*[Cumulative totals include revised and delayed reports through previous weeks]*

| DISEASE                                     | 43rd WEEK ENDING    |                     | MEDIAN<br>1971-1975 | CUMULATIVE, FIRST 43 WEEKS |                     |                     |
|---------------------------------------------|---------------------|---------------------|---------------------|----------------------------|---------------------|---------------------|
|                                             | October 30,<br>1976 | October 25,<br>1975 |                     | October 30,<br>1976        | October 25,<br>1975 | MEDIAN<br>1971-1975 |
| Aseptic meningitis                          | 92                  | 113                 | 113                 | 2,658                      | 2,323               | 3,437               |
| Brucellosis                                 | 2                   | 6                   | 3                   | 233                        | 211                 | 159                 |
| Chickenpox                                  | 1,095               | 1,008               | ---                 | 151,168                    | 120,756             | ---                 |
| Diphtheria                                  | —                   | 10                  | 3                   | 126                        | 239                 | 157                 |
| Encephalitis                                | 30                  | 145                 | 33                  | 1,089                      | 1,971               | 1,265               |
| { Primary                                   | 3                   | 2                   | 3                   | 229                        | 261                 | 241                 |
| { Post-Infectious                           | 254                 | 270                 | 176                 | 12,137                     | 9,572               | 7,495               |
| Hepatitis, Viral                            | 574                 | 732                 | 925                 | 27,676                     | 28,840              | 42,539              |
| { Type B                                    | 153                 | 202                 | ---                 | 7,053                      | 6,633               | ---                 |
| { Type A                                    | 4                   | 5                   | 6                   | 353                        | 353                 | 353                 |
| { Type unspecified                          | 133                 | 200                 | 156                 | 35,223                     | 21,795              | 24,748              |
| Malaria                                     | 12                  | 15                  | 19                  | 1,272                      | 1,193               | 1,159               |
| Measles (rubeola)                           | 12                  | 14                  | 25                  | 1,263                      | 1,167               | 1,140               |
| Meningococcal infections, total             | —                   | 1                   | —                   | 9                          | 26                  | 28                  |
| Civilian                                    | 276                 | 544                 | 626                 | 33,884                     | 49,477              | 58,833              |
| Military                                    | 10                  | 44                  | ---                 | 802                        | 1,331               | ---                 |
| Mumps                                       | 76                  | 98                  | 145                 | 10,582                     | 15,321              | 22,362              |
| Pertussis                                   | 2                   | 5                   | 2                   | 52                         | 80                  | 80                  |
| Rubella (German measles)                    | 643                 | 622                 | ---                 | 27,460                     | 27,404              | ---                 |
| Tetanus                                     | —                   | 2                   | 2                   | 113                        | 95                  | 126                 |
| Tuberculosis                                | 8                   | 14                  | 10                  | 338                        | 291                 | 333                 |
| Tularemia                                   | 12                  | 9                   | 9                   | 825                        | 776                 | 612                 |
| Typhoid fever                               | —                   | —                   | —                   | —                          | —                   | —                   |
| Typhus, tick-borne (Rky. Mt. spotted fever) | 18,057              | 21,387              | ---                 | 835,020                    | 823,466             | ---                 |
| Veneral Diseases:                           | 379                 | 534                 | ---                 | 24,307                     | 24,360              | ---                 |
| Gonorrhea                                   | 509                 | 514                 | ---                 | 20,025                     | 21,154              | ---                 |
| { Civilian                                  | 2                   | 8                   | ---                 | 284                        | 300                 | ---                 |
| { Military                                  | 34                  | 44                  | 44                  | 2,458                      | 2,072               | 2,915               |
| Syphilis, primary and secondary             | —                   | —                   | —                   | —                          | —                   | —                   |
| Rabies in animals                           | —                   | —                   | —                   | —                          | —                   | —                   |

**Table II. Notifiable Diseases of Low Frequency: United States**

|                             | CUM. |                      | CUM. |
|-----------------------------|------|----------------------|------|
| Anthrax                     | 2    | Poliomyelitis, total | 8    |
| Botulism                    | 26   | Paralytic            | 7    |
| Congenital rubella syndrome | 19   | Psittacosis          | 58   |
| Leprosy: NYC 3              | 113  | Rabies in man        | 2    |
| Leptospirosis               | 39   | Trichinosis: Ariz. 1 | 76   |
| Plague                      | 15   | Typhus, murine       | 44   |

**Table III**  
**Cases of Specified Notifiable Diseases: United States**  
*Weeks Ending October 30, 1976 and October 25, 1975 - 43rd Week*

| AREA REPORTING          | ASEPTIC<br>MENIN-<br>GITIS | BRUCEL-<br>LOSIS | CHICKEN-<br>POX | DIPHTHERIA |              | ENCEPHALITIS                                 |                      |        | HEPATITIS, VIRAL |                     |      | MALARIA |              |
|-------------------------|----------------------------|------------------|-----------------|------------|--------------|----------------------------------------------|----------------------|--------|------------------|---------------------|------|---------|--------------|
|                         |                            |                  |                 |            |              | Primary: Arthropod-<br>borne and Unspecified | Post In-<br>fectious | Type B | Type A           | Type<br>Unspecified |      |         |              |
|                         |                            |                  |                 |            |              |                                              |                      |        |                  |                     |      |         |              |
|                         | 1976                       | 1976             | 1976            | 1976       | CUM.<br>1976 | 1976                                         | 1975                 | 1976   | 1976             | 1976                | 1976 | 1976    | CUM.<br>1976 |
| UNITED STATES .....     | 92                         | 2                | 1,055           | -          | 126          | 30                                           | 145                  | 3      | 254              | 574                 | 153  | 4       | 393          |
| NEW ENGLAND .....       | 5                          | 1                | 86              | -          | -            | 1                                            | 1                    | -      | 7                | 11                  | 15   | -       | 18           |
| Maine .....             | -                          | -                | 4               | -          | -            | -                                            | -                    | -      | -                | 1                   | -    | -       | -            |
| New Hampshire* .....    | -                          | -                | -               | -          | -            | -                                            | -                    | -      | -                | -                   | -    | -       | -            |
| Vermont .....           | -                          | -                | 1               | -          | -            | -                                            | -                    | -      | -                | 1                   | -    | -       | -            |
| Massachusetts .....     | -                          | -                | 48              | -          | -            | 1                                            | 1                    | -      | 1                | 3                   | 15   | -       | 10           |
| Rhode Island .....      | 5                          | -                | 20              | -          | -            | -                                            | -                    | -      | 1                | 3                   | -    | -       | 3            |
| Connecticut .....       | -                          | 1                | 13              | -          | -            | -                                            | -                    | -      | 5                | 3                   | -    | -       | 5            |
| MIDDLE ATLANTIC .....   | 22                         | -                | 33              | -          | -            | 2                                            | 15                   | 1      | 71               | 76                  | 19   | 2       | 85           |
| Upstate New York .....  | 3                          | -                | 17              | -          | -            | -                                            | 6                    | -      | 10               | 9                   | -    | -       | 19           |
| New York City .....     | 8                          | -                | 13              | -          | -            | -                                            | -                    | -      | 32               | 37                  | -    | 2       | 39           |
| New Jersey* .....       | 7                          | -                | NA              | -          | -            | -                                            | 2                    | -      | 16               | 23                  | 17   | -       | 14           |
| Pennsylvania .....      | 4                          | -                | 2               | -          | -            | 2                                            | 7                    | 1      | 13               | 7                   | 2    | -       | 13           |
| EAST NORTH CENTRAL ..   | 15                         | -                | 448             | -          | 1            | 5                                            | 59                   | -      | 41               | 69                  | 23   | -       | 20           |
| Ohio* .....             | -                          | -                | 13              | -          | 1            | -                                            | 20                   | -      | 2                | 3                   | -    | -       | 7            |
| Indiana .....           | 1                          | -                | 52              | -          | -            | -                                            | 27                   | -      | 5                | 4                   | 6    | -       | -            |
| Illinois .....          | 1                          | -                | 76              | -          | -            | 1                                            | -                    | -      | 9                | 9                   | 2    | -       | 2            |
| Michigan .....          | 12                         | -                | 175             | -          | -            | 4                                            | 10                   | -      | 24               | 49                  | 15   | -       | 9            |
| Wisconsin* .....        | 1                          | -                | 132             | -          | -            | -                                            | 2                    | -      | 1                | 4                   | -    | -       | 2            |
| WEST NORTH CENTRAL ..   | 2                          | 1                | 145             | -          | 4            | 8                                            | 31                   | -      | 19               | 22                  | 7    | -       | 27           |
| Minnesota* .....        | -                          | -                | -               | -          | -            | -                                            | 16                   | -      | 6                | 3                   | -    | -       | 4            |
| Iowa .....              | -                          | 1                | 73              | -          | -            | -                                            | 6                    | -      | 5                | 6                   | -    | -       | -            |
| Missouri* .....         | 1                          | -                | 6               | -          | 1            | 2                                            | -                    | -      | 2                | 4                   | 5    | -       | 9            |
| North Dakota .....      | 1                          | -                | 27              | -          | -            | -                                            | -                    | -      | -                | 7                   | -    | -       | 1            |
| South Dakota .....      | -                          | -                | -               | -          | 3            | -                                            | -                    | -      | -                | -                   | -    | -       | 3            |
| Nebraska .....          | -                          | -                | 5               | -          | -            | -                                            | 3                    | -      | -                | -                   | -    | -       | 5            |
| Kansas .....            | -                          | -                | 34              | -          | -            | 6                                            | 6                    | -      | 6                | 2                   | 2    | -       | 5            |
| SOUTH ATLANTIC .....    | 10                         | -                | 62              | -          | -            | 2                                            | 6                    | 2      | 31               | 84                  | 36   | 1       | 65           |
| Delaware* .....         | -                          | -                | -               | -          | -            | -                                            | -                    | -      | 2                | -                   | 1    | -       | -            |
| Maryland .....          | 1                          | -                | 1               | -          | -            | 1                                            | -                    | -      | 6                | 3                   | 9    | 1       | 12           |
| District of Columbia .. | -                          | -                | -               | -          | -            | -                                            | -                    | -      | -                | 3                   | -    | -       | 9            |
| Virginia* .....         | 4                          | -                | 4               | -          | -            | -                                            | 2                    | -      | 3                | 19                  | 6    | -       | 9            |
| West Virginia .....     | 3                          | -                | 41              | -          | -            | -                                            | -                    | -      | 3                | 1                   | 1    | -       | 3            |
| North Carolina .....    | -                          | -                | NA              | -          | -            | 1                                            | 2                    | -      | 5                | 8                   | 3    | -       | 6            |
| South Carolina .....    | -                          | -                | -               | -          | -            | -                                            | -                    | -      | 4                | 5                   | 1    | -       | 1            |
| Georgia .....           | -                          | -                | -               | -          | -            | -                                            | -                    | -      | -                | 7                   | -    | -       | 5            |
| Florida .....           | 2                          | -                | 16              | -          | -            | -                                            | 2                    | 2      | 8                | 38                  | 15   | -       | 20           |
| EAST SOUTH CENTRAL ..   | 5                          | -                | 95              | -          | -            | 2                                            | 17                   | -      | 5                | 21                  | 1    | -       | 2            |
| Kentucky .....          | 1                          | -                | 93              | -          | -            | -                                            | 1                    | -      | 1                | 1                   | -    | -       | -            |
| Tennessee .....         | 4                          | -                | NA              | -          | -            | 2                                            | 10                   | -      | 3                | 16                  | 1    | -       | -            |
| Alabama .....           | -                          | -                | 5               | -          | -            | -                                            | 2                    | -      | 1                | -                   | -    | -       | 1            |
| Mississippi* .....      | -                          | -                | 1               | -          | -            | -                                            | 4                    | -      | -                | 4                   | -    | -       | 1            |
| WEST SOUTH CENTRAL ..   | 11                         | -                | 22              | -          | 1            | 4                                            | 6                    | -      | 9                | 29                  | 7    | 1       | 21           |
| Arkansas .....          | 2                          | -                | -               | -          | -            | -                                            | -                    | -      | 2                | 6                   | 2    | 1       | 2            |
| Louisiana .....         | 2                          | -                | NA              | -          | -            | 3                                            | -                    | -      | 5                | 17                  | 1    | -       | 2            |
| Oklahoma .....          | -                          | -                | 8               | -          | -            | -                                            | 1                    | -      | 2                | 6                   | 4    | -       | 3            |
| Texas .....             | 7                          | -                | 14              | -          | 1            | 1                                            | 5                    | -      | -                | -                   | -    | -       | 14           |
| MOUNTAIN .....          | -                          | -                | 84              | -          | 4            | -                                            | 7                    | -      | 12               | 35                  | 12   | -       | 15           |
| Montana .....           | NA                         | NA               | NA              | NA         | -            | NA                                           | 6                    | -      | NA               | NA                  | NA   | NA      | -            |
| Idaho .....             | -                          | -                | 14              | -          | -            | -                                            | -                    | -      | 1                | 2                   | 2    | -       | -            |
| Wyoming .....           | NA                         | NA               | NA              | NA         | -            | NA                                           | -                    | -      | NA               | NA                  | NA   | NA      | -            |
| Colorado .....          | -                          | -                | 66              | -          | 3            | -                                            | 1                    | -      | 4                | 6                   | 7    | -       | 9            |
| New Mexico .....        | -                          | -                | 4               | -          | 1            | -                                            | -                    | -      | 1                | 9                   | 1    | -       | 1            |
| Arizona .....           | -                          | -                | NN              | -          | -            | -                                            | -                    | -      | 5                | 16                  | 2    | -       | 4            |
| Utah .....              | -                          | -                | -               | -          | -            | -                                            | -                    | -      | -                | -                   | -    | -       | -            |
| Nevada* .....           | -                          | -                | -               | -          | -            | -                                            | -                    | -      | 1                | 2                   | -    | -       | 1            |
| PACIFIC .....           | 22                         | -                | 116             | -          | 116          | 6                                            | 3                    | -      | 59               | 227                 | 33   | -       | 140          |
| Washington .....        | -                          | -                | 89              | -          | 110          | -                                            | -                    | -      | 2                | 2                   | 1    | -       | 2            |
| Oregon .....            | -                          | -                | 2               | -          | -            | -                                            | -                    | -      | 2                | 9                   | 3    | -       | 5            |
| California* .....       | 19                         | -                | -               | -          | 1            | 6                                            | 3                    | -      | 52               | 90                  | 29   | -       | 132          |
| Alaska .....            | 2                          | -                | 18              | -          | 4            | -                                            | -                    | -      | 1                | 121                 | -    | -       | -            |
| Hawaii .....            | 1                          | -                | 7               | -          | 1            | -                                            | -                    | -      | 2                | 5                   | -    | -       | 1            |
| Guam* .....             | -                          | -                | -               | -          | -            | -                                            | -                    | -      | -                | -                   | -    | -       | -            |
| Puerto Rico .....       | -                          | -                | 11              | -          | 1            | -                                            | -                    | -      | 2                | -                   | -    | -       | 1            |
| Virgin Islands .....    | NA                         | NA               | NA              | NA         | -            | NA                                           | -                    | -      | NA               | NA                  | NA   | NA      | -            |

NN: Not Notifiable

NA: Not Available

\*Delayed Reports: Asep. Meng: N.J. add 2, Wisc. add 2, Mo. delete 3, Miss. add 10; Chickenpox: Calif. add 15, Guam add 1; Enceph: Wisc. add 2, Mo. add 3, Minn. add 1, Miss. delete 2; Enceph. post: Minn. delete 1; Hep. B: N. Hamp. add 2, Ohio add 4, Dela. add 1; Hep. A.: N. Hamp. add 1, Ohio delete 4, Nev. add 6, Guam add 2; Hep. Unsp.: Va. delete 2.

**Table III-Continued**  
**Cases of Specified Notifiable Diseases: United States**  
*Weeks Ending October 30, 1976 and October 25, 1975 — 43rd Week*

| REPORTING AREA             | MEASLES (Rubeola) |            |        | MENINGOCOCCAL INFECTIONS<br>TOTAL |            |       | MUMPS |              | PERTUSSIS | RUBELLA |              | TETANUS      |
|----------------------------|-------------------|------------|--------|-----------------------------------|------------|-------|-------|--------------|-----------|---------|--------------|--------------|
|                            | 1976              | CUMULATIVE |        | 1976                              | CUMULATIVE |       | 1976  | CUM.<br>1976 | 1976      | 1976    | CUM.<br>1976 | CUM.<br>1976 |
|                            |                   | 1976       | 1975   |                                   | 1976       | 1975  |       |              |           |         |              |              |
| UNITED STATES .....        | 133               | 35,223     | 21,795 | 12                                | 1,272      | 1,193 | 276   | 33,884       | 10        | 76      | 10,982       | 52           |
| NEW ENGLAND .....          | -                 | 420        | 319    | 2                                 | 58         | 69    | 30    | 1,380        | -         | 2       | 294          | 2            |
| Maine .....                | -                 | 8          | 15     | -                                 | 1          | 6     | 1     | 119          | -         | -       | 10           | -            |
| New Hampshire .....        | -                 | 9          | 22     | -                                 | 5          | 3     | -     | 27           | -         | -       | 11           | -            |
| Vermont .....              | -                 | 69         | 50     | -                                 | 3          | 2     | 3     | 33           | -         | -       | 5            | -            |
| Massachusetts .....        | -                 | 36         | 111    | 2                                 | 17         | 25    | 3     | 164          | -         | 2       | 141          | 1            |
| Rhode Island .....         | -                 | 15         | 3      | -                                 | 6          | 3     | 9     | 467          | -         | -       | 5            | -            |
| Connecticut .....          | -                 | 283        | 116    | -                                 | 26         | 30    | 14    | 570          | -         | -       | 122          | 1            |
| MIDDLE ATLANTIC .....      | 30                | 7,091      | 1,837  | 4                                 | 188        | 118   | 13    | 3,173        | 2         | 5       | 2,304        | 7            |
| Upstate New York .....     | 1                 | 2,951      | 618    | 1                                 | 68         | 37    | 3     | 400          | -         | -       | 606          | 4            |
| New York City .....        | 1                 | 476        | 161    | 1                                 | 49         | 30    | 3     | 1,682        | -         | 1       | 150          | 2            |
| New Jersey .....           | -                 | 611        | 471    | 2                                 | 29         | 19    | -     | 522          | -         | 4       | 1,346        | -            |
| Pennsylvania .....         | 28                | 3,053      | 567    | -                                 | 42         | 32    | 7     | 569          | 2         | -       | 202          | 1            |
| EAST NORTH CENTRAL .....   | 66                | 14,568     | 6,489  | 1                                 | 164        | 171   | 116   | 13,869       | 2         | 50      | 4,121        | 4            |
| Ohio .....                 | -                 | 577        | 106    | -                                 | 68         | 50    | 6     | 1,969        | -         | 12      | 309          | 2            |
| Indiana .....              | 21                | 3,357      | 418    | -                                 | 8          | 9     | 9     | 1,495        | -         | 16      | 794          | -            |
| Illinois .....             | 8                 | 1,649      | 1,833  | -                                 | 20         | 22    | 6     | 1,802        | 1         | 6       | 1,185        | -            |
| Michigan .....             | 10                | 5,877      | 3,062  | 1                                 | 57         | 68    | 44    | 4,943        | -         | 13      | 1,405        | 2            |
| Wisconsin .....            | 27                | 3,468      | 1,070  | -                                 | 11         | 22    | 51    | 3,660        | 1         | 3       | 428          | -            |
| WEST NORTH CENTRAL .....   | 2                 | 1,173      | 5,012  | 1                                 | 75         | 73    | 22    | 3,448        | -         | 3       | 410          | 7            |
| Minnesota .....            | 1                 | 425        | 182    | -                                 | 12         | 17    | 1     | 548          | -         | -       | 29           | 2            |
| Iowa .....                 | 1                 | 37         | 606    | 1                                 | 10         | 6     | 15    | 1,265        | -         | -       | 85           | -            |
| Missouri * .....           | -                 | 27         | 269    | -                                 | 30         | 36    | 2     | 348          | -         | -       | 43           | 2            |
| North Dakota .....         | -                 | 3          | 1,057  | -                                 | 3          | -     | 3     | 127          | -         | -       | 3            | 1            |
| South Dakota .....         | -                 | 4          | 356    | -                                 | 1          | 1     | -     | 9            | -         | 1       | 21           | 1            |
| Nebraska .....             | -                 | 55         | 395    | -                                 | 5          | 2     | -     | 104          | -         | -       | 3            | -            |
| Kansas .....               | -                 | 622        | 2,147  | -                                 | 14         | 11    | 1     | 1,047        | -         | 1       | 226          | 1            |
| SOUTH ATLANTIC .....       | 2                 | 2,177      | 363    | 2                                 | 236        | 245   | 21    | 2,600        | 5         | 1       | 1,306        | 8            |
| Delaware .....             | -                 | 130        | 35     | -                                 | 8          | 7     | 1     | 65           | -         | 1       | 36           | -            |
| Maryland .....             | -                 | 715        | 49     | -                                 | 21         | 29    | 1     | 693          | -         | -       | 3            | 3            |
| District of Columbia ..... | -                 | 13         | 1      | -                                 | 2          | 5     | -     | 105          | -         | -       | 46           | -            |
| Virginia .....             | 1                 | 772        | 37     | -                                 | 29         | 21    | 1     | 204          | -         | -       | 235          | 1            |
| West Virginia .....        | 1                 | 202        | 166    | -                                 | 7          | 5     | 8     | 786          | -         | -       | 316          | -            |
| North Carolina .....       | -                 | 17         | 2      | 1                                 | 48         | 45    | 3     | 383          | 5         | -       | 18           | -            |
| South Carolina .....       | -                 | 4          | -      | -                                 | 36         | 36    | -     | 45           | -         | -       | 590          | -            |
| Georgia .....              | -                 | 2          | 40     | 1                                 | 25         | 14    | -     | -            | -         | -       | 2            | -            |
| Florida .....              | -                 | 322        | 33     | -                                 | 60         | 83    | 7     | 319          | -         | -       | 60           | 4            |
| EAST SOUTH CENTRAL .....   | 1                 | 888        | 302    | 1                                 | 119        | 169   | 12    | 2,834        | -         | 1       | 373          | 7            |
| Kentucky .....             | -                 | 752        | 94     | -                                 | 23         | 71    | 6     | 971          | -         | 1       | 169          | 2            |
| Tennessee .....            | 1                 | 119        | 178    | 1                                 | 50         | 54    | 2     | 1,514        | -         | -       | 192          | 4            |
| Alabama .....              | -                 | -          | 5      | -                                 | 32         | 30    | 4     | 290          | -         | -       | 1            | 1            |
| Mississippi .....          | -                 | 17         | 25     | -                                 | 14         | 14    | -     | 59           | -         | -       | 11           | -            |
| WEST SOUTH CENTRAL .....   | 11                | 753        | 348    | -                                 | 196        | 181   | 19    | 2,438        | -         | 5       | 544          | 10           |
| Arkansas .....             | -                 | -          | -      | -                                 | 11         | 10    | 1     | 81           | -         | -       | 190          | -            |
| Louisiana .....            | 3                 | 225        | 2      | -                                 | 38         | 34    | -     | 25           | -         | -       | 89           | 2            |
| Oklahoma .....             | 4                 | 297        | 143    | -                                 | 21         | 11    | 8     | 704          | -         | 3       | 74           | -            |
| Texas .....                | 4                 | 231        | 203    | -                                 | 126        | 126   | 10    | 1,628        | -         | 2       | 191          | 8            |
| MOUNTAIN .....             | -                 | 5,135      | 1,454  | -                                 | 44         | 37    | 5     | 1,152        | -         | -       | 483          | 1            |
| Montana .....              | NA                | 246        | 50     | -                                 | 5          | 7     | NA    | 22           | NA        | NA      | 235          | -            |
| Idaho .....                | -                 | 2,020      | 12     | -                                 | 6          | 5     | -     | 446          | -         | -       | 18           | -            |
| Wyoming .....              | NA                | 4          | 2      | -                                 | -          | 1     | NA    | 1            | NA        | NA      | 2            | -            |
| Colorado .....             | -                 | 320        | 1,156  | -                                 | 12         | 9     | 5     | 240          | -         | -       | 24           | -            |
| New Mexico .....           | -                 | 16         | 13     | -                                 | 4          | 4     | -     | 127          | -         | -       | 31           | -            |
| Arizona .....              | -                 | 227        | 80     | -                                 | 10         | 3     | -     | -            | -         | -       | -            | 1            |
| Utah .....                 | -                 | 2,237      | 112    | -                                 | 5          | 7     | -     | 200          | -         | -       | 154          | -            |
| Nevada .....               | -                 | 65         | 27     | -                                 | 2          | 1     | -     | 116          | -         | -       | 19           | -            |
| PACIFIC .....              | 21                | 2,618      | 5,671  | 1                                 | 192        | 130   | 38    | 2,990        | 1         | 9       | 1,147        | 6            |
| Washington .....           | -                 | 352        | 290    | 1                                 | 33         | 17    | 7     | 878          | 1         | 6       | 183          | 1            |
| Oregon .....               | -                 | 170        | 199    | -                                 | 17         | 7     | 5     | 380          | -         | -       | 135          | 1            |
| California .....           | 21                | 2,089      | 5,118  | -                                 | 119        | 98    | 23    | 1,670        | -         | 3       | 808          | 4            |
| Alaska .....               | -                 | 4          | -      | -                                 | 20         | 6     | 3     | 28           | -         | -       | 1            | -            |
| Hawaii .....               | -                 | 3          | 64     | -                                 | 3          | 2     | -     | 34           | -         | -       | 20           | -            |
| Guam * .....               | -                 | 15         | 33     | -                                 | 1          | 3     | -     | 18           | -         | -       | 5            | -            |
| Puerto Rico .....          | 1                 | 445        | 656    | -                                 | 3          | 1     | 2     | 744          | -         | 1       | 10           | 5            |
| Virgin Islands .....       | NA                | 14         | 8      | -                                 | 1          | -     | NA    | 31           | NA        | NA      | 8            | 1            |

NA: Not Available

\*Delayed reports: Measles: Mo. delete 3; Men. Inf.: Mo. add 1; Mumps: Guam add 2

**Table III-Continued**  
**Cases of Specified Notifiable Diseases: United States**  
*Weeks Ending October 30, 1976 and October 25, 1975 - 43rd Week*

| REPORTING AREA          | TUBERCULOSIS |              | TULA-<br>REMIA | TYPHOID<br>FEVER |              | TYPHUS-FEVER<br>TICK-BORNE<br>(RMSF) |              | VENEREAL DISEASES (Civilian Cases Only) |            |         |                        |            |        | RABIES<br>IN<br>ANIMALS |
|-------------------------|--------------|--------------|----------------|------------------|--------------|--------------------------------------|--------------|-----------------------------------------|------------|---------|------------------------|------------|--------|-------------------------|
|                         |              |              |                |                  |              |                                      |              | GONORRHEA                               |            |         | SYPHILIS (Pri. & Sec.) |            |        |                         |
|                         | 1976         | CUM.<br>1976 | CUM.<br>1976   | 1976             | CUM.<br>1976 | 1976                                 | CUM.<br>1976 | 1976                                    | CUMULATIVE |         | 1976                   | CUMULATIVE |        | CUM.<br>1976            |
|                         |              |              |                |                  |              |                                      |              |                                         | 1976       | 1975    |                        | 1976       | 1975   |                         |
| UNITED STATES .....     | 643          | 27,460       | 113            | 8                | 338          | 12                                   | 825          | 18,057                                  | 835,020    | 823,466 | 509                    | 20,025     | 21,154 | 2,458                   |
| NEW ENGLAND .....       | 17           | 954          | 1              | -                | 24           | 1                                    | 9            | 507                                     | 23,512     | 22,654  | 27                     | 683        | 759    | 70                      |
| Maine .....             | 2            | 67           | -              | -                | -            | -                                    | -            | 56                                      | 1,994      | 1,862   | 1                      | 20         | 30     | 33                      |
| New Hampshire .....     | -            | 39           | -              | -                | 2            | -                                    | -            | 24                                      | 695        | 595     | -                      | 9          | 14     | 1                       |
| Vermont .....           | -            | 26           | -              | -                | -            | -                                    | -            | 12                                      | 584        | 564     | -                      | 9          | 7      | -                       |
| Massachusetts .....     | 9            | 566          | 1              | -                | 15           | -                                    | 4            | 206                                     | 11,192     | 10,476  | 23                     | 501        | 502    | 24                      |
| Rhode Island .....      | 2            | 71           | -              | -                | -            | 1                                    | 3            | 63                                      | 1,611      | 1,785   | -                      | 17         | 19     | 5                       |
| Connecticut .....       | 4            | 185          | -              | -                | 7            | -                                    | 2            | 146                                     | 7,436      | 7,372   | 3                      | 127        | 187    | 7                       |
| MIDDLE ATLANTIC .....   | 115          | 5,132        | 3              | 1                | 61           | 2                                    | 69           | 1,292                                   | 96,126     | 95,371  | 73                     | 3,297      | 3,825  | 66                      |
| Upstate New York .....  | 29           | 793          | 2              | -                | 9            | -                                    | 23           | 274                                     | 15,441     | 17,025  | 4                      | 209        | 350    | 14                      |
| New York City .....     | 38           | 2,053        | 1              | -                | 32           | -                                    | 5            | 600                                     | 42,616     | 40,157  | 43                     | 2,045      | 2,214  | -                       |
| New Jersey .....        | 25           | 1,022        | -              | 1                | 12           | -                                    | 13           | 177                                     | 15,027     | 13,600  | 12                     | 495        | 611    | 31                      |
| Pennsylvania .....      | 23           | 1,264        | -              | -                | 8            | 2                                    | 19           | 241                                     | 23,042     | 24,589  | 14                     | 548        | 650    | 21                      |
| EAST NORTH CENTRAL ..   | 82           | 3,904        | 1              | 3                | 40           | -                                    | 23           | 2,842                                   | 133,024    | 135,993 | 29                     | 1,766      | 1,708  | 161                     |
| Ohio* .....             | 18           | 739          | -              | -                | 12           | -                                    | 18           | 1,172                                   | 33,316     | 37,899  | 17                     | 423        | 419    | 31                      |
| Indiana .....           | 12           | 441          | -              | -                | 4            | -                                    | -            | 161                                     | 13,197     | 11,693  | -                      | 94         | 129    | 22                      |
| Illinois .....          | 19           | 1,361        | 1              | 3                | 12           | -                                    | -            | 605                                     | 45,655     | 47,389  | 5                      | 959        | 801    | 22                      |
| Michigan* .....         | 18           | 1,144        | -              | -                | 9            | -                                    | 5            | 668                                     | 28,478     | 25,944  | 6                      | 199        | 253    | 7                       |
| Wisconsin .....         | 15           | 215          | -              | -                | 3            | -                                    | -            | 236                                     | 12,378     | 13,068  | 1                      | 91         | 66     | 79                      |
| WEST NORTH CENTRAL ..   | 18           | 988          | 28             | -                | 20           | -                                    | 26           | 1,048                                   | 43,799     | 41,341  | 13                     | 370        | 508    | 568                     |
| Minnesota .....         | 1            | 167          | 3              | -                | 10           | -                                    | -            | 120                                     | 7,693      | 8,396   | 4                      | 82         | 97     | 145                     |
| Iowa .....              | 1            | 97           | 1              | -                | 1            | -                                    | 3            | 170                                     | 5,468      | 5,900   | 1                      | 37         | 33     | 114                     |
| Missouri* .....         | 6            | 484          | 20             | -                | 5            | -                                    | 13           | 451                                     | 17,601     | 14,920  | 4                      | 154        | 238    | 58                      |
| North Dakota .....      | 3            | 30           | -              | -                | -            | -                                    | -            | 16                                      | 674        | 645     | -                      | -          | 5      | 116                     |
| South Dakota .....      | 2            | 48           | 1              | -                | 1            | -                                    | 3            | 42                                      | 1,296      | 1,607   | 1                      | 5          | 5      | 56                      |
| Nebraska .....          | -            | 44           | -              | -                | 2            | -                                    | -            | 63                                      | 3,704      | 3,693   | 1                      | 30         | 16     | 15                      |
| Kansas* .....           | 5            | 118          | 3              | -                | 1            | -                                    | 7            | 186                                     | 7,363      | 6,180   | 2                      | 62         | 114    | 64                      |
| SOUTH ATLANTIC .....    | 120          | 5,814        | 7              | 2                | 44           | 8                                    | 409          | 4,483                                   | 201,901    | 202,059 | 151                    | 5,799      | 6,596  | 389                     |
| Delaware .....          | -            | 61           | -              | -                | -            | -                                    | 1            | 156                                     | 2,908      | 2,919   | 3                      | 58         | 73     | 17                      |
| Maryland .....          | 21           | 801          | 1              | -                | 5            | -                                    | 21           | 445                                     | 26,522     | 24,709  | 8                      | 468        | 468    | 11                      |
| District of Columbia .. | 5            | 255          | -              | 1                | 1            | -                                    | -            | 156                                     | 11,464     | 11,538  | 18                     | 510        | 577    | -                       |
| Virginia* .....         | 7            | 864          | 2              | 1                | 5            | -                                    | 98           | 584                                     | 21,301     | 19,808  | 15                     | 590        | 508    | 55                      |
| West Virginia .....     | 1            | 222          | -              | -                | 5            | -                                    | 8            | 68                                      | 2,545      | 2,607   | 1                      | 21         | 52     | 14                      |
| North Carolina* .....   | 24           | 1,083        | 3              | -                | 2            | 1                                    | 174          | 897                                     | 29,818     | 29,134  | 28                     | 1,063      | 828    | 14                      |
| South Carolina .....    | 15           | 434          | -              | -                | 4            | -                                    | 49           | 249                                     | 18,860     | 18,883  | 9                      | 317        | 465    | 5                       |
| Georgia .....           | 23           | 735          | 1              | -                | 3            | 7                                    | 56           | 629                                     | 39,145     | 37,761  | 13                     | 655        | 913    | 193                     |
| Florida .....           | 24           | 1,359        | -              | -                | 15           | -                                    | 2            | 1,299                                   | 49,338     | 54,700  | 56                     | 2,117      | 2,712  | 80                      |
| EAST SOUTH CENTRAL ..   | 64           | 2,356        | 15             | -                | 14           | 1                                    | 155          | 1,723                                   | 74,231     | 69,421  | 13                     | 774        | 955    | 113                     |
| Kentucky .....          | 12           | 487          | 1              | -                | 6            | -                                    | 34           | 329                                     | 9,845      | 9,145   | 5                      | 111        | 142    | 54                      |
| Tennessee .....         | 23           | 768          | 14             | -                | 7            | 1                                    | 89           | 610                                     | 29,703     | 27,510  | 3                      | 266        | 364    | 38                      |
| Alabama .....           | 16           | 685          | -              | -                | 1            | -                                    | 13           | 479                                     | 20,664     | 19,095  | -                      | 157        | 215    | 21                      |
| Mississippi .....       | 13           | 412          | -              | -                | -            | -                                    | 19           | 305                                     | 14,019     | 13,671  | 5                      | 240        | 234    | -                       |
| WEST SOUTH CENTRAL ..   | 91           | 3,277        | 43             | 1                | 14           | -                                    | 133          | 2,173                                   | 105,839    | 101,557 | 45                     | 2,410      | 1,848  | 554                     |
| Arkansas* .....         | 22           | 405          | 24             | -                | 4            | -                                    | 20           | 100                                     | 9,785      | 10,971  | -                      | 89         | 55     | 133                     |
| Louisiana .....         | 5            | 528          | 3              | 1                | 3            | -                                    | -            | 421                                     | 15,702     | 18,249  | 12                     | 502        | 427    | 7                       |
| Oklahoma .....          | 13           | 323          | 7              | -                | 1            | -                                    | 95           | 280                                     | 10,344     | 9,819   | -                      | 83         | 77     | 137                     |
| Texas .....             | 51           | 2,017        | 9              | -                | 6            | -                                    | 18           | 1,372                                   | 70,008     | 62,518  | 33                     | 1,736      | 1,289  | 277                     |
| MOUNTAIN .....          | 19           | 774          | 4              | -                | 20           | -                                    | 4            | 804                                     | 32,288     | 33,202  | 25                     | 662        | 476    | 189                     |
| Montana .....           | NA           | 41           | 2              | NA               | 2            | NA                                   | 1            | NA                                      | 1,678      | 1,744   | NA                     | 8          | 5      | 84                      |
| Idaho .....             | 3            | 27           | -              | -                | 1            | -                                    | 1            | 56                                      | 1,810      | 1,688   | 1                      | 32         | 12     | -                       |
| Wyoming .....           | NA           | 17           | 1              | NA               | -            | NA                                   | -            | NA                                      | 646        | 780     | NA                     | 8          | 10     | 1                       |
| Colorado .....          | 1            | 126          | -              | -                | 5            | -                                    | 1            | 236                                     | 8,638      | 8,931   | -                      | 134        | 84     | 53                      |
| New Mexico* .....       | -            | 145          | -              | -                | 2            | -                                    | 1            | 92                                      | 6,133      | 5,835   | 23                     | 252        | 125    | 3                       |
| Arizona .....           | 15           | 345          | -              | -                | 9            | -                                    | -            | 252                                     | 9,420      | 8,750   | 1                      | 182        | 177    | 29                      |
| Utah .....              | -            | 41           | 1              | -                | 1            | -                                    | -            | 60                                      | 1,857      | 2,077   | -                      | 20         | 15     | 19                      |
| Nevada .....            | -            | 32           | -              | -                | -            | -                                    | -            | 108                                     | 2,106      | 3,397   | -                      | 26         | 48     | -                       |
| PACIFIC .....           | 117          | 4,261        | 11             | 1                | 101          | -                                    | 6            | 3,185                                   | 124,300    | 121,868 | 133                    | 4,264      | 4,479  | 348                     |
| Washington* .....       | 10           | 323          | 2              | -                | 5            | -                                    | 3            | 212                                     | 10,447     | 11,105  | -                      | 112        | 152    | 8                       |
| Oregon .....            | 7            | 166          | 1              | -                | -            | -                                    | -            | 277                                     | 8,794      | 9,268   | 3                      | 97         | 120    | 11                      |
| California .....        | 87           | 3,155        | 8              | 1                | 92           | -                                    | 3            | 2,527                                   | 98,678     | 96,495  | 130                    | 3,950      | 4,154  | 288                     |
| Alaska* .....           | -            | 78           | -              | -                | -            | -                                    | -            | 144                                     | 3,606      | 2,985   | -                      | 21         | 6      | 41                      |
| Hawaii .....            | 13           | 525          | -              | -                | 4            | -                                    | -            | 25                                      | 2,775      | 2,015   | -                      | 84         | 47     | -                       |
| Guam* .....             | -            | 35           | -              | -                | 1            | -                                    | -            | -                                       | 248        | 346     | -                      | 2          | 16     | -                       |
| Puerto Rico .....       | -            | 351          | -              | -                | 1            | -                                    | -            | 27                                      | 2,249      | 2,460   | 17                     | 513        | 597    | 40                      |
| Virgin Islands .....    | NA           | 5            | -              | NA               | -            | NA                                   | -            | NA                                      | 207        | 179     | NA                     | 48         | 34     | -                       |

NA: Not available

\*Delayed reports: TB: Mich. delete 2, Mo. delete 3, Kans. delete 2, Va. delete 2, N. Car. delete 6, Ark. delete 1, N. Mex. delete 1, Wash. add 27, Alaska delete 1, Guam add 2; GC: Guam add 6; An. rabies: Ohio add 3.

**Table IV**  
**Deaths in 121 United States Cities\***  
*Week Ending October 30, 1976 - 43rd Week*

| REPORTING AREA             | ALL CAUSES |                   |             |             |              | Pneumonia and Influenza ALL AGES | REPORTING AREA               | ALL CAUSES |                   |             |             |              | Pneumonia and Influenza ALL AGES |
|----------------------------|------------|-------------------|-------------|-------------|--------------|----------------------------------|------------------------------|------------|-------------------|-------------|-------------|--------------|----------------------------------|
|                            | ALL AGES   | 65 Years and Over | 45-64 Years | 25-44 Years | Under 1 Year |                                  |                              | ALL AGES   | 65 Years and Over | 45-64 Years | 25-44 Years | Under 1 Year |                                  |
| <b>NEW ENGLAND</b> .....   | 683        | 424               | 169         | 32          | 19           | 44                               | <b>SOUTH ATLANTIC</b> ...    | 1,127      | 622               | 338         | 79          | 40           | 43                               |
| Boston, Mass. ....         | 199        | 111               | 64          | 12          | 8            | 11                               | Atlanta, Ga. ....            | 102        | 69                | 25          | 4           | 2            | 6                                |
| Bridgeport, Conn. ....     | 46         | 27                | 14          | 3           | 1            | 3                                | Baltimore, Md. ....          | 255        | 135               | 77          | 18          | 9            | 4                                |
| Cambridge, Mass. ....      | 20         | 16                | 3           | -           | -            | 4                                | Charlotte, N. C. ....        | 66         | 30                | 23          | 6           | 3            | 1                                |
| Fall River, Mass. ....     | 22         | 17                | 3           | 1           | -            | -                                | Jacksonville, Fla. ....      | 73         | 35                | 22          | 5           | 4            | 2                                |
| Hartford, Conn. ....       | 76         | 38                | 29          | 5           | 2            | 2                                | Miami, Fla. ....             | 92         | 41                | 37          | 8           | 4            | 2                                |
| Lowell, Mass. ....         | 30         | 21                | 7           | 1           | -            | 3                                | Norfolk, Va. ....            | 68         | 32                | 25          | 6           | 2            | 3                                |
| Lynn, Mass. ....           | 16         | 11                | 1           | 2           | -            | -                                | Richmond, Va. ....           | 62         | 31                | 24          | 5           | 1            | 4                                |
| New Bedford, Mass. ....    | 30         | 23                | 6           | 1           | -            | -                                | Savannah, Ga. ....           | 36         | 25                | 10          | -           | -            | 1                                |
| New Haven, Conn. ....      | 31         | 19                | 6           | 1           | 2            | 1                                | St. Petersburg, Fla. ....    | 68         | 53                | 12          | -           | 1            | 6                                |
| Providence, R.I. ....      | 78         | 53                | 20          | 1           | 1            | 12                               | Tampa, Fla. ....             | 70         | 42                | 15          | 6           | 4            | 8                                |
| Somerville, Mass. ....     | 6          | 5                 | 1           | -           | -            | -                                | Washington, D. C. ....       | 180        | 95                | 53          | 19          | 7            | 6                                |
| Springfield, Mass. ....    | 55         | 31                | 17          | 1           | 5            | 3                                | Wilmington, Del. ....        | 55         | 34                | 15          | 2           | 3            | -                                |
| Waterbury, Conn. ....      | 30         | 18                | 10          | 2           | -            | 3                                |                              |            |                   |             |             |              |                                  |
| Worcester, Mass. ....      | 44         | 34                | 8           | 2           | -            | 2                                |                              |            |                   |             |             |              |                                  |
| <b>MIDDLE ATLANTIC</b> ... | 2,770      | 1,717             | 667         | 178         | 55           | 134                              | <b>EAST SOUTH CENTRAL</b>    | 662        | 383               | 188         | 40          | 26           | 30                               |
| Albany, N. Y. ....         | 54         | 32                | 12          | 3           | 5            | 1                                | Birmingham, Ala. ....        | 118        | 68                | 35          | 10          | 3            | 2                                |
| Allentown, Pa. ....        | 19         | 14                | 4           | -           | -            | 1                                | Chattanooga, Tenn. ....      | 40         | 21                | 17          | -           | -            | 3                                |
| Buffalo, N. Y. ....        | 113        | 68                | 21          | 4           | 3            | 12                               | Knoxville, Tenn. ....        | 33         | 26                | 5           | 1           | 1            | -                                |
| Camden, N. J. ....         | 37         | 16                | 13          | 3           | 3            | -                                | Louisville, Ky. ....         | 114        | 57                | 35          | 7           | 9            | 11                               |
| Elizabeth, N. J. ....      | 24         | 16                | 5           | 1           | -            | -                                | Memphis, Tenn. ....          | 159        | 99                | 42          | 8           | 3            | 1                                |
| Erie, Pa. ....             | 47         | 29                | 14          | 2           | 1            | 2                                | Mobile, Ala. ....            | 48         | 27                | 16          | 2           | 1            | -                                |
| Jersey City, N. J. ....    | 31         | 23                | 6           | 2           | -            | 1                                | Montgomery, Ala. ....        | 30         | 19                | 7           | 2           | 2            | 2                                |
| Newark, N. J. ....         | 60         | 29                | 21          | 6           | 2            | 2                                | Nashville, Tenn. ....        | 120        | 66                | 31          | 10          | 7            | 11                               |
| New York City, N. Y. ....  | 1,483      | 949               | 328         | 112         | 44           | 65                               |                              |            |                   |             |             |              |                                  |
| Paterson, N. J.** ....     | 36         | 22                | 8           | 2           | 2            | 3                                | <b>WEST SOUTH CENTRAL</b>    | 1,053      | 603               | 270         | 73          | 52           | 26                               |
| Philadelphia, Pa. ....     | 302        | 171               | 90          | 21          | 14           | 14                               | Austin, Tex. ....            | 40         | 22                | 10          | 4           | 1            | 3                                |
| Pittsburgh, Pa. ....       | 172        | 89                | 52          | 11          | 11           | 13                               | Baton Rouge, La. ....        | 34         | 19                | 10          | 2           | 2            | 1                                |
| Reading, Pa. ....          | 34         | 19                | 15          | -           | -            | 3                                | Corpus Christi, Tex. ....    | 25         | 17                | 7           | 1           | -            | -                                |
| Rochester, N. Y. ....      | 125        | 61                | 30          | 5           | 6            | 8                                | Dallas, Tex. ....            | 178        | 99                | 47          | 14          | 13           | 4                                |
| Schenectady, N. Y. ....    | 21         | 12                | 8           | 1           | -            | 1                                | El Paso, Tex. ....           | 57         | 33                | 12          | 4           | 1            | 1                                |
| Scranton, Pa. ....         | 50         | 38                | 9           | 2           | -            | -                                | Fort Worth, Tex. ....        | 81         | 54                | 18          | 6           | 1            | 2                                |
| Syracuse, N. Y. ....       | 82         | 47                | 26          | 3           | 4            | 3                                | Houston, Tex. ....           | 201        | 102               | 57          | 14          | 15           | 1                                |
| Trenton, N. J. ....        | 32         | 24                | 7           | -           | -            | -                                | Little Rock, Ark. ....       | 56         | 36                | 7           | 4           | 4            | 6                                |
| Utica, N. Y. ....          | 12         | 10                | 2           | -           | -            | 1                                | New Orleans, La. ....        | 141        | 76                | 45          | 8           | 5            | -                                |
| Yonkers, N. Y. ....        | 36         | 28                | 6           | -           | -            | 4                                | San Antonio, Tex. ....       | 112        | 65                | 29          | 8           | 2            | -                                |
|                            |            |                   |             |             |              |                                  | Shreveport, La. ....         | 56         | 36                | 13          | 3           | 2            | 3                                |
|                            |            |                   |             |             |              |                                  | Tulsa, Okla. ....            | 72         | 44                | 15          | 5           | 6            | 5                                |
| <b>EAST NORTH CENTRAL</b>  | 2,157      | 1,294             | 562         | 146         | 76           | 61                               |                              |            |                   |             |             |              |                                  |
| Akron, Ohio ....           | 38         | 24                | 8           | 3           | 1            | -                                | <b>MOUNTAIN</b> .....        | 474        | 271               | 129         | 28          | 14           | 13                               |
| Canton, Ohio ....          | 36         | 22                | 8           | 4           | 1            | -                                | Albuquerque, N. Mex. ....    | 58         | 25                | 21          | 4           | 1            | 2                                |
| Chicago, Ill. ....         | 580        | 328               | 142         | 48          | 27           | 11                               | Colorado Springs, Colo. .... | 34         | 21                | 10          | 1           | -            | 2                                |
| Cincinnati, Ohio ....      | 126        | 82                | 33          | 8           | 1            | 8                                | Denver, Colo. ....           | 107        | 65                | 31          | 4           | 1            | 2                                |
| Cleveland, Ohio ....       | 151        | 75                | 46          | 9           | 17           | 1                                | Las Vegas, Nev. ....         | 28         | 12                | 10          | 4           | -            | 2                                |
| Columbus, Ohio ....        | 140        | 83                | 45          | 4           | 3            | 10                               | Ogden, Utah ....             | 18         | 16                | 2           | -           | -            | -                                |
| Dayton, Ohio ....          | 100        | 65                | 28          | 2           | 3            | 2                                | Phoenix, Ariz. ....          | 98         | 49                | 25          | 7           | 7            | 4                                |
| Detroit, Mich. ....        | 265        | 160               | 63          | 20          | 10           | 5                                | Pueblo, Colo. ....           | 23         | 16                | 6           | -           | -            | -                                |
| Evansville, Ind. ....      | 35         | 25                | 8           | 1           | 1            | -                                | Salt Lake City, Utah ....    | 52         | 33                | 9           | 3           | 5            | -                                |
| Fort Wayne, Ind. ....      | 63         | 37                | 20          | 3           | -            | 2                                | Tucson, Ariz. ....           | 56         | 34                | 15          | 5           | -            | 1                                |
| Gary, Ind. ....            | 16         | 7                 | 5           | 3           | 1            | -                                |                              |            |                   |             |             |              |                                  |
| Grand Rapids, Mich. ....   | 67         | 52                | 10          | 2           | 1            | 5                                | <b>PACIFIC</b> .....         | 1,308      | 775               | 331         | 61          | 52           | 22                               |
| Indianapolis, Ind. ....    | 132        | 78                | 38          | 11          | 3            | 4                                | Berkeley, Calif. ....        | 21         | 20                | 1           | -           | -            | -                                |
| Madison, Wis. ....         | 31         | 14                | 10          | 4           | -            | 3                                | Fresno, Calif. ....          | 68         | 33                | 14          | 6           | 8            | 1                                |
| Milwaukee, Wis. ....       | 118        | 75                | 29          | 9           | 3            | 2                                | Glendale, Calif. ....        | 11         | 6                 | 3           | 2           | -            | -                                |
| Peoria, Ill. ....          | 31         | 17                | 10          | 2           | -            | -                                | Honolulu, Hawaii** ....      | 43         | 22                | 12          | 4           | 3            | 1                                |
| Rockford, Ill. ....        | 40         | 29                | 9           | 2           | -            | 3                                | Long Beach, Calif. ....      | 93         | 57                | 25          | 3           | 5            | 1                                |
| South Bend, Ind. ....      | 42         | 27                | 12          | 1           | 2            | 4                                | Los Angeles, Calif. ....     | 289        | 150               | 75          | 32          | 7            | 7                                |
| Toledo, Ohio ....          | 89         | 60                | 20          | 7           | 1            | -                                | Oakland, Calif. ....         | 67         | 40                | 14          | 6           | 5            | 1                                |
| Youngstown, Ohio ....      | 57         | 34                | 16          | 3           | 1            | 1                                | Pasadena, Calif. ....        | 37         | 27                | 10          | -           | -            | -                                |
|                            |            |                   |             |             |              |                                  | Portland, Oreg. ....         | 100        | 60                | 29          | 8           | 3            | -                                |
| <b>WEST NORTH CENTRAL</b>  | 633        | 409               | 136         | 31          | 34           | 16                               | Sacramento, Calif. ....      | 52         | 35                | 11          | 4           | 1            | -                                |
| Des Moines, Iowa ....      | 69         | 45                | 13          | 5           | 3            | -                                | San Diego, Calif. ....       | 112        | 70                | 26          | 3           | 5            | 1                                |
| Duluth, Minn. ....         | 20         | 9                 | 8           | 2           | -            | 1                                | San Francisco, Calif. ....   | 155        | 88                | 40          | 13          | 10           | 2                                |
| Kansas City, Kans. ....    | 32         | 26                | 2           | 2           | 1            | 2                                | San Jose, Calif. ....        | 47         | 30                | 12          | 4           | 1            | -                                |
| Kansas City, Mo. ....      | 111        | 71                | 32          | 2           | 5            | 2                                | Seattle, Wash. ....          | 131        | 85                | 36          | 3           | 2            | 4                                |
| Lincoln, Nebr. ....        | 30         | 18                | 7           | 3           | 1            | 2                                | Spokane, Wash. ....          | 43         | 25                | 13          | 1           | 2            | 2                                |
| Minneapolis, Minn. ....    | 74         | 48                | 12          | 3           | 7            | 3                                | Tacoma, Wash. ....           | 39         | 27                | 10          | 2           | -            | 2                                |
| Omaha, Nebr. ....          | 74         | 45                | 19          | 1           | 5            | -                                |                              |            |                   |             |             |              |                                  |
| St. Louis, Mo. ....        | 130        | 86                | 25          | 7           | 6            | 5                                | <b>TOTAL</b> .....           | 10,867     | 6,498             | 2,830       | 668         | 408          | 385                              |
| St. Paul, Minn. ....       | 65         | 45                | 11          | 3           | 4            | 1                                | Expected Number              | 11,358     | 6,832             | 2,965       | 743         | 402          | 381                              |
| Wichita, Kans. ....        | 28         | 16                | 7           | 3           | 2            | -                                |                              |            |                   |             |             |              |                                  |

\*By place of occurrence and week of filing certificate. Excludes fetal deaths.

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\*\* (Paterson, NJ) Estimate based on average percent of divisional total

\*\* (Honolulu) Estimate based on average percent of divisional total

Current Trends**Influenza — Worldwide**

**United States:** One influenza B/Hong Kong/72 isolate was recovered from a college student in South Carolina who had an influenza-like illness in late September. No other isolates of influenza viruses have been made in the last 2 weeks, and no isolations of A/New Jersey/76-like virus have been made since February 1976.

From the beginning of the National Influenza Immunization Program through October 30, a total of 9,613,029 inoculations were administered; 3,897,786 of these were administered during the week ending October 30. (See Table 1, which also illustrates the coverage rate—that is, the number of doses of influenza vaccine administered divided by the population 18 years of age and older —

TABLE 1. Influenza assessment data, October 30, 1976

| Project Area       | Population<br>18 Years &<br>Over* | Vaccines<br>Given<br>Week of<br>10/30/76 | Vaccines<br>Given<br>Cumulative | %<br>Vaccinated | Project Area       | Population<br>18 Years &<br>Over* | Vaccines<br>Given<br>Week of<br>10/30/76 | Vaccines<br>Given<br>Cumulative | %<br>Vaccinated |
|--------------------|-----------------------------------|------------------------------------------|---------------------------------|-----------------|--------------------|-----------------------------------|------------------------------------------|---------------------------------|-----------------|
| <b>REGION I</b>    | <b>7,892,160</b>                  | <b>218,142</b>                           | <b>514,389</b>                  | <b>6.52</b>     | <b>REGION VI</b>   | <b>13,049,954</b>                 | <b>162,015</b>                           | <b>628,508</b>                  | <b>4.82</b>     |
| Connecticut        | 2,010,546                         | 116,389                                  | 313,665                         | 15.60           | Arkansas           | 1,267,811                         | 6,807                                    | 26,204                          | 2.07            |
| Maine              | 649,668                           | 14,298                                   | 31,335                          | 4.82            | Louisiana          | 2,253,198                         | no report                                | 56,661                          | 2.52            |
| Massachusetts      | 3,812,358                         | 32,181                                   | 38,491                          | 1.01            | New Mexico         | 610,220                           | 25,002                                   | 34,703                          | 5.69            |
| New Hampshire      | 483,344                           | 22,715                                   | 76,190                          | 15.76           | Oklahoma           | 1,722,233                         | 33,215                                   | 283,914                         | 16.49           |
| Rhode Island       | 648,499                           | 0                                        | 0                               | 0               | Texas              | 6,002,906                         | 82,354                                   | 200,723                         | 3.34            |
| Vermont            | 287,745                           | 32,559                                   | 54,708                          | 19.01           | Houston            | 790,434                           | 2,835                                    | 6,837                           | .86             |
| <b>REGION II</b>   | <b>18,752,946</b>                 | <b>453,742</b>                           | <b>1,029,318</b>                | <b>5.49</b>     | San Antonio        | 403,152                           | 11,802                                   | 19,466                          | 4.83            |
| New Jersey         | 4,783,882                         | 87,832                                   | 127,373                         | 2.66            | Texas Total        | 7,196,492                         | 96,991                                   | 227,026                         | 3.15            |
| New York State     | 6,735,524                         | 113,194                                  | 223,988                         | 3.33            | <b>REGION VII</b>  | <b>7,450,849</b>                  | <b>214,249</b>                           | <b>580,084</b>                  | <b>7.79</b>     |
| New York City      | 5,660,043                         | 33,524                                   | 109,680                         | 1.94            | Iowa               | 1,849,583                         | 143,514                                  | 242,122                         | 13.09           |
| Puerto Rico        | 1,536,545                         | 215,000                                  | 560,000                         | 36.45           | Kansas             | 1,501,356                         | 30,984                                   | 90,459                          | 6.03            |
| Virgin Islands     | 36,952                            | 4,192                                    | 8,277                           | 22.40           | Missouri           | 3,123,290                         | no report                                | 165,089                         | 5.29            |
| <b>REGION III</b>  | <b>15,584,765</b>                 | <b>374,215</b>                           | <b>688,683</b>                  | <b>4.42</b>     | Nebraska           | 976,620                           | 39,751                                   | 82,414                          | 8.44            |
| Delaware           | 350,930                           | 7,218                                    | 9,474                           | 2.70            | <b>REGION VIII</b> | <b>3,539,378</b>                  | <b>221,232</b>                           | <b>866,951</b>                  | <b>24.49</b>    |
| D.C.               | 532,355                           | 20,847                                   | 52,439                          | 9.85            | Colorado           | 1,434,291                         | 47,302                                   | 263,362                         | 18.36           |
| Maryland           | 2,541,199                         | 75,149                                   | 107,396                         | 4.23            | Montana            | 441,150                           | 33,341                                   | 93,446                          | 21.18           |
| Pennsylvania       | 6,124,678                         | 88,087                                   | 197,537                         | 3.23            | North Dakota       | 391,336                           | 37,889                                   | 115,078                         | 29.41           |
| Allegheny Cty.     | 1,094,214                         | 58,147                                   | 111,457                         | 10.19           | South Dakota       | 425,082                           | 23,093                                   | 100,009                         | 23.53           |
| Philadelphia       | 729,788                           | 8,303                                    | 64,155                          | 8.79            | Utah               | 635,186                           | 58,148                                   | 158,519                         | 24.96           |
| Pennsylvania Total | 7,948,680                         | 154,537                                  | 373,149                         | 4.69            | Wyoming            | 212,333                           | 21,459                                   | 136,537                         | 64.30           |
| Virginia           | 3,047,915                         | 100,000                                  | 106,756                         | 3.50            | <b>REGION IX</b>   | <b>15,371,800</b>                 | <b>539,498</b>                           | <b>1,100,551</b>                | <b>7.16</b>     |
| West Virginia      | 1,163,686                         | 16,464                                   | 39,469                          | 3.39            | American Samoa     | 12,288                            | 710                                      | 710                             | 5.78            |
| <b>REGION IV</b>   | <b>20,867,791</b>                 | <b>859,728</b>                           | <b>2,147,780</b>                | <b>10.29</b>    | Arizona            | 1,129,507                         | 13,679                                   | 113,011                         | 10.01           |
| Alabama            | 2,209,956                         | 76,625                                   | 237,365                         | 10.74           | California         | 13,327,605                        | 453,838                                  | 767,538                         | 5.76            |
| Florida            | 4,680,155                         | 276,196                                  | 740,667                         | 15.83           | Guam               | 46,422                            | 6,123                                    | 10,583                          | 22.80           |
| Georgia            | 2,942,355                         | 108,396                                  | 213,391                         | 7.25            | Hawaii             | 494,719                           | 58,072                                   | 140,630                         | 28.43           |
| Kentucky           | 2,105,277                         | 127,658                                  | 204,038                         | 9.69            | Nevada             | 318,514                           | 7,076                                    | 51,357                          | 16.12           |
| Mississippi        | 1,372,569                         | 64,714                                   | 173,263                         | 12.62           | Trust Territory    | 42,745                            | no report                                | 16,722                          | 39.12           |
| North Carolina     | 3,323,501                         | 67,213                                   | 184,083                         | 5.54            | <b>REGION X</b>    | <b>4,276,506</b>                  | <b>104,575</b>                           | <b>247,121</b>                  | <b>5.78</b>     |
| South Carolina     | 1,635,030                         | 25,305                                   | 51,330                          | 3.14            | Alaska             | 182,453                           | 14,960                                   | 72,955                          | 39.99           |
| Tennessee          | 2,598,948                         | 113,621                                  | 343,643                         | 13.22           | Idaho              | 449,397                           | 21,849                                   | 38,773                          | 8.63            |
| <b>REGION V</b>    | <b>28,468,963</b>                 | <b>750,390</b>                           | <b>1,809,644</b>                | <b>6.36</b>     | Oregon             | 1,393,327                         | 36,942                                   | 61,965                          | 4.45            |
| Illinois           | 5,030,986                         | 18,456                                   | 23,916                          | .48             | Washington         | 2,251,329                         | 30,824                                   | 73,428                          | 3.26            |
| Chicago            | 2,285,559                         | no report                                | 49,928                          | 2.18            | <b>TOTAL</b>       | <b>135,255,112</b>                | <b>3,897,786</b>                         | <b>9,613,029</b>                | <b>7.11</b>     |
| Illinois Total     | 7,316,545                         | 18,456                                   | 73,844                          | 1.01            |                    |                                   |                                          |                                 |                 |
| Indiana            | 2,844,300                         | 50,873                                   | 111,397                         | 3.92            |                    |                                   |                                          |                                 |                 |
| Marion Cty.        | 509,547                           | 2,243                                    | 17,620                          | 3.46            |                    |                                   |                                          |                                 |                 |
| Indiana Total      | 3,353,847                         | 53,116                                   | 129,017                         | 3.85            |                    |                                   |                                          |                                 |                 |
| Michigan           | 5,626,347                         | 227,320                                  | 336,684                         | 5.98            |                    |                                   |                                          |                                 |                 |
| Minnesota          | 2,423,530                         | 159,352                                  | 518,453                         | 21.39           |                    |                                   |                                          |                                 |                 |
| Ohio               | 6,915,495                         | 184,179                                  | 588,161                         | 8.50            |                    |                                   |                                          |                                 |                 |
| Wisconsin          | 2,833,199                         | 107,967                                  | 163,485                         | 5.77            |                    |                                   |                                          |                                 |                 |

\*1970 U.S. Census data are used as the denominator in order to calculate influenza vaccination coverage rates at the county level within each state by age groups: 18-24, 25-44, 45-64, and 65+. More recent U.S. Census Bureau population estimates are not available by these age groups at the county level.

International Notes**Paralytic Shellfish Poisoning — New Brunswick, Canada**

Five separate instances of paralytic shellfish poisoning (PSP) occurred in the Saint John area during July 1976 (Figure 1).

The first episode on July 18 involved 3 people who ate mussels from Beaver Harbour. They suffered mild cases and were not hospitalized. The second outbreak occurred in Pocologan Harbour on July 21. A 26-year-old woman developed facial paresthesia, numbness, and drowsiness 15 to

by project area as of October 30.) The number of deaths reported temporally associated with immunization is substantially less than the number expected to be coincidentally associated. Cause of death, age, and sex characteristics of these persons reflect those expected for the high-risk groups being immunized. No deaths have been causally related to influenza immunization.

*Reported by RL Parker, DVM, State Epidemiologist, South Carolina Dept of Health and Environmental Control; National Influenza Immunization Program, CDC.*

**Worldwide:** There have been no recent outbreaks of influenza-like illness or isolations of swine influenza-like virus.

30 minutes after eating a meal of clams. Symptoms subsided without medication 6 to 9 hours after onset.

The third episode occurred on the weekend of July 24-25 when 3 adults and an 8-year-old child experienced circumoral paresthesia, "pins and needles" and numbness in extremities, weakness of hands, nausea, and vomiting 1 to 2 hours after eating clams obtained from the Lepreau Basin. All 4 were hospitalized under intensive care and

**PSP — Continued**

given supportive treatment including intravenous fluids and emetics. The 2 male patients were discharged 12 hours after admission and the woman after 36 hours. The child had no neurologic symptoms, and none of the 4 experienced respiratory problems. The fourth incident, occurring on the same weekend, involved a married couple who experienced nausea, vomiting, and numbness of the extremities after eating clams at a restaurant in Pocologan Harbour. They were seen at an emergency clinic but were not hospitalized.

**FIGURE 1.** Locations of paralytic shellfish poisoning, Saint John area, July, 1976



Finally, at 6:00 PM on July 31 in Saint John, 3 adults, 1 male and 2 females, ate a serving of clams at a local restaurant but did not become ill until the next morning when they experienced numbness and tingling, circumorally and at the fingertips. One woman had hyperreflexia. These clams had been dug prior to a ban on digging and had been frozen for later consumption.

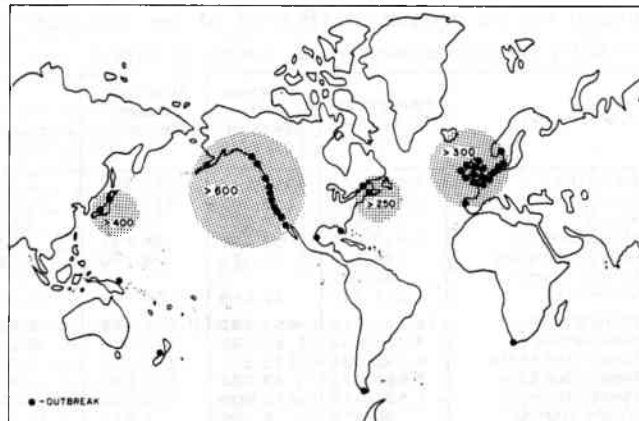
All these cases followed the ingestion of clams obtained from the Fundy Coast which had been closed earlier in the summer by the Department of Fisheries due to the very high levels of toxin found in mollusks. That Department considers 80 µg of toxin per 100 gm of clam meat a level dangerous enough to close beaches for clam digging. Clams from the Lepreau Basin currently contain about 10,000 µg of toxin per 100 gm of clam meat. Warning signs have been

posted in the areas involved, and adequate publicity has been made about the danger of eating toxic shellfish.

**Editorial Note:** Cases of PSP occurring on the Atlantic seaboard have been well-documented (1-6). This condition has also been observed on the Pacific coast (7,8). Figure 2 illustrates the world distribution of PSP for the period 1689-1970.

Reported by E Paras, MD, FH George, MD, and R Millar, MD, Saint John General Hospital; A Davies, MD, District Medical Health Officer; C Devadason, MD, Provincial Epidemiologist, New Brunswick; RM Bond, Fisheries and Marine Service; J Reid, Health Protection Br, Dept of National Health and Welfare, Ottawa; and F White, MD, Bur of Epidemiology, Laboratory Centre for Disease Control, Ottawa, in *Canada Diseases Weekly Report* 2(39):153-155, 1976.

**FIGURE 2.** World distribution of paralytic shellfish poisoning, 1689-1970\*



\*Numerals are approximate totals of human poisonings reported from the major areas affected; dots are individual outbreaks. Map modified after Halstead BW (ed): *Poisoning and Venomous Marine Animals of the World*, vol. 1. Washington, Government Printing Office, 1965.

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