CENTER FOR DISEASE CONTROL

# MMWR

## MORBIDITY AND MORTALITY WEEKLY REPORT

May 5, 1978 / Vol. 27 / No. 18



*Epidemiologic Notes and Reports*

## Nosocomial Transmission of Group Y *Neisseria meningitidis* in Cancer Patients — Connecticut

Within a 4-day period, 2 oncology patients in adjacent rooms in the Clinical Research Center at Yale-New Haven Hospital had bacteremia caused by group Y *Neisseria meningitidis.*

**Patient A:** A 52-year-old man with diffuse lymphocytic lymphoma was admitted to a 3-bed room in the Center on August 2, 1977, because of shortness of breath, productive cough, and large bilateral pleural effusions. The respiratory findings were attributed to the malignancy; serum immunoglobulin levels were depressed. On August 18, the patient developed copious, non-purulent sputum production and a temperature of 38 C. Chest X ray showed a retrocardiac density, but sputum grew only normal flora; blood cultures showed no growth. Antibiotic therapy was not started. On August 24, blood and sputum cultures were obtained again for evaluation of fever. The next day the patient had a respiratory arrest and was resuscitated; cephalothin and gentamicin therapy was begun. On August 26, group Y *N. meningitidis* sensitive to sulfadiazine was recovered from both blood and sputum cultures, and the patient was placed in a private room on respiratory isolation.

**Patient B:** A 66-year-old man with diffuse histiocytic lymphoma was hospitalized August 12-24 in the adjacent room to patient A for evaluation of obstructive jaundice. His findings were thought to be caused by the malignancy, and he was treated with cyclophosphamide and vincristine. On August 28, 4 days after discharge, the patient was readmitted to a 3-bed room at the opposite end of the floor because of the recent onset of sore throat, nausea and vomiting, and temperature of 38.9 C. Chest X ray was normal, but the white blood cell (WBC) count was 200 cells/$mm^3$ with 4% polymorphonuclear leukocytes. Oxacillin, carbenicillin, and gentamicin therapy was begun, and 6 hours after admission the patient was transferred to a private room for protective isolation. On August 30, blood cultures drawn on admission grew group Y *N. meningitidis* sensitive to sulfadiazine. Patients A and B said that they had seen each other only at a distance.

*N. meningitidis* infection had not been observed previously in patients at the Center. Because nosocomial transmission of the organism seemed possible, nasopharyngeal swab specimens were obtained on August 30 from persons in the following categories: 1) patients hospitalized in the Center at any time from August 10 to the day of sampling, 2) hospital personnel exposed to these patients during the same period, and 3) family contacts and visitors of patients with positive cultures. Specimens were plated on modified Thayer-Martin agar—chocolate agar with vancomycin, colistin, nystatin, and trimethoprim (VCNT) antimicrobic mixture (Gibco Diagnostics, Madison, Wisconsin) and IsoVitaleX Enrichment* (Baltimore Biological Laboratories, Cockeysville, Maryland); *N. meningitidis* isolates were then serogrouped.

*N. meningitidis* organisms were isolated from the nasopharynx of 5-12% of persons in each category (Table 1). However, 4 of 5 patients (patient B and 3 additional patients, patients C, D, and E) had serogroup Y isolates sensitive to sulfadiazine; 1 employee but no family contacts or visitors had this serogroup. No cases occurred after prophylaxis of patients, selected personnel, and family contacts of culture-positive patients.

**TABLE 1. Results of nasopharyngeal swab specimens for *Neisseria meningitidis*, Connecticut, August 30, 1977**

| Category | No. cultured | No. and percent positive all serogroups | No. and percent positive serogroup Y |
|---|---|---|---|
| Patients | 42 | 5 (12) | 4 (10.0) |
| Personnel | 349 | 27 (8) | 1 (0.2) |
| Family contacts and visitors | 38 | 2 (5) | 0 (0.0) |

The Center has 20 beds in 12 rooms located along a single hallway. Patients A and B and 2 asymptomatic infected patients, C and D, were located in 3 adjacent rooms at the end of the hall. Patients A and C exchanged bed locations when patient A was tranferred to a private room; therefore, these 2 patients were only briefly in the same room. Patient D was never in the same room with an affected patient. After discharge, patient B was readmitted to a 3-bed room at the opposite end of the floor for 6 hours

*Use of trade names is for identification only and does not constitute endorsement by the Public Health Service, U.S. Dept of Health, Education, and Welfare.

*N. meningitidis – continued*

until transfer; the third asymptomatic infected patient (patient E) was admitted to that room on the same day. The 5 patients said that they had not had contact with one another and doubted that they had been even as close as a few feet of one another. All infected patients were admitted after patient A became symptomatic, so they could not have been the source of the outbreak. The 1 employee infected with serogroup Y took food carts to the floor but did not deliver trays; he could not be linked to the outbreak.

To assess host and risk factors that may have influenced infection, the 5 infected patients were compared to the 8 uninfected patients located in the same 4 rooms at that time. No significant differences were noted between the 2 groups with respect to primary diagnosis, age, sex, WBCs, the number receiving chemotherapy or antibiotic therapy, or the number with upper-respiratory manipulation (i.e., IPPB or endotracheal or nasogastric tubes). In addition, infected patients actually spent less time in the same room with other infected patients than did uninfected patients.

*Reported by A Steere, MD, R Baltimore, MD, D Bruce, LPN, B Camp, PA, M Cohen, MD, K Dietz, RN, S Hannon, LPN, C Kontnick, MT, E Pantelick, RN, R Root, MD, A Strouse, MT, A von Graevenitz, MD, and the staff of the clinical microbiology laboratories, Yale University School of Medicine and the Yale-New Haven Hospital, New Haven; A Gandelman, JN Lewis, MD, State Epidemiologist, J Redys, Connecticut State Health Dept; Bur of Laboratories, and Bacterial Diseases Div, Bur of Epidemiology, CDC.*

**Editorial Note:** Eighteen percent of *N. meningitidis* infections reported by the Meningococcal Disease Surveillance Group at CDC from 1973 to 1975 were caused by serogroup Y (*1*). In contrast to other serogroups, group Y infection is often manifested by respiratory symptoms, as shown by the 2 patients reported here, rather than by meningitis or meningococcemia (*2*). This serogroup has been responsible for several outbreaks in military camps (*2,3*). Nosocomial transmission of *N. meningitidis* of any serogroup is rare and has been reported to occur only from extensive contact with an infected individual (*4*).

In the outbreak reported here, the clustering of 2 patients with *N. meningitidis* infection in adjacent rooms within a 4-day period suggested nosocomial transmission. This hypothesis was supported by finding 3 additional, asymptomatic patients infected with the implicated strain in the same or adjacent rooms. It seems likely that patient A with unrecognized meningococcal pneumonia was responsible for a heavy dispersal of organisms to patients in 3 adjacent rooms. The source of his infection is unknown. Patient B, a member of the original cluster, was readmitted with respiratory symptoms to a room at the opposite end of the hall and was probably responsible for infection of

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

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

| DISEASE | 17th WEEK ENDING | | MEDIAN | CUMULATIVE, FIRST 17 WEEKS | | |
|---|---|---|---|---|---|---|
| | April 29, 1978 | April 30, 1977† | 1973-1977†† | April 29, 1978 | April 30, 1977† | MEDIAN 1973-1977†† |
| Aseptic meningitis | 27 | 50 | 38 | 595 | 609 | 608 |
| Brucellosis | 4 | 5 | 5 | 39 | 54 | 49 |
| Chickenpox | 5,151 | 6,624 | 5,990 | 70,993 | 106,081 | 96,652 |
| Diphtheria | 1 | 6 | 6 | 28 | 34 | 89 |
| Encephalitis, Primary | 8 | 12 | 16 | 177 | 197 | 252 |
| Encephalitis, Post-Infectious | 2 | 8 | 8 | 42 | 54 | 75 |
| Hepatitis, Viral, Type B | 305 | 322 | 200 | 4,805 | 5,258 | 3,579 |
| Hepatitis, Viral, Type A | 605 | 556 | 772 | 9,133 | 10,738 | 11,790 |
| Hepatitis, Viral, Type unspecified | 182 | 154 | | 2,822 | 2,922 | |
| Malaria | 13 | 10 | 4 | 139 | 118 | 86 |
| Measles (rubeola) | 1,291 | 2,441 | 1,229 | 11,127 | 27,933 | 14,325 |
| Meningococcal infections, total | 47 | 35 | 34 | 937 | 743 | 582 |
| Civilian | 47 | 35 | 34 | 926 | 739 | 567 |
| Military | – | – | – | 11 | 4 | 15 |
| Mumps | 468 | 556 | 1,368 | 7,317 | 10,180 | 27,212 |
| Pertussis | 26 | 13 | --- | 650 | 235 | --- |
| Rubella (German measles) | 1,054 | 928 | 724 | 6,188 | 10,843 | 7,348 |
| Tetanus | – | – | – | 17 | 15 | 15 |
| Tuberculosis | 699 | 679 | 680 | 9,285 | 9,548 | 9,935 |
| Tularemia | 2 | 2 | 2 | 23 | 30 | 30 |
| Typhoid fever | 11 | 9 | 7 | 134 | 117 | 106 |
| Typhus, tick-borne (Rky. Mt. spotted fever) | 8 | 14 | 7 | 24 | 47 | 27 |
| Venereal Diseases: | | | | | | |
| Gonorrhea, Civilian | 16,346 | 16,696 | 18,598 | 298,264 | 299,334 | 303,151 |
| Gonorrhea, Military | 249 | 381 | 463 | 7,444 | 8,746 | 9,527 |
| Syphilis, primary and secondary, Civilian | 436 | 355 | 394 | 6,723 | 6,925 | 8,413 |
| Syphilis, primary and secondary, Military | 5 | 4 | 4 | 97 | 98 | 113 |
| Rabies in animals | 75 | 89 | 86 | 884 | 893 | 893 |

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

| | CUM. | | CUM. |
|---|---|---|---|
| Anthrax: N.C. 1 | 2 | Poliomyelitis, total: | – |
| Botulism: Texas 2 | 41 | Paralytic: | – |
| Congenital rubella syndrome: * | 9 | Psittacosis: Calif. 1 | 40 |
| Leprosy: Fla. 1, Calif. 2, Hawaii 1 | 36 | Rabies in man: | – |
| Leptospirosis: Del. 1, Texas 1, Nev. 3 | 16 | Trichinosis: | 9 |
| Plague: | 1 | Typhus, murine: Md. 2 | 12 |

†Delayed reports received for calendar year 1977 are used to update last year's weekly and cumulative totals.
††Medians for Gonorrhea and Syphilis are based on data for 1975-1977.
*The following delayed reports will be reflected in next week's cumulative totals: Cong. rubella syn.: N.H. +1, Trichinosis: Iowa –1 (1978), Tenn. –1 (1977)

## Table III
## Cases of Specified Notifiable Diseases: United States
*Weeks Ending April 29, 1978 and April 30, 1977 — 17th Week*

| AREA REPORTING | ASEPTIC MENINGITIS | BRUCELLOSIS | CHICKENPOX | DIPHTHERIA | | ENCEPHALITIS | | | HEPATITIS, VIRAL | | | MALARIA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Primary: Arthropod-borne and Unspecified | | Post Infectious | Type B | Type A | Type Unspecified | | |
| | 1978 | 1978 | 1978 | 1978 | CUM. 1978 | 1978 | 1977† | 1978 | 1978 | 1978 | 1978 | 1978 | CUM. 1978 |
| UNITED STATES | 27 | 4 | 5,151 | 1 | 28 | 8 | 12 | 2 | 306 | 605 | 182 | 13 | 139 |
| NEW ENGLAND | 2 | – | 521 | – | – | 1 | 1 | – | 15 | 17 | 14 | – | 7 |
| Maine* | – | – | 203 | – | – | – | – | – | – | 6 | – | – | 1 |
| New Hampshire | – | – | – | – | – | – | – | – | – | – | – | – | 1 |
| Vermont | – | – | – | – | – | – | – | – | – | 1 | 2 | – | – |
| Massachusetts | – | – | 133 | – | – | 1 | 1 | – | 2 | 4 | 10 | – | 1 |
| Rhode Island | 1 | – | 74 | – | – | – | – | – | 3 | 3 | – | – | – |
| Connecticut | 1 | – | 111 | – | – | – | – | – | 10 | 3 | 2 | – | 4 |
| MIDDLE ATLANTIC | 4 | – | 357 | 1 | 1 | 1 | – | – | 30 | 40 | 17 | 1 | 34 |
| Upstate New York | – | – | 225 | – | – | – | – | – | 9 | 13 | 6 | – | 4 |
| New York City | 2 | – | 76 | 1 | 1 | – | – | – | 9 | 13 | 7 | 1 | 16 |
| New Jersey* | 2 | – | NN | – | – | 1 | – | – | 12 | 14 | 4 | – | 4 |
| Pennsylvania | – | – | 56 | – | – | – | – | – | NA | NA | NA | – | 10 |
| EAST NORTH CENTRAL | – | – | 1,945 | – | – | 2 | 3 | – | 33 | 74 | 16 | – | 4 |
| Ohio* | – | – | 366 | – | – | – | 2 | – | 9 | 29 | – | – | – |
| Indiana | – | – | 188 | – | – | 1 | – | – | 2 | 5 | 5 | – | – |
| Illinois | – | – | 369 | – | – | – | – | – | 5 | 14 | 1 | – | 2 |
| Michigan | – | – | 561 | – | – | 1 | 1 | – | 14 | 24 | 10 | – | 1 |
| Wisconsin | – | – | 461 | – | – | – | – | – | 3 | 2 | – | – | 1 |
| WEST NORTH CENTRAL | 2 | 2 | 671 | – | – | – | – | – | 24 | 36 | 13 | – | 10 |
| Minnesota | – | – | 1 | – | – | – | – | – | 10 | 11 | – | – | 2 |
| Iowa* | – | 2 | 250 | – | – | – | – | – | 3 | 5 | 3 | – | – |
| Missouri* | 2 | – | 34 | – | – | – | – | – | 5 | 8 | 7 | – | 4 |
| North Dakota | – | – | 11 | – | – | – | – | – | – | – | – | – | – |
| South Dakota | – | – | 9 | – | – | – | – | – | 1 | 11 | 2 | – | – |
| Nebraska | – | – | 31 | – | – | – | – | – | 2 | – | 1 | – | 3 |
| Kansas | – | – | 335 | – | – | – | – | – | 3 | 1 | – | – | 1 |
| SOUTH ATLANTIC | 6 | – | 553 | – | – | 3 | – | 2 | 68 | 94 | 18 | 6 | 27 |
| Delaware | – | – | 10 | – | – | – | – | – | 4 | 1 | – | – | 1 |
| Maryland | – | – | 45 | – | – | – | – | – | 9 | 29 | 1 | 2 | 9 |
| District of Columbia | – | – | 1 | – | – | – | – | – | 1 | – | – | – | – |
| Virginia* | 2 | – | 114 | – | – | 2 | – | – | 3 | 3 | 5 | – | 4 |
| West Virginia | – | – | 232 | – | – | – | – | – | – | 7 | – | – | 1 |
| North Carolina | 2 | – | NN | – | – | 1 | – | – | 8 | 8 | 4 | 1 | 1 |
| South Carolina | – | – | 4 | – | – | – | – | – | 2 | 3 | – | – | 1 |
| Georgia | – | – | – | – | – | – | – | – | 2 | 12 | – | – | 1 |
| Florida* | 2 | – | 147 | – | – | – | – | 2 | 39 | 31 | 8 | 3 | 9 |
| EAST SOUTH CENTRAL | 3 | – | 143 | – | – | – | 4 | – | 33 | 56 | 7 | – | 2 |
| Kentucky | – | – | 65 | – | – | – | – | – | 9 | 19 | 1 | – | 1 |
| Tennessee | 3 | – | NN | – | – | – | 4 | – | 16 | 23 | 4 | – | 1 |
| Alabama* | – | – | 72 | – | – | – | – | – | 6 | 5 | 2 | – | – |
| Mississippi | – | – | 6 | – | – | – | – | – | 2 | 9 | – | – | – |
| WEST SOUTH CENTRAL | 3 | 2 | 224 | – | 1 | – | 3 | – | 14 | 81 | 20 | 1 | 8 |
| Arkansas* | – | – | 39 | – | 1 | – | 1 | – | 3 | 12 | 1 | – | – |
| Louisiana | – | – | NN | – | – | – | 2 | – | – | – | – | – | 3 |
| Oklahoma* | 1 | – | – | – | – | – | – | – | 2 | 17 | 5 | – | – |
| Texas | 2 | 2 | 185 | – | – | – | – | – | 9 | 52 | 14 | 1 | 5 |
| MOUNTAIN | – | – | 465 | – | 2 | – | – | – | 10 | 61 | 33 | – | 3 |
| Montana | – | – | 22 | – | – | – | – | – | – | 2 | – | – | – |
| Idaho | – | – | 33 | – | – | – | – | – | – | 4 | – | – | – |
| Wyoming | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Colorado | – | – | 302 | – | 1 | – | – | – | 4 | 11 | 6 | – | 1 |
| New Mexico | – | – | – | – | – | – | – | – | – | 13 | 6 | – | – |
| Arizona | – | – | NN | – | – | – | – | – | 5 | 26 | 19 | – | 1 |
| Utah | – | – | 8 | – | – | – | – | – | – | 5 | 2 | – | – |
| Nevada | – | – | 100 | – | 1 | – | – | – | 1 | – | – | – | 1 |
| PACIFIC | 7 | – | 272 | – | 24 | 1 | 1 | – | 79 | 146 | 44 | 5 | 44 |
| Washington | – | – | 234 | – | 24 | – | – | – | 5 | 17 | 6 | – | 1 |
| Oregon | – | – | – | – | – | – | – | – | 9 | 12 | 4 | – | 2 |
| California* | 7 | – | – | – | – | 1 | – | – | 59 | 103 | 34 | 5 | 39 |
| Alaska | – | – | 14 | – | – | – | 1 | – | 1 | 6 | – | – | – |
| Hawaii | – | – | 24 | – | – | – | – | – | 5 | 8 | – | – | 2 |
| Guam | NA | NA | NA | NA | – | NA | – | – | NA | NA | NA | NA | – |
| Puerto Rico | – | – | 21 | – | – | – | – | – | – | 5 | 8 | – | 2 |
| Virgin Islands* | – | – | – | – | – | – | – | – | – | – | – | – | – |

NN: Not notifiable
NA: Not available
†Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.
*The following delayed reports will be reflected in next week's cumulative totals: Asep. meng: N.J. +1; Bruc.: Iowa +1; Chickenpox: Mo. +171, Ala. +54, Calif. +136, V.I. +1; Hep. B: N.J. –3, Ohio +1, Ark. –1, Okla. –1; Hep. A: Maine –1, N.J. –7, Ohio –1, Mo. –1, Va. –1, Ark. –1, V.I. +2; Hep. unsp.: N.J. –8, Fla. –3; Malaria: Ala. +1.

## Table III-Continued
## Cases of Specified Notifiable Diseases: United States
*Weeks Ending April 29, 1978 and April 30, 1977 — 17th Week*

| REPORTING AREA | MEASLES (Rubeola) | | | MENINGOCOCCAL INFECTIONS TOTAL | | | MUMPS | | PERTUSSIS | RUBELLA | | TETANUS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1978 | CUMULATIVE | | 1978 | CUMULATIVE | | 1978 | CUM. 1978 | 1978 | 1978 | CUM. 1978 | CUM. 1978 |
| | | 1978 | 1977† | | 1978 | 1977† | | | | | | |
| UNITED STATES | 1,291 | 11,127 | 27,933 | 47 | 937 | 743 | 468 | 7,317 | 26 | 1,054 | 6,188 | 17 |
| NEW ENGLAND | 232 | 1,273 | 1,369 | 1 | 47 | 37 | 35 | 466 | – | 33 | 280 | – |
| Maine | 190 | 842 | 3 | – | 4 | 3 | 25 | 342 | – | 12 | 117 | – |
| New Hampshire | – | 10 | 415 | – | 6 | 3 | 1 | 7 | – | 7 | 69 | – |
| Vermont | 4 | 16 | 248 | – | 2 | 3 | 1 | 4 | – | 3 | 3 | – |
| Massachusetts* | 18 | 141 | 339 | 1 | 13 | 10 | 2 | 42 | – | 5 | 56 | – |
| Rhode Island | – | 4 | 6 | – | 11 | – | 1 | 12 | – | – | 1 | – |
| Connecticut* | 20 | 260 | 358 | – | 11 | 18 | 5 | 59 | – | 6 | 34 | – |
| MIDDLE ATLANTIC | 101 | 874 | 3,685 | 9 | 142 | 98 | 18 | 299 | 4 | 180 | 1,144 | – |
| Upstate New York | 58 | 586 | 1,144 | 1 | 49 | 25 | 8 | 100 | 3 | 37 | 155 | – |
| New York City | 4 | 100 | 161 | 3 | 33 | 21 | 1 | 81 | – | 3 | 28 | – |
| New Jersey | 2 | 12 | 83 | 3 | 29 | 25 | 5 | 59 | – | 104 | 763 | – |
| Pennsylvania | 37 | 176 | 2,297 | 2 | 31 | 27 | 4 | 59 | 1 | 36 | 198 | – |
| EAST NORTH CENTRAL | 553 | 4,102 | 6,168 | 1 | 79 | 79 | 188 | 2,567 | 8 | 540 | 2,503 | 1 |
| Ohio | 16 | 224 | 327 | 1 | 21 | 29 | 41 | 307 | 2 | 119 | 454 | – |
| Indiana* | 6 | 75 | 2,978 | – | 15 | 7 | 7 | 122 | 1 | 24 | 114 | 1 |
| Illinois | 39 | 388 | 739 | – | 4 | 16 | 47 | 846 | 5 | 90 | 233 | – |
| Michigan | 414 | 2,673 | 624 | – | 31 | 19 | 55 | 802 | – | 230 | 1,095 | – |
| Wisconsin | 78 | 742 | 1,500 | – | 8 | 8 | 37 | 490 | – | 77 | 607 | – |
| WEST NORTH CENTRAL | 20 | 152 | 5,226 | 3 | 35 | 42 | 41 | 1,401 | 1 | 23 | 177 | 1 |
| Minnesota | 4 | 16 | 1,029 | 1 | 5 | 18 | 1 | 12 | 1 | 4 | 14 | – |
| Iowa | 11 | 21 | 2,684 | – | 5 | 4 | 2 | 90 | – | 1 | 19 | – |
| Missouri* | – | 6 | 645 | 1 | 17 | 13 | 8 | 824 | – | 4 | 47 | – |
| North Dakota* | 5 | 72 | 8 | 1 | 1 | 1 | – | 5 | – | – | 9 | – |
| South Dakota | – | – | 28 | – | 2 | 4 | – | 5 | – | 9 | 25 | – |
| Nebraska | – | 1 | 85 | – | – | – | – | 10 | – | – | 4 | – |
| Kansas | – | 36 | 747 | – | 5 | 2 | 30 | 455 | – | 5 | 59 | 1 |
| SOUTH ATLANTIC | 214 | 2,674 | 1,795 | 18 | 257 | 167 | 26 | 369 | 5 | 73 | 572 | 2 |
| Delaware | – | 5 | 19 | 1 | 4 | 14 | – | 22 | – | 3 | 8 | – |
| Maryland | 2 | 3 | 276 | – | 11 | 11 | 1 | 44 | – | – | 2 | 1 |
| District of Columbia | – | – | 2 | – | 1 | – | – | – | – | – | 1 | – |
| Virginia | 102 | 1,809 | 910 | 2 | 34 | 9 | 18 | 73 | – | 10 | 182 | – |
| West Virginia | 87 | 527 | 68 | – | 5 | 8 | 4 | 78 | 2 | 13 | 163 | – |
| North Carolina | 1 | 50 | 29 | 3 | 51 | 41 | – | 37 | 1 | 39 | 142 | – |
| South Carolina | 1 | 149 | 115 | – | 17 | 14 | – | 11 | 1 | – | 7 | – |
| Georgia | 1 | 6 | 334 | 2 | 32 | 27 | – | 12 | 1 | – | 1 | – |
| Florida* | 20 | 125 | 42 | 10 | 102 | 43 | 3 | 92 | – | 8 | 66 | 1 |
| EAST SOUTH CENTRAL | 48 | 758 | 652 | 4 | 77 | 80 | 37 | 536 | – | 47 | 205 | 1 |
| Kentucky | 4 | 62 | 176 | 1 | 15 | 19 | 1 | 82 | – | 2 | 41 | 1 |
| Tennessee | 44 | 561 | 402 | 2 | 23 | 20 | 11 | 261 | – | 15 | 91 | – |
| Alabama* | – | 25 | 59 | – | 21 | 25 | 19 | 171 | – | 7 | 11 | – |
| Mississippi | – | 110 | 15 | 1 | 18 | 16 | 6 | 22 | – | 23 | 62 | – |
| WEST SOUTH CENTRAL | 94 | 780 | 1,550 | 5 | 134 | 136 | 98 | 1,141 | 4 | 90 | 543 | 10 |
| Arkansas | 6 | 9 | 26 | – | 13 | 9 | 70 | 509 | – | – | 56 | 1 |
| Louisiana | 42 | 359 | 56 | – | 43 | 42 | – | 37 | – | 76 | 314 | 1 |
| Oklahoma | – | 9 | 46 | 2 | 13 | 5 | – | 4 | – | 1 | 9 | 1 |
| Texas | 46 | 403 | 1,422 | 3 | 65 | 80 | 28 | 591 | 4 | 13 | 164 | 7 |
| MOUNTAIN | 3 | 109 | 1,757 | 1 | 17 | 17 | 2 | 113 | – | – | 78 | – |
| Montana | 1 | 77 | 884 | – | 1 | 2 | – | 7 | – | – | 8 | – |
| Idaho | – | 1 | 30 | – | 1 | 1 | 1 | 18 | – | – | 3 | – |
| Wyoming | – | – | 1 | – | – | 1 | – | – | – | – | – | – |
| Colorado | 1 | 13 | 372 | – | 2 | 1 | 1 | 33 | – | – | 17 | – |
| New Mexico | – | – | 199 | – | 2 | 4 | – | 7 | – | – | 3 | – |
| Arizona | – | 7 | 197 | 1 | 6 | 6 | – | 3 | – | – | 28 | – |
| Utah | – | 4 | 5 | – | 4 | 1 | – | 43 | – | – | 17 | – |
| Nevada | 1 | 7 | 69 | – | 1 | 1 | – | 2 | – | – | 2 | – |
| PACIFIC | 26 | 405 | 5,731 | 5 | 149 | 87 | 23 | 425 | 4 | 68 | 686 | 2 |
| Washington | – | 37 | 325 | – | 23 | 11 | 10 | 122 | 2 | 1 | 73 | – |
| Oregon | 11 | 119 | 123 | – | 4 | 8 | 4 | 41 | – | 8 | 54 | – |
| California | 15 | 243 | 5,220 | 5 | 116 | 49 | 8 | 243 | 2 | 59 | 557 | 2 |
| Alaska | – | 1 | 55 | – | 5 | 18 | – | 4 | – | – | 1 | – |
| Hawaii | – | 5 | 8 | – | 1 | 1 | 1 | 15 | – | – | 1 | – |
| Guam | NA | 1 | 3 | – | – | – | NA | 1 | NA | NA | – | – |
| Puerto Rico | 4 | 82 | 409 | – | 1 | – | 42 | 551 | 1 | – | 10 | 1 |
| Virgin Islands | – | 6 | 9 | – | – | – | – | 1 | – | – | 1 | – |

NA: Not available

†Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

*The following delayed reports will be reflected in next week's cumulative totals: Measles: Ind. –8, N. Dak. +3; Men. inf.: Conn. +1; Mumps: Mo. +48; Pertussis: Mo. +1; Rubella: Mass. –1, Mo. +1, N. Dak. +9, Fla. +3, Ala. +1.

## Table III-Continued
## Cases of Specified Notifiable Diseases: United States
*Weeks Ending April 29, 1978 and April 30, 1977 — 17th Week*

| REPORTING AREA | TUBERCULOSIS | | TULAREMIA | TYPHOID FEVER | | TYPHUS-FEVER TICK-BORNE (RMSF) | | VENEREAL DISEASES (Civilian Cases Only) | | | | | | RABIES IN ANIMALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | GONORRHEA | | | SYPHILIS (Pri. & Sec.) | | | |
| | 1978 | CUM. 1978 | CUM. 1978 | 1978 | CUM. 1978 | 1978 | CUM. 1978 | 1978 | CUMULATIVE 1978 | CUMULATIVE 1977† | 1978 | CUMULATIVE 1978 | CUMULATIVE 1977† | CUM. 1978 |
| UNITED STATES | 699 | 9,285 | 23 | 11 | 134 | 8 | 24 | 16,346 | 298,264 | 299,334 | 436 | 6,723 | 6,925 | 884 |
| NEW ENGLAND | 20 | 310 | – | 1 | 32 | – | – | 480 | 7,555 | 7,773 | 12 | 211 | 264 | 41 |
| Maine* | 1 | 18 | – | – | – | – | – | 46 | 584 | 616 | 1 | 4 | 8 | 39 |
| New Hampshire | – | 8 | – | – | 5 | – | – | 15 | 349 | 303 | – | 1 | 1 | – |
| Vermont | 1 | 12 | – | 1 | 1 | – | – | 17 | 193 | 202 | 1 | 1 | 4 | – |
| Massachusetts | 13 | 185 | – | – | 17 | – | – | 218 | 3,332 | 3,428 | 6 | 141 | 200 | 1 |
| Rhode Island | 2 | 19 | – | – | 4 | – | – | 41 | 533 | 591 | 1 | 7 | 3 | – |
| Connecticut | 3 | 68 | – | – | 5 | – | – | 143 | 2,564 | 2,633 | 3 | 57 | 48 | 1 |
| MIDDLE ATLANTIC | 120 | 1,598 | 1 | 1 | 14 | – | 5 | 1,827 | 33,200 | 32,814 | 68 | 927 | 1,004 | 16 |
| Upstate New York | 14 | 230 | 1 | – | 3 | – | 3 | 352 | 5,365 | 4,837 | 9 | 61 | 95 | 16 |
| New York City | 66 | 645 | – | 1 | 8 | – | – | 759 | 13,100 | 14,488 | 40 | 652 | 626 | – |
| New Jersey | 15 | 397 | – | – | 1 | – | – | 104 | 6,069 | 4,995 | 12 | 107 | 133 | – |
| Pennsylvania | 25 | 326 | – | – | 2 | – | 2 | 612 | 8,666 | 8,494 | 7 | 107 | 150 | – |
| EAST NORTH CENTRAL | 126 | 1,381 | – | – | 6 | – | – | 1,822 | 41,717 | 43,875 | 44 | 645 | 765 | 32 |
| Ohio | 23 | 258 | – | – | 1 | – | – | 256 | 10,921 | 10,718 | 8 | 142 | 199 | 3 |
| Indiana | 9 | 172 | – | – | – | – | – | 72 | 4,510 | 3,757 | 1 | 39 | 52 | 4 |
| Illinois | 50 | 496 | – | – | 1 | – | – | 672 | 12,441 | 14,854 | 31 | 386 | 401 | 3 |
| Michigan* | 39 | 395 | – | – | 4 | – | – | 649 | 10,012 | 10,213 | 3 | 58 | 79 | 1 |
| Wisconsin* | 5 | 60 | – | – | – | – | – | 173 | 3,833 | 4,333 | 1 | 20 | 34 | 21 |
| WEST NORTH CENTRAL | 20 | 317 | 7 | – | 7 | – | 1 | 997 | 14,796 | 15,562 | 20 | 176 | 158 | 214 |
| Minnesota | – | 58 | – | – | 1 | – | – | 210 | 2,705 | 2,792 | 10 | 79 | 50 | 75 |
| Iowa | 2 | 40 | – | – | 2 | – | – | 41 | 1,698 | 1,898 | 4 | 17 | 15 | 45 |
| Missouri* | 12 | 130 | 6 | – | 2 | – | – | 354 | 5,831 | 6,539 | 6 | 44 | 56 | 27 |
| North Dakota* | – | 16 | – | – | – | – | – | 20 | 317 | 276 | – | 2 | 2 | 32 |
| South Dakota | 1 | 32 | – | – | – | – | – | 56 | 576 | 415 | – | 1 | 1 | 25 |
| Nebraska | 1 | 4 | – | – | – | – | – | 116 | 1,158 | 1,316 | – | 4 | 16 | 1 |
| Kansas | 4 | 37 | 1 | – | 2 | – | 1 | 200 | 2,511 | 2,326 | – | 29 | 18 | 9 |
| SOUTH ATLANTIC | 133 | 2,018 | 2 | 1 | 12 | 6 | 12 | 4,310 | 72,578 | 72,560 | 107 | 1,802 | 2,035 | 84 |
| Delaware* | 1 | 13 | – | – | – | – | – | 38 | 1,097 | 891 | – | 3 | 13 | 1 |
| Maryland | 18 | 350 | 2 | – | 1 | – | – | 667 | 9,663 | 9,151 | 8 | 139 | 132 | – |
| District of Columbia | 2 | 107 | – | – | – | – | 1 | 329 | 4,812 | 5,001 | 8 | 145 | 231 | – |
| Virginia | 17 | 223 | – | – | 3 | 4 | 4 | 379 | 6,615 | 7,656 | 8 | 162 | 202 | 1 |
| West Virginia | 9 | 79 | – | 1 | 1 | – | – | 54 | 1,122 | 988 | – | 5 | 1 | – |
| North Carolina | 27 | 328 | – | – | – | – | 2 | 730 | 10,291 | 10,668 | 10 | 154 | 298 | 1 |
| South Carolina | 10 | 163 | – | – | – | – | 2 | 378 | 5,775 | 6,703 | 3 | 82 | 93 | 8 |
| Georgia | 19 | 251 | – | – | 2 | 2 | 3 | 729 | 13,638 | 14,084 | 29 | 439 | 368 | 63 |
| Florida | 30 | 504 | – | – | 5 | – | – | 1,006 | 18,565 | 17,418 | 41 | 673 | 697 | 10 |
| EAST SOUTH CENTRAL | 68 | 897 | 4 | – | 1 | 1 | 2 | 1,724 | 25,697 | 26,182 | 13 | 320 | 216 | 55 |
| Kentucky | 15 | 199 | 1 | – | 1 | – | – | 146 | 2,872 | 3,438 | 2 | 38 | 22 | 34 |
| Tennessee | 32 | 283 | 3 | – | – | 1 | 2 | 679 | 9,471 | 10,514 | 1 | 119 | 66 | 10 |
| Alabama | 13 | 210 | – | – | – | – | – | 436 | 7,624 | 7,346 | – | 44 | 43 | 11 |
| Mississippi | 8 | 205 | – | – | – | – | – | 463 | 5,730 | 4,884 | 10 | 119 | 85 | – |
| WEST SOUTH CENTRAL | 81 | 1,029 | 6 | 4 | 11 | 1 | 3 | 1,905 | 41,490 | 38,473 | 81 | 1,027 | 881 | 287 |
| Arkansas | 5 | 107 | 5 | – | – | 1 | 1 | 29 | 3,057 | 2,909 | 3 | 35 | 22 | 45 |
| Louisiana | 14 | 200 | 1 | – | – | – | – | 433 | 6,926 | 5,299 | 28 | 206 | 187 | 5 |
| Oklahoma | 5 | 115 | – | – | – | – | – | 187 | 3,735 | 3,611 | 2 | 36 | 24 | 70 |
| Texas | 57 | 607 | – | 4 | 11 | – | 2 | 1,256 | 27,772 | 26,654 | 48 | 750 | 648 | 167 |
| MOUNTAIN | 28 | 270 | 2 | – | 9 | – | – | 725 | 11,153 | 12,288 | 13 | 139 | 140 | 6 |
| Montana | 2 | 21 | – | – | – | – | – | 35 | 596 | 628 | – | 5 | – | – |
| Idaho | – | 10 | 2 | – | 5 | – | – | 30 | 388 | 590 | – | 1 | 3 | – |
| Wyoming | – | 4 | – | – | – | – | – | 14 | 260 | 319 | – | 3 | 2 | – |
| Colorado | 2 | 14 | – | – | 2 | – | – | 188 | 3,030 | 3,188 | 5 | 44 | 44 | – |
| New Mexico | 7 | 53 | – | – | – | – | – | 125 | 1,565 | 1,793 | 6 | 42 | 30 | 5 |
| Arizona | 12 | 132 | – | – | – | – | – | 179 | 2,831 | 3,451 | 1 | 28 | 52 | 1 |
| Utah | 2 | 11 | – | – | 1 | – | – | 47 | 671 | 735 | 1 | 4 | 4 | – |
| Nevada | 3 | 25 | – | – | 1 | – | – | 107 | 1,712 | 1,584 | – | 11 | 5 | – |
| PACIFIC | 103 | 1,465 | 1 | 4 | 42 | – | 1 | 2,556 | 50,078 | 49,807 | 78 | 1,476 | 1,462 | 149 |
| Washington* | 6 | 40 | – | 1 | 2 | – | – | 211 | 3,543 | 3,762 | NA | 49 | 56 | – |
| Oregon | 6 | 62 | – | – | 1 | – | – | 241 | 3,522 | 3,666 | 3 | 49 | 48 | 1 |
| California | 82 | 1,144 | 1 | 2 | 38 | – | 1 | 1,920 | 40,277 | 39,638 | 74 | 1,357 | 1,334 | 146 |
| Alaska | – | 16 | – | – | – | – | – | 115 | 1,526 | 1,659 | – | 5 | 10 | 2 |
| Hawaii | 9 | 203 | – | 1 | 1 | – | – | 69 | 1,310 | 1,082 | 1 | 16 | 14 | – |
| Guam | NA | 24 | – | NA | – | NA | – | NA | 49 | 91 | NA | – | 1 | – |
| Puerto Rico | 5 | 136 | – | – | – | – | – | 67 | 871 | 967 | 7 | 142 | 194 | 7 |
| Virgin Islands* | – | 1 | – | – | – | – | – | 1 | 60 | 48 | – | 4 | 1 | – |

NA: Not available

†Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.

*The following delayed reports will be reflected in next week's cumulative totals: TB: Maine +1, Mich. –2, N. Dak. –1, Del. –1, Wash. +16, V.I. +1; Typhoid fever: Wash. +1, V.I. +2; RMSF: Mo. +1; GC: Wis. –1, V.I. +4; Syphilis: V.I. +1.

# Table IV
## Deaths in 121 United States Cities*
*Week Ending April 29, 1978 — 17th Week*

| REPORTING AREA | ALL CAUSES | | | | | Pneumonia and Influenza |
|---|---|---|---|---|---|---|
| | ALL AGES | 65 Years and Over | 45-64 Years | 25-44 Years | Under 1 Year | ALL AGES |
| NEW ENGLAND | 618 | 420 | 137 | 31 | 13 | 42 |
| Boston, Mass. | 204 | 126 | 46 | 17 | 6 | 14 |
| Bridgeport, Conn. | 52 | 38 | 12 | 2 | – | 2 |
| Cambridge, Mass. | 16 | 15 | 1 | – | – | 5 |
| Fall River, Mass. | 18 | 16 | 2 | – | – | – |
| Hartford, Conn. | 38 | 22 | 12 | 2 | 1 | 2 |
| Lowell, Mass. | 26 | 19 | 6 | 1 | – | 3 |
| Lynn, Mass. | 24 | 16 | 5 | 3 | – | 2 |
| New Bedford, Mass. | 27 | 23 | 4 | – | – | 3 |
| New Haven, Conn. | 41 | 29 | 7 | – | 4 | – |
| Providence, R.I. | 59 | 38 | 17 | 3 | – | 4 |
| Somerville, Mass. | 8 | 4 | 2 | – | 1 | – |
| Springfield, Mass. | 25 | 18 | 4 | 1 | – | 3 |
| Waterbury, Conn. | 32 | 21 | 11 | – | – | 2 |
| Worcester, Mass. | 48 | 35 | 8 | 2 | 1 | 2 |
| MIDDLE ATLANTIC | 2,664 | 1,711 | 638 | 147 | 92 | 113 |
| Albany, N. Y. | 52 | 31 | 12 | 5 | – | 1 |
| Allentown, Pa. | 23 | 19 | 4 | – | – | – |
| Buffalo, N. Y. | 82 | 54 | 22 | 2 | 2 | 8 |
| Camden, N. J. | 34 | 17 | 15 | 1 | – | – |
| Elizabeth, N. J. | 31 | 18 | 10 | 2 | – | 3 |
| Erie, Pa. | 38 | 31 | 4 | 1 | 2 | 4 |
| Jersey City, N. J. | 63 | 49 | 10 | 1 | 1 | 1 |
| Newark, N. J. | 79 | 37 | 29 | 4 | 5 | 4 |
| New York City, N. Y. | 1,361 | 911 | 285 | 79 | 47 | 56 |
| Paterson, N. J. | 42 | 22 | 12 | 4 | 2 | – |
| Philadelphia, Pa. | 400 | 227 | 120 | 22 | 24 | 13 |
| Pittsburgh, Pa. | 80 | 48 | 22 | 8 | – | 7 |
| Reading, Pa. | 41 | 26 | 8 | 5 | 1 | – |
| Rochester, N. Y. | 120 | 79 | 32 | 4 | 1 | 10 |
| Schenectady, N. Y. | 20 | 13 | 6 | – | – | 2 |
| Scranton, Pa. | 20 | 14 | 6 | – | – | – |
| Syracuse, N. Y. | 84 | 50 | 18 | 6 | 5 | 1 |
| Trenton, N. J. | 28 | 21 | 6 | – | 1 | 1 |
| Utica, N. Y. | 22 | 16 | 4 | 2 | – | – |
| Yonkers, N. Y. | 44 | 28 | 13 | 1 | 1 | 2 |
| EAST NORTH CENTRAL | 2,248 | 1,330 | 605 | 134 | 91 | 82 |
| Akron, Ohio | 45 | 28 | 13 | 2 | 1 | – |
| Canton, Ohio | 43 | 29 | 10 | 3 | – | 3 |
| Chicago, Ill. | 556 | 307 | 148 | 52 | 22 | 18 |
| Cincinnati, Ohio | 154 | 89 | 44 | 6 | 6 | 6 |
| Cleveland, Ohio | 180 | 88 | 63 | 11 | 12 | 7 |
| Columbus, Ohio | 134 | 75 | 39 | 9 | 6 | 5 |
| Dayton, Ohio | 102 | 69 | 26 | 2 | 2 | 5 |
| Detroit, Mich. | 268 | 150 | 83 | 16 | 7 | 8 |
| Evansville, Ind. | 49 | 36 | 12 | 1 | – | 3 |
| †Fort Wayne, Ind. | 49 | 31 | 11 | 3 | 2 | 4 |
| Gary, Ind. | 16 | 5 | 5 | 3 | 1 | 1 |
| Grand Rapids, Mich. | 54 | 36 | 10 | 1 | 5 | 1 |
| Indianapolis, Ind. | 145 | 75 | 53 | 10 | 5 | 3 |
| Madison, Wis. | 45 | 27 | 12 | 2 | 4 | 5 |
| Milwaukee, Wis. | 139 | 96 | 28 | 6 | 2 | 6 |
| Peoria, Ill. | 37 | 23 | 7 | 1 | 3 | 2 |
| Rockford, Ill. | 41 | 23 | 10 | 2 | 3 | 3 |
| South Bend, Ind. | 35 | 24 | 9 | 1 | – | 2 |
| Toledo, Ohio | 99 | 73 | 15 | 1 | 8 | – |
| Youngstown, Ohio | 57 | 46 | 7 | 2 | 2 | – |
| WEST NORTH CENTRAL | 737 | 476 | 188 | 23 | 31 | 30 |
| Des Moines, Iowa | 46 | 31 | 6 | 5 | 4 | 3 |
| Duluth, Minn. | 19 | 13 | 5 | – | 1 | 4 |
| Kansas City, Kans. | 21 | 9 | 7 | 2 | 1 | 1 |
| Kansas City, Mo. | 128 | 77 | 32 | 6 | 9 | 4 |
| Lincoln, Nebr. | 40 | 26 | 11 | – | 1 | 2 |
| Minneapolis, Minn. | 82 | 62 | 15 | – | 3 | 5 |
| Omaha, Nebr. | 92 | 60 | 24 | 2 | 2 | 1 |
| St. Louis, Mo. | 192 | 119 | 55 | 8 | 9 | 4 |
| St. Paul, Minn. | 55 | 42 | 11 | – | – | 2 |
| Wichita, Kans. | 62 | 37 | 22 | – | 1 | 4 |
| SOUTH ATLANTIC | 1,112 | 658 | 288 | 76 | 50 | 47 |
| Atlanta, Ga. | 132 | 68 | 35 | 14 | 6 | 7 |
| Baltimore, Md. | 237 | 154 | 52 | 15 | 9 | 5 |
| Charlotte, N. C. | 42 | 24 | 13 | 3 | 1 | 1 |
| Jacksonville, Fla. | 73 | 40 | 23 | 4 | – | 4 |
| Miami, Fla. | 102 | 59 | 32 | 6 | 2 | 1 |
| Norfolk, Va. | 49 | 19 | 16 | 6 | 5 | 3 |
| Richmond, Va. | 86 | 55 | 20 | 5 | 3 | 7 |
| Savannah, Ga. | 35 | 19 | 13 | 1 | 1 | 4 |
| St. Petersburg, Fla. | 86 | 71 | 10 | 4 | 1 | 3 |
| Tampa, Fla. | 69 | 49 | 13 | 4 | – | 3 |
| Washington, D. C. | 151 | 65 | 51 | 11 | 22 | 6 |
| Wilmington, Del. | 50 | 35 | 10 | 3 | – | 3 |
| EAST SOUTH CENTRAL | 674 | 401 | 188 | 24 | 23 | 34 |
| Birmingham, Ala. | 106 | 61 | 30 | 4 | 7 | 2 |
| Chattanooga, Tenn. | 70 | 42 | 25 | 1 | 2 | 7 |
| Knoxville, Tenn. | 60 | 39 | 16 | 1 | 1 | – |
| Louisville, Ky. | 99 | 63 | 22 | 4 | 5 | 7 |
| Memphis, Tenn. | 142 | 88 | 45 | 2 | 1 | 3 |
| Mobile, Ala. | 62 | 36 | 11 | 5 | 2 | 1 |
| Montgomery, Ala. | 52 | 25 | 14 | 3 | – | 5 |
| Nashville, Tenn. | 83 | 47 | 25 | 4 | 5 | 9 |
| WEST SOUTH CENTRAL | 1,224 | 695 | 318 | 88 | 51 | 38 |
| Austin, Tex. | 39 | 27 | 9 | 3 | – | 1 |
| Baton Rouge, La. | 48 | 21 | 16 | 4 | 2 | 6 |
| Corpus Christi, Tex. | 16 | 10 | 5 | – | 1 | – |
| Dallas, Tex. | 178 | 103 | 50 | 11 | 5 | 1 |
| El Paso, Tex. | 47 | 29 | 9 | 3 | 2 | 3 |
| Fort Worth, Tex. | 77 | 48 | 13 | 6 | 4 | 1 |
| Houston, Tex. | 327 | 162 | 92 | 32 | 21 | 6 |
| Little Rock, Ark. | 68 | 43 | 14 | 4 | 3 | 7 |
| New Orleans, La. | 131 | 73 | 39 | 6 | 2 | – |
| San Antonio, Tex. | 162 | 93 | 44 | 12 | 6 | 5 |
| Shreveport, La. | 37 | 24 | 8 | 3 | 2 | 2 |
| Tulsa, Okla. | 94 | 62 | 19 | 4 | 3 | 6 |
| MOUNTAIN | 506 | 312 | 123 | 34 | 21 | 25 |
| Albuquerque, N. Mex. | 55 | 23 | 17 | 12 | 1 | 6 |
| Colorado Springs, Colo. | 26 | 21 | 4 | 1 | – | 5 |
| Denver, Colo. | 100 | 57 | 27 | 6 | 5 | 4 |
| Las Vegas, Nev. | 28 | 13 | 12 | 2 | – | 1 |
| Ogden, Utah | 15 | 12 | 2 | 1 | – | – |
| Phoenix, Ariz. | 130 | 87 | 28 | 4 | 7 | 6 |
| Pueblo, Colo. | 25 | 17 | 4 | 2 | 2 | 2 |
| Salt Lake City, Utah | 49 | 33 | 10 | 2 | 4 | 1 |
| Tucson, Ariz. | 78 | 49 | 19 | 4 | 2 | – |
| PACIFIC | 1,696 | 1,085 | 408 | 91 | 56 | 42 |
| Berkeley, Calif. | 12 | 5 | 5 | 1 | 1 | – |
| Fresno, Calif. | 62 | 41 | 12 | 3 | 4 | – |
| Glendale, Calif. | 26 | 22 | 4 | – | – | 1 |
| Honolulu, Hawaii | 52 | 25 | 21 | 4 | – | – |
| Long Beach, Calif. | 98 | 63 | 21 | 6 | 5 | 4 |
| Los Angeles, Calif. | 547 | 364 | 120 | 32 | 16 | 18 |
| Oakland, Calif. | 88 | 59 | 22 | 4 | 2 | 2 |
| Pasadena, Calif. | 29 | 23 | 6 | – | – | 1 |
| Portland, Oreg. | 126 | 82 | 32 | 5 | 4 | 1 |
| Sacramento, Calif. | 61 | 30 | 23 | 6 | – | 2 |
| San Diego, Calif. | 119 | 66 | 34 | 6 | 7 | 3 |
| San Francisco, Calif. | 151 | 85 | 37 | 13 | 9 | 1 |
| San Jose, Calif. | 85 | 56 | 17 | 4 | 2 | 2 |
| Seattle, Wash. | 137 | 90 | 34 | 5 | 2 | 3 |
| Spokane, Wash. | 63 | 47 | 10 | 1 | 3 | 4 |
| Tacoma, Wash. | 40 | 27 | 10 | 1 | 1 | – |
| TOTAL | 11,479 | 7,088 | 2,893 | 648 | 428 | 453 |
| Expected Number | 11,153 | 6,827 | 2,878 | 682 | 413 | 419 |

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

†Data not available: figures are estimates based on average percent of regional total

The Morbidity and Mortality Weekly Report, circulation 78,000, is published by the Center for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

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*N. meningitidis — continued*

a patient in that room. In contrast to past experience, affected patients apparently did not have close contact. Thus, airborne transmission of the organism seems likely, but droplet spread or chance association is also possible.

Respiratory isolation is generally recommended for hospitalized patients with suspected *N. meningitidis* infection and may be particularly important for patients with meningococcal pneumonia.

*References*

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## *International Notes*

### Smallpox Surveillance — Worldwide

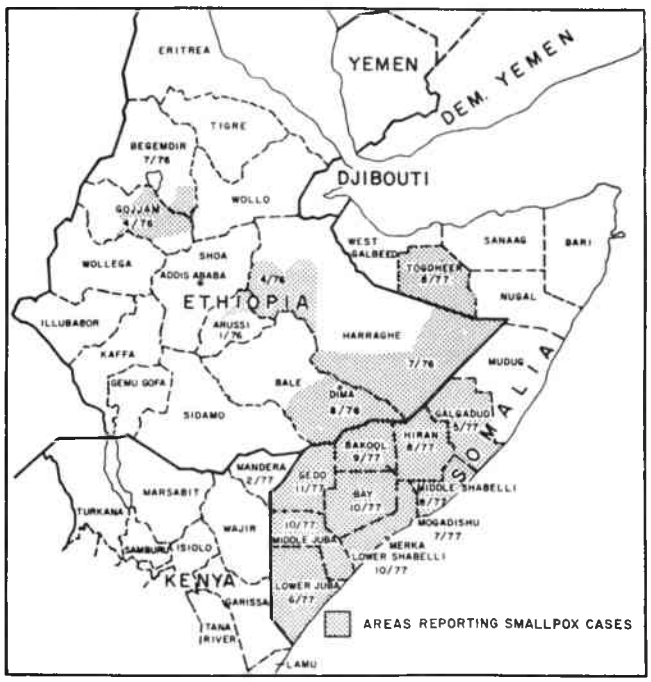
As of April 14, 1978, no cases of smallpox have been reported to the World Health Organization (WHO) from anywhere in the world since the last case had onset of rash on October 26, 1977, in Merka town, Somalia. However, a total of 2 years of effective surveillance must elapse before this last endemic area can be confirmed to be smallpox-free.

Worldwide, since January 1, 1976, smallpox cases have been detected only in certain areas of Ethiopia, Kenya, and Somalia (Figure 1). One year and 9 months has elapsed since cases were detected in Ethiopia; 1 year and 1 month has elapsed since 5 cases were detected in Kenya after an importation from Somalia; and 6 months has passed since the last case was found in Somalia.

With the apparent interruption of transmission of the disease on a global basis, smallpox activities are being directed toward promptly certifying and providing authoritative endorsement of this historic event. In January 1978 the Executive Board of WHO endorsed the recommendations of a consultant group on worldwide certification of smallpox eradication which met in October 1977. Recognizing that this certification is based on verifying that 2 years has elapsed with no case of smallpox being detected by a surveillance system which would have detected any case had it occurred, the recommendations called for the establishment of a Global Commission. This independent group of experts is to monitor and review the following steps to be undertaken in 1978 and 1979: (1) certification by international commissions in the 15 countries not yet visited by commissions; (2) special documentation or visits to be required for 16 countries; (3) the request for statements from other countries declaring their smallpox-free status.

If no more cases of smallpox are detected, the countries of Somalia, Ethiopia, Djibouti, Kenya, Yemen, and Democratic Yemen will be eligible for certification in October 1979. These will be the last of the 15 countries to be certified by an international commission, and priority attention is being given to surveillance in these areas.

*FIGURE 1. Eastern Africa: The world's last known smallpox foci by area and dates of last cases, as of April 14, 1978*




*Reported by the World Health Organization in the Weekly Epidemiological Record 53:97-99, 108, 1978.*

### Quarantine Measures

The following changes should be made in the *Supplement — Health Information for International Travel,* MMWR Vol. 26, August 1977:

**BULGARIA**

Smallpox — Under code delete >6 mos. Insert >1 yr.

**CENTRAL AFRICAN REPUBLIC**

Change name to CENTRAL AFRICAN EMPIRE.

**CHINA, PEOPLE'S REPUBLIC OF**

Delete note.

Cholera — Change code to II. Insert: A Certificate is required ALSO from travelers arriving or transiting from:

Africa: Algeria; Angola; Benin; Cameroon, United Republic of; Cape Verde; Comoros; Ghana; Kenya; Liberia; Malawi; Morocco; Mozambique; Nigeria; Rhodesia; Upper Volta; Yemen

Asia: Bangladesh, Burma, Democratic Kampuchea, Gaza Strip, India, Indonesia, Jordan, Malaysia, Nepal, Philippines, Singapore, Sri Lanka, Syrian Arab Republic, Thailand, Vietnam

Europe: Portugal, Spain

Yellow fever — Insert code II. Insert: A Certificate is required ALSO required from travelers arriving or transiting from:

Africa: Angola; Benin; Burundi; Cameroon, United Republic of; Central Africa Empire; Chad; Congo; Djibouti; Equatorial Guinea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Ivory Coast; Liberia; Mali; Niger; Rwanda; Senegal; Sierra Leone; Somalia; Sudan; Togo; Uganda; Tanzania, United Republic of; Upper Volta; Zaire

*Quarantine Measures — continued*

Americas: Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Surinam, Venezuela

**COLOMBIA**
Smallpox — Change code to II.

**GERMANY, FEDERAL REPUBLIC OF (WEST)**
Smallpox — Delete note. Insert: A Certificate is required ALSO from air travelers who within the preceding 14 days have been in: Africa: Ethiopia, Somalia

**GUINEA-BISSAU**
Cholera — Delete code II. Insert: none.

**HONDURAS**
Smallpox — Delete note Insert: A Certificate is required ALSO from travelers who within the preceding 14 days have been in a country any part of which is infected.

**INDIA**
Yellow fever — Insert: A Certificate is required ALSO from travelers arriving from all countries any part of which is infected. Africa: Delete Central African Republic. Insert Central African Empire.

**INDONESIA**
Yellow fever — Insert: A Certificate is required ALSO from travelers arriving from countries in the endemic zones (see pp. 60-61).

**ISRAEL**
Smallpox — Africa: Insert: Kenya, Somalia
Asia: Delete all information.

**ITALY**
Cholera — Delete all information. Insert none.
Smallpox — Africa: Insert Kenya.

**JAMAICA**
Smallpox — Under code insert >1 yr. Africa: Delete Afars and the Issas, French Territory of. Insert Djibouti.

**JORDAN**
Smallpox — Change code to II. Insert: A Certificate is required ALSO from travelers who within the preceding 14 days have been in a country any part of which is infected. Travelers passing through Jordan to enter Saudi Arabia must satisfy Saudi Arabia's requirements on entry to Jordan.

**KUWAIT**
Cholera — Delete code II. Insert none.

**LAOS**
Change name to LAO PEOPLE'S DEMOCRATIC REPUBLIC.

**LEBANON**
Smallpox — Delete all information. Insert code II.

**LIBYAN ARAB REPUBLIC**
Change name to Libyan Arab Jamahiriya.

**MONTSERRAT**
Yellow fever — Undert code insert >1 yr.

**MOZAMBIQUE**
Cholera — Delete all information. Insert code I.

**REUNION**
Smallpox — Delete all information. Insert code II. Insert: A Certificate is required ALSO from travelers who within the preceding 14 days have been in a country any part of which is infected.

**SAMOA, AMERICAN**
Yellow fever — Insert: A Certificate is required ALSO from travelers who within the preceding 7 days have been in a country any part of which is infected.

## Errata, Vol. 27

**No. 14, p121** In the article "Meningococcal Meningitis—Alaska, 1976-1977," first paragraph, there was a case of meningococcal meningitis due to group W135, not group W138, as written.

**No. 16, p138** The credits for the article, "Decontamination of CPR Training Mannequins," should read as follows: JE Conte, Jr, MD, RK Ockner, MD, School of Medicine, University of California, San Francisco; Phoenix Laboratories Div, Bur of Epidemiology, CDC.

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