CENTER FOR DISEASE CONTROL

# Morbidity and Mortality

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WEEKLY REPORT

For Week Ending March 31, 1973



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

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## EPIDEMIOLOGIC NOTES AND REPORTS
## TUBERCULOSIS – North Dakota

On Sept. 1, 1972, a 2-year-old Indian boy from Twin Buttes, North Dakota, was diagnosed as having active primary tuberculosis. In view of the boy's close contact with his grandmother, she was brought in for examination and was diagnosed on September 14 as having moderately advanced active tuberculosis, confirmed bacteriologically.

The 73-year-old grandmother had had a positive tuberculin test and an abnormal chest X-ray since October 1969, but multiple sputum specimens were negative. X-rays taken on follow-up examinations in 1970 and 1971 had showed progressive change, but a definitive diagnosis had not been established previously. She had been a known diabetic since 1953.

Investigation of other family members and contacts of these patients revealed 2 grandchildren, ages 7 and 4, and another child contact, age 5, with active primary tuberculosis. In addition, 3 other grandchildren, 2 daughters, and a son-in-law had positive skin tests. The patients with active primary tuberculosis and those persons with a positive skin test were placed on preventive treatment with isoniazid. The mother of the 1st case, who had a negative skin test, was also given isoniazid. Further investigation revealed that another grandchild and another daughter who lived most of the year

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

| DISEASE | 13th WEEK ENDING | | MEDIAN 1968-1972 | CUMULATIVE, FIRST 13 WEEKS | | |
|---|---|---|---|---|---|---|
| | March 31, 1973 | April 1, 1972 | | 1973 | 1972 | MEDIAN 1968-1972 |
| Aseptic meningitis | 38 | 31 | 28 | 457 | 426 | 377 |
| Brucellosis | 2 | 6 | 5 | 21 | 28 | 27 |
| Chickenpox | 5,953 | 3,960 | – – – | 70,860 | 49,851 | – – – |
| Diphtheria | 3 | 1 | 2 | 59 | 26 | 38 |
| Encephalitis, primary: | | | | | | |
| Arthropod-borne and unspecified | 27 | 16 | 16 | 228 | 190 | 251 |
| Encephalitis, post-infectious | 6 | 6 | 6 | 50 | 60 | 79 |
| Hepatitis, serum (Hepatitis B) | 164 | 166 | 158 | 1,812 | 2,421 | 1,669 |
| Hepatitis, infectious (Hepatitis A) | 983 | 1,188 | 1,142 | 12,737 | 14,497 | 14,044 |
| Malaria | 4 | 24 | 56 | 56 | 390 | 606 |
| Measles (rubeola) | 1,094 | 1,178 | 1,178 | 9,082 | 10,422 | 10,418 |
| Meningococcal infections, total | 51 | 28 | 61 | 442 | 457 | 885 |
| Civilian | 49 | 27 | 57 | 428 | 438 | 804 |
| Military | 2 | 1 | 9 | 14 | 19 | 92 |
| Mumps | 2,064 | 2,184 | 2,801 | 25,277 | 27,582 | 33,393 |
| Rubella (German measles) | 1,386 | 954 | 1,980 | 9,454 | 8,747 | 14,263 |
| Tetanus | 2 | 3 | 1 | 15 | 21 | 21 |
| Tuberculosis, new active | 773 | 663 | – – – | 7,563 | 7,782 | – – – |
| Tularemia | 3 | – | 1 | 19 | 27 | 24 |
| Typhoid fever | 90 | 7 | 5 | 239 | 65 | 57 |
| Typhus, tick-borne (Rky. Mt. spotted fever) | 1 | – | 1 | 7 | 12 | 4 |
| Venereal Diseases: | | | | | | |
| Gonorrhea | 15,557 | 14,033 | – – – | 188,333 | 167,044 | – – – |
| Syphilis, primary and secondary | 552 | 537 | – – – | 6,759 | 5,717 | – – – |
| Rabies in animals | 101 | 107 | 101 | 793 | 1,027 | 966 |

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

| | Cum. | | Cum. |
|---|---|---|---|
| Anthrax: | 1 | Poliomyelitis, total: | – |
| Botulism: | – | Paralytic: | – |
| Congenital rubella syndrome:* | 7 | Psittacosis:* | 3 |
| Leprosy:* Calif. – 1, Hawaii – 6, Tex. – 1 | 33 | Rabies in man: | – |
| Leptospirosis: | 10 | Trichinosis: Calif. – 1, NYC – 4 | 31 |
| Plague: | – | Typhus, murine: | 5 |

*Delayed reports: Congenital rubella syndrome: (1972) Tex. 1
Leprosy: Guam 1
Psittacosis: (1972) Tex. 1

## TUBERCULOSIS – Continued

in California and Minnesota, respectively, had spent the summer in North Dakota with this family. Skin tests performed on these 2 contacts in their respective states were positive; neither was placed on isoniazid.

*(Reported by James R. Amos, M.D., State Health Officer, Kenneth Mosser, Director, Division of Disease Control, and Fred Heer, Program Representative, Tuberculosis Control, North Dakota State Department of Health; and David F. Henderson, M.D., Director, Medical Services, Minni-Tohe Health Center, Division of Indian Health, New Town.)*

### Editorial Note

This small outbreak demonstrates the focal nature of tuberculosis transmission in the United States today. Most exposure to tuberculosis occurs within the family or household setting. For this reason, CDC has emphasized the importance of prompt examination and preventive treatment for contacts of active cases rather than unproductive mass screening programs. In 1972 the yield of cases from examination of household contacts was 20.3/1,000 compared with an overall national case rate of 15.8/100,000. For household contacts under 15 years of age the rate was 34.5/1,000 *(1)*. It is especially important to search for source cases among contacts of children with primary tuberculosis.

This episode also illustrates the consequences of failing to make a definitive diagnosis in a tuberculosis suspect and of failing to give preventive treatment to persons at high risk. Abnormal chest X-ray and diabetes both are risk factors listed in the joint statement on preventive treatment for tuberculosis by the American Thoracic Society, National Tuberculosis and Respiratory Disease Association, and CDC *(2)*. All of these instances of primary tuberculosis and of tuberculous infection might have been averted if the grandmother had received treatment before her disease became infectious.

### References

1. Center for Disease Control: Tuberculosis Program Reports–provisional data. June 1972

2. American Thoracic Society, National Tuberculosis and Respiratory Disease Association, Center for Disease Control: Preventive treatment of tuberculosis–a joint statement. Am Rev Resp Dis 104:460-463, 1971

## RUBELLA – Virginia, North Carolina, Mississippi, Tennessee, Colorado

Through the 12th week of 1973, a total of 8,056 cases of rubella had been reported nationally. This represents an increase of 263 cases over the comparable period in 1972. Several outbreaks among college students have been reported to CDC; 5 are summarized below.

**Virginia**: Between March 5 and 22, there were 20 cases of rubella among 12,534 students at the University of Virginia in Charlottesville, Albemarle County. All students had the typical rash of rubella, and 11 of 18 (61%) on whom histories were available had arthralgia or arthritis. Seroconversion to the rubella HAI test was documented in 1 coed in whom paired sera have been studied. The attack rate in females was 2.1 times greater than in males. In comparison with a control group of students, there were significantly more students with rubella who had had specific contacts with students from other universities in the period 2-3 weeks prior to illness. A survey of practicing pediatricians in Charlottesville and of schools in Albemarle County revealed only 4 possible cases of rubella in 1973, all in patients in the post-pubertal age group. Distribution of rubella vaccine in Albemarle County has been sufficient to immunize greater than 99% of children under 13 years of age.

The University has embarked on a program of intensified case finding and selective serologic screening of female students. No mass immunization campaigns have been initiated.

*(Reported by James Camp, M.D., Director, Student Health Department, University of Virginia, Charlottesville; George Moore, M.D., Director, Albemarle County Health Department; Karl A. Western, M.D., State Epidemiologist, Virginia State Department of Health; and an EIS Officer.)*

**North Carolina**: A survey of 32 colleges and universities in North Carolina revealed that 3 institutions have had outbreaks of rubella this year. Elon College (14 cases) and High Point College (25 cases) had attack rates of 2% and 2.5%, respectively. The University of North Carolina in Chapel Hill (enrollment 19,160) has reported 376 cases of rubella, 13 of which were confirmed serologically. The attack rate in females was 1.6 times greater than in males. A telephone survey of pediatric facilities at the University of North Carolina Medical School and of pediatricians in Chapel Hill revealed only 1 case of rubella (in an adolescent) in 1973.

*(Reported by Martin P. Hines, D.V.M., State Epidemiologist, and J. Newton MacCormack, M.D., Chief, Communicable Disease Control Section, North Carolina State Board of Health.)*

**Mississippi**: The University of Mississippi in Oxford, a campus of 7,376 students, has reported 35 cases of rubella in the past 3 weeks. The city of Oxford has an 82% immunity level in 1- to 9-year-old children principally via rubella vaccination. Investigation by local and state health officials has failed to reveal significant rubella activity among preadolescents in Oxford.

*(Reported by D. L. Blakey, M.D., State Epidemiologist, Mississippi State Board of Health; A. Eugene Lee, M.D., Director, Student Health Service, University of Mississippi; E. V. Bramlett, M.D., Director, Lafayette County Health Department; and an EIS Officer.)*

**Tennessee**: During February and March, approximately 70 cases of rubella were identified at Memphis State University in Memphis (enrollment 19,323). A distinct clustering of cases occurred in early February, and registration for the spring semester in mid-January was perhaps the setting of a common exposure for many students. Apparent 3rd-generation cases have been identified in the outbreak. A survey of coeds at the University showed that 85% were immune by rubella HAI testing. Surveillance is continuing for rubella in the city of Memphis as well as on the University campus.

*(Reported by Robert H. Hutcheson, Jr., M.D., State Epidemiologist, Tennessee Department of Public Health; Beverly Ray, M.D., Director, Student Health, Memphis State University; Robert Rentdorff, M.D., Director, Communicable Disease Section, Shelby County Health Department; and an EIS Officer.)*

**Colorado**: Three universities have reported rubella outbreaks during 1973. The University of North Colorado in Greeley (7,413 students) and the University of Colorado in Boulder (31,802 students) have each reported approximately 35 cases of rubella from late January through mid-March. Rubella was

*(Continued on page 115)*

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 31, 1973 AND APRIL 1, 1972 (13th WEEK)

| AREA | ASEPTIC MENINGITIS | BRUCELLOSIS | CHICKENPOX | DIPHTHERIA | | ENCEPHALITIS | | | HEPATITIS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Primary including unspec. cases | | Post Infectious | Serum (Hepatitis B) | Infectious (Hepatitis A) | |
| | 1973 | 1973 | 1973 | 1973 | Cum. 1973 | 1973 | 1972 | 1973 | 1973 | 1973 | 1972 |
| UNITED STATES | 38 | 2 | 5,953 | 3 | 59 | 27 | 16 | 6 | 164 | 983 | 1,188 |
| NEW ENGLAND | 1 | – | 686 | – | 2 | 1 | 1 | 1 | 5 | 53 | 80 |
| Maine * | – | – | 12 | – | – | – | – | – | 1 | 3 | 12 |
| New Hampshire * | – | – | 33 | – | – | – | – | – | – | 4 | – |
| Vermont | – | – | 55 | – | – | – | – | – | – | 4 | 9 |
| Massachusetts | – | – | 354 | – | – | – | 1 | – | – | 23 | 43 |
| Rhode Island | – | – | 70 | – | 2 | – | – | – | 1 | 8 | 2 |
| Connecticut | 1 | – | 162 | – | – | 1 | – | 1 | 3 | 11 | 14 |
| MIDDLE ATLANTIC | 5 | – | 330 | – | – | 4 | 7 | – | 49 | 162 | 177 |
| Upstate New York | 2 | – | 6 | – | – | – | – | – | 17 | 48 | 29 |
| New York City | 1 | – | 183 | – | – | 3 | – | – | 10 | 23 | 48 |
| New Jersey | 1 | – | NN | – | – | – | 4 | – | 8 | 42 | 72 |
| Pennsylvania | 1 | – | 141 | – | – | 1 | 3 | – | 14 | 49 | 28 |
| EAST NORTH CENTRAL | 7 | 1 | 2,449 | – | – | 9 | 1 | – | 22 | 154 | 210 |
| Ohio | – | 1 | 359 | – | – | 3 | 1 | – | 1 | 47 | 33 |
| Indiana | 4 | – | 262 | – | – | – | – | – | – | 22 | 10 |
| Illinois | 1 | – | – | – | – | 1 | – | – | 5 | 32 | 69 |
| Michigan | 2 | – | 597 | – | – | 5 | – | – | 13 | 51 | 87 |
| Wisconsin | – | – | 1,231 | – | – | – | – | – | 3 | 2 | 11 |
| WEST NORTH CENTRAL | – | – | 762 | – | 6 | 3 | – | 2 | 4 | 63 | 43 |
| Minnesota | – | – | 45 | – | – | – | – | 1 | 1 | 6 | 7 |
| Iowa | – | – | 612 | – | – | 2 | – | 1 | 2 | 36 | 7 |
| Missouri | – | – | 23 | – | – | – | – | – | – | 12 | 17 |
| North Dakota | – | – | 48 | – | – | – | – | – | – | – | 2 |
| South Dakota | – | – | 2 | – | 6 | – | – | – | – | 7 | – |
| Nebraska | – | – | 12 | – | – | – | – | – | 1 | – | 4 |
| Kansas | – | – | 20 | – | – | 1 | – | – | – | 2 | 6 |
| SOUTH ATLANTIC | 10 | – | 489 | – | – | 2 | 1 | 1 | 13 | 125 | 149 |
| Delaware | – | – | 23 | – | – | – | – | – | 1 | 2 | 3 |
| Maryland | – | – | 62 | – | – | – | – | – | 3 | 15 | 22 |
| District of Columbia | – | – | 5 | – | – | – | – | – | – | 2 | – |
| Virginia * | 1 | – | 41 | – | – | – | – | – | 2 | 9 | 37 |
| West Virginia | 1 | – | 286 | – | – | – | – | 1 | – | 3 | 5 |
| North Carolina | 2 | – | NN | – | – | – | 1 | – | 2 | 23 | 26 |
| South Carolina | – | – | 70 | – | – | – | – | – | – | 6 | 7 |
| Georgia | 1 | – | 2 | – | – | 1 | – | – | – | 16 | 3 |
| Florida | 5 | – | – | – | – | 1 | – | – | 5 | 49 | 46 |
| EAST SOUTH CENTRAL | 2 | – | 124 | – | – | 1 | – | 1 | 5 | 65 | 71 |
| Kentucky | 1 | – | 71 | – | – | – | – | – | – | 23 | 21 |
| Tennessee | 1 | – | NN | – | – | – | – | – | 5 | 33 | 38 |
| Alabama | – | – | 39 | – | – | 1 | – | – | – | 7 | 6 |
| Mississippi | – | – | 14 | – | – | – | – | 1 | – | 2 | 6 |
| WEST SOUTH CENTRAL | 7 | 1 | 551 | 1 | 2 | 1 | 1 | – | 11 | 121 | 138 |
| Arkansas * | – | – | 83 | – | – | – | – | – | 2 | 4 | 5 |
| Louisiana * | 6 | – | NN | – | – | 1 | – | – | 4 | 24 | 12 |
| Oklahoma * | – | – | 93 | – | – | – | – | – | – | 17 | 12 |
| Texas* | 1 | 1 | 375 | 1 | 2 | – | 1 | – | 5 | 76 | 109 |
| MOUNTAIN | – | – | 148 | – | 1 | – | – | – | 5 | 25 | 49 |
| Montana | – | – | 23 | – | – | – | – | – | – | 1 | 6 |
| Idaho | – | – | – | – | – | – | – | – | – | 3 | 7 |
| Wyoming | – | – | 27 | – | – | – | – | – | – | 1 | 1 |
| Colorado | – | – | 55 | – | – | – | – | – | 1 | 12 | 19 |
| New Mexico | – | – | 38 | – | 1 | – | – | – | – | 7 | 4 |
| Arizona * | – | – | – | – | – | – | – | – | – | 1 | 7 |
| Utah | – | – | – | – | – | – | – | – | 4 | – | 5 |
| Nevada | – | – | 5 | – | – | – | – | – | – | – | – |
| PACIFIC | 6 | – | 414 | 2 | 48 | 6 | 5 | 1 | 50 | 215 | 271 |
| Washington | – | – | 358 | 2 | 43 | 1 | – | – | 4 | 24 | 30 |
| Oregon | – | – | 1 | – | 3 | – | – | – | 5 | 22 | 20 |
| California | 6 | – | – | – | 2 | 5 | 5 | 1 | 40 | 164 | 212 |
| Alaska | – | – | 22 | – | – | – | – | – | 1 | 4 | 8 |
| Hawaii | – | – | 33 | – | – | – | – | – | – | 1 | 1 |
| Guam * | – | – | – | – | – | – | – | – | – | – | – |
| Puerto Rico | – | – | 16 | – | – | – | – | – | – | 7 | 27 |
| Virgin Islands | – | – | – | – | – | – | – | – | – | – | 1 |

*Delayed reports: Aseptic meningitis: Guam 1
Chickenpox: Me. 35, N.H. 43, Ark. 8, Guam 11
Diphtheria: (1972) Tex. 1
Hepatitis B: Ark. 3, La. 2
Hepatitis A: Me. 3. Va. delete 1, Ark. 12, La. delete 3, Okla. delete 1, Ariz. 3, Guam 2

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 31, 1973 AND APRIL 1, 1972 (13th WEEK) – Continued

| AREA | MALARIA | | MEASLES (Rubeola) | | | MENINGOCOCCAL INFECTIONS, TOTAL | | | MUMPS | | RUBELLA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1973 | Cum. 1973 | 1973 | Cumulative 1973 | Cumulative 1972 | 1973 | Cumulative 1973 | Cumulative 1972 | 1973 | Cum. 1973 | 1973 | Cum. 1973 |
| UNITED STATES | 4 | 56 | 1,094 | 9,082 | 10,422 | 51 | 442 | 457 | 2,064 | 25,277 | 1,386 | 9,454 |
| NEW ENGLAND | – | 4 | 367 | 3,516 | 743 | 1 | 21 | 21 | 90 | 1,070 | 153 | 915 |
| Maine* | – | – | – | 11 | 100 | – | – | 3 | 1 | 53 | – | 29 |
| New Hampshire* | – | – | 18 | 542 | 91 | – | 3 | – | 6 | 101 | 3 | 13 |
| Vermont | – | 2 | 16 | 75 | 68 | – | 2 | – | 7 | 149 | 1 | 10 |
| Massachusetts* | – | – | 268 | 1,834 | 99 | – | 7 | 10 | 43 | 416 | 114 | 523 |
| Rhode Island | – | – | 14 | 265 | 101 | – | 1 | 6 | 1 | 94 | 5 | 47 |
| Connecticut | – | 2 | 51 | 789 | 284 | 1 | 8 | 2 | 32 | 257 | 30 | 293 |
| MIDDLE ATLANTIC | – | 7 | 96 | 767 | 540 | 6 | 64 | 52 | 254 | 2,597 | 288 | 1,256 |
| Upstate New York | – | 4 | 28 | 190 | 50 | 3 | 22 | 14 | NN | NN | 66 | 120 |
| New York City | – | 1 | 52 | 431 | 103 | – | 13 | 11 | 172 | 1,622 | 21 | 110 |
| New Jersey | – | 1 | 1 | 67 | 365 | 1 | 14 | 16 | 30 | 507 | 201 | 877 |
| Pennsylvania | – | 1 | 15 | 79 | 22 | 2 | 15 | 11 | 52 | 468 | – | 149 |
| EAST NORTH CENTRAL | – | 6 | 485 | 2,741 | 3,912 | 5 | 44 | 61 | 522 | 6,941 | 263 | 2,048 |
| Ohio | – | 2 | 11 | 126 | 138 | 2 | 25 | 20 | 78 | 1,077 | 34 | 190 |
| Indiana | – | 1 | 29 | 251 | 691 | – | 1 | 9 | 19 | 516 | 69 | 462 |
| Illinois | – | 2 | 41 | 660 | 1,286 | 2 | 7 | 14 | 80 | 1,337 | 29 | 236 |
| Michigan | – | 1 | 376 | 1,239 | 710 | 1 | 11 | 15 | 190 | 1,811 | 55 | 535 |
| Wisconsin | – | – | 28 | 465 | 1,087 | – | – | 3 | 155 | 2,200 | 76 | 625 |
| WEST NORTH CENTRAL | – | 2 | 18 | 227 | 372 | 1 | 35 | 38 | 192 | 2,732 | 89 | 647 |
| Minnesota | – | – | – | 14 | 12 | – | – | 7 | 3 | 50 | 44 | 116 |
| Iowa | – | – | 10 | 149 | 202 | – | 5 | – | 171 | 1,861 | 7 | 118 |
| Missouri | – | – | – | 12 | 109 | 1 | 18 | 8 | 1 | 312 | 5 | 207 |
| North Dakota | – | 1 | – | 28 | 30 | – | 3 | – | – | 33 | 4 | 34 |
| South Dakota | – | – | – | – | 4 | – | 2 | 2 | – | 6 | – | 2 |
| Nebraska | – | – | – | 1 | 7 | – | 3 | 7 | 2 | 56 | 9 | 89 |
| Kansas | – | 1 | 8 | 23 | 8 | – | 4 | 14 | 15 | 414 | 20 | 81 |
| SOUTH ATLANTIC | 1 | 7 | 17 | 299 | 905 | 5 | 77 | 94 | 293 | 2,952 | 155 | 847 |
| Delaware | – | – | – | 1 | 4 | – | – | 1 | 15 | 157 | – | 2 |
| Maryland | – | – | – | – | 7 | 2 | 15 | 13 | 27 | 319 | – | 8 |
| District of Columbia | – | – | – | – | – | – | 1 | 2 | 2 | 13 | 1 | 2 |
| Virginia | – | 4 | 6 | 25 | 25 | 1 | 9 | 20 | 25 | 234 | 100 | 252 |
| West Virginia | – | – | 4 | 97 | 54 | – | 1 | 6 | 84 | 1,052 | 14 | 92 |
| North Carolina | – | 1 | – | 6 | 22 | 1 | 15 | 17 | NN | NN | 30 | 84 |
| South Carolina | – | 1 | 2 | 22 | 130 | 1 | 7 | 8 | 48 | 158 | 2 | 17 |
| Georgia | – | – | – | 11 | 47 | – | 15 | 1 | 1 | 9 | 1 | 5 |
| Florida | 1 | 1 | 5 | 137 | 616 | – | 14 | 26 | 91 | 1,010 | 7 | 385 |
| EAST SOUTH CENTRAL | – | 1 | 23 | 176 | 732 | 21 | 45 | 38 | 121 | 1,740 | 55 | 547 |
| Kentucky | – | – | 21 | 73 | 429 | 16 | 22 | 10 | 54 | 566 | 9 | 269 |
| Tennessee | – | – | – | 77 | 107 | 4 | 16 | 15 | 42 | 589 | 17 | 205 |
| Alabama | – | 1 | – | – | 92 | 1 | 3 | 7 | 12 | 211 | 6 | 35 |
| Mississippi | – | – | 2 | 26 | 104 | – | 4 | 6 | 13 | 374 | 23 | 38 |
| WEST SOUTH CENTRAL | 1 | 6 | 21 | 337 | 662 | 9 | 68 | 58 | 111 | 1,771 | 40 | 714 |
| Arkansas* | – | – | – | 9 | 6 | 1 | 8 | 6 | 24 | 98 | 1 | 86 |
| Louisiana | – | 1 | 3 | 33 | 23 | 4 | 12 | 18 | 3 | 37 | 6 | 38 |
| Oklahoma* | – | – | 4 | 15 | 2 | – | 4 | 3 | 26 | 153 | – | 38 |
| Texas* | 1 | 5 | 14 | 280 | 631 | 4 | 44 | 31 | 58 | 1,483 | 33 | 552 |
| MOUNTAIN | – | 6 | 7 | 262 | 766 | – | 11 | 7 | 128 | 1,341 | 142 | 914 |
| Montana | – | 1 | 2 | 4 | 12 | – | 2 | 1 | 15 | 109 | 8 | 215 |
| Idaho | – | – | 1 | 102 | 3 | – | 1 | 2 | 25 | 96 | – | 6 |
| Wyoming | – | – | 2 | 9 | – | – | – | 1 | 9 | 295 | 1 | 3 |
| Colorado | – | – | 1 | 65 | 294 | – | 2 | – | 19 | 141 | 119 | 505 |
| New Mexico | – | 1 | 1 | 73 | 53 | – | 1 | 1 | 60 | 501 | 14 | 113 |
| Arizona* | – | 4 | – | 8 | 294 | – | 2 | 1 | – | 140 | – | 14 |
| Utah | – | – | – | 1 | 110 | – | 1 | 1 | – | 52 | – | 56 |
| Nevada | – | – | – | – | – | – | 2 | – | – | 7 | – | 2 |
| PACIFIC | 2 | 17 | 60 | 757 | 1,790 | 3 | 77 | 88 | 353 | 4,133 | 201 | 1,566 |
| Washington | – | – | 25 | 326 | 382 | – | 6 | 11 | 33 | 534 | 24 | 214 |
| Oregon | – | 1 | 3 | 185 | 16 | – | 4 | 5 | 58 | 840 | 25 | 189 |
| California | 2 | 13 | 32 | 241 | 1,343 | 2 | 65 | 70 | 218 | 2,342 | 152 | 1,152 |
| Alaska | – | 2 | – | – | 5 | 1 | 2 | – | 32 | 334 | – | 1 |
| Hawaii | – | 1 | – | 5 | 44 | – | – | 2 | 12 | 83 | – | 10 |
| Guam* | – | – | – | 3 | 2 | – | – | 5 | – | 1 | – | 2 |
| Puerto Rico | – | – | 96 | 596 | 163 | – | 3 | 1 | 30 | 244 | – | 14 |
| Virgin Islands | – | – | – | – | 1 | – | – | 2 | 1 | 7 | – | 1 |

*Delayed reports: Malaria: Ariz. 2, (1972) Tex. 1
Measles: Me. 1, N.H. 1, Mass. delete 2, Ark. 4, Ariz. 1, Guam 1
Mumps: Me. 4, Ark. 7, Okla. 10
Rubella: Me. 1, Ark. 11, Guam 1

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MARCH 31, 1973 AND APRIL 1, 1972 (13th WEEK) – Continued

| AREA | TETANUS | TUBERCULOSIS (New Active) | | TULAREMIA | TYPHOID FEVER | | TYPHUS FEVER TICK-BORNE (Rky. Mt. spotted fever) | | VENEREAL DISEASES | | RABIES IN ANIMALS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | GONORRHEA | SYPHILIS (Pri. & Sec.) | | |
| | Cumulative 1973 | 1973 | Cum. 1973 | Cumulative 1973 | 1973 | Cum. 1973 | 1973 | Cum. 1973 | 1973 | 1973 | 1973 | Cum. 1973 |
| UNITED STATES | 15 | 773 | 7,563 | 19 | 90 | 239 | 1 | 7 | 15,557 | 552 | 101 | 793 |
| NEW ENGLAND | – | 17 | 249 | – | – | 3 | – | – | 463 | 19 | 6 | 52 |
| Maine | – | 2 | 19 | – | – | – | – | – | 18 | 3 | 2 | 37 |
| New Hampshire | – | 3 | 11 | – | – | – | – | – | 11 | – | 3 | 13 |
| Vermont * | – | – | 5 | – | – | – | – | – | 5 | – | 1 | 1 |
| Massachusetts | – | 7 | 136 | – | – | 3 | – | – | 254 | 12 | – | 1 |
| Rhode Island | – | 3 | 21 | – | – | – | – | – | 40 | – | – | – |
| Connecticut | – | 2 | 57 | – | – | – | – | – | 135 | 4 | – | – |
| MIDDLE ATLANTIC | 4 | 189 | 1,594 | – | 2 | 18 | – | 1 | 1,621 | 123 | – | 4 |
| Upstate New York | – | 23 | 307 | – | – | 3 | – | – | 171 | – | – | 1 |
| New York City | 2 | 70 | 589 | – | – | 6 | – | – | 1,054 | 69 | – | – |
| New Jersey | 2 | 16 | 283 | – | 1 | 6 | – | – | 262 | 21 | – | – |
| Pennsylvania | – | 80 | 415 | – | 1 | 3 | – | 1 | 134 | 33 | – | 3 |
| EAST NORTH CENTRAL | 2 | 142 | 1,216 | 1 | 3 | 8 | – | – | 2,334 | 34 | 24 | 78 |
| Ohio * | 1 | 49 | 424 | 1 | 1 | 4 | – | – | 678 | 4 | 9 | 11 |
| Indiana | – | 19 | 169 | – | – | – | – | – | 215 | 7 | 10 | 24 |
| Illinois | – | 48 | 351 | – | – | 1 | – | – | 704 | 8 | 1 | 22 |
| Michigan | – | 26 | 215 | – | 2 | 3 | – | – | 550 | 11 | – | 1 |
| Wisconsin | 1 | – | 57 | – | – | – | – | – | 187 | 4 | 4 | 20 |
| WEST NORTH CENTRAL | 3 | 28 | 284 | 2 | 2 | 7 | – | 1 | 967 | 4 | 16 | 205 |
| Minnesota | – | 2 | 33 | – | 1 | 2 | – | – | 150 | – | 4 | 72 |
| Iowa | – | 1 | 33 | – | – | – | – | – | 165 | – | 3 | 60 |
| Missouri | 3 | 11 | 137 | 2 | 1 | 3 | – | 1 | 310 | 4 | – | 20 |
| North Dakota | – | – | 7 | – | – | – | – | – | 5 | – | 7 | 39 |
| South Dakota | – | 2 | 17 | – | – | 1 | – | – | 66 | – | – | 3 |
| Nebraska | – | 4 | 21 | – | – | 1 | – | – | 133 | – | – | – |
| Kansas | – | 8 | 36 | – | – | – | – | – | 138 | – | 2 | 11 |
| SOUTH ATLANTIC | 3 | 102 | 1,440 | 4 | 80 | 173 | 1 | 2 | 3,594 | 171 | 8 | 74 |
| Delaware | – | 2 | 13 | – | – | – | – | 1 | 53 | 1 | – | – |
| Maryland | – | 11 | 143 | – | – | 1 | – | – | 261 | 4 | – | 3 |
| District of Columbia | – | 4 | 77 | – | – | – | – | – | 281 | 14 | – | – |
| Virginia | – | 11 | 188 | 1 | – | – | – | – | 327 | 57 | 5 | 32 |
| West Virginia | – | 5 | 84 | – | – | – | – | – | 94 | 2 | 1 | 9 |
| North Carolina * | – | 29 | 249 | 1 | – | 2 | 1 | 1 | 905 | 11 | – | – |
| South Carolina | – | 19 | 154 | – | – | 1 | – | – | 280 | 27 | – | – |
| Georgia | – | 21 | 241 | 2 | – | 1 | – | – | 404 | 14 | 1 | 18 |
| Florida | 3 | – | 291 | – | 80 | 168 | – | – | 989 | 41 | 1 | 12 |
| EAST SOUTH CENTRAL | 1 | 48 | 643 | 5 | – | 2 | – | 3 | 1,527 | 32 | 19 | 192 |
| Kentucky | – | 14 | 163 | 1 | – | 1 | – | – | 158 | 10 | 12 | 94 |
| Tennessee | – | 9 | 183 | 3 | – | – | – | 1 | 587 | 11 | 6 | 72 |
| Alabama | 1 | 13 | 183 | – | – | 1 | – | 2 | 449 | – | 1 | 26 |
| Mississippi | – | 12 | 114 | 1 | – | – | – | – | 333 | 11 | – | – |
| WEST SOUTH CENTRAL | 1 | 55 | 751 | 7 | 1 | 3 | – | – | 2,353 | 46 | 23 | 128 |
| Arkansas | – | 8 | 81 | 2 | – | – | – | – | 579 | 5 | 8 | 33 |
| Louisiana * | 1 | 10 | 154 | – | – | – | – | – | 600 | 12 | 1 | 10 |
| Oklahoma | – | – | 63 | 4 | – | 1 | – | – | 198 | – | 4 | 37 |
| Texas * | – | 37 | 453 | 1 | 1 | 2 | – | – | 976 | 29 | 10 | 48 |
| MOUNTAIN | – | 74 | 225 | – | – | 2 | – | – | 535 | 7 | – | 3 |
| Montana | – | – | 5 | – | – | – | – | – | 32 | 1 | – | – |
| Idaho | – | – | 10 | – | – | – | – | – | 41 | – | – | – |
| Wyoming | – | 1 | 8 | – | – | – | – | – | 8 | – | – | – |
| Colorado | – | 19 | 41 | – | – | – | – | – | 65 | 3 | – | – |
| New Mexico | – | 4 | 63 | – | – | 1 | – | – | 103 | 1 | – | – |
| Arizona | – | 49 | 81 | – | – | 1 | – | – | 209 | 1 | – | 3 |
| Utah | – | 1 | 8 | – | – | – | – | – | 26 | 1 | – | – |
| Nevada | – | – | 9 | – | – | – | – | – | 51 | – | – | – |
| PACIFIC | 1 | 118 | 1,161 | – | 2 | 23 | – | – | 2,163 | 116 | 5 | 57 |
| Washington | – | 10 | 101 | – | – | – | – | – | 186 | – | – | – |
| Oregon | – | 5 | 54 | – | – | 2 | – | – | 178 | 3 | – | – |
| California | 1 | 78 | 899 | – | 2 | 21 | – | – | 1,712 | 108 | 5 | 55 |
| Alaska | – | 12 | 37 | – | – | – | – | – | 54 | 1 | – | 2 |
| Hawaii | – | 13 | 70 | – | – | – | – | – | 33 | 4 | – | – |
| Guam * | – | – | 4 | – | – | – | – | – | – | – | – | – |
| Puerto Rico | 3 | 11 | 133 | – | 1 | 1 | – | – | 145 | 16 | 2 | 10 |
| Virgin Islands | – | – | – | – | – | – | – | – | 4 | – | – | – |

*Delayed reports: Tetanus: (1972) Tex. 4
TB: Ohio delete 4, N.C. delete 2
Gonorrhea: Guam 13
Syphilis: Vt. delete 1, Ohio delete 2, La. 1
Rabies: Ohio delete 7

Week No. 13

## TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING MARCH 31, 1973

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

| Area | All Causes | | | Pneumonia and Influenza | Area | All Causes | | | Pneumonia and Influenza |
|---|---|---|---|---|---|---|---|---|---|
| | All Ages | 65 years and over | Under 1 year | All Ages | | All Ages | 65 years and over | Under 1 year | All Ages |
| NEW ENGLAND | 701 | 440 | 26 | 29 | SOUTH ATLANTIC | 1,183 | 619 | 91 | 42 |
| Boston, Mass. | 216 | 114 | 19 | 8 | Atlanta, Ga. | 103 | 56 | 3 | 2 |
| Bridgeport, Conn. | 41 | 34 | – | 2 | Baltimore, Md. | 186 | 97 | 4 | – |
| Cambridge, Mass. | 34 | 25 | 3 | 5 | Charlotte, N. C. | 67 | 33 | 8 | – |
| Fall River, Mass. | 25 | 18 | – | 1 | Jacksonville, Fla. | 71 | 40 | 3 | 3 |
| Hartford, Conn. | 57 | 29 | – | – | Miami, Fla. | 109 | 61 | 2 | 4 |
| Lowell, Mass. | 40 | 24 | 1 | – | Norfolk, Va. | 60 | 33 | 4 | 7 |
| Lynn, Mass. | 12 | 11 | – | 2 | Richmond, Va. | 119 | 59 | 10 | 8 |
| New Bedford, Mass. | 28 | 23 | 1 | 2 | Savannah, Ga. | 41 | 25 | 3 | 1 |
| New Haven, Conn. | 43 | 26 | 1 | – | St. Petersburg, Fla. | 92 | 70 | 2 | 6 |
| Providence, R. I. | 55 | 32 | 1 | 2 | Tampa, Fla. | 83 | 50 | 1 | 5 |
| Somerville, Mass. | 14 | 11 | – | – | Washington, D. C. | 208 | 78 | 47 | 5 |
| Springfield, Mass. | 45 | 31 | – | 4 | Wilmington, Del. | 44 | 17 | 4 | 1 |
| Waterbury, Conn. | 39 | 32 | – | 1 | | | | | |
| Worcester, Mass. | 52 | 30 | – | 2 | EAST SOUTH CENTRAL | 723 | 400 | 26 | 40 |
| | | | | | Birmingham, Ala. | 138 | 78 | 4 | 3 |
| MIDDLE ATLANTIC | 3,267 | 1,908 | 119 | 125 | Chattanooga, Tenn. | 64 | 39 | 3 | 10 |
| Albany, N. Y. | 62 | 37 | 7 | 1 | Knoxville, Tenn. | 50 | 33 | 1 | 1 |
| Allentown, Pa. | 32 | 18 | 2 | 2 | Louisville, Ky. | 98 | 48 | 5 | 8 |
| Buffalo, N. Y. | 129 | 78 | 4 | 11 | Memphis, Tenn. | 159 | 80 | 7 | 3 |
| Camden, N. J. | 45 | 25 | 2 | – | Mobile, Ala. | 45 | 29 | – | 4 |
| Elizabeth, N. J. | 27 | 15 | – | – | Montgomery, Ala. | 35 | 22 | 2 | 1 |
| Erie, Pa. | 30 | 20 | – | 3 | Nashville, Tenn. | 134 | 71 | 4 | 10 |
| Jersey City, N. J. | 61 | 42 | 3 | 5 | | | | | |
| Newark, N. J. | 86 | 40 | 13 | 3 | WEST SOUTH CENTRAL | 1,343 | 747 | 66 | 34 |
| New York City, N. Y. † | 1,655 | 935 | 53 | 63 | Austin, Tex. | 42 | 29 | – | 2 |
| Paterson, N. J. | 48 | 26 | 3 | 2 | Baton Rouge, La. | 48 | 30 | 1 | 2 |
| Philadelphia, Pa. | 499 | 312 | 18 | 4 | Corpus Christi, Tex. | 25 | 13 | 4 | – |
| Pittsburgh, Pa. | 186 | 114 | 9 | 15 | Dallas, Tex. | 213 | 129 | 6 | 5 |
| Reading, Pa. | 37 | 26 | – | 2 | El Paso, Tex. | 50 | 18 | 12 | 2 |
| Rochester, N. Y. | 100 | 63 | – | 4 | Fort Worth, Tex. | 113 | 63 | 10 | 7 |
| Schenectady, N. Y. | 31 | 16 | 2 | 2 | Houston, Tex. | 260 | 135 | 12 | 2 |
| Scranton, Pa. | 45 | 26 | 1 | 1 | Little Rock, Ark. | 59 | 30 | 1 | 1 |
| Syracuse, N. Y. | 79 | 45 | – | 2 | New Orleans, La. | 148 | 78 | 3 | 1 |
| Trenton, N. J. | 45 | 26 | – | 1 | Oklahoma City, Okla. * | 94 | 56 | 5 | 2 |
| Utica, N. Y. | 30 | 21 | 1 | 2 | San Antonio, Tex. | 170 | 92 | 11 | 3 |
| Yonkers, N. Y. | 40 | 23 | 1 | 2 | Shreveport, La. | 68 | 42 | – | 3 |
| | | | | | Tulsa, Okla. | 53 | 32 | 1 | 4 |
| EAST NORTH CENTRAL | 2,489 | 1,426 | 102 | 86 | | | | | |
| Akron, Ohio | 67 | 42 | 5 | – | MOUNTAIN | 544 | 314 | 30 | 18 |
| Canton, Ohio | 30 | 19 | 1 | – | Albuquerque, N. Mex. | 37 | 18 | 4 | 5 |
| Chicago, Ill. | 623 | 346 | 25 | 15 | Colorado Springs, Colo. | 31 | 19 | – | 2 |
| Cincinnati, Ohio | 173 | 98 | 8 | 5 | Denver, Colo. | 136 | 80 | 8 | 4 |
| Cleveland, Ohio | 220 | 113 | 10 | 6 | Las Vegas, Nev. | 18 | 8 | – | – |
| Columbus, Ohio | 139 | 89 | 9 | 7 | Ogden, Utah | 23 | 10 | 2 | 4 |
| Dayton, Ohio | 104 | 58 | 4 | 2 | Phoenix, Ariz. | 150 | 86 | 11 | 1 |
| Detroit, Mich. | 327 | 164 | 11 | 9 | Pueblo, Colo. | 24 | 17 | – | 1 |
| Evansville, Ind. | 51 | 27 | 1 | – | Salt Lake City, Utah | 62 | 40 | 5 | 1 |
| Fort Wayne, Ind. | 50 | 34 | 2 | 6 | Tucson, Ariz. | 63 | 36 | – | – |
| Gary, Ind. | 39 | 17 | 3 | 4 | | | | | |
| Grand Rapids, Mich. | 47 | 38 | – | 4 | PACIFIC | 1,676 | 1,045 | 57 | 46 |
| Indianapolis, Ind. | 154 | 75 | 6 | 4 | Berkeley, Calif. | 31 | 22 | – | 1 |
| Madison, Wis. | 26 | 17 | 2 | 3 | Fresno, Calif. | 55 | 34 | 3 | 4 |
| Milwaukee, Wis. | 125 | 93 | 4 | 4 | Glendale, Calif. | 30 | 20 | – | 1 |
| Peoria, Ill. | 28 | 20 | 1 | 5 | Honolulu, Hawaii | 51 | 28 | 4 | 2 |
| Rockford, Ill. | 41 | 27 | 2 | 4 | Long Beach, Calif. | 99 | 67 | 1 | 5 |
| South Bend, Ind. | 41 | 30 | 1 | 3 | Los Angeles, Calif. | 504 | 313 | 11 | 10 |
| Toledo, Ohio | 131 | 73 | 7 | 3 | Oakland, Calif. | 110 | 66 | 6 | – |
| Youngstown, Ohio | 73 | 46 | – | 2 | Pasadena, Calif. | 29 | 16 | 2 | – |
| | | | | | Portland, Oreg. | 141 | 89 | 7 | 6 |
| WEST NORTH CENTRAL | 780 | 497 | 25 | 26 | Sacramento, Calif. | 55 | 30 | 5 | 1 |
| Des Moines, Iowa | 59 | 35 | – | 2 | San Diego, Calif. | 102 | 53 | 1 | 3 |
| Duluth, Minn. | 29 | 19 | 2 | 3 | San Francisco, Calif. | 156 | 98 | 6 | 4 |
| Kansas City, Kans. | 34 | 15 | 3 | 1 | San Jose, Calif. | 61 | 39 | 1 | 1 |
| Kansas City, Mo. | 135 | 95 | 5 | 2 | Seattle, Wash. | 167 | 113 | 10 | 2 |
| Lincoln, Nebr. | 34 | 28 | – | 2 | Spokane, Wash. | 48 | 32 | – | 2 |
| Minneapolis, Minn. | 100 | 65 | 4 | 1 | Tacoma, Wash. | 37 | 25 | – | 4 |
| Omaha, Nebr. | 80 | 47 | 3 | – | | | | | |
| St. Louis, Mo. | 211 | 126 | 7 | 6 | Total | 12,706 | 7,396 | 542 | 446 |
| St. Paul, Minn. | 77 | 55 | – | 3 | Expected Number | 13,088 | 7,605 | 536 | 526 |
| Wichita, Kans. | 21 | 12 | 1 | 6 | Cumulative Total (includes reported corrections for previous weeks) | 182,753 | 109,309 | 6,625 | 9,506 |

†Delayed report for week ending March 24, 1973

*Estimate based on average percent of divisional total

**RUBELLA – Continued**

centered in 2 dormitories in Greeley, and 35 of the cases were confirmed serologically. The United States Air Force Academy in Colorado Springs (3,836 cadets) reported 225 cases of an illness clinically compatible with rubella. Twelve of the cases were proven by the rubella HAI test. The epidemic began on January 8, and cases were reported through March 15. No data is yet available on the incidence of rubella in the communities adjacent to these universities.

*(Reported by Thomas Vernon, M.D., State Epidemiologist, Colorado State Department of Public Health; Col. Charles Upp, MC, USAF, Director, Base Medical Services, and Col. Ronald Costin, MC, USAF, Director, Cadet Clinic, United States Air Force Academy, Colorado Springs; Charles Dowding, M.D., Director, Boulder City Health Department; Reta Long, Director, Nursing Services, Weld County Health Department; and an EIS Officer.)*

**Editorial Note**

Prior to the availability of vaccine, rubella occurred in young adults, particularly in institutional settings. When rubella vaccine was licensed, it was expected that rubella might continue to occur among adolescents. However, the potential for spread from this group to pregnant women was felt to be low.

As outbreaks such as these among young adults are recognized, intensified surveillance is required to determine the potential risks rubella poses both to university coeds and to women of child-bearing age in the surrounding community.

## BOTULINAL TOXIN IN COMMERCIALLY CANNED MUSHROOMS – United States

Preliminary tests at the Food and Drug Administration (FDA) Regional Laboratory, Atlanta, Georgia, have demonstrated contamination with type B botulinal toxin in 1 of 15 swollen cans of mushrooms distributed by Fran Mushroom Co., Ravena, N.Y. These are 8-oz cans, and the incriminated lot numbers are 2KC07 (on cans) and K072 (on cases). Unlabeled coded cans were distributed through at least 1 U.S. Army commissary. There have been no reports of illness associated with this product. FDA is continuing the investigation.

*(Reported by Lawrence W. Wood, Jr., M.D., Chief, Department of Medicine, U.S. Army General Hospital, Fort Gordon, Augusta, Georgia; the Regional Office, Atlanta, Georgia, and the Field Investigations Branch, Office of the Associate Commissioner for Compliance, Food and Drug Administration; and the Bacterial Diseases Branch, Epidemiology Program, CDC.)*

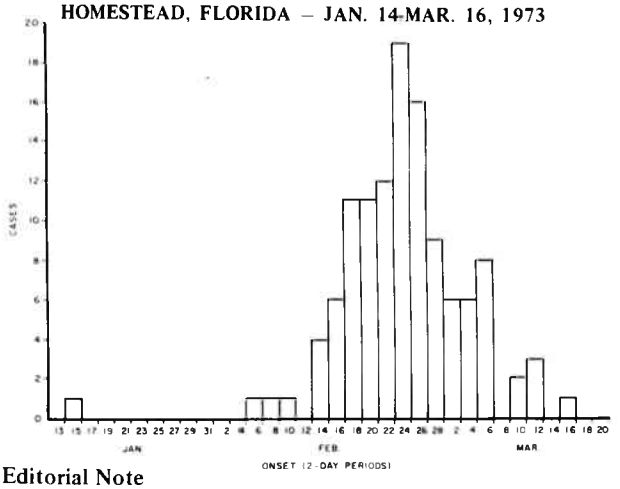
## FOLLOW-UP ON TYPHOID FEVER – Florida

As of Apr. 2, 1973, a total of 197 suspect and confirmed cases of *Salmonella typhi* infection had been reported in the waterborne outbreak of typhoid fever at the South Dade Migrant Farm Labor Camp, Homestead, Florida (MMWR, Vol. 22, No. 9 and 10). *S. typhi* has been isolated from 178 patients, 2 patients have demonstrated 4-fold rises in antibody titers to group D salmonella O antigen, and 17 additional patients have had 1 or more antibody titers of 1:160 or greater. The revised epidemic curve is consistent with a common source outbreak (Figure 1). Eighteen cases occurred in March, the most recent on March 16. In at least 15 instances these cases occurred in households where other members had earlier developed overt typhoid fever. The number of such possible secondary cases is small in relation to the total outbreak. No deaths have occurred. At least 9 cases were asymptomatic.

Only 4 instances of documented typhoid have occurred in persons who were not inhabitants of the camp, and each of these cases was exposed to the camp's water supply in early February. No documented transmission of typhoid outside the camp has been reported.

*(Reported by Milton Saslaw, M.D., Director, Joel L. Nitzkin, M.D., Chief, Office of Consumer Protection, Diane Eisman, M.D., Acting Head, Disease Control Section, Dade County Department of Public Health; Ralph D. Hogan, M.D., State Epidemiologist, Florida Division of Health; and 2 EIS Officers.)*

Figure 1
118 TYPHOID FEVER CASES, BY DATE OF ONSET
HOMESTEAD, FLORIDA – JAN. 14-MAR. 16, 1973




**Editorial Note**

This is the largest reported outbreak of typhoid fever in the United States since 1939. Its subsidence without resort to quarantine or mass immunization illustrates again that these measures are unnecessary in the control of typhoid in the United States. The small number of possible secondary cases probably were exposed before recognition of the outbreak; their disease could not have been prevented by vaccine.

## FOLLOW-UP ON SEPTICEMIAS ASSOCIATED WITH CONTAMINATED INTRAVENOUS FLUIDS – United States

On Mar. 19, 1973, Cutter Laboratories, Inc., recalled all 1,000 cc bottles of 5% Dextrose in Lactated Ringers Injection (D5LR) produced at its Chattanooga, Tennessee plant since Sept. 13, 1972 (MMWR, Vol. 22, No. 11). This fluid had been manufactured using a modified time-temperature-pressure autoclave cycle.

A total of 5 cases of clinical septicemia with *Enterobacter agglomerans, E. cloacae,* or *Citrobacter freundii* associated with administration of Cutter D5LR have been reported to CDC. The onset of cases was between Feb. 16 and Mar. 5, 1973; 3 patients were hospitalized in Milwaukee, Wisconsin, 1 in Washington, D.C., and 1 in Nashville, Tennessee. Three of the 5 patients died.

Fluid from 1 of 109 unopened bottles of the same lot

**SEPTICEMIAS – Continued**

(TK4596A) as administered to 1 of the patients grew *E. agglomerans*. In addition, 3 other unopened bottles of D5LR tested by the Food and Drug Administration (FDA) and CDC have been positive for microorganisms still under analysis; the lots involved are TK4617A, TK4623A, and TK4617C. One bottle of D5LR (TK4617A) was noted to be turbid as it was being prepared for administration at a hospital in Menomonee Falls, Wisconsin; the bottle was not used but was cultured, and a *C. freundii* of an identical biotype and antibiogram as that isolated from 3 of the patients with septicemia was grown from the fluid. All *C. freundii* isolated were characterized by the following markers: nitrate-negative, $H_2S$-negative, and identical multiply sensitive antibiogram.

*(Reported by Robert H. Hutcheson, Jr., M.D., State Epidemiologist, Tennessee Department of Public Health; George H. Handy, M.D., State Health Officer, Wisconsin Department of Health and Social Services; Donald K. Wallace, M.D., Chief, Communicable Disease Control Branch, CHHA, Washington, D.C.; Bacterial Diseases Branch, Epidemiology Program, the Microbiology Branch, Laboratory Division, CDC; Bureau of Drugs, Food and Drug Administration; and 4 EIS Officers.)*

**Editorial Note**

Septicemia may occur in any patient receiving intravenous (IV) therapy; however, rapid onset of severe clinical symptoms of septicemia in an otherwise not seriously ill patient who has received IV therapy for only a short period of time and has no other obvious site of infection should raise a strong suspicion of intrinsic contamination of the IV fluid. Currently the great majority of septicemias related to IV therapy are probably due to extrinsic or in-use contamination; however, in the event that intrinsic contamination of IV fluid is suspected as the cause of a patient's symptoms, the following measures are recommended:

1. Discontinue the IV fluid system entirely, including the removal of cannulae or needles. **This is the single most important therapeutic step.** Indicate the nature of the fluid and the exact lot number on the patient's chart.
2. Draw 2 blood cultures from 2 independent sites.
3. Administer appropriate antibiotic therapy. Organisms that are often associated with intrinsic contamination are frequently resistant to cephalothin and ampicillin.
4. Place a sterile closure on the end of the delivery-set tubing, wrap the suspect IV system in a clean plastic bag, and send it to the laboratory for immediate culture: (a) Aseptically withdraw 20 cc of fluid from the IV line; use 1 cc to prepare a pour plate, and place the rest in a blood culture bottle; incubate the plate and the blood culture bottle aerobically at 35-37°C. (b) If the IV bottle or bag is more than half full of fluid, aseptically drain to no more than half full. Aseptically add to the bottle an equal volume of double strength brain-heart infusion broth enriched with 0.5% beef extract, and incubate the bottle aerobically at 35-37°C. (c) Perform all laboratory procedures in as clean an area as possible, preferably in a laminar-flow hood, and monitor the working area with settling plates.
5. The nature of the solution and the exact lot number should be recorded on the laboratory requisition or other permanent laboratory record.
6. Identify, segregate, and save all bottles of the implicated lot number.
7. Notify local or State health authorities and the FDA immediately.

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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.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

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