CENTER FOR DISEASE CONTROL

# Morbidity and Mortality

Vol. 23, No. 46

WEEKLY REPORT

For Week Ending November 16, 1974

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

DATE OF RELEASE: NOVEMBER 22, 1974 – ATLANTA, GEORGIA 30333



## INTERNATIONAL NOTES

### SMALLPOX – Worldwide

At the end of October 1974, the number of reported smallpox-infected areas was the smallest ever recorded, and under the impact of intensive campaigns in each of the remaining endemic countries, cases and outbreaks in the infected areas are rapidly decreasing. The endemic areas of Asia are now almost wholly confined to limited areas of eastern India and northern Bangladesh. In Pakistan, no cases whatsoever have been detected in the country in the past 2 weeks despite an intensive search by program personnel and the offer of 100 rupees to anyone who reports an outbreak. In Nepal, no cases with onsets of illness more recent than September 27 have been found. In India, 6,650 of the cases detected since September 1 (97%) have occurred in only 3 states (Assam, Bihar, and Uttar Pradesh) of the country's 30 states and union territories; in Bangladesh, 78% of the remain-

CONTENTS



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

| DISEASE | WEEK ENDING | | MEDIAN 1969-1973 | CUMULATIVE, FIRST 46 WEEKS | | |
|---|---|---|---|---|---|---|
| | November 16, 1974 | November 17, 1973 | | 1974 | 1973 | MEDIAN 1969-1973 |
| Aseptic meningitis | 75 | 93 | 93 | 2,822 | 4,303 | 4,303 |
| Brucellosis | 2 | 1 | 3 | 161 | 165 | 172 |
| Chickenpox | 1,689 | 1,446 | – – – | 107,428 | 151,048 | – – – |
| Diphtheria | 3 | 6 | 7 | 209 | 167 | 167 |
| Encephalitis: | | | | | | |
| Primary: Arthropod-borne and unspecified | 66 | 47 | 29 | 950 | 1,398 | 1,368 |
| Post-Infectious | 2 | 4 | 4 | 227 | 252 | 274 |
| Hepatitis, Viral: | | | | | | |
| Type B | 253 | 156 | 169 | 8,737 | 7,166 | 7,168 |
| Type A | 886 | 1,047 | 1,143 | 37,082 | 45,685 | 48,668 |
| Type unspecified | 169 | | | 7,336 | | |
| Malaria | 6 | 2 | 30 | 234 | 223 | 2,686 |
| Measles (rubeola) | 124 | 169 | 303 | 20,922 | 25,299 | 28,674 |
| Meningococcal infections, total | 47 | 17 | 20 | 1,201 | 1,214 | 1,994 |
| Civilian | 47 | 17 | 20 | 1,173 | 1,188 | 1,783 |
| Military | – | – | 1 | 28 | 26 | 211 |
| Mumps | 945 | 1,070 | 1,697 | 49,235 | 61,834 | 76,984 |
| Pertussis | 51 | – – – | – – – | 1,536 | – – – | – – – |
| Rubella (German measles) | 164 | 161 | 303 | 11,115 | 27,064 | 41,393 |
| Tetanus | 3 | 3 | 4 | 86 | 82 | 106 |
| Tuberculosis, new active | 549 | 570 | – – – | 26,945 | 27,671 | – – – |
| Tularemia | 1 | 4 | 4 | 130 | 148 | 138 |
| Typhoid fever | 9 | 14 | 7 | 381 | 602 | 338 |
| Typhus, tick-borne (Rky. Mt. spotted fever) | 7 | 4 | 2 | 742 | 621 | 437 |
| Venereal Diseases: | | | | | | |
| Gonorrhea | 19,129 | 17,383 | – – – | 810,943 | 755,134 | – – – |
| Syphilis, primary and secondary | 523 | 498 | – – – | 22,211 | 22,072 | – – – |
| Rabies in animals | 56 | 47 | 53 | 2,618 | 3,051 | 3,051 |

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

| | Cum. | | Cum. |
|---|---|---|---|
| Anthrax: | 2 | Poliomyelitis, total: | 5 |
| Botulism: | 16 | Paralytic: | 5 |
| Congenital rubella syndrome: Wash. 1 | 45 | Psittacosis: * | 150 |
| Leprosy: | 87 | Rabies in man: | – |
| Leptospirosis: Conn. 1 | 41 | Trichinosis: * Calif. 1 | 85 |
| Plague: | 6 | Typhus, murine: Calif. 1 | 23 |

*Delayed reports: Psittacosis: Calif. 1
Trichinosis: N.J. 5

SMALLPOX – Continued

ing outbreaks are in 2 of the 19 districts; and in Ethiopia, all but 22 cases found in the past 7 weeks have occurred in 2 of the country's 14 provinces.

For the still infected areas, it is felt that the number of remaining active outbreaks best reflects the status of the problem. An active outbreak is defined as a village or municipal ward which has experienced 1 or more cases of smallpox in the preceding 4 weeks and so must be kept under close surveillance by program epidemiologists. Such data are now reported weekly throughout the endemic Asian countries. As of mid-October, there were 1,110 active foci in all of Asia, a decrease of 88% from the 9,511 known to have been present at the end of May. Of the 442 districts in India, Pakistan, and Bangladesh, 350 (79%) harbor no known active outbreaks, and an additional 63 (14%) have less than 10 outbreaks and so appear to be near to interrupting transmission. "Problem" districts, i.e., those now harboring 10 or more active outbreaks, are only 29 in number or 7% of the total districts in these countries. The average number of cases in each focus is now less than 5, and more than one-third are single case outbreaks. The number of new outbreaks detected each week in Asia has decreased from 1,420 in May to 120 in mid-October. The number is now sufficiently few so that a reward has been posted and widely advertised throughout Asia to be paid to anyone reporting a previously undetected outbreak. The widespread response to this incentive has been such that it is believed that few outbreaks are now escaping detection.

The status of smallpox in Ethiopia is also encouraging; only 193 cases having been discovered in the past 7 weeks. Except for a single focus in the southeastern desert area of Hararghe Province (now believed to be contained), all known foci are limited to remote villages in mountainous areas of "awrajas" in the Provinces of Begemdir and Gojjam. A helicopter-supported search and containment program that commenced November 10 undoubtedly will reveal some additional foci,but these are expected to be comparatively few in number.

Although a great deal of work remains and unexpected difficulties could occur, program officers in each of the endemic countries now foresee the possibility that the last known outbreaks might be contained within the next few months. However, intensive active search programs for cases will be required in the following 6 months to assure that no remote foci have been missed, and then to confirm this, a special surveillance program will be established for a full 2-year period after the last case is detected.

*(Reported by the World Health Organization:* Weekly Epidemiological Record *49(44):365-369, 1 Nov 1974.)*

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## EPIDEMIOLOGIC NOTES AND REPORTS

### MIXED FILARIAL INFECTION – California

On August 1, 1974, an 11-year-old boy was seen at the Palo Alto (California) Medical Clinic for a routine physical examination. He was born in Ogbomosho, West Nigeria, and had lived there until November 1973 when he and his family moved to Menlo Park, California. With the exception of this move he had never traveled out of the environs of Ogbomosho.

Although he was well at the time of examination, the patient had experienced recurrent chills, fever, nausea, vomiting, and anemia since 1968. Each episode had been treated with unknown antimalarial drugs with abatement of symptoms. He had taken pyrimethamine once a week for malaria prophylaxis for nearly 2 years, discontinuing its use when he moved to California. In 1971 he required an unknown number of transfusions for anemia.

The physical examination on August 1 was normal. Because of the history of recurrent fevers, blood was obtained for malaria detection. Although no *Plasmodium* organisms were seen, 2 types of microfilaria were observed (1-5 per thin smear). The majority were consistent with *Acanthocheilonema perstans;* the remainder appeared to be *Wuchereria bancrofti.* This finding was confirmed at Stanford University Medical Center. Subsequently, the patient was treated with diethylcarbamazine for 14 days; blood obtained at 10 pm on the fourteenth day of treatment revealed no organisms. The remainder of the patient's family are currently being evaluated for filariasis.

*(Reported by John E. Swartzberg, M.D., Fellow, and Jack S. Remington, M.D., Chief, Allergy Immunology, and Infectious Diseases Section, Department of Medicine, Stanford University; W. Elwyn Turner, M.D., Health Officer, Santa Clara County, California; James Chin, M.D., Chief, Infectious Diseases Section, California State Department of Health; and the Parasitic Diseases Branch, Parasitic Disease and Veterinary Public Health Division, CDC.)*

**Editorial Note**

*W. bancrofti* and *A. (Dipetalonema) perstans* are common filarial parasites of man. *A. perstans* is found in tropical Africa and South America and is transmitted by the bite of midges *(Culicoides).* Adult worms may be found in the mesentery, perirenal, and retroperitoneal spaces, pericardium, pleura, and occasionally in subcutaneous cysts. Infection with this organism is generally considered to be asymptomatic in endemic populations, although a high incidence of allergic symptoms have been reported in studies with Caucasian missionaries *(1).* Its microfilariae manifest no periodicity and thus may be found in the blood day or night. A high prevalence of *A. perstans* microfilaremia may be found in populations throughout much of Africa, most frequently in those living in banana-growing areas.

The distribution of *W. bancrofti* is more cosmopolitan, extending throughout the world's tropics. Species of *W. bancrofti* in Africa manifest nocturnal periodicity unlike those found in southeast Asia. Nocturnal periodic bancroftian filariasis is spread by a variety of mosquito vectors, including *Anopheles, Culex, Aedes,* and *Mansonia* species.

To find microfilariae, blood must be obtained at night. The best time is between 10 pm and midnight *(2).* Acute infection may cause a severe lymphadenitis and lymphangitis, eventuating in lymphedema, hydrocele, and elephantiasis in the chronic stage.

Mixed filarial infections are not common. Prevalence studies revealed a 1% incidence of mixed microfilaremia (with

*A. perstans* and *Mansonella ozzardi)* among aboriginal Indians in Guyana *(3)* and 0.07% (for *W. bancrofti* and *Brugia malayi)* in residents of the Philippines *(4).*

**References**

1. Adolph PE, Kagan IG, McQuay RM: Diagnosis and treatment of *Acanthocheilonema perstans* filariasis. Am J Trop Med Hyg 11:76-88, 1962
2. Kessel JF: Filarial infections of man. Am Zool 5:79-84, 1965
3. Orihel TC: Infections with *Dipetalonema perstans* and *Mansonella ozzardi* in the aboriginal Indians of Guyana. Am J Trop Med Hyg 16:628-635, 1967
4. Cabrera DP, Tamondong CT: Filariasis—Studies in Mindanao, Republic of the Philippines: The third endemic focus for Malayan filariasis. Acta Med Philip 6:102-31, 1970

## HEPATITIS IN NAVY RECRUITS – California

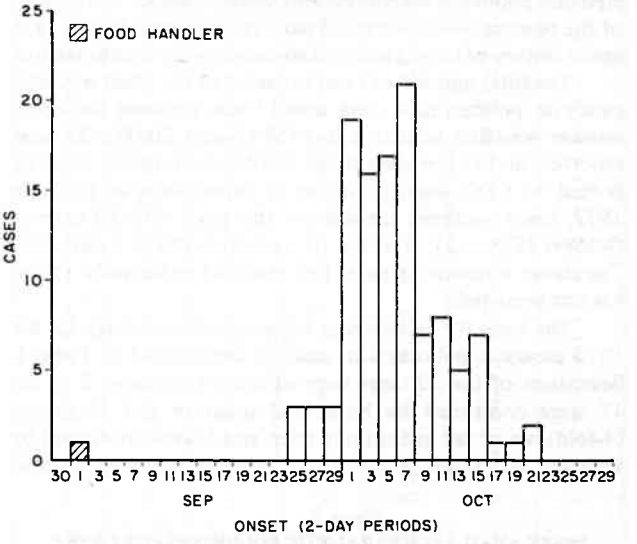
Between September 24 and October 6, 1974, 94 clinical cases of hepatitis A developed in recruits undergoing basic training at the Naval Training Center, San Diego, California. The first hospitalized case was admitted on October 4, and on October 6, a screening program to detect subclinical hepatitis cases was initiated. A total of 5,422 recruits were screened, and those having (1) an SGOT greater than 3 times normal or (2) an elevated SGOT on 2 separate occasions and a positive test for bile in the urine were hospitalized for diagnostic evaluation. In this manner, a total of 41 suspect asymptomatic cases were identified, of whom 19 were subsequently confirmed as having asymptomatic, anicteric hepatitis. Also, in the course of the screening process, 19 additional symptomatic recruits were identified, for a total of 113 clinical cases (Figure 1). All 132 cases were tested for the hepatitis B surface antigen (HBsAg) and were negative.

The temporal clustering of cases suggested a common source outbreak, and an investigation to identify the source was initiated. The ill recruits were found to be from different barracks and different companies and to have received their vaccinations at different times. Routine water samples from the camp's 2 galleys showed no evidence of contamination.

However, further investigation revealed that all but 2 of the ill recruits had arrived at the Naval Training Center before August 31 and that all but 3 of the symptomatic cases had eaten at 1 dining hall during the first 2 weeks of September. Of 2,781 recruits who ate at this dining hall, the overall attack rate was 46.3/1,000, while the attack rate for 2,639 recruits who ate at the second dining hall was 0.7/1,000. Results obtained from administering a food preference questionnaire to 112 patients and 346 well recruits on October 12 were as follows: For 10 of the total 78 food items surveyed, the patients' and controls' preferences were significantly different ($p \leq 0.01$). These items were tossed salad, cottage cheese, cucumbers, sliced tomatoes, French dressing, thousand island dressing, grapefruit, plums, nectarines, and oranges. (The last 4 items may not have been available in the dining hall during the first 2 weeks of September but were nonetheless included on the questionnaire.)

On October 7, 1974, investigators learned that a food handler, who had worked in the implicated dining hall on September 3 and 5, had become ill on September 1 and was subsequently hospitalized on September 9 with HBsAg-negative hepatitis (Figure 1). While preparing food on September 3 and 5 he had experienced symptoms of diarrhea, nausea, and vomiting. He reported that his routine duties included preparing sliced tomatoes, tossed salad, cole slaw, and sliced

**Figure 1**
**HEPATITIS A CASES BY DATE OF ONSET**
**NAVAL TRAINING CENTER, SAN DIEGO, CALIFORNIA**
**SEPTEMBER-OCTOBER 1974**




cantaloupe, and placing glazed cherries on cottage cheese—all without gloves. Thus, while 1 specific food was not definitely incriminated, the results of the questionnaire supported the evidence that a combination of foods was the vehicle of infection—most likely the uncooked items known to have been handled by the suspect index case.

During the training period, several recruits, who subsequently developed hepatitis A, had been involved in food handling at the 2 main galleys at the Naval Training Center immediately prior to the onset of their illness. To reduce the possibility of a second wave of cases, 21,000 doses of immune serum globulin were given to all Naval personnel who had eaten at the dining halls in question.

*(Reported by LCDR Richard R. Hooper, M.D., M.P.H., Epidemiologist, and Capt. Stephen J. Kendra, M.D., M.P.H., Officer-in-Charge, Navy Environmental and Preventive Medicine Unit No. 5; CDR James Quinn, M.D., Regional Health Care Coordinator, CDR Will Harrison, M.D., Head, Infectious Disease Division, and LCDR John Routenberg, M.D., Gastroenterology Clinic, Navy Regional Medical Center, San Diego; and LCDR Charles Juels, M.D., M.P.H., Resident, University of California, Berkeley, School of Public Health, and Infectious Disease Section, California State Health Department.)*

## SURVEILLANCE SUMMARY
## POLIOMYELITIS – United States, 1972

Twenty-two cases of paralytic poliomyelitis with 3 deaths were reported in the United States in 1972. This represents an increase of 3 cases from the corrected total of 19 cases reported for 1971. The cases were scattered among 14 states. Connecticut and New York with 4 cases each, and Texas with 3 cases, were the only states to report more than 1 case. Seventeen (78%) of the 22 cases were in persons 19 years of age or younger, and 5 (23%) were in preschool age children. Type 1 poliovirus was implicated in 64% of the cases and in 74% of those cases in which an etiology was determined.

Four of the 22 reported cases were "recipient vaccine-associated" and 6 were "contact vaccine-associated." Two additional cases of paralytic poliomyelitis were reported for 1971 and were both "contact vaccine-associated," increasing the 1971 total to 19 cases, 10 of which were "contact vaccine-associated." This is the highest annual number of "contact vaccine-associated" cases reported to CDC since live, attenuated oral poliovirus vaccine became widely used in 1962. None of the persons who contracted paralytic poliomyelitis in 1972 gave a history of having received adequate polio immunization.

The total number of cases included in the "best available paralytic poliomyelitis case count" has declined since this number was first tabulated in 1958 (Figure 2). The 22 cases reported in 1972 represent the third lowest annual total reported to CDC since initiation of surveillance in 1955. In 1972, cases occurred throughout the year, with 10 cases in October (Figure 3); 8 of the 10 were clustered in 1 outbreak. The classic summer-fall peak, last observed in the early 1960s, has not persisted.

The basis for establishing a type-specific etiology for the 1972 paralytic poliomyelitis cases is summarized in Table 1. Seventeen of the 22 cases were of known etiology; 2 of the 17 were confirmed by both viral isolation and diagnostic (4-fold) rise or fall in antibody titer, and 5 were confirmed by serologic test alone. Although the presence of an enterovirus in the alimentary tract does not constitute proof of an etiologic role, isolation of poliovirus from throat washings or stool specimens in the context of compatible illness and absence of evidence for another etiology has been accepted by the respective states as adequate documentation of etiology and is indicated as the probable agent in 9 cases. In 1 case, the diagnosis of type 1 paralytic poliomyelitis was based on clinical and epidemiologic criteria alone.

Comparison of "etiologic" poliovirus types for 1966-1972 (the only years for which this method of definition has been used) shows that in 1972 type 1 poliovirus increased from the lowest level of 26% in 1971 to 64%, the second highest percentage since 1966. However, for the first time in 7 years, type 2 poliovirus was not implicated as the etiologic agent in any of the reported cases.

**Figure 2**
**"BEST AVAILABLE PARALYTIC POLIOMYELITIS CASE COUNT," BY YEAR – UNITED STATES, 1958-1972**

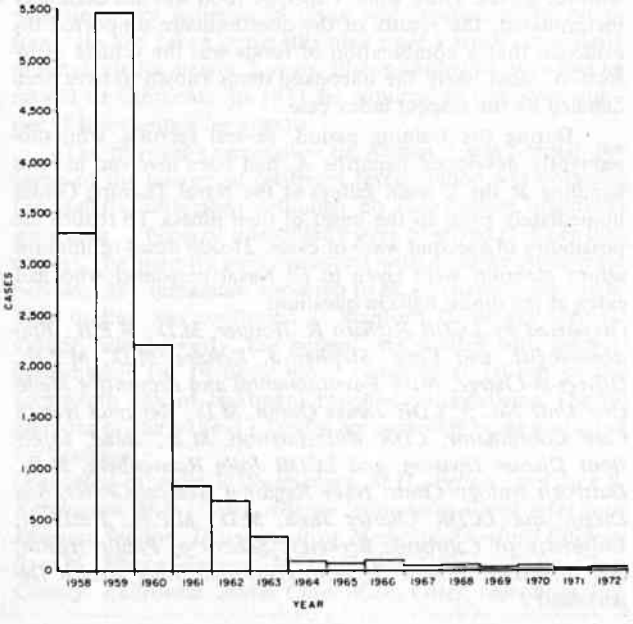



**Figure 3**
**PARALYTIC POLIOMYELITIS, BY ONSET UNITED STATES – 1972**

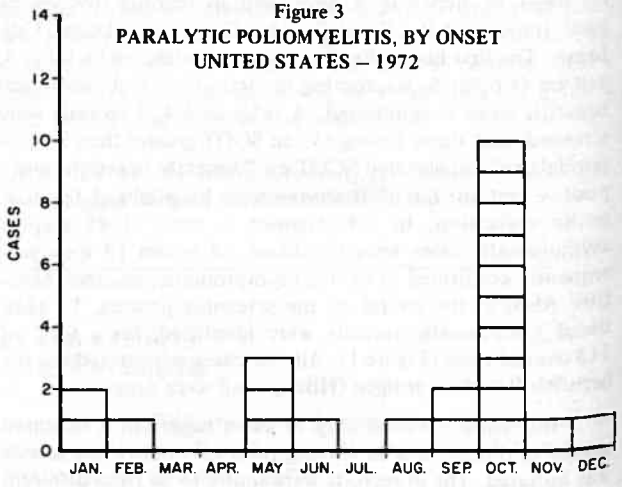



**Table 1**
**Paralytic Poliomyelitis Cases by Designation of Known "Etiologic" Poliovirus Type, 1972***

| Basis of Confirmation | Poliovirus | | | Total |
|---|---|---|---|---|
| | Type 1 | Type 2 | Type 3 | |
| Viral isolation and diagnostic serologic test | 0 | 0 | 2 | 2 |
| Serologic test (only) | 4 | 0 | 1 | 5 |
| Viral isolation (only) | 9 | 0 | 0 | 9 |
| Diagnosis made on clinical and epidemiologic basis only | 1 | 0 | 0 | 1 |
| Total | 14 | 0 | 3 | 17 |

*Excludes 4 vaccine-associated cases with multiple isolates or serologic changes

*(Reported by the Viral Examination Branch, Enteric Virology Branch, Virology Division, Bureau of Laboratories, and the Viral Diseases Division, Bureau of Epidemiology, CDC.)*

A copy of the report from which these data were derived is available on request from
Center for Disease Control
Attn: Neurotropic Diseases
Viral Diseases Division
Bureau of Epidemiology
Atlanta, Georgia 30333

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING NOVEMBER 16, 1974 AND NOVEMBER 17, 1973 (46th WEEK)

| AREA | ASEPTIC MENINGITIS | BRUCELLOSIS | CHICKENPOX | DIPHTHERIA | | ENCEPHALITIS | | | HEPATITIS, VIRAL | | | MALARIA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Primary: Arthropod-borne and Unspecified | | Post Infectious | Type B | Type A | Type Unspecified | | |
| | 1974 | 1974 | 1974 | 1974 | Cum. 1974 | 1974 | 1973 | 1974 | 1974 | 1974 | 1974 | 1974 | Cum. 1974 |
| UNITED STATES | 75 | 2 | 1,689 | 3 | 209 | 66 | 47 | 2 | 253 | 886 | 169 | 6 | 234 |
| NEW ENGLAND | – | – | 92 | – | – | – | – | – | 5 | 19 | 9 | 1 | 9 |
| Maine * | – | – | 8 | – | – | – | – | – | – | – | – | – | – |
| New Hampshire | – | – | – | – | – | – | – | – | 2 | 2 | – | 1 | 1 |
| Vermont | – | – | 20 | – | – | – | – | – | – | – | – | – | – |
| Massachusetts | – | – | 35 | – | – | – | – | – | 2 | 3 | 9 | – | 2 |
| Rhode Island | – | – | 5 | – | – | – | – | – | 1 | 8 | – | – | 3 |
| Connecticut | – | – | 24 | – | – | – | – | – | – | 6 | – | – | 3 |
| MIDDLE ATLANTIC | 5 | – | 58 | – | 1 | 2 | 1 | – | 19 | 73 | 17 | 4 | 45 |
| Upstate New York | 2 | – | 16 | – | – | 1 | – | – | 5 | 28 | 2 | – | 16 |
| New York City | – | – | 41 | – | – | 1 | – | – | 5 | 13 | – | 2 | 16 |
| New Jersey | 2 | – | NN | – | – | – | – | – | 7 | 16 | 14 | 2 | 7 |
| Pennsylvania | 1 | – | 1 | – | 1 | – | 1 | – | 2 | 16 | 1 | – | 6 |
| EAST NORTH CENTRAL | 3 | – | 695 | – | 2 | 4 | 8 | – | 63 | 123 | 42 | – | 19 |
| Ohio | – | – | 103 | – | 1 | – | 3 | – | 9 | 41 | – | – | 6 |
| Indiana | – | – | 64 | – | – | – | – | – | 1 | – | 23 | – | – |
| Illinois | 1 | – | – | – | 1 | – | 3 | – | 37 | 29 | 16 | – | 2 |
| Michigan | 2 | – | 285 | – | – | 2 | 2 | – | 11 | 46 | 3 | – | 10 |
| Wisconsin | – | – | 243 | – | – | 2 | – | – | 5 | 7 | – | – | 1 |
| WEST NORTH CENTRAL | 2 | – | 274 | – | – | 3 | 18 | – | 24 | 61 | 20 | – | 7 |
| Minnesota | 1 | – | 1 | – | – | – | – | – | 13 | 11 | – | – | 2 |
| Iowa | – | – | 231 | – | – | – | – | – | 3 | 10 | 6 | – | 3 |
| Missouri * | – | – | – | – | – | – | 17 | – | 7 | 10 | 5 | – | 1 |
| North Dakota | – | – | 25 | – | – | – | – | – | – | 6 | – | – | – |
| South Dakota | – | – | – | – | – | – | – | – | – | 7 | – | – | 1 |
| Nebraska | – | – | 3 | – | – | – | 1 | – | 1 | 1 | 1 | – | – |
| Kansas | 1 | – | 14 | – | – | 3 | – | – | – | 16 | 8 | – | – |
| SOUTH ATLANTIC | 8 | – | 98 | – | 1 | 2 | 7 | 1 | 17 | 96 | 14 | – | 35 |
| Delaware | – | – | 4 | – | – | – | – | – | 1 | – | – | – | 1 |
| Maryland | 1 | – | 13 | – | – | – | 3 | – | 5 | 12 | 3 | – | 6 |
| District of Columbia | – | – | 1 | – | – | – | – | – | – | – | – | – | 5 |
| Virginia | 2 | – | 8 | – | – | – | – | 1 | 4 | 6 | 8 | – | 7 |
| West Virginia | 2 | – | 70 | – | – | – | – | – | – | 3 | – | – | 2 |
| North Carolina * | 1 | – | NN | – | 1 | – | 1 | – | 3 | 12 | – | – | 4 |
| South Carolina | 1 | – | 2 | – | – | – | – | – | 1 | 9 | 3 | – | 1 |
| Georgia | – | – | – | – | – | – | – | – | – | 22 | – | – | 1 |
| Florida | 1 | – | – | – | – | 2 | 3 | – | 3 | 32 | – | – | 8 |
| EAST SOUTH CENTRAL | 13 | – | 76 | – | – | 49 | 7 | 1 | 21 | 88 | 1 | – | 9 |
| Kentucky | – | – | 57 | – | – | – | – | – | 1 | 9 | – | – | 5 |
| Tennessee | 11 | – | NN | – | – | 46 | 4 | – | 17 | 53 | – | – | 1 |
| Alabama | – | – | 18 | – | – | – | 2 | – | 1 | 10 | 1 | – | – |
| Mississippi | 2 | – | 1 | – | – | 3 | 1 | 1 | 2 | 16 | – | – | 3 |
| WEST SOUTH CENTRAL | 11 | 2 | 202 | – | 9 | – | 2 | – | 24 | 120 | 18 | 1 | 17 |
| Arkansas * | – | – | 6 | – | – | – | – | – | 2 | 4 | 1 | – | 1 |
| Louisiana | 4 | – | NN | – | – | – | – | – | 1 | 9 | 5 | – | 1 |
| Oklahoma | 2 | 1 | 30 | – | – | – | 2 | – | 14 | 33 | 5 | – | 6 |
| Texas | 5 | 1 | 166 | – | 9 | – | – | – | 7 | 74 | 7 | 1 | 9 |
| MOUNTAIN | – | – | 61 | – | 34 | – | – | – | 7 | 60 | 22 | – | 12 |
| Montana | – | – | 47 | – | – | – | – | – | – | 18 | – | – | – |
| Idaho | – | – | – | – | – | – | – | – | – | 3 | 6 | – | – |
| Wyoming | – | – | – | – | – | – | – | – | – | 6 | – | – | – |
| Colorado | – | – | 14 | – | 3 | – | – | – | 4 | 3 | 3 | – | 5 |
| New Mexico | – | – | – | – | 13 | – | – | – | 2 | 14 | 8 | – | 3 |
| Arizona | – | – | – | – | 18 | – | – | – | 1 | 8 | 4 | – | 2 |
| Utah | – | – | – | – | – | – | – | – | – | 3 | 1 | – | 1 |
| Nevada | – | – | – | – | – | – | – | – | – | 5 | – | – | 1 |
| PACIFIC | 33 | – | 133 | 3 | 162 | 6 | 4 | – | 73 | 246 | 26 | – | 81 |
| Washington | 5 | – | 122 | 3 | 151 | 5 | – | – | 10 | 19 | 9 | – | – |
| Oregon | 1 | – | 2 | – | – | – | – | – | 4 | 15 | 1 | – | 2 |
| California * | 13 | – | – | – | 7 | 1 | 3 | – | 59 | 122 | 16 | – | 75 |
| Alaska | – | – | 5 | – | 4 | – | – | – | – | 87 | – | – | – |
| Hawaii | 14 | – | 4 | – | – | – | 1 | – | – | 3 | – | – | 4 |
| Guam * | – | – | – | – | – | – | – | – | – | – | – | – | 2 |
| Puerto Rico | – | – | 6 | – | 1 | – | – | – | – | – | 15 | – | 1 |
| Virgin Islands | --- | --- | --- | --- | – | --- | – | --- | --- | --- | --- | --- | 3 |

*Delayed reports: Aseptic meningitis: Calif. 21
Brucellosis: Ark. 1
Chickenpox: Me. 7, Calif. 20, Guam 29
Encephalitis, post infectious: Calif. 1
Hepatitis B: Mo. 1, Calif. 47
Hepatitis A: Me. 3, N.C. delete 2, Calif. 117, Guam 35
Hepatitis unspecified: Me. 2, N.C. delete 1, Calif. 17, Guam 22
Malaria: Calif. 1

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING NOVEMBER 16, 1974 AND NOVEMBER 17, 1973 (46th WEEK) – Continued

| AREA | MEASLES (Rubeola) | | | MENINGOCOCCAL INFECTIONS, TOTAL | | | MUMPS | | PERTUSSIS | RUBELLA | | TETANUS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1974 | Cumulative | | 1974 | Cumulative | | 1974 | Cum. 1974 | 1974 | 1974 | Cum. 1974 | Cum. 1974 |
| | | 1974 | 1973 | | 1974 | 1973 | | | | | | |
| UNITED STATES | 124 | 20,922 | 25,299 | 47 | 1,201 | 1,214 | 945 | 49,235 | 51 | 164 | 11,115 | 86 |
| NEW ENGLAND | 3 | 952 | 7,487 | 2 | 68 | 50 | 40 | 6,284 | 6 | 10 | 1,152 | 1 |
| Maine * | – | 43 | 69 | – | 2 | 1 | 1 | 836 | – | – | 286 | – |
| New Hampshire * | – | 211 | 920 | – | 10 | 7 | – | 296 | 5 | – | 22 | 1 |
| Vermont * | – | 56 | 120 | – | 12 | 3 | – | 17 | – | – | 41 | – |
| Massachusetts | 2 | 401 | 3,945 | – | 17 | 13 | 23 | 1,058 | 1 | 3 | 362 | – |
| Rhode Island * | – | 61 | 620 | – | 9 | 3 | 15 | 2,534 | – | 1 | 20 | – |
| Connecticut | 1 | 180 | 1,813 | 2 | 18 | 23 | 1 | 1,543 | – | 6 | 421 | – |
| MIDDLE ATLANTIC | 21 | 8,214 | 2,623 | 1 | 177 | 169 | 46 | 3,850 | 8 | 3 | 1,134 | 7 |
| Upstate New York | 3 | 967 | 818 | 1 | 64 | 60 | 9 | 946 | 5 | 1 | 261 | 2 |
| New York City | 1 | 616 | 928 | – | 40 | 36 | 17 | 718 | 2 | – | 159 | 1 |
| New Jersey | 16 | 5,662 | 497 | – | 48 | 40 | 9 | 699 | 1 | 2 | 459 | 2 |
| Pennsylvania * | 1 | 969 | 380 | – | 25 | 33 | 11 | 1,487 | – | – | 255 | 2 |
| EAST NORTH CENTRAL | 66 | 8,168 | 8,814 | 12 | 152 | 166 | 355 | 14,286 | 19 | 34 | 3,654 | 10 |
| Ohio | 4 | 3,059 | 294 | 9 | 63 | 71 | 58 | 3,274 | – | – | 520 | 2 |
| Indiana | 6 | 271 | 681 | – | 15 | 5 | 35 | 1,099 | – | 4 | 624 | – |
| Illinois | 14 | 2,097 | 2,111 | – | 10 | 27 | 39 | 1,325 | 9 | 8 | 606 | 3 |
| Michigan | 36 | 2,156 | 4,451 | 3 | 47 | 47 | 123 | 5,994 | 3 | 15 | 1,309 | 4 |
| Wisconsin | 6 | 585 | 1,277 | – | 17 | 16 | 100 | 2,594 | 7 | 7 | 595 | 1 |
| WEST NORTH CENTRAL | 7 | 711 | 456 | 5 | 90 | 90 | 42 | 3,082 | – | 2 | 230 | 13 |
| Minnesota | – | 85 | 22 | 1 | 31 | 12 | – | 44 | – | – | 13 | 2 |
| Iowa | – | 134 | 279 | 1 | 15 | 21 | 23 | 1,856 | – | – | 15 | 1 |
| Missouri | – | 265 | 53 | 1 | 21 | 34 | 4 | 416 | – | 2 | 43 | 4 |
| North Dakota | 2 | 33 | 67 | – | 3 | 3 | 9 | 78 | – | – | 18 | 3 |
| South Dakota | – | 27 | 2 | – | 3 | 4 | – | 2 | – | – | 26 | – |
| Nebraska | 1 | 3 | 6 | – | 3 | 7 | – | 88 | – | – | 6 | – |
| Kansas | 4 | 164 | 27 | 2 | 14 | 9 | 6 | 598 | – | – | 109 | 3 |
| SOUTH ATLANTIC | 4 | 584 | 1,272 | 13 | 234 | 206 | 94 | 5,888 | – | 33 | 1,306 | 23 |
| Delaware | – | 15 | 10 | – | 5 | 2 | 3 | 102 | – | – | 30 | – |
| Maryland | – | 24 | 13 | – | 23 | 27 | 13 | 133 | – | – | 5 | 1 |
| District of Columbia | – | 3 | 8 | – | 1 | 4 | – | 50 | – | – | 4 | – |
| Virginia | – | 38 | 422 | – | 39 | 41 | 28 | 664 | – | 2 | 52 | 3 |
| West Virginia | – | 218 | 222 | 1 | 8 | 6 | 28 | 3,082 | – | 3 | 306 | 1 |
| North Carolina | – | 5 | 4 | 1 | 46 | 42 | NN | NN | – | – | 55 | 4 |
| South Carolina | 3 | 57 | 66 | 3 | 21 | 13 | 6 | 134 | – | 26 | 663 | 4 |
| Georgia | – | 4 | 152 | – | 8 | 23 | – | 1 | – | – | 3 | 1 |
| Florida | 1 | 220 | 375 | 8 | 83 | 48 | 16 | 1,722 | – | 2 | 188 | 9 |
| EAST SOUTH CENTRAL | 2 | 283 | 629 | 2 | 114 | 113 | 75 | 5,922 | 4 | 18 | 638 | 6 |
| Kentucky | 2 | 196 | 393 | 1 | 44 | 40 | 27 | 2,349 | – | 1 | 217 | – |
| Tennessee | – | 56 | 165 | – | 50 | 44 | 38 | 2,630 | 3 | 16 | 339 | 2 |
| Alabama | – | 18 | 13 | 1 | 12 | 16 | 7 | 563 | – | 1 | 63 | 1 |
| Mississippi | – | 13 | 58 | – | 8 | 13 | 3 | 380 | 1 | – | 19 | 3 |
| WEST SOUTH CENTRAL | 4 | 231 | 725 | 8 | 204 | 187 | 121 | 3,664 | 5 | 22 | 482 | 10 |
| Arkansas | – | 7 | 72 | – | 13 | 13 | 4 | 144 | 1 | – | 26 | – |
| Louisiana | – | 13 | 87 | – | 53 | 44 | 20 | 254 | – | 12 | 111 | 3 |
| Oklahoma | – | 29 | 60 | 2 | 21 | 32 | 4 | 399 | 2 | – | 57 | 3 |
| Texas | 4 | 182 | 506 | 6 | 117 | 98 | 93 | 2,867 | 2 | 10 | 288 | 4 |
| MOUNTAIN | 1 | 759 | 932 | 1 | 39 | 35 | 13 | 1,170 | 6 | 3 | 425 | 1 |
| Montana | – | 373 | 211 | – | 1 | 7 | – | 178 | 5 | – | 68 | – |
| Idaho | – | 52 | 256 | – | 2 | 4 | – | 158 | – | – | 14 | – |
| Wyoming | – | 1 | 81 | – | 3 | 1 | – | 10 | – | – | – | – |
| Colorado | – | 36 | 107 | – | 9 | 11 | 12 | 572 | – | – | 160 | – |
| New Mexico | – | 61 | 128 | – | 3 | 3 | – | 179 | – | 1 | 125 | – |
| Arizona | – | 20 | 19 | 1 | 8 | 5 | – | – | – | – | 1 | 1 |
| Utah | – | 16 | 129 | – | 9 | 2 | – | 67 | 1 | 2 | 24 | – |
| Nevada | 1 | 200 | 1 | – | 4 | 2 | 1 | 6 | – | – | 33 | – |
| PACIFIC | 16 | 1,020 | 2,361 | 3 | 123 | 198 | 159 | 5,089 | 3 | 39 | 2,094 | 15 |
| Washington | – | 72 | 1,043 | 1 | 16 | 20 | 77 | 1,766 | – | 7 | 410 | 1 |
| Oregon | – | – | 460 | – | 14 | 16 | 8 | 821 | – | 2 | 232 | 2 |
| California * | 16 | 882 | 773 | 2 | 86 | 154 | 68 | 2,280 | 3 | 30 | 1,435 | 11 |
| Alaska | – | – | 65 | – | 4 | 8 | 1 | 149 | – | – | – | – |
| Hawaii | – | 66 | 20 | – | 3 | – | 5 | 73 | – | – | 17 | 1 |
| Guam * | – | 17 | 52 | – | 2 | – | – | 370 | – | – | 6 | – |
| Puerto Rico | 2 | 661 | 1,957 | – | 6 | 8 | 17 | 1,169 | – | 1 | 33 | 4 |
| Virgin Islands | --- | 29 | 7 | --- | – | – | --- | 35 | --- | --- | – | 1 |

*Delayed reports: Measles: N.H. 1, Vt. delete 1, R.I. 2, Calif. 8
Meningococcal infection: Vt. 10, Penn. delete 1, Calif. 1, Guam 1
Mumps: Me. 1, N.H. 6, Calif. 29, Guam 8
Pertussis: N.H. 2, Calif. 5
Rubella: Vt. 2, Calif. 2

## TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING NOVEMBER 16, 1974 AND NOVEMBER 17, 1973 (46th WEEK) – Continued

| AREA | TUBERCULOSIS (New Active) | | TULAREMIA | TYPHOID FEVER | | TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever) | | VENEREAL DISEASES | | | | | | RABIES IN ANIMALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | GONORRHEA | | | SYPHILIS (Pri. & Sec.) | | | |
| | 1974 | Cum. 1974 | Cum. 1974 | 1974 | Cum. 1974 | 1974 | Cum. 1974 | 1974 | Cumulative 1974 | Cumulative 1973 | 1974 | Cumulative 1974 | Cumulative 1973 | Cum. 1974 |
| UNITED STATES | 549 | 26,945 | 130 | 9 | 381 | 7 | 742 | 19,129 | 810,943 | 755,134 | 523 | 22,211 | 22,072 | 2,618 |
| NEW ENGLAND | 9 | 1,068 | – | 2 | 21 | – | 8 | 444 | 21,324 | 18,970 | 18 | 448 | 589 | 25 |
| Maine | – | 81 | – | – | 1 | – | – | 38 | 1,821 | 1,228 | – | 40 | 22 | 3 |
| New Hampshire * | – | 25 | – | – | 1 | – | – | 21 | 732 | 717 | 2 | 13 | 10 | 3 |
| Vermont * | – | 23 | – | – | 1 | – | – | 16 | 585 | 315 | – | 2 | 21 | 1 |
| Massachusetts | 4 | 579 | – | 2 | 14 | – | 6 | 178 | 9,497 | 8,057 | 4 | 180 | 266 | 4 |
| Rhode Island | 3 | 97 | – | – | 2 | – | 2 | 59 | 1,943 | 1,918 | – | 18 | 15 | 4 |
| Connecticut | 2 | 263 | – | – | 2 | – | – | 132 | 6,746 | 6,735 | 12 | 195 | 255 | 10 |
| MIDDLE ATLANTIC | 68 | 4,879 | 2 | 3 | 64 | – | 66 | 2,204 | 96,876 | 104,181 | 79 | 4,697 | 4,893 | 77 |
| Upstate New York * | 11 | 716 | 2 | – | 14 | – | 27 | 414 | 18,465 | 18,071 | 3 | 437 | 345 | 34 |
| New York City | 32 | 1,877 | – | – | 33 | – | 3 | 1,008 | 41,561 | 46,838 | 43 | 2,702 | 2,934 | – |
| New Jersey | 8 | 890 | – | 1 | 11 | – | 4 | 176 | 13,418 | 15,386 | 21 | 757 | 887 | 25 |
| Pennsylvania | 17 | 1,396 | – | 2 | 6 | – | 32 | 606 | 23,432 | 23,886 | 12 | 801 | 727 | 18 |
| EAST NORTH CENTRAL | 90 | 3,731 | 6 | – | 38 | – | 26 | 2,825 | 128,528 | 115,848 | 45 | 1,921 | 2,026 | 190 |
| Ohio * | 24 | 985 | – | – | 6 | – | 17 | 844 | 34,311 | 28,284 | 3 | 297 | 242 | 26 |
| Indiana | 5 | 540 | – | – | 5 | – | 1 | 93 | 12,156 | 10,647 | 2 | 164 | 262 | 14 |
| Illinois | 38 | 1,080 | 3 | – | 15 | – | 6 | 998 | 41,279 | 40,049 | 38 | 999 | 1,028 | 45 |
| Michigan | 20 | 1,014 | – | – | 10 | – | 2 | 567 | 28,196 | 27,328 | 2 | 369 | 426 | 5 |
| Wisconsin | 3 | 112 | 3 | – | 2 | – | – | 323 | 12,586 | 9,540 | – | 92 | 68 | 100 |
| WEST NORTH CENTRAL | 52 | 1,046 | 20 | – | 10 | – | 17 | 742 | 41,963 | 38,123 | 14 | 564 | 343 | 697 |
| Minnesota | 7 | 162 | – | – | 4 | – | – | 86 | 9,190 | 7,614 | 3 | 73 | 91 | 237 |
| Iowa | 6 | 115 | – | – | 2 | – | 1 | 15 | 5,283 | 4,476 | – | 34 | 54 | 116 |
| Missouri | 31 | 503 | 17 | – | 2 | – | 9 | 358 | 13,943 | 12,903 | 6 | 370 | 159 | 38 |
| North Dakota | – | 30 | – | – | – | – | – | 26 | 667 | 632 | – | 3 | 2 | 101 |
| South Dakota | – | 51 | 3 | – | – | – | 2 | 36 | 2,012 | 1,928 | – | 2 | 5 | 134 |
| Nebraska * | 1 | 43 | – | – | – | – | – | 66 | 3,649 | 4,360 | – | 12 | 10 | 5 |
| Kansas | 7 | 142 | – | – | 2 | – | 5 | 155 | 7,219 | 6,210 | 5 | 70 | 22 | 66 |
| SOUTH ATLANTIC | 103 | 5,688 | 10 | – | 52 | 2 | 410 | 5,619 | 206,103 | 183,395 | 142 | 7,027 | 6,478 | 364 |
| Delaware | 4 | 92 | – | – | – | – | 10 | 113 | 2,771 | 2,680 | 1 | 77 | 82 | 1 |
| Maryland | 6 | 731 | 1 | – | 8 | – | 48 | 547 | 21,821 | 16,215 | 5 | 686 | 640 | 26 |
| District of Columbia | 7 | 327 | – | – | 1 | – | – | 257 | 14,557 | 15,853 | 16 | 596 | 755 | – |
| Virginia | 18 | 703 | 4 | – | 3 | 2 | 135 | 352 | 18,479 | 18,015 | 11 | 687 | 732 | 96 |
| West Virginia | 5 | 266 | – | – | 13 | – | 5 | 42 | 2,348 | 2,699 | – | 17 | 21 | 31 |
| North Carolina | 16 | 848 | 3 | – | 3 | – | 107 | 539 | 28,044 | 26,867 | 3 | 852 | 576 | 38 |
| South Carolina | 7 | 520 | – | – | 5 | – | 55 | 547 | 20,854 | 19,127 | 16 | 727 | 1,037 | 6 |
| Georgia | 18 | 850 | 2 | – | 3 | – | 48 | 1,811 | 42,794 | 35,696 | 16 | 787 | 881 | 128 |
| Florida | 22 | 1,351 | – | – | 16 | – | 2 | 1,411 | 54,435 | 46,243 | 74 | 2,598 | 1,754 | 38 |
| EAST SOUTH CENTRAL | 43 | 2,373 | 13 | – | 52 | 1 | 111 | 1,532 | 67,375 | 61,130 | 25 | 1,152 | 1,228 | 218 |
| Kentucky | 11 | 508 | 3 | – | 18 | 1 | 20 | 233 | 8,371 | 7,341 | 5 | 252 | 328 | 130 |
| Tennessee | 8 | 744 | 6 | – | 25 | – | 65 | 679 | 26,894 | 23,774 | 3 | 424 | 418 | 52 |
| Alabama | 15 | 710 | 2 | – | 4 | – | 10 | 350 | 18,459 | 17,346 | 12 | 232 | 176 | 33 |
| Mississippi | 9 | 411 | 2 | – | 5 | – | 16 | 270 | 13,651 | 12,669 | 5 | 244 | 306 | 3 |
| WEST SOUTH CENTRAL | 60 | 3,128 | 59 | – | 25 | 4 | 94 | 2,471 | 106,758 | 97,873 | 48 | 2,054 | 2,390 | 539 |
| Arkansas | 7 | 369 | 31 | – | 4 | 2 | 13 | 157 | 10,325 | 11,169 | 1 | 89 | 122 | 68 |
| Louisiana | 1 | 439 | 3 | – | 8 | – | 1 | 381 | 21,223 | 20,703 | 9 | 530 | 734 | 24 |
| Oklahoma * | 5 | 275 | 18 | – | 2 | 2 | 63 | 205 | 9,806 | 8,853 | 3 | 130 | 154 | 148 |
| Texas | 47 | 2,045 | 7 | – | 11 | – | 17 | 1,728 | 65,404 | 57,148 | 35 | 1,305 | 1,380 | 299 |
| MOUNTAIN | 21 | 860 | 12 | 1 | 18 | – | 7 | 619 | 30,749 | 25,818 | 8 | 519 | 547 | 163 |
| Montana | 11 | 70 | – | – | – | – | 1 | 41 | 1,685 | 1,477 | 3 | 6 | 4 | 7 |
| Idaho | – | 32 | – | – | – | – | 1 | 14 | 1,579 | 1,835 | 1 | 12 | 10 | – |
| Wyoming | 1 | 19 | 6 | – | 3 | – | 1 | 18 | 662 | 459 | – | 9 | 29 | 11 |
| Colorado | – | 161 | – | – | – | – | 1 | 140 | 8,549 | 6,981 | 1 | 126 | 187 | 27 |
| New Mexico | 7 | 178 | 2 | – | 4 | – | 2 | 133 | 4,749 | 4,626 | – | 81 | 101 | 73 |
| Arizona * | 2 | 311 | – | 1 | 8 | – | – | 146 | 8,556 | 7,170 | 1 | 190 | 141 | 44 |
| Utah | – | 36 | 4 | – | – | – | 1 | 31 | 1,853 | 1,482 | – | 14 | 13 | 1 |
| Nevada | – | 53 | – | – | 3 | – | – | 96 | 3,116 | 1,788 | 2 | 81 | 62 | – |
| PACIFIC | 103 | 4,172 | 8 | 3 | 101 | – | 3 | 2,673 | 111,267 | 109,796 | 144 | 3,829 | 3,578 | 345 |
| Washington | – | 291 | – | – | 13 | – | 1 | 284 | 10,576 | 10,611 | – | 80 | 137 | – |
| Oregon | 3 | 180 | 2 | – | 1 | – | 2 | 143 | 10,078 | 9,567 | 2 | 94 | 54 | 6 |
| California * | 89 | 3,288 | 6 | 3 | 83 | – | – | 2,131 | 85,744 | 85,077 | 142 | 3,610 | 3,305 | 328 |
| Alaska | – | 82 | – | – | 2 | – | – | 61 | 2,670 | 2,511 | – | 16 | 16 | 11 |
| Hawaii | 11 | 331 | – | – | 2 | – | – | 54 | 2,199 | 2,030 | – | 29 | 66 | – |
| Guam * | – | 30 | – | – | 1 | – | – | – | 284 | 388 | – | 3 | 5 | – |
| Puerto Rico | 7 | 476 | – | – | 4 | – | – | 59 | 2,911 | 3,748 | 10 | 781 | 645 | 50 |
| Virgin Islands | --- | 3 | – | --- | – | --- | – | --- | 273 | 207 | --- | 43 | 29 | – |

*Delayed reports: Tuberculosis: Ariz. delete 6, Calif. 58, Guam 2
Typhoid: Vt. 1, Calif. 2, Guam 1
RMSF: Okla. delete 2

Gonorrhea: N.H. 11, Neb. 1, Calif. 1980, Guam 39
Syphilis: Upstate N.Y. 9, Ohio delete 1, Neb. 2, Calif. 45
Rabies: Calif. 5

Week No. 46

## TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING NOVEMBER 16, 1974

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

| Area | All Causes | | | | | Pneumonia and Influenza All Ages |
|---|---|---|---|---|---|---|
| | All Ages | 65 years and over | 45-64 years | 25-44 years | Under 1 year | |
| NEW ENGLAND | 670 | 415 | 168 | 39 | 22 | 32 |
| Boston, Mass. | 194 | 113 | 48 | 13 | 9 | 9 |
| Bridgeport, Conn. | 39 | 25 | 12 | 1 | 1 | 1 |
| Cambridge, Mass. | 25 | 22 | – | 3 | – | 1 |
| Fall River, Mass. | 29 | 16 | 8 | 3 | – | 1 |
| Hartford, Conn. | 35 | 19 | 11 | 3 | 1 | 5 |
| Lowell, Mass. | 24 | 18 | 4 | 1 | – | 1 |
| Lynn, Mass. | 20 | 13 | 7 | – | – | – |
| New Bedford, Mass. | 27 | 21 | 4 | – | 1 | 2 |
| New Haven, Conn. | 63 | 29 | 21 | 5 | 4 | – |
| Providence, R. I. | 62 | 33 | 23 | 2 | 3 | 6 |
| Somerville, Mass. | 12 | 9 | 2 | 1 | – | – |
| Springfield, Mass. | 45 | 32 | 9 | 1 | 2 | 1 |
| Waterbury, Conn. | 44 | 25 | 12 | 6 | – | 1 |
| Worcester, Mass. | 51 | 40 | 7 | – | 1 | 4 |
| MIDDLE ATLANTIC | 2,769 | 1,689 | 728 | 167 | 74 | 116 |
| Albany, N. Y. | 47 | 28 | 10 | 8 | – | 3 |
| Allentown, Pa. | 30 | 22 | 5 | – | 2 | 1 |
| Buffalo, N. Y. | 126 | 73 | 32 | 6 | 8 | 8 |
| Camden, N. J. | 37 | 25 | 10 | – | 2 | – |
| Elizabeth, N. J. | 22 | 9 | 12 | – | 1 | – |
| Erie, Pa. | 25 | 11 | 12 | 1 | – | 4 |
| Jersey City, N. J. | 53 | 34 | 8 | 4 | 7 | 1 |
| Newark, N. J. | 80 | 43 | 21 | 6 | 4 | 3 |
| New York City, N. Y. † | 1,457 | 889 | 376 | 97 | 33 | 50 |
| Paterson, N. J. | 26 | 11 | 9 | 3 | 2 | 5 |
| Philadelphia, Pa. | 292 | 170 | 79 | 21 | 7 | 4 |
| Pittsburgh, Pa. | 171 | 106 | 52 | 7 | 2 | 17 |
| Reading, Pa. | 34 | 24 | 9 | 1 | – | 3 |
| Rochester, N. Y. | 128 | 82 | 33 | 6 | 2 | 5 |
| Schenectady, N. Y. | 21 | 14 | 6 | – | – | – |
| Scranton, Pa. | 35 | 25 | 5 | 1 | 1 | – |
| Syracuse, N. Y. | 90 | 48 | 32 | 4 | 3 | – |
| Trenton, N. J. | 33 | 23 | 8 | 2 | – | 4 |
| Utica, N. Y. | 29 | 25 | 3 | – | – | 3 |
| Yonkers, N. Y. | 33 | 27 | 6 | – | – | 5 |
| EAST NORTH CENTRAL | 2,342 | 1,337 | 644 | 161 | 115 | 52 |
| Akron, Ohio | 84 | 58 | 19 | 3 | 3 | – |
| Canton, Ohio | 40 | 17 | 16 | 3 | – | – |
| Chicago, Ill. | 597 | 335 | 175 | 44 | 25 | 12 |
| Cincinnati, Ohio | 138 | 87 | 32 | 10 | 5 | 2 |
| Cleveland, Ohio | 199 | 117 | 61 | 13 | 1 | 3 |
| Columbus, Ohio | 135 | 65 | 33 | 11 | 18 | 1 |
| Dayton, Ohio | 88 | 44 | 30 | 6 | 5 | – |
| Detroit, Mich. | 303 | 159 | 77 | 30 | 23 | 5 |
| Evansville, Ind. | 56 | 36 | 19 | – | – | 2 |
| Fort Wayne, Ind. | 39 | 24 | 10 | 2 | 3 | 4 |
| Gary, Ind. | 20 | 5 | 8 | 3 | 1 | 2 |
| Grand Rapids, Mich. | 65 | 49 | 9 | 5 | 1 | 6 |
| Indianapolis, Ind. | 171 | 87 | 53 | 11 | 11 | 1 |
| Madison, Wis. | 35 | 20 | 8 | – | 2 | 5 |
| Milwaukee, Wis. | 120 | 75 | 31 | 5 | 7 | 1 |
| Peoria, Ill. | 27 | 17 | 8 | – | 2 | 1 |
| Rockford, Ill. | 31 | 23 | 4 | – | 2 | 3 |
| South Bend, Ind. | 31 | 20 | 9 | 2 | – | 2 |
| Toledo, Ohio | 98 | 53 | 32 | 8 | 4 | 1 |
| Youngstown, Ohio | 65 | 46 | 10 | 5 | 2 | 1 |
| WEST NORTH CENTRAL | 770 | 491 | 185 | 39 | 30 | 27 |
| Des Moines, Iowa | 57 | 37 | 14 | 2 | 3 | 2 |
| Duluth, Minn. | 8 | 6 | 1 | – | 1 | 2 |
| Kansas City, Kans. | 29 | 14 | 8 | 4 | 2 | 1 |
| Kansas City, Mo. | 118 | 73 | 30 | 8 | 2 | – |
| Lincoln, Nebr. | 28 | 20 | 5 | 2 | 1 | 1 |
| Minneapolis, Minn. | 106 | 69 | 26 | 3 | 4 | 2 |
| Omaha, Nebr. | 79 | 47 | 23 | 2 | 3 | 1 |
| St. Louis, Mo. | 212 | 133 | 55 | 11 | 9 | 10 |
| St. Paul, Minn. | 74 | 52 | 14 | 2 | 2 | 1 |
| Wichita, Kans. | 59 | 40 | 9 | 5 | 3 | 7 |
| SOUTH ATLANTIC | 1,359 | 739 | 399 | 114 | 46 | 35 |
| Atlanta, Ga. | 120 | 64 | 33 | 10 | 6 | – |
| Baltimore, Md. | 203 | 108 | 57 | 21 | 8 | 1 |
| Charlotte, N. C. | 55 | 32 | 15 | 2 | 3 | – |
| Jacksonville, Fla. | 69 | 34 | 25 | 3 | 5 | 1 |
| Miami, Fla. | 156 | 94 | 46 | 11 | 1 | 4 |
| Norfolk, Va. | 62 | 37 | 15 | 6 | 3 | 2 |
| Richmond, Va. | 98 | 48 | 40 | 8 | – | 7 |
| Savannah, Ga. | 51 | 31 | 17 | 2 | – | 4 |
| St. Petersburg, Fla. | 82 | 67 | 13 | 1 | – | 4 |
| Tampa, Fla. | 69 | 42 | 18 | 1 | 4 | 4 |
| Washington, D. C. | 357 | 163 | 112 | 44 | 15 | 6 |
| Wilmington, Del. | 37 | 19 | 8 | 5 | 1 | 2 |
| EAST SOUTH CENTRAL | 681 | 406 | 169 | 52 | 34 | 28 |
| Birmingham, Ala. | 100 | 61 | 22 | 6 | 9 | – |
| Chattanooga, Tenn. | 46 | 31 | 9 | 3 | 2 | 1 |
| Knoxville, Tenn. | 37 | 26 | 9 | 1 | 1 | 2 |
| Louisville, Ky. | 114 | 67 | 36 | 6 | 3 | 11 |
| Memphis, Tenn. | 139 | 74 | 32 | 18 | 7 | 2 |
| Mobile, Ala. | 82 | 41 | 20 | 10 | 8 | 1 |
| Montgomery, Ala. | 45 | 27 | 10 | 3 | 3 | 2 |
| Nashville, Tenn. | 118 | 79 | 31 | 5 | 1 | 9 |
| WEST SOUTH CENTRAL | 1,224 | 685 | 325 | 85 | 67 | 27 |
| Austin, Tex. | 68 | 38 | 18 | 4 | 3 | 2 |
| Baton Rouge, La. | 42 | 26 | 9 | 3 | 1 | 3 |
| Corpus Christi, Tex. | 39 | 27 | 8 | 1 | 1 | – |
| Dallas, Tex. | 186 | 95 | 55 | 17 | 13 | – |
| El Paso, Tex. | 66 | 35 | 16 | 5 | 7 | 5 |
| Fort Worth, Tex. | 69 | 45 | 19 | 4 | 1 | 1 |
| Houston, Tex. | 261 | 137 | 66 | 20 | 14 | 3 |
| Little Rock, Ark. | 61 | 22 | 24 | 3 | 9 | 3 |
| New Orleans, La. | 157 | 95 | 42 | 8 | 9 | 2 |
| San Antonio, Tex. | 156 | 93 | 33 | 14 | 7 | 3 |
| Shreveport, La. | 48 | 29 | 13 | 5 | – | 1 |
| Tulsa, Okla. | 71 | 43 | 22 | 1 | 2 | 4 |
| MOUNTAIN | 573 | 298 | 165 | 40 | 35 | 18 |
| Albuquerque, N. Mex. | 68 | 32 | 18 | 12 | 2 | 4 |
| Colorado Springs, Colo. | 31 | 17 | 10 | 1 | 1 | 4 |
| Denver, Colo. | 153 | 76 | 48 | 5 | 15 | 2 |
| Las Vegas, Nev. | 16 | – | 8 | 5 | 2 | – |
| Ogden, Utah | 22 | 17 | 5 | – | – | 2 |
| Phoenix, Ariz. | 153 | 79 | 45 | 9 | 7 | 3 |
| Pueblo, Colo. | 24 | 15 | 5 | 2 | 1 | 2 |
| Salt Lake City, Utah | 47 | 29 | 9 | 3 | 3 | 1 |
| Tucson, Ariz. | 59 | 33 | 17 | 3 | 4 | – |
| PACIFIC | 1,511 | 975 | 334 | 97 | 33 | 50 |
| Berkeley, Calif. | 19 | 10 | 5 | – | – | – |
| Fresno, Calif. | 64 | 43 | 12 | 4 | 3 | 2 |
| Glendale, Calif. | 21 | 14 | 6 | 1 | – | – |
| Honolulu, Hawaii | 63 | 41 | 14 | 4 | 2 | – |
| Long Beach, Calif. | 102 | 70 | 22 | 6 | 1 | 3 |
| Los Angeles, Calif. | 378 | 237 | 77 | 32 | 12 | 11 |
| Oakland, Calif. | 80 | 51 | 13 | 9 | 1 | 4 |
| Pasadena, Calif. | 32 | 26 | 3 | 1 | – | – |
| Portland, Oreg. | 132 | 77 | 35 | 9 | 4 | 6 |
| Sacramento, Calif. | 53 | 31 | 11 | 9 | 2 | 2 |
| San Diego, Calif. | 91 | 58 | 25 | 1 | – | 2 |
| San Francisco, Calif. | 169 | 111 | 42 | 9 | 1 | 6 |
| San Jose, Calif. | 59 | 44 | 7 | 1 | 3 | 1 |
| Seattle, Wash. | 173 | 112 | 45 | 7 | 3 | 6 |
| Spokane, Wash. | 42 | 25 | 10 | 3 | 1 | 5 |
| Tacoma, Wash. | 33 | 25 | 7 | 1 | – | 2 |
| Total | 11,899 | 7,035 | 3,117 | 794 | 456 | 385 |
| Expected Number | 12,313 | 7,360 | 3,277 | 806 | 407 | 410 |

†Delayed report for week ending November 9, 1974

## CURRENT TRENDS

### PRIMARY AND SECONDARY SYPHILIS
United States, September 1974 (Provisional Data)

In September 1974, reported cases of primary and secondary syphilis numbered 2,192, up 6.5% from the number reported in September 1973 (provisional data). During the first 9 months of calendar year 1974, cases numbered 19,024, representing a small increase (1.4%) over the number reported in the same time period in the previous year. These increases are referable to a relatively small number of program areas. For example, 4 project areas accounted for 20% of the total cases reported between January and September and 67.7% of the increases reported in that period.

*(Reported by the Venereal Disease Control Division, Bureau of State Services, CDC.)*

### SUMMARY OF REPORTED CASES OF INFECTIOUS SYPHILIS

**CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas, September 1974 and September 1973 – Provisional Data**

| Reporting Area | Sept. | | Calendar Year Cumulative Jan. – Sept. | |
|---|---|---|---|---|
| | 1974 | 1973 | 1974 | 1973 |
| Connecticut | 12 | 19 | 138 | 191 |
| Maine | 7 | 1 | 30 | 21 |
| Massachusetts | 41 | 35 | 471 | 562 |
| New Hampshire | 0 | 1 | 7 | 7 |
| Rhode Island | 4 | 4 | 13 | 17 |
| Vermont | 0 | 3 | 1 | 16 |
| **DHEW REGION I TOTAL** | **64** | **63** | **660** | **814** |
| New Jersey | 72 | 72 | 661 | 755 |
| New York (Excl. NYC) | 54 | 29 | 399 | 300 |
| New York City | 249 | 227 | 2,333 | 2,539 |
| **DHEW REGION II TOTAL** | **375** | **328** | **3,393** | **3,594** |
| Delaware | 10 | 6 | 65 | 72 |
| District of Columbia | 55 | 74 | 484 | 599 |
| Maryland (Excl. Baltimore) | 13 | 21 | 182 | 197 |
| Baltimore | 46 | 39 | 380 | 448 |
| Pennsylvania (Excl. Philadelphia) | 22 | 16 | 172 | 196 |
| Philadelphia | 49 | 53 | 506 | 382 |
| Virginia | 46 | 82 | 588 | 581 |
| West Virginia | 2 | 1 | 14 | 14 |
| **DHEW REGION III TOTAL** | **243** | **292** | **2,391** | **2,489** |
| Alabama | 28 | 13 | 182 | 137 |
| Florida | 243 | 161 | 2,116 | 1,448 |
| Georgia (Excl. Atlanta) | 56 | 62 | 516 | 597 |
| Atlanta* | 51 | 41 | 371 | 423 |
| Kentucky | 27 | 18 | 220 | 265 |
| Mississippi | 22 | 26 | 185 | 264 |
| North Carolina | 72 | 54 | 701 | 467 |
| South Carolina | 62 | 78 | 537 | 558 |
| Tennessee | 29 | 54 | 359 | 339 |
| **DHEW REGION IV TOTAL** | **590** | **507** | **5,187** | **4,498** |
| Illinois (Excl. Chicago) | 29 | 17 | 201 | 148 |
| Chicago | 68 | 84 | 628 | 715 |
| Indiana (Excl. Indianapolis) | 7 | 15 | 94 | 155 |
| Indianapolis* | 3 | 7 | 37 | 64 |
| Michigan | 39 | 43 | 322 | 380 |
| Minnesota | 4 | 3 | 60 | 75 |
| Ohio | 36 | 26 | 227 | 212 |
| Wisconsin | 7 | 4 | 81 | 61 |
| **DHEW REGION V TOTAL** | **193** | **199** | **1,650** | **1,810** |
| Arkansas | 6 | 5 | 77 | 106 |
| Louisiana | 49 | 78 | 472 | 626 |
| New Mexico | 9 | 1 | 64 | 56 |
| Oklahoma | 14 | 15 | 99 | 134 |
| Texas | 141 | 164 | 1,052 | 1,190 |
| **DHEW REGION VI TOTAL** | **219** | **263** | **1,764** | **2,112** |
| Iowa | 8 | 8 | 34 | 42 |
| Kansas | 8 | 2 | 54 | 16 |
| Missouri | 44 | 39 | 326 | 118 |
| Nebraska | 1 | 1 | 10 | 10 |
| **DHEW REGION VII TOTAL** | **61** | **50** | **424** | **186** |
| Colorado | 12 | 9 | 99 | 153 |
| Montana | 0 | 0 | 2 | 2 |
| North Dakota | 2 | 1 | 6 | 2 |
| South Dakota | 0 | 1 | 2 | 5 |
| Utah | 2 | 1 | 10 | 12 |
| Wyoming | 0 | 0 | 2 | 3 |
| **DHEW REGION VIII TOTAL** | **16** | **12** | **121** | **177** |
| Arizona | 31 | 23 | 199 | 133 |
| California (Excl. LA and SF) | 129 | 91 | 913 | 878 |
| Los Angeles* | 146 | 135 | 1,411 | 1,357 |
| San Francisco* | 97 | 60 | 662 | 440 |
| Hawaii | 0 | 4 | 22 | 42 |
| Nevada | 4 | 8 | 47 | 53 |
| **DHEW REGION IX TOTAL** | **407** | **321** | **3,254** | **2,903** |
| Alaska | 1 | 3 | 4 | 13 |
| Idaho | 0 | 0 | 9 | 9 |
| Oregon | 9 | 2 | 72 | 34 |
| Washington | 14 | 19 | 95 | 121 |
| **DHEW REGION X TOTAL** | **24** | **24** | **180** | **177** |
| **UNITED STATES TOTAL** | **2,192** | **2,059** | **19,024** | **18,760** |
| Puerto Rico | 76 | 63 | 672 | 576 |
| Virgin Islands | 0 | 4 | 20 | 25 |
| U.S. Including Territories | 2,268 | 2,126 | 19,716 | 19,361 |

Note: Cumulative totals include revised and delayed reports through previous months.
Source: CDC 9.98 CDC, VD Control Division, Atlanta, Ga. 30333

*County Data

## EPIDEMIOLOGIC NOTES AND REPORTS

### GIARDIASIS – Utah

From September 5 to 17, 1974, 54 members of a Brigham Young University (BYU) sociology class camped in the Uintah Mountains of Utah. During their last week or after their return to Provo, 34 of 52 campers contacted developed diarrhea or loose, frequent stools of at least 3-5 days' duration (clinical attack rate 65%). Distribution of symptomatic cases by date of onset is shown in Figure 4, and frequency of symptoms is shown in Table 2. Symptoms lasted from 3 to 41 days, with a mean of 13 days and a median of 11 days. No campers were hospitalized. All had had normal physical examinations before the trip.

The Center for Health and Environmental Studies at BYU examined stools from 42 campers; 26 (62%) contained *Giardia lamblia* trophozoites or cysts. Twenty-two (79%) of 28 symptomatic campers tested had positive stools, while 4 (29%) of 14 asymptomatic campers tested had positive stools.

GIARDIASIS – Continued

Figure 4
GIARDIASIS CASES IN 34 SYMPTOMATIC CAMPERS
BY DATE OF ONSET
BRIGHAM YOUNG UNIVERSITY – SEPTEMBER 1974

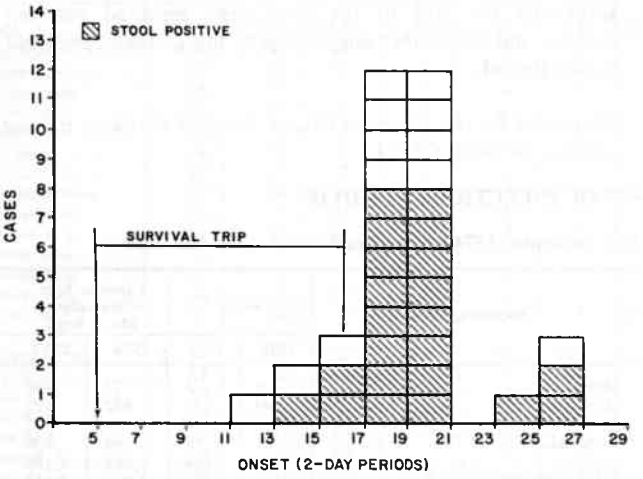



Table 2
Frequency of Symptoms in 34 Ill Campers
Brigham Young University – September 1974

| Symptom | Percent with Symptom |
|---|---|
| Bloating, belching, or flatulence | 97 |
| Diarrhea or frequent, loose stools | 85 |
| Nausea | 79 |
| Weight loss | 56 |
| Abdominal cramps | 44 |
| Loss of appetite | 41 |
| Vomiting | 24 |
| Fever | 0 |

Including both symptomatic and asymptomatic cases, the overall attack rate was 75%. One asymptomatic member who was negative for *Giardia* had *Endolimax nana* cysts in his stool. Stool specimens from 6 campers were tested for *Shigella* and *Salmonella* and were negative. At least 34 campers, 28 of whom were symptomatic, have been treated with quinacrine hydrochloride; 3 of the 28 have had clinical relapses.

Stool specimens were subsequently obtained from 55 other students at BYU before they went on similar survival trips; 1 (1.8%) contained *Giardia.*

Epidemiologic investigation revealed that the group, after 3 days of backpacking, set up camp at an altitude of 8,000 feet near a stream. They obtained all their drinking water from this source; it was neither halogenated nor boiled. The campers noted several active beaver ponds in the drainage area and saw grazing sheep and 1 shepherd, but no other humans. Food consisted of indigenous flora and some store-bought food. Human wastes were deposited at least 100 yards from the stream. Samples of stream water had 42 colonies of *Escherichia coli* per 100 ml; this is not an atypical coliform count for surface water in mountain streams in Utah *(1).*

Analysis of questionnaires from 52 members (96%) did not show a significant difference in attack rates when data were stratified by age, sex, home residence, history of recent foreign travel, or amount of water consumed during the trip. *(Reported by Percy Hawkes, Missionary Parasite Study, Vernon J. Tipton, Ph.D., Director, Center for Health and Environmental Studies, and Cloyd C. Hofheins, M.D., Director, Health Center, Brigham Young University; Craig R. Nichols, Epidemiologist, Merlin A. Smith, M.S., Chief, Environmental Microbiology, Bureau of Laboratories, and Taira Fukushima, M.D., M.P.H., Director, Bureau of Disease Prevention, Utah State Division of Health; and an EIS Officer.)*

**Editorial Note**

Sporadic single cases or small clusters of giardiasis in people with no history of foreign travel but with recent exposure to untreated mountain or pond water have been noted in Utah and other Rocky Mountain states recently *(2, 3).* This is the largest known outbreak to occur where the only source appears to be mountain streams. Human fecal contamination from the shepherd, group members, or other unknown sources is possible. However, *Giardia* species have been found in many wild and domestic animals *(4).* They are said to be host-specific, but extensive studies have not been done *(5, 6).* A wild or grazing animal at high altitudes may be an alternate host to man.

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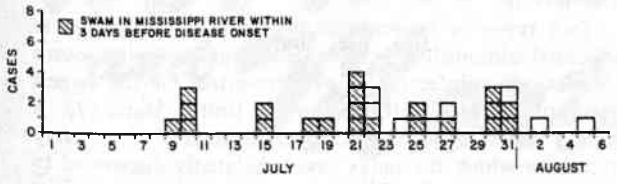
## SHIGELLOSIS ASSOCIATED WITH SWIMMING IN THE MISSISSIPPI RIVER – Iowa

Thirty-nine culture-positive cases of shigellosis occurring in 29 families between July 9 and August 5, 1974, were reported to the City and County Health Departments, Dubuque, Iowa, by August 30. Symptoms included diarrhea (100%), accompanied by fever (95%), abdominal pain (79%), chills (51%), headache (51%), vomiting (49%), and blood in stools (23%). Thirty-seven persons (95%) consulted a physician, 16 (41%) were hospitalized, and 1 underwent surgery for acute appendicitis. All isolates were *Shigella sonnei.*

Investigation revealed that 21 (72%) of the initial cases in each family had swum in a 5-mile portion of the Mississippi River about 6-11 miles south of Dubuque within 3 days before disease onset; 10 of these 21 persons swam at the same spot, a small beach near a camping park 10 miles south of Dubuque. The median age of all swimmers was 5 years and of the other initial cases, 12.5 years. Only 2 cases, both swimmers, had shared food or had personal contact; only 2 of the 10 swimmers from the park beach had consumed food or water while there. Swimming exposures and disease onsets for the 29 initial cases occurred over a 28-day period (Figure 5). Comparison of these cases with a neighbor-matched control group showed a statistically significant correlation ($p<.0000001$) between swimming and illness.

A retrospective telephone survey of 60 family groups

Figure 5
29 INITIAL SHIGELLOSIS CASES BY DATE OF ONSET
DUBUQUE, IOWA – JULY 9-AUGUST 5, 1974




who had camped at the park showed a statistically significant association between diarrheal illness and swimming at the beach near the park ($p<.0001$) but no association with drinking water from the well or consuming food prepared at a park restaurant. The attack rate among all swimmers was 13%; among those swimmers who remembered getting river water in their mouths it was 21%. The attack rate for swimmers less than 20 years old (16%) was more than twice that for swimmers over 20 (6%).

*S. sonnei* isolates from the 21 swimmers were examined for antibiogram and colicin type. Isolates from 6 were resistant to tetracycline, streptomycin, carbenicillin, and ampicillin, sensitive to 8 other antibiotics tested, and colicin untypable. Isolates from 12 were resistant to tetracycline, streptomycin, and sulfathiazole and were colicin type 9. Isolates from 2 were resistant only to sulfathiazole and were colicin type 9. The antibiogram and colicin type of the isolate from 1 swimmer were unknown.

Water samples were obtained from a 5-mile stretch of river between the Dubuque sewage treatment plant and the swimming area on August 2, 5, 7, 13, and 20. Mean fecal coliform counts were 17,500 organisms per 100 ml in the swimming area near the park and 6,500 organisms per 100 ml 5 miles upstream just below the outfall of the Dubuque sewage treatment plant. *S. sonnei*, with the same antibiogram and colicin type as the isolates from 6 cases (resistant to tetracycline, streptomycin, carbenicillin, and ampicillin, colicin untypable), was isolated at the Mercy Medical Center Laboratory in Dubuque from a sample of water obtained at the swimming area on September 4. Several possible sources of river contamination were found, but the specific source of shigella contamination could not be identified.

A ban was posted on swimming and waterskiing in the involved area on August 2, and no cases directly attributable to river contact in that area occurred after the ban was announced. Investigations were initiated to further identify and correct sources of river contamination.

*(Reported by John Schaefer, and Ray Ann Moriarity, Bacteriology Laboratories, Mercy Medical Center; Mary Gleason Kline, Frances Kringle, Glenann Slade, Mary Jane Toner, Mary Unsen, Public Health Nurses, and Arthur J. Roth, Jr., M.P.H., City Health Administrator, Dubuque City Health Department; David Kunkel, Sanitarian, and Isabel Hagge, Public Health Nurse, Dubuque County Health Department; Kenneth K. Hazlet, M.D., Director, Dubuque City and County Health Departments; Kim Deppe, Public Health Nurse, Jackson County Health Department; Franklin P. Koontz, Ph.D., Assistant Director, William J. Hausler, Ph.D., Director, Iowa State Hygienic Laboratories; Kenneth Choquette, Director, Health Engineering Section, William Permar, Robert Olsen, Frank Thompson, and Charles A. Herron, M.D., State Epidemiologist, Iowa State Department of Health; and an EIS Officer.)*

**Editorial Note**

Epidemiologic data strongly implicated swimming in the Mississippi River as the vehicle of transmission of shigellosis for 21 of the 29 initial cases in this study. Other infectious diseases associated with swimming in polluted natural waters include hepatitis (MMWR, Vol. 20, No. 26), typhoid fever *(1)*, dermatitis (MMWR, Vol. 18, No. 41), primary amebic meningoencephalitis (MMWR, Vol. 20, No. 24), and leptospirosis *(2)*. An outbreak of shigellosis in 1969 in Medford, Oregon, was traced to 8 index patients, 2 to 6 years old, who had used a wading pool grossly contaminated with fecal coliforms (MMWR, Vol. 18, No. 46); however, shigellae were not cultured from the pool, and epidemiologic data could not further implicate the pool as the source.

In this outbreak, fecal coliform counts where the children swam greatly exceeded the recommended federal standards of 200 per 100 ml of water used for swimming and other recreational purposes *(3)*. The small number of swallowed shigellae necessary to cause disease ($10^1$-$10^2$ shigella organisms, compared to $10^5$ salmonellae or $10^8$ *Vibrio cholerae)* suggest that this organism may pose a significant risk to swimmers in polluted waters *(4)*.

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## INTERNATIONAL NOTES

### SALMONELLA CROSS-INFECTION IN A HOSPITAL – United Kingdom

A patient was admitted to a maternity hospital where she had a normal delivery of a female child. As the hospital was short of accommodation, mother and child were transferred to a cottage hospital after 3 days. Four days later it was noted that the baby was failing to thrive. A loose stool was sent for laboratory examination, and the child was transferred the next day to a third hospital, under the care of a pediatrician. *Salmonella indiana* was isolated from the stool and also subsequently from the mother who admitted that she had had diarrhea for several days before entering the hospital; the source of infection may well have been uncooked sausage meat, which the mother regarded as a delicacy and had eaten recently. Within the maternity ward of the cottage hospital there were 7 other mothers and their babies; *S. indiana* was isolated from 2 of the babies and 1 of the mothers and also from 2 nurses who were mainly employed with adult patients but also helped care for the babies. One of these nurses had helped to feed the infected infants; she also washed their

**SALMONELLOSIS – Continued**

diapers in a sink after which they were boiled in an electric boiler. One adult patient in another ward of the cottage hospital, a 37-year-old man with carcinomatosis, was also infected with this salmonella and is likely to have acquired it by direct or indirect contact with 1 of the nurses. Only the babies had loose stools; the 2 mothers, 2 nurses, and the adult patient were symptomless. No salmonellae were isolated from fecal specimens from 12 domestics, 17 other nursing and ancillary staff, and 7 other male and 14 female adult patients. There was no spread in the Maternity Unit where the first baby had been delivered.

The cottage hospital was closed to new admissions while the staff and patients were investigated for salmonellosis. As many patients as possible were sent home. The 2 nurses who were carriers were not allowed to return to duty until they had had 3 consecutive negative fecal examinations, and the adult patient who was an excreter was transferred to the isolation unit of a district general hospital. Advice was given on personal and environmental hygiene, and it was recommended (1) that nurses use gloves when handling diapers, (2) that disposable diapers and bedpans are preferable and that if nondisposable diapers are used they should be boiled first before being washed in a sink, and (3) that in small hospitals with inadequate facilities or staff shortages, consideration should be given to the use of commercially prepared baby-feeds. A hand-wash basin was supplied to the kitchen and a disinfectant provided for hand-washing in the wards as an additional safeguard.

*(From notes based on reports to the Public Health Laboratory Service from Public Health and Hospital Laboratories in the United Kingdom and Republic of Ireland, published in the* British Medical Journal. *October 12, 1974.)*

**Editorial Note**

Two types of transmission patterns are recognized in nosocomial salmonellosis–cross-infection and common source outbreaks. Cross-infections have accounted for the largest number of reported outbreaks in the United States *(1)*. A recurrent theme in nosocomial salmonellosis is the nursery outbreak in which the index case is belatedly discovered to have been delivered from a mother with a recent or current history of diarrhea. The likelihood of such an occurrence could be greatly diminished if a question on recent gastrointestinal illness were a routine part of every obstetrical admission history. If the mother has had diarrhea recently or if she is currently having diarrhea, isolation precautions appropriate for enteric infections should be extended to mother and child until cultures have ruled out enteric pathogens. Infants with diarrhea of suspected infectious etiology should also be isolated pending culture results. If outbreaks do occur, it may be necessary to close the ward to admissions or to apply cohorting of both patients and personnel so that well and ill infants are separated and attendants caring for patients with diarrhea do not come into contact with newly admitted or uninfected patients. Recognizing and correcting environmental problems, as in the outbreak reported here, are also important in the control and prevention of outbreaks.

**Reference**

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| | |
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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 cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials.

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