## EPIDEMIOLOGICAL NOTES AND REPORTS POLIOMYELITIS - San Antonio, Texas

As of September 12, two cases of paralytic poliomyelitis have been confirmed in San Antonio, Texas, in 1970. The first case was in a 10 -month-old unimmunized MexicanAmerican child who had traveled with his parents to northern Mexico on July 1, 1970. On July 21 the child became ill with high fever and muscle weakness. He was hospitalized in Monterey, Mexico, for 6 days, and the parents were told that he had poliomyelitis. When the family returned to San Antonio in mid-August, the child was hospitalized. At that time, he had flaccid areflexic paralysis of all extremities with profound weakness of the trunk; he was able to move his fingers and toes. There were no sensory abnormalities. Type 1 poliovirus was isolated from his stool specimen.

The second case was in a 13 -month-old MexicanAmerican child from San Antonio. This boy had received a

CONTENTS
Epidemiologic Notes and Reports
Poliomyelitis - San Antonio, Texas . . . . . . . . . . . . . . 369
Plague - New Mexico . . . . . . . . . . . . . . . . . . . . . . . . . 370
Malaria in Tourists - Mi shigan and California ........... 370
International Notes
Echovirus Infections - United Kingdom and Republic of Ireland
371

Smallpox - Denmark

Current Trends
Tuberculosis Cases and Case Rates - 1969 373
Surveillance Summary
Listeriosis - United States 1969 . . . . . . . . . . . . . . . . 375
single dose of trivalent oral poliovirus vaccine at 2 months of age. On September 3 the child became ill with fever and weakness of the left arm. He was hospitalized in San Antonio on September 5 with a stiff neck, flaccid left arm, and weakness of the other extremities. A lumbar puncture was performed, and the cerebrospinal fluid contained 109 lymphocytes with normal glucose and protein concentra-
(Continued on page 370)

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

| DISEASE | 37th WEEK ENDED |  | $\begin{gathered} \text { MEDIAN } \\ 1965-1969 \end{gathered}$ | CUMULATIVE, FIRST 37 WEEKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { September } 19, \\ 1970 \end{gathered}$ | September 13 , 1969 |  | 1970 | 1969 | $\begin{gathered} \text { MEDIAN } \\ 1965-1969 \end{gathered}$ |
| Aseptic meningitis | 338 | 166 | 166 | 3.474 | 2,022 | 1,926 |
| Drucellosis... | 4 | 8 | 5 | 147 | 161 | 169 |
| Diphtheria . . . . . . . |  | 2 | 5 | 294 | 110 | 110 |
| Encephalitis, primary: <br> Arthropod-borne \& unspecified | 32 | 39 | 55 | 979 | 813 | 1,139 |
| Encephalitis, post-infectious . |  | 5 | 8 | 324 | 243 | 1.139 |
| Hepatitis, serum . . . . . . | 139 | 95 |  | 5,087 | 3,706 |  |
| Hepatitis, infectious | 1,124 | 965 | 895 | 39,528 | 32,910 | 28,554 |
| Measles (rubeola | 49 | 80 | 47 | 2,382 | 2,012 | 1,402 |
| Measles (rubeola) . . . . . . . . | 143 | 130 | 225 | 39,646 | 20,388 | 57,845 |
| Military | 37 | ${ }^{28}$ | 25 1 | 1,696 188 | 2,168 206 | 2,135 182 |
| Mumps . | 570 | 460 |  | 76,013 | 68,202 | 182 |
| Poliomyelitis, total | , | 2 | - | 19 | -13 | 42 |
| Paralytic | - | 1 | - | 18 | 12 | 37 |
| Rubella (German measles) | 312 | 232 | -.. | 49,564 | 49,023 | -.. |
| Tetanus. | 3 | , | 6 | 84 | 105 | 128 |
| Tyuaremia... | 3 | 5 |  | 104 | 108 | 131 |
| Typhus fever . . . . . . . . . . . . . . . | 12 |  | 14 | 219 | 207 | 266 |
| Raphus, tick-borne (Rky. Mt. spotted fever) | 8 | 9 | 9 | 298 | 384 | 238 |
| Rabies in animals | 45 | 51 | 81 | 2,193 | 2,541 | 3,061 |

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

|  | Cum. |  | Cum. |
| :---: | :---: | :---: | :---: |
| Anthrax: |  | Psittacosis: | 23 |
| Letulism: | 9 | Rabies in Man: | 2 |
| Leprosy: ...... | 90 | Rubella congenital syndrome: Calif.-1 | 46 |
| Leptospirosis: Fla.-1 | 31 10 | Trichinosis: N.Y.Ups.-1 . . . | 73 |
| Plague: N. Mex.-1 | 10 | Typhus, murine: | 31 |

## POLIOMYELITIS - (Continued from front page)

tion. During the next 24 hours the child's condition deteriorated rapidly. He became quadriplegic, comatose, and died on September 6. Type 1 poliovirus was isolated from a stool specimen of the child. This child had had no known contact with the previous patient.

A mass immunization campaign is being conducted in San Antonio at the present time; accordingly, 100,000 doses
of trivalent oral poliovirus vaccine from the CDC epidemic aid stockpile were sent for use in San Antonio.
(Reported by William Ross, M.D., Director, San Antonio Metropolitan Health District; M. S. Dickerson, M.D., Chief, Communicable Disease Services, Texas State Health Department; and an EIS Officer.)

## PLAGUE - New Mexico

On Sept. 15, 1970, a 15 -year-old boy in Tijeras, New Mexico, a community in Bernalillo County about 10 miles east of Albuquerque, had onset of pain and swelling in the left axilla. Although he did not feel well, he went to school. During the morning he saw the school nurse because of pain in the left axilla, severe headache, vomiting, and shaking chills. His temperature was $99.2^{\circ} \mathrm{F}$. ver the next few hours, his condition worsened with his temperature rising to $104^{\circ} \mathrm{F}$. That afternoon he was hospitalized in Albuquerque.

On admission he was noted to have numerous insect bites on his abdomen and chest and several tender swollen lymph nodes in his left axilla. Blood cultures were taken, and he was started on ampicillin. The next day bubonic plague was suspected, and he was started on streptomycin and tetracycline. On September 17 an organism resembling Yersinia pestis was seen on four of his five blood cultures. On September 18 a fluorescent antibody test was positive for $Y$. pestis, and on September 21 phage typing was positive, confirming the diagnosis.

On September 16, the patient's 34 -year-old mother also became ill with severe frontal headache, fever, shaking chills, and pain and swelling in the right axilla. She was hospitalized immediately with a diagnosis of presumptive bubonic plague and was begun on streptomycin and tetracycline. Her blood cultures have been negative, and serol-
ogy is pending. Both the mother and son are recovering. Epidemiologic investigation determined several possible exposures for the patients. In late August the boy found a dead mouse with a live litter of mice, and fed the dead mouse to his Siamese cat. In the 2 weeks prior to illness, the boy and his mother had cleaned a rental house where rodent droppings were frequently seen. In addition, during the weekend prior to his illness the boy went camping with his scout troop on the Isleta Indian Reservation. On returning home he noted several insect bites over his trunk which appeared to be mosquito bites. About this time his mother also noted similar bites on her body. In an effort to determine a specific source of infection, the family dog and cat were bled, and animal trapping was begun at the rental house and the camp site.
(Reported by Bruce Storrs, M.D., Director, Medical Services Division, Eva Wallen, M.D., District Health Officer, Brian Miller, Chief, General Sanitation Section, and Neil Weber, Supervisor, Vector Control Unit, Environmental Services Division, and Daniel Johnson, Ph.D., Director, State Laboratory, New Mexico Health and Social Services Department; W. Woodard, M.D., and R. Friedenberg, Private Physicians, Albuquerque; Zoonoses Section, Ecologic Investigations Program, CDC, Fort Collins, Colorado; and two EIS Officers.)

## MALARIA IN TOURISTS - Michigan and California

Three cases of malaria were recently reported in American tourists who had visited West Africa.

The first two cases were in a married couple who returned to their home in Michigan on Aug. 18, 1970, after a 1 -month tour of several West African countries. The next day, both persons experienced malaise, and the wife had onset of fever, chills, and dark urine. These symptoms persisted, and on August 21 the husband also developed fever. On August 22 they were admitted to a local hospital. Both patients had fever, slight jaundice, hepatomegaly, and dark urine, and the serum transaminase levels were markedly elevated although the serum bilirubin was only slightly abnormal. The diagnosis at the time of admission was either infectious hepatitis or yellow fever, but on the following day Plasmodium falciparum parasites were seen on peripheral blood smears of both persons. Both responded promptly to treatment with chloroquine.

The patients were members of a tour group of eight persons. They stated that before departing the United States they had received no information about the possibility of malaria in Africa and the need for chemosuppressive drugs. When these two cases were reported, the other tour members were notified of the possibility of malaria through the efforts of the McComb County Health Department, Michigan, and the Ohio State Health Department.

The third case was in a 58 -year-old woman who returned to her home in California on Aug. 19, 1970, after a 6 -week tour of West Africa. On August 23 she had onset of high fever, chills, headache, and lethargy, and on August 28 she went to a medical clinic where $P$. vivax parasites were seen on a peripheral blood smear taken that day. She had taken quinine sulfate before leaving the United States and pyrimethamine weekly while in Africa, but no antimalarial medication after her return to this country.

The patient was a member of one of two tourist groups of 250 persons each, who visited Africa for 6 weeks during the summer of 1970 . The travel agency that made the arrangements was notified of the patient's illness; they contacted all tour members and advised them to consult their personal physician in order to determine whether the medication they took was adequate. Subsequently, the California State Department of Public Health has received three further reports of suspect malaria in members of this tour group, including one case of possible cerebral malaria. (Reported by Moufid Ragheb, M.D., Attending Physician, St. Joseph's Hospital, Michigan; Ophelia V. Baker, M.D., Deputy Director, McComb County Health Department, Michigan; John H. Ackerman, M.D., Chief, Bureau of Preventive Medicine, Ohio Department of Health; S. B. Werner, M.D., Medical Epidemiologist, Infectious Disease Element, Bureau of Communicable Disease Control, California State Health Department; and Malaria Surveillance, Parasitic Diseases Branch, CDC.)

## Editorial Note:

Since 1963, the Malaria Surveillance Unit, CDC, has received reports of 452 civilians who traveled in Africa and then experienced an attack of malaria after returning to the United States. Most of these persons were tourists; others were foreign visitors, missionaries, seamen, or Peace Corps volunteers. Forty-two percent of these cases were due to $P$. falciparum. There were 18 deaths with a falciparum case-fatality ratio of 10 percent and many serious illnesses.

In a survey of health precautions advised by travel agencies which arrange African tours, it was found that only one of the 13 agencies contacted gave adequate information concerning malaria and the need for chemosuppression in malarious areas.* Quinine sulfate should not be used as a chemosuppressive drug as in Case No. 3.

* 500 mg of chloroquine phosphate once each week, starting the week prior to possible exposure and continuing throughout the time spent in areas in which transmission may occur and for 4 to 6 weeks thereafter, is recommended.


## INTERNATIONAL NOTES

## ECHOVIRUS INFECTIONS - United Kingdom and Republic of Ireland

The numbers of infections with different types of echovirus reported during each of the last 10 years are shown in Table 1. The increase in the number of reports in the early part of the decade probably reflects only the increase in the number of laboratories able to undertake virology and the increasing use of their facilities by clinicians during that period. By far the most commonly identified types have been types 6 and 9. Other types that have been highly prevalent in one or more years are shown individually in the table. The remaining types have been isolated in most in-
stances sporadically and in relatively small numbers; the most frequent among these were types $2,4,12,13,16,20$, 22,25 , and 27 . There was an epidemic of type 6 infection in 1968 that continued into early 1969 (1). In 1969 type 9 virus also became epidemic (2).

Altogether, 708 cases were reported during 1969 (Figure 1). The number of cases reported began to increase during late May and June, reached a peak in early August, and continued at a high rate until mid-October, after which
(Continued on page 372)

Figure 1


## ECHOVIRUS INFECTIONS－（Continued from page 371）

there was a rapid decline．The figure shows the number of cases according to the week in which laboratories received the relevant specimen，which，in most cases，was probably within a few days of onset of illness；this figure excludes all 202 cases from Scotland and 19 cases from England and Wales in which this date was not stated and another 25 cases in which the specimen was received in 1968．Cases were reported from all parts of the British Isles，but be－ tween one－fourth and one－third of the cases were from Scot－ land．The majority of cases had no known connection with one another，but there were a few small outbreaks．One outbreak was reported in a children＇s convalescent home in which nine children aged 1－13 years had febrile illnesses． Four cases were reported in a village outbreak in Scotland： one patient was a boy age 7 years with fever and myocard－ itis，another was a man age 24 years with meningitis，the third was a man of 33 years with headache，general aches， and fever，and the fourth patient，a woman age 28 years， had headache and fever．Several instances were also re－ corded in which the infection was detected in more than one member of the same family，sometimes with similar illnesses，but often with different symptoms or none at all．

Infection was considerably more frequent in males than in females at all ages（Table 2）and about two－thirds of the cases were in children．It should be noted that there is likely to be bias in the selection of cases for laboratory investigation，which may itself be influenced by the age and clinical condition of the patient．The main，clinical features of illnesses associated with the infection in the

Table 1
Echovirus Infections－1960－69

| Year | Echovirus Types |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 3 | 6 | 7 | 9 | 11 | 14 | 19 | 30 | Other Types | All <br> Types |
| 1960 | 2 | 3 | 3 | 33 | 166 | 11 | 14 |  | － | 3 | 235 |
| 961 | 25 | 6 | 14 | 13 | 119 | 19 | 38 | 3 | － | 21 | 258 |
| 1962 | 6 | 3 | 71 | 9 | 32 | 9 | 22 | 5 | － | 45 | 202 |
| 63 | 15 | 1 | 184 | 18 | 97 | 24 | 79 | 4 | － | 47 | 469 |
| 1964 | 21 | 11 | 36 | 28 | 254 | 38 | 40 | 4 | 19 | 171 | 622 |
| 965 | 29 | 12 | 78 | 62 | 104 | 38 | 32 | 4 | 10 | 148 | 517 |
| 1966 | 76 | 68 | 104 | 48 | 37 | 39 | 61 | 9 | 285 | 194 | 921 |
| 1967 | 27 | 112 | 81 | 73 | 73 | 111 | 80 | 127 | 199 | 137 | 1，020 |
| 1968 | 24 | 63 | 677 | 48 | 140 | 99 | 104 | 173 | 130 | 202 | 1，660 |
| 1969 | 16 | 11 | 452 | 55 | 708 | 57 | 70 | 39 | 85 | 210 | 1，703 |
| Total | 241 | 290 | 1，700 | 387 | 1，730 | 445 | 540 | 368 | 728 | 1，178 | 7，607 |

cases investigated are also shown in Table 2．About half the children and two－thirds of the adults had meningitis or encephalitis．About one in eight of the children had a respiratory illness， 7 percent had gastrointestinal disturb－ ances，and most of the others had general nonspecific， usually febrile illnesses．In adults the proportions with respiratory and gastrointestinal illnesses were smaller．

Five patients are known to have died with echovirus 9 infection．A diabetic man age 58 years who had chronic bronchitis and emphysema，suffered from convulsions， pyrexia，and a rash，and finally died with bronchopneumonia and anemia；the virus was isolated from urine．A girl age

Table 2
Patients with Echo 9 Virus Infections by Age，Main Clinical Features，and Sex United Kingdom 1969

| Age（Years） | Symptoms |  |  |  |  |  |  |  |  |  | Sex |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Respiratory |  |  | Gastro－ intestinal | Central Nervous System |  |  | $\begin{aligned} & \text { 팽 } \\ & \stackrel{5}{5} \\ & 0 \end{aligned}$ | $\begin{aligned} & \stackrel{\oplus}{ \pm} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  | $\stackrel{\otimes}{\stackrel{0}{\otimes}}$ |  | Not Stated |  |  |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { L } \\ & \stackrel{ \pm}{5} \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { 岕 } \\ & \text { 20 } \end{aligned}$ | $\begin{aligned} & \text { 山山 } \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  | Num－ ber | Per- cent |
| Under 1 | 6 | 5 | 4 | 18 | 1 | 15 | 1 | 10 | 5 | 6 | 42 | 25 | 4 | 71 | 10.0 |
| 1－4 | 13 | 8 | 0 | 10 | 5 | 36 | 4 | 27 | 8 | 15 | 76 | 49 | 1 | 126 | 17.8 |
| 5－9 | 11 | 3 | 2 | 4 | 3 | 84 | 8 | 25 | 4 | 2 | 100 | 46 | 0 | 146 | 20.6 |
| 10－14 | 0 | 6 | 2 | 2 | 8 | 73 | 7 | 11 | 2 | 1 | 69 | 40 | 3 | 112 | 15.8 |
| All children | 30 | 22 | 8 | 34 | 17 | 208 | 20 | 74＊ | 20＊ | 26＊＊ | 291 | 160 | 8 | 459 | 64.8 |
| （Percent） | 6.5 | 4.8 | 1.7 | 7.4 | 3.7 | 45.3 | 4.4 | 16.1 | 4.4 | 5.7 | 63.4 | 34.9 | 1.7 | 100.0 |  |
| 15－24 | 3 | 3 | 3 | 0 | 6 | 68 | 5 | 12 | 5 | 0 | 59 | 46 | 0 | 105 | 14.8 |
| 25－44 | 3 | 0 | 5 | 4 | 4 | 74 | 4 | 15 | 2 | 1 | 67 | 45 | 0 | 112 | 15.8 |
| 45 and over | 0 | 1 | 1 | 2 | 0 | 6 | 1 | 2 | 1 | 0 | 8 | 6 | 0 | 14 | 2.0 |
| All adults | 6 | 4 | 9 | $7 \times$ | 10 | $149{ }^{\text {x }}$ | 10 | 29 | 8 | 1 | 136 | 97 | 0 | 233 | 32.9 |
| （Percent） | 2.6 | 1.7 | 3.9 | 3.0 | 4.3 | 63.9 | 4.3 | 12.4 | 3.4 | 0.4 | 58.4 | 41.6 | － | 100.0 |  |
| Not stated | 1 | 0 | 1 | 0 | 0 | 5 | 2 | 3 | 2 | 2 | 10 | 5 | 1 | 16 | 2.3 |
| Total | 37 | 26 | 18 | 41 | 27 | 362 | 32 | 106 | 30 | 29 | 437 | 262 | 9 | 708 | 100.0 |

＊One child－age not stated
xOne adult－age not stated

16 years, had acute myocarditis, and the virus was isolated from heart muscle and lung obtained at autopsy. Another girl age 13 years, who was hospitalized with a history of increasing psychiatric disorder, became comatose, had a convulsion, and died; she was thought to have had a virus encephalitis, and echovirus 9 was isolated from her throat. A 46 -year-old man who had a cerebrovascular accident collapsed and became unconscious, and the virus was isolated from cerebrospinal fluid. The fifth fatal case was in a child age 4 years, with pulmonary infiltration and
pyrexia; the virus was isolated from feces, and paired sera showed a fourfold rise in antibody titer.
(Based on reports to the Public Health Laboratory Service from public health and hospital laboratories in the United Kingdom and Republic of Ireland for the week ending August 21, 1970)

References:

1. Epidemiology. Brit Med J 2:701, June 14, 1969
2. Epidemiology. Brit Med J 3:538, Aug. 30, 1969

## SMALLPOX - Denmark (1)

On September 4 an imported case of smallpox was diagnosed in Copenhagen in a 22 -year-old Norwegian man who has just returned from Afghanistan. This is the first case of smallpox to occur in Denmark since 1924.

The patient, who had been in Afghanistan since May 1970, had been hospitalized in Kabul between August 15 and 20 because of gastroenteritis. He left Kabul for Istanbul on August 22 where he remained for 4 days. On August 26 he flew from Istanbul to Copenhagen where he arrived in the late afternoon. On the evening of August 27 he had onset of fever and the next day was treated with penicillin. A rash appeared on August 29 which was initially thought to be a drug reaction. He was hospitalized on August 31. As the rash evolved, the diagnosis of smallpox was suspected; this was confirmed on September 4 by electron microscopy and virus isolation. The patient had been vaccinated in childhood and is said to have a vaccination scar. He was revaccinated in May 1970, but this was said to have been unsuccessful.

Over 300 contacts have been identified, immunized, and isolated. One contact who had been isolated in Tromsø,

Norway, developed fever and transient rash on September 5 and back pain with increasing fever on September 8. Smallpox is suspected. The patient is under close observation, all contacts have been vaccinated, and laboratory studies are in progress.

Possible sources of infection of the patient in Denmark are being investigated by the Government of Afghanistan. A smallpox eradication program is in progress in Afghanistan, and during the past year all reported suspected cases have been intensively investigated and containment measures taken. Between July 1 and August 22, 19 cases were detected in Afghanistan; two of these occurred in Kabul.

This represents the second importation of smallpox into Europe during 1970. In January a German electrician, returning from Karachi (Pakistan) introduced smallpox into Meschede (Federal Republic of Germany - MMWR, Vol. 19, Nos. 3-5, 8, and 24).

[^0]
## CURRENT TRENDS <br> TUBERCULOSIS CASES AND CASE RATES - 1969

The number of new active tuberculosis cases reported in the United States during 1969 continued to show the accelerating decline noted in recent years (Table 3). An official count shows a total of 39,120 cases reported in 1969 ; this was 8.2 percent fewer cases than the 42,623 cases recorded in 1968 (Table 4). There was also a decline in the case rate, dropping from 21.3 per 100,000 population in 1968 to 19.4 in 1969. This decline in the nation's tuberculosis morbidity reflects the cumulative effect of intensified control efforts and expanded emphasis on preventive treatment for tuberculosis infection during the previous five years.
(Reported by the Tuberculosis Branch, State and Community Services Division, CDC.)
(Continued on page 374)

Table 3
New Active Tuberculosis Cases by Year - 1959-1969

| Year | New Active <br> Tuberculosis Cases | Percent Change from <br> the Previous Year |
| :--- | :---: | :---: |
| 1959 | 57,535 | $\cdots$ |
| 1960 | 55,494 | -3.5 |
| 1961 | 53,726 | -3.2 |
| 1962 | 53,315 | -0.8 |
| 1963 | 54,042 | +1.4 |
| 1964 | 50,874 | -5.9 |
| 1965 | 49,016 | -3.7 |
| 1966 | 47,767 | -2.5 |
| 1967 | 45,647 | -4.4 |
| 1968 | 42,623 | -6.6 |
| 1969 | 39,120 | -8.2 |

Table 4
New Active Tuberculosis Cases and Case Rates: Each State, 1968 and 1969

| State | New Active Cases |  | Case Rate per 100,000 Population |  | Rank According to Rate |  | Population July 1, 1969 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1968 | 1969 | 1968 | 1969 | 1968 | 1969 |  |
| United States | 42,623 | 39,120 | 21.3 | 19.4 |  |  | 201,921,000 |
| Continental U.S. | 42,211 | 38,729 | 21.2 | 19.3 | - | . | 200,845,000 |
| Alabama | 1,338 | 1,203 | 37.5 | 34.1 | 3 | 2 | 3,531,000 |
| Alaska | 112 | 89 | 40.4 | 31.6 | 1 | 3 | 282,000 |
| Arizona | 472 | 452 | 28.3 | 26.7 | 8 | 7 | 1,693,000 |
| Arkansas | 563 | 577 | 28.0 | 28.9 | 9 | 4 | 1,995,000 |
| California | 3,838 | 3,804 | 20.0 | 19.6 | 24 | 20 | 19,443,000 |
| Colorado | 230* | 251 | 11.2 | 12.0 | 38 | 37 | 2,100,000 |
| Connecticut | 374 | 346 | 12.6 | 11.5 | 37 | 38 | 3,000,000 |
| Delaware | 88 | 94 | 16.5 | 17.4 | 31 | 26 | 540,000 |
| District of Columbia | 432 | 380 | 53.4 | 47.6 |  | $\ldots$ | 798,000 |
| Florida | 1,620 | 1,572 | 26.3 | 24.7 | 11 | 9 | 6,354,000 |
| Georgia | 1,074 | 983 | 23.4 | 21.2 | 19 | 17 | 4,641,000 |
| Hawaii | 300 | 302 | 38.6 | 38.0 | 2 |  | 794,000 |
| Idaho | 63 | 49 | 8.9 | 6.8 | 42 | 47 | 718,000 |
| Illinois | 2,805 | 2,478 | 25.6 | 22.4 | 14 | 13 | 11,047,000 |
| Indiana | 1,036 | 821 | 20.4 | 16.0 | 20 | 29 | 5,118,000 |
| Iowa | 116 | 128 | 4.2 | 4.6 | 50 | 50 | 2,781,000 |
| Kansas | 224 | 185 | 9.7 | 8.0 | 40 | 43 | 2,321,000 |
| Kentucky | 1,002 | 906 | 31.0 | 28.0 | 5 | 5 | 3,232,000 |
| Louisiana | 963 | 755 | 25.8 | 20.2 | 13 | 18 | 3,745,000 |
| Maine | 92 | 92 | 9.4 | 9.4 | 41 | 41 | 978,000 |
| Maryland | 1,094 | 912 | 29.1 | 24.2 | 7 | 10 | 3,765,000 |
| Massachusetts | 905 | 802 | 16.6 | 14.7 | 30 | 31 | 5,467,000 |
| Michigan | 1,785 | 1,577 | 20.4 | 18.0 | 21 | 23 | 8,766,000 |
| Minnesota | 300 | 280 | 8.2 | 7.6 | 43 | 45 | 3,700,000 |
| Mississippi | 558 | 457 | 23.8 | 19.4 | 17 | 21 | 2,360,000 |
| Missouri | 801 | 750 | 17.3 | 16.1 | 27 | 28 | 4,651,000 |
| Montana | 101 | 101 | 14.6 | 14.6 | 33 | 32 | 694,000 |
| Nebraska | 117 | 102 | 8.1 | 7.0 | 44 | 46 | 1,449,000 |
| Nevada | 91 | 57 | 20.1 | 12.5 | 23 | 36 | 457,000 |
| New Hampshire | 45 | 48 | 6.4 | 6.7 | 49 | 48 | 717,000 |
| New Jersey | 1,297 | 1,232 | 18.3 | 17.2 | 26 | 27 | 7,148,000 |
| New Mexico | 193 | 198 | 19.0 | 19.9 | 25 | 19 | 994,000 |
| New York | 4,699 | 4,335 | 25.9 | 23.7 | 12 | 11 | 18,321,000 |
| North Carolina | 1,207 | 1,157 | 23.5 | 22.2 | 18 | 14 | 5,205,000 |
| North Dakota | 45 | 68 | 7.2 | 11.1 | 47 | 39 | 615,000 |
| Ohio | 1,376 | 1,365 | 13.0 | 12.7 | 36 | 35 | 10,740,000 |
| Oklahoma | 428 | 363 | 17.0 | 14.1 | 29 | 33 | 2,568,000 |
| Oregon | 290 | 357 | 14.4 | 17.6 | 34 | 24 | 2,032,000 |
| Pennsylvania | 2,378 | 2,233 | 20.3 | 18.9 | 22 | 22 | 11,803,000 |
| Rhode Island | 121 | 91 | 13.3 | 10.0 | 35 | 40 | 911,000 |
| South Carolina | 651 | 630 | 24.2 | 23.4 | 16 | 12 | 2,692,000 |
| South Dakota | 108 | 115 | 16.4 | 17.5 | 32 | 25 | 659,000 |
| Tennessee | 1,073 | 860 | 27.0 | 21.6 | 10 | 15 | 3,985,000 |
| Texas | 3,216 | 2,988 | 29.3 | 26.7 | 6 | 6 | 11,187,000 |
| Utah | 74 | 62 | 7.2 | 5.9 | 48 | 49 | 1,045,000 |
| Vermont | 31 | 38 | 7.3 | 8.7 | 46 | 42 | 439,000 |
| Virginia | 1,441 | 1,186 | 31.3 | 25.4 | 4 | 8 | 4,669,000 |
| Washington | 566 | 525 | 17.3 | 15.4 | 28 | 30 | 3,402,000 |
| West Virginia | 455 | 390 | 25.2 | 21.4 | 15 | 16 | 1,819,000 |
| Wisconsin | 411 | 332 | 9.8 | 7.8 | 39 | 44 | 4,233,000 |
| Wyoming | 24 | 42 | 7.6 | 13.1 | 45 | 34 | 320,000 |
| Puerto Rico** | 1,044 | 883 | 38.3 | 32.1 | . . | . . | 2,754,000 |

[^1]
## SURVEILLANCE SUMMARY <br> LISTERIOSIS - United States 1969

In 1969 there were 90 cases of human listeriosis reported in the United States, 15 fewer than for the previous year (Table 5). Eighty-nine were from 20 states, Puerto Rico, and the District of Columbia; the state of residence was not reported in one case. Listeriosis was the cause of death in at least 13 of the 90 cases ( 14 percent), for the outcome of illness was known in only 26 cases. The 90 cases were reported throughout the year with slightly fewer cases reported in the spring.

Fifty-five percent of the 51 cases in which age was known occurred in the age groups over 40 years of age. The highest percentage of cases in a single age group occurred in the newborn ( $0-4$ weeks of age). This was also true in 1967 and 1968 . Of the 51 patients where sex was reported, more cases occurred in males ( 57 percent) than in females ( 43 percent - Table 6).

In 1969, serotype 4 b was isolated most frequently, accounting for 32 percent of the 90 cases reported and 40 percent of the 73 isolates typed. This was followed by serotypes 1 a and 1 b , the latter being the most common serotype in 1967 and 1968. These three serotypes accounted for 67 of the 73 isolates types in 1969 (Table 7).

Listeria monocytogenes was isolated from the cerebrospinal fluid or blood in at least 71 of the 90 patients. Other isolations were made from throat, lung, gastric contents, umbilical cord, liver, spleen placenta, vagina, and meninges (Table 8).

In 1969 the clinical manifestations of human listeriosis were varied. The most commonly noted symptoms were fever and disturbances of the central nervous system. Of the 90 patients, 25 were known to be suffering from a primary disease prior to the onset of listeriosis. Ten of these 25 patients died. Among the 25 were patients from all age groups except neonates. Therapy for the 90 patients involved a
(Continued on page 380)
Table 6
Age and Sex Distribution, Human Listeriosis United States - 1969*

| Age <br> Group | Sex |  | Total | $\begin{gathered} \text { Percent } \\ \text { of } \\ \text { Total } \end{gathered}$ | Fatal | Group Fatality Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female |  |  |  |  |
| 0.4 wks | 4 | 7 | 11 | 21.6 | 0 | 0 |
| $4 \mathrm{wks}-9 \mathrm{yrs}$ | 1 | 2 | 3 | 5.9 | 1 | 33.3 |
| 10-19 yrs | 1 | 1 | 2 | 3.9 | 1 | 50.0 |
| 20-29 yrs | 2 | 2 | 4 | 7.8 | 0 | 0 |
| 30.39 yrs | 1 | 2 | 3 | 5.9 | 0 | 0 |
| 40.49 yrs | 4 | 3 | 7 | 13.7 | 1 | 14.3 |
| 50.59 yrs | 4 | 3 | 7 | 13.7 | 2 | 28.6 |
| 60-69 yrs | 5 | 2 | 7 | 13.7 | 3 | 42.9 |
| $70+$ yrs | 7 | 0 | 7 | 13.7 | 3 | 42.9 |
| Total | 29 | 22 | 51*** | 99.9 | 11** | 21.6 |
| Percent of |  |  |  |  |  |  |
| Total | 56.9 | 43.1 | 100.0 | - | 21.6 | - |

[^2]**Does not include aborted 5 -month fetus or 1 death in which age and sex were unknown
** 51 cases where age and sex data were noted of 90 cases reported

Table 5
Human Listeriosis - United States, 1967-1969

| State | 1967 | 1968 | 1969* | Total |
| :---: | :---: | :---: | :---: | :---: |
| Alabama | 1 | 1 | 2 | 5 |
| Alaska | 1 | 0 | 0 | 1 |
| Arizona | 2 | 0 | 0 | 2 |
| Arkansas | 1 | 2 | 0 | 3 |
| California | 11 | 8 | 0 | 19 |
| Colorado | 2 | 2 | 3 | 7 |
| Connecticut | 0 | 2 | 0 | 2 |
| Delaware | 0 | 0 | 2 | 2 |
| District of Columbia | 0 | 0 | 1 | 1 |
| Florida | 0 | 3 | 10 | 13 |
| Georgia | 2 | 4 | 4 | 10 |
| Hawaii | 0 | 1 | 1 | 2 |
| Idaho | 0 | 0 | 0 | 0 |
| Illinois | 3 | 14 | 3 | 20 |
| Indiana | 0 | 3 | 0 | 3 |
| lowa | 0 | 1 | 0 | 1 |
| Kansas | 1 | 0 | 0 | 1 |
| Kentucky | 1 | 2 | 0 | 3 |
| Louisiana | 4 | 3 | 6 | 13 |
| Maine | 0 | 1 | 0 | 1 |
| Maryland | 0 | 1 | 0 | 1 |
| Massachusetts | 1 | 7 | 3 | 11 |
| Michigan | 0 | 8 | 8 | 16 |
| Minnesota | 1 | 5 | 5 | 11 |
| Mississippi | 0 | 0 | 0 | 0 |
| Missouri | 0 | 2 | 0 | 2 |
| Montana | 0 | 0 | 0 | 0 |
| Nebraska | 0 | 0 | 0 | 0 |
| Nevada | 0 | 0 | 0 | 0 |
| New Hampshire | 0 | 0 | 0 | 0 |
| New Jersey | 1 | 3 | 3 | 7 |
| New Mexico | 0 | 0 | 0 | 0 |
| New York | 4 | 4 | 11 | 19 |
| North Carolina | 4 | 4 | 1 | 9 |
| North Dakota | 1 | 0 | 0 | 1 |
| Ohio | 2 | 5 | 2 | 9 |
| Oklahoma | 0 | 0 | 0 | 0 |
| Oregon | 1 | 1 | 2 | 4 |
| Pennsylvania | 6 | 4 | 3 | 13 |
| Puerto Rico | 0 | 0 | 4 | 4 |
| Rhode Island | 0 | 0 | 0 | 0 |
| South Carolina | 1 | 0 | 0 | 1 |
| South Dakota | 0 | 0 | 0 | 0 |
| Tennessee | 1 | 2 | 0 | 3 |
| Texas | 5 | 10 | 10 | 25 |
| Utah | 0 | 0 | 0 | 0 |
| Vermont | 0 | 0 | 0 | 0 |
| Virginia | 0 | 0 | 0 | 0 |
| Washington | 0 | 2 | 2 | 4 |
| West Virginia | 0 | 0 | 0 | 0 |
| Wisconsin | 2 | 0 | 3 | 5 |
| Wyoming | 0 | 0 | 0 | 0 |
| Totals | 60 | 105 | 90** | 255 |

- Provisional Data
**Includes 1 case where the state was unknown

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
SEPTEMBER 19, 1970 AND SEPTEMBER 13, 1969 (37th WEEK)

| AREA | $\begin{aligned} & \text { ASEPTIC } \\ & \text { MENIN- } \\ & \text { GITIS } \end{aligned}$ | $\begin{aligned} & \text { BRUCEL- } \\ & \text { LOSIS } \end{aligned}$ | DIPHTHERIA | ENCEPHALITIS |  |  | HEPATITIS |  |  | MALARIA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Primary including unsp. cases |  | Post In= fectious | Serum | Infectious |  |  |  |
|  | 1970 | 1970 | 1970 | 1970 | 1969 | 1970 | 1970 | 1970 | 1969 | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ |
| UNITED STATES....... | 338 | 4 | 22 | 32 | 39 | 4 | 139 | 1,124 | 965 | 49 | 2,382 |
| NEW ENGLAND............. | 17 | 1 | - | 3 | 2 | - | 5 | 83 | 130 | 1 | 70 |
| Maine.................. | - | - | - | - | - | - | - | 9 | 6 | - | 6 |
| New Hampshire......... | - | 1 | - | - | - | - | 1 | 3 | 3 | 1 | 6 |
| Vermont. . . . . . . . . . . . | - | - | - | - | $\overline{7}$ | - | - | 8 | 9 | - | 5 |
| Massachusetts........ | 15 | - | - | - | 1 | - | - | 39 | 83 | - | 34 |
| Rhode Island.......... | 2 | - | - | 3 | - | - | 1 | 11 | 20 | - | 8 |
| Connecticut.......... | - | - | - | - | 1 | - | 3 | 13 | 9 | - | 11 |
| MIDDLE ATLANTIC......... | 49 | 1 | - | 4 | 1 | - | 59 | 232 | 134 | 5 | 255 |
| New York City......... | 31 | - | - | - | - | - | 30 | 80 | 35 | 4 | 34 |
| New York, Up-State... | - | - | - | - | _ | - | 10 | 33 | 23 |  | 72 |
| New Jerseyt........... | 12 | $\overline{-}$ | - | - | - | - | 8 | 56 | 36 | - | 69 |
| Pennsylvania, ........ | 6 | 1 | - | 4 | 1 | - | 11 | 63 | 40 | 1 | 80 |
| EAST NORTH CENTRAL..... | 47 | - | - | 13 | 11 | - | 17 | 180 | 136 | 3 | 140 |
| Oh1o................... | 11 | - | - | 7 | 8 | - | 2 | 32 | 34 | 3 | 27 |
| Indiana. . . . . . . . . . . . . | 3 | - | - |  |  | - | - | 12 | 9 | 1 | 15 |
| Illinois.............. | 10 | - | - | 2 | 1 | - | 1 | 45 | 38 | 1 | 39 |
| Michigan.............. | 22 | - | - | 2 | 1 | - | 14 | 84 | 50 | 1 | 59 |
| Wisconsin. ........... | 1 | - | - | 2 | 1 | - | - | 7 | 5 | - | - |
| WEST NORTH CENTRAL..... | 10 | 1 | - | - | 3 | - | 1 | 52 | 39 | 11 | 221 |
| Minnesota............. | 10 | - | - | - | 1 | - | - | 6 | 5 | - | 19 |
| Iowa................... | - | 1 | - | - | 1 | - | - | 21 | 8 | - | 19 |
| Missouri.............. | - | - | - | - | - | - | - | 8 | 8 | - | 19 |
| North Dakota. . . . . . . . | - | - | - | - | - | - | - | 1 | - | 1 | 3 |
| South Dakota. ......... | - | - | - | - | - | - | - | - | - | - | 2 |
| Nebraska. . . . . . . . . . . . | - | - | - | - | 1 | - | - | 2 | 10 | - | 3 |
| Kansas. . . . . . . . . . . . . . | - | - | - | - | - | - | 1 | 14 | 8 | 10 | 156 |
| SOUTH ATLANTIC.......... | 53 | - | 4 | 9 | 8 | - | 14 | 159 | 113 | 14 | 452 |
| Delaware.............. | - | - | - | - | 1 | - | 1 | 5 | 1 | 14 | 2 |
| Maryland.............. | 14 | - | 3 | - | 2 | - | 2 | 16 | 27 | 2 | 50 |
| Dist. of Columbia.... | - | - | - | - | - | - | 1 | 4 | 3 | - | 2 |
| Virginia.t............ | 8 | - | - | 2 | - | - | 5 | 61 | 8 | - | 59 |
| West Virginia......... | 1 | - | - | - | - | - | - | 4 | 2 | - | 7 |
| North Carolina........ | 3 | - | - | 2 | 2 | - | 1 | 20 | 14 | 11 | 182 |
| South Carolina....... | 3 | - | - | - | 1 | - | 1 | 5 | 6 | 1 | 39 |
| Georgia............... | - | - | 1 | - | - | - | - | 17 | 14 | - | 68 |
| Florida............... | 24 | - | - | 5 | 2 | - | 3 | 27 | 38 | _ | 43 |
| EAST SOUTH CENTRAL...... | 14 | - | 1 | 1 | 1 | - | 1 | 62 | 33 | - | 162 |
| Kentucky............... | 4 | - | - | - | - | - | - | 25 | 12 | - | 133 |
| Tennessee............ | 6 | - | - | 1 | 1 | - | - | 27 | 15 | - | - |
| Alabama.............. | 4 | - | 1 | - | - | - | 1 | 7 | 3 | - | 18 |
| Mississippi........... |  | - | - | - | - | - | - | 3 | 3 | - | 11 |
| WEST SOUTH CENTRAL..... | 11 | - | 17 | - | 1 | 1 | 8 | 103 | 81 | 8 | 422 |
| Arkansas.............. | - | - | - | - | - | - | - | 2 | 11 | - | 9 3 |
| Louisiana............. | 6 | - | - | - | 1 | 1 | 2 | 7 | 14 | 2 | 32 |
| Oklahoma.才............ | 2 | - | 7 | - | - | - |  | 9 | 11 | 6 | $\begin{array}{r}75 \\ \hline\end{array}$ |
| Texas.................. | 3 | - | 17 | - | - | - | 6 | 85 | 45 | - | 306 |
| MOUNTAIN................. | 9 | - | - | - | 6 | - | 1 | 14 | 58 | - | 191 |
| Montana. . . . . . . . . . . . . | - | - | - | - | - | - | - | 1 | 2 | - | 10 |
| Idaho................. | 1 | - | - | - | 1 | - | - | 2 | 3 | - | 3 |
| Wyoming. . . . . . . . . . . . | - | - | - | - | - | - | - | 1 | 4 | - | - |
| Colorado.............. | 3 | - | - | - | 2 | - | - | - | 9 | - | 161 |
| New Mexico............ | - | - | - | - | 3 | - | - | 3 | 7 | - | 8 |
| Arizona.*.............. | 5 | - | - | - | - | - | - | 5 | 16 | - | 6 |
| Utah.................. | - | - | - | - | - | - | 1 |  | 3 | - | 3 |
| Nevada. . . . . . . . . . . . . | - | - | - | - | - | - | - | 2 | 14 | - | - |
| PACIFIC................. | 128 | 1 | - | 2 | 6 | 3 | 33 | 239 | 241 | 7 | 469 |
| Washington. . . . . . . . . . | 2 | - | - | 1 | 1 | 3 | - | 45 | 53 | 7 | 45 |
| Oregon............... | 1 | - | - | - | 1 | - | 2 | . 26 | 14 | - | 15 |
| California........... | 43 | 1 | - | 1 | 5 | 3 | 31 | 162 | 162 | 7 | 300 |
| Alaska................ | 80 | - | - | - | - | - | , | 3 | - | 7 | 1 |
| Hawai1. . . . ............ | 2 | - | - | - | - | - | - | 3 | 12 | - | 108 |
| Puerto Rico, ${ }^{\text {, } . . . . . . . . .}$ | - | - | - | - | - | - | 1 | 24 | 29 | - | 9 |
| Virgin Islands.......... | - | - | - | - | - | - | - | - | 1 | - |  |

*Delayed Reports: Aseptic Meningitis: Va, 22, Okla, 1, Ariz, 22
Encephalitis, Post Infectious: Okla, 1
Hepatitis, Serum: N.J. Delete 2
Hepatitis, Infectious: N.J. Delete 1, Okla, 6, P.R. 4

TABLE 1II. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
SEPTEMBER 19, 1970 AND SEPTEMBER 13, 1969 (37th WEEK) - CONTINUED

| AREA | MEASLES (Rubeola) |  |  | MENINGOCOCCAL INFECTIONS, TOTAL |  |  | MUMPS |  | POLIOMYELITIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cumulative |  |  | Cumulative |  |  | $\begin{aligned} & \text { Cum : } \\ & 1970 \end{aligned}$ | Total | Paralytic |  |
|  | 1970 | 1970 | 1969 | 1970 | 1970 | 1969 | 1970 |  | 1970 | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ |
| UNITED STATES...... | 143 | 39,646 | 20,388 | 38 | 1,883 | 2,374 | 570 | 76,013 | 1 | - | 18 |
| NEW ENGLAND | 4 | 883 | 1,107 | 1 | 82 | 91 | 23 | 8,911 | - | - | - |
| Maine. | - | 204 | , 8 | - | 3 | 6 | 5 | +689 | - | _ | - |
| New Hampshire........ | - | 50 | 238 | - | 8 | 3 | - | 330 | - | - | - |
| Vermont................ | - | 8 | 3 | - | 7 | - | - | 586 | - | - | - |
| Mhassachusetts.\%...... | 4 | 416 | 214 | 1 | 37 | 37 | 8 | 2,810 | - | - | - |
| Connecticut............ | - | 120 85 | 27 617 | - | 5 22 | 11 34 | 6 4 | 1,501 2,995 | - | - | - |
| Middle atlantic. . . . . . . . | 25 | 4,854 | 7.496 | 8 | 343 | 389 | 56 | 7.555 | - | - | - |
| New York City......... | 11 | -882 | 4.911 | - | 81 | 75 | 30 | 2,775 | - | _ | - |
| New York, Up-State... | 8 | 277 | 596 | - | 66 | 72 | NN | NN | - | - | - |
| New Jersey............ | 3 3 | 1.707 | 898 1 | 4 | 132 | 157 | 8 | 2.078 | - | - | - |
| Pennsylvania.*. . . . . . | 3 | 1,988 | 1.091 | 4 | 64 | 85 | 18 | 2.702 | - | - | - |
| East north central. .... | 29 | 9,791 | 2,227 | 7 | 216 | 325 | 177 | 20,335 | 1 | - | 2 |
| Ohio.................. | 2 | 3,807 | 2, 376 | 2 | 85 | 123 | 21 | 3,631 | - | - | - |
| Indiana................ | 1 | 271 | 466 | - | 20 | 38 | 19 | 1.819 | $\overline{1}$ | - | - |
| Milinois........... | 7 | 3.055 | 525 | 4 | 49 | 46 | 15 | 1.754 | 1 | - | - |
| Wisconsin................. | 10 | 1.728 | 280 | - | 52 | 95 | 5 | 4.970 | - | - | 1 |
| Hsconsin............ | 9 | 930 | 580 | 1 | 10 | 23 | 117 | 8,161 | - | - | 1 |
| WEST NORTH CENTRAL..... | 11 | 3,874 | 531 | - | 96 | 121 | 27 | 3.789 | - | - | 1 |
| Minnesota............. | 9 | - 47 | 7 | - | 13 | 26 | 1 | . 354 | - | - | - |
| Mssourd................... | - | 1,142 | 331 26 | - | 12 56 | 18 51 | 20 4 | 2,317 274 | - | - | 1 |
| North Dakota.......... | 1 | 319 | 14 | - | 5 | 1 | - | 286 | - | - | - |
| South Dakota......... | - | 93 | 3 | - | - | 1 | - | 40 | - | - | - |
| Nebraska............. | 1 | 925 | 143 | - | 5 | 9 | 2 | 382 | - | - | - |
| Kansas............... | - | 73 | 7 | - | 5 | 15 | - | 136 | - | - | - |
| SOUTh atlantic. | 10 | 7,162 | 2,500 | 3 | 379 | 409 | 49 | 8,718 | - | - | 1 |
| Delaware.............. | - | 260 | 374 | - | 3 | 8 | 4 | 308 | - | - | - |
| Maryland.............. | - | 1.376 | 75 | 2 | 37 | 38 | 11 | 942 | - | - | - |
| Dist, of Columbia.... | - | 343 | - | - | 3 | 9 | - | 188 | - | - | - |
| Virginia............. | 2 | 1,983 | 883 | - | 40 | 51 | 10 | 2,005 | - | - | - |
| West Virginia......... | - | 312 | 197 | - | 10 | 18 | 16 | 2,113 | - | - | 1 |
| North Carolina....... | 4 | 865 | 316 | 1 | 77 | 70 | NN | NN | - | - | - |
| South Carolina....... | - | 595 | 117 | - | 44 | 56 | 4 | 846 | - | - | - |
| Georgia............... | - | 14 | 2 | - | 34 | 70 | - | 2 | - | - | - |
| Plorida.............. | 4 | 1.414 | 536 | - | 131 | 89 | 4 | 2,314 | - | - | - |
| EAST SOUTH CENTRAL..... | 9 | 1,328 | 109 | 2 | 135 | 144 | 38 | 4,421 | - | - | - |
| Kentucky............. | 8 | 763 | 65 | - | 45 | 50 | 5 | 1,587 | - | - | - |
| Tennessee........... | 1 | 378 | 17 | - | 58 | 54 | 31 | 2,524 | - | - | - |
| Alabama............... | - | 98 | 4 | 2 | 23 | 24 | 1 | 262 | - | - | - |
| Mississippi.......... | - | 89 | 23 | - | 9 | 16 | 1 | 48 | - | - | - |
| WEST SOUTH CENTRAL..... | 35 |  |  | 3 | 255 | 322 | 79 | 7.313 | - | - | 14 |
| Arkansas............. | 35 | r. 30 | + 16 | - | 22 | 30 | - | - 119 | _ | - | - |
| Louisiana............ | - | 100 | 120 | - | 62 | 85 | 1 | 29 | - | - | - |
| Oklahoma.*............ | 12 | 464 | 136 | , | 20 | 31 | 18 | 2,420 | - | - | - |
| Texas.................... | 23 | 6.990 | 4,255 | 3 | 151 | 176 | 60 | 4,745 | - | - | 14 |
| Mountain. | 5 | 1.527 |  | 2 | 40 | 45 | 21 | 3,484 | - | - | - |
| Montana................... | 1 | . 62 | 17 | - | - 1 | 8 | 3 | 730 | - | - | - |
| Idaho................ | 3 | 43 | 89 | - | 6 | 8 | 2 | 89 | - | - | - |
| Hyoming. . . . . . . . . . . . . | - | 11 |  | - | 2 | - | 1 | 36 | - | - | - |
| Colorado............. | - | 183 | 140 | 2 | 14 | 8 | 11 | 1,117 | - | - | - |
| New Mexico........... | 1 | 203 | 247 | - | 1 | 6 | 3 | 673 | - | - | - |
| Arizona,............. | - | 969 | 355 | - | 13 | 10 | 1 | 715 | - | - | - |
| Utah.................... | - | 35 21 | 9 1 | - | 2 | 3 | - | 124 | - | - | - |
| Nevada................ | - | 21 | 1 | - | 1 | 2 | - | - | - | - | - |
| PACIFIC | 15 | 2,643 | 1,033 | 12 | 337 | 528 | 100 | 11.487 | - | - | - |
| Washington............ | 1 | 526 | - 59 | 1 | 44 | 54 | 31 | 4,245 | - | - | - |
| Oregon................. | 2 | 230 | 998 | - | 25 | 16 | 11 | 1,004 | - | - | - |
| California........... | 11 | 1,565 | 729 | 11 | 266 | 437 | 41 | 4,728 | - | - | - |
| Alaska............... | - | 138 | 8 | - | - | 11 | - | +379 | - | - | - |
| Hawail............... | 1 | 184 | 39 | - | 2 | 10 | 17 | 1.131 | - | - | - |
| Vuerto Rico. | 11 | 898 | 1,480 | - | 5 | 19 | 18 | 751 | - | - | - |
| -rgin Islands....... | - | 6 | 40 | - | 1 | - | - | 1 | - | - | - |

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
SEPTEMBER 19, 1970 AND SEPTEMBER 13, 1969 (37th WEEK) - CONTINUED

| AREA | RUBELLA |  | tetanus |  | tularemia |  | TYPHOID FEVER |  | $\begin{gathered} \text { TYPHUS FEVER } \\ \text { TICK-BORNE } \\ \text { (Rky. Mt. Spotted) } \end{gathered}$ |  | RABIES IN ANIMALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \\ & \hline \end{aligned}$ | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \\ & \hline \end{aligned}$ | 1970 | $\begin{aligned} & \text { Cum. } \\ & 1970 \end{aligned}$ |
| UNITED STATES..... | 312 | 49,564 | 3 | 84 | 3 | 104 | 12 | 219 | 8 | 298 | 45 | 2,193 |
| NEW ENGLAND. . . . . . . . . . | 23 | 2,448 | - | 3 | - | 1 | - | 7 | - | - | 1 | 76 |
| Maine... | 6 | 392 | - | - | - | - | - | - | - | - | - | 27 |
| New Hampshire....... | - | 150 | - | - | - | - | - | - | - | - | - | 1 |
| Vermont.............. | - | 53 | - | - | - | - | - | - | - | - | 1 | 41 |
| Massachusetts....... | 9 | 1,187 | - | 2 | - | 1 | - | 5 | - | - | - | 3 |
| Rhode Island......... | $\overline{8}$ | 107 | - | - | - | - | - | 2 | - | - | - | 3 |
| Connecticut......... | 8 | 559 | - | 1 | - | - | - | 2 | - | - | - | 3 |
| MIddle atlantic....... | 10 | 3,942 | 1 | 9 | - | 2 | 1 | 46 | - | 12 | 4 | 197 |
| New York City....... | 6 | 586 | - | 3 | - | - | - | 11 | - | - | - | - |
| New York, Up-Stare.. | 1 | 423 | 1 | 2 | - | 1 | 1 | 17 | - | 6 | 4 | 185 |
| New Jersey........... | - | 854 | - | 3 | - | - | - | 10 | - | 3 | - | 5 |
| Pennsyivania........ | 3 | 2,079 | - | 1 | - | 1 | - | 8 | - | 3 | - | 12 |
| EAST NORTH CENTRAL.... | 42 | 10,280 | - | 14 | - | 18 | 4 | 32 | - | 9 | 5 | 182 |
| Ohio................. | - | 2,027 | - | 1 | - | 2 | - | 10 | - | 8 | - | 44 |
| Indiana............. | 14 | 1,858 | - | 6 | - | 12 | 1 | 2 | - | - | 2 | 20 |
| Illinois............. | 1 | 1,691 | - | 3 | - | 2 | - | 7 | - | 1 | - | 56 |
| Michigan............. | 13 | 2,662 | - | 4 | - | - | 3 | 11 | - | - | 1 | 19 |
| Wisconsin........... | 14 | 2,042 | - | - | - | 2 | - | 2 | - | - | 2 | 43 |
| WEST NORTH CENTRAL.... | 6 | 3,284 | - | 4 | - | 25 | - | 7 | 1 | 3 | 5 | 418 |
| Minnesota........... | - | 117 | - | 1 | - | 1 | - | 1 | - | - | 4 | 92 |
| Lowa................. | 1 | 2,002 | - | 1 | - | - | - | 1 | 1 | 1 | 1 | 75 |
| Missouri............. | - | 419 | - | 1 | - | 21 | - | 1 | - | 2 | - | 76 |
| North Dakota. . . . . . . | 1 | 149 | - | - | - | 1 | - | 2 | - | - | - | 28 |
| South Dakota........ | - | 1 | - | 1 | - | 1 | - | - | - | - | - | 60 |
| Nebraska............. | 4 | 548 | - | - | - | - | - | 2 | - | - | - | 6 |
| Kansas............. | - | 56 | - | - | - | 1 | - | - | - | - | - | 81 |
| SOUTH ATLANTIC........ | 22 | 6,257 | 2 | 23 | - | 9 | - | 30 | 3 | 198 | 8 | 444 |
| Delaware............ | 1 | 42 | - | - | - | - | - | - | - | 4 | - | 1 |
| Maryland............ | 2 | 317 | - | - | - | - | - | 9 | - | 20 | - | 1 |
| Dist. of Columbia... | - | 19 | - | 1 | - | - | - | 1 | - | - | - | 185 |
| Virginia..*.......... | 4 | 696 | - | 1 | - | 1 | - | 4 | 1 | 51 | 4 | 185 |
| West Virginia....... | 8 | 1,294 | - | - | - | - | - | - | - | 5 | - | 114 |
| North Carolina...... | 4 | 43 | - | 3 | - | 4 | - | 2 | 2 | 75 | - | 1 |
| South Carolina...... | 1 | 643 | - | 1 | - | - | - | - | - | 35 | - |  |
| Georgia............. | - |  | 2 | 5 | - | 3 | - | 8 | - | 8 | - | 78 65 |
| Florida............. | 2 | 3,203 | - | 12 | - | 1 | - | 6 | - | - | 4 | 65 |
| EAST SOUTH CENTRAL.... | 23 | 2,645 | - | 9 | 1 | 5 | 5 | 26 | 3 | 35 | 2 | 176 94 |
| Kentucky............. | 7 | 928 | - | 1 | $\overline{1}$ | 1 | - | 6 | - | 3 | 1 | 94 50 |
| Tennessee........... | 14 | 1,359 | - | 3 | 1 | 4 | 3 | 12 | 2 | 22 | - | 31 |
| Alabama............ | 1 | 279 | - | 5 | - | - | 2 | 8 | 1 | 7 | 1 | 31 |
| Mississippi......... | 1 | 79 | - | - | - | - | - | - | - | 3 | - |  |
| WEST SOUTH CENTRAL.... | 33 | 8,796 | - | 13 | 1 | 27 | - | 18 | 1 | 34 | 4 | 377 65 |
| Arkansas..*......... | - | 34 | - | 3 | 1 | 11 | - | 3 | 1 | 6 | $\bar{\square}$ | 65 56 |
| Louisiana............ | - | 150 | - | 3 | - | 4 | - | 2 | - | 1 | 1 | 56 76 |
| Oklahoma..*.......... | - | 808 | - | - | - | 9 | - | 1 | - | 22 | 2 | + |
| Texas.............. | 33 | 7,804 | - | 7 | - | 3 | - | 12 | - | 5 | 1 | 180 |
| MOUNTALN................ | 11 | 1,979 | - | - | - | 10 | 1 | 13 | - | 6 | - | 71 |
| Montana............ | - | 315 | - | - | - | - | - | 9 | - | 1 | - | 1 |
| Idaho............... | 4 | 193 | - | - | - | - | - | - | - | 2 | - | 3 |
| Wyoming. ............ | - | 134 | - | - | - | - | 1 | 1 | - | 1 | - | 34 |
| Colorado............ | - | 393 | - | - | - | - | - | 3 | - | 2 | - | 11 |
| New Mexico......... | 2 | 211 | - | - | - | - | - | 6 | - | - | - | 11 |
| Arizona.*............ | 5 | 571 | - | - | - | - | - | 1 | - | - | - | 2 |
| Utah............... | - | 162 | - | - | - | 10 | - | 1 | - | - | - | 9 |
| Nevada............... . | - | - | - | - | - | - | - | - | - | - | - |  |
| PACIFIC................ | 142 | 9,933 | - | 9 | 1 | 7 | 1 | 40 | - | 1 | 16 | 252 9 |
| Washington.......... | 13 | 4,613 | - | 2 | - | 2 | - | 4 | - | - | 1 | 1 |
| Oregon.............. | 4 | 843 | - | 3 | $-$ | 1 | $\overline{-}$ | 1 | - | - | - | 242 |
| California.......... | 122 | 4,173 | - | 4 | 1 | 4 | 1 | 32 | - | 1 | 15 | 24. |
| Alaska............. | 3 | - 98 | - | - | - | - | - | 2 | - | - | - |  |
| Hawail.............. | - | 206 | - | - | - | - | - | 1 | - | - | - | $\square$ |
| Puerto Rico........... | 1 | 27 | - | 9 | - | - | - | 4 | - | - | - | 39 |
| Virgin Islands........ | 1 | 1 | - | - | - | - | - | 1 | - | - | - |  |

Week No.
TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED SEPTEMBER 19, 1970
37
(By place of occurrence and week of filing certificate. Excludes fetal deaths)


LISTERIOSIS－（Continued from page 375）
Table 7
Infecting Serotype，Human Listeriosis United States－1969＊

| Infecting Serotype | Number of Cases | Percent of Total |
| :---: | :---: | :---: |
| 1a | 23 | 25.6 |
| 1b | 15 | 16.7 |
| 3b | 4 | 4.4 |
| $4^{* *}$ | 1 | 1.1 |
| 4b | 29 | 32.2 |
| 4d | 1 | 1.1 |
| Untyped | 17 | 18.9 |
| Total | 90 | 100.0 |

＊Provisional Data
＊＊No further classification reported
Table 8
Type of Material Cultured，Human Listeriosis United States－1969＊

| Material Cultured | Number of Cases | Percent of Total |
| :--- | :---: | :---: |
| CSF | 34 | 37.8 |
| Blood | 25 | 27.8 |
| CSF and Blood | 12 | 13.3 |
| Other＊ | 8 | 8.9 |
| Unknown | 11 | 12.2 |
| Total | 90 | 100.0 |

＊Provisional Data
＊＊Includes throat，umbilical cord，meninges，gastric contents， placenta，vagina，liver，lung，and spleen in 1 or more cases where isolations were not noted from CSF or blood
number of drugs．Those used most frequently were ampi－ cillin，penicillin，and tetracycline．
（Reported by the Office of Veterinary Public Health Serv－ ices，Epidemiology Program，CDC．）

A copy of the report from which these data were derived is available on request from

Center for Disease Control
Attn：Chief，Office of Veterinary Public Health Services Epidemiology Program
Atlanta，Georgia 30333

Erratum，Vol．19，No．28，p． 269
In the article，＂A Fatal Case of Dysentery Due to Shigella dysenteriae in an American Resident－Florida，＂ in the editorial comment，it was incorrectly stated that this case was the first documented death of dysentery due to the virulent Shiga bacillus in a resident of the United States although there have been numerous imported cases since the Central American and Mexican epidemic was first recognized in 1969．The comment should have con－ tained the statement that this was the first death in a U．S． citizen related to the recent outbreak in Central America and Mexico．As early as 1903 （1）deaths due to S．dysen－ teriae in persons in the United States have been reported with other outbreaks and deaths occurring after that（2，3， and 4）．

## References：

1．Park WH，Carey HW：The Presence of the Shiga Variety of Dysentery Bacilli in an Extensive Epidemic of Dysentery with Notes Upon the Serum Reactions Obtained．J Med Res 9：180， 1903
2．Reed AC：Bacillary Dysentery in California．Amer J Med Sci 187：819， 1934
3．Block NB，Ferguson W：An Outbreak of Shiga Dysentery in Michigan，1938．Amer J Public Health 30：43， 1940
4．Caudill FW，Tengue RE，Duncan JT：A Rural Shiga Dysentery Epidemic．JAMA 119：1402， 1942





















YヨIN 3 JSV3Sio 3า日VJINnWW00
OFFICIAL BUSINESS

[^3][^4] HEALTH SERVICES AND MEN
CENTER FOR DISEASE CONTROL PUBLIC HEALTH SERVI U．S．DEPARTMENT OF HEALTH，EDUCATION，AND WELFARE

U．S．DEPARTMENT OF H．E．W
al甘d Sヨヨコ QNV ヨOVLSOd



[^0]:    Reference

    1. World Health Organization Weekly Epidemiological Record 45(37):386, 11 Sept 1970
[^1]:    * Excludes 95 military cases
    ** Not included in totals
    The District of Columbia is classed as a city and is not ranked with the States.

[^2]:    *Provisional Data

[^3]:    OFFICIAL BUSINESS

[^4]:    ATLANTA，GEORGIA 30333

