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For Week Ending August 11, 1973

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

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EPIDEMIOLOGIC NOTES AND REPORTS

NOSOCOMIAL *PSEUDOMONAS SPP.* BACTEREMIAS
Maryland

On August 2, 1973, 10 cases of *Pseudomonas spp.* bacteremia were reported to CDC's National Nosocomial Infections Study. These cases had occurred in trauma and surgical patients in the University of Maryland Hospital, Baltimore, Maryland, between May 22 and June 30, 1973. A preliminary analysis of the data by infection control personnel at the hospital had indicated a possible association of cases with albumin administration. The organism grew slowly in blood culture and was difficult to maintain on sub-cultures. The gram-negative isolates from blood cultures of patients were reported to produce alkaline over alkaline or neutral reactions on triple sugar iron slants, had positive oxidase reactions, failed to ferment glucose, and grew slowly on MacConkey's and blood agar media. Sensitivity testing by disc technique showed susceptibility to chloramphenicol and tetracycline but resistance to other tested agents. No viable isolates are presently available for future study.

CONTENTS

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

DISEASE	32nd WEEK ENDING		MEDIAN 1968-1972	CUMULATIVE, FIRST 32 WEEKS		
	August 11, 1973	August 12, 1972		1973	1972	MEDIAN 1968-1972
Aseptic meningitis	190	136	186	2,023	1,607	1,607
Brucellosis	10	3	3	119	105	126
Chickenpox	344	610	– – –	143,920	112,683	– – –
Diphtheria	2	2	2	113	62	98
Encephalitis, primary:						
Arthropod-borne and unspecified	50	18	33	774	533	641
Encephalitis, post-infectious	8	4	7	193	191	256
Hepatitis, serum (Hepatitis B)	136	169	158	4,857	5,669	4,392
Hepatitis, infectious (Hepatitis A)	965	1,060	1,018	31,038	33,971	33,971
Malaria	7	7	46	149	645	1,684
Measles (rubeola)	123	213	213	23,718	26,349	26,349
Meningococcal infections, total	16	21	29	984	942	1,742
Civilian	16	20	27	960	905	1,565
Military	–	1	2	24	37	177
Mumps	459	462	588	53,897	55,294	73,295
Rubella (German measles)	98	164	261	25,564	20,122	42,505
Tetanus	1	2	4	50	71	71
Tuberculosis, new active	658	667	– – –	19,578	20,629	– – –
Tularemia	4	6	1	93	83	88
Typhoid fever	13	12	9	439	197	187
Typhus, tick-borne (Rky. Mt. spotted fever)	27	27	27	435	327	259
Venereal Diseases:						
Gonorrhea	16,527	16,433	– – –	491,002	439,464	– – –
Syphilis, primary and secondary	500	555	– – –	16,034	14,952	– – –
Rabies in animals	75	82	64	2,294	2,715	2,273

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Poliomyelitis, total:	3
Botulism:	13	Paralytic:	3
Congenital rubella syndrome: Va.-1	19	Psittacosis: Tex.-1	13
Leprosy: Calif.-3, N.J.-1, Tex.-1	77	Rabies in man:	–
Leptospirosis:	20	Trichinosis: NYC-1	64
Plague:	1	Typhus, murine: Tex.-1	25

BACTEREMIAS – Continued

Epidemiologic analysis showed a statistically significant association between these blood isolates and infusion of normal, human, salt-poor, serum albumin (Probumin-25%, Lederle Laboratories Division, American Cyanamid Company). Compared with matched control populations, affected patients had no other significant common-source exposure. One patient developed signs of gram-negative septicemia within 15 minutes after initiation of albumin infusion. The physicians caring for this patient obtained cultures of blood and infusion fluid and recorded the identifying number, 350-322, on the bottle of the albumin given to the patient. The blood culture yielded the above organism, but the small sample of albumium which had been cultured in a media poorly suited for growth of this organism was negative.

Seventy units of albumin, each containing 50 cc of the implicated lot, were found in the hospital. An additional 105 units have been recovered unused from other institutions that received that lot. Separate cultures of the albumin and stopper of 1 of 54 bottles on test for 2 days have revealed a yet unidentified gram-negative rod. Antibiotic susceptibility tests, which have been completed only on the isolate from the culture of the stopper, revealed sensitivity only to tetracycline, chloramphenicol, and naladixic acid—the latter was not tested at the hospital.

(Reported by Mary Ellen Dunne, R.N., Sandra Polakavetz, Infection Control Officers, William G. Armiger, M.D., Anthony Raneri, M.D., Surgical Residents, University of Maryland Hospital, Baltimore, Maryland; Merrill J. Snyder, Ph.D., Division of Infectious Diseases, School of Medicine, University of Maryland; John D. Stafford, M.D., Chief, Division of Communicable Diseases, Preventive Medicine Administration, Maryland Department of Health and Mental Hygiene; Bureau of Biologics, Food and Drug Administration, Washington, D.C.; and the Bacterial Diseases Branch, Bureau of Epidemiology, CDC.)

Editorial Note

Epidemiologic and preliminary microbiologic data strongly suggest intrinsic contamination of this lot of commercially-prepared normal serum albumin. It should be pointed out that the number 350-322 represents 1 of 4 different identifying numbers given to a particular lot of this product. The other numbers are 350-125, 348-200, and 347-232. All hospitals that received shipments of the implicated lot of albumin have been contacted and all available unused vials of the suspect lot have been placed in quarantine. Further epidemiologic and microbiologic studies of the product are underway.

HUMAN PLAGUE – New Mexico, Texas

On June 2, 1973, a 64-year-old resident of Lincoln, New Mexico, traveling through Brownfield, Texas, became ill with fever and general malaise. The following day he was admitted to a Brownfield hospital with a temperature of 103°F, nausea, weakness, and lower extremity myalgia. No lymphadenopathy or abnormal lung findings were apparent. On the second day of hospitalization, blood specimens were positive for gram-negative organisms, and the patient was begun on chloramphenicol and gentamicin. Identification of *Yersinia pestis* was performed by the CDC Bureau of Laboratories.

The patient's general condition improved rapidly following antibiotic therapy, although fever persisted for 10 days; his clinical course was punctuated by an episode of pulmonary edema. Persistent pulmonary infiltrates were thought to be related to congestive heart failure rather than to true plague pneumonia. He was discharged after a 2-week hospitalization and is presently asymptomatic.

Epidemiologic investigation by the Texas State Department of Health revealed that the patient had spent most of the previous month at his brother's ranch in Lincoln, New Mexico, where he had handled dead mice; he did not recall being bitten by fleas. During the 2 days immediately preceding his illness, the patient had been traveling in Texas. He spent 1 night on a ranch in Plano, Texas, but had no contact with rodents there.

Sylvatic plague has been reported in most New Mexico counties in recent years, but not from the Plano, Texas, vicinity. The last human case in the Lincoln, New Mexico, area was reported in 1949. Rodent and insect vector investigations are now underway in Lincoln, New Mexico, and Plano, Texas.

(Reported by Noah Stone, M.D., private physician, Brownfield, Texas; Myron Mattison, M.D., private physician, Lubbock, Texas; M. S. Dickerson, M.D., State Epidemiologist, R. F. Sowell, Jr., M.D., Medical Consultant, Texas State Department of Health; Hazel English, County Health Nurse, Lincoln, New Mexico, Neil Weber, Program Manager, Insect and Rodent Control Section, Environmental Improvement Agency, New Mexico; David Farrell, Acting Director, New Mexico State Health Agency; the Plague Section, Vector-borne Diseases Branch, Fort Collins, Colorado, the Special Bacteriology Unit, Clinical Bacteriology Section, Bacteriology Branch, Bureau of Laboratories, CDC; and an EIS Officer.)

Editorial Note

On the basis of the usual 2- to 7-day incubation period in humans and this patient's history of animal contact, it is assumed that he was exposed to plague in New Mexico. This is the second case of human plague reported in the United States this year; the first was reported in Payson, Arizona, in July (MMWR, Vol. 22, No. 30).

TULAREMIA – Oklahoma, Missouri

Seven cases of tularemia have recently been reported to CDC—4 among fishing companions in Oklahoma and 3 among family members in Missouri. The clinical histories and the epidemiologic investigations of these cases are described below:

Oklahoma

Case 1: On April 9, 1973, a 24-year-old man in Oklahoma became ill with a high temperature, backache, and sore throat which lasted for 3 days. He did not seek medical attention or report for serologic testing.

Case 2: On April 10, a 43-year-old man had the abrupt onset of fever (temperature 103°F) and frontal headache and noted a weeping lesion on his right palm. Two days later he complained of a tender lump in the right axillary region. Because of continued fever and progressive weakness, he was hospitalized on April 18. A chest X-ray revealed bilateral patchy

infiltrates. His fever defervesced following treatment with streptomycin and tetracycline, and a chest X-ray on May 31 showed complete resolution of the pulmonary infiltrate.

Case 3: On April 11, a 23-year-old man had the sudden onset of fever, headache, and mild, right-sided pleuritic pain. Physical examination revealed bilateral cervical lymphadenopathy but no ulcerative skin lesions. On May 21, he was hospitalized for an unrelated problem, and a chest X-ray showed an infiltrate surrounding a 1 cm x 1 1/2 cm cavitary lesion in the right upper lobe and right-sided hilar adenopathy. Sputum examinations were negative for acid-fast bacilli, and an intermediate strength tuberculin skin test was negative. The patient has not taken tetracycline as prescribed by his physician; a chest X-ray on July 5 showed minimal resolution of the cavitary lesion.

Case 4: This 27-year-old man developed sore throat, fever, headache, and muscle and joint pain on April 11. Bilateral cervical and right axillary lymphadenopathy were noted by his physician. No skin ulcerations were present. A chest X-ray showed no pulmonary abnormalities. He improved following treatment with streptomycin.

Although *Francisella tularensis* was not cultured from blood specimens from any of the men, 2 of the 3 tested had a 4-fold or greater rise in tularemia agglutinin titers, and 1 had a single high convalescent titer.

Epidemiologic investigation revealed that on April 7 Case 1 had killed a wild rabbit with a stick in Tulsa County, Oklahoma, while on a fishing trip with Cases 2, 3, and 4. Cases 1 and 3 subsequently dressed the rabbit, which was then cooked over an open fire. Cases 1, 3, and 4 ingested some of the cooked rabbit. Case 2 tasted the meat but did not swallow it because he did not like the taste. All 4 men handled the rabbit entrails, which were used as fishing bait. None of the men reported exposure to ticks during their outing.

(Reported by W. R. Loerke, D.O., B. J. Sappington, D.O., private physicians, Tulsa; N. J. Newell, D.O., private physician, Oklahoma City; Stanley W. Ferguson, Ph.D., State Epidemiologist, and the Laboratory Division, Oklahoma State Department of Health; and an EIS Officer.)

Missouri

On December 27, 1972, 2 brothers, age 9 and 12, killed a sitting rabbit with a BB gun. Three days later the 12-year-old boy became ill with severe headache, and on the following day he was admitted to a local hospital with a temperature of 103°F. Both the brother and the boys' mother, who had assisted in cleaning the rabbit, experienced similar symptoms. The mother had an indurated cutaneous lesion on the middle finger of her left hand and generalized lymphadenopathy; neither of the boys had an observed cutaneous lesion, but both developed prominent epitrochlear lymphadenopathy. All 3 persons responded clinically to tetracycline and chloramphenicol.

On January 9, the Missouri Division of Health Laboratory reported that the 9-year-old boy had a bacterial agglutination titer of 1:2,560 and his brother and mother had agglutination titers of 1:1,280 against *F. tularensis.*

(Reported by Rosanna Herzog, R.N., Director, St. Genevieve County Nursing Service; E. R. Price, D.V.M., Director, Missouri Bureau of Veterinary Public Health; H. Denny Donnell, Jr., M.D., State Epidemiologist, Missouri Division of Health, Missouri Department of Health and Welfare.)

Editorial Note

Both of these outbreaks of tularemia involved contact with tissues of recently killed rabbits infected with *F. tularensis.* High attack rates of tularemia have been reported previously in the southern Mississippi Valley, where cases are often associated with tick bites or direct contact with tissues from infected rabbits *(1, 2, 3).*

If the cavitary lesion in the third Oklahoma case is due to tularemia, this represents a rare pulmonary finding *(4).*

References

1. Assal NR, Lindeman RD, Carpenter RL: Epidemiologic study on reported human tularemia in Oklahoma. J Okla State Med Assoc 61:120-124, 1968

2. Assal NR, Blenden DC, Price ER: Epidemiologic study of human tularemia reported in Missouri, 1949-65. Public Health Reports 82:627-632, 1967

3. Brooks GF, Buchanan TM: Tularemia in the United States: epidemiologic aspects in the 1960s and follow-up of the outbreak of tularemia in Vermont. J Infect Dis 121:357-359, 1970

4. Sanborn EB, Purcell EM: Pleuropulmonary complications of tularemia: two reports of tularemic lung abscesses. J Thorac Cardiovasc Surg 34:85-94, 1957

RABIES — Tennessee

In late June, a young skunk was found by a family in Gibson County, Tennessee, and adopted as a family pet. A few days later, the family traveled to Florida and took their pet. During the trip the skunk became ill, and after the family returned to Tennessee, it died on July 17. The State Laboratory in Nashville subsequently reported that the brain was positive for rabies by the fluorescent antibody test.

All 5 family members, 2 adults and 3 children, were exposed to the rabid skunk and are receiving antirabies prophylaxis; 1 child, an 11-year-old boy, who is hypersensitive to eggs, is being treated with a non-avian tissue rabies vaccine provided through CDC.

In addition, 3 persons who were exposed to the skunk in Florida are currently receiving antirabies prophylaxis.

(Reported by C. N. Hickman, M.D., Director, Gibson County Health Department; Robert H. Hutcheson, Jr., M.D., State Epidemiologist, Tennessee Department of Public Health.)

Editorial Note

Wild animals are not suitable pets and may expose a family to an unwarranted risk. Indeed, in at least 1 state it is unlawful to have a skunk for a pet. In many parts of the United States, skunks must be considered rabid unless proven otherwise.

The only rabies vaccine available commercially in this country is Duck Embryo Vaccine (Eli Lilly). The contraindications for its use are hypersensitivity either to the vaccine or to egg protein. A supply of non-avian tissue rabies vaccine may be obtained from CDC. Any physician who needs this product should contact his state health department.

FOLLOW-UP ON RELAPSING FEVER – United States

Three additional cases of relapsing fever in tourists visiting the North Rim of the Grand Canyon have been reported to CDC. A 13-year-old boy from Minnesota who visited the North Rim with his family on June 24, 1973, became ill 6 days later with headache, myalgia, and fever (temperature 105°F). Over the next month, he had 4 relapses of fever and was hospitalized 2 times. The diagnosis of relapsing fever was suggested to the family by a CDC questionnaire which they received August 5. The patient was treated with tetracycline and has been asymptomatic.

A 43-year-old man from California who visited the North Rim on June 14 became ill 9 days later with headache, myalgia, nausea, vomiting, shaking chills, and fever (temperature 104°F). Administration of tetracycline was followed by more severe chills and fever, which cleared over 2 days. The patient then stopped taking tetracyline; 9 days later he developed chills and fever again. Diagnosis of relapsing fever was made during his fourth episode of fever when spirochetes were seen on a Wright's stain preparation of peripheral blood at a Sacramento hospital on July 24. He was treated with tetracycline and has since been asymptomatic.

A 14-year-old girl from Michigan visited the North Rim with her grandparents on July 30. On August 8, she developed fever (temperature 104°F), headache, chills, weakness, and sweats. The diagnosis of relapsing fever, made on examination of a peripheral blood smear in an Ogden, Utah, hospital, was confirmed by the Bureau of Laboratories, CDC.

(Reported by Herzl Friedlander, M.D., private physician, Sacramento; Stephan Billstein, M.D., Communicable Disease Officer, Sacramento County Health Department; James Chin, M.D., State Epidemiologist, California State Department of Public Health; Chris Holmes, M.D., private physician, Ned Christiansen, Chief Microbiologist, St. Benedict's Hospital, Ogden, Utah; Taira Fukushima, M.D., State Epidemiologist, Utah State Division of Health.)

Editorial Note

Reactions resembling the Jarisch-Herxheimer reaction have been observed following initial treatment of relapsing fever with tetracycline as well as with other antimicrobial agents *(1)*. It is possible that the exacerbation of fever experienced by the second patient was caused by the destruction of spirochetes during tetracycline therapy.

Reference

1. Southern PM, Sanford JP: Relapsing fever: A clinical and microbiological review. Medicine 48:129-149, 1969

SALMONELLA TYPHI – Maryland

On April 17, 1973, a case of typhoid fever in a 5-year-old girl was reported to the Frederick County Health Department by a private pediatrician. The girl had been hospitalized, and blood and stool specimens had yielded *Salmonella typhi*, phage type C_1.

Epidemiologic investigation revealed that a known typhoid carrier, a 76-year-old man, resided on the same farm as the patient. He had first been identified as a carrier in 1968 when the woman with whom he lived was found to have typhoid fever. He had been instructed as to personal hygiene and other precautionary steps to avoid transmission of the disease. However, he admitted to sometimes helping prepare food on the farm. *S. typhi*, phage type C_1, was isolated from his stool on April 30, 1973.

On May 2, 1973, another resident of the farm, a 19-year-old man, had a positive stool specimen for *S. typhi*, phage C_1. He was asymptomatic at the time the isolation was reported. He was treated with ampicillin and his stool specimens were subsequently negative for enteric pathogens.

On May 17, 1973, the 76-year-old typhoid carrier was admitted to the University of Maryland Hospital for treatment with intravenous ampicillin (6 gm per day for 46 days) to eradicate his carrier state *(1)*. He responded well to therapy and has had negative stool cultures for several weeks.

Contact investigation of other farm residents failed to reveal any additional cases of *S. typhi*. However, environmental studies revealed fecal coliform contamination of well water and an unsatisfactory sewage disposal system. The farm was closed by the manager on June 5, 1973.

(Reported by Charles E. Wright, M.D., private pediatrician, Frederick County, Maryland; Richard Hornick, M.D., Professor of Medicine and Director, Division of Infectious Diseases, University of Maryland, School of Medicine; Leonard M. Thompson, Sanitarian, Charles G. Spicknall, M.D., Health Officer, Frederick County Health Department; Edwin Swecker, Head, Enteric Bacteriology Laboratory, Laboratories and Research Administration, John D. Stafford, M.D., Chief, Division of Communicable Diseases, Preventive Medicine Administration, Maryland Department of Health and Mental Hygiene.)

Reference

1. Scioli C, Fiorentino F, Sasso G: Treatment of *Salmonella typhi* carriers with intravenous ampicillin. J Infect Dis 125(2):170-173, 1972

INTERNATIONAL NOTES

CHOLERA – Worldwide

Mauritania

One confirmed and 19 suspect cases of *Vibrio cholerae*, biotype El Tor, have been reported from the Sixth Region in the period July 19-22, 1973. The last reported cases were detected in Mauritania in September 1972.

Sweden

Two confirmed imported cases of *V. cholerae*, biotype El Tor, serotype Ogawa, were reported on July 24. The 2 women affected, aged 56 and 30, were members of a group of tourists who had visited Tunisia. All necessary measures to ensure that there is no secondary spread have been taken.

Tunisia

A small localized outbreak of *V. cholerae*, biotype El Tor, with 15 cases was reported on July 24 from an agricultural area in the south of the country between Gabès and Gafsa. All necessary control measures have been taken.

United Kingdom

One confirmed imported case of *V. cholerae*, biotype El Tor, serotype Ogawa, was recorded on August 1. The man was a member of a group of tourists who had visited Tunisia. His wife, who was in the same tourist group, has also been

(Continued on page 273)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING AUGUST 11, 1973 AND AUGUST 12, 1972 (32nd WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspec. cases		Post Infectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
	1973	1973	1973	1973	Cum. 1973	1973	1972	1973	1973	1973	1972
UNITED STATES	190	10	344	2	113	50	18	8	136	965	1,060
NEW ENGLAND	15	–	53	–	3	1	2	–	4	45	91
Maine *	–	–	–	–	–	–	–	–	–	2	10
New Hampshire *	–	–	–	–	–	–	–	–	1	5	28
Vermont	–	–	1	–	–	–	–	–	–	1	2
Massachusetts	4	–	25	–	1	1	2	–	1	23	31
Rhode Island	10	–	12	–	2	–	–	–	–	7	4
Connecticut	1	–	15	–	–	–	–	–	2	7	16
MIDDLE ATLANTIC	13	1	56	–	–	3	–	5	36	123	161
Upstate New York	4	1	–	–	–	–	–	4	2	27	35
New York City	4	–	56	–	–	–	–	–	10	26	27
New Jersey	–	–	NN	–	–	–	–	–	12	31	47
Pennsylvania	5	–	–	–	–	3	–	1	12	39	52
EAST NORTH CENTRAL	42	–	135	–	–	9	6	–	16	178	164
Ohio *	20	–	6	–	–	6	4	–	1	29	37
Indiana	–	–	7	–	–	1	–	–	–	12	6
Illinois	1	–	–	–	–	1	–	–	6	50	56
Michigan	21	–	35	–	–	1	2	–	9	79	60
Wisconsin	–	–	87	–	–	–	–	–	–	8	5
WEST NORTH CENTRAL	1	–	5	–	7	4	–	1	2	29	54
Minnesota	–	–	–	–	–	–	–	1	1	5	5
Iowa	–	–	4	–	–	2	–	–	–	4	14
Missouri	1	–	–	–	–	2	–	–	–	5	20
North Dakota	–	–	1	–	–	–	–	–	–	–	2
South Dakota	–	–	–	–	7	–	–	–	–	–	2
Nebraska	–	–	–	–	–	–	–	–	–	1	3
Kansas	–	–	–	–	–	–	–	–	1	14	8
SOUTH ATLANTIC	34	2	36	–	–	4	2	1	14	185	156
Delaware	–	–	1	–	–	–	–	–	–	–	5
Maryland	2	–	1	–	–	2	–	–	–	4	14
District of Columbia	4	–	–	–	–	–	–	–	–	3	–
Virginia	9	–	8	–	–	–	1	–	3	17	23
West Virginia *	9	–	22	–	–	–	1	–	–	7	8
North Carolina	5	–	NN	–	–	1	–	–	2	23	29
South Carolina	–	–	4	–	–	–	–	–	–	12	7
Georgia	1	2	–	–	–	–	–	–	–	34	35
Florida	4	–	–	–	–	1	–	1	9	85	35
EAST SOUTH CENTRAL	11	2	11	–	–	2	2	1	5	60	50
Kentucky	6	–	11	–	–	–	2	–	–	14	22
Tennessee	2	2	NN	–	–	–	–	1	3	36	25
Alabama	1	–	–	–	–	1	–	–	2	4	1
Mississippi	2	–	–	–	–	1	–	–	–	6	2
WEST SOUTH CENTRAL	18	–	1	2	11	18	5	–	16	97	98
Arkansas *	–	–	–	–	–	–	–	–	–	–	4
Louisiana	1	–	NN	–	–	1	–	–	1	10	16
Oklahoma	17	–	1	–	–	17	2	–	–	11	17
Texas	–	–	–	2	11	–	3	–	15	76	61
MOUNTAIN	1	1	9	–	14	–	–	–	6	41	61
Montana	1	–	–	–	–	–	–	–	–	1	3
Idaho	–	–	–	–	–	–	–	–	–	1	10
Wyoming	–	–	–	–	–	–	–	–	–	1	–
Colorado	–	–	2	–	–	–	–	–	3	9	14
New Mexico	–	1	7	–	6	–	–	–	1	10	2
Arizona *	–	–	–	–	8	–	–	–	–	9	18
Utah	–	–	–	–	–	–	–	–	2	8	6
Nevada	–	–	–	–	–	–	–	–	–	2	8
PACIFIC	55	4	38	–	78	9	1	–	37	207	225
Washington	3	–	11	–	70	1	–	–	3	29	7
Oregon	–	–	–	–	3	–	1	–	–	10	37
California	51	4	–	–	3	7	–	–	34	165	166
Alaska	–	–	10	–	2	–	–	–	–	–	1
Hawaii	1	–	17	–	–	1	–	–	–	3	14
Guam	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico *	–	–	12	–	–	–	–	–	–	4	8
Virgin Islands	–	–	–	–	–	–	–	–	–	–	–

*Delayed reports: Chickenpox: N. H. 3, Ark. 2
Diphtheria: Ariz. 7
Hepatitis B: Ohio 2, W. Va. delete 2
Hepatitis A: Me. 9, N. H. 2, Ohio delete 2, W. Va. 2, Ark. 2, Ariz. 9, Puerto Rico 3

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING AUGUST 11, 1973 AND AUGUST 12, 1972 (32nd WEEK) – Continued

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1973	Cum. 1973	1973	Cumulative 1973	Cumulative 1972	1973	Cumulative 1973	Cumulative 1972	1973	Cum. 1973	1973	Cum. 1973
UNITED STATES	7	149	123	23,718	26,349	16	984	942	459	53,897	98	25,564
NEW ENGLAND	–	12	4	7,350	3,052	2	46	38	25	2,735	6	3,586
Maine *	–	–	–	64	243	–	1	3	1	306	–	68
New Hampshire *	–	–	1	857	228	–	6	3	–	178	1	354
Vermont	–	2	–	118	125	1	3	–	–	241	–	43
Massachusetts	–	6	3	3,912	658	–	12	18	4	805	3	2,034
Rhode Island	–	–	–	603	519	–	3	10	8	318	–	210
Connecticut	–	4	–	1,796	1,279	1	21	4	12	887	2	877
MIDDLE ATLANTIC	–	21	39	2,391	957	3	132	119	84	7,043	8	4,142
Upstate New York	–	12	7	787	124	–	46	32	NN	NN	2	409
New York City	–	1	11	870	294	1	27	36	77	4,402	4	449
New Jersey	–	4	7	389	484	2	31	24	4	1,471	1	2,997
Pennsylvania	–	4	14	345	55	–	28	27	3	1,170	1	287
EAST NORTH CENTRAL	1	21	41	8,355	10,855	1	126	139	88	13,956	48	5,815
Ohio	–	4	–	278	235	–	56	54	9	2,640	2	677
Indiana	–	3	1	618	1,225	–	4	11	10	1,154	1	924
Illinois	1	11	8	2,012	4,034	–	24	30	18	2,355	4	911
Michigan	–	3	28	4,330	1,968	1	37	38	18	3,872	25	1,806
Wisconsin	–	–	4	1,117	3,393	–	5	6	33	3,935	16	1,497
WEST NORTH CENTRAL	1	6	2	436	933	2	77	68	8	4,567	3	1,197
Minnesota	–	1	–	19	19	1	7	19	2	79	1	219
Iowa	1	1	1	277	650	1	18	2	1	2,788	2	186
Missouri	–	1	–	49	162	–	31	20	2	660	–	259
North Dakota	–	1	–	58	51	–	3	–	–	64	–	276
South Dakota	–	–	–	–	6	–	4	2	–	17	–	23
Nebraska	–	1	1	6	18	–	7	9	3	123	–	139
Kansas	–	1	–	27	27	–	7	16	–	836	–	95
SOUTH ATLANTIC	1	23	2	1,177	2,096	3	162	211	81	6,354	6	2,070
Delaware	–	–	–	8	48	–	–	1	4	262	1	13
Maryland	1	3	–	12	15	–	22	33	6	615	–	10
District of Columbia	–	1	–	5	2	–	4	9	8	95	–	3
Virginia	–	5	1	411	59	–	29	47	12	674	1	621
West Virginia	–	–	–	190	261	–	2	7	24	2,208	2	283
North Carolina	–	6	–	4	32	1	36	27	NN	NN	–	201
South Carolina	–	1	–	57	214	–	10	20	1	349	–	84
Georgia	–	3	1	148	165	–	20	10	3	29	–	11
Florida	–	4	–	342	1,300	2	39	57	23	2,122	2	844
EAST SOUTH CENTRAL	–	5	5	592	1,031	–	91	76	43	4,350	7	1,263
Kentucky	–	1	1	364	519	–	32	25	7	1,278	–	380
Tennessee	–	–	–	165	191	–	37	28	25	2,002	5	505
Alabama	–	4	4	9	140	–	15	15	9	614	–	184
Mississippi	–	–	–	54	181	–	7	8	2	456	2	194
WEST SOUTH CENTRAL	–	9	6	640	1,419	1	153	115	46	3,566	6	1,425
Arkansas	–	–	–	69	13	–	13	9	1	345	–	112
Louisiana *	–	2	–	84	82	1	31	35	5	75	–	99
Oklahoma	–	1	1	52	10	–	27	6	1	421	–	175
Texas	–	6	5	435	1,314	–	82	65	39	2,725	6	1,039
MOUNTAIN	–	9	6	581	1,745	2	31	17	13	2,399	6	2,354
Montana	–	1	–	16	15	–	6	2	1	222	1	500
Idaho	–	–	1	248	24	–	4	4	–	110	–	33
Wyoming	–	–	1	80	51	–	–	1	–	420	–	6
Colorado	–	2	–	102	517	2	11	4	8	423	3	1,539
New Mexico	–	2	4	116	114	–	3	2	4	955	2	188
Arizona	–	4	–	16	869	–	3	1	–	140	–	17
Utah	–	–	–	2	155	–	2	2	–	121	–	68
Nevada	–	–	–	1	–	–	2	1	–	8	–	3
PACIFIC	4	43	18	2,196	4,261	2	166	159	71	8,927	8	3,712
Washington	–	3	2	1,002	973	–	17	12	–	1,406	1	652
Oregon	–	2	1	453	115	–	12	13	18	1,657	2	774
California	4	35	14	657	3,067	2	131	125	45	4,939	5	2,251
Alaska	–	2	–	65	11	–	6	6	4	679	–	9
Hawaii	–	1	1	19	95	–	–	3	4	246	–	26
Guam	–	–	–	26	8	–	–	11	–	17	–	8
Puerto Rico	–	–	34	1,751	592	–	7	4	18	654	–	26
Virgin Islands	–	–	–	–	2	–	–	2	1	21	–	2

*Delayed reports: Measles: La. 1
Mumps: Me. 6, N. H. 1
Rubella: La. delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING AUGUST 11, 1973 AND AUGUST 12, 1972 (32nd WEEK) – Continued

AREA	TETANUS	TUBERCULOSIS (New Active)		TULAREMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
									GONORRHEA	SYPHILIS (Pri. & Sec.)		
	Cumulative 1973	1973	Cum. 1973	Cumulative 1973	1973	Cum. 1973	1973	Cum. 1973	1973	1973	1973	Cum. 1973
UNITED STATES	50	658	19,578	93	13	439	27	435	16,527	500	75	2,294
NEW ENGLAND	2	11	672	–	2	8	–	1	420	24	2	96
Maine *	–	4	54	–	–	–	–	–	28	5	1	55
New Hampshire	–	2	39	–	–	–	–	–	20	–	1	33
Vermont *	–	1	19	–	–	–	–	–	6	–	–	3
Massachusetts	–	–	353	–	2	8	–	1	211	1	–	4
Rhode Island	1	2	47	–	–	–	–	–	57	–	–	–
Connecticut	1	2	160	–	–	–	–	–	98	18	–	1
MIDDLE ATLANTIC	7	119	3,832	–	–	40	2	24	2,370	124	6	26
Upstate New York	1	21	695	–	–	6	2	12	366	14	–	10
New York City	3	50	1,449	–	–	14	–	1	1,063	61	–	–
New Jersey	2	17	657	–	–	12	–	5	464	17	–	–
Pennsylvania	1	31	1,031	–	–	8	–	6	477	32	6	16
EAST NORTH CENTRAL	8	103	2,986	2	2	24	–	17	2,052	20	4	215
Ohio *	1	31	888	–	–	9	–	13	588	3	–	29
Indiana	1	16	387	–	–	–	–	–	363	4	–	47
Illinois	3	24	909	–	1	6	–	4	190	6	2	58
Michigan	1	32	725	2	1	7	–	–	719	7	–	4
Wisconsin	2	–	77	–	–	2	–	–	192	–	2	77
WEST NORTH CENTRAL	4	28	786	10	2	17	–	14	957	14	25	740
Minnesota	–	5	96	–	–	4	–	–	210	–	13	256
Iowa *	–	3	84	–	–	–	–	7	161	13	5	151
Missouri	3	13	365	10	–	9	–	6	264	1	2	68
North Dakota	1	–	28	–	–	–	–	–	16	–	5	122
South Dakota	–	2	54	–	–	1	–	–	42	–	–	77
Nebraska	–	1	49	–	–	1	–	1	52	–	–	3
Kansas	–	4	110	–	2	2	–	–	212	–	–	63
SOUTH ATLANTIC	8	125	3,873	8	3	230	21	219	4,367	158	10	191
Delaware	–	3	53	–	–	–	–	7	80	–	–	3
Maryland	–	17	417	–	–	6	1	9	497	15	–	9
District of Columbia	–	–	172	–	–	–	–	–	429	27	–	–
Virginia	2	18	508	3	–	3	3	46	450	37	3	58
West Virginia *	–	4	180	–	–	2	–	2	77	–	–	18
North Carolina	–	29	623	1	–	4	14	96	455	16	–	1
South Carolina *	–	–	340	–	–	4	1	26	49	7	1	4
Georgia	1	17	640	3	–	1	2	33	929	15	4	64
Florida	5	37	940	1	3	210	–	–	1,401	41	2	34
EAST SOUTH CENTRAL	7	64	1,778	6	1	19	2	67	1,573	39	3	347
Kentucky	1	21	417	1	–	3	–	–	204	7	–	188
Tennessee	4	12	551	4	1	9	1	31	638	12	1	120
Alabama	2	21	472	–	–	2	–	9	478	16	1	38
Mississippi	–	10	338	1	–	5	1	27	253	4	1	1
WEST SOUTH CENTRAL	8	91	2,009	65	–	20	2	78	2,143	65	8	427
Arkansas *	–	8	238	45	–	3	–	12	154	4	1	90
Louisiana *	3	24	326	–	–	6	–	–	469	17	2	35
Oklahoma	3	7	170	17	–	2	1	63	159	4	1	134
Texas	2	52	1,275	3	–	9	1	3	1,361	40	4	168
MOUNTAIN	–	18	626	1	–	8	–	8	400	5	2	22
Montana *	–	–	29	–	–	–	–	1	30	–	–	–
Idaho	–	–	26	–	–	–	–	2	28	–	–	–
Wyoming	–	7	18	–	–	1	–	1	9	–	–	–
Colorado	–	6	120	–	–	1	–	1	118	3	–	–
New Mexico	–	1	140	1	–	2	–	3	159	2	2	4
Arizona *	–	–	226	–	–	4	–	–	–	–	–	18
Utah	–	–	25	–	–	–	–	–	37	–	–	–
Nevada	–	4	42	–	–	–	–	–	19	–	–	–
PACIFIC	6	99	3,016	1	3	73	–	7	2,245	51	15	230
Washington	2	8	248	–	–	6	–	4	257	3	–	3
Oregon	1	2	165	–	–	2	–	2	200	–	3	6
California	3	88	2,362	1	2	63	–	1	1,642	47	12	214
Alaska	–	–	67	–	1	1	–	–	83	–	–	7
Hawaii	–	1	174	–	–	1	–	–	63	1	–	–
Guam	–	–	28	–	–	–	–	–	–	–	–	–
Puerto Rico	4	9	298	–	–	3	–	–	111	11	1	35
Virgin Islands	–	–	1	–	–	–	–	–	4	–	–	–

*Delayed reports: TB: Ohio delete 5, Iowa delete 1, La. delete 2
Tularemia: Ark. 1
Typhoid: Ariz. 1
RMSF: W. Va. 1, S.C. delete 1, Mont. 1
Syphilis: Vt. delete 1
Animal rabies: Me. 1, Ariz. 1

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING AUGUST 11, 1973

Week No. 32

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

Area	All Causes			Pneumonia and Influenza	Area	All Causes			Pneumonia and Influenza
	All Ages	65 years and over	Under 1 year	All Ages		All Ages	65 years and over	Under 1 year	All Ages
NEW ENGLAND	734	413	23	30	SOUTH ATLANTIC	1,185	615	43	32
Boston, Mass.	276	132	10	7	Atlanta, Ga.	139	71	4	3
Bridgeport, Conn.	35	21	–	1	Baltimore, Md.	194	101	6	2
Cambridge, Mass.	19	14	1	1	Charlotte, N. C.	53	31	2	–
Fall River, Mass.	27	17	–	1	Jacksonville, Fla.	109	60	6	3
Hartford, Conn.	51	34	3	–	Miami, Fla.	114	58	5	3
Lowell, Mass.	30	14	1	1	Norfolk, Va.	49	21	5	2
Lynn, Mass.	24	18	–	–	Richmond, Va.	83	44	1	6
New Bedford, Mass.	37	25	–	5	Savannah, Ga.	32	11	3	1
New Haven, Conn.	52	25	2	–	St. Petersburg, Fla.	90	69	1	5
Providence, R. I.	55	30	1	11	Tampa, Fla.	72	37	–	4
Somerville, Mass.	7	5	–	–	Washington, D. C.	196	88	7	3
Springfield, Mass.	57	33	4	3	Wilmington, Del.	54	24	3	–
Waterbury, Conn.	28	18	–	–					
Worcester, Mass.	36	27	1	–	EAST SOUTH CENTRAL	690	353	37	22
					Birmingham, Ala.	137	80	8	3
MIDDLE ATLANTIC	3,075	1,907	83	143	Chattanooga, Tenn.	46	21	1	1
Albany, N. Y.	58	36	3	1	Knoxville, Tenn.	30	20	–	2
Allentown, Pa.	21	16	–	2	Louisville, Ky.	140	67	6	8
Buffalo, N. Y.	152	101	4	10	Memphis, Tenn.	148	77	6	1
Camden, N. J.	46	25	1	2	Mobile, Ala.	59	28	3	2
Elizabeth, N. J.	28	20	–	1	Montgomery, Ala.	40	21	5	1
Erie, Pa.	33	19	4	1	Nashville, Tenn.	90	39	8	4
Jersey City, N. J.	41	22	1	–					
Newark, N. J.	67	41	4	2	WEST SOUTH CENTRAL	1,314	678	82	33
New York City, N. Y. †	1,506	937	38	54	Austin, Tex.	34	15	5	1
Paterson, N. J.	41	27	1	–	Baton Rouge, La.	57	30	5	–
Philadelphia, Pa.	499	295	17	33	Corpus Christi, Tex.	30	17	1	–
Pittsburgh, Pa.	165	89	4	12	Dallas, Tex.	147	67	14	–
Reading, Pa.	44	33	–	1	El Paso, Tex.	38	15	3	3
Rochester, N. Y.	127	88	–	7	Fort Worth, Tex.	74	41	2	–
Schenectady, N. Y.	23	14	–	–	Houston, Tex.	293	145	13	5
Scranton, Pa.	40	26	–	2	Little Rock, Ark.	59	30	5	6
Syracuse, N. Y.	91	54	6	4	New Orleans, La.	168	89	8	4
Trenton, N. J.	37	21	–	3	Oklahoma City, Okla. *	92	51	6	2
Utica, N. Y.	18	15	–	5	San Antonio, Tex.	165	83	13	3
Yonkers, N. Y.	38	28	–	3	Shreveport, La.	76	46	4	3
					Tulsa, Okla.	81	49	3	6
EAST NORTH CENTRAL	2,503	1,454	109	61					
Akron, Ohio	72	43	5	–	MOUNTAIN	502	281	25	18
Canton, Ohio	48	28	2	1	Albuquerque, N. Mex.	37	23	–	4
Chicago, Ill.	682	386	27	12	Colorado Springs, Colo.	29	16	1	4
Cincinnati, Ohio	148	92	6	4	Denver, Colo.	124	65	6	5
Cleveland, Ohio	192	115	6	–	Las Vegas, Nev.	42	20	2	–
Columbus, Ohio	135	79	10	3	Ogden, Utah	29	16	2	1
Dayton, Ohio	131	79	6	–	Phoenix, Ariz.	88	47	7	2
Detroit, Mich.	314	170	12	10	Pueblo, Colo.	17	11	1	2
Evansville, Ind.	50	33	3	5	Salt Lake City, Utah	63	39	3	–
Fort Wayne, Ind.	43	25	–	5	Tucson, Ariz.	73	44	3	–
Gary, Ind.	34	14	2	3					
Grand Rapids, Mich.	57	42	1	7	PACIFIC	1,573	968	47	35
Indianapolis, Ind.	173	95	7	1	Berkeley, Calif.	25	17	–	1
Madison, Wis.	36	20	2	2	Fresno, Calif.	52	28	2	–
Milwaukee, Wis.	123	72	8	2	Glendale, Calif.	25	16	1	1
Peoria, Ill.	48	29	1	–	Honolulu, Hawaii	48	32	1	–
Rockford, Ill.	20	8	3	1	Long Beach, Calif.	98	60	3	2
South Bend, Ind.	29	22	1	2	Los Angeles, Calif.	493	311	6	10
Toledo, Ohio	99	65	5	1	Oakland, Calif.	77	40	5	2
Youngstown, Ohio	69	37	2	2	Pasadena, Calif.	24	17	–	2
					Portland, Oreg.	118	84	–	3
WEST NORTH CENTRAL	756	441	31	24	Sacramento, Calif.	64	30	5	–
Des Moines, Iowa	66	41	–	2	San Diego, Calif.	110	64	9	2
Duluth, Minn.	21	10	1	–	San Francisco, Calif.	166	98	4	3
Kansas City, Kans.	29	10	–	1	San Jose, Calif.	47	32	1	2
Kansas City, Mo.	132	70	8	2	Seattle, Wash.	125	71	7	3
Lincoln, Nebr.	18	13	–	–	Spokane, Wash.	59	39	2	3
Minneapolis, Minn.	115	69	7	1	Tacoma, Wash.	42	29	1	1
Omaha, Nebr.	69	36	2	–					
St. Louis, Mo.	191	119	7	11	Total	12,332	7,110	480	398
St. Paul, Minn.	63	42	3	1	Expected Number	12,129	6,854	549	392
Wichita, Kans.	52	31	3	6	Cumulative Total (includes reported corrections for previous weeks)	417,362	245,896	15,500	17,284

†Delayed report for week ending August 4, 1973
*Estimate based on average percent of divisional total

CHOLERA – Continued

shown to be excreting vibrios of the same serotype, although apart from mild diarrhea during her stay in Tunisia, she has not been ill.

Another imported case was reported on August 7 from a different group staying in Tunisia, and again *V. cholerae*, biotype El Tor, serotype Ogawa, has been identified.

Federal Republic of Germany

One confirmed imported case of *V. cholerae* (type not yet specified) was reported on August 6. The patient had returned from Tunisia 2 days prior to the onset of illness. Two family contacts have been isolated, and all necessary measures to prevent secondary spread have been taken.

A second imported case of *V. cholerae*, biotype El Tor, serotype Ogawa, was reported on August 9. This patient had returned from Tunisia on August 7.

Niger

Five confirmed and 67 suspect cases of cholera were reported on August 14 from Tera Arr (Niamey Department).

Editorial Note

The attention of all health administrations is drawn to the fact that no part of the Federal Republic of Germany nor the United Kingdom should be considered as infected as a result of these imported cases. It is most probable that the vibrio in the case imported into the Federal Republic of Germany will also prove to be El Tor, Ogawa. The recent 7 importations in tourists from Tunisia into the above-mentioned countries will thus all have been due to the same serotype.

The "prompt notification of the occurrence of the diseases subject to the International Health Regulations (1969) as an indispensable basis for the efficient implementation of these Regulations" has been called to the attention of all Member States by the World Health Assembly in resolution WHA26.54

In this connection, the prompt notification of the appearance of cholera is to be commended. This enables the Organization to provide the necessary information to national health administrations without delay, thus facilitating the implementation of adequate surveillance measures, which constitute the most effective method to contain the spread of the disease.

(Reported by the World Health Organization: Weekly Epidemiological Record, *Vol. 48, Nos. 30-32, July 27, August 3, August 10, 1973, and the* Epidemiological Bulletin, *No. 1, August 14.)*

INFLUENZA – Worldwide

Australia

In addition to the scattered influenza cases associated with virus B which are being observed throughout the Melbourne metropolitan area, an epidemic of respiratory illness was reported on July 17 in a country town of 15,000 inhabitants in Victoria; 2 strains of virus B were isolated from patients in the town. On July 18, absenteeism was 120/560 in 1 primary school and 70/690 in another.

One strain of virus B isolated from patients in Melbourne was obtained in a fatal fulminating case from a 22-year-old male with pneumonia and shock.

Japan

The influenza epidemic associated with virus B which began in late April has developed in the whole of Japan. It has started to decline, though it is still spreading in some places. In most areas it was associated with a virus antigenically close to the strains intermediate between the new variant B/HK/5/72 and the previous B strains. In Tokyo, Kanagawa, and Tochigi Prefectures, however, a minority of strains of the previous B virus were also isolated.

A survey of serum obtained before the epidemic from children in a secondary school in Ibaragi Prefecture has shown that most of them had no antibody against the virus B which caused the epidemic (a few showed very low titers), whereas more or less high antibody titers to previous B viruses were found in the same population.

Kenya

An influenza epidemic was observed in Kenya between May and early July. It began on the coast in the second week of May and reached Nairobi in early June and west Kenya by the end of June. The disease was relatively mild. Several strains of a virus antigenically close to A/England/42/72 have been isolated.

International Influenza Center for the Americas – Atlanta

Strains of influenza virus A antigenically close to the variant A/England/42/72 have been isolated since December 1972 in the following countries: Argentina–epidemics in Viedma, Rio Negro Province in April and Córdoba region in June; Brazil–epidemics in São Paulo in January; Trinidad and Tobago–epidemic in Port-of-Spain in December 1972 and January 1973; Uruguay–epidemic in the second half of April and in May.

(Reported by the World Health Organization: Weekly Epidemiological Record, *Vol. 48, No. 31, August 3, 1973.)*

CURRENT TRENDS

TUBERCULOSIS CASES AND CASE RATES – United States, 1972

In 1972, a total of 32,882 new cases of active tuberculosis were reported in the United States, a decrease of 6.6% from 1971. The case rate declined 7.6% – from 17.1 per 100,000 population in 1971 to 15.8 in 1972. Case rates for individual states ranged from a high of 38.9 in Hawaii to a low of 4.1 in Iowa. The case rate recorded in the District of Columbia was 47.3, which exceeded case rates in all states. For the past 2 years, Hawaii, Alaska, and Alabama have reported the highest rates; however, Alaska had a case rate decline of 26.6% from 33.5 in 1971 to 24.6 in 1972, and case rates decreased 6.5% and 7.4% in Hawaii and Alabama, respectively. The 3 lowest ranked states in 1972 were Iowa, New Hampshire, and North Dakota. North Dakota, which ranked 39 in 1971, fell to 49 in 1972, and the case rate showed a 40.2% decrease. Iowa had an annual case rate decline of 8.9% while New Hampshire had an annual increase of 19.5% (Table 1).

The 5 most populous states–California, New York, Illinois, Pennsylvania, and Texas–accounted for 39% of the total new cases of tuberculosis reported this year.

(Reported by the Tuberculosis Branch, Bureau of State Services, CDC.)

Table 1
New Active Tuberculosis Cases and Rates per 100,000 Population, by State – United States, 1972 and 1971

State	New Active Cases		Case Rate		Rank According to Rate		Estimated Population as of July 1, 1972
	1972	1971	1972	1971	1972	1971	
United States	32,882	35,217	15.8	17.1	..	..	208,232,000
Alabama	918	985	26.2	28.3	2	3	3,510,000
Alaska	80	105	24.6	33.5	3	2	325,000
Arizona	396	459	20.4	24.8	11	5	1,945,000
Arkansas	434	482	21.9	24.8	6	6	1,978,000
California	3,326	3,488	16.2	17.2	21	20	20,468,000
Colorado	245	257	10.4	11.3	34	33	2,357,000
Connecticut	246	270	8.0	8.8	40	38	3,082,000
Delaware	103	83	18.2	14.9	15	25	565,000
District of Columbia	354	323	47.3	43.6	..	..	748,000
Florida	1,517	1,551	20.9	22.0	8	9	7,259,000
Georgia	897	977	19.0	20.9	13	12	4,720,000
Hawaii	315	328	38.9	41.6	1	1	809,000
Idaho	62	56	8.2	7.7	38	43	756,000
Illinois	1,940	2,138	17.2	19.1	18	18	11,251,000
Indiana	722	767	13.6	14.5	26	27	5,291,000
Iowa	117	129	4.1	4.5	50	48	2,883,000
Kansas	169	156	7.5	6.9	42	45	2,258,000
Kentucky	715	755	21.7	23.0	7	8	3,299,000
Louisiana	520	747	14.0	20.3	24	14	3,720,000
Maine	87	81	8.5	8.1	37	41	1,029,000
Maryland	838	840	20.7	21.0	10	11	4,056,000
Massachusetts	734	763	12.7	13.3	28	29	5,787,000
Michigan	1,261	1,312	13.9	14.6	25	26	9,082,000
Minnesota	202	206	5.2	5.3	47	47	3,896,000
Mississippi	400	431	17.7	19.4	17	16	2,263,000
Missouri	605	710	12.7	15.0	27	24	4,753,000
Montana	64	78	8.9	11.0	36	34	719,000
Nebraska	101	82	6.6	5.4	43	46	1,525,000
Nevada	43	46	8.2	9.1	39	37	527,000
New Hampshire	38	31	4.9	4.1	48	49	771,000
New Jersey	1,208	1,298	16.4	17.8	20	19	7,367,000
New Mexico	194	172	18.2	16.7	16	21	1,065,000
New York	3,451	3,752	18.8	20.4	14	13	18,366,000
North Carolina	996	1,043	19.1	20.3	12	15	5,214,000
North Dakota	31	51	4.9	8.2	49	39	632,000
Ohio	1,252	1,301	11.6	12.1	30	31	10,783,000
Oklahoma	330	347	12.5	13.3	29	28	2,634,000
Oregon	234	249	10.7	11.5	32	32	2,182,000
Pennsylvania	1,772	1,928	14.9	16.2	22	22	11,926,000
Rhode Island	108	116	11.2	12.1	31	30	968,000
South Carolina	651	669	24.4	25.5	4	4	2,665,000
South Dakota	69	69	10.2	10.3	35	36	679,000
Tennessee	929	878	23.0	22.0	5	10	4,031,000
Texas	2,422	2,730	20.8	23.8	9	7	11,649,000
Utah	62	44	5.5	4.0	45	50	1,126,000
Vermont	36	37	7.8	8.1	41	40	462,000
Virginia	817	912	17.1	19.3	19	17	4,764,000
Washington	359	358	10.4	10.4	33	35	3,443,000
West Virginia	252	276	14.1	15.8	23	23	1,781,000
Wisconsin	240	324	5.3	7.2	46	44	4,520,000
Wyoming	20	27	5.8	7.9	44	42	345,000
Puerto Rico*	644	808	23.7	29.8	..	..	2,712,000

*Not included in totals
District of Columbia is classified as a city and is not ranked with the States.

CURRENT TRENDS
ARTHROPOD-BORNE VIRUS DISEASE AND SURVEILLANCE – California, Southeastern United States

California

In 1972, the California State Department of Public Health reported a total of 5 human cases of St. Louis encephalitis (SLE), 3 of western equine encephalomyelitis (WEE), 1 of introduced Venezuelan equine encephalitis (VEE), and 3 of introduced dengue; in addition, 6,336 mosquito pools were tested through surveillance programs and 180 viruses isolated (MMWR, Vol. 22, No. 16). One of the SLE cases is briefly described below:

On October 5, 1972, a 17-year-old field worker from Delano, California, had sudden onset of severe headache. The next day, he also experienced neck pain and nausea, and on October 7, he consulted his private physician. Physical examination revealed a temperature of 101°F but was otherwise unremarkable. The tentative diagnosis was aseptic meningitis, and the patient was admitted to a local hospital.

On the evening of admission, the patient's temperature rose to 106°F, and he had a convulsive seizure. Nuchal rigidity was noted, but there were no other unusual findings. Headache persisted until October 13, but by October 20, the patient had no symptoms and was discharged.

Acute and convalescent serum specimens drawn on October 11 and 31, respectively, were sent to the State Laboratory for testing and showed a rise in titer from 1:32 to 1:128 by the fluorescent antibody titer method.

Between January 1 and August 1, 1973, continued surveillance has revealed no human cases of arbovirus encephalitis; of the cases of suspect encephalitis in equines reported to the State Health Department in this period, none have been confirmed by laboratory tests as due to arboviruses. Twenty horse brains have been tested in suckling mice, and none yielded arboviruses.

In the first 7 months of 1973, 2,554 mosquito pools (more than 87,000 individual mosquitoes) were tested, and 127 viruses were isolated: 50 WEE, 20 SLE, 35 Turlock, 20 of a virus (V4038) still being characterized, and 2 unidentified isolates. Most of the WEE and SLE viruses have been from the Imperial Valley. Additional isolates of WEE and SLE viruses have been reported from University of California at Los Angeles study sites in Imperial County.

(Reported by Peter Cummings, M.D., private physician, Delano, California; Telford H. Work, M.D., University of California at Los Angeles; Richard W. Emmons, M.D., Public Health Medical Officer, James Chin, M.D., State Epidemiologist, Edwin H. Lennette, M.D., Ph.D., Chief, Biomedical Laboratories, California State Department of Public Health.)

Southeastern United States

Since early summer 1973, an increase in the number of horses affected with symptoms of encephalitis has been reported from the Southeastern United States. Viral isolations or positive serologic tests have implicated eastern equine encephalomyelitis (EEE) virus as the agent in 26 animals from the following 6 states: Mississippi (1); Louisiana (1); Georgia (7); South Carolina (8); North Carolina (7); Virginia (2). Florida has confirmed 56 horse deaths as due to EEE virus by hemagglutination-inhibition (HI) tests. The Florida investigators have noted a generally higher titer of HI antibody to the EEE virus than in previous years. The cases from all 7 states have been geographically scattered indicating a generalized increase in normal seasonal arbovirus transmission in the Southeast.

In the past month, a cluster of 9 encephalitis cases in horses occurred north of Beaumont, Texas. Seven horses became ill in the last week of July and the first week of August. All had a similar picture of encephalitis of rapid onset. Six died within 4 days of onset, and the remaining horse has not yet recovered. Viral neutralization and HI tests on serum from 1 horse indicate EEE infection as the probable cause of death.

(Reported by James B. Nichols, D.V.M., Director, Division of Veterinary Public Health, Florida State Board of Health; R. K. Sikes, D.V.M., State Public Health Veterinarian, Maurice Miot, Chief, Virus Laboratory, John E. McCroan, Ph.D., State Epidemiologist, Georgia State Department of Human Resources; Charles T. Caraway, D.V.M., State Epidemiologist, Louisiana State Department of Health; Durward L. Blakey, M.D., State Epidemiologist, Mississippi State Board of Health, John Lomi, D.V.M., USDA, Jackson, Mississippi; T. B. Ryan, D.V.M., Rollins Animal Disease Diagnostic Laboratory, North Carolina Department of Agriculture, Martin P. Hines, D.V.M., State Epidemiologist, North Carolina State Board of Health; Carl E. Boyd, D.V.M., State Veterinarian, W. B. Gamble, M.D., State Epidemiologist, South Carolina State Board of Health; William Crenshaw, D.V.M., N. G. Ferrell, D.V.M., private veterinarians, Beaumont, Texas; William R. Bilderback, D.V.M., Assistant to the Director, A. B. Rich, D.V.M., Director, Veterinary Public Health Division, M. S. Dickerson, M.D., State Epidemiologist, Texas State Department of Health; A. J. Roth, Coordinator, Animal Health Services, Virginia Department of Agriculture, Karl A. Western, M.D., State Epidemiologist, Virginia Department of Health.)

Editorial Note

As the late summer arboviral encephalitis season approaches, increased awareness and surveillance of primary encephalitis in the United States is encouraged, especially in the wake of the recent flooding in the Mississippi-Missouri River basins. Residual flood water may lead to increased mosquito breeding and consequently increased vector density. Generally such a trend has not yet been noted, but breeding is being closely watched in many areas. Other flood-induced phenomena such as a decrease in the number of natural mammalian and avian hosts (leading to increased human biting) or increased migratory bird populations may alter otherwise normally stable transmission cycles.

The increased number of confirmed EEE cases in horses in the Southeastern United States is significant because human epidemics of arthropod-borne encephalitis characteristically occur in conjunction with horse epidemics. No confirmed human cases have been reported from individual states, and the CDC Bureau of Laboratories has not identified serologically or by viral isolation any arbovirus as a cause of human encephalitis; however, based on weekly telegraphic reports received through August 4, cases of primary encephalitis reported in the United States this year are 17% greater than the median for the previous 5 years and 40% greater than for the same period in 1972.

EPIDEMIOLOGIC NOTES AND REPORTS

CRYPTIC MALARIA – North Carolina, New York

On July 1, 1973, a 53-year-old woman was admitted to Kings County Hospital, New York, with a 1-week history of intermittent chills and fever. A peripheral blood smear demonstrated *Plasmodium falciparum* parasites; this finding was confirmed at CDC. The patient was treated with antimalarial drugs and recovered uneventfully.

Epidemiologic investigation revealed that the patient, a resident of Brooklyn, had traveled to a rural community south of Raleigh, North Carolina, on June 18 accompanied by her niece and the niece's 2 daughters. She stayed at her sister's home until June 25 when she became ill. She returned to Brooklyn with her niece that day and remained there until her hospitalization.

The patient gave no history of foreign travel except to Canada, blood transfusions, or parenteral drug use, and her family concurred. Physical examination revealed no evidence of drug use. The patient had 2 tattoos on her left arm which were at least 2 years old. She and her family denied any contact with residents of malarious areas.

Interviews with inhabitants of the rural community near Raleigh failed to reveal a potential source of infection. Peripheral blood smears performed on specimens from the patient's sister and 2 grandnieces were negative for malaria parasites.

Further investigation revealed that 2 children living in Raleigh who were originally from Zaire had been treated for falciparum malaria on approximately May 30. They lived 12 miles from the community where the patient had stayed, and their father denied traveling to that community or knowing the patient or her relatives.

In the absence of a known source of infection, secondary cases, history of transfusion, parenteral drug use, or foreign travel, this case has been classified as cryptic malaria.

(Reported by Stephen Seligman, M.D., Chief, Infectious Disease Section, Department of Medicine, Kings County Hospital, New York; Chung C. Wang, M.D., physician, Division of Tropical Diseases, Pascal J. Imperato, M.D., Director, Bureau of Infectious Disease Control, New York City Health Department; J. N. MacCormack, M.D., Head, Communicable Disease Control Branch, North Carolina Division of Health Services; and an EIS Officer.)

Editorial Note

Since this patient was in North Carolina for only 7 days before becoming ill, it is unclear whether she acquired malaria there. The intrinsic incubation period for *P. falciparum* may be as short as 5 days, but the average is approximately 12 days. The extrinsic (mosquito) incubation period is 7-14 days, depending on temperature and humidity. Hence, the children from Zaire could have served as the source of infection, although the distance between their residence and the rural community is considerably greater than the usual 1-mile flying range of mosquitoes. Anophelene vectors of malaria are known to exist in the Raleigh area.

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The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

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

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