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For Week Ending May 4, 1974

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

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EPIDEMIOLOGIC NOTES AND REPORTS
FOLLOW-UP ON HUMAN LEAD ABSORPTION – Texas

In August 1972, epidemiologic studies in El Paso, Texas (MMWR, Vol. 22, No. 49), showed that blood lead levels ≥ 40 μg/100 ml* were widespread among apparently asymptomatic children. Such low-level lead absorption was especially prevalent within 1 mile of a large ore smelter in southwest El Paso, and in that area, ingestion of particulate lead deposited in dust by the smelter appeared to have been the principal mode of lead intake; beyond 1 mile, lead from paint, pottery, and automotive emissions appeared to have accounted for a greater fraction of the total intake.

In June 1973, followup medical, neurologic, and psy-

A whole blood lead level of 40 μg or more per 100 ml is considered by the Surgeon General to be indicative of "undue lead absorption"(1)*.

CONTENTS

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

DISEASE	18th WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 18 WEEKS		
	May 4, 1974	May 5, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	38	51	38	597	674	608
Brucellosis	2	6	1	44	49	44
Chickenpox	3,983	5,889	– – –	67,214	102,541	– – –
Diphtheria	4	7	4	93	74	64
Encephalitis:						
Primary: Arthropod-borne and unspecified	19	20	20	299	345	354
Post-Infectious	7	5	5	76	80	95
Hepatitis, Viral:						
Type B	162	165	165	3,101	2,611	2,611
Type A	766	944	1,080	15,268	17,757	19,608
Type unspecified	222			3,056		
Malaria	6	4	35	55	74	835
Measles (rubeola)	1,082	1,250	1,252	11,855	15,575	16,597
Meningococcal infections, total	24	36	43	596	619	1,193
Civilian	24	35	42	578	603	1,024
Military	–	1	2	18	16	129
Mumps	1,759	2,094	2,458	29,572	36,379	44,312
Pertussis	1!	– – –	– – –	424	– – –	– – –
Rubella (German measles)	413	1,774	1,774	5,766	17,812	24,410
Tetanus	3	1	2	17	23	30
Tuberculosis, new active	585	627	– – –	10,349	10,809	– – –
Tularemia	2	3	1	33	23	31
Typhoid fever	5	5	7	108	382	89
Typhus, tick-borne (Rky. Mt. spotted fever)	11	8	5	38	24	14
Venereal Diseases:						
Gonorrhea	15,805	14,788	– – –	287,521	262,597	– – –
Syphilis, primary and secondary	442	434	– – –	8,167	8,647	– – –
Rabies in animals	63	81	81	959	1,261	1,400

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total:	2
Botulism:	3	Paralytic:	2
Congenital rubella syndrome:	26	Psittacosis: N.Y. Ups. 1	8
Leprosy:	45	Rabies in man:	–
Leptospirosis:*	18	Trichinosis:	43
Plague:	–	Typhus, murine:*	8

*Delayed reports: Leptospirosis: Texas 1
Typhus, murine: Texas 1

LEAD ABSORPTION – Continued

chologic evaluations were undertaken of a group of children in El Paso whose blood lead levels in 1972 had been ≥ 40 μg/100 ml (Group A) and of a control group (Group B) whose blood levels had been below that mark. Each group consisted of children 3-15 years of age who had lived in a 13 census-tract area in south and west El Paso for at least 12 of the preceding 24 months. Groups were matched according to age, sex, language spoken, length of residence in the study area, census tract of residence, and socioeconomic status *(2)* (Table 1). All examinations were done in blind fashion, with examiners unaware of blood lead levels or group assignments.

After parental permission had been granted, children were given general medical and neurologic examinations. No cases of symptomatic lead poisoning were found, but 4 children with preexisting unrelated neurologic disease were discovered and excluded from further study. The parents of those remaining were asked whether their children had experienced pica, abdominal colic, clumsiness, irritability, convulsions, or hyperactivity (Werry-Weiss-Peters questionnaire *[3]*). Hyperactivity was also evaluated by a physician, and general behavior in the testing situation was scored by a psychologist (NIH behavior profile *[4]*). Visual reaction time, auditory reaction time, hand steadiness, rapidity of 2-plate alternate tapping, and rapidity of finger-wrist tapping were determined in all children over age 5 years using electronic equipment similar to that developed by Baloh et al *(5)*. Psychologic status was measured by the Wechsler Preschool and Primary Scale of Intelligence (WPPSI) in 3- and 4-year-old children and by the Wechsler Intelligence Scale for Children (WISC) in those 5 to 15 *(6,7)*. Children were also administered a Bender Motor Gestalt Test *(8)*. Finally, a venous blood sample was obtained for repeat lead determination.

Analysis of the repeat blood lead data revealed that the children could be divided into 3 groups instead of 2: those with blood lead levels < 40 μg/100 ml in both examinations (81 children); those with levels ≥ 40 μg/100 ml in both examinations (26 children); and those with levels ≥ 40 μg/100 ml in August 1972 but < 40 μg in June 1973 (24 children). However, since results of tests on the latter 2 groups did not differ significantly ($p > 0.10$ for all examinations), data from these 2 groups were combined. Two additional children whose levels rose from < 40 μg/100 ml to > 40 μg/100 ml were excluded from analysis.

Of the historical items examined, only pica was found significantly more often in Group A than in Group B (18% versus 5%, $0.01 < p < 0.05$). Neither hyperactivity nor any other behavioral abnormality was significantly more common in either group as measured by the parental questionnaire, the physician's examination, or the psychologist's evaluation. Finger-wrist tapping was significantly slower in the dominant hand of children in Group A (47 taps in 10 seconds versus 54 in controls, $p < 0.01$), but there were no other significant differences in the neurologic testing.

The results of the psychologic testing showed that verbal I.Q. did not differ significantly between the 2 groups ($p > 0.05$) (Table 2). Results in the Bender-Gestalt test also did not differ significantly. Comparison of performance I.Q. showed, however, that Group A was significantly below Group B ($p < 0.01$). This difference in performance for Group A resulted from the accumulation of small differences in each of the WPPSI and WISC subtests rather than from a highly significant difference in any single area. These data suggest that children with blood lead levels ≥ 40 μg/100 ml have diffuse and subtle impairment of the fine motor, perceptual, and visual perceptual skills measured by these tests *(9)*.

Table 1
Comparison of Group Features
Neurologic and Psychologic Testing
El Paso, Texas – 1973

Characteristics	Group A	Group B
Number	50	81
Mean (and range) Blood Lead Level, 1972 (μg/100 ml)	49· (40-68)*	27· (1-39)
Mean (and range) Blood Lead Level, 1973 (μg/100 ml)	40· (22-58)**	26· (15-39)
Mean Age (yrs)	7.6***	8.8
% Male	66***	58
% Speaking Spanish at Home	98***	95
Socioeconomic Index *(2)*	68***	66
Mean Length of Residence in Study Area (yrs)	6.6***	6.6
% Within 1 Mile of Smelter, 1972	48***	44
% 1.1-2.4 Miles from Smelter, 1972	34***	37
% 2.5-4.1 Miles from Smelter, 1972	18***	19
% Within 1 Mile of Smelter Throughout First 2 Years of Life	28***	22

* $p < 0.01$
** $p < 0.001$
*** $p > 0.05$ by 2-tailed t test

Table 2
Comparison of Groups on Wechsler Intelligence Scales

Group	N	Verbal I.Q.			Performance I.Q.		
		Mean	Standard Deviation	t	Mean	Standard Deviation	t
Group A	49*	83.14	11.82	0.51**	94.16	13.95	2.64***
Group B	81	84.47	15.01		101.89	17.24	

* 1 child in Group A was too uncooperative to permit testing
** $p > .05$ on 2-tailed t-test
*** $p < .01$

(Reported by Randolph H. Whitworth, Ph.D., Associate Professor of Psychology, University of Texas at El Paso; Bernard F. Rosenblum, M.D., M.P.H., Director, El Paso City-County Health Department; M.S. Dickerson, M.D., State Epidemiologist, Texas State Department of Health; Robert W. Baloh, M.D., formerly of Lead Poisoning Control Branch, Bureau of Community and Environmental Management, DHEW; the Toxicology Section, Clinical Chemistry Division, Bureau of Laboratories, and the Field Services Division, Bureau of Epidemiology, CDC; and a team of EIS Officers.)

Editorial Note

Low-level lead absorption sufficient to produce blood levels of 40-80 μg/100 ml has been shown to cause enzymatic interference with heme biosynthesis. Whether such absorption may result also in subclinical damage to the nervous system is less well established. Previous reports have noted hyperactivity, behavioral abnormality, disturbance in fine motor function, and weakness of the distal arm muscles in children with low-level lead absorption, but these results have not been consistent. Variables involved in the production of these findings such as age at onset of exposure to lead or chronicity of exposure need yet to be explored.

The results of the present study agree with previous findings of fine motor dysfunction and weakness of the wrist muscles in children with blood lead levels of 40-80 μg/100 ml. Additionally, this study suggests that children with blood lead levels in the 40-80 μg/100 ml range may display subclinical impairment in a broad range of psychologic function. This impairment appears unrelated to linguistic, cultural, or socioeconomic factors. Further follow-up on these children is planned.

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INTERNATIONAL NOTES

RUBELLA – United Kingdom

Although rubella is usually a disease of infancy and childhood, only 13% of the rubella cases reported in 1973 were in children under 15 years. Most of the investigations to establish a diagnosis of rubella are made when infection, or exposure to infection, is suspected in a pregnant woman. Of 1,168 cases reported in 1973, 67% were in adult women aged 15-44 years, very many of whom were in early pregnancy. Women who were not pregnant and men were usually investigated because they were in contact with a pregnant woman or, less commonly, because the cause of their illness had not been diagnosed clinically—such patients often presented with either glandular enlargement or arthritis. Cases of congenital rubella syndrome are regularly reported, and in 1973 infection was diagnosed in 17 cases of congenital abnormality. Clearly, not all cases of rubella in relation to pregnancy are investigated by virologic tests, and many others which are investigated prove to be negative, but even from the evidence of confirmed infections in women of child-bearing years—788 cases in 1973—it is apparent that the rubella virus continues to be responsible for much clinical concern.

A large number of pregnant women in whom rubella is diagnosed undergo a therapeutic abortion. In 1971 the number of abortions notified in England and Wales under grounds 4 of the Abortion Act—substantial risk of the child being born abnormal—was 1,327, of which 791 were for maternal rubella. In addition, there were 229 abortions carried out in women who had been exposed to the disease and a further 43 in patients who had been given rubella vaccine. For 1972 and 1973 the only figures so far available are the number of abortions notified under grounds 4; in 1972 there were 1,175 cases, and in the first 6 months of 1973 there were 590 cases. On this evidence, therefore, there is little to suggest that the rubella vaccination program has yet begun to have any appreciable effect on the incidence of rubella in pregnant women. However, the program was begun in the United Kingdom in 1970 and is aimed primarily at 13-year-old schoolgirls; these girls are only now starting to be old enough for child-bearing to become frequent, and effects of the main campaign cannot be expected for a number of years to come.

(From notes based on reports to the Public Health Laboratory Service from Public Health and Hospital Laboratories in the United Kingdom and Republic of Ireland, published in the British Medical Journal, *February 23, 1974.)*

Editorial Note

There are 2 very striking differences between the United Kingdom and the United States in regard to rubella: (1) the age distribution of reported cases, and (2) the approaches to vaccination. Two-thirds of reported cases of rubella in the United Kingdom are in women 15-44 years of age. This is clearly the "high risk" group, and most investigations were carried out because pregnancy was suspected. Because vaccine is not offered to young children, the group often responsible for transmission of the disease, there is rarely need for laboratory confirmation of the diagnosis. Thus, it is likely that these data are "weighted" toward the 15-44 year age group. In the United States, rubella continues to be a disease of young school-age children. Since licensure of vaccine in 1969, 90% of reported cases were less than 20 years of age, with approximately 50% occurring before 10 years.

Vaccination programs in the United Kingdom are directed at 13-year-old girls. Because the program has only been carried out for the past 5 years, a significant impact on the incidence of congenital rubella syndrome would not be expected. In the United States, vaccination efforts have been directed at (1) school and preschool children, in an attempt to diminish the transmission of rubella virus, and (2) susceptible adult women (who are not pregnant). To date, the program has been successful. The reported incidence of the disease is at an all-time low level, and cases of congential rubella syndrome are only rarely reported.

EPIDEMIOLOGIC NOTES AND REPORTS
ARTHRALGIA AND PROLONGED NEUROMUSCULAR SYMPTOMS FOLLOWING RUBELLA VACCINATION – Maryland

On September 25, 1973, a 26-year-old woman in Rockville, Maryland, received rubella vaccine because a blood specimen taken during her recent pregnancy had a rubella titer of less than 1:8. On October 2, 1973, she had onset of fatigue, weakness, slight malaise, sore throat, and a temperature of 100°F. These symptoms persisted with slight improvement over the next 4 to 5 days when she began having severe joint pains beginning in the proximal interphalangeal joints bilaterally and in the wrists. Severe pain prevented normal activity for 4 or 5 days, and she also noted pain in her feet, ankles, and Achilles tendons, and intermittent pain in her knees.

On October 11, general physical examination revealed some slight swelling of the proximal interphalangeal joint of the right middle finger without other abnormality. A complete blood cell count revealed a hematocrit of 38.5 and a white blood cell count of 17,200 with a normal differential.

Over the next 4 months, back pain occurred intermittently, and leg pain continued so that for several weeks the patient was unable to stand from a crouching position unassisted.

Physical examination on January 30, 1974, failed to reveal any evidence of systemic lupus erythematosus, psoriasis, or rheumatoid arthritis. The patient had slight pain on wrist motion bilaterally but a full range of motion. Laboratory tests were normal. Treatment consisted of therapeutic doses of aspirin.

The patient has improved steadily, and by early March her symptoms were gone. On March 11 her rubella titer was 1:32.

(Reported by Harvey J. Steinfeld, M.D., and Katherine Waldmann, M.D., Montgomery County Health Department, Rockville, Maryland; and Anita Bahn, M.D., State Epidemiologist, Maryland State Department of Health and Mental Hygiene.)

Editorial Note

Post-vaccination muscular complaints and clinical manifestations of peripheral neuropathy have been observed infrequently following large scale community immunization programs *(1,2)*. Characteristic is the "catcher's crouch syndrome" associated with involvement of the hamstring muscles. These reactions occur 4-7 weeks following vaccination, are transient, and are associated with an abnormal nerve conduction velocity.

This woman experienced acute polyarthritis and polyarthralgia and later had intermittent neuromuscular symptoms as a complication of live, attenuated rubella virus vaccination. Acute arthritis is a common complication of rubella immunization in adult women, and long-term, recurrent joint symptoms have been described previously *(3,4)*.

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INTERNATIONAL NOTES
FATAL SALMONELLOSIS DUE TO *SALMONELLA ENTERITIDIS* PHAGE TYPE 8 – United Kingdom

Two fatal cases of salmonellosis due to the same organism have been investigated at the Poole Public Health Laboratory within a period of 12 months.

The first case was in a 26-year-old nurse with no history of previous illness who came to the area to spend the weekend with a relative in December 1972. Soon after arrival she was admitted to the hospital as a surgical emergency with a possible case of corrosive poisoning, although this could not be substantiated. Partial gastrectomy and splenectomy were performed, and the histology was that of acute phlegmonous gastritis. Diarrhea ensued, and *Salmonella enteritidis*, phage type 8, was isolated from her feces. Despite intensive treatment, her condition deteriorated, and she died within 5 days of the onset of illness. Salmonella was isolated from her lung and heart blood at autopsy.

In November 1973, a 65-year-old man was admitted to the same hospital as a surgical emergency with a 30-year history of duodenal ulceration and was treated initially for an exacerbation of his symptoms. Severe diarrhea soon developed with dehydration so severe that by the fifth day of illness he was needing 12 liters of intravenous fluid replacement per 24 hours. *S. enteritidis*, phage type 8, was isolated from his feces, nose, throat, and sputum. On the ninth day of illness he died of renal failure and pneumonia in spite of chloramphenicol and cephaloridine therapy. A pure growth of salmonella was obtained from the lung at autopsy.

It is noteworthy that both these cases of fatal acute enteritis due to *S. enteritidis*, phage type 8, were associated with having eaten meals prepared from frozen chicken 48-72 hours before the onset of symptoms. No other cases of fatal salmonellosis have occurred in this group of hospitals in the last 5 years.

Comment from the Enteric Reference Laboratory

S. enteritidis, phage type 8, has had a long-term association with broiler chickens, and infections in man have resulted in consequence of this.

(Reported by the World Health Organization: Weekly Epidemiological Record, *49:17, 26 April 1974.)*

Editorial Note

These incidents illustrate that a phage type can serve as a useful epidemiologic marker in the investigation of cases of salmonellosis. In the United States, salmonella phage typing services are available through state health laboratories and CDC for *Salmonella typhi* on a routine basis and selectively for *Salmonella typhimurium* in outbreaks. Typing for *S. enteritidis* and other serotypes is not available at the present time.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MAY 4, 1974 AND MAY 5, 1973 (18th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	CHICKENPOX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod-borne and Unspecified		Post Infectious	Type B	Type A	Type Unspecified		
	1974	1974	1974	1974	Cum. 1974	1974	1973	1974	1974	1974	1974	1974	Cum. 1974
UNITED STATES	38	2	3,983	4	93	19	20	7	162	766	222	6	55
NEW ENGLAND	1	–	671	–	–	3	1	–	4	27	16	–	3
Maine *	–	–	5	–	–	–	–	–	–	2	–	–	–
New Hampshire *	–	–	22	–	–	–	–	–	–	2	1	–	–
Vermont	–	–	22	–	–	–	–	–	–	3	–	–	–
Massachusetts	–	–	298	–	–	1	1	–	–	8	15	–	1
Rhode Island	1	–	171	–	–	2	–	–	2	6	–	–	2
Connecticut	–	–	153	–	–	–	–	–	2	6	–	–	–
MIDDLE ATLANTIC	12	–	175	–	–	4	1	–	32	75	38	2	8
Upstate New York	5	–	40	–	–	2	–	–	15	31	9	–	3
New York City	–	–	132	–	–	–	–	–	2	12	–	1	3
New Jersey	5	–	NN	–	–	–	–	–	7	16	26	–	–
Pennsylvania *	2	–	3	–	–	2	1	–	8	16	3	1	2
EAST NORTH CENTRAL	3	–	1,493	–	–	3	8	1	36	186	3	1	6
Ohio	1	–	319	–	–	1	2	–	13	31	–	–	3
Indiana	–	–	171	–	–	–	–	–	1	41	–	–	–
Illinois	2	–	–	–	–	–	1	1	15	45	–	1	2
Michigan	–	–	425	–	–	1	5	–	6	45	3	–	1
Wisconsin	–	–	578	–	–	1	–	–	1	24	–	–	–
WEST NORTH CENTRAL	–	–	656	–	–	3	1	–	9	20	20	–	2
Minnesota	–	–	–	–	–	–	–	–	1	1	2	–	–
Iowa	–	–	282	–	–	–	–	–	2	1	–	–	–
Missouri	–	–	6	–	–	1	1	–	3	–	10	–	1
North Dakota	–	–	4	–	–	–	–	–	–	1	–	–	–
South Dakota	–	–	–	–	–	–	–	–	–	4	–	–	1
Nebraska	–	–	4	–	–	–	–	–	1	1	2	–	–
Kansas	–	–	360	–	–	2	–	–	2	12	6	–	–
SOUTH ATLANTIC	9	–	266	–	–	1	1	–	19	170	27	–	9
Delaware	–	–	4	–	–	–	–	–	–	1	–	–	–
Maryland	–	–	3	–	–	–	–	–	2	10	1	–	1
District of Columbia	–	–	14	–	–	–	–	–	–	–	–	–	2
Virginia	3	–	13	–	–	–	1	–	1	10	6	–	2
West Virginia	–	–	151	–	–	–	–	–	1	–	–	–	–
North Carolina	–	–	NN	–	–	–	–	–	2	20	1	–	1
South Carolina	1	–	80	–	–	–	–	–	3	4	2	–	–
Georgia	–	–	1	–	–	–	–	–	–	26	–	–	–
Florida	5	–	–	–	–	1	–	–	10	99	17	–	3
EAST SOUTH CENTRAL	3	–	86	–	–	1	4	1	9	67	62	–	2
Kentucky	2	–	72	–	–	–	–	1	3	30	59	–	2
Tennessee	1	–	–	–	–	–	2	–	3	30	–	–	–
Alabama	–	–	6	–	–	–	2	–	3	6	3	–	–
Mississippi	–	–	8	–	–	1	–	–	–	1	–	–	–
WEST SOUTH CENTRAL	5	–	66	–	8	1	2	–	3	31	13	–	3
Arkansas	–	–	24	–	–	–	–	–	–	4	9	–	–
Louisiana	–	–	NN	–	–	–	1	–	2	6	–	–	1
Oklahoma	5	–	42	–	–	1	1	–	1	21	4	–	1
Texas *	---	---	---	---	8	---	–	---	---	---	---	---	1
MOUNTAIN	–	–	142	4	15	–	–	1	6	65	20	1	3
Montana	–	–	92	–	–	–	–	–	–	10	–	–	–
Idaho	–	–	–	–	–	–	–	–	2	1	–	–	–
Wyoming	–	–	–	–	–	–	–	–	–	3	5	–	–
Colorado	–	–	37	–	–	–	–	–	1	18	10	1	2
New Mexico	–	–	13	–	6	–	–	–	–	14	–	–	1
Arizona	–	–	–	4	9	–	–	–	1	12	5	–	–
Utah	–	–	–	–	–	–	–	–	–	6	–	–	–
Nevada	–	–	–	–	–	–	–	1	2	1	–	–	–
PACIFIC	5	2	428	–	70	3	2	4	44	125	23	2	19
Washington	3	–	393	–	63	–	–	2	3	5	6	–	–
Oregon	1	–	–	–	–	–	–	–	2	14	–	–	–
California *	1	2	–	–	4	3	2	2	39	104	15	2	19
Alaska	–	–	6	–	3	–	–	–	–	2	–	–	–
Hawaii	–	–	29	–	–	–	–	–	–	–	2	–	–
Guam *	–	–	–	–	–	–	–	–	–	–	–	–	1
Puerto Rico	–	–	37	–	–	–	–	–	2	–	19	–	–
Virgin Islands	–	–	1	–	–	–	–	–	–	–	1	–	–

*Delayed reports: Aseptic Meningitis: Texas 3
Brucellosis: Texas 3
Chickenpox: Me. 5, Texas 22, Calif. 31, Guam 5
Hepatitis B: Texas 7; (1973), Penn 1
Hepatitis A: N. H. 2, Texas 95, Guam 3
Hepatitis Unspecified: Guam 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MAY 4, 1974 AND MAY 5, 1973 (18th WEEK) – Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	1,082	11,855	15,575	24	596	619	1,759	29,572	11	413	5,766	17
NEW ENGLAND	47	574	5,667	2	35	27	204	4,070	–	27	529	–
Maine *	–	25	19	–	1	–	5	640	–	8	151	–
New Hampshire *	–	194	803	–	6	4	–	178	–	–	13	–
Vermont *	5	42	91	–	1	2	–	13	–	–	10	–
Massachusetts	32	195	3,053	1	10	11	33	645	–	11	200	–
Rhode Island	–	58	316	–	6	1	132	1,472	–	–	15	–
Connecticut	10	60	1,385	1	11	9	34	1,122	–	8	140	–
MIDDLE ATLANTIC	514	4,703	1,205	4	73	91	130	2,239	2	46	607	1
Upstate New York	48	129	300	2	33	35	19	476	2	12	137	–
New York City	30	259	628	–	12	16	24	329	–	4	72	–
New Jersey	358	3,796	141	1	22	20	9	455	–	17	258	1
Pennsylvania	78	519	136	1	6	20	78	979	–	13	140	–
EAST NORTH CENTRAL	355	4,556	5,028	3	69	73	403	8,501	1	186	1,846	1
Ohio	209	2,052	200	2	22	34	116	2,246	–	82	298	–
Indiana	10	137	426	–	7	2	38	653	–	11	353	–
Illinois	44	852	1,092	–	9	12	33	722	–	10	209	–
Michigan	80	1,283	2,578	1	20	21	145	3,601	1	61	709	1
Wisconsin *	12	232	732	–	11	4	71	1,279	–	22	277	–
WEST NORTH CENTRAL	66	420	309	2	42	50	174	2,193	–	24	159	5
Minnesota	–	76	14	–	15	–	–	27	–	–	6	–
Iowa	–	8	204	–	6	8	61	1,399	–	–	12	–
Missouri	31	146	22	–	10	26	–	294	–	3	27	2
North Dakota	–	24	43	–	1	3	2	14	–	1	9	–
South Dakota	1	24	–	–	2	3	–	2	–	–	25	–
Nebraska	–	2	3	–	1	4	1	62	–	–	6	–
Kansas	34	140	23	2	7	6	110	395	–	20	74	3
SOUTH ATLANTIC	13	337	879	3	115	102	268	3,695	–	15	609	5
Delaware	–	5	5	–	3	1	2	49	–	1	12	–
Maryland	–	21	1	–	13	16	3	63	–	–	–	–
District of Columbia	–	2	–	–	–	1	1	36	–	–	1	–
Virginia	4	16	344	1	18	16	21	283	–	–	19	2
West Virginia	5	91	136	–	4	2	174	2,164	–	2	102	–
North Carolina	–	2	4	1	26	19	NN	NN	–	1	44	–
South Carolina	–	31	37	–	11	7	11	76	–	10	318	–
Georgia	–	1	121	–	5	17	–	–	–	–	2	–
Florida	4	168	231	1	35	23	56	1,024	–	1	111	3
EAST SOUTH CENTRAL	9	76	461	6	66	57	362	3,209	–	16	324	2
Kentucky	7	59	316	4	31	23	238	1,355	–	7	110	–
Tennessee	2	3	114	1	29	20	107	1,476	–	9	154	1
Alabama	–	2	–	1	6	10	13	321	–	–	47	–
Mississippi	–	12	31	–	–	4	4	57	–	–	13	1
WEST SOUTH CENTRAL	4	110	520	1	115	98	12	1,916	–	12	187	1
Arkansas	–	4	59	1	9	11	–	113	–	1	8	–
Louisiana	4	11	59	–	22	21	–	118	–	9	37	–
Oklahoma	–	13	38	–	12	7	12	265	–	2	25	–
Texas *	---	82	364	---	72	59	---	1,420	---	---	117	1
MOUNTAIN	45	496	373	3	16	15	28	753	–	14	230	–
Montana	22	236	12	–	1	3	5	126	–	–	60	–
Idaho	–	47	184	1	2	1	2	144	–	–	11	–
Wyoming	–	3	10	–	2	–	–	4	–	–	–	–
Colorado	–	25	64	–	2	2	20	339	–	7	83	–
New Mexico	4	44	92	–	2	2	1	135	–	2	39	–
Arizona	–	10	10	1	4	4	–	–	–	–	–	–
Utah	–	–	1	–	1	1	–	3	–	1	10	–
Nevada	19	131	–	1	2	2	–	2	–	4	27	–
PACIFIC	29	583	1,133	–	65	106	178	2,996	8	73	1,275	2
Washington	1	40	457	–	7	7	92	1,135	–	29	259	–
Oregon	–	–	306	–	8	8	12	572	2	2	166	–
California	24	492	362	–	45	87	69	1,192	6	42	839	2
Alaska	–	–	–	–	2	4	4	67	–	–	–	–
Hawaii	4	51	8	–	3	–	1	30	–	–	11	–
Guam *	–	4	3	–	1	–	–	208	–	–	1	–
Puerto Rico	21	319	1,021	–	1	4	56	921	3	2	11	1
Virgin Islands	–	10	–	–	–	–	4	24	–	–	–	1

*Delayed reports: Measles: Me. 1, Texas 2
Meningococcal Infections: Texas 2
Mumps: Me. 17, N. H. 2, Texas 71, Guam 11
Pertussis: Texas 2
Rubella: Me. 11, Vt. delete 1, Wisc. 10, Texas 15

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MAY 4, 1974 AND MAY 5, 1973 (18th WEEK) – Continued

AREA	TUBERCULOSIS (New Active)		TULAREMIA	TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES						RABIES IN ANIMALS
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1974	Cum. 1974	Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	1974	Cumulative 1974	Cumulative 1973	1974	Cumulative 1974	Cumulative 1973	Cum. 1974
UNITED STATES	585	10,349	33	5	108	11	38	15,805	287,521	262,597	442	8,167	8,647	959
NEW ENGLAND	16	453	–	–	5	–	–	446	6,683	7,202	5	154	259	5
Maine	1	31	–	–	–	–	–	34	551	382	–	11	9	1
New Hampshire	–	13	–	–	1	–	–	17	233	242	1	6	4	1
Vermont	–	4	–	–	–	–	–	13	227	93	–	1	9	–
Massachusetts	12	271	–	–	2	–	–	229	2,577	3,460	1	63	129	1
Rhode Island	–	45	–	–	2	–	–	17	617	764	–	5	6	2
Connecticut	3	89	–	–	–	–	–	136	2,478	2,261	3	68	102	–
MIDDLE ATLANTIC	108	1,772	1	1	19	–	9	2,272	35,038	35,051	135	1,827	1,956	5
Upstate New York	16	200	1	–	3	–	–	401	6,649	7,374	19	183	103	2
New York City	50	697	–	–	13	–	–	780	14,844	15,217	65	1,064	1,248	–
New Jersey	13	350	–	1	3	–	–	267	4,930	4,928	13	280	335	–
Pennsylvania	29	525	–	–	–	–	9	824	8,615	7,532	38	300	270	3
EAST NORTH CENTRAL	119	1,363	5	–	8	–	–	2,581	39,452	31,010	55	524	500	58
Ohio	48	410	–	–	3	–	–	752	13,388	9,791	8	97	93	–
Indiana	9	201	–	–	–	–	–	335	4,200	3,755	2	69	124	4
Illinois	31	372	3	–	3	–	–	645	6,657	4,601	37	181	59	9
Michigan	26	375	–	–	2	–	–	580	10,805	9,655	6	138	191	1
Wisconsin	5	5	2	–	–	–	–	269	4,402	3,208	2	39	33	44
WEST NORTH CENTRAL	24	361	8	–	3	–	–	803	15,030	14,979	3	185	111	228
Minnesota	1	57	–	–	2	–	–	202	3,527	2,897	1	24	43	103
Iowa	1	37	–	–	–	–	–	–	2,023	1,987	–	12	13	48
Missouri	18	184	7	–	1	–	–	323	4,584	5,222	–	124	36	9
North Dakota	–	9	–	–	–	–	–	9	251	220	–	–	1	47
South Dakota	–	22	1	–	–	–	–	56	718	767	1	2	1	–
Nebraska	3	16	–	–	–	–	–	63	1,267	1,591	–	3	1	–
Kansas	1	36	–	–	–	–	–	150	2,660	2,295	1	20	16	21
SOUTH ATLANTIC	130	2,155	2	1	17	6	16	4,680	73,741	66,336	151	2,648	2,482	114
Delaware	1	30	–	–	–	–	–	44	1,003	936	1	32	32	–
Maryland	14	260	–	–	1	–	1	457	6,738	5,733	4	282	253	–
District of Columbia	6	133	–	–	–	–	–	252	5,424	5,402	12	224	275	–
Virginia	10	272	1	–	1	1	3	416	6,526	6,192	16	315	247	48
West Virginia	9	115	–	–	3	1	1	63	896	1,029	–	7	11	17
North Carolina *	17	342	1	–	1	1	3	631	9,616	9,504	25	294	197	6
South Carolina	10	219	–	–	–	3	5	448	8,300	7,307	11	335	376	2
Georgia	21	279	–	–	1	–	2	1,130	15,290	12,170	8	274	462	27
Florida	42	505	–	1	10	–	1	1,239	19,948	18,063	74	885	629	14
EAST SOUTH CENTRAL	43	931	7	–	13	3	4	1,236	24,795	22,562	14	419	605	121
Kentucky	8	202	1	–	7	–	–	201	3,074	2,748	2	88	249	80
Tennessee	21	299	4	–	4	2	3	580	9,637	8,353	8	169	153	28
Alabama	14	293	2	–	2	–	–	156	6,781	6,436	–	82	49	12
Mississippi	–	137	–	–	–	1	1	299	5,303	5,025	4	80	154	1
WEST SOUTH CENTRAL	22	1,335	7	1	9	1	5	1,065	39,884	35,585	11	814	986	248
Arkansas	11	181	2	–	1	–	–	398	3,935	4,891	–	41	61	35
Louisiana *	6	152	1	1	2	–	–	423	8,628	7,223	9	235	277	8
Oklahoma	5	100	3	–	–	1	4	244	3,535	3,807	2	55	74	53
Texas *	---	902	1	---	6	---	1	---	23,786	19,664	---	483	574	152
MOUNTAIN	32	346	2	2	11	1	3	687	11,111	10,038	16	206	289	32
Montana	–	24	–	–	–	1	1	36	669	571	–	–	2	–
Idaho	–	13	–	–	–	–	–	50	668	596	1	4	5	–
Wyoming	–	9	1	–	2	–	1	22	236	156	–	4	11	3
Colorado	18	68	–	–	–	–	1	192	3,166	2,673	2	42	95	–
New Mexico	2	72	1	–	1	–	–	97	1,507	1,623	–	32	26	15
Arizona	9	125	–	2	8	–	–	200	3,437	2,999	9	73	66	14
Utah	–	12	–	–	–	–	–	8	537	532	–	6	7	–
Nevada	3	23	–	–	–	–	–	82	891	888	4	45	77	–
PACIFIC	91	1,633	1	–	23	–	1	2,035	41,787	39,834	52	1,390	1,459	148
Washington	–	106	–	–	4	–	–	192	3,786	3,635	7	34	50	–
Oregon	6	68	–	–	–	–	1	153	3,553	3,577	–	27	30	8
California	82	1,306	1	–	19	–	–	1,622	32,586	30,880	45	1,314	1,314	134
Alaska	–	27	–	–	–	–	–	29	925	966	–	1	24	6
Hawaii	3	126	–	–	–	–	–	39	937	776	–	14	41	–
Guam *	–	18	–	–	–	–	–	–	77	119	–	–	–	–
Puerto Rico	17	208	–	1	2	–	–	60	951	1,450	12	309	268	24
Virgin Islands	–	–	–	–	–	–	–	5	97	70	1	12	8	–

*Delayed reports: Tuberculosis: N.C. delete 1, Texas 71, Guam 2
RMSF: Texas 1
Gonorrhea: La. delete 51, Texas 1191, Guam 5
Syphilis: Texas 27
Rabies: Texas 9

Week No. 18

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING MAY 4, 1974

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

Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	714	434	177	48	27	50
Boston, Mass.	238	132	63	25	9	18
Bridgeport, Conn.	37	20	11	4	1	4
Cambridge, Mass.	20	15	5	–	–	4
Fall River, Mass.	28	23	3	–	–	–
Hartford, Conn.	49	34	11	1	2	2
Lowell, Mass.	28	17	8	1	–	3
Lynn, Mass.	23	20	3	–	–	2
New Bedford, Mass.	20	15	3	–	–	–
New Haven, Conn.	52	32	15	2	2	2
Providence, R. I.	61	29	18	7	4	5
Somerville, Mass.	15	9	3	2	–	1
Springfield, Mass.	49	27	15	2	5	4
Waterbury, Conn.	39	23	10	–	3	1
Worcester, Mass.	55	38	9	4	1	4
MIDDLE ATLANTIC	3,161	1,953	812	220	81	135
Albany, N. Y.	45	32	9	2	–	1
Allentown, Pa.	33	24	8	–	–	5
Buffalo, N. Y.	104	70	23	6	4	8
Camden, N. J.	49	29	18	1	–	2
Elizabeth, N. J.	18	9	7	2	–	1
Erie, Pa.	46	29	11	3	2	3
Jersey City, N. J.	50	31	11	3	2	2
Newark, N. J.	71	36	19	8	4	4
New York City, N. Y. †	1,516	971	356	115	37	63
Paterson, N. J.	42	22	11	6	2	4
Philadelphia, Pa.	592	337	180	36	16	9
Pittsburgh, Pa.	178	96	53	12	6	9
Reading, Pa.	57	42	12	2	–	4
Rochester, N. Y.	123	76	30	10	3	9
Schenectady, N. Y.	27	14	8	4	–	2
Scranton, Pa.	34	22	11	–	1	2
Syracuse, N. Y.	84	51	23	4	4	3
Trenton, N. J.	32	20	10	2	–	1
Utica, N. Y.	27	20	4	2	–	3
Yonkers, N. Y.	33	22	8	2	–	–
EAST NORTH CENTRAL	2,558	1,538	657	181	93	92
Akron, Ohio	73	48	16	3	3	–
Canton, Ohio	47	32	9	2	3	–
Chicago, Ill.	672	376	190	55	26	24
Cincinnati, Ohio	166	114	41	7	3	4
Cleveland, Ohio	179	96	56	13	6	3
Columbus, Ohio	135	84	33	6	4	7
Dayton, Ohio	92	53	28	7	4	2
Detroit, Mich.	348	197	80	39	14	17
Evansville, Ind.	38	28	7	2	1	2
Fort Wayne, Ind.	57	29	13	8	4	5
Gary, Ind.	41	23	10	3	2	4
Grand Rapids, Mich.	53	38	11	1	2	4
Indianapolis, Ind.	155	88	48	11	5	5
Madison, Wis.	32	14	13	1	2	2
Milwaukee, Wis.	138	97	33	3	4	5
Peoria, Ill.	31	20	5	1	4	–
Rockford, Ill.	33	24	7	2	–	2
South Bend, Ind.	67	46	12	5	2	4
Toledo, Ohio	129	80	32	7	3	1
Youngstown, Ohio	72	51	13	5	1	1
WEST NORTH CENTRAL	785	500	191	48	21	21
Des Moines, Iowa	64	40	17	5	1	3
Duluth, Minn.	26	18	6	–	1	3
Kansas City, Kans.	35	20	10	2	2	–
Kansas City, Mo.	115	65	34	8	4	1
Lincoln, Nebr.	26	21	4	–	–	3
Minneapolis, Minn.	114	76	24	9	4	1
Omaha, Nebr.	70	45	17	2	4	–
St. Louis, Mo.	216	139	51	17	4	5
St. Paul, Minn.	73	44	18	3	1	–
Wichita, Kans.	46	32	10	2	–	5
SOUTH ATLANTIC	1,275	716	363	113	32	47
Atlanta, Ga.	164	74	50	29	7	6
Baltimore, Md.	244	140	70	21	4	7
Charlotte, N. C.	68	36	21	4	3	1
Jacksonville, Fla.	73	48	18	1	3	–
Miami, Fla.	61	32	19	5	–	2
Norfolk, Va.	63	35	19	5	2	3
Richmond, Va.	98	55	31	6	3	11
Savannah, Ga.	54	26	21	4	2	3
St. Petersburg, Fla.	93	85	6	2	–	5
Tampa, Fla.	76	43	16	11	2	4
Washington, D. C.	224	114	73	22	2	4
Wilmington, Del.	57	28	19	3	4	1
EAST SOUTH CENTRAL	677	378	202	36	23	40
Birmingham, Ala.	117	63	26	8	10	3
Chattanooga, Tenn.	33	21	8	3	–	5
Knoxville, Tenn.	29	19	7	–	1	2
Louisville, Ky.	151	88	48	5	6	7
Memphis, Tenn.	160	92	48	9	1	6
Mobile, Ala.	52	25	19	2	2	2
Montgomery, Ala.	33	18	8	2	2	6
Nashville, Tenn.	102	52	38	7	1	9
WEST SOUTH CENTRAL	1,175	645	337	74	56	26
Austin, Tex.	36	21	8	3	3	–
Baton Rouge, La.	38	29	6	1	1	–
Corpus Christi, Tex.	23	12	4	2	4	–
Dallas, Tex.	204	113	54	12	11	5
El Paso, Tex.	56	30	15	4	3	6
Fort Worth, Tex.	64	41	20	1	2	–
Houston, Tex.	295	137	107	19	16	7
Little Rock, Ark.	32	14	11	3	2	–
New Orleans, La.	148	76	49	9	5	3
San Antonio, Tex.	140	92	30	9	3	–
Shreveport, La.	54	26	18	3	4	3
Tulsa, Okla.	85	54	15	8	2	2
MOUNTAIN	562	300	164	32	37	29
Albuquerque, N. Mex.	65	31	22	5	2	4
Colorado Springs, Colo.	40	23	10	4	1	4
Denver, Colo.	136	68	39	7	13	5
Las Vegas, Nev.	32	12	15	4	1	–
Ogden, Utah	30	21	6	–	2	5
Phoenix, Ariz.	110	57	33	5	10	1
Pueblo, Colo.	17	12	3	1	1	6
Salt Lake City, Utah	64	36	13	2	6	4
Tucson, Ariz.	68	40	23	4	1	–
PACIFIC	1,585	973	414	98	38	29
Berkeley, Calif.	19	15	3	1	–	–
Fresno, Calif.	31	21	8	1	–	1
Glendale, Calif.	28	18	8	1	–	–
Honolulu, Hawaii	38	16	12	3	1	–
Long Beach, Calif.	102	46	38	9	4	1
Los Angeles, Calif.	522	341	118	33	14	2
Oakland, Calif.	59	40	16	–	1	2
Pasadena, Calif.	31	20	9	–	1	2
Portland, Oreg.	141	95	36	6	2	1
Sacramento, Calif.	72	43	20	4	2	–
San Diego, Calif.	113	53	39	9	3	3
San Francisco, Calif.	174	110	41	16	2	8
San Jose, Calif.	44	27	10	5	–	1
Seattle, Wash.	120	63	38	8	5	4
Spokane, Wash.	51	35	11	2	2	3
Tacoma, Wash.	40	30	7	–	1	1
Total	12,492	7,437	3,317	850	408	469
Expected Number	12,098	7,075	3,311	798	419	384

†Delayed report for week ending April 27, 1974

CURRENT TRENDS
RESULTS OF SCREENING FOR GONORRHEA – United States, July-December 1973

In the 6-month period ending December 31, 1973, gonorrhea screening programs cultured specimens from 3,776,169 females; 174,400 (4.6%) were positive. Table 3 reflects the results of such screening by type of health care facility securing the specimen. Although the positivity rates were highest (19.4%) in venereal disease clinics, only 10% of all tests were performed at such clinics. Of the 90% of tests performed in other settings, positivity rates ranged from 1.3% among female dependents examined at military installations to 5.5% among enrollees in manpower training programs. Some 1,037,359 females were tested by private physicians, and 21,940 (2.1%) were positive.

Provisional data indicate that an additional 2,103,848 females were tested by all types of facilities in January, February, and March 1974 or about 700,000 per month. The overall positivity rate for all sources for this period was 4.6%. *(Reported by the Venereal Disease Control Division, Bureau of State Services, CDC.)*

Table 3
Results of Gonorrhea Culture Tests on Females
United States* – July-December 1973

Source of Test	Number Tested	Number Positive	Percent Positive	Source of Test	Number Tested	Number Positive	Percent Positive
Health Care Providers (Excluding VD Clinics)	3,379,855	97,317	2.9	**Health Care Providers (Cont'd)**			
Health Dept. Non-VD Clinic	682,132	23,200	3.4	**Private Physicians**	1,037,359	21,940	2.1
Family Planning	466,768	15,374	3.3	**Private Family Planning Groups**	374,931	7,923	2.1
Prenatal, Ob-Gyn	78,091	2,721	3.5	**Group Health Clinics**	55,813	1,638	2.9
Cancer Detection	14,802	196	1.3	**Student Health Centers**	102,392	1,661	1.6
Combinations or Other	122,471	4,909	4.0	**Manpower Training Agencies**	5,118	283	5.5
Public/Private Hospital –Outpatient	647,534	25,984	4.0	**Industrial Screening**	8,533	170	2.0
Family Planning	82,815	2,400	2.9	**Military/Dependents**	71,241	938	1.3
Prenatal, Ob-Gyn	180,587	6,760	3.7	**Correction or Detention Centers**	25,560	1,332	5.2
Cancer Detection	6,518	70	1.1	**Not Specified**	58,020	2,216	3.8
Combinations or Other	377,614	16,754	4.4	**Venereal Disease Clinics**	396,314	77,083	19.4
Public/Private Hospital –Inpatient	30,352	1,037	3.4	Gonorrhea Contacts	48,804	17,702	36.3
Obstetric	6,192	200	3.2	Syphilis: Contact/Cluster/ Reactor	7,951	830	10.4
Gynecologic	1,186	44	3.7	Other	339,559	58,551	17.2
Combinations or Other	22,974	793	3.5				
Community Health Centers	280,870	8,995	3.2	**Total (All Clinics)**	3,776,169	174,400	4.6
Family Planning	122,389	2,434	2.0				
Prenatal, Ob-Gyn	26,530	553	2.1				
Cancer Detection	957	11	1.1				
Combinations or Other	130,994	5,997	4.6				

* Includes reports from Puerto Rico
Source: HSM 9.124, CDC, VD, Atlanta, Georgia

SURVEILLANCE SUMMARY
ABORTIONS – United States, 1972

In 1972, 586,760 legal abortions were reported to CDC from 27 states and the District of Columbia. The national abortion ratio (number of abortions per 1,000 live births) increased from 136.0 in 1971 to 180.1 in 1972. Of the abortions reported in 1972, 43.8% were performed in states outside the woman's state of residence, compared with 41.5% in 1971.

In 1972, approximately one-third of reported legal abortions were performed on women less than 20 years old. In 10 states, abortions outnumbered live births for women less than 15 years old. By race, 75.7 of women undergoing legal abortions were white; 22.6% were of black and other races. Estimates of race-specific national abortion ratios indicated that whites had 161 abortions per 1,000 live births compared with 225 for blacks. Approximately 70% of legal abortions were performed on women who were either single, widowed, separated, or divorced. For all states with available data, abortion ratios for unmarried women were higher than for currently married women. In 8 states, more unmarried pregnant women had legal abortions than had live births. Of the abortions reported, 84.1% were performed by curettage (suction or sharp), and 79.1% were performed in the first trimester of pregnancy.

A review of the data from states with information available for both 1971 and 1972 shows that (1) the percent of abortions to women less than 20 years old increased, and the

ABORTIONS – Continued

median age for all women having abortions decreased from 23.0 to 22.7; (2) the percent of currently married women having abortions decreased from 33.1% to 30.8%; (3) the percent of abortions performed by suction or sharp curettage was essentially unchanged (84.5% to 84.6%); and (4) the percent of abortions performed in the first trimester increased slightly from 78.2% to 78.6%.

In 1972, a total of 71 maternal deaths related to abortions were reported to CDC by the 50 states, New York City, and the District of Columbia; 19 of the 71 were associated with legally induced abortions. Using the 586,760 legally induced abortions reported to CDC in 1972 as the denominator, the overall death-to-case ratio was 3.2 deaths per 100,000 legally induced abortions.

In 1972, important legislative changes and/or court decisions relating to abortion laws occurred in Connecticut, Kansas, New Jersey, and Vermont.

(Reported by the Family Planning Evaluation Division, Bureau of Epidemiology, CDC.)

A copy of the original report from which these data were derived is available from:
Center for Disease Control
Attn: Chief, Family Planning Evaluation Division
Bureau of Epidemiology
Atlanta, Georgia 30333

EPIDEMIOLOGIC NOTES AND REPORTS

BOVINE TUBERCULOSIS – Michigan

On February 9, 1974, a cow culled from a milking herd and sent to slaughter in Detroit, Michigan, was diagnosed by a meat inspector as having generalized bovine tuberculosis. The herd of origin of this cow was then tested by veterinarians from the Michigan Department of Agriculture; 181 of 182 animals had positive reactions. The only non-reactor was a newborn calf. Eighty-seven milking cows were in the herd, and 34 of them were found to have generalized disease on slaughter in mid-March; the remainder either had localized disease or no gross lesions. Several of the 34 had extensively infected supramammary lymph nodes, indicating the strong possibility that they were excreting tubercule bacilli in their milk. One of the 87 milking cows, obviously ill when loaded on the truck at the farm for slaughter, was dead when the truck arrived at the slaughter house and was found to have generalized tuberculosis. Specimens from the cattle are being cultured in the Michigan Department of Agriculture laboratory and at Michigan State University.

Seven family members live on the farm: the father and his wife, their son and his wife, and the son's 3 children (all under 5 years of age). The father and son run the farm, and all 7 drink unpasteurized (raw) milk from the herd. Chest X-rays on all 7 family members were normal; Mantoux skin tests revealed 1 positive reactor–the son–who had a 30 mm induration. All 7 family members have been placed on antituberculosis therapy.

This is the largest single herd outbreak of bovine tuberculosis recorded by the Michigan Department of Agriculture. The epizootiologic aspects of this outbreak are under investigation at this time.

(Reported by John Quinn, D.V.M., Michigan Department of Agriculture; Norm Keon, Tuberculosis Program, and Donald B. Coohon, D.V.M., M.P.H., Chief, Division of Disease Control, Michigan Department of Public Health; and R.M. Scott, D.V.M., U.S. Department of Agriculture, Lansing.)

Editorial Note

Infection with either *Mycobacterium tuberculosis* or *Mycobacterium bovis* can be transmitted from man to cattle or cattle to man. In the past, contaminated raw milk was not an unusual vehicle of transmission of tuberculosis to man by the gastrointestinal route. Tuberculin testing of cattle and slaughter of reactors, as well as pasteurization of milk, have reduced the transmission of tuberculosis from cattle to man in the United States to minimal levels. However, as indicated by this outbreak, bovine tuberculosis may still present an occasional health hazard, especially in persons who live on farms and who drink unpasteurized milk. This outbreak also emphasizes the need for postmortem examination of cattle for gross evidence of infection with tuberculosis.

CURRENT TRENDS

INFLUENZA – United States, Puerto Rico

United States

The mortality due to pneumonia and influenza reported to CDC from 121 U.S. cities has been slightly above the epidemic threshold for the past 3 weeks, but currently both regional and national mortality levels are declining (Figure 1). Mortality due to pneumonia and influenza generally reflects clinical disease that has occurred 3-4 weeks previously, and these data may represent influenza A outbreaks that have occurred in the northeastern part of the country. Almost all the excess mortality this year has been associated with influenza A outbreaks rather than the earlier influenza B outbreaks that most heavily affected the middle section of the United States.

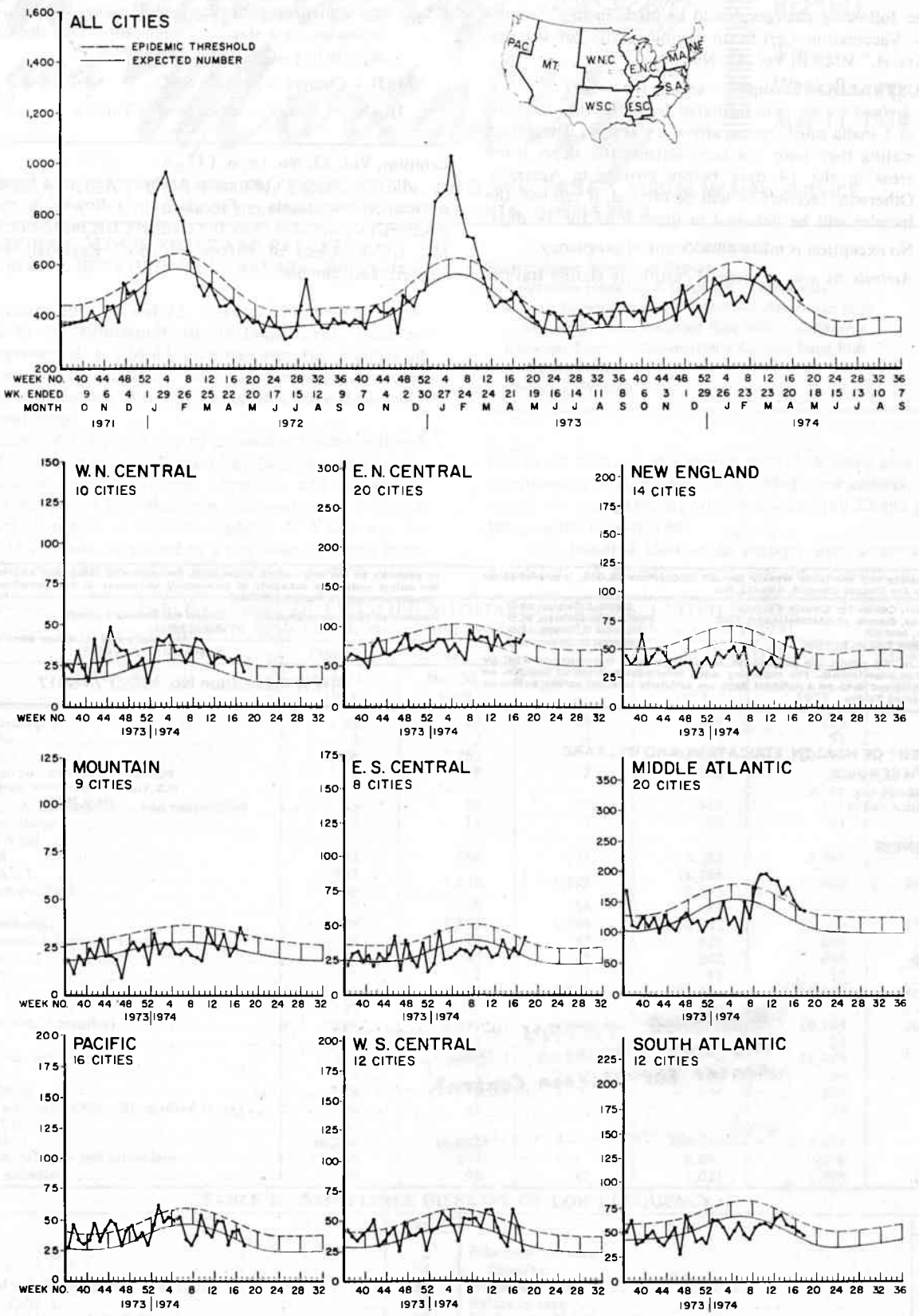
(Reported by the Viral Diseases Division, Bureau of Epidemiology, CDC.)

Puerto Rico

Influenza activity is still being reported in the Mayaguez area on the island of Puerto Rico. During the week of April 8, 1974, 1 factory reported an absenteeism rate of approximately 20% with over 60% of factory employees manifesting influenza-like symptoms. Fifteen of 28 cultures have grown influenza A virus similar to that isolated from the outbreak in the boarding school reported earlier (MMWR, Vol. 23, No. 13). Over 90% of cases had headache, fever, chills, cough, myalgia, and sore throat, 68% nausea or vomiting, and 18% diarrhea. By the following week factory absenteeism was back to normal levels; however, a neighboring factory also noted an increase in influenza-like illness in employees corresponding to an increase in absenteeism from 3% to 25%. Surveillance on the island has revealed sporadic cases of influenza-like disease, but no other major outbreaks have been reported.

(Reported by Diez Martinez, Director of Preventive Medicine, West Region; the San Juan Laboratories, Bureau of Laboratories, and the International Influenza Center for the Americas, CDC; and an EIS Officer.)

Figure 1
PNEUMONIA-INFLUENZA DEATHS IN 121 UNITED STATES CITIES



INTERNATIONAL NOTES
QUARANTINE MEASURES

The following changes should be made in the "Supplement – Vaccination Certificate Requirements for International Travel," MMWR, Vol. 22, No. 17:

AUSTRALIA – Smallpox – add to the note:

Arrivals by air: Unvaccinated travelers from the USA or Canada must sign on arrival a statutory declaration stating they have not been outside the above listed areas in the 14 days before arriving in Australia. Otherwise vaccination will be offered; if refused, the traveler will be detained in quarantine for 14 days.

No exception is made on account of pregnancy.

Arrivals by sea: A medical certificate stating traveler has a medical condition which makes vaccination inadvisable, or a statutory declaration that the traveler objects to vaccination is acceptable.

FIJI – Cholera – Add Code II.

IRAN – Cholera – Africa: delete Tunisia.

Erratum, Vol. 23, No. 16, p. 147

In the article, "Cutaneous Anthrax Acquired From Imported Haitian Drums – Florida," the following name was inadvertently omitted from the credits: CDR Burton O. Leeb, MC, USNR, Chief of Pathology, Naval Regional Medical Center, Jacksonville.

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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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