

Epidemiologic Notes and Reports

29 Follow-up on Antibiotic Resistant
Neisseria gonorrhoeae

30 Follow-up on Infant Botulism — California,
Pennsylvania, Tennessee, Texas

31 Human Rabies — Texas

37 Insecticide-associated Illness — Mississippi, California

Current Trends

31 Anthrax Contamination of Haitian Goatskin Products

32 Influenza — Worldwide

37 Primary and Secondary Syphilis — United States,
November 1976

International Notes

38 Quarantine Measures

Epidemiologic Notes and Reports

Follow-up on Antibiotic Resistant *Neisseria gonorrhoeae*

Penicillin Resistance: Information collected at the meeting of a WHO Scientific Group on *Neisseria* and Gonococcal infections, which took place from November 2-8, 1976, in Geneva, and reports received thereafter indicate that beta-lactamase (penicillinase) producing gonococcal strains have now been identified in 11 different countries — Australia, Canada, Japan, Netherlands, New Zealand, Norway, Phillipines, Republic of Korea, Singapore, the United Kingdom, and the United States of America.

As of January 21, 1977, 94 cases of infection caused by penicillinase producing *Neisseria gonorrhoeae* (PPNG) from New York City and 16 states have been confirmed at CDC (Figure 1). The porportion of cases that can be linked to military personnel or others returning from the Far East has decreased (Table 1).

Spread of the organism within the civilian U.S. population has been demonstrated in several areas. For example, since the first case caused by PPNG in Salt Lake County, Utah, was confirmed on September 28, 1976, 13 additional cases have been confirmed locally in 4 separate clusters; 1 cluster involves a 5-generation spread. None of the cases could be linked to military personnel or importation from the Far East. Nine of the cases were found by epidemi-

FIGURE 1. Penicillinase producing *Neisseria gonorrhoeae* confirmed cases, United States, as of January 21, 1977

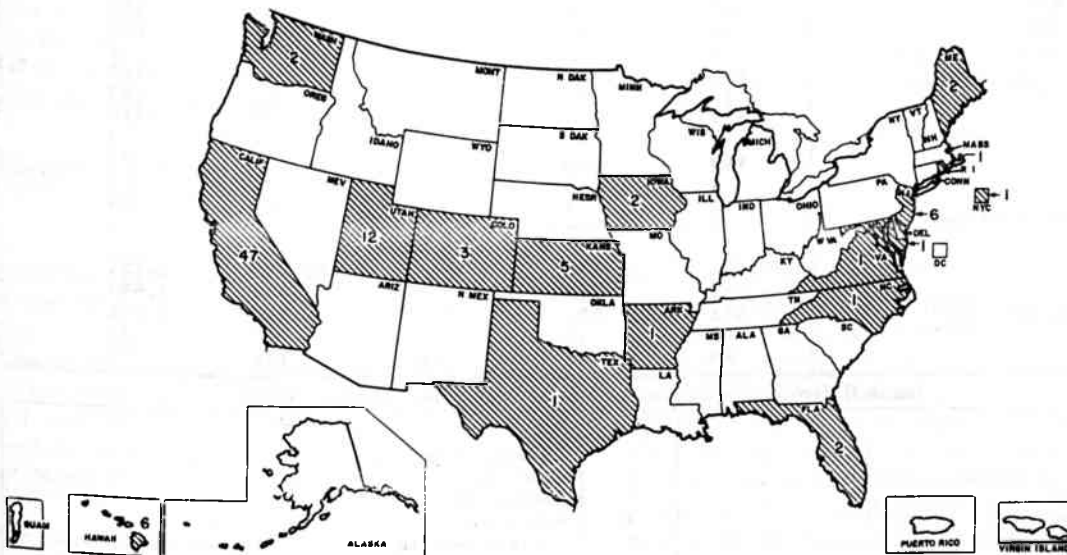


TABLE 1. Cases of penicillinase producing *N. gonorrhoeae*, United States, March 1976-January 1977.

Month Isolate Obtained	No. Cases	% Related to Far East
March-September	21	81
October	14	50
November	21	29
December-January	38	18
Total	94	39

ologic investigation, 4 by testing isolates from penicillin treatment failures, and 1 by routine screening. No confirmed cases have been identified in Salt Lake County since December 2.

Spectinomycin Resistance: CDC has identified a post-treatment isolate of *N. gonorrhoeae* which is resistant to spectinomycin (minimum inhibitory concentration $> 2048 \mu\text{g/ml}$), obtained from a patient in Georgia who was seen in November 1976. The patient remained infected despite ampicillin-probenecid and spectinomycin therapy before he was cured with tetracycline. No additional resistant isolates were detected in his sexual contacts or in other clinic patients. This isolate does not produce beta-lactamase.

Reported by the World Health Organization in the *Weekly Epidemiological Record* 50(51):386, 1976; W Elsea, MD, G Kleris, MD, Fulton County (GA) Health Dept; WJ Brown, MD, JE McCroan, PhD, State Epidemiologist, Georgia Dept of Human Resources; H Gibbons, MD, Salt Lake County Dept of Health; T Fukushima, MD, State Epidemiologist, Utah Div of Health; Bur of State Services and Bur of Laboratories, CDC.

Editorial note: Beta-lactamase producing strains of *N. gonorrhoeae* have been identified in several countries, and spread has been demonstrated within the civilian population of the United States. Education programs, surveillance, and case-by-case epidemiology of PPNG cases should be continued. All patients treated for gonorrhea should be re-examined and cultured after treatment. All gonococcal isolates obtained from travelers from the Far East and from patients with persistent infection after initial therapy should be screened for beta-lactamase production. Once a

case of gonorrhea caused by PPNG is identified, intensive case-by-case epidemiologic investigation and cluster screening are recommended.

Although the identification of 2 spectinomycin-resistant gonococcal isolates was reported from Denmark in 1973, the case of spectinomycin-resistant gonorrhea is the first such case reported in the United States. The prevalence of these strains in the United States is very low; CDC found no spectinomycin-resistant strains among 9,226 isolates collected from 1972-1975.

The CDC continues to recommend 4.8 million units of aqueous procaine penicillin IM plus 1 gram of probenecid as the initial treatment of choice for routine cases of uncomplicated gonococcal infection. Spectinomycin 2 grams intramuscularly is recommended primarily for patients who are not cured with other antibiotics or who are likely to be infected with beta-lactamase producing strains.

Follow-up on Infant Botulism — California, Pennsylvania, Tennessee, Texas

Since an earlier report of 4 California infants with botulism (MMWR 25[34]), 11 additional infants have been hospitalized with this newly recognized syndrome. Eight cases were in California and 1 each was in Pennsylvania, Tennessee, and Texas. In these 11 cases, as in the original 4, the diagnosis was established by identification of *Clostridium botulinum* toxin and organisms in feces. No botulinal toxin was found in the sera of patients nor in the feces of 25 healthy California infants.

Clinical features of the 15 cases included constipation, poor feeding, weak cry, hypotonia, and muscle weakness. Loss of head control was particularly striking. Among cranial nerve abnormalities were ophthalmoplegia, ptosis, flaccid facial expression, pooled oral secretions, dysphagia, and a weak gag reflex. Seven of the 15 infants had respiratory arrests. Admission diagnoses included failure to thrive, congenital myasthenia gravis, poliomyelitis, bulbar encephalitis, brain tumor, various hereditary and metabolic disorders,

Table I. Summary—Cases of Specified Notifiable Diseases: United States

[Cumulative totals include revised and delayed reports through previous weeks]

DISEASE	4th WEEK ENDING		MEDIAN 1972-1976	CUMULATIVE, FIRST 4 WEEKS		
	January 29, 1977	January 31, 1976		January 29, 1977	January 31, 1976	MEDIAN 1972-1976
Aseptic meningitis	34	45	34	155	169	162
Brucellosis	—	9	2	9	18	7
Chickenpox	5,500	4,715	—	18,989	17,443	—
Diphtheria	1	9	4	1	39	9
Encephalitis						
Primary	12	17	11	50	72	50
Post-Infectious	1	4	4	4	16	12
Hepatitis, Viral						
Type B	299	251	199	1,062	978	720
Type A	638	726	887	2,305	2,705	3,129
Type unspecified	178	190	—	653	685	—
Malaria	5	6	4	16	26	12
Measles (rubeola)	827	453	486	3,389	1,624	1,624
Meningococcal infections, total	48	26	29	156	110	113
Civilian	47	26	26	155	109	109
Military	1	—	1	1	1	4
Mumps	602	1,234	1,450	2,022	4,343	5,849
Pertussis	17	22	—	61	107	—
Rubella (German measles)	227	220	263	737	719	719
Tetanus	2	—	1	4	3	4
Tuberculosis	605	640	—	1,777	2,128	—
Tularemia	1	3	—	8	11	8
Typhoid fever	7	8	7	22	30	17
Typhus, tick-borne (Rky. Mt. spotted fever)	2	—	—	7	1	8
Venereal Diseases:						
Gonorrhea						
Civilian	19,801	20,262	—	75,591	78,751	—
Military	639	508	—	2,079	2,497	—
Syphilis, primary and secondary						
Civilian	511	554	—	1,810	2,076	—
Military	7	13	—	27	34	—
Rabies in animals	49	29	62	179	109	185

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax	—	Poliomyelitis, total: *	1
Botulism: Calif. 1	1	Paralytic:	1
Congenital rubella syndrome:	—	Psittacosis: Ore. 1	3
Leprosy: Calif. 1, Hawaii 1	8	Rabies in man:	—
Leptospirosis: New Hamp. 1	5	Trichinosis: New Jersey 7	12
Plague:	—	Typhus, murine: *	1

*Delayed reports: Polio: Wash. 1 (1976), Typhus, murine: Tex. 2 (1976)

and infant botulism, itself.

Age at hospital admission ranged from 3 to 20 weeks. Eleven infants were male and 4 female. Nine cases were type B and 6 type A. In each instance, the infant was the only family member ill with botulism, and feces of family members contained neither *C. botulinum* nor its toxin.

Epidemiologic investigation did not identify any common food exposures. Although 9 infants had been primarily breast-fed and 6 primarily formula-fed, all infants had some exposure to other food items prior to the onset of illness. In only 1 case were *C. botulinum* organisms identified in any of the available foods tested. A honey specimen fed one of the initial 4 patients (who developed type B illness) contained *C. botulinum* type B but no preformed toxin. The honey container had been opened during a camping trip, at which time *C. botulinum* spores could have been introduced. No foods tested contained preformed toxin.

All 15 infants recovered with good supportive care. None received botulinal antitoxin. Access to an intensive care unit appears to be an important component of successful treatment. Most cases required gavage feeding; a few needed mechanical ventilation. Insufficient information

exists to evaluate the role of antibiotics directed at intra-intestinal *C. botulinum*.

Reported by California Morbidity, No. 48, 1976; WE Parkin, DVM, State Epidemiologist, Pennsylvania Dept of Health; AR Hinman, MD, State Epidemiologist, Tennessee Dept of Public Health; CR Webb Jr, MD, State Epidemiologist, Texas Dept of Health Resources; Enteric Diseases Br, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial note: The identification in 4 states of 15 infants with botulism suggests that this disease may be more common than currently recognized. Epidemiologic and laboratory findings to date have identified no common source of preformed toxin for these cases and thus support the hypothesis that ingested *C. botulinum* spores germinate in the intestine and elaborate toxin (1,2). The actual incidence, full clinical spectrum, and public health significance of this newly recognized disease have yet to be defined.

References

1. Pickett J, Berg B, Chaplin E, Brunstetter-Shafer M: Syndrome of botulism in infancy. *N Engl J Med* 295:770-772, 1976
2. Midura TF, Arnon SS: Infant botulism: Identification of *Clostridium botulinum* and its toxin in feces. *Lancet* ii:934-936, 1976

Current Trends

Anthrax Contamination of Haitian Goatskin Products

An evaluation of the need for continuing the current ban on importation of Haitian handicrafts made with goatskins was initiated in October 1976. Of 42 items tested since that time, 23 (55%) were culture-positive for *Bacillus anthracis* (Table 2).

Importation from Haiti of goatskins or products made in part or whole of goatskins having attached hair, such as those listed in Table 2, has not been permitted at U.S. ports of entry since April 19, 1974. The ban was implemented after a Florida resident acquired anthrax from a contaminated goatskin drumhead (MMWR 23[16]). Commercial importation of raw goatskins for tanning in this country is not restricted, however. Of 368 specimens of various Haitian goatskin handicrafts tested at CDC in 1974, 96 (26%) were culture-positive.

Travelers to Haiti should be aware of the risk of infection posed by goatskin handicrafts. Persons who recently purchased these items report having been told by local vendors that the items had been disinfected. As of the pre-

TABLE 2. *Bacillus anthracis* culture results for imported Haitian goatskin products, United States, 1974 and 1976-1977

Items	1974	1976-1977
Rugs	45/58 (78%)*	11/13 (85%)
Mosaic pictures	20/55 (36%)	10/13 (77%)
Drums	22/219 (10%)	2/16 (13%)
Voodoo dolls	3/13 (23%)	N/A**
Goatskins	4/10 (40%)	N/A
Purses	1/10 (10%)	N/A
Stool	1/1 (100%)	N/A
Bottle Holder	0/1	N/A
Hat	0/1	N/A
Total	96/368 (26%)	23/42 (55%)

*No. positive/No. cultured (%)

**Not available for testing

sent time, a practical non-destructive decontamination procedure has not been developed for such products.

Reported by Bacterial Zoonoses Br and Bacterial Zoonoses Laboratory Section, Bacterial Diseases Div, and Quarantine Div, Bur of Epidemiology, CDC.

Epidemiologic Notes and Reports

Human Rabies — Texas

Texas has recently reported a fatal rabies case in a resident who was bitten by a stray dog while visiting Mexico last summer.

The 17-year-old male patient became ill on August 30, 1976, while visiting Monclova, Mexico; his symptoms were high fever, sore throat, dysphagia, and seizures. He was hospitalized for a short period of time in Monclova and then transferred to a hospital in San Antonio, Texas, on August 31.

On admission to the hospital, the patient was febrile with a temperature of 106 F and delirious with violent activity consisting of spitting on and biting those attempting to

care for him. Subcutaneous crepitus was present over the neck and anterior chest.

Two days after admission additional members of the family who had accompanied the young man in Monclova arrived in San Antonio. They reported that a stray dog had bitten the patient on the right wrist late in July in Monclova. The patient had not been treated for the bite. They also recalled the patient's complaints of a burning sensation in the right hand on August 27 and right arm soreness on August 28. On August 30 the patient complained that air currents and the sound of water dripping from the tap caused him throat pain.

A clinical diagnosis of rabies was made on September 1. Initial attempts to diagnose rabies by a fluorescent rabies antibody (FA) examination of skin biopsy material from the nape of the neck and corneal impressions were unsuccessful. The remainder of the patient's hospital course was marked by hypoxia, hypotension, cardiac arrhythmias, major motor seizures, and anuria. Approximately 72 hours after his admission the patient died of his fifth cardiac arrest, despite intensive medical care. Postmortem skin biopsy, brain, and spinal cord specimens were all positive for rabies by FA technique.

Fifteen hospital employees and 4 relatives of the patient were judged to have had significant exposure to potentially infected secretions. These exposures consisted of: a) a bite from the patient, b) a cut from a scalpel which had been in contact with the patient's tissues, c) contamination of open

cuts with the patient's saliva, or d) repeated contamination of mucus membranes with the patient's saliva. These 19 contacts were treated with Rabies Immune Globulin and Duck Embryo Rabies vaccine. After treatment, 4 had titers below those assumed to be protective ($>1:16$ by the Rabies Fluorescent Focus Inhibition Test), a failure rate higher than the 5% previously reported (7). The 4 were treated with Human Diploid Rabies Vaccine provided by CDC and subsequently developed protective titers.

Reported by PR Craven, MD, DJ Drutz, University of Texas Medical Branch, San Antonio; CN Rothe, MD, Bexar County Metropolitan Health Authority; R Allen, MD, R Smythe, MD, Public Health Region IX, Texas Dept of Health Resources; Viral Diseases Div, Bur of Epidemiology, CDC.

Reference

1. Hattwick MAW, Corey L, Creech W: Clinical use of human globulin immune to rabies virus. *J Infect Dis* 133(Suppl):A266-A272, 1976

Current Trends

Influenza — Worldwide

Worldwide: No isolates of influenza A or recent outbreaks attributed to it have been reported worldwide.

United States: Influenza-like illness has been reported from 30 states (Figure 2). Outbreaks of influenza B in schools have been reported by the National Institute of Allergy and Infectious Diseases (NIAID) Influenza Surveillance Centers in Houston, Texas, Chapel Hill, North Carolina, and Nashville, Tennessee. Orange County, New York, Westmoreland and Montgomery Counties, Pennsylvania, East Carroll Parish, Louisiana, and Wayne County, Michigan, have all reported isolates of influenza B from influenza outbreaks associated with increased school absenteeism.

Isolates of influenza B have been reported from sporadic cases in Georgia, Virginia, Philadelphia, Michigan, and the District of Columbia. The World Health Organization (WHO) center for influenza at CDC has examined the recently isolated strains of B influenza from North Carolina, Pennsylvania, Tennessee, Texas, and Washington, D.C. The preliminary results indicate no substantial differences between these strains and the prototype B/Hong Kong/5 72, which they resemble in demonstrating little reaction to antibody.

The pattern of each outbreak reported so far has been typical of influenza B in that there has been substantial school absenteeism but little evidence of spread to the surrounding community. In the Vanderbilt University outbreak (MMWR 26[3,4]), for example, while students have continued to be seen in large numbers in the student health clinic — where 50 out of 65 throat cultures have been positive for influenza B — no spread to the University staff or to the surrounding community has been detected.

No outbreaks involving influenza A have been reported. A serologic survey of 150 school contacts of 2 suspected secondary cases of A/New Jersey/76 influenza in Wisconsin has revealed only 4 with antibody titers ≥ 20 to A/New Jersey/76. This number is substantially the same as the expected prevalence of antibody levels in unvaccinated teenagers. There has been no evidence of influenza-like illness occurring in the community involved.

Reported by RG Sharrar, MD, City of Philadelphia Dept of Public Health; State Epidemiologists from Pennsylvania, New York, Louisiana, Michigan, North Carolina, Georgia, Virginia, and the District of Columbia, and other health personnel; the National Institute of Allergy and Infectious Diseases, Bethesda, Maryland; the National Influenza Immunization Program; and the Virology Div, Bur of Laboratories, CDC.

FIGURE 2. Extent of influenza-like activity in the United States, January 28, 1977

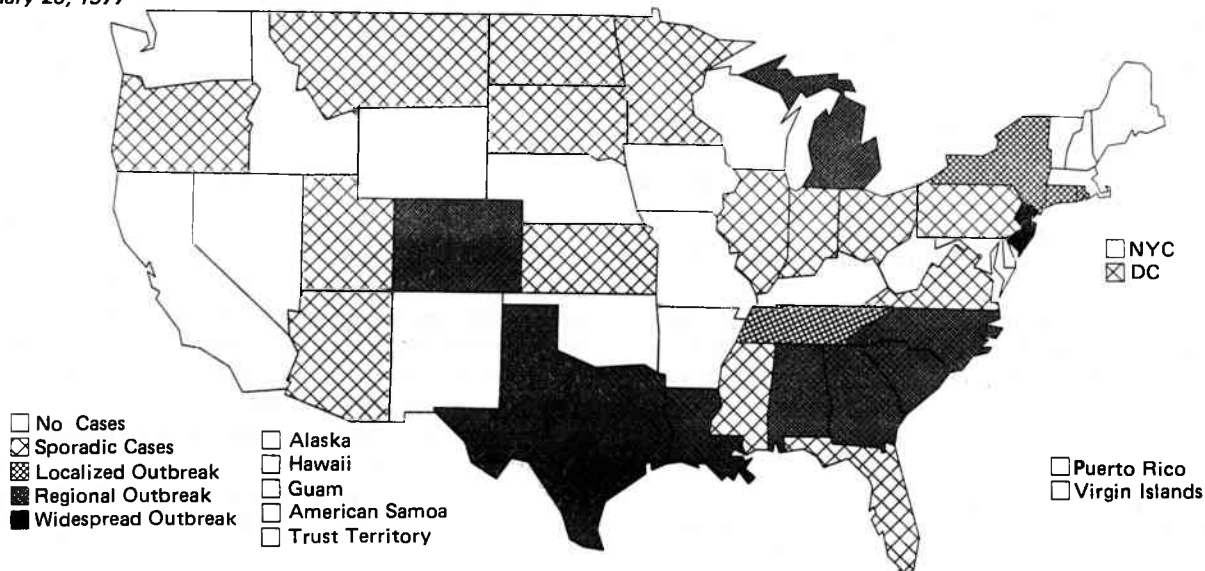


Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 29, 1977 and January 31, 1976 - 4th Week

AREA REPORTING	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1977	1976	1977	1977	1977	1977		
UNITED STATES	34	-	5,500	1	1	12	17	1	299	638	178	5	16
NEW ENGLAND	1	-	577	-	-	-	-	1	9	19	4	1	1
Maine	-	-	21	-	-	-	-	-	-	-	-	-	-
New Hampshire*	-	-	38	-	-	-	-	1	-	1	-	-	-
Vermont	-	-	6	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	260	-	-	-	-	-	3	5	3	1	1
Rhode Island	-	-	126	-	-	-	-	-	-	4	-	-	-
Connecticut	1	-	126	-	-	-	-	-	6	9	1	-	-
MIDDLE ATLANTIC	2	-	327	-	-	1	2	-	60	82	33	1	6
Upstate New York	2	-	212	-	-	1	-	-	22	17	4	1	3
New York City	-	-	85	-	-	-	1	-	14	16	7	-	3
New Jersey	-	-	NN	-	-	-	1	-	19	43	22	-	-
Pennsylvania*	-	-	30	-	-	-	-	-	5	6	-	-	-
EAST NORTH CENTRAL	3	-	2,281	-	-	2	1	-	41	78	13	-	-
Ohio	2	-	239	-	-	1	1	-	6	14	-	-	-
Indiana	-	-	192	-	-	-	-	-	-	6	6	-	-
Illinois	-	-	238	-	-	-	-	-	9	14	1	-	-
Michigan	1	-	1,071	-	-	1	-	-	23	38	5	-	-
Wisconsin	-	-	541	-	-	-	-	-	3	6	1	-	-
WEST NORTH CENTRAL	1	-	886	-	-	-	1	-	11	23	11	-	-
Minnesota	-	-	-	-	-	-	-	-	5	2	-	-	-
Iowa	-	-	220	-	-	-	-	-	-	2	5	-	-
Missouri*	1	-	58	-	-	-	1	-	4	11	6	-	-
North Dakota	-	-	29	-	-	-	-	-	-	5	-	-	-
South Dakota	-	-	94	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	28	-	-	-	-	-	2	-	-	-	-
Kansas	-	-	457	-	-	-	-	-	-	3	-	-	-
SOUTH ATLANTIC	4	-	215	-	-	3	5	-	21	49	11	1	3
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	1	-	31	-	-	-	1	-	7	5	1	-	1
District of Columbia	-	-	2	-	-	-	-	-	1	-	-	-	-
Virginia	1	-	10	-	-	2	-	-	2	4	3	1	2
West Virginia	-	-	94	-	-	-	1	-	1	1	-	-	-
North Carolina	1	-	NN	-	-	1	-	-	4	10	2	-	-
South Carolina	1	-	33	-	-	-	-	-	1	7	5	-	-
Georgia	-	-	-	-	-	-	-	-	-	NA	-	-	-
Florida	-	-	45	-	-	-	3	-	5	22	-	-	-
EAST SOUTH CENTRAL	4	-	308	-	-	-	2	-	19	28	1	-	-
Kentucky	-	-	299	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	NN	-	-	-	-	-	12	17	1	-	-
Alabama*	4	-	6	-	-	-	2	-	7	4	-	-	-
Mississippi*	-	-	3	-	-	-	-	-	-	7	-	-	-
WEST SOUTH CENTRAL	5	-	283	-	-	4	1	-	17	66	32	-	1
Arkansas*	-	-	56	-	-	-	-	-	1	5	2	-	-
Louisiana*	-	-	NN	-	-	-	1	-	3	5	3	-	-
Oklahoma	2	-	40	-	-	1	-	-	1	13	6	-	-
Texas*	3	-	187	-	-	3	-	-	12	43	21	-	1
MOUNTAIN	-	-	210	-	-	-	-	-	23	61	11	2	3
Montana	-	-	14	-	-	-	-	-	-	2	1	-	-
Idaho	-	-	52	-	-	-	-	-	1	7	-	-	-
Wyoming	-	-	5	-	-	-	-	-	-	-	-	-	-
Colorado*	-	-	82	-	-	-	-	-	12	17	6	2	2
New Mexico	-	-	20	-	-	-	-	-	6	24	2	-	-
Arizona*	-	-	NN	-	-	-	-	-	1	10	2	-	1
Utah	-	-	32	-	-	-	-	-	2	-	-	-	-
Nevada	-	-	5	-	-	-	-	-	1	1	-	-	-
PACIFIC	14	-	413	1	1	2	5	-	98	232	62	-	2
Washington	-	-	346	-	-	-	4	-	3	7	5	-	-
Oregon	1	-	2	-	-	-	-	-	8	12	4	-	-
California*	13	-	-	-	-	2	1	-	83	146	53	-	2
Alaska	-	-	40	1	1	-	-	-	2	61	-	-	-
Hawaii	-	-	25	-	-	-	-	-	2	6	-	-	-
Guam	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
Puerto Rico	-	-	1	-	-	-	-	-	-	4	-	-	-
Virgin Islands	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-

NA: Not available

NN: Not notifiable

*Delayed reports: Aseptic Meningitis: Pa. add 4 (1976); Brucellosis: Texas add 4 (1976), Mo. add 1 (1977); Chickenpox: Pa. add 3 (1976), N.H. add 26, Calif. add 14 (1977); Encephalitis: Pa. add 3 (1976), Mo. add 1 (1977); Hep. B: Pa. add 29, Ark. add 2, La. delete 1, Colo. add 10 (1976), N.H. add 1 (1977); Hep. A: Pa. add 30, Ala. add 2, Ark. add 8, La. delete 1, Colo. add 9 (1976), Mo. delete 3, Miss. add 2, Texas delete 1, Ariz. delete 1 (1977); Hep. unsp.: Pa. add 2, Ark. add 2, Colo. add 2 (1976), N.H. delete 2, Tex. delete 3 (1977); Malaria: Colo. add 2 (1976).

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 29, 1977 and January 31, 1976 — 4th Week

REPORTING AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1977	CUMULATIVE		1977	CUMULATIVE		1977	CUM. 1977	1977	1977	CUM. 1977	CUM. 1977
		1977	1976		1977	1976						
UNITED STATES	827	3,389	1,624	48	156	110	602	2,022	17	227	737	4
NEW ENGLAND	17	44	3	3	7	9	31	107	1	20	46	—
Maine	—	1	—	1	1	—	1	1	—	—	1	—
New Hampshire*	12	12	—	—	1	—	8	9	—	—	—	—
Vermont	3	27	—	—	—	—	—	—	—	—	—	—
Massachusetts	—	—	—	1	1	3	2	10	—	19	30	—
Rhode Island	—	—	2	—	—	2	1	8	—	—	6	—
Connecticut	2	4	1	1	4	4	19	79	1	1	9	—
MIDDLE ATLANTIC	64	512	204	10	28	13	48	141	4	25	95	—
Upstate New York	15	45	106	2	8	4	3	24	4	15	19	—
New York City	13	20	11	3	7	4	19	59	—	7	15	—
New Jersey*	4	11	14	5	11	2	21	43	—	—	44	—
Pennsylvania	32	436	73	—	2	3	5	15	—	3	17	—
EAST NORTH CENTRAL ..	203	1,136	488	6	17	12	187	605	2	69	293	—
Ohio	24	52	2	4	11	2	14	121	1	29	70	—
Indiana	57	562	86	—	—	—	9	36	—	10	114	—
Illinois	33	102	13	—	1	—	18	53	—	8	17	—
Michigan	23	89	71	1	3	6	81	182	1	11	54	—
Wisconsin	66	331	316	1	2	4	65	213	—	11	38	—
WEST NORTH CENTRAL ..	145	832	33	1	5	7	166	574	—	23	59	1
Minnesota	22	63	1	—	—	2	—	—	—	—	1	—
Iowa	83	541	7	—	—	2	21	275	—	18	36	—
Missouri*	40	42	—	1	4	2	66	97	—	1	5	1
North Dakota	—	2	1	—	—	—	—	2	—	—	—	—
South Dakota	4	4	—	—	—	—	1	1	—	—	—	—
Nebraska	2	3	19	—	—	—	—	1	—	—	—	—
Kansas	14	177	5	—	1	1	78	198	—	4	17	—
SOUTH ATLANTIC	7	34	207	7	28	23	18	75	1	2	8	1
Delaware	—	1	13	—	1	—	—	10	—	—	—	—
Maryland	—	—	69	1	3	1	3	7	—	—	—	—
District of Columbia ..	—	—	—	—	—	—	—	2	—	—	—	—
Virginia	4	19	2	2	3	—	5	19	—	1	1	1
West Virginia	3	14	29	—	4	—	8	23	—	1	4	—
North Carolina	—	—	—	2	5	6	—	3	—	—	1	—
South Carolina	—	—	—	1	4	4	—	2	1	—	2	—
Georgia	—	—	—	—	2	—	—	1	—	—	—	—
Florida	—	—	94	1	6	12	2	8	—	—	—	—
EAST SOUTH CENTRAL ..	20	64	98	5	17	9	41	142	4	31	85	1
Kentucky	14	22	97	4	9	2	12	19	3	2	5	1
Tennessee	6	42	1	1	7	3	29	106	1	29	79	—
Alabama*	—	—	—	—	1	3	—	17	—	—	1	—
Mississippi	—	—	—	—	—	1	—	—	—	—	—	—
WEST SOUTH CENTRAL ..	25	101	124	7	29	15	49	189	3	6	20	1
Arkansas	—	1	—	—	—	—	—	—	1	—	—	—
Louisiana*	1	1	5	2	16	1	1	12	—	—	—	—
Oklahoma	2	7	109	—	—	4	31	93	1	2	4	—
Texas*	22	92	10	5	13	10	17	84	1	4	16	1
MOUNTAIN	67	177	369	3	4	4	22	62	—	13	26	—
Montana	19	114	—	—	—	1	—	—	—	—	3	—
Idaho	—	11	45	—	1	—	12	32	—	—	—	—
Wyoming	—	—	—	—	—	—	—	—	—	—	1	—
Colorado*	31	32	4	1	1	—	1	8	—	2	5	—
New Mexico	—	—	1	—	—	—	2	2	—	—	—	—
Arizona	16	16	3	2	2	2	—	—	—	—	—	—
Utah	1	2	295	—	—	1	7	19	—	11	17	—
Nevada	—	2	1	—	—	—	—	1	—	—	—	—
PACIFIC	259	489	98	6	21	18	40	127	2	38	105	—
Washington	48	57	2	—	2	4	7	27	2	10	30	—
Oregon	—	6	—	1	1	1	3	13	—	2	4	—
California	163	378	94	5	13	13	23	75	—	26	71	—
Alaska*	48	48	—	—	4	—	6	10	—	—	—	—
Hawaii	—	—	2	—	1	—	1	2	—	—	—	—
Guam	NA	—	4	—	—	1	NA	—	NA	NA	—	—
Puerto Rico	1	32	6	—	—	1	6	42	—	—	2	—
Virgin Islands	NA	—	—	—	—	—	NA	—	NA	NA	—	—

NA: Not available

*Delayed reports: Measles: Mo. add 13, La. delete 2, Colo. add 28, Alaska add 3 (1976), N.H. add 23, Mo. add 23, Texas delete 1 (1977); Men. Inf.: La. delete 1 (1976); Mumps: N.H. add 2 (1977); Rubella: N.H. add 1, N.J. add 3 (1977); Tetanus: Ala. add 1 (1976).

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending January 29, 1977 and January 31, 1976 - 4th Week

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
								GONORRHEA			SYPHILIS (Pri. & Sec.)			
	1977	CUM. 1977	CUM. 1977	1977	CUM. 1977	1977	CUM. 1977	1977	CUMULATIVE		1977	CUMULATIVE		CUM. 1977
									1977	1976		1977	1976	
UNITED STATES	605	1,777	8	7	22	2	7	19,801	75,591	79,031	511	1,810	2,216	179
NEW ENGLAND	37	62	-	1	1	-	-	535	1,937	2,248	18	59	64	1
Maine	1	3	-	-	-	-	-	33	143	190	2	2	5	1
New Hampshire*	2	3	-	-	-	-	-	17	73	42	-	1	-	-
Vermont	2	3	-	-	-	-	-	13	41	53	-	1	1	-
Massachusetts	24	30	-	1	1	-	-	271	856	1,050	14	41	41	-
Rhode Island	-	5	-	-	-	-	-	31	99	165	-	-	2	-
Connecticut*	8	18	-	-	-	-	-	170	725	748	2	14	15	-
MIDDLE ATLANTIC	108	224	-	-	6	-	-	1,788	9,231	7,103	71	261	357	3
Upstate New York	13	18	-	-	-	-	-	262	753	867	-	12	22	3
New York City	26	80	-	-	6	-	-	848	5,384	3,294	48	169	247	-
New Jersey	15	72	-	-	-	-	-	207	1,017	1,086	10	41	43	-
Pennsylvania	54	54	-	-	-	-	-	471	2,077	1,856	13	39	45	-
EAST NORTH CENTRAL ..	99	268	2	2	4	-	-	3,197	11,086	12,855	43	201	176	6
Ohio	44	44	1	-	1	-	-	643	3,221	3,344	19	58	36	-
Indiana	11	28	-	-	-	-	-	154	530	991	-	5	6	1
Illinois	12	104	-	1	1	-	-	1,398	3,992	4,703	16	110	106	-
Michigan	27	78	-	1	2	-	-	689	2,397	2,609	6	20	19	-
Wisconsin	5	14	1	-	-	-	-	313	946	1,208	2	8	9	5
WEST NORTH CENTRAL ..	17	69	1	-	2	-	2	1,059	4,221	3,962	11	36	51	37
Minnesota	3	14	-	-	1	-	-	158	665	786	4	11	16	20
Iowa	2	10	-	-	-	-	-	144	504	564	1	3	3	9
Missouri	7	30	1	-	1	-	2	390	1,879	1,555	4	14	25	1
North Dakota	-	1	-	-	-	-	-	18	59	60	-	-	-	7
South Dakota	1	2	-	-	-	-	-	28	116	124	-	-	-	-
Nebraska	-	1	-	-	-	-	-	97	318	338	-	1	3	-
Kansas	4	11	-	-	-	-	-	224	680	535	2	7	4	-
SOUTH ATLANTIC	129	508	3	3	4	-	-	4,830	17,367	17,982	149	545	622	20
Delaware	-	-	-	-	-	-	-	60	282	298	1	2	7	-
Maryland	15	71	-	-	-	-	-	627	2,022	2,578	21	41	54	-
District of Columbia ..	6	17	-	-	-	-	-	320	1,017	1,026	14	58	52	-
Virginia	13	78	-	1	1	-	-	733	1,843	2,203	10	42	56	1
West Virginia	-	16	-	-	-	-	-	83	250	224	-	-	1	-
North Carolina*	26	87	-	-	-	-	-	524	2,544	2,615	21	84	93	-
South Carolina	12	45	1	-	-	-	-	202	1,483	1,645	7	29	41	-
Georgia	14	61	2	-	-	-	-	822	3,476	3,311	24	96	72	19
Florida	43	133	-	2	3	-	-	1,459	4,450	4,082	51	193	246	-
EAST SOUTH CENTRAL ..	37	136	-	-	-	1	3	1,561	5,621	6,829	12	51	73	1
Kentucky	-	21	-	-	-	1	1	294	834	943	-	6	8	-
Tennessee*	20	57	-	-	-	-	2	564	2,616	2,649	5	20	38	1
Alabama	12	48	-	-	-	-	-	381	1,331	1,728	3	10	12	-
Mississippi*	5	10	-	-	-	-	-	322	840	1,509	4	15	15	-
WEST SOUTH CENTRAL ..	60	161	1	-	-	1	2	2,509	10,788	13,241	78	246	238	73
Arkansas*	6	16	-	-	-	-	-	308	836	1,236	-	3	8	4
Louisiana*	13	55	-	-	-	-	-	157	1,214	1,800	17	57	47	-
Oklahoma	7	14	-	-	-	1	1	221	803	1,110	3	9	13	19
Texas*	34	76	1	-	-	-	1	1,823	7,935	9,095	58	177	170	50
MOUNTAIN	12	33	1	-	-	-	-	731	2,946	3,359	22	43	210	3
Montana*	-	-	1	-	-	-	-	31	166	137	-	-	1	3
Idaho	-	3	-	-	-	-	-	40	153	427	-	2	140	-
Wyoming	1	3	-	-	-	-	-	14	73	55	-	3	-	-
Colorado	4	9	-	-	-	-	-	230	751	765	8	15	30	-
New Mexico	2	2	-	-	-	-	-	70	323	665	8	8	17	-
Arizona	5	15	-	-	-	-	-	209	904	831	4	12	16	-
Utah	-	-	-	-	-	-	-	40	152	224	2	2	1	-
Nevada	-	1	-	-	-	-	-	97	424	255	-	1	5	-
PACIFIC	106	316	-	1	5	-	-	3,591	12,394	11,452	107	368	425	35
Washington	9	9	-	-	-	-	-	203	884	1,041	NA	-	15	-
Oregon	6	13	-	-	-	-	-	327	953	905	5	16	12	-
California	71	236	-	1	5	-	-	2,851	9,947	8,888	101	348	393	29
Alaska	-	-	-	-	-	-	-	150	371	347	1	1	-	6
Hawaii	20	58	-	-	-	-	-	60	239	271	-	3	5	-
Guam	NA	-	-	NA	-	NA	-	NA	-	42	NA	-	-	-
Puerto Rico	-	27	-	-	-	-	-	42	207	187	21	53	25	1
Virgin Islands	NA	-	-	NA	-	NA	-	NA	12	-	NA	-	-	-

NA: Not available

*Delayed reports: TB: Conn delete 4, N.C. delete 2, La. delete 1, Mont. add 1 (1976), Miss. add 6 (1977); RMSF: Texas add 2 (1976); GC: La. delete 38 (1976), Tenn. delete 1, Miss. add 227 civ., add 1 mil (1977); Syphilis: La. delete 8 (1976), N.H. delete 1, Miss. add 3 (1977); An. Rabies: Ark. delete 1 (1976).

Table IV
Deaths in 121 United States Cities*
Week Ending January 29, 1977 - 4th Week

REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES	REPORTING AREA	ALL CAUSES					Pneumonia and Influenza ALL AGES
	ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year			ALL AGES	65 Years and Over	45-64 Years	25-44 Years	Under 1 Year	
NEW ENGLAND	724	466	179	40	18	54	SOUTH ATLANTIC	1,354	817	369	98	33	66
Boston, Mass.	209	117	54	22	11	13	Atlanta, Ga.	127	72	37	13	2	7
Bridgeport, Conn.	56	40	13	2	-	9	Baltimore, Md.	345	195	102	22	13	7
Cambridge, Mass.	25	23	1	1	-	3	Charlotte, N. C.	62	30	20	6	2	4
Fall River, Mass.	23	15	6	-	-	-	Jacksonville, Fla.	146	87	43	9	2	6
Hartford, Conn.	69	38	21	5	4	4	Miami, Fla.	105	54	34	13	2	4
Lowell, Mass.	30	21	8	1	-	-	Norfolk, Va.	45	27	13	1	3	5
Lynn, Mass.	22	12	9	1	-	3	Richmond, Va.	102	66	26	6	2	9
New Bedford, Mass.	22	16	6	-	-	1	Savannah, Ga.	22	11	6	2	1	3
New Haven, Conn.	49	25	17	-	2	1	St. Petersburg, Fla.	96	80	10	4	1	2
Providence, R.I.	62	41	16	3	-	7	Tampa, Fla.	82	64	14	4	-	13
Somerville, Mass.	14	9	4	1	-	1	Washington, D. C.	179	100	57	15	4	4
Springfield, Mass.	62	44	14	1	1	5	Wilmington, Del.	43	31	7	3	1	2
Waterbury, Conn.	25	22	3	-	-	2							
Worcester, Mass.	56	43	7	3	-	5							
MIDDLE ATLANTIC	3,121	2,039	770	152	83	126	EAST SOUTH CENTRAL	840	458	260	60	33	49
Albany, N. Y.	59	43	8	3	4	3	Birmingham, Ala.	151	73	56	13	3	3
Allentown, Pa.	25	15	8	-	1	1	Chattanooga, Tenn.	52	31	13	3	4	4
Buffalo, N. Y.	131	82	36	5	4	8	Knoxville, Tenn.	34	21	10	2	1	-
Camden, N. J.	47	32	15	-	-	1	Louisville, Ky.	146	74	51	14	5	10
Elizabeth, N. J.	25	11	11	2	-	1	Memphis, Tenn.	180	107	44	12	7	6
Erie, Pa.	45	31	10	2	1	2	Mobile, Ala.	95	47	31	6	6	5
Jersey City, N. J.	57	40	9	5	2	1	Montgomery, Ala.	58	33	20	1	4	5
Newark, N. J.	69	37	21	8	1	3	Nashville, Tenn.	124	72	35	9	3	16
New York City, N. Y.	1,496	989	347	88	42	54	WEST SOUTH CENTRAL	1,349	797	361	76	63	46
Paterson, N. J.	47	32	7	3	3	3	Austin, Tex.	50	38	7	1	3	3
Philadelphia, Pa.	494	300	150	19	10	18	Baton Rouge, La.	54	27	16	1	6	2
Pittsburgh, Pa.	178	103	55	8	7	12	Corpus Christi, Tex.	48	29	13	1	3	3
Reading, Pa.	38	22	16	-	-	1	Dallas, Tex.	187	119	41	15	9	6
Rochester, N. Y.	127	99	21	2	2	10	El Paso, Tex.	57	33	15	3	3	3
Schenectady, N. Y.	29	19	9	1	-	2	Fort Worth, Tex.	108	69	24	4	7	-
Scranton, Pa.	37	29	7	-	-	-	Houston, Tex.	320	173	97	26	13	5
Syracuse, N. Y.	99	68	20	4	4	3	Little Rock, Ark.	76	41	27	2	6	3
Trenton, N. J.	55	40	10	1	2	2	New Orleans, La.	147	84	43	8	2	1
Utica, N. Y.	26	19	5	-	-	1	San Antonio, Tex.	148	91	35	9	5	5
Yonkers, N. Y.	35	28	5	1	-	-	Shreveport, La.	66	38	23	1	3	5
							Tulsa, Okla.	88	55	20	5	3	10
EAST NORTH CENTRAL	2,556	1,545	689	162	79	65	MOUNTAIN	564	337	138	39	28	28
Akron, Ohio	65	39	18	4	2	-	Albuquerque, N. Mex.	57	32	17	2	4	6
Canton, Ohio	48	32	11	3	2	1	Colorado Springs, Colo.	36	22	8	3	1	-
Chicago, Ill.	632	348	187	48	23	15	Denver, Colo.	110	65	31	7	4	4
Cincinnati, Ohio	205	124	61	13	4	5	Las Vegas, Nev.	35	14	15	3	1	4
Cleveland, Ohio	194	105	56	12	10	2	Ogden, Utah	19	12	4	-	2	7
Columbus, Ohio	176	98	51	12	9	6	Phoenix, Ariz.	118	77	21	10	7	2
Dayton, Ohio	88	61	24	2	1	4	Pueblo, Colo.	30	19	6	2	-	4
Detroit, Mich.	316	202	58	27	3	5	Salt Lake City, Utah	62	40	10	5	6	1
Evansville, Ind.	60	41	16	3	-	3	Tucson, Ariz.	97	56	26	7	3	-
Fort Wayne, Ind.	34	19	10	1	1	1							
Gary, Ind.	15	8	4	2	-	-	PACIFIC	1,596	958	425	101	51	35
Grand Rapids, Mich.	50	32	11	3	2	2	Berkeley, Calif.	17	14	2	1	-	1
Indianapolis, Ind.	195	120	51	11	9	7	Fresno, Calif.	55	24	20	4	6	1
Madison, Wis.	52	32	15	3	1	4	Glendale, Calif.	24	22	1	-	1	1
Milwaukee, Wis.	115	73	36	4	2	3	Honolulu, Hawaii	40	19	17	3	1	2
Peoria, Ill.	43	31	5	1	5	4	Long Beach, Calif.	150	68	56	14	4	3
Rockford, Ill.	49	34	13	-	1	1	Los Angeles, Calif.	429	260	102	35	12	11
South Bend, Ind.	39	25	12	2	-	-	Oakland, Calif.	68	43	16	5	-	1
Toledo, Ohio	116	79	25	9	1	2	Pasadena, Calif.	41	28	7	1	2	-
Youngstown, Ohio	64	42	15	2	3	-	Portland, Ore.	133	88	33	4	2	1
WEST NORTH CENTRAL	849	562	175	44	37	43	Sacramento, Calif.	75	47	20	2	5	2
Des Moines, Iowa	70	50	11	3	5	3	San Diego, Calif.	128	70	42	7	2	-
Duluth, Minn.	30	24	4	-	-	3	San Francisco, Calif.	159	99	35	15	5	1
Kansas City, Kans.	39	22	9	5	2	2	San Jose, Calif.	47	25	18	3	-	2
Kansas City, Mo.	143	92	34	5	4	12	Seattle, Wash.	149	91	39	7	8	6
Lincoln, Nebr.	46	33	6	4	1	5	Spokane, Wash.	50	37	9	-	3	2
Minneapolis, Minn.	101	70	19	2	5	1	Tacoma, Wash.	31	23	8	-	-	1
Omaha, Nebr.	84	50	25	6	1	4							
St. Louis, Mo.	225	138	46	14	19	7	TOTAL	12,953	7,979	3,366	772	425	512
St. Paul, Minn.	69	54	11	3	-	2	Expected Number	12,740	7,853	3,276	780	412	534
Wichita, Kans.	42	29	10	2	-	4							

*By place of occurrence and week of filing certificate. Excludes fetal deaths. † Estimate based on average percent of divisional total.

The Morbidity and Mortality Weekly Report, circulation 52,000, is published by the Center for Disease Control, Atlanta, Georgia. 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.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Center for Disease Control, Attn.: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

Send mailing list additions, deletions, and address changes to: Center for Disease Control, Attn.: Distribution Services, GSO, 1-SB-36, Atlanta, Georgia 30333. When requesting changes be sure to give your former address, including zip code and mailing list code number, or send an old address label.

Primary and Secondary Syphilis — United States, November 1976

Reported cases of primary and secondary syphilis numbered 1,791 in November 1976 — 13.4% less than the number of cases reported in November 1975. During the first 11 months of 1976, some 21,815 cases were reported; this was 1,834 cases or 7.8% less than the number reported during the same period of 1975. Also, during the first 11

months of 1976 reported early latent syphilis cases decreased 5.5% from the number reported during the corresponding time period of 1975.

Reported by Venereal Disease Control Div, Bur of State Services, CDC.

Summary of Reported Primary and Secondary Syphilis Cases by Reporting Area:
November 1976 and November 1975 — Provisional Data

Reporting Area	November		Calendar Year Cumulative January - November		Reporting Area	November		Calendar Year Cumulative January - November		Reporting Area	November		Calendar Year Cumulative January - November	
	1976	1975	1976	1975		1976	1975	1976	1975		1976	1975	1976	1975
Connecticut	17	4	153	191	Illinois (Excl Chicago)	14	9	142	240	Arizona	13	25	194	232
Maine	1	5	23	40	Chicago	84	60	870	707	Calif. (Excl LA & SF)	141	225	1841	1776
Massachusetts	57	39	509	514	Ind. (Excl Indianapolis)	2	9	72	101	Los Angeles*	169	159	1691	1765
New Hampshire	1	0	9	15	Indianapolis*	6	5	36	44	San Francisco*	73	60	757	879
Rhode Island	1	2	18	23	Michigan	26	20	236	309	Hawaii	4	2	81	49
Vermont	0	0	9	8	Minnesota	13	8	97	101	Nevada	2	3	39	47
DHEW REGION I TOTAL	77	50	721	791	Ohio	34	45	458	470	DHEW REGION IX TOTAL	402	474	4603	4748
New Jersey	43	41	518	714	Wisconsin	10	10	103	72	Alaska	2	0	27	6
New York (Excl NYC)	24	29	227	373	DHEW REGION V TOTAL	189	166	2014	2044	Idaho	0	2	23	18
New York City	200	255	2230	2715	Arkansas	4	8	93	63	Oregon	1	10	97	126
DHEW REGION II TOTAL	267	325	2975	3802	Louisiana	45	39	546	489	Washington	16	17	155	194
Delaware	7	6	63	82	New Mexico	5	11	135	143	DHEW REGION X TOTAL	19	29	302	344
Dist. of Columbia	40	53	526	626	Oklahoma	6	6	90	82					
Md. (Excl Baltimore)	8	22	167	207	Texas	176	157	1877	1415					
Baltimore	16	33	341	342	DHEW REGION VI TOTAL	236	221	2741	2192					
Penn. (Excl Phila.)	19	23	218	346	Iowa	4	3	40	30					
Philadelphia	27	33	373	362	Kansas	9	8	79	130	Puerto Rico	61	51	589	693
Virginia	45	47	630	534	Missouri	12	16	166	254	Virgin Islands	0	4	32	31
West Virginia	1	4	22	37	Nebraska	7	2	40	20	U.S. & Outlying Areas	1852	2123	22436	24,373
DHEW REGION III TOTAL	163	221	2340	2536	DHEW REGION VII TOTAL	32	29	325	434					
Alabama	14	26	171	243	Colorado	12	5	129	102					
Florida	146	229	2281	2980	Montana	0	1	12	7					
Georgia (Excl Atlanta)	48	46	555	616	North Dakota	0	1	2	5					
Atlanta*	31	41	432	418	South Dakota	1	0	6	4					
Kentucky	5	14	115	162	Utah	0	1	23	15					
Mississippi	21	28	262	275	Wyoming	3	0	8	6					
North Carolina	78	95	1175	1020	DHEW REGION VIII TOTAL	16	8	180	139					
South Carolina	31	30	352	506										
Tennessee	16	36	271	393										
DHEW REGION IV TOTAL	390	545	5614	6619										

*County Data

Note: Cumulative totals include revised and delayed reports through previous months.

Source: CDC 9-98, HEW-CDC-855 VD Control Division, Atlanta, Georgia

Epidemiologic Notes and Reports

Insecticide-associated Illness — Mississippi, California

A total of 17 cases of poisoning following the indoor spraying of insecticides have been reported to CDC recently; 1 case was fatal. The cases occurred in 2 separate incidents — 1 in July in Mississippi, and 1 in October in California. Details of the outbreaks follow.

Mississippi: Seven of 13 members of a single family in Humphreys County developed weakness, abdominal pain, nausea, vomiting, difficulty seeing, excessive sweating, and salivation from July 4-17. On July 13, 1 of the 7, a 26-year-old man, died, and another, a 17-year-old woman, was hospitalized and treated with atropine. The clinical illness suggested organophosphate insecticide intoxication.

Blood specimens were collected from most family members and several neighbors. Tissue specimens from the fatal case were also examined. Depressed cholinesterase levels were observed in family members, and organophosphate was present in abnormal amounts in the liver of the patient who died.

The affected family lives on a farm in rural Mississippi. The father of the family said that he had obtained a small amount of concentrated insecticide containing methyl parathion from a discarded drum. He placed the liquid in a hand nebulizer and sprayed in late June and early July around the inside of his home to kill cockroaches. The nebulizer was discarded when the family members became ill.

Several other hand-spray instruments containing com-

mercially available insecticides were present in the home. These were sprayed into the air periodically during the day and night to reduce the number of mosquitoes and flies.

Following this episode, the home was thoroughly cleaned. No additional episodes of illness have occurred in the family since that time.

California: An outbreak of mild illness occurred in 10 of 36 employees at a Chula Vista restaurant on October 1, after insecticide had been applied to exterminate roaches. The restaurant had been closed the previous afternoon, at which time professional exterminators applied 4 different forms of insecticide:

- 1) A dust containing 1% pyrethrum and 10% piperonyl butoxide was applied to equipment and in cracks;
- 2) an organophosphate insecticide solution containing diethyl trichloropyridyl phosphorothioate was sprayed on baseboards and in cracks;
- 3) a carbamate bait was applied under equipment; and
- 4) afterwards, the restaurant was fogged with 3 gallons of 5% solution containing dimethyl dichlorovinyl phosphate (DDVP).

The restaurant remained closed until the following day at 5:30 AM when employees entered the restaurant, cleaned the kitchen and tables, and resumed duties. From 9:30 AM to 12:30 PM, a total of 10 employees became ill with nausea, light headiness, dizziness, headaches, and

burning sensations of eyes, throat, and nose. Management sent all 36 employees to a local hospital emergency room. Two employees were hospitalized for 24 hours with a diagnosis of mild organophosphate insecticide poisoning. There were no reported illnesses or symptoms occurring in customers.

Restaurant operators were ordered to scrub all working surfaces and wash utensils before the restaurant reopened the following day. Air filters were changed in the air conditioning system to aid elimination of odors.

Close surveillance of the restaurant disclosed no further illnesses occurring during a 14-day period after the outbreak.

Reported by DL Blakey, MD, State Epidemiologist, Mississippi State Board of Health; MO Ochs, MD, W Rye, MD, Bay General Hospital, Chula Vista, CA; JR Philp, MD, MPH, RB Redmond, RS, MS, W Townsend, MD, MPH, DrPH, San Diego Dept of Public Health; J Chin, MD, State Epidemiologist, California State Dept of Health; Environmental Hazards Activity, Cancer and Birth Defects Div, Field Services Div, Bur of Epidemiology, CDC.

Editorial Note: Organophosphate insecticides are one of the most acutely toxic classes of insecticides in general use. A death certificate study identified 21 deaths associated with

this group of chemicals in 1969 in the United States (7). These compounds act by inhibiting the enzyme cholinesterase and cause symptoms by interrupting transmission of nerve impulses (2). Careless handling by untrained individuals, such as apparently occurred in the Mississippi outbreak, has been the general cause of organophosphate-related illness in nonoccupational settings. Accidental ingestion of pesticides by children also has been a clinically important cause of intoxication.

Illness following commercial application of pesticides has been relatively uncommon. In the California outbreak, pesticide exposure may have occurred during cleaning of the restaurant by skin contact with recently sprayed surfaces. Most organophosphates are readily absorbed through the skin; illness and deaths have occurred following exposure by this route alone (2).

References

1. Hayes WJ Jr: Mortality in 1969 from pesticides including aerosols. *Arch Environ Health* 31:61-72, 1976
2. Hayes WF Jr: *Clinical Handbook on Economic Poisons*. Chamblee, Georgia, Environmental Protection Agency, Pesticides Programs, 1963

International Notes

Quarantine Measures

The following changes should be made in the *Supplement — Health Information for International Travel*, MMWR, Vol. 25, October 1976:

ALBANIA

Smallpox — Asia — Delete all information. Insert: China (Peking), Korea, Democratic People's Republic of, Viet-Nam, Socialist Republic of, Turkey.

ALGERIA

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

AUSTRIA

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

BAHRAIN

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in the following countries:

Asia: Bangladesh, India
Africa: Ethiopia, Somali

BARBADOS

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

BELGIUM

Smallpox — Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

BERMUDA

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

BRITISH SOLOMON ISLANDS

Smallpox — Oceania — Delete all information. Insert: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Gilbert Island, Nauru, New Caledonia, New Hebrides, New Zealand, Niue, Norfolk and Tokelau Islands, Tonga, Tuvalu, Western Samoa.

BULGARIA

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in or passed through a country any part of which is infected.

BURMA

Yellow fever — Delete note. Insert: A Certificate is ALSO required from travelers who within the preceding 6 days have been in countries in the endemic zones. A Certificate is ALSO required from nationals and citizens of Burma departing for an infected area.

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

CANADA

Smallpox — Delete note. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

CANAL ZONE

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 30 days have been in a country any part of which is infected.

Yellow fever — Canal Zone recommends vaccination.

CAPE VERDE ISLANDS

Smallpox — Change code to II > 3 mos. Insert: A Certificate is required ONLY from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

CHILE

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

CHRISTMAS ISLAND

Smallpox — Oceania — Delete all information. Insert: American Samoa, Antarctica, Australia, Cocos (Keeling) and Cook Islands, Fiji, French Polynesia, Gilbert Island (including Ocean and Fanning Islands), Hawaii, Lord Howe Island, Nauru, New Caledonia, New Hebrides, New Zealand, Niue and Norfolk Islands, Papua New Guinea, Solomon and Tokelau Islands, Tonga, Tuvalu, Western Samoa.

COOK ISLANDS

Smallpox — Oceania — Delete all information. Insert: American Samoa, Australia, British Solomon Islands, Fiji, French Polynesia, Gilbert Island, Hawaii, Nauru, New Caledonia, New Hebrides, New Zealand, Niue, Norfolk and Tokelau Islands, Tonga, Tuvalu, Western Samoa.

COSTA RICA

Smallpox — Insert: A Certificate is ALSO required from travelers arriving from:

Africa: Ethiopia, Somali

CYPRUS

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

DENMARK

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

DOMINICA

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

EL SALVADOR

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

FAROE ISLANDS

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

FIJI

Smallpox — Delete all information. Insert code II by air > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

FRENCH POLYNESIA (TAHITI)

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

GERMAN DEMOCRATIC REPUBLIC (EAST)

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

GERMANY, FEDERAL REPUBLIC OF (WEST)

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

Asia: Bangladesh, India, Pakistan

GHANA

Smallpox — Change code to II > 1 yr.

GILBERT AND ELLICE ISLANDS**CHANGE NAME TO GILBERT ISLAND AND TUVALU ISLAND**

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

GREECE

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

GREENLAND

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

GUATEMALA

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

HONDURAS

Smallpox — Delete all information. Insert code II. Insert: A Certificate is required ONLY from travelers who within the preceding 14 days have been in:

Africa: Ethiopia

Asia: Bangladesh

HONG KONG

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

HUNGARY

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

INDIA

Yellow fever — Africa — Insert: Guinea

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

IRAN

Cholera — Asia — Delete: Viet-Nam, South, Republic of. Insert: Viet-Nam Socialist Republic of.

IRAQ

Cholera — Delete: None. Insert code II > 6 mos.

IRELAND

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

ITALY

Smallpox — Delete note. Insert: A Certificate is ALSO required from travelers arriving from:

Africa: Ethiopia, Somali

Asia: Bangladesh, India, Nepal, Pakistan

JAMAICA

Smallpox — Delete note. Insert: Except that NO Certificate is required from travelers who have been resident in the following countries for 14 days before arriving in Jamaica:

Americas: All countries

Caribbean: All countries.

JAPAN

Smallpox — Delete note. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected. A Certificate is ALSO required from travelers arriving from:

Africa: Ethiopia, Somali

MONTERRAT

Smallpox — Change code to II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

MOROCCO

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

NAURU

Smallpox — Delete all information. Insert code II > 12 mos. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

NETHERLANDS ANTILLES

Smallpox — Delete all information. Insert code II > 3 mos. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

NEW CALEDONIA AND DEPENDENCIES

Smallpox — Oceania — Delete note. Insert: American Samoa, Australia, British Solomon Islands, Cook Islands, Fiji, French Polynesia, Gilbert Island, Nauru, New Hebrides, New Zealand, Tonga, Tuvalu, Western Samoa.

NIUE

Smallpox — Insert code II > 12 mos. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.
Yellow fever — Insert code II > 12 mos. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

NORWAY

Smallpox — Delete all information. Insert code II > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

PACIFIC ISLANDS, TRUST TERRITORY OF THE USA

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.
Yellow fever — Vaccination is recommended for travel to infected areas.

PAKISTAN

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the previous 14 days have been in a country any part of which is infected.

PANAMA

Smallpox — Change code to II. Insert: A Certificate is ALSO required from travelers who within the preceding 30 days have been in or transited:

Africa: Ethiopia

Cholera — Delete all information. Insert code II.

PAPUA NEW GUINEA

Cholera — Oceania — Delete note. Insert: American Samoa, Australia, Australian Antarctic Territories, British Solomon Islands, Cook Islands, Fiji, Gilbert Island, Guam, Lord Howe Island, Nauru, New Caledonia, New Hebrides, New Zealand, Norfolk Island, Society Archipelago, Tonga, Tuvalu, Western Samoa.
Smallpox — Oceania — Delete note. Insert: American Samoa, Australia, Australian Antarctic Territories, British Solomon Islands, Cook Islands, Fiji, Gilbert Island, Guam, Lord Howe Island, Nauru, New Caledonia, New Hebrides, New Zealand, Norfolk Island, Society Archipelago, Tonga, Tuvalu, Western Samoa.

PARAGUAY

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

PITCAIRN ISLAND

Smallpox — Delete all information. Insert code II by air > 1 yr. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

POLAND

Smallpox — Delete all information. Insert code II. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in:

Africa: Ethiopia, Somali, Sudan

Asia: Bangladesh, India, Nepal, Pakistan.

RWANDA

Smallpox — Change code to II > 6 mos. Insert: A Certificate is ALSO required from travelers who within the preceding 14 days have been in a country any part of which is infected.

SAMOA, AMERICAN

Yellow fever — Delete: None. Insert code II.

SAMOA, WESTERN

Smallpox — Oceania — Delete note. Insert: American Samoa, Australia, British Solomon Islands, Cook Islands, Fiji, French Polynesia, Gilbert Island, Nauru, New Caledonia, New Hebrides, New Zealand, Niue, Norfolk and Tokelau Islands, Tonga, Tuvalu.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE / CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

Director, Center for Disease Control, David J. Sencer, M.D.
Director, Bureau of Epidemiology, Philip S. Brachman, M.D.
Editor, Michael B. Gregg, M.D.
Managing Editor, Anne D. Mather, M.A.

OFFICIAL BUSINESS FIRST CLASS

Redistribution using indicia is illegal.



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF HEALTH
HEW 399