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WEEKLY REPORT

For Week Ending July 25, 1970

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS

INFECTIOUS HEPATITIS – Hatfield, Arkansas

Between May 13 and July 19, 1970, 77 cases of infectious hepatitis (Figure 1) occurred among residents of Polk County, Arkansas, and adjacent counties in Arkansas and Oklahoma. The patients included 57 men and 20 women; mean age was 23.8 years (Table 1). All patients had symptoms characteristic of viral hepatitis including jaundice; no attempt was made to identify anicteric cases. Fifteen patients were hospitalized; no deaths occurred.

All patients lived, worked, or ate meals in Hatfield, a small town in Polk County with a population of 337. Of the 77 patients, 71 (91 percent) had eaten in one particular Hatfield cafe; the other six cases occurred among family members or close contacts of this group. For comparison, a group of 455 non-ill residents of Hatfield and the surrounding countryside were surveyed concerning eating places they patronized; 100 (22 percent) had eaten at this cafe. Furthermore, of the 71 patients who had patronized the cafe, 66 recalled drinking the water; the other five were uncertain of their contact with water.

The cafe had opened for business on April 13, 1970. It specialized in sandwiches and short orders and catered

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

DISEASE	29th WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 29 WEEKS		
	July 25, 1970	July 19, 1969	1965 - 1969	1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis	169	48	50	1,326	993	993
Brucellosis	3	11	6	116	123	123
Diphtheria	1	1	1	190	81	87
Encephalitis, primary:						
Arthropod-borne & unspecified	38	24	33	636	555	748
Encephalitis, post-infectious	12	4	13	274	185	454
Hepatitis, serum	134	100	641	3,977	2,867	22,744
Hepatitis, infectious	1,050	823		30,908	25,849	
Malaria	40	74	28	1,925	1,497	1,098
Measles (rubeola)	476	329	356	37,838	19,049	56,052
Meningococcal infections, total	52	32	40	1,643	2,132	2,081
Civilian	39	30	36	1,474	1,935	1,908
Military	13	2	3	169	197	173
Mumps	797	901	---	70,946	63,806	---
Poliomyelitis, total	–	–	2	15	5	28
Paralytic	–	–	2	15	5	24
Rubella (German measles)	393	580	---	47,542	46,565	---
Tetanus	1	3	5	61	74	88
Tularemia	7	1	5	68	80	92
Typhoid fever	7	3	11	143	149	174
Typhus, tick-borne (Rky. Mt. spotted fever)	22	25	18	175	227	133
Rabies in animals	60	71	71	1,776	2,082	2,441

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Psittacosis: N.J.-1	19
Botulism:	5	Rabies in Man:	–
Leprosy: Cal.-2, Ore.-1	74	Rubella congenital syndrome: Cal.-2	42
Leptospirosis: La.-1	20	Trichinosis:	59
Plague:	6	Typhus, murine: Ohio-2, Tex.-1	23

INFECTIOUS HEPATITIS – *(Continued from front page)*

Figure 1
77 CASES OF INFECTIOUS HEPATITIS BY DATE OF ONSET
POLK COUNTY, ARKANSAS, AND ADJACENT COUNTIES
MAY 13 TO JULY 19, 1970

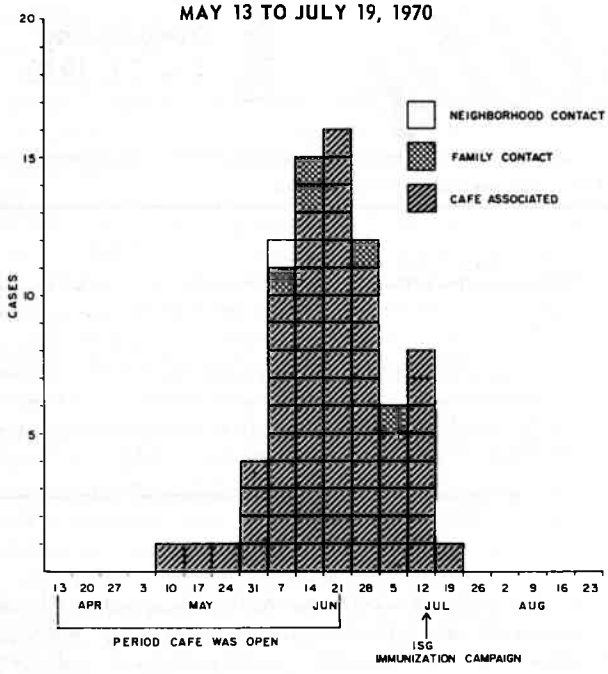

Table 1
77 Cases of Infectious Hepatitis by Age and Sex
Polk County, Arkansas, and Adjacent Counties
May 13 to July 19, 1970

Age Group (Years)	Male	Female
0-4	1	0
5-9	1	2
10-14	7	4
15-19	13	7
20-24	14	2
25-29	4	2
30-34	6	0
35-39	6	0
40-44	1	1
45-49	1	1
50-54	2	0
55-59	0	0
60-64	1	1
Total	57	20

to a largely male working clientele. Although sanitary conditions of the cafe appeared excellent, the water supply was found to be contaminated with coliform organisms. Fluorescein dye placed in the cafe's toilet on June 25 was demonstrated in tap water on July 15.

Several patients had only one contact with Hatfield, and without exception, the contact was limited to the involved cafe: A 19-year-old Oklahoma man visited the cafe on June 6, while his aunt kept an appointment at a nearby beauty shop; he ate only a boiled egg and drank a glass of water and on July 1 had onset of hepatitis. Three Oklahoma men, while baling hay in Hatfield on June 13, ate lunch and drank ice water at the cafe; they made no return visits to this area and developed hepatitis on July 13, 17, and 19, respectively. A 35-year-old man from outside Hatfield ate at the cafe twice on May 29, while his wife was visiting relatives in Texas; that same evening he departed for Texas and did not return to Hatfield until he developed hepatitis on June 22. A young married couple from a nearby town breakfasted at the cafe on May 30, the morning after their wedding; this was their only visit to Hatfield, and they developed hepatitis on June 15 and 21, respectively. Persons with single exposures visited the cafe from May 1 to June 13.

Control measures included the voluntary closing of the cafe by the owner on June 21 and administration of immune serum globulin to household contacts by private physicians. An ISG immunization campaign for local residents was carried out on July 15 in an effort to reduce the extent and severity of secondary spread.

(Reported by John A. Harrel, Jr., M.D., Director, Division of Communicable Disease Control, Arkansas State Department of Health; R. LeRoy Carpenter, M.D., Director, Division of Epidemiology, Oklahoma State Department of Health, Calvin D. Austin, M.D., Health Officer, and Myrideth Lawrence, Public Health Nurse, Polk County Health Department; and a team from CDC.)

FOLLOW-UP SKUNK RABIES – Oregon and Washington

Investigation by health officials in Oregon and Washington of a case of rabies in a pet skunk has revealed no other related cases (MMWR, Vol. 19, No. 28). The one case first came to attention on July 16 when a Seattle woman reported to the local health authorities that she had been bitten on the arm and leg by her pet skunk. The pet had exhibited viciousness for several days. He was sacrificed and found positive for rabies virus on July 20. The woman was given antirabies serum (equine) and begun on a course of duck embryo vaccine.

This skunk had been purchased from a retail pet dealer in Seattle on June 13, who had obtained the animal from a skunk farm in Wolf Creek, Oregon. Health officials in Josephine County (Wolf Creek) found that this skunk farm had been abandoned and that the whereabouts of the owner was unknown. On July 21, an appeal went to radio, television, and newspapers to help in locating the owner of the farm. Within 6 hours, the owner telephoned health authorities. He had obtained the skunks from 14 pregnant or just delivered wild female skunks at the end of February and early March and had shipped the 69 baby skunks in four shipments to three pet stores, one in Seattle and two in metropolitan Portland. The pet store owners and purchasers of skunks were contacted. Appeals through mass media

located purchasers whose names were not available through the pet stores.

A history of skunk bites or other exposure was obtained from these persons. In Oregon 30 skunk bites were reported among 146 possible household contacts (20.5 percent) and 12 bites were reported among 127 nonhousehold contacts (9.4 percent). In Washington 30 bites were reported among 70 exposed persons (43 percent). Of the 37 skunks that were sold in Oregon, 23 had bitten someone; of the 20 skunks sold in Washington, 14 had bitten someone. Thirteen persons in Washington and seven persons in Oregon whose skunks had been lost or had died prior to investigation and who had exposure warranting treatment were begun on antirabies therapy. Three others in Oregon were started on therapy; treatment was discontinued when their skunks were found negative for rabies.

Forty-seven skunks were rendered for examination for rabies, 20 were not available for examination, and one skunk was retained by its owner (Table 2). All 45 animals examined subsequent to the initial case have been negative; results on the other two are pending.

(Reported by Morris Chelsky, M.D., Director, Epidemiology Section, Monroe Holmes, D.V.M., Public Health Veterinarian, and Gatlin Brandon, Director, Laboratory, Oregon State Board of Health; Frank Watts, D.V.M., Epidemiologist, and William Lee, Laboratory, Multnomah County Health Department; Edmund Wall, M.D., Health Officer, Josephine County Health Department; Byron J. Francis, M.D., Chief, Epidemiology, and F. Christman and Vernon Ashby, Laboratory, Division of Health, Washington State Department of Social and Health Services; Donald Peterson, M.D., Epidemiologist, Paul Bonin, Director, and Evelyn Tronca, Assistant Director, Laboratories, and R. B. Watkins, D.V.M., Public Health Veterinarian, Seattle-King County Department of Public Health; Donald A. Champaign, M.D., Health Officer, Southwest Washington Health District; Lauren Lucke, M.D., Health Officer, Grays Harbor-Pacific Health District; Harlan T. McNutt, M.D., Pierce-Tacoma Health District; Vernon E. Michael, M.D., Health Officer, Benton-Franklin Health District; and six EIS Officers.)

Table 2
Skunk Investigation Status
Oregon and Washington – July 28, 1970

Number of Skunks	Oregon	Washington	Total
Positive for Rabies	0	1 (initial case)	1
Negative for Rabies	30	15	45
Examination Results Pending	0	2	2
Lost or Died Prior to Investigation	14	6	20
Not Submitted for Examination	1	0	1
Total	45	24	69

CURRENT TRENDS
ASEPTIC MENINGITIS – Florida

Through July 10, 150 cases of aseptic meningitis have been reported from Florida for 1970, compared with 40 cases reported for the same period in 1969. Most of the cases (114) have been reported since May 22 (Figure 2). Of the 150 cases reported thus far, 85 were from Dade County (Miami) and 26 from Duval County (Jacksonville). The others were reported from 16 other counties, with none recording more than seven cases.

Figure 2
ASEPTIC MENINGITIS BY WEEK OF REPORT
FLORIDA – 1970

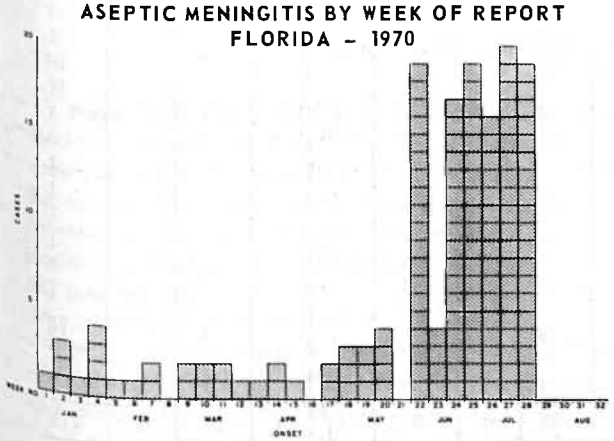

Table 3
Age and Sex Distribution of Aseptic Meningitis Cases
Florida – 1970

Age Group (Years)	Male	Female	Total
<1	19	14	33
1–4	27	10	37
5–9	20	17	37
10–14	12	5	17
15–19	4	4	8
≥20	5	4	9
Total	87	54	141

Age and sex were known for 141 patients (Table 3). Males accounted for 61.7 percent of the cases, and nearly one-half of the cases (49.6 percent) were in persons under 5 years of age.

To date, two patients have had Echovirus type 9 isolated from cerebrospinal fluid, and another has had Echovirus type 6 isolated from his stool.

(Reported by E. Charlton Prather, M.D., Chief, Bureau of Preventable Diseases, Nathan J. Schneider, Ph.D., Chief, and Elsie E. Buff, Virologist-in-Charge, Bureau of Laboratories, Florida Division of Health.)

ENTEROVIRUS SURVEILLANCE – January-June 1970

Since 1961, many state health departments have reported to the CDC all enteroviruses isolated in their laboratories, regardless of the clinical syndrome. This Enterovirus Surveillance Program was initially undertaken through the auspices of the Joint Liaison Committee of the Conference of Territorial Epidemiologists and the Association of State and Territorial Public Health Laboratory Directors. Since that time, CDC has received monthly reports from state epidemiologists or laboratory directors (depending on the reporting system established within a given state), regarding enteroviruses isolated in the state health department laboratory and, in some cases, isolations made in other virus diagnostic laboratories in the state. Results of these reports have been published periodically (MMWR, Vol. 19, No. 1). Prior to 1970, only the total number of isolations of a given virus were reported. For 1970 the reporting form has been revised to incorporate information regarding age, sex, date of onset, and clinical syndrome for persons from whom an enterovirus has been isolated.

During the first 6 months, reports concerning enteroviral isolations from 113 persons were received from 14 of the 53 state and territorial reporting areas. Areas reporting during this period were Connecticut, New York City, New York State, Pennsylvania, Michigan, Minnesota, Kansas, Virginia, North Carolina, Kentucky, Tennessee, Alabama,

Table 6
Enteroviruses Associated with Neurologic Illness* by Age Group and Virus type

Agent	Age Group					
	0-4	5-9	10-29	≥30	Unknown	Total
Coxsackie A1				1		1
A6	2					2
A7	1					1
A25					1	1
B1					1	1
B2			2		2	4
B3		1	1			2
B4	3		1			4
B5	1					1
B6					1	1
Echovirus type 3	1					1
4	1	2	2		3	8
6	2	7	4		1	14
9		1				1
14			1			1
25			2			2
Poliovirus type 1	3					3
3	1	1				2
Total	15	12	13	1	9	50

*Syndromes of aseptic meningitis, encephalitis, meningoencephalitis, or paralytic disease

Table 4
Enteroviruses Isolated by Reporting Area and Virus Type

Virus Type	Conn.	NYC	NYS	Pa.	Mich.	Minn.	Kan.	Va.	N.C.	Ky.	Tenn.	Ala.	La.	Tex.	Wyo.	Total
Coxsackie A1			1													1
A2									1							1
A5			1													1
A6					3											3
A7					1											1
A9							1							1		2
A16					3											3
A25														1		1
Coxsackie B1		2	1		1											4
B2		2			2			1								5
B3					2	2										4
B4		3							3					6		12
B5						2							1			3
B6		1														1
Echovirus 2													1			1
3					1											1
4	1				2									7		10
6	1	1	1		9		3		2							17
9									2			1		1		4
11							1						1	1		3
14								1								1
17						1										1
18							1									1
22			1													1
25							1							2		3
30				1												1
Poliovirus 1	4					1			3					4		12
2	5			1									1			7
3	2					1			4					1		8
Total	13	9	5	2	24	7	7	2	15	0	0	1	4	24	0	113

Table 5
Enteroviruses Isolated by Clinical Syndrome and Virus Type

Virus Type	Aseptic Meningitis	Encephalitis	Meningo-Encephalitis	Polio	Other	Unknown	Total
Coxsackie A1				1			1
A2						1	1
A5					1		1
A6	1	1			1		3
A7			1				1
A9						2	2
A16					2	1	3
A25		1					1
Coxsackie B1	1				3		4
B2	3	1				1	5
B3			2			2	4
B4	3	1			3	5	12
B5				1		2	3
B6	1						1
Echovirus 2					1		1
3	1						1
4	3	5				2	10
6	4	5	5			3	17
9			1		3		4
11					1	2	3
14	1						1
17						1	1
18						1	1
22					1		1
25	2					1	3
30					1		1
Poliovirus 1				3	6	3	12
2					4	3	7
3		2			4	2	8
Total	20	16	9	5	31	32	113

Louisiana, Texas, and Wyoming (Table 4). These reports summarize isolations made during the 6-month period and do not reflect dates of onset of the patient's clinical illness, which ranged from July 1969 to June 1970. Clinical syndrome and type of enteroviral isolation from the 113 patients are shown in Table 5. A syndrome of neurologic illness (aseptic meningitis, encephalitis, meningoencephalitis, or paralytic disease) was reported for 50 of the 113 reported cases. Although the numbers involved are small, it is of interest that some agents (e.g. echovirus type 6) were isolated more frequently from persons with neurologic illness than from persons with non-neurologic syndromes.

The 50 cases for which neurologic illness was associated with enteroviral isolation are shown by age group in Table 6. Of these 50 cases, 25 occurred in males and 19 in females, with sex unrecorded in six of the cases. Only one case occurred in a person over the age of 30 years; this patient was 38 years old.

(Reported by the Neurotropic Viral Diseases Unit, Epidemic Program, and the Enteric Virology Unit, Laboratory Division, CDC.)

INTERNATIONAL NOTES

SMALLPOX – Brazil *(1-2)*

Since 1967, Brazil has been the only country in the Americas endemic for smallpox, with all reported cases occurring in Brazil or as a result of importation from Brazil. Because of this, there has been increased interest in the progress of the smallpox eradication program which was initiated in 1962 in northeastern Brazil. In 1967 the existing program was intensified and expanded to include the more populous southeastern and southern states.

From 1962 to 1966, 6.4 million vaccinations were registered (Table 7). In 1967, the first full year of expanded operation, 6.6 million vaccinations were performed. This total was almost doubled in 1968 when 12.2 million vaccinations were recorded. In 1969 almost 21 million persons were vaccinated. In 1970 as of June, 20.9 million persons have been vaccinated, bringing the cumulative total of persons registered as vaccinated to 67 million. Thus 70 percent of the estimated Brazilian population has been vaccinated.

The systematic vaccination program has been completed in eight of the nine states of the northeastern region and in Espirito Santo, Rio de Janeiro, Sao Paulo, Parana,

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SMALLPOX – *(Continued from page 285)*

Goias, and the Federal District (Brasilia) (Figure 3). Vaccination programs are in progress in Bahia, Minas Gerais, Santa Catarina, and Rio Grande do Sul. Vaccination should commence in Mato Grosso and Para in 1970, with the five remaining areas (Amazonia) scheduled for 1971.

An assessment survey method, developed and field tested in February 1968, has been in operation since April 1968 *(3)*. A team of two assessors visits each urban locality and a sample of rural localities in each municipio (county), 7 to 14 days after completion of vaccination. In a random sample of households, vaccination coverage is ascertained for all residents, and all primary vaccinees under 5 years of age are examined to determine the primary vaccination take rate.

An increased emphasis on surveillance and epidemic investigation contributed to a marked increase in the number of cases reported in 1969 (Figure 4). This increase was confined to those states in which the vaccination campaign has not yet been completed or had not been initiated (Table 8). In the 12 states where the attack phase had been completed by June 1969, there was an 80 percent decrease in the number of cases reported compared with the previous year. This decrease contrasts with the 99 percent increase in notified cases in the other 15 states.

In the northeastern region (excluding Bahia, where the program is still in progress in 1970), an abrupt drop in smallpox was seen in 1967, although the annual seasonal increase was still evident (Figure 5). In 1968 and 1969 the incidence declined further and no seasonal increase

Figure 3
STATUS OF SMALLPOX VACCINATION PROGRAM
BRAZIL – JUNE 1970

Figure 4
REPORTED SMALLPOX CASES BY FOUR-WEEK PERIOD
BRAZIL – 1967, 1968, AND 1969

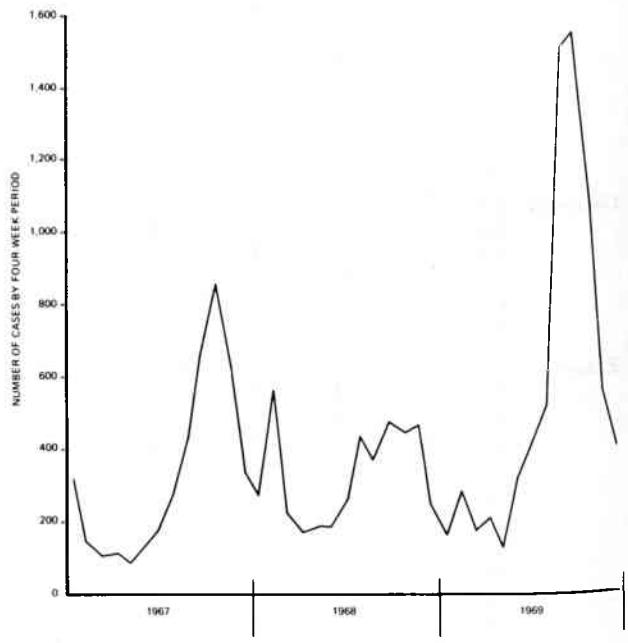
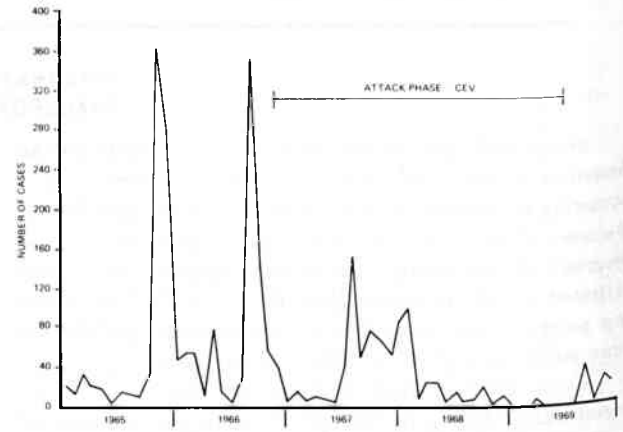


Table 7
Number of Smallpox Vaccinations by Year in the Systematic Vaccination Program – Brazil, 1962-June 1970

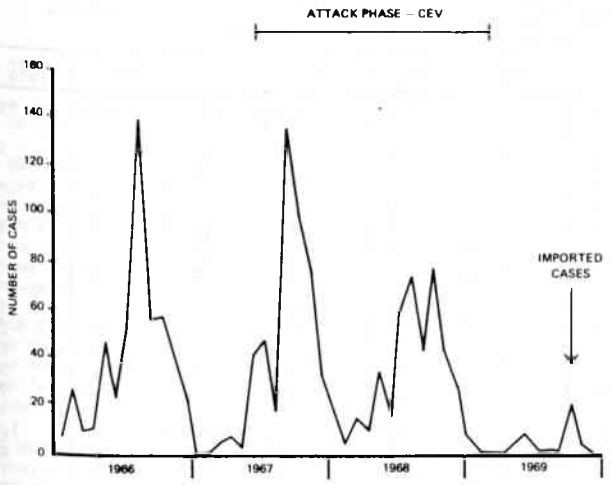
Year(s)	Number of Vaccinations (Millions)	
	Number	Cumulative
1962-66	6.4	6.4
1967	6.6	13.0
1968	12.2	25.2
1969	20.9	46.1
1970 through June	20.9	67.0

Figure 5
SMALLPOX CASES BY MONTH OF REPORT
NORTHEAST REGION* – BRAZIL – 1965-1969



*Excluding the State of Bahia

Figure 6
SMALLPOX CASES BY MONTH OF REPORT
STATES OF RIO DE JANEIRO AND GOIAS AND THE FEDERAL DISTRICT – BRAZIL – 1966-1969



was observed. In the states of Rio de Janeiro, Goias, and the Federal District, smallpox incidence decreased in 1968 although a seasonal increase occurred as in previous years (Figure 6). In 1969, 21 imported cases were recorded; however, indigenous smallpox had disappeared.

In 1969, 74 percent of cases occurred in individuals under 15 years of age and 93 percent were under 30 years of age. Since 1956, the case fatality rate has varied annually from 0.5 to 3.3 percent. In addition to the epidemiologic data, laboratory tests have demonstrated that variola minor has been the only form of variola present in Brazil in recent years.

Table 8
Reported Smallpox – Brazil, 1969 and 1968

Campaign Status 1969	Number of States	Cases Reported		
		1969	1968	Difference (Percent)
Completed	12	146	715	−79.6
Not Completed	15	7,261	3,657	+98.6
Total	27	7,407	4,372	+69.4

Based on investigation of notified cases, reporting is estimated to have been no more than 2 to 3 percent complete prior to 1969. The efficacy of smallpox vaccine in preventing smallpox was appraised utilizing data from 22 investigations with more than 2,000 cases. The reduction in expected cases among the vaccinated was 94 percent.

(Reported by the Smallpox Eradication Program, Center for Disease Control.)

References
(1) Ministerio da Saude, Brasil: Boletim Semanal da Campanha de Erradicacao da Variola 4(1,4,20, and 26), 1970
(2) World Health Organization Weekly Epidemiological Record 45(19):209-221 and 45(3):17-27, 1970
(3) Lavigne de Lemos A, Morris L.: Avaliacao na Campanha de Erradicacao da Variola. Bras Estat 30(119):300-302, 1969 (Por)

QUARANTINE MEASURES

Recently a booklet, Vaccination Certificate Requirements for International Travel, was published as a supplement to the Morbidity and Mortality Weekly Report, Vol. 19, No. 21, for the week ending May 30, 1970. This booklet, designed primarily for the use of health departments and physicians, contains immunization requirements of individual countries.

The Foreign Quarantine Program, CDC, has prepared a new booklet entitled Health Information for International Travel (PHS Publication No. 2045) which provides detailed information on required and recommended immunizations for travel to most countries. PHS Publication No. 2045 replaces the booklet Immunization Information for International Travel (PHS Publication No. 384) and is available from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, at 10 cents per copy or $6.50 per 100 copies.

(Reported by the Foreign Quarantine Program, CDC.)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED
JULY 25, 1970 AND JULY 19, 1969 (29th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post Infectious	Serum	Infectious			
	1970	1970	1970	1970	1969	1970	1970	1970	1969	1970	Cum. 1970
UNITED STATES.....	169	3	1	38	24	12	134	1,050	823	40	1,925
NEW ENGLAND.....	3	–	–	1	–	–	–	78	66	1	58
Maine.....	–	–	–	–	–	–	–	9	2	–	5
New Hampshire*.....	–	–	–	–	–	–	–	5	3	–	3
Vermont.....	–	–	–	–	–	–	–	–	1	–	3
Massachusetts.....	2	–	–	–	–	–	–	42	30	1	30
Rhode Island.....	1	–	–	–	–	–	–	10	21	–	9
Connecticut.....	–	–	–	1	1	–	–	12	9	–	8
MIDDLE ATLANTIC.....	6	–	–	1	–	2	38	186	175	3	213
New York City.....	4	–	–	–	–	–	21	63	40	–	26
New York, Up-State...	2	–	–	–	–	2	3	26	36	–	62
New Jersey.....	–	–	–	–	–	–	10	38	38	3	54
Pennsylvania.....	–	–	–	1	–	–	4	59	61	–	71
EAST NORTH CENTRAL.....	10	–	–	14	10	1	40	158	103	1	104
Ohio.....	5	–	–	6	6	–	1	29	25	–	22
Indiana.....	1	–	–	–	–	–	–	7	5	–	10
Illinois.....	2	–	–	–	1	1	6	24	24	–	28
Michigan.....	2	–	–	8	3	–	33	92	46	1	44
Wisconsin.....	–	–	–	–	–	–	–	6	3	–	–
WEST NORTH CENTRAL.....	2	1	–	1	1	–	2	38	46	4	152
Minnesota.....	2	–	–	–	–	–	–	5	5	–	18
Iowa*.....	–	1	–	–	–	–	–	6	3	4	14
Missouri.....	–	–	–	–	–	–	–	11	20	–	17
North Dakota.....	–	–	–	–	1	–	–	1	1	–	1
South Dakota.....	–	–	–	–	–	–	–	1	1	–	2
Nebraska.....	–	–	–	–	–	–	–	4	12	–	2
Kansas.....	–	–	–	1	–	–	2	10	4	–	98
SOUTH ATLANTIC.....	71	–	–	10	2	4	9	126	47	10	364
Delaware.....	–	–	–	–	–	–	–	–	1	–	1
Maryland.....	1	–	–	–	–	–	4	19	15	1	36
Dist. of Columbia....	20	–	–	–	–	–	–	3	–	–	2
Virginia.....	4	–	–	1	2	–	–	33	11	3	45
West Virginia.....	–	–	–	–	–	–	–	1	1	–	6
North Carolina.....	1	–	–	1	–	–	4	24	8	2	147
South Carolina.....	1	–	–	2	–	–	–	8	5	1	31
Georgia.....	–	–	–	–	–	–	–	14	6	2	62
Florida.....	44	–	–	6	–	4	1	24	–	1	34
EAST SOUTH CENTRAL.....	6	–	–	3	1	–	–	62	89	2	143
Kentucky.....	–	–	–	2	–	–	–	25	56	–	119
Tennessee.....	4	–	–	1	1	–	–	29	8	–	–
Alabama.....	1	–	–	–	–	–	–	5	13	1	14
Mississippi.....	1	–	–	–	–	–	–	3	12	1	10
WEST SOUTH CENTRAL.....	13	2	–	2	4	–	3	66	58	3	349
Arkansas.....	1	–	–	–	–	–	–	4	–	1	7
Louisiana.....	6	–	–	–	4	–	2	15	12	–	23
Oklahoma*.....	–	2	–	2	–	–	–	–	4	2	57
Texas*.....	6	–	–	–	–	–	1	47	42	–	262
MOUNTAIN.....	1	–	–	–	–	1	8	76	49	–	154
Montana.....	1	–	–	–	–	1	–	2	2	–	6
Idaho.....	–	–	–	–	–	–	–	2	1	–	3
Wyoming.....	–	–	–	–	–	–	–	1	–	–	–
Colorado.....	–	–	–	–	–	–	3	39	25	–	133
New Mexico.....	–	–	–	–	–	–	1	8	4	–	4
Arizona*.....	–	–	–	–	–	–	2	17	12	–	6
Utah*.....	–	–	–	–	–	–	2	6	5	–	2
Nevada.....	–	–	–	–	–	–	–	1	–	–	–
PACIFIC.....	57	–	1	6	5	4	34	260	190	16	388
Washington.....	–	–	–	–	–	–	–	17	4	–	33
Oregon.....	–	–	1	1	–	–	2	19	13	–	14
California.....	37	–	–	4	5	4	32	202	171	7	249
Alaska.....	17	–	–	–	–	–	–	1	–	–	–
Hawaii.....	3	–	–	1	–	–	–	21	2	9	92
Puerto Rico*.....	–	–	–	–	–	–	1	7	20	–	7
Virgin Islands.....	–	–	–	–	–	–	–	–	–	–	–

*Delayed Reports: Hepatitis, serum: N.J. delete 1, Utah delete 1, P.R. 1
Hepatitis, infectious: N.J. delete 4, Okla. 1, P.R. 2
Malaria: N.H. 2, Iowa 1, Tex. delete 1, Ariz. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JULY 25, 1970 AND JULY 19, 1969 (29th WEEK) – CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
		Cumulative			Cumulative			Cum.	Total	Paralytic	
	1970	1970	1969	1970	1970	1969	1970	1970	1970	1970	Cum. 1970
UNITED STATES.....	476	37,838	19,049	52	1,643	2,132	797	70,946	–	–	15
NEW ENGLAND.....	27	865	1,018	1	73	70	70	8,571	–	–	–
Maine.....	5	193	5	–	3	6	1	655	–	–	–
New Hampshire.*.....	–	49	237	1	7	2	1	315	–	–	–
Vermont.....	–	8	3	–	6	–	–	573	–	–	–
Massachusetts.....	12	418	180	–	32	31	23	2,688	–	–	–
Rhode Island.....	8	118	22	–	5	6	24	1,420	–	–	–
Connecticut.....	2	79	571	–	20	25	21	2,920	–	–	–
MIDDLE ATLANTIC.....	95	4,592	7,167	15	293	339	131	7,134	–	–	–
New York City.....	15	807	4,736	3	74	69	53	2,500	–	–	–
New York, Up-State...	2	217	573	1	54	56	NN	NN	–	–	–
New Jersey.....	14	1,646	846	10	114	141	57	2,018	–	–	–
Pennsylvania.....	64	1,922	1,012	1	51	73	21	2,616	–	–	–
EAST NORTH CENTRAL.....	129	9,338	1,950	–	188	296	172	18,749	–	–	1
Ohio.....	35	3,690	348	–	75	113	59	3,352	–	–	–
Indiana.....	2	257	453	–	18	34	28	1,698	–	–	–
Illinois.....	14	2,994	418	–	42	41	16	1,648	–	–	–
Michigan.....	58	1,551	214	–	46	90	51	4,714	–	–	–
Wisconsin..*.....	20	846	517	–	7	18	18	7,337	–	–	1
WEST NORTH CENTRAL.....	18	3,731	494	7	85	112	16	3,647	–	–	1
Minnesota.....	–	36	5	–	12	25	3	339	–	–	–
Iowa.*.....	4	1,046	324	–	11	15	3	2,260	–	–	–
Missouri.....	12	1,247	16	5	51	48	6	247	–	–	1
North Dakota.....	1	315	10	–	3	–	1	255	–	–	–
South Dakota.....	–	91	3	–	–	1	–	36	–	–	–
Nebraska.....	–	923	132	2	5	9	3	374	–	–	–
Kansas.....	1	73	4	–	3	14	–	136	–	–	–
SOUTH ATLANTIC.....	59	6,942	2,380	10	343	379	141	8,000	–	–	1
Delaware.....	1	256	373	–	3	5	5	265	–	–	–
Maryland.....	10	1,358	63	–	33	35	18	846	–	–	–
Dist. of Columbia....	–	342	–	–	1	8	2	182	–	–	–
Virginia.....	20	1,936	867	3	35	48	43	1,858	–	–	–
West Virginia.*.....	3	286	166	–	7	18	41	1,952	–	–	1
North Carolina.....	11	819	303	2	69	67	NN	NN	–	–	–
South Carolina.....	4	547	108	2	44	53	8	778	–	–	–
Georgia.....	1	13	1	–	30	64	–	–	–	–	–
Florida.....	9	1,385	499	3	121	81	24	2,119	–	–	–
EAST SOUTH CENTRAL.....	43	1,210	102	4	127	136	39	4,045	–	–	–
Kentucky.....	41	687	60	2	45	49	14	1,438	–	–	–
Tennessee.....	2	348	17	2	54	51	24	2,331	–	–	–
Alabama.....	–	87	3	–	21	21	1	230	–	–	–
Mississippi.....	–	88	22	–	7	15	–	46	–	–	–
WEST SOUTH CENTRAL.....	50	7,306	4,230	4	226	285	56	6,834	–	–	12
Arkansas.....	–	29	16	1	19	28	4	116	–	–	–
Louisiana.....	–	89	120	1	58	74	1	25	–	–	–
Oklahoma..*.....	4	438	136	–	18	29	6	2,388	–	–	–
Texas.....	46	6,750	3,958	2	131	154	45	4,305	–	–	12
MOUNTAIN.....	21	1,443	750	1	30	37	46	3,192	–	–	–
Montana.....	6	40	16	–	1	5	17	654	–	–	–
Idaho.....	–	32	88	–	5	6	3	86	–	–	–
Wyoming.....	–	11	–	–	1	–	–	30	–	–	–
Colorado.....	5	168	115	1	8	6	8	1,037	–	–	–
New Mexico.....	4	183	226	–	–	6	11	616	–	–	–
Arizona.....	6	956	297	–	13	10	7	649	–	–	–
Utah.....	–	32	7	–	2	2	–	120	–	–	–
Nevada.....	–	21	1	–	–	2	–	–	–	–	–
PACIFIC.....	34	2,411	958	10	278	478	126	10,774	–	–	–
Washington.....	1	495	57	1	38	50	5	4,113	–	–	–
Oregon.....	–	214	195	1	21	11	13	934	–	–	–
California.....	22	1,392	671	7	217	396	62	4,373	–	–	–
Alaska.....	–	134	8	–	–	11	7	375	–	–	–
Hawaii.....	11	176	27	1	2	10	39	979	–	–	–
Puerto Rico.....	12	857	1,224	–	4	15	4	663	–	–	–
Virgin Islands.....	–	6	36	–	1	–	–	1	–	–	–

*Delayed Reports: Measles: Iowa 31, W. Va. delete 1, Okla. 8
Meningococcal infections: N.H. 1
Mumps: N.H. 1, Okla. 5
Poliomyelitis, paralytic: Wis. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JULY 25, 1970 AND JULY 19, 1969 (29th WEEK) – CONTINUED

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970
UNITED STATES.....	393	47,542	1	61	7	68	7	143	22	175	60	1,776
NEW ENGLAND.....	29	2,305	–	3	–	–	–	5	–	–	3	64
Maine.....	2	379	–	–	–	–	–	–	–	–	1	22
New Hampshire.....	–	150	–	–	–	–	–	–	–	–	–	–
Vermont.....	–	49	–	–	–	–	–	–	–	–	1	39
Massachusetts.....	17	1,100	–	2	–	–	–	3	–	–	–	–
Rhode Island.....	7	88	–	–	–	–	–	–	–	–	–	1
Connecticut.....	3	539	–	1	–	–	–	2	–	–	1	2
MIDDLE ATLANTIC.....	50	3,815	–	5	–	1	3	37	–	8	6	168
New York City.....	12	536	–	2	–	–	1	11	–	–	–	–
New York, Up-State..	3	384	–	–	–	1	2	12	–	4	5	157
New Jersey.....	30	839	–	2	–	–	–	6	–	2	–	–
Pennsylvania.....	5	2,056	–	1	–	–	–	8	–	2	1	11
EAST NORTH CENTRAL....	86	9,856	–	13	1	18	1	20	–	–	6	136
Ohio.....	15	1,985	–	1	–	2	1	8	–	–	2	39
Indiana.....	14	1,746	–	5	–	13	–	1	–	–	2	10
Illinois.....	10	1,670	–	3	–	2	–	3	–	–	1	46
Michigan.....	27	2,510	–	4	–	–	–	7	–	–	1	12
Wisconsin.....	20	1,945	–	–	1	1	–	1	–	–	–	29
WEST NORTH CENTRAL....	15	3,218	–	4	1	14	–	5	–	1	14	331
Minnesota.....	–	116	–	1	–	–	–	1	–	–	5	62
Iowa.....	1	1,986	–	1	–	–	–	1	–	–	1	60
Missouri.....	14	395	–	1	1	12	–	1	–	1	–	58
North Dakota.....	–	124	–	–	–	1	–	–	–	–	–	25
South Dakota.*.....	–	1	–	1	–	1	–	–	–	–	–	60
Nebraska.....	–	541	–	–	–	–	–	2	–	–	–	6
Kansas.....	–	55	–	–	–	–	–	–	–	–	8	60
SOUTH ATLANTIC.....	35	6,056	1	12	–	8	3	22	18	126	14	369
Delaware.....	–	41	–	–	–	–	–	–	–	4	–	–
Maryland.....	1	307	–	–	–	–	–	6	1	9	–	1
Dist. of Columbia...	1	18	–	1	–	–	–	–	–	–	–	–
Virginia.....	7	672	–	–	–	1	–	2	6	32	5	169
West Virginia.....	11	1,218	–	–	–	–	–	–	2	4	2	87
North Carolina.....	–	37	1	1	–	4	–	2	8	46	–	1
South Carolina.....	3	606	–	1	–	–	–	–	1	27	–	–
Georgia.....	–	–	–	1	–	2	–	7	–	4	4	61
Florida.....	12	3,157	–	8	–	1	3	5	–	–	3	50
EAST SOUTH CENTRAL....	42	2,482	–	4	–	2	–	9	3	17	3	136
Kentucky.....	10	889	–	–	–	1	–	1	1	1	3	80
Tennessee.....	32	1,261	–	1	–	1	–	5	2	10	–	38
Alabama.....	–	254	–	3	–	–	–	3	–	3	–	18
Mississippi.....	–	78	–	–	–	–	–	–	–	3	–	–
WEST SOUTH CENTRAL....	47	8,440	–	11	3	16	–	11	–	17	9	321
Arkansas.*.....	1	34	–	3	3	8	–	2	–	5	1	58
Louisiana.....	–	146	–	2	–	2	–	1	–	–	–	47
Oklahoma.....	1	806	–	–	–	4	–	–	–	11	4	66
Texas.....	45	7,454	–	6	–	2	–	8	–	1	4	150
MOUNTAIN.....	24	1,866	–	–	1	5	–	8	1	5	1	55
Montana.....	1	301	–	–	–	–	–	1	1	1	–	1
Idaho.....	1	174	–	–	–	–	–	–	–	1	–	–
Wyoming.....	–	133	–	–	–	–	–	–	–	1	–	1
Colorado.....	2	371	–	–	–	–	–	2	–	2	–	30
New Mexico.....	14	194	–	–	–	–	–	5	–	–	–	9
Arizona.....	4	535	–	–	–	–	–	–	–	–	–	11
Utah.....	2	158	–	–	1	5	–	–	–	–	–	–
Nevada.....	–	–	–	–	–	–	–	–	–	–	1	3
PACIFIC.....	65	9,504	–	9	1	4	–	26	–	1	4	196
Washington.....	–	4,574	–	2	1	1	–	3	–	–	1	2
Oregon.....	22	783	–	3	–	–	–	–	–	–	–	1
California.....	30	3,856	–	4	–	3	–	20	–	1	3	193
Alaska.....	4	93	–	–	–	–	–	2	–	–	–	–
Hawaii.....	9	198	–	–	–	–	–	1	–	–	–	–
Puerto Rico.....	–	26	–	5	–	–	–	3	–	–	2	32
Virgin Islands.....	–	–	–	–	–	–	–	–	–	–	–	–

* Delayed Reports: Typhoid fever: Ark. delete 1
Rabies in animals: S. Dak. 43

Week No. 29

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JULY 25, 1970

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

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
NEW ENGLAND:	636	349	46	29
Boston, Mass.	202	96	12	14
Bridgeport, Conn.	45	28	4	2
Cambridge, Mass.	20	12	8	1
Fall River, Mass.	20	13	–	–
Hartford, Conn.	53	21	2	2
Lowell, Mass.	14	10	1	–
Lynn, Mass.	17	12	1	–
New Bedford, Mass.	14	12	4	–
New Haven, Conn.	49	24	–	5
Providence, R. I.	52	25	6	1
Somerville, Mass.	12	10	1	–
Springfield, Mass.	49	29	5	1
Waterbury, Conn.	29	18	–	2
Worcester, Mass.	60	39	2	1
MIDDLE ATLANTIC:	3,229	1,841	125	183
Albany, N. Y.	45	23	1	3
Allentown, Pa.	40	23	2	1
Buffalo, N. Y.	160	93	1	9
Camden, N. J.	38	19	3	5
Elizabeth, N. J.	28	12	2	1
Erie, Pa.	43	27	1	5
Jersey City, N. J.	78	49	3	5
Newark, N. J.	101	31	4	26
New York City, N. Y.†	1,630	947	50	79
Paterson, N. J.	55	37	11	3
Philadelphia, Pa.	396	220	7	19
Pittsburgh, Pa.	202	117	13	7
Reading, Pa.	52	33	–	–
Rochester, N. Y.	106	61	14	11
Schenectady, N. Y.	27	16	2	1
Scranton, Pa.	41	25	2	–
Syracuse, N. Y.	80	46	1	4
Trenton, N. J.	48	26	2	3
Utica, N. Y.	32	19	2	–
Yonkers, N. Y.	27	17	4	1
EAST NORTH CENTRAL:	2,476	1,398	58	127
Akron, Ohio	61	32	–	7
Canton, Ohio	25	18	–	–
Chicago, Ill.	703	380	14	43
Cincinnati, Ohio	194	112	3	9
Cleveland, Ohio	195	118	3	9
Columbus, Ohio	92	45	–	7
Dayton, Ohio	67	42	3	2
Detroit, Mich.	349	184	10	18
Evansville, Ind.	44	29	1	2
Flint, Mich.	49	19	–	5
Fort Wayne, Ind.	31	20	1	2
Gary, Ind.	26	16	2	–
Grand Rapids, Mich.	44	25	5	2
Indianapolis, Ind.	152	78	3	11
Madison, Wis.	39	21	2	1
Milwaukee, Wis.	138	87	3	3
Peoria, Ill.	47	27	–	1
Rockford, Ill.	37	24	1	1
South Bend, Ind.	25	14	3	1
Toledo, Ohio	105	76	3	1
Youngstown, Ohio	53	31	1	2
WEST NORTH CENTRAL:	786	474	20	44
Des Moines, Iowa	43	28	–	2
Duluth, Minn.	23	14	3	1
Kansas City, Kans.	36	15	1	5
Kansas City, Mo.	116	68	–	10
Lincoln, Nebr.	29	18	–	1
Minneapolis, Minn.	109	73	3	6
Omaha, Nebr.	61	39	1	2
St. Louis, Mo.	230	134	2	10
St. Paul, Minn.	78	53	3	3
Wichita, Kans.	61	32	7	4
Las Vegas, Nev.*	9	5	–	–

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
SOUTH ATLANTIC:	1,175	567	45	75
Atlanta, Ga.	138	64	4	8
Baltimore, Md.	210	105	3	17
Charlotte, N. C.	49	16	1	4
Jacksonville, Fla.	84	37	4	12
Miami, Fla.	105	45	2	8
Norfolk, Va.	50	24	3	3
Richmond, Va.	93	45	6	2
Savannah, Ga.	28	11	1	2
St. Petersburg, Fla.	84	68	2	–
Tampa, Fla.	75	34	8	6
Washington, D. C.	215	100	9	9
Wilmington, Del.	44	18	2	4
EAST SOUTH CENTRAL:	654	352	25	39
Birmingham, Ala.	95	55	2	6
Chattanooga, Tenn.	71	41	2	6
Knoxville, Tenn.	33	19	1	–
Louisville, Ky.	117	62	10	7
Memphis, Tenn.	153	80	5	9
Mobile, Ala.	50	30	3	2
Montgomery, Ala.	49	21	1	3
Nashville, Tenn.	86	44	1	6
WEST SOUTH CENTRAL:	1,078	527	31	62
Austin, Tex.	35	14	1	4
Baton Rouge, La.	41	24	2	–
Corpus Christi, Tex.	25	9	–	5
Dallas, Tex.	151	66	3	21
El Paso, Tex.	31	15	2	4
Fort Worth, Tex.	88	47	3	5
Houston, Tex.	223	107	5	–
Little Rock, Ark.	52	22	4	4
New Orleans, La.	142	60	–	5
Oklahoma City, Okla.	65	31	2	–
San Antonio, Tex.	110	63	2	9
Shreveport, La.	55	31	2	1
Tulsa, Okla.	60	38	5	4
MOUNTAIN:	431	257	21	16
Albuquerque, N. Mex.	40	22	7	1
Colorado Springs, Colo.	37	17	2	4
Denver, Colo.	126	81	4	3
Ogden, Utah	10	7	3	–
Phoenix, Ariz.	106	65	3	6
Pueblo, Colo.	19	14	2	–
Salt Lake City, Utah	48	27	–	2
Tucson, Ariz.	45	24	–	–
PACIFIC:	1,594	930	29	55
Berkeley, Calif.	21	14	–	–
Fresno, Calif.	52	30	1	2
Glendale, Calif.	22	13	–	–
Honolulu, Hawaii	41	18	1	3
Long Beach, Calif.	80	55	–	2
Los Angeles, Calif.	513	314	11	9
Oakland, Calif.	71	39	1	6
Pasadena, Calif.	35	19	1	1
Portland, Oreg.	134	87	3	4
Sacramento, Calif.	62	37	–	4
San Diego, Calif.	94	47	2	2
San Francisco, Calif.	175	92	1	2
San Jose, Calif.	59	34	2	3
Seattle, Wash.	138	73	4	12
Spokane, Wash.	45	24	2	5
Tacoma, Wash.	52	34	–	–
Total	12,059	6,695	400	630
Expected Number	12,092	6,903	341	500
Cumulative Total (includes reported corrections for previous weeks)	382,451	218,850	15,645	17,830

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

† Delayed Report For Week Ended July 18, 1970

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 21,000 IS PUBLISHED AT THE CENTER FOR DISEASE CONTROL, ATLANTA, GEORGIA.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE CENTER FOR DISEASE CONTROL WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CENTER FOR DISEASE CONTROL. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

CENTER FOR DISEASE CONTROL
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL 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.