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MORBIDITY AND MORTALITY WEEKLY REPORT

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Surveillance Summary

Abortion Surveillance — United States, 1975

In 1975 the 50 states and the District of Columbia reported 854,853 legal abortions to CDC, an increase of 12% over 1974. The nationwide abortion ratio increased by 12% from 242 abortions per 1,000 live births in 1974 to 272 in 1975, representing more than 1 legal abortion for every 4 live births. The nationwide abortion rate rose from 17 abortions per 1,000 women aged 15-44 in 1974 to

18 per 1,000 in 1975, an increase of 6%. The redistribution of legal abortions into states which had restrictive laws before 1973 continued in 1975. Concurrently, the trend noted in 1973 toward performing abortions in a woman's state of residence continued in 1975, with 89% of women undergoing abortion in their home state, as compared with 87% in 1974 and 75% in 1973 (Table 1).

TABLE 1. Characteristics of women receiving abortions, United States, 1972-1975

CHARACTERISTICS	% DISTRIBUTION*			
	1972	1973	1974	1975
Residence				
Abortion in-state	56.2	74.8	86.6	89.2
Abortion out-of-state	43.8	25.2	13.4	10.8
Age (years)				
<19	32.6	32.7	32.7	33.1
20-24	32.5	32.0	31.8	31.9
≥25	34.9	35.3	35.6	35.0
Race				
White	77.0	72.5	69.7	67.8
Black and others	23.0	27.5	30.3	32.2
Marital Status				
Married	29.7	27.4	27.4	26.1
Unmarried	70.3	72.6	72.6	73.9
Number of Living Children				
0	49.4	48.6	47.8	47.1
1	18.2	18.8	19.6	20.2
2	13.3	14.2	14.8	15.5
3	8.7	8.7	8.7	8.7
4	5.0	4.8	4.5	4.4
≥5	5.4	4.9	4.5	4.2
Type of Procedure				
Curettage	88.6	88.4	89.7	90.9
Suction	65.2	74.9	77.5	82.6
Sharp	23.4	13.5	12.3	8.4
Intrauterine instillation	10.4	10.4	7.8	6.2
Hysterotomy/hysterectomy	0.6	0.7	0.6	0.4
Other	0.5	0.6	1.9	2.4
Weeks of Gestation				
<8	34.0	36.1	42.6	44.6
9-10	30.7	29.4	28.7	28.4
11-12	17.5	17.9	15.4	14.9
13-15	8.4	6.9	5.5	5.0
16-20	8.2	8.0	6.5	6.1
>21	1.3	1.7	1.2	1.0

*Excludes unknowns

Women obtaining legal abortions in 1975 tended to be young, white, unmarried, of low parity, and pregnant 12 menstrual weeks or less at the time of the procedure (Table 1). Suction curettage again was the predominant abortion method in 1975, accounting for 83% of all procedures, followed by sharp curettage (8%), intrauterine instillations (6%), other procedures (2%), and major abdominal operations (0.4%).

The trend in declining abortion deaths continued into 1975. Forty-four women died that year, compared with 52 in 1974, 56 in 1973, and 88 in 1972. Legal abortions accounted for 27 deaths, illegal abortions 4 deaths, and spontaneous abortions 12 deaths; 1 death was classified as unknown. The death-to-case rate for legal abortions fell from 3.5 deaths per 100,000 abortions in 1974 to 3.2 in 1975.

Of the 17,467 abortions performed at ≥ 13 menstrual weeks' gestation and reported through the Joint Program for the Study of Abortion/CDC, dilatation and evacuation (D&E) was the safest of the 3 predominant midtrimester methods. In the 13- to 20-week periods, intraamniotic instillation of hypertonic saline had a significantly higher major complication rate than D&E (1.78 vs 0.69 per 100 cases; $p < .001$). In the 13- to 24-week period intraamniotic instillation of prostaglandin F_{2α} (PGF_{2α}) had a significantly higher major complication rate than saline instillation (2.9 vs 1.81 per 100 cases; $p < .01$).

Reported by the Statistical Services Br and the Abortion Surveillance Br, Family Planning Evaluation Div, Bur of Epidemiology, CDC.

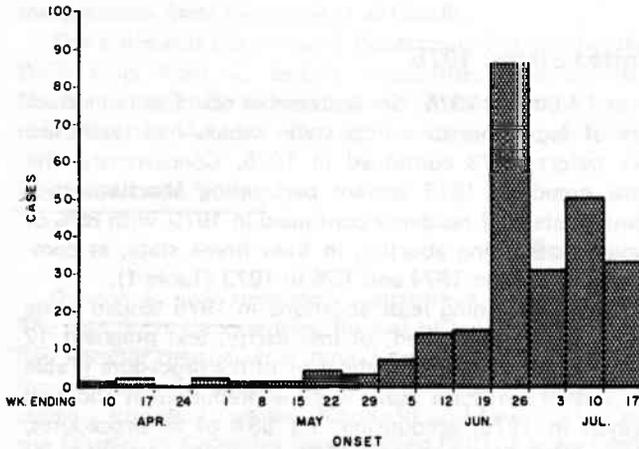
▲ A copy of the report from which these data were derived is available on request from the Center for Disease Control, Attn: Chief, Abortion Surveillance Br, Family Planning Evaluation Div, Bur of Epidemiology, Atlanta, Georgia 30333.

Epidemiologic Notes and Reports

Rubella – Hawaii

Over 250 cases of rubella have been reported to the Hawaii State Health Department from April 10 through July 17; most of these occurred in June and July (Figure 1). Approximately 95% of the cases are in persons from the Honolulu area of the island of Oahu; however, cases have also been reported from at least 3 of the other islands.

FIGURE 1. 250 cases of rubella by week of onset, Hawaii, April-July, 1977



Data on age and sex, available for 239 of these cases, indicate that the majority of cases reported to date have been in young adults. Cases are evenly divided between males and females (Table 2). Preliminary investigation suggests a possible common exposure, since approximately 75% of cases with onset from June 20 to June 26 had visited a popular Honolulu night club.

TABLE 2. 239 cases of rubella by age and sex, Hawaii, June and July 1977

Age Group	Male	Female	Total	%
0-4	8	5	13	5.4
5-9	2	0	2	0.8
10-14	0	0	0	0.0
15-19	13	19	32	13.4
20-24	60	59	119	49.8
25-29	22	24	46	19.2
30-34	4	5	9	3.8
35-39	3	1	4	1.7
40-44	2	3	5	2.1
45+	9	0	9	3.8
	123	116	239	100.0

Special rubella vaccination clinics have been set up at several sites in the Honolulu area and on the other islands. Adult women are being offered the vaccine after approval. (Continued on page 247)

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

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

DISEASE	28th WEEK ENDING		MEDIAN 1972-1976	CUMULATIVE, FIRST 28 WEEKS		
	July 23 1977	July 24 1976		July 23, 1977	July 24, 1976	MEDIAN 1972-1976
Aseptic meningitis	140	75	88	1,454	1,170	1,212
Brucellosis	8	9	6	111	147	104
Chickenpox	891	938	---	155,263	144,143	---
Diphtheria	-	2	2	52	119	119
Encephalitis						
{ Primary	23	22	22	369	466	468
{ Post-infectious	2	5	7	115	169	172
Hepatitis, Viral						
{ Type B	365	343	215	9,024	8,271	5,186
{ Type A	584	623	823	17,369	19,405	23,860
{ Type unspecified	186	179	---	5,131	4,805	---
Malaria	16	19	19	260	230	209
Measles (rubeola)	512	289	271	51,154	33,146	23,240
Meningococcal infections, total	19	34	26	1,129	1,002	926
Civilian	19	32	26	1,123	986	905
Military	-	2	1	6	16	23
Mumps	138	345	558	14,697	30,911	44,277
Pertussis	36	18	---	439	510	---
Rubella (German measles)	406	157	122	17,931	10,259	14,274
Tetanus	2	3	3	29	27	44
Tuberculosis	585	740	---	16,918	18,603	---
Tularemia	1	5	5	66	79	79
Typhoid fever	7	13	10	194	207	206
Typhus, tick-borne (Rky. Mt. spotted fever)	74	48	47	601	411	396
Venereal Diseases:						
Gonorrhea						
{ Civilian	22,335	20,872	---	529,695	543,553	---
{ Military	519	401	---	14,982	15,758	---
Syphilis, primary and secondary	390	471	---	11,504	13,531	---
{ Civilian	2	7	---	170	192	---
{ Military	388	464	---	11,334	13,339	---
Rabies in animals	58	81	63	1,604	1,543	1,639

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
Anthrax	-	Poliomyelitis, total	6
Botulism	72	Paralytic	5
Congenital rubella syndrome	8	Psittacosis: Calif. 1	41
Leprosy: Mo. 1	69	Rabies in man	1
Leptospirosis	25	Trichinosis: Ups. N.Y. 1	52
Plague	5	Typhus, murine: Tex. 4	38

Table III
Cases of Specified Notifiable Diseases: United States
Weeks Ending July 23, 1977 and July 24, 1976 - 29th 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	140	8	891	-	52	23	22	2	365	584	186	16	260
NEW ENGLAND	9	-	126	-	-	1	-	-	20	21	8	-	11
Maine	-	-	13	-	-	-	-	-	1	-	-	-	-
New Hampshire*	-	-	3	-	-	-	-	-	-	-	-	-	1
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	1
Massachusetts	2	-	65	-	-	1	-	-	1	5	5	-	2
Rhode Island	-	-	20	-	-	-	-	-	6	8	-	-	3
Connecticut	7	-	25	-	-	-	-	-	12	8	3	-	4
MIDDLE ATLANTIC	9	-	206	-	5	3	6	1	49	79	30	1	63
Upstate New York	-	-	142	-	-	-	1	-	3	11	4	-	15
New York City	-	-	54	-	5	1	-	-	12	12	6	-	27
New Jersey*	8	-	NN	-	-	-	2	-	16	22	13	-	9
Pennsylvania	1	-	10	-	-	2	3	1	18	34	7	1	12
EAST NORTH CENTRAL	10	-	276	-	-	4	-	-	57	52	8	3	22
Ohio*	3	-	11	-	-	1	-	-	13	12	-	-	7
Indiana	4	-	26	-	-	2	-	-	-	1	6	-	2
Illinois	-	-	20	-	-	-	-	-	18	15	-	-	2
Michigan	3	-	65	-	-	1	-	-	20	20	2	3	8
Wisconsin	-	-	154	-	-	-	-	-	6	4	-	-	3
WEST NORTH CENTRAL	3	4	3	-	1	1	-	-	16	23	7	1	23
Minnesota	-	-	-	-	-	-	-	-	2	8	-	-	9
Iowa	-	-	1	-	-	-	-	-	6	9	-	-	-
Missouri*	3	1	1	-	1	-	-	-	4	4	6	1	10
North Dakota*	-	-	1	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	1
Nebraska	-	2	-	-	-	1	-	-	4	2	1	-	-
Kansas*	-	1	-	-	-	-	-	-	-	-	-	-	3
SOUTH ATLANTIC	48	-	107	-	-	5	3	-	61	86	25	2	36
Delaware	-	-	2	-	-	-	-	-	1	-	-	-	-
Maryland	-	-	5	-	-	2	1	-	9	3	2	-	7
District of Columbia	1	-	1	-	-	-	-	-	-	-	-	1	2
Virginia*	12	-	23	-	-	-	-	-	4	5	3	-	4
West Virginia	8	-	25	-	-	-	-	-	5	1	1	-	1
North Carolina	13	-	NN	-	-	1	1	-	2	16	6	-	4
South Carolina	2	-	1	-	-	2	-	-	4	2	4	-	-
Georgia	-	-	-	-	-	-	-	-	20	24	-	-	7
Florida	12	-	50	-	-	-	1	-	21	31	9	1	11
EAST SOUTH CENTRAL	4	1	14	-	-	-	6	-	23	56	8	1	7
Kentucky	1	-	9	-	-	-	-	-	3	25	5	-	4
Tennessee	3	1	NN	-	-	-	-	-	15	16	-	1	1
Alabama	-	-	2	-	-	-	1	-	-	3	3	-	2
Mississippi	-	-	3	-	-	-	5	-	5	12	-	-	-
WEST SOUTH CENTRAL	18	1	36	-	2	1	3	-	18	61	33	-	12
Arkansas*	1	-	1	-	-	-	-	-	1	15	1	-	-
Louisiana*	2	-	NN	-	-	-	1	-	5	10	4	-	1
Oklahoma	3	-	5	-	-	-	1	-	3	4	6	-	-
Texas	12	1	30	-	2	1	1	-	9	32	22	-	11
MOUNTAIN	1	2	73	-	3	-	-	-	21	55	5	1	9
Montana	-	-	7	-	-	-	-	-	1	3	-	-	-
Idaho	-	-	1	-	-	-	-	-	1	6	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	1
Colorado	-	2	47	-	-	-	-	-	3	11	1	1	6
New Mexico	-	-	-	-	2	-	-	-	11	13	-	-	1
Arizona	-	-	NN	-	1	-	-	-	3	8	3	-	1
Utah	1	-	18	-	-	-	-	-	2	14	1	-	-
Nevada*	-	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC	38	-	50	-	41	8	4	1	100	151	62	7	77
Washington*	3	-	44	-	38	2	-	-	4	10	10	-	4
Oregon	9	-	-	-	-	-	-	-	8	16	2	-	1
California*	23	-	-	-	1	6	4	1	87	115	49	7	66
Alaska	-	-	3	-	2	-	-	-	1	9	1	-	2
Hawaii	3	-	3	-	-	-	-	-	-	1	-	-	4
Guam*	NA	NA	NA	NA	-	NA	-	-	-	NA	NA	NA	-
Puerto Rico	-	-	3	-	-	-	1	-	1	-	2	-	1
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-	-	-

NN: Not Notifiable

NA: Not Available

*Delayed reports: Asep. Meng.: N.J. +2, Nev. +2; Bruc.: Ark. -1; Chickenpox: N. Hamp. +1, Calif. +10, Guam +3; Hep. B: Ohio +1, Kans. +5, Ark. +3, Wash. -1; Hep. A: Ohio -1, Mo. -2, Kans. +25, Va. -1, La. -4, Nev. +1, Wash. +2; Hep. unsp.: Va. +1, Wash. -1, Guam +1; Malaria: N. Dak. +1.

Table III-Continued
 Cases of Specified Notifiable Diseases: United States
 Weeks Ending July 23, 1977 and July 24, 1976 - 29th 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	512	51,154	33,146	19	1,129	1,002	138	14,697	36	406	17,931	29
NEW ENGLAND	15	2,457	366	1	48	47	3	617	-	8	1,162	-
Maine	-	164	6	-	3	-	-	46	-	-	69	-
New Hampshire	-	510	9	-	3	4	-	90	-	-	240	-
Vermont*	-	291	30	-	4	3	-	6	-	-	64	-
Massachusetts*	9	636	35	1	16	16	1	113	-	5	367	-
Rhode Island	3	61	14	-	1	4	-	49	-	-	130	-
Connecticut	3	795	272	-	21	20	2	313	-	3	292	-
MIDDLE ATLANTIC	122	8,114	6,787	4	164	136	16	1,203	1	84	5,938	3
Upstate New York	109	3,700	2,458	1	38	57	5	270	-	81	3,319	1
New York City	13	662	430	1	40	35	4	445	1	3	301	-
New Jersey	-	193	586	1	32	17	-	334	-	-	1,775	2
Pennsylvania*	-	3,559	2,913	1	54	27	7	154	-	-	543	-
EAST NORTH CENTRAL ..	180	10,410	14,097	1	108	128	46	5,071	4	31	3,548	2
Ohio	91	1,338	562	-	37	52	2	630	1	2	1,087	-
Indiana	18	4,276	3,106	-	8	6	19	281	-	10	892	1
Illinois	37	1,515	1,456	-	19	15	6	853	-	5	300	-
Michigan	11	908	5,695	1	32	46	6	1,769	3	9	894	1
Wisconsin	23	2,373	3,278	-	12	9	13	1,538	-	5	375	-
WEST NORTH CENTRAL ..	19	9,413	1,166	-	65	67	8	3,355	1	1	487	4
Minnesota	-	2,596	389	-	21	14	-	6	-	-	16	1
Iowa	2	4,281	37	-	5	8	1	1,245	-	1	158	-
Missouri*	17	943	17	-	27	23	7	1,057	1	-	33	2
North Dakota	-	21	3	-	1	3	-	16	-	-	10	-
South Dakota	-	65	4	-	4	2	-	59	-	-	17	-
Nebraska	-	192	55	-	1	4	-	63	-	-	2	-
Kansas*	-	1,315	661	-	6	13	-	909	-	-	251	1
SOUTH ATLANTIC	67	4,368	2,081	5	242	196	15	659	6	18	1,567	8
Delaware	1	23	128	-	3	6	1	112	-	-	24	-
Maryland	4	371	715	-	17	16	-	50	-	-	5	-
District of Columbia ..	-	4	12	-	-	2	-	5	-	-	-	-
Virginia	36	2,589	699	-	14	31	1	84	2	5	571	1
West Virginia	1	206	180	-	9	5	1	146	2	9	97	-
North Carolina	1	60	9	1	58	36	7	45	-	-	437	-
South Carolina	1	147	4	1	26	34	-	10	1	2	209	-
Georgia	20	760	1	1	39	17	4	18	1	1	49	1
Florida	3	208	333	2	76	49	1	189	-	1	175	6
EAST SOUTH CENTRAL ..	4	1,904	781	4	130	88	11	783	8	-	1,895	2
Kentucky	2	1,156	729	-	26	14	-	80	-	-	74	1
Tennessee	2	639	37	-	33	39	8	477	2	-	1,704	1
Alabama	-	77	-	1	47	25	2	196	-	-	109	-
Mississippi	-	32	15	3	24	10	1	30	6	-	8	-
WEST SOUTH CENTRAL ..	5	2,016	651	3	196	158	23	1,294	5	6	751	4
Arkansas	-	29	-	-	9	8	2	38	1	-	3	1
Louisiana*	-	74	184	2	76	27	-	30	1	1	28	1
Oklahoma	1	54	285	-	10	18	7	455	-	-	27	-
Texas*	4	1,859	182	1	101	105	14	771	3	5	693	2
MOUNTAIN	7	2,455	4,985	-	40	29	1	575	2	2	340	1
Montana	1	1,152	202	-	2	4	-	9	-	-	14	-
Idaho	-	128	2,020	-	4	3	-	119	-	-	11	-
Wyoming	-	15	3	-	1	-	-	1	-	-	3	1
Colorado	2	496	239	-	1	5	-	250	-	2	232	-
New Mexico	-	267	15	-	17	3	1	106	2	-	11	-
Arizona	4	296	225	-	11	8	-	-	-	-	11	-
Utah	-	8	2,218	-	3	4	-	76	-	-	49	-
Nevada	-	93	63	-	1	2	-	14	-	-	9	-
PACIFIC	93	10,017	2,232	1	136	153	15	1,140	9	256	2,243	5
Washington*	5	524	326	-	18	27	-	256	2	3	433	-
Oregon	2	349	143	-	11	13	7	206	2	3	103	-
California	86	9,052	1,760	1	80	97	8	634	5	16	1,414	5
Alaska	-	58	-	-	25	13	-	25	-	-	1	-
Hawaii	-	34	3	-	2	3	-	19	-	234	292	-
Guam	NA	4	12	-	-	-	NA	3	NA	NA	7	-
Puerto Rico	4	775	293	-	1	3	12	574	3	-	29	7
Virgin Islands	-	14	9	-	-	-	-	186	-	-	2	-

NA: Not Available

*Delayed reports: Measles: Vt. -2, Mass. -1, Kans. +112, Tex. -1; Men. Inf.: Pa. -1, Mo. -1, La. -1; Pertussis: Wash. -1; Rubella: Tex. +2

Table III-Continued
Cases of Specified Notifiable Diseases: United States
Weeks Ending July 23, 1977 and July 24, 1976 - 29th Week

REPORTING AREA	TUBERCULOSIS		TULA-REMICIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (RMSF)		VENEREAL DISEASES (Civilian Cases Only)						RABIES IN ANIMALS
	1977	CUM. 1977	CUM. 1977	1977	CUM. 1977	1977	CUM. 1977	GONORRHEA		SYPHILIS (Pri. & Sec.)		CUM. 1977		
								1977	1976	1977	CUMULATIVE			
													1977	
UNITED STATES	585	16,918	65	7	194	74	601	22,335	529,695	543,553	390	11,504	13,531	1,604
NEW ENGLAND	18	626	1	-	12	-	6	530	13,549	14,520	14	479	392	23
Maine	1	45	-	-	-	-	-	28	987	1,252	-	14	8	21
New Hampshire*	1	18	-	-	-	-	-	15	545	404	-	3	6	1
Vermont	-	24	-	-	-	-	-	21	362	371	-	6	4	-
Massachusetts*	13	349	1	-	9	-	1	186	5,910	6,966	12	338	274	-
Rhode Island	1	46	-	-	2	-	3	91	1,154	984	-	7	15	-
Connecticut*	2	144	-	-	1	-	2	189	4,591	4,543	2	111	85	1
MIDDLE ATLANTIC	92	2,701	1	2	41	3	35	1,992	53,820	62,925	60	1,596	2,279	39
Upstate New York	20	419	1	-	6	2	19	376	9,028	9,904	8	149	141	22
New York City	17	885	-	1	16	-	-	596	21,323	28,544	31	1,004	1,439	-
New Jersey	30	689	-	-	16	-	6	546	9,268	9,525	10	207	313	15
Pennsylvania	25	708	-	1	3	1	10	474	14,201	14,952	11	236	386	2
EAST NORTH CENTRAL ..	83	2,670	3	-	19	-	7	3,435	82,272	84,797	15	1,225	1,167	60
Ohio	13	431	1	-	7	-	4	962	21,394	20,844	5	279	283	-
Indiana	12	310	-	-	1	-	2	509	7,638	8,240	2	92	60	3
Illinois	29	1,047	-	-	2	-	-	909	26,750	30,257	4	660	606	19
Michigan	25	758	-	-	9	-	1	758	18,919	18,054	1	138	156	4
Wisconsin	4	124	2	-	-	-	-	297	7,571	7,402	3	56	62	34
WEST NORTH CENTRAL ..	16	578	5	-	12	1	19	1,090	27,667	28,201	7	263	230	412
Minnesota	2	124	-	-	4	-	-	226	4,985	5,047	4	81	53	154
Iowa	3	61	-	-	-	-	-	67	3,224	3,523	2	32	23	66
Missouri*	7	241	4	-	3	-	11	495	11,774	11,272	1	90	92	31
North Dakota	1	14	-	-	1	-	-	26	513	401	-	-	-	58
South Dakota	-	26	1	-	-	-	-	47	743	789	-	2	2	74
Nebraska	-	21	-	-	1	-	-	87	2,365	2,446	-	24	16	1
Kansas	3	91	-	-	3	1	8	142	4,063	4,723	-	34	44	28
SOUTH ATLANTIC	139	3,834	8	3	33	53	333	5,401	131,769	133,453	102	3,263	4,144	164
Delaware	1	33	-	-	-	-	1	63	1,810	1,703	1	17	39	2
Maryland	17	542	1	-	7	41	471	16,386	17,596	1	211	350	-	
District of Columbia ..	8	180	-	-	1	-	-	414	8,707	9,214	7	339	328	-
Virginia*	16	445	-	-	8	12	93	875	13,451	14,269	16	323	362	2
West Virginia	7	140	-	1	3	-	3	40	1,814	1,706	-	1	18	2
North Carolina*	32	641	2	-	2	22	133	923	19,440	18,985	10	465	769	5
South Carolina	12	353	2	-	-	4	35	288	12,110	13,049	8	143	218	5
Georgia	19	447	3	-	9	8	33	1,497	25,858	24,524	33	651	585	110
Florida	27	1,053	-	2	10	-	-	1,330	32,193	32,407	26	1,113	1,475	38
EAST SOUTH CENTRAL ..	64	1,488	4	-	3	11	94	2,407	47,211	47,911	14	402	540	48
Kentucky	-	341	1	-	-	1	22	561	6,557	6,015	1	50	78	16
Tennessee*	27	480	3	-	1	9	62	799	18,780	18,659	7	124	195	25
Alabama	13	402	-	-	1	-	9	600	12,981	13,862	1	73	111	7
Mississippi	24	265	-	-	1	1	1	447	8,893	9,375	5	155	156	-
WEST SOUTH CENTRAL ..	55	1,966	38	-	9	6	97	2,882	67,467	70,942	87	1,653	1,578	516
Arkansas*	14	236	22	-	2	-	21	168	5,056	6,624	4	37	51	74
Louisiana	-	363	1	-	-	1	2	504	10,191	10,402	19	370	324	6
Oklahoma	-	187	7	-	1	3	55	234	6,291	6,617	-	43	63	173
Texas*	41	1,180	8	-	6	2	19	1,976	45,929	47,299	64	1,203	1,140	263
MOUNTAIN	22	457	5	1	16	-	9	924	21,432	21,668	6	230	369	90
Montana	-	25	1	-	-	-	3	45	1,067	1,103	-	3	4	33
Idaho	-	23	-	-	-	-	4	49	1,007	1,137	1	5	14	-
Wyoming	-	7	1	-	-	-	2	25	517	416	-	4	3	1
Colorado	-	68	2	1	8	-	-	212	5,519	5,371	2	70	84	24
New Mexico	5	71	-	-	-	-	-	160	3,176	4,149	-	40	92	-
Arizona	9	207	1	-	4	-	-	236	6,164	6,522	2	94	132	28
Utah	8	25	-	-	4	-	-	51	1,186	978	-	6	16	4
Nevada	-	31	-	-	-	-	-	146	2,796	1,992	1	8	24	-
PACIFIC	96	2,598	1	1	49	-	1	3,174	84,508	79,136	85	2,393	2,832	252
Washington*	NA	147	-	-	1	-	-	168	6,276	6,633	NA	106	73	-
Oregon	5	116	-	-	3	-	-	189	5,802	6,054	2	70	61	4
California	81	1,956	1	1	44	-	1	2,684	67,878	62,645	82	2,177	2,634	236
Alaska	-	35	-	-	-	-	-	92	2,750	2,256	-	16	10	12
Hawaii	10	344	-	-	1	-	-	41	1,802	1,548	1	24	54	-
Guam*	NA	34	-	NA	1	NA	-	NA	107	199	NA	1	1	-
Puerto Rico	4	200	-	-	4	-	-	45	1,788	1,534	4	310	336	39
Virgin Islands	-	1	-	-	-	-	-	7	115	145	-	5	42	-

NA: Not Available

*Delayed reports: TB: N. Hamp. -1, Mo. -1, N. Car. -1, Tenn. -1; Tularemia: Ark. +3, Typhoid fever: Mo. +1, Ark. +2; RMSF: Mo. -1, Va. +4; GC: Conn. +176, Guam +3; Syphilis: Tex. -1, Ar. rabies: Mass. +2, Wash. +2.

Table IV
Deaths in 121 United States Cities*
Week Ending July 23, 1977 - 29th 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	665	449	150	42	13	34	SOUTH ATLANTIC	1,227	683	378	82	35	56
Boston, Mass.	182	115	50	12	2	3	Atlanta, Ga.	145	68	45	21	4	7
Bridgeport, Conn.	39	26	11	-	1	6	Baltimore, Md.	206	121	65	3	8	6
Cambridge, Mass.	31	28	3	-	-	4	Charlotte, N. C.	66	30	26	7	2	3
Fall River, Mass.	28	25	3	-	-	1	Jacksonville, Fla.	80	44	22	5	6	7
Hartford, Conn.	53	34	11	5	2	1	Miami, Fla.	121	68	45	3	-	4
Lowell, Mass.	23	16	6	-	-	-	Norfolk, Va.	50	25	16	1	5	4
Lynn, Mass.	16	12	3	1	-	1	Richmond, Va.	83	44	33	5	1	8
New Bedford, Mass.	29	21	8	-	-	1	Savannah, Ga.	48	30	12	2	-	2
New Haven, Conn.	45	25	9	5	4	1	St. Petersburg, Fla.	87	72	11	1	-	-
Providence, R.I.	60	33	19	7	-	2	Tampa, Fla.	60	32	19	4	4	7
Somerville, Mass.	15	10	4	1	-	1	Washington, D. C.	199	98	63	23	4	6
Springfield, Mass.	55	33	11	7	3	2	Wilmington, Del.	82	51	21	7	1	2
Waterbury, Conn.	29	21	6	1	-	2							
Worcester, Mass.	60	50	6	3	1	4	EAST SOUTH CENTRAL	701	404	183	36	34	30
MIDDLE ATLANTIC	2,998	1,885	728	203	89	118	Birmingham, Ala.	127	74	31	8	5	2
Albany, N. Y.	53	31	12	2	4	-	Chattanooga, Tenn.	57	32	11	6	4	5
Allentown, Pa.	20	12	6	1	1	-	Knoxville, Tenn.	45	28	11	-	1	-
Buffalo, N. Y.	120	72	35	4	7	10	Louisville, Ky.	99	52	26	5	11	13
Camden, N. J.	50	30	17	2	1	1	Memphis, Tenn.	152	93	39	7	5	2
Elizabeth, N. J.	39	27	9	2	-	-	Mobile, Ala.	61	30	22	4	1	2
Erie, Pa.	28	18	9	1	-	2	Montgomery, Ala.	51	33	8	1	5	2
Jersey City, N. J.	27	15	8	2	-	2	Nashville, Tenn.	109	62	35	5	2	4
Newark, N. J.	61	28	18	9	5	-							
New York City, N. Y.	1,590	1,024	360	121	38	56	WEST SOUTH CENTRAL	1,187	649	330	100	52	22
Paterson, N. J.	25	8	14	2	-	5	Austin, Tex.	49	31	10	4	2	3
Philadelphia, Pa.	392	230	100	25	23	17	Baton Rouge, La.	52	31	13	3	1	2
Pittsburgh, Pa.	172	109	45	12	2	7	Corpus Christi, Tex.	40	31	7	-	-	1
Reading, Pa.	35	24	7	1	3	-	Dallas, Tex.	185	94	58	18	7	1
Rochester, N. Y.	125	80	31	7	3	4	El Paso, Tex.	56	29	16	5	3	2
Schenectady, N. Y.	24	15	6	1	-	3	Fort Worth, Tex.	101	67	24	4	3	2
Scranton, Pa.	44	31	10	2	-	-	Houston, Tex.	262	120	81	30	14	2
Syracuse, N. Y.	77	50	20	2	1	3	Little Rock, Ark.	55	21	21	3	7	-
Trenton, N. J.	59	38	11	5	-	3	New Orleans, La.	123	71	30	15	3	-
Utica, N. Y.	23	19	3	-	-	4	San Antonio, Tex.	147	84	33	13	10	1
Yonkers, N. Y.	34	24	7	2	1	1	Shreveport, La.	43	20	20	3	-	1
							Tulsa, Okla.	74	50	17	2	2	7
EAST NORTH CENTRAL	2,390	1,411	598	167	104	57	MOUNTAIN	503	290	130	39	16	11
Akron, Ohio	55	36	14	1	1	-	Albuquerque, N. Mex.	60	35	15	5	1	2
Canton, Ohio	54	42	5	3	1	3	Colorado Springs, Colo.	23	9	13	-	-	1
Chicago, Ill.	576	324	139	46	32	13	Denver, Colo.	119	65	34	8	6	4
Cincinnati, Ohio	170	109	34	18	7	2	Las Vegas, Nev.	43	22	13	5	-	-
Cleveland, Ohio	168	80	57	15	8	6	Ogden, Utah	17	10	4	-	-	2
Columbus, Ohio	184	100	54	12	13	10	Phoenix, Ariz.	97	62	22	6	2	-
Dayton, Ohio	106	61	30	11	1	3	Pueblo, Colo.	19	13	4	2	-	2
Detroit, Mich.	311	182	82	14	18	4	Salt Lake City, Utah	61	38	10	6	3	-
Evansville, Ind.	41	29	7	2	2	-	Tucson, Ariz.	64	36	15	7	4	-
Fort Wayne, Ind.	46	34	8	1	-	4							
Gary, Ind.	34	18	9	3	-	4	PACIFIC	1,589	966	405	94	63	47
Grand Rapids, Mich.	52	31	15	3	1	-	Berkeley, Calif.	17	7	7	3	-	-
Indianapolis, Ind.	151	85	38	10	8	1	Fresno, Calif.	53	30	14	3	4	2
Madison, Wis.	26	18	4	2	1	-	Glendale, Calif.	22	17	5	-	-	-
Milwaukee, Wis.	127	78	36	7	3	2	Honolulu, Hawaii	65	37	17	3	4	-
Peoria, Ill.	35	25	8	-	1	1	Long Beach, Calif.	96	51	34	6	1	2
Rockford, Ill.	44	25	10	3	3	-	Los Angeles, Calif.	469	285	116	31	16	18
South Bend, Ind.	36	23	9	1	-	2	Oakland, Calif.	72	42	22	5	2	-
Toledo, Ohio	121	80	29	3	4	1	Pasadena, Calif.	22	12	6	1	2	-
Youngstown, Ohio	53	31	10	12	-	1	Portland, Oreg.	120	76	24	10	4	2
							Sacramento, Calif.	64	45	15	-	1	5
WEST NORTH CENTRAL	837	529	202	43	23	29	San Diego, Calif.	133	82	37	7	2	4
Des Moines, Iowa	82	44	26	6	1	2	San Francisco, Calif.	150	87	39	14	8	2
Duluth, Minn.	20	13	5	-	1	2	San Jose, Calif.	62	42	10	5	1	1
Kansas City, Kans.	35	19	11	1	-	1	Seattle, Wash.	148	87	36	3	18	2
Kansas City, Mo.	136	87	34	6	4	6	Spokane, Wash.	54	36	14	2	-	5
Lincoln, Neb.	22	14	4	2	1	2	Tacoma, Wash.	42	30	9	1	-	4
Minneapolis, Minn.	83	60	13	4	3	4							
Omaha, Neb.	82	58	10	8	1	1	TOTAL	12,097	7,266	3,104	806	429	403
St. Louis, Mo.	241	151	64	10	9	5	Expected Number	11,242	6,735	2,908	754	385	352
St. Paul, Minn.	57	34	17	3	1	1							
Wichita, Kans.	79	49	18	3	2	4							

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

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Rubella — continued

appropriate counseling regarding pregnancy and after a blood specimen is drawn. (The latter is a precaution. Should a woman, unknowingly pregnant, be vaccinated at one of these clinics, an analysis of the serum sample for HI antibody titers can determine if she was susceptible to rubella and can be used as a guide in deciding on further action.) Men and previously unvaccinated children are also being vaccinated. Thus far, approximately 8,000 adults have been vaccinated.

Reported by T Maeda, K Murphy, M Serdula, MD, and N Wiabenga, MD, MPH, State Epidemiologist, Hawaii State Dept of Health; R Melton, MD, MPH, Kauai; S Clark, MD, MPH, Maui; A Sackett, MD, MPH, Hilo, Hawaii; Immunization Div, Bur of State Services, and Field Services Div, Bur of Epidemiology, CDC.

Editorial Note: When this outbreak occurred, over 95% of school-aged children in Hawaii had already been vaccinated against rubella in accordance with state law. This — and the postulated nightclub exposure — may explain the small number of cases in these age groups.

This is the first attempt in the United States to provide rubella vaccine to an adult population on a large-scale community basis in a response to an outbreak. The logistics of such a program are made difficult by the need for individual counseling and blood drawing from women of child-

bearing age, although the risk to the fetus from rubella vaccine administered in early pregnancy appears small (7).

Approximately 20 serologically confirmed cases of rubella are identified in Hawaii each year. Many of these cases occur in persons who were exposed in the continental United States or in other countries. These introductions have not led to large-scale outbreaks of disease in spite of the fact that 30-50% of the adult population is seronegative for rubella antibodies (2). It is not known for certain why the outbreak reported here was so explosive. The combination of a large number of susceptible persons in a small enclosed space may have been a contributing factor. This outbreak does demonstrate that protecting a large segment of the pediatric population does not necessarily prevent outbreaks in older age groups if a significant proportion of them are susceptible.

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*International Notes***Poliomyelitis — Nuevo Leon, Mexico**

From January through May 1977, 23 cases of paralytic poliomyelitis were reported in Monterrey, Nuevo Leon (1 in January, 1 in February, 4 in March, 9 in April, and 8 in May). Ninety-two percent of these occurred in children under 5 years of age, with a predominance in males. Of the cases, 29.2% had received 3 or more doses of poliomyelitis vaccine. Poliovirus type 1 was isolated in one of these cases.

Reported in the *Border Epidemiological Bulletin* 5(5), 1977; and *Viral Diseases Div, Bur of Epidemiology, CDC*.

Editorial Note: Serologic conversion rates to polioviruses after vaccination with oral poliovirus vaccine are frequently lower in countries with tropical, as opposed to temperate, climates. The major hypotheses advanced to account for the noted differences in seroconversion rates have been: 1) reduced vaccine potency because of problems in manufacturing, handling, and storage; 2) maternal antibodies in

breast milk interfering with vaccine efficacy; 3) interference by other endemic enteroviral infections; and 4) uncharacterized factors in the gastrointestinal tracts of persons from tropical climates somehow interfering with the ability of the vaccine viruses to infect the recipients. Recent studies have discounted the theory that breast-feeding plays a significant role in the etiology of the differences (1,2,3).

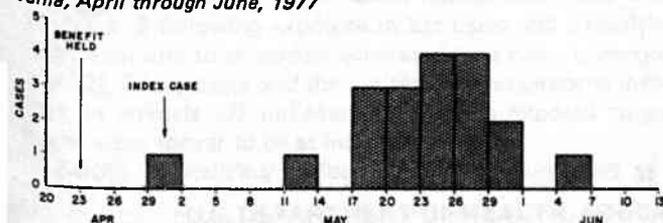
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*Epidemiologic Notes and Reports***Foodborne Outbreak of Hepatitis A — Pennsylvania**

Eighteen cases of hepatitis A occurred in the 1-month period from May 10 to June 10, 1977, among approximately 580 persons who purchased sandwiches at a local softball team benefit in eastern Pennsylvania (Figure 2).

FIGURE 2. Onset of cases of hepatitis A by 3-day periods, Pennsylvania, April through June, 1977



The average age of cases was 25.4 years. There were 5 females and 13 males. Ten of the 18 cases were hospitalized.

The outbreak was first suspected when a county which usually reports 2 to 6 cases of hepatitis A a year reported 9 cases in a 2-week period in May. Because each of the cases had onset of illness within a 16-day period, a common-source outbreak was suspected. Foodborne transmission was postulated because preliminary questioning of the patients revealed that each had eaten a submarine sandwich prepared and sold by the team on April 23. Furthermore, 1 of the team members had developed hepatitis A on April 30.

Subsequent case-finding techniques — including letters to physicians in the area, inspection of hospital discharge

diagnoses and emergency room records, and review of laboratory logs for HBsAg test specimens — revealed a total of 23 cases of hepatitis A in persons with onset from May 10-June 10. Eighteen of these (78%) had eaten a suspect sandwich on April 23.

Subsequent surveys confirmed the association. A telephone questionnaire, which compared cases both with neighborhood controls matched for age and sex as well as with well household contacts, significantly associated illness with ingestion of submarine sandwiches ($p=.0000003^*$ and $p=.0002^*$, respectively). The member of the organization who developed disease 8 days after the benefit had helped fill the sandwiches with bologna, salami, ham, cheese, lettuce, onions, and tomatoes. Using April 23, the day that the sandwiches were sold, as the date of exposure, the mean incubation period for the 18 cases was 32 days, with a range from 21 to 45 days.

Thirty-two of 54 household contacts (59%) received injections of immunoglobulin (IG). The only secondary case of hepatitis A among family members of the cases occurred in an 11-year-old girl who had not received IG. Since the population at risk was 6 weeks past exposure to the hepatitis virus when the outbreak was recognized, mass prophylaxis with IG of all persons who ingested the sandwiches was not recommended.

*Fisher's exact test

International Notes

Follow-up on Dengue — Jamaica, United States

Dengue activity remains widespread in Jamaica. The Epidemiology Research Center in Tampa, Florida, has tested the sera of a U.S. traveler from Jamaica who developed an acute febrile illness typical of dengue after his return to Tampa. Laboratory results for that patient (Table 3) indicate a recent infection with dengue or some other flavivirus. Such increases in HI titers against other dengue types and other flaviviruses such as St. Louis Encephalitis (SLE) and yellow fever following infection with dengue are not unusual. Specimens from other persons with suspect imported dengue are being tested at the San Juan Laboratories.

TABLE 3. HI titers, suspect dengue case, Florida

	Dengue Type 1	Dengue Type 2	SLE
Acute Serum	1:40	1:10	1:20
Convalescent Serum	1:320	1:160	1:160

In addition to the previously reported suspect cases of imported dengue in Florida, Louisiana, Maryland, New York, and the District of Columbia several more states have

Reported by N Hess, RN, WE Parkin, DVM, State Epidemiologist, P Pheasant, RN, MA Stohler, RN, R Teagarden, RN, Pennsylvania State Dept of Health; Hepatitis Laboratories Div, Bur of Epidemiology, CDC.

Editorial Note: Peak fecal excretion of hepatitis A virus (HAV), and therefore peak infectiousness, occur prior to the onset of symptoms (1,2). Since a foodhandler would typically be asymptomatic when most infectious, routine good hygiene and sanitary food preparation cannot be over-emphasized as the most important means of prevention of HAV transmission.

Immunoprophylaxis following exposure to HAV is most effective when the IG is administered within 1 to 2 weeks after exposure. In practice, however, once enough cases are recognized to document a common-source exposure, IG administration is usually too late to benefit any of the remaining exposed individuals (3). Therefore, mass IG immunoprophylaxis in documented common-source HAV outbreaks is not routinely recommended.

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suspect cases: California, Georgia, Maine, Mississippi, and Virginia.

CDC has sent an advisory memorandum to U.S. airlines, passenger ships, and travel agencies recommending that, although the risk of infection appears small, travelers to Jamaica should take precautions to avoid mosquito bites and should advise their physicians of any acute febrile illness occurring within 2 weeks after leaving Jamaica.

Reported by FM Wellings, PhD, Epidemiology Research Center, Tampa, H Janowski, MPH, RM Yeller, MD, Acting State Epidemiologist, Epidemiology Section, N Schneider, PhD, Florida State Dept of Health and Rehabilitative Services; San Juan Laboratories, Bur of Laboratories, Bur of Tropical Medicine, and Viral Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: Although the identity of the specific virus that caused the Tampa case cannot be confirmed from the serologic results alone, the serology together with the clinical and epidemiologic history of the patient suggests dengue infection.

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