

CDC POLIOMYELITIS SURVEILLANCE REPORT

NO. 129

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U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE  
Public Health Service                      Bureau of State Services

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SPECIAL NOTE

Information presented in this report represents a summary of preliminary data regarding poliomyelitis and polio-like diseases reported to CDC from State Health Departments, participating diagnostic and reference laboratories, Epidemic Intelligence Service Officers, National Office of Vital Statistics, and other pertinent sources. It is to be emphasized that these data are provisional and intended for the information and administrative use of physicians involved in investigation and control of poliomyelitis and polio-like diseases. Anyone desiring to quote this information is urged to contact the person or persons responsible for the items reported in order that the exact interpretation of the report and the current status of the investigation be obtained.

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A. CURRENT POLIOMYELITIS MORBIDITY TRENDS

National incidence of poliomyelitis remained stable during the past five weeks, with 231 cases reported to HOVS for the week ending September 28, following 213 for the week of September 21 and 282, 244 and 276 cases reported for the three preceding weeks. Figure 1 presents national incidence by weeks for 1947 and 1952 through 1957.

The number of cases for the 39th week and the cumulative total for the 1957 calendar year may be compared with similar data for last year and the low years 1947 and 1942:

	TOTAL NATIONAL REPORTED POLIO INCIDENCE			
	<u>1957</u>	<u>1956</u>	<u>1947</u>	<u>1942</u>
39th week	231	655	792	217
Cumulative thru 39th week	4,881	12,183	7,242	2,832
Total for the year	-	15,463	10,789	4,190

Incidence by states and regions, with six week totals for the comparable periods of the past four years, is presented in Table 1.

The number of cases categorized as paralytic increased from 82 cases for the week ending September 21 to 105 cases for the week ending September 28. This represents the highest weekly total recorded this year. During the comparable week of last year, 248 paralytic cases were recorded; the peak of paralytic disease had already been passed. The cumulative case totals of 1585 paralytic, 2516 nonparalytic and 788 unspecified, through the 39th week of this year, may be compared with 5247 paralytic, 4750 nonparalytic and 2184 unspecified for last year.

The Southeast Region experienced a decided increase in incidence of paralytic disease, from 26 to 46 cases, with the largest group of paralytic cases, ten, reported from West Virginia.

Dr. Mason Romaine of the Virginia State Health Department indicates that of the total of 10 Virginia cases reported last week, three were unvaccinated siblings, aged 8 mos. (paralytic), 22 mos. (paralytic) and 3 years (nonparalytic) from a family of 11 children.

B. ROUTINE POLIOMYELITIS SURVEILLANCE

1. Under-30-day vaccinated cases - During the week ending October 2, PSU received no reports of paralytic poliomyelitis cases with onset of symptoms within 30 days of a polio vaccine inoculation. Seven such non-paralytic cases were listed.

2. Triply-Vaccinated Cases - Preliminary reports of 16 triply-vaccinated polio cases, one paralytic and 15 nonparalytic, were received by PSU during the week ending October 2. The paralytic case and two revisions are listed in Table 2. Cumulative totals of 63 paralytic and 359 nonparalytic cases have been reported in triply-vaccinated individuals in 1957.

3. Vaccine Distribution - Current and cumulative vaccine releases, shipments and inventory estimates are presented in Table 3.

### C. ASEPTIC MENINGITIS

#### New York (see PSU Report No. 128) - Progress Report

Dr. Gunter Bach, Health Officer, Croghan, New York and Dr. Jerome Klein, EIS Officer, have investigated an outbreak of aseptic meningitis in Croghan. Cases were first reported September 8 and a total of twenty-five had been reported through September 22. Visits were made to 16 households. Age distribution ranged from two to 38 years involving eight males and eight females. Frequency of signs and symptoms are shown below. The headache was described as extremely severe.

#### FREQUENCY OF SIGNS AND SYMPTOMS IN 16 CASES OF ASEPTIC MENINGITIS CROGHAN, NEW YORK

<u>Symptoms</u>		<u>Signs</u>	
Fever	16	Stiff neck	16
Headache	14	Increased reflexes	6
Sore throat	11	Rash	1
Myalgia	11		
Nausea	12		
Vomiting	6		

In family groups, there appeared to be high secondary attack rates. Concomitant with the appearance of the complete syndrome marked by nuchal rigidity in one or more members of a family group, other members would demonstrate symptomatology that was similar, but did not include nuchal rigidity. These would experience a spectrum of disease including gastrointestinal complaints, headache (apparently less severe than in those noted to have nuchal rigidity), sore throat, and malaise. Various combinations of these were apparent within a family group. In one family group, the mother had the complete syndrome, including nuchal rigidity, while a four year old son was noted to have a fleeting, fine erythematous rash with fever, headache, malaise and vomiting but without nuchal rigidity. In another family group the father, mother, sister-in-law and hired man were affected with the syndrome, including meningismus. The two children in the family, ages 3½ and 5 years, had a generalized illness, but no meningismus.

Laboratory studies are underway at the New York State Health Department Laboratories and further developments will be reported.

ERRATUM

On page 6, PSU Report No. 128 in which the incidence of reported poliomyelitis in Caddo Parish, Louisiana, was described by paralytic status for the years 1951-1957, the paralytic column was inadvertently labeled as nonparalytic and the nonparalytic as paralytic.

Figure 1: CURRENT U.S. POLIO INCIDENCE  
COMPARED WITH YEARS 1952-1956

DATA PROVIDED BY NATIONAL OFFICE OF VITAL STATISTICS

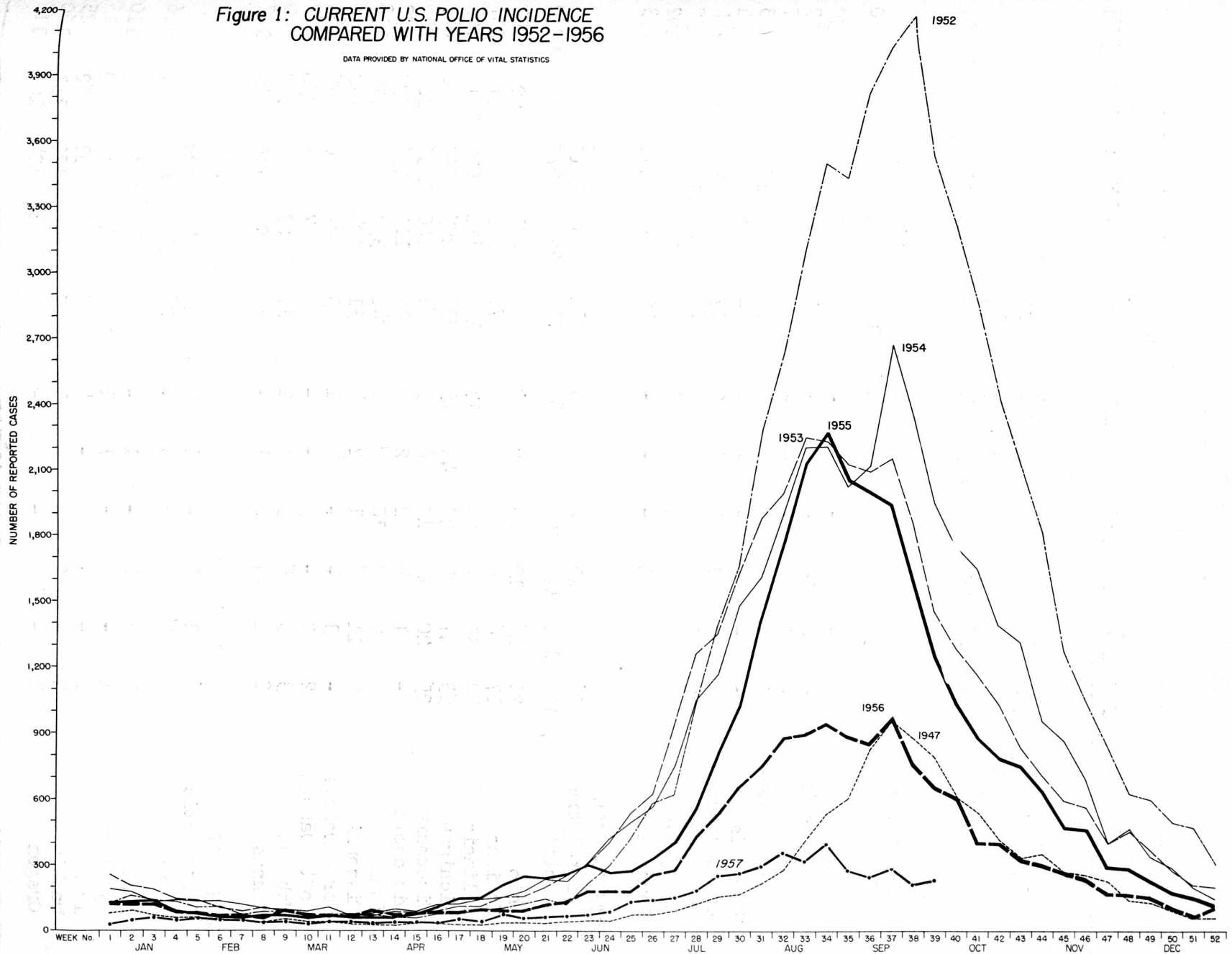


Table 1

## TREND OF 1957 POLIO VIRAL INFECTIONS

State and Region	Cases Reported to CVSW for week Ending:						Six Week Total	Comparable Six Week Totals in:			
	6-24	-31	-7	8-14	8-21	8-28		1956	1955	1954	1953
<b>UNITED STATES</b>											
Paralytic	95	77	73	90	82	105	522	1857	3595		
Nonparalytic	233	144	124	148	94	95	838	2211	4183		
Unspecified	69	55	47	44	37	31	283	1005	3058		
Total	397	276	244	282	213	231	1643	5073	11136	13333	11936
<b>NORTH EAST</b>											
Paralytic	10	9	5	12	5	6	47	151	1241		
Total	41	39	28	26	13	21	163	574	4343	2446	2650
Maine	2	-	1	-	-	-	3	6	81	43	139
New Hampshire	-	1	-	-	-	-	1	-	97	32	29
Vermont	-	1	1	-	-	-	2	4	57	24	47
Massachusetts	1	-	1	6	1	2	11	32	1474	485	243
Rhode Island	-	-	-	-	-	-	-	2	108	64	134
Connecticut	3	6	3	2	1	2	17	39	313	139	144
New York	22	19	12	14	7	11	83	308	1343	800	1239
New Jersey	8	8	9	4	6	6	41	111	322	299	302
Pennsylvania	5	4	1	-	-	-	10	72	346	560	553
<b>NORTH CENTRAL</b>											
Paralytic	28	22	22	42	25	33	172	732	1212		
Total	192	143	115	142	96	84	772	2458	4077	5261	5250
Ohio	29	16	10	13	9	9	86	277	575	996	1043
Indiana	17	6	4	26	5	14	72	163	167	314	267
Illinois	42	31	32	25	13	17	165	613	632	1014	795
Michigan	53	47	25	43	42	25	235	295	509	796	886
Wisconsin	25	20	16	12	6	3	82	260	1436	265	348
Minnesota	-	1	4	2	2	3	12	112	236	299	999
Iowa	8	2	7	10	9	6	42	353	169	610	198
Missouri	5	11	8	1	2	4	31	194	101	240	297
North Dakota	-	3	-	-	1	1	5	22	20	45	81
South Dakota	2	2	-	5	-	-	9	7	23	50	89
Nebraska	3	3	5	3	1	2	17	67	93	363	60
Kansas	8	1	4	2	1	-	16	90	116	264	187
<b>NORTH WEST</b>											
Paralytic	6	2	3	-	1	1	13	58	224		
Total	8	2	6	3	3	6	28	139	426	427	426
Montana	1	2	1	-	1	-	5	3	67	49	110
Wyoming	1	-	1	-	1	1	4	12	11	90	15
Idaho	1	-	1	3	-	4	9	41	51	52	25
Washington	4	-	2	-	-	1	7	67	173	131	160
Oregon	1	-	1	-	1	-	3	31	124	105	116

\* National Office of Vital Statistics.

(CONTINUED ON NEXT PAGE)

Table 1 (Continued)

State and Region	Cases Reported to DOWS* for Week Ending:						Six Week Total	Comparable Six Week Totals in:			
	8-24 8-31	9-7	9-14	9-21	9-28	1956		1955	1954	1953	
<b>SOUTH EAST</b>											
Paralytic	32	19	21	16	26	45	159	291	304		
Total	61	36	36	42	47	73	295	618	956	2148	1417
Delaware	-	-	-	-	-	-	-	12	11	18	12
Maryland	2	-	-	1	1	3	7	42	94	100	212
Dist. of Col.	7	0	7	6	6	7	32	5	22	35	19
Virginia	11	3	5	4	5	10	38	99	73	230	234
West Virginia	1	2	1	4	1	12	21	42	83	183	167
North Carolina	12	6	5	5	4	9	41	107	135	243	177
South Carolina	1	1	3	5	5	8	23	39	90	75	36
Georgia	7	2	2	2	2	3	18	74	23	227	104
Florida	5	1	7	6	4	3	26	71	74	415	172
Kentucky	7	7	3	4	6	9	36	59	124	318	93
Tennessee	6	8	3	4	6	9	36	42	98	213	116
Alabama	2	-	-	1	7	-	10	26	39	91	75
<b>SOUTH CENTRAL</b>											
Paralytic	11	15	16	8	9	11	70	304	242		
Total	51	32	36	27	19	22	187	600	659	1149	666
Mississippi	4	1	2	1	-	-	8	97	26	94	60
Arkansas	2	1	1	1	2	2	9	73	45	81	86
Louisiana	6	12	3	6	4	6	37	139	70	107	83
Oklahoma	9	2	0	2	5	6	32	52	87	145	120
Texas	30	16	22	17	3	8	101	239	423	722	317
<b>SOUTH WEST</b>											
Paralytic	8	10	6	12	16	9	61	314	292		
Total	44	24	23	42	35	25	193	664	702	1902	1327
Colorado	2	1	2	7	1	3	16	65	76	161	50
New Mexico	-	1	2	1	2	-	6	27	42	102	33
Arizona	1	1	-	-	2	6	10	22	42	68	96
Utah	-	1	3	-	-	2	6	66	21	108	69
Nevada	-	-	-	-	-	-	-	9	14	34	10
California	41	20	16	34	30	14	155	475	507	1429	1061
<b>TERRITORIES</b>											
	1	-	6	-	3	1	11	15	29		
Alaska	-	-	1	-	-	-	1	3	22	88	6
Hawaii	-	-	2	-	1	-	3	5	22	14	3
Puerto Rico	1	-	4	-	2	1	8	9	3	-	8

\* National Office of Vital Statistics.

Table 2

1957 PARALYTIC POLIOMYELITIS CASES FOLLOWING THREE INOCULATIONS OF VACCINE  
(Reports September 26 through October 2, 1957)

3 V Case No.	State	County	Ini- tials	Age	Sex	Date 1st Symp.	Cerebro- spinal Fluid	Site of Para.	Dates of Vacc. Inoc.	Mfr.	Lot No.
REVISIONS											
50	Arkansas	White	SS	7	F	6-8-57		?	? ? March '57	? ? ?	? ? ?
Comment: Poliovirus Type I was isolated from this patient's stool specimen.											
49	Dropped - Not Poliomyelitis.										
NEW CASE											
105	D.C.	Washington	RW	2	M	8-28-57		?	? ? ?	? ? ?	? ? ?
Preliminary Report.											



Table 3

## POLIOMYELITIS VACCINE REPORT through 9-27-57

(Data provided by the Polio Vaccine Activity, BSS, USPHS.  
Listed in 1000's of cc's of Net Bottled Vaccine)

VACCINE RELEASED						
<u>Period</u>	<u>Lilly</u>	<u>Parke, Davis</u>	<u>Pitman- Moore</u>	<u>Wyeth</u>	<u>Sharpe &amp; Dohme</u>	<u>Cutter</u>
July	5,047	1,843	1,239	378	1,015	-
August	5,840	3,704	1,339	394	864	-
September 1-27	8,251	1,273	2,664	257	488	-
Cumulative to date	127,835	31,406	32,191	9,623	9,865	401

VACCINE SHIPPED					
<u>Period</u>	<u>NFIP</u>	<u>Public Agencies</u>	<u>Commercial Channels</u>	<u>Export</u>	<u>Total</u>
1955	13,541	7,893	6,233	-	27,667
1956	194	45,588	24,784	6,477	77,043
1957					
January - June	151	36,044	23,760	6,385	66,970
July	-	4,642	4,903	327	9,871
August	-	4,133	4,037	1,099	9,269
September 1-20	585	2,454	3,294	577	6,326
Cumulative Totals	13,886	101,384	67,010	14,867	197,147

VACCINE INVENTORY				
<u>Week Ending</u>	<u>Unshipped by Manufacturers</u>	<u>In State and Local Health Departments</u>	<u>In Commercial Channel and Physicians Office</u>	<u>Total</u>
9-6-57	7,737	6,113	3,933	17,783
9-13-57	6,942	6,248	4,712	17,902
9-20-57	11,780	5,895	5,964	23,639

