



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 241

OCTOBER 6, 1961

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SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

SUMMARY

There was a slight decrease in the number of reported cases during the 39th week of the year. The 67 cases reported are more widely dispersed geographically than the 71 cases reported for the previous week.

Poliomyelitis in New York continues to decline as the outbreak in the Syracuse area has greatly diminished. Preliminary information from Pennsylvania has revealed a cluster of cases in the city of Erie. No other concentrations are noted throughout the United States.

The epidemic of aseptic meningitis in Rhode Island due to Coxsackie B-5 is now over. A report on the character of that outbreak and the nature of the febrile illness which occurred concurrently in the communities involved is presented in Section 5.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 67 cases of poliomyelitis was reported for the week ending September 30, 1961. Of these, 36 were classified as paralytic, 17 as nonparalytic and 14 were unspecified (See Table 1). Although New York State again reported the greatest number of cases, their current week's total was 17 as compared to 24 the previous week. Pennsylvania reported 11 cases, 7 of these from one county. Further comment will be made in Section 2 on these States and Maryland. Ohio, Louisiana and Texas, the only other States reporting more than 3 cases, have noted no concentrations.

Six week totals for the 34th through 39th week as shown below reflect the low seasonal incidence. Figure 1 clearly indicates the absence of any upward trend and suggests that the peak week may have already been reached.

Six Week Totals (34th through 39th Week) for Past 5 Years

	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Paralytic	269	699	1854	1025	526
Total	429	1066	2936	2127	1647

2. REPORTS

A. New York State

Only two new cases of paralytic poliomyelitis have been reported during the past week from the outbreak in Central New York State. Both cases were from Onondaga County bringing the total number of paralytic cases in the contiguous tri-county area to 74 through October 4. Of the 74 cases, 44 have occurred in Onondaga County (31 in Syracuse), 17 in Madison County, and 13 in Oneida County.

Dr. Robert M. Albrecht, Director, Office of Epidemiology, New York State Department of Health, reports that both of the new cases were adults with onsets on September 19 and 24. They both had received type I oral vaccine during the mass immunization campaign on August 29-31. The epidemic curve by county and date of onset in three-day periods showing those cases receiving oral vaccine appeared in last week's P.S.U. Report No. 240.

The paralytic cases are shown below by age group and vaccination history. Over 40 percent have been preschool children and 30 percent have been adults at least 20 years old. Forty percent of the 74 paralytic cases have had three or more doses of inactivated vaccine while 38 percent have been unvaccinated. Fifteen of the 28 cases with onset since the oral vaccine program began on August 29 have received oral vaccine.

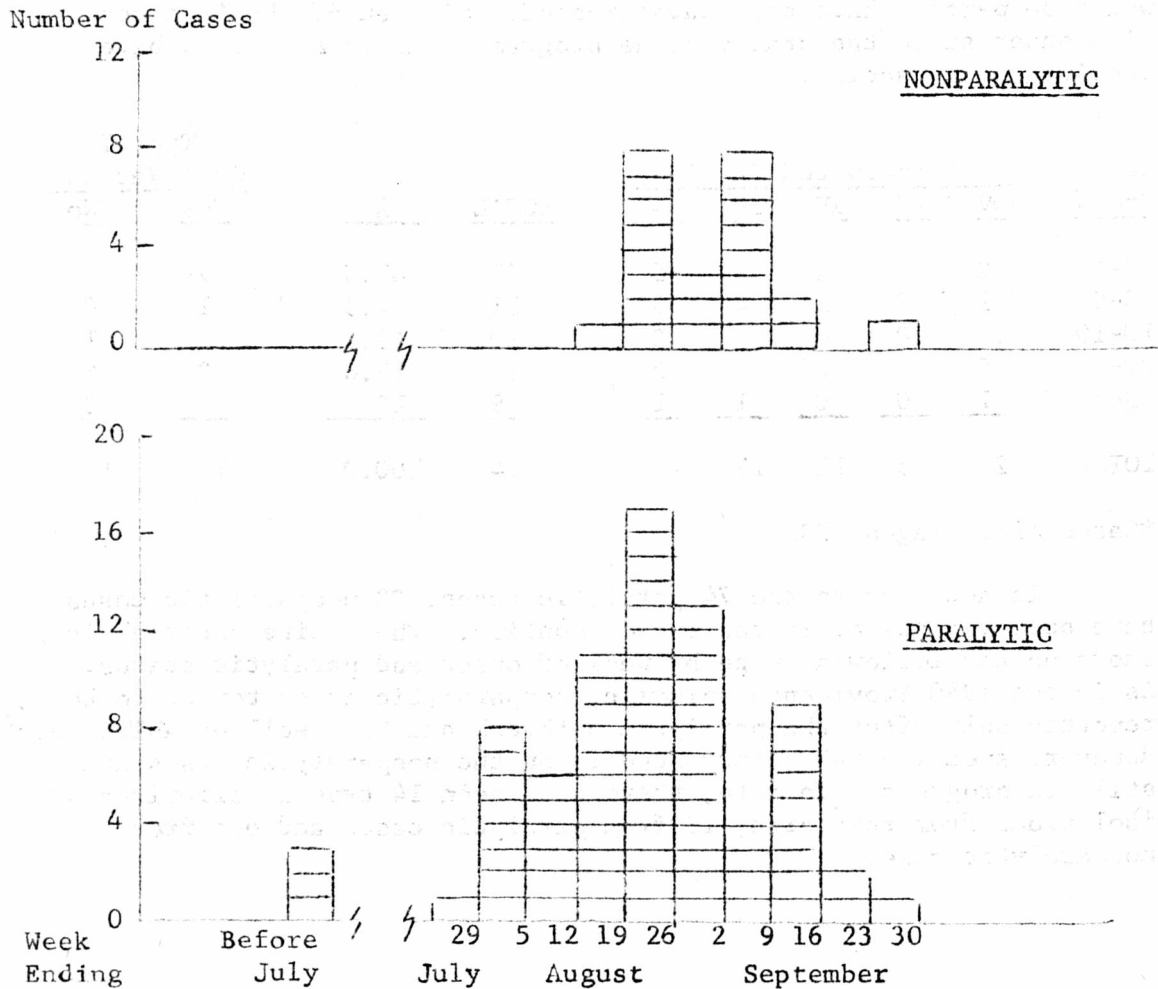
Age Group	Inactivated Vaccine					TOTAL	%	Type I Oral Vaccine*	
	OV	1V	2V	3V	4+			Yes	No
0-4	12	2	4	8	5	31	41.9	2	3
5-9	1	0	3	4	3	11	14.9	1	0
10-19	3	0	4	1	2	10	13.5	5	1
20-29	5	3	0	3	2	13	17.6	3	6
30+	<u>7</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>9</u>	<u>12.2</u>	<u>4</u>	<u>3</u>
TOTAL	28	5	11	17	13	74	100.0	15	13

*Cases since August 29.

In addition to the 74 paralytic cases, 23 nonparalytic cases have been recognized in the three counties. The entire outbreak is shown on the following page by week of onset and paralytic status. As in the 1960 Providence epidemic, nonparalytic cases tended to be reported only after the paralytic outbreak had been well established.⁽¹⁾ However, specific laboratory studies on the nonparalytic cases are still in progress. To date, there have been 14 type I poliovirus isolations from this area, 13 from paralytic cases and one from a nonparalytic case.

⁽¹⁾Oren, J. et al: Rhode Island Medical Journal 44:337-342, June 1961.

POLIOMYELITIS BY WEEK OF ONSET
ONONDAGA-MADISON-ONEIDA COUNTIES
NEW YORK STATE



B. Pennsylvania

The eleven cases reported this week from Pennsylvania represent a marked increase over previous weeks. Four cases were scattered throughout the State while seven patients unspecified as to paralytic status were reported from Erie County. Preliminary investigations reveal that all were children under ten years of age, with three cases occurring in one family. Five of seven had onset in the latter half of September.

A high incidence of enterovirus disease or aseptic meningitis has not been noted in the area. Laboratory identification of the responsible agent has not been accomplished.

Across the State line, four cases have been reported from adjacent Chautauqua County, New York, by the New York State Department of Health. Although all four cases have occurred in September, there is no geographic localization within the county.

C. Maryland

Two of the three paralytic cases reported from Maryland for the week ending September 30, were acute fatalities in Washington County. Both cases, three-year old white females, had onset in mid-September and died within three days. One patient was unvaccinated and the other had received two doses of inactivated vaccine. Two previous paralytic cases have been reported from Washington County earlier this year. Adjacent Frederick County, scene of an August outbreak, has had a total of 13 paralytic cases, the last one having onset on August 31 (See P.S.U. Report No. 235).

In addition, four cases have occurred in adjacent Franklin County, Pennsylvania, two in September.

3. 1961 POLIOMYELITIS REPORTED TO PSU

Through September 30, there have been 647 cases of poliomyelitis with onset in 1961 submitted on individual case forms to the Poliomyelitis Surveillance Unit. Of these 647 cases, 473 (73 percent) are paralytic, 153 nonparalytic and 21 unspecified as to paralytic status. These cases are presented below in Table 3 by paralytic status, age group and vaccination history.

Sixty-day follow-up reports on cases occurring earlier in the year are being received daily. Of the 473 paralytic cases shown in Table 3, 151 follow-up reports received reveal that 16 have had no residual paralysis at sixty days and another 14 were not poliomyelitis. Thus, the follow-ups received on paralytic cases show 20 percent to not be true paralytic poliomyelitis. This emphasizes the importance of careful and adequate sixty-day follow-up reports.

TABLE 3
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION STATUS REPORTED ON PSU FORMS
(Through September 30, 1961)

Age Group	Paralytic						TOTAL	Percent
	0	1	2	3	4+	Unk		
0-4	110	16	14	21	17	10	188	39.7
5-9	24	8	9	21	25	4	91	19.2
10-14	18	3	6	15	15	4	61	12.9
15-19	9	0	6	11	3	1	30	6.3
20-29	32	2	4	8	2	1	49	10.4
30-39	23	5	2	1	3	3	37	7.8
40+	14	0	0	1	0	2	17	3.6
TOTAL	230	34	41	78	65	25	473	100.0
PERCENT DOSES	51.3	7.6	9.2	17.4	14.5	-	100.0	

Age Group	Nonparalytic						TOTAL	Percent
	0	1	2	3	4+	Unk		
0-4	14	1	6	7	2	1	31	20.3
5-9	5	0	4	13	14	4	40	26.1
10-14	1	3	3	8	14	5	34	22.2
15-19	2	0	3	4	4	0	13	8.5
20-29	6	0	2	6	8	2	24	15.7
30-39	5	0	0	3	0	1	9	5.9
40+	0	0	0	0	2	0	2	1.3
TOTAL	33	4	18	41	44	13	153	100.0
PERCENT DOSES	23.6	2.9	12.9	29.3	31.4	-	100.0	

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset Within 30 Days of Vaccination

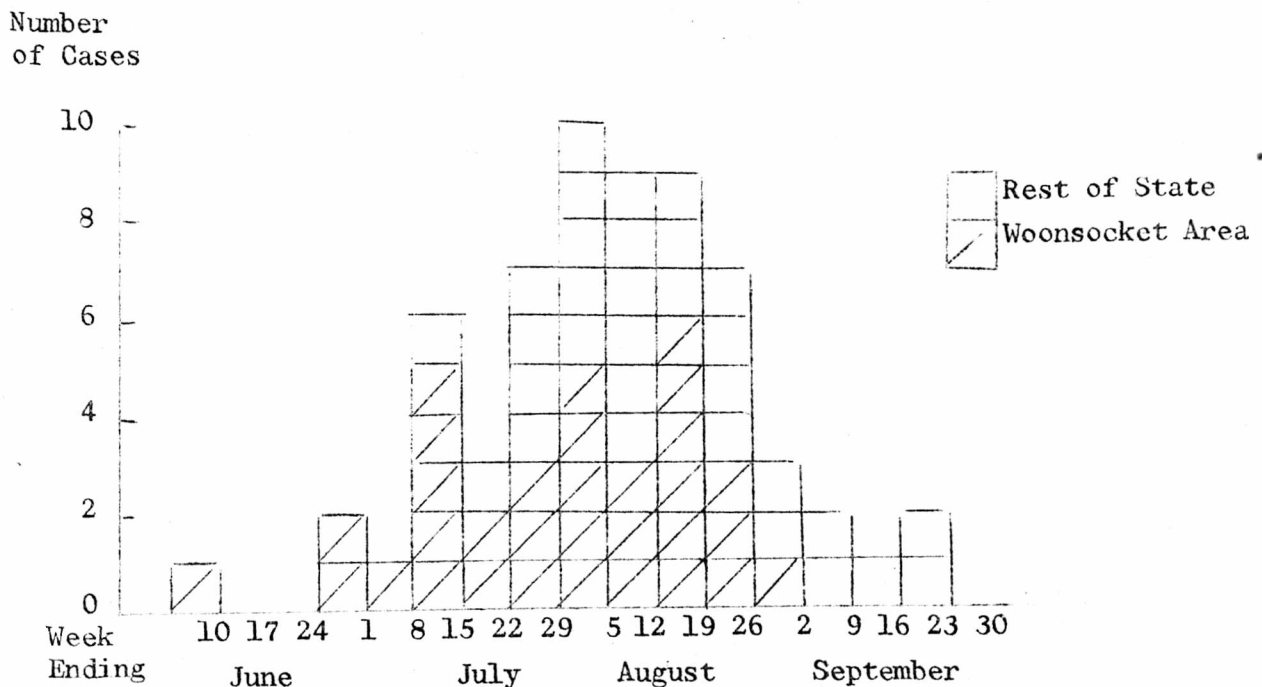
Two cases of poliomyelitis, one paralytic, within 30 days of receiving inactivated vaccine have been reported to the Poliomyelitis Surveillance Unit during the past week ending September 30. This brings the corrected 1961 total to 13 cases, of which 10 are paralytic (two correlated). The three paralytic cases reported during the last two months are presented in Table II. The under-30-day cases reported previous to August appeared in Table II of PSU Report 232 dated August 4, 1961.

5. ENTEROVIRUS SURVEILLANCE - ASEPTIC MENINGITIS IN RHODE ISLAND

Drs. R.F. McAteer, Assistant Director of Health, and Earl Byrne, EIS Officer, assigned to the Rhode Island State Department of Health report that a total of 64 cases of aseptic meningitis have been hospitalized in the State this summer. There has been a sharp decrease in the number of cases with recent onset.

The large number of cases originating from the northern part of the State (Woonsocket Area) is quite evident from the histogram.

RHODE ISLAND ASEPTIC MENINGITIS
BY WEEK OF ONSET



These hospitalized cases assumed the following age distribution:

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>TOTAL</u>
0-4	5	3	8
5-9	11	6	17
10-14	8	7	15
15-19	4	2	6
20-24	4	3	7
25-29	0	3	3
30+	<u>2</u>	<u>6</u>	<u>8</u>
TOTAL	34	30	64

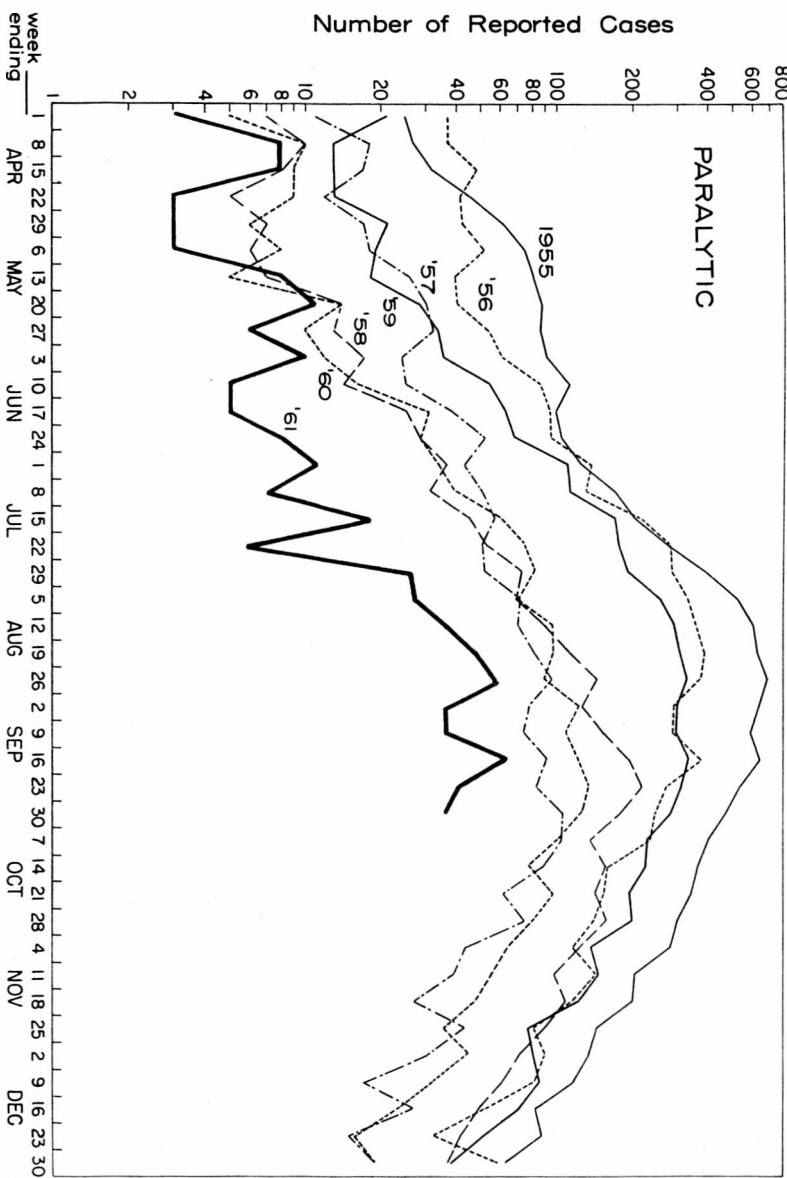
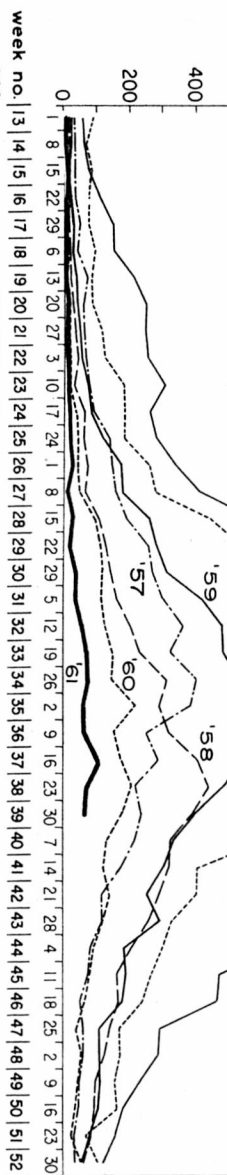
The aseptic meningitis from Woonsocket was associated with a high incidence of febrile illness in the area. In thirty-two families visited with febrile illness 67 of 158 family members were affected. The following clinical complaints were made by these 67 patients.

Fever	100%	(varying from 100°-105°F)
Headache	68	
Nausea and Vomiting	51	
Sore Throat	39	
Stiff Neck	30	
Abdominal Pain	30	
Myalgia	21	
Pleurisy	11	
Diarrhea	9	

The illness reported in the non-hospitalized cases, and those hospitalized with aseptic meningitis was identical, differing only in degree of severity of symptoms.

Several strains of Coxsackie B-5 have been isolated from hospitalized cases of aseptic meningitis and from the patients with febrile illness. Pericarditis or neonatal myocarditis has not been noted.

(This surveillance report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Michael J. Regan, M.D., Chief, James A. Bryan, II, M.D., and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)

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FIGURE 1

CURRENT U.S. POLIO INCIDENCE
COMPARED WITH YEARS 1955-1960, April - December, by week

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS
AND COMMUNICABLE DISEASE CENTER

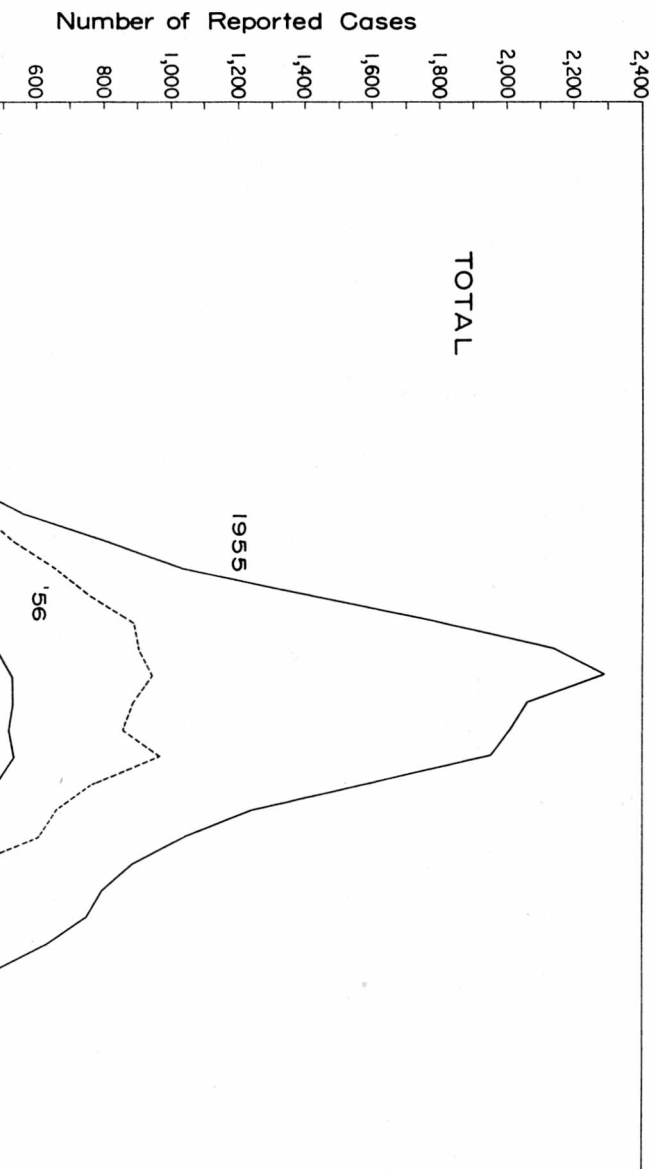


Table 1

TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumula- tive 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		8/26	9/ 2	9/ 9	9/16	9/23	9/ 30		1960	1959	1958
UNITED STATES											
Paralytic	589	57	36	37	62	41	36	269	699	1854	1025
Nonparalytic	217	9	18	16	28	22	17	110	233	850	810
Unspecified	109	6	5	9	8	8	14	50	134	232	292
Total	915	72	59	62	98	71	67	429	1066	2936	2127
NEW ENGLAND											
Paralytic	15	1	3	2	2	1	-	9	57	123	19
Total	18	1	3	3	2	1	-	10	78	160	41
Maine	1	-	1	-	-	-	-	1	25	31	-
New Hampshire	1	-	-	-	-	-	-	-	-	3	3
Vermont	3	-	-	-	1	-	-	1	5	1	4
Massachusetts	9	1	2	1	1	1	-	6	10	88	16
Rhode Island	-	-	-	-	-	-	-	-	19	4	1
Connecticut	4	-	-	2	-	-	-	2	19	33	17
MIDDLE ATLANTIC											
Paralytic	161	27	14	15	33	17	11	117	120	207	168
Total	244	33	25	23	52	30	29	192	172	327	310
New York	172	24	20	14	46	24	17	145	92	185	113
New Jersey	32	3	3	2	3	3	1	15	34	73	147
Pennsylvania	40	6	2	7	3	3	11	32	46	69	50
EAST NORTH CENTRAL											
Paralytic	62	8	6	3	8	7	6	38	140	217	362
Total	102	11	9	8	12	10	8	58	228	562	997
Ohio	30	4	1	-	3	3	5	16	55	100	165
Indiana	11	1	1	2	2	1	-	7	56	60	59
Illinois	22	2	1	2	1	1	1	8	62	150	119
Michigan	20	3	2	2	3	1	2	13	34	233	632
Wisconsin	19	1	4	2	3	4	-	14	21	19	22
WEST NORTH CENTRAL											
Paralytic	25	2	1	2	2	4	1	12	35	288	68
Total	56	2	5	4	3	9	4	27	67	529	156
Minnesota	6	1	-	1	-	1	-	3	17	109	12
Iowa	18	-	1	2	1	5	-	9	11	125	32
Missouri	14	-	2	-	1	1	2	6	16	172	60
North Dakota	3	-	-	-	1	-	1	2	5	9	26
South Dakota	1	-	-	1	-	-	-	1	1	5	1
Nebraska	7	1	-	-	-	2	1	4	8	32	12
Kansas	7	-	2	-	-	-	-	2	9	77	13

Table 1 (Continued)

State and Region	Cumula- tive 1961	Cases Reported to CDC for Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		8/26	9/2	9/9	9/16	9/23	9/30		1960	1959	1958
SOUTH ATLANTIC											
Paralytic	109	8	-	6	4	2	7	27	147	343	147
Total	148	11	3	8	8	5	7	42	184	441	227
Delaware	2	-	-	-	-	-	-	-	-	3	6
Maryland	26	4	-	1	1	-	3	9	65	16	8
D.C.	2	-	-	-	-	-	1	1	-	3	-
Virginia	10	-	-	-	1	1	1	3	14	117	47
West Virginia	22	3	-	3	1	3	1	11	18	90	81
North Carolina	14	-	3	-	2	1	-	6	31	87	20
South Carolina	15	1	-	1	3	-	-	5	36	36	7
Georgia	28	2	-	-	-	-	1	3	10	57	16
Florida	29	1	-	3	-	-	-	4	10	32	42
EAST SOUTH CENTRAL											
Paralytic	40	1	9	1	5	2	1	19	25	230	43
Total	68	1	9	3	7	4	4	28	101	315	71
Kentucky	23	-	1	-	2	-	2	5	71	42	10
Tennessee	17	-	-	3	-	3	1	7	19	161	32
Alabama	9	-	2	-	1	-	-	3	5	78	9
Mississippi	19	1	6	-	4	1	1	13	6	34	20
WEST SOUTH CENTRAL											
Paralytic	64	5	2	3	3	3	4	20	45	170	129
Total	123	8	4	6	7	5	9	39	71	269	183
Arkansas	15	2	2	1	-	4	-	9	12	96	8
Louisiana	40	5	1	2	3	-	4	15	4	35	28
Oklahoma	3	-	-	-	-	-	-	-	6	35	12
Texas	65	1	1	3	4	1	5	15	49	103	135
MOUNTAIN											
Paralytic	24	1	-	-	-	-	1	2	13	36	20
Total	42	1	-	2	-	1	1	5	26	60	51
Montana	3	-	-	-	-	-	-	-	3	1	20
Idaho	14	-	-	1	-	1	-	2	-	-	7
Wyoming	-	-	-	-	-	-	-	-	11	-	2
Colorado	6	1	-	-	-	-	-	1	8	11	6
New Mexico	3	-	-	-	-	-	-	-	3	14	4
Arizona	8	-	-	-	-	-	1	1	-	25	8
Utah	8	-	-	1	-	-	-	1	1	6	2
Nevada	-	-	-	-	-	-	-	-	-	3	2
PACIFIC											
Paralytic	89	4	1	5	5	5	5	25	117	240	69
Total	114	4	1	5	7	6	5	28	139	273	91
Washington	20	2	1	1	1	1	-	6	11	84	4
Oregon	14	-	-	1	-	1	1	3	11	59	17
California	76	2	-	3	5	4	3	17	116	126	57
Alaska	-	-	-	-	-	-	-	-	-	3	1
Hawaii	4	-	-	-	1	-	1	2	1	1	12
TERRITORY											
Puerto Rico	6	-	-	-	1	-	-	1	62	1	5

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION
(Cases Reported to PSU from August 1, through September 30, 1961)

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr.	Lot No.	Onset Inter- val	Site Inoc.	Site First Para.
Michigan	Jack- son	J.E.	32	M	5-13-61	Unk.	Unk.	26 days	right arm	right arm & both legs
N. Y.	Monroe	H.K.	7 mos.	M	8-18-61	Lilly	25867D	13 days	Unk.	Unk.
Wisc.	Milwau- kee	E.P.	6	M	8- -61	Unk.	Unk.	?	arm	right arm