



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 209

SEPTEMBER 2, 1960

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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, the National Office of Vital Statistics, 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 decrease in both total and paralytic cases of poliomyelitis reported to NOVS this week. The total for the current week was 148 cases, of which 88 were paralytic. For the previous week, the total was 155, including 98 paralytic.

The decrease is reflected throughout the nation with increases appearing only in Maryland, North Carolina and Rhode Island. Figures from Maryland and Rhode Island are primarily delayed reports and all but two of the cases in North Carolina are nonparalytic. There are no new outbreaks in evidence and no additional cases have been reported from either Somerset County, Pennsylvania or Taylor County, Kentucky. (Outbreaks described in PSU Report No. 208.)

The Poliomyelitis Surveillance Unit has now received individual case forms on 871 cases of poliomyelitis, which represents 63 percent of the cases reported to NOVS through August 27. Of these cases, laboratory results on 119 cases have been submitted to PSU with 79 percent of positive poliovirus isolations being type I.

Narrative reports are included from Rhode Island, Pennsylvania, Indiana, Maryland, Kentucky, and Puerto Rico.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

(Note: The preliminary figures of 154 total cases, 94 paralytic, reported to NOVS last week have been revised to 155 total cases, 98 paralytic - SEE TABLE I.)

A total of 148 cases, 88 paralytic, was reported to the National Office of Vital Statistics during the 34th week of 1960, ending August 27. This represents a decrease in both total and paralytic poliomyelitis compared to figures for the previous week.

The 1960 cumulative total now stands at 1,384 cases, which is much lower than the total figures at this time for the past four years. Of these, 958 or 69 percent are paralytic. As can be seen in the lower half of Figure I, the 1960 curve has been below the 1958 curve for the past five weeks. This portrays the fact that the number of paralytic cases for the current six-week period in 1960 is lower than the number of paralytic cases for the corresponding period in 1958 for the first time since June. These figures are presented below:

	<u>Total for 29th through 34th Week for Five Years</u>				
	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	504	1,557	565	418	2,030
Total	769	2,464	1,179	1,886	4,690

All regions in the nation show lower paralytic and total figures for the past six-weeks as compared to the corresponding six-week period in 1959.

2. REPORTS

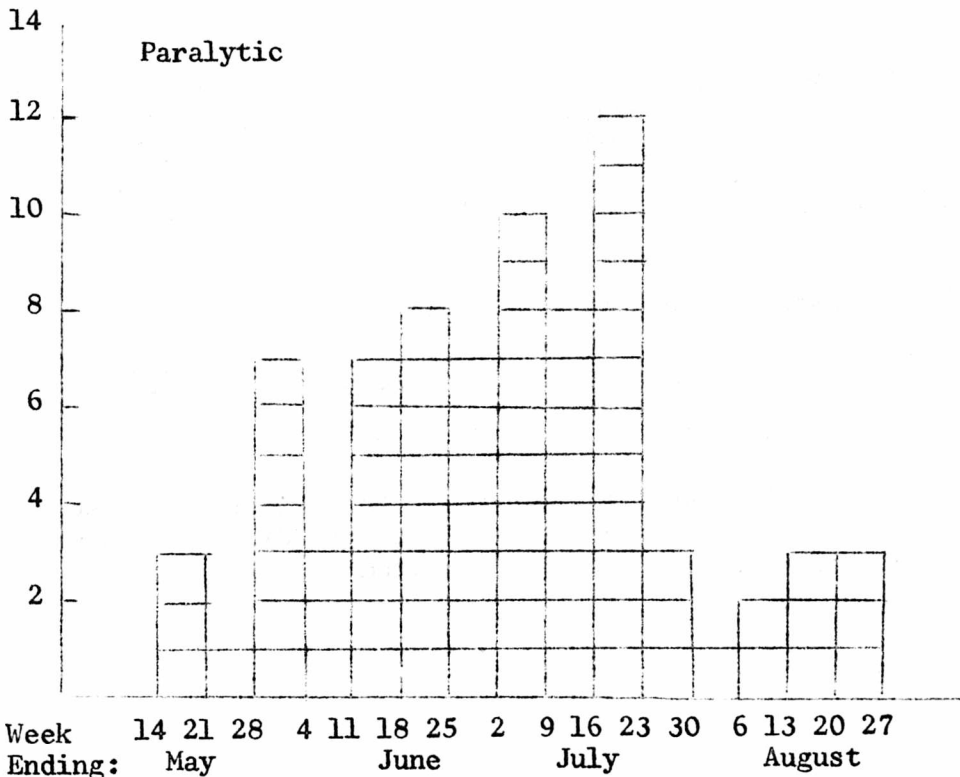
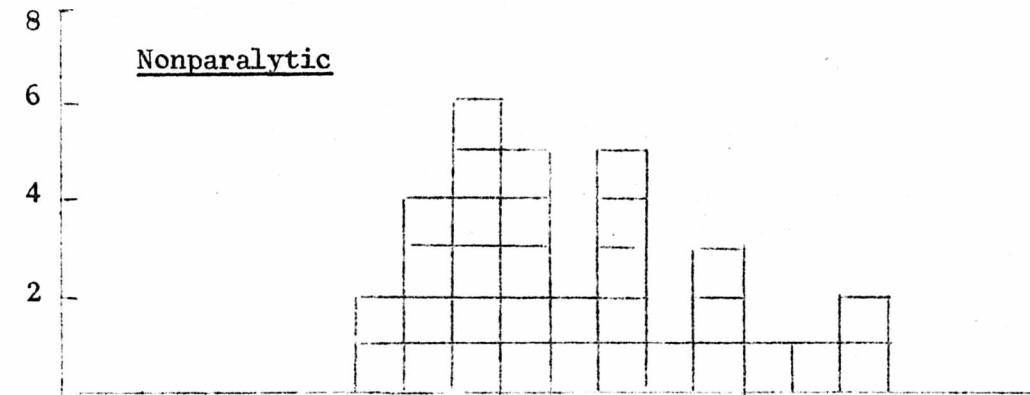
A. Rhode Island

Dr. R.F. McAteer, Medical Director, Division of Communicable Diseases, Rhode Island Department of Health, reports an additional 5 cases of poliomyelitis during the past week in Rhode Island. This brings the total number of cases reported to the State Health Department through August 30, to 90, of which 72 are paralytic.

There remains an additional 19 cases, of which only 5 are paralytic, not yet reported. The histogram below, which includes these cases not yet reported, continues to depict the sharp drop in paralytic cases following the peak week ending July 23.

RHODE ISLAND - 1960

Number of Cases



B. Pennsylvania

Dr. I. F. Gratch, Chief of Epidemiology Section, Pennsylvania Department of Health, reports no new cases of poliomyelitis in the Somerset County area (see PSU Report No. 208). This area has been the scene of an unusual incidence of type III poliomyelitis over the past 6 weeks.

To date there have been 11 paralytic cases reported as compared to only one case at this time last year. There have been type III isolations from the stool of 8 patients and from throat washings of two of these. One of the latter showed an 8-fold titer rise to type III poliovirus, and serological confirmation is pending for the others.

No new cases have been reported from areas surrounding Somerset County, or in the adjacent counties in Maryland. Thus far in 1960, there have been 38 cases reported from the entire state of Pennsylvania.

C. Indiana

Dr. A. L. Marshall, Jr., Director of Communicable Disease Control, Indiana State Board of Health, reports 5 new cases of poliomyelitis, 1 paralytic, bringing the total to date to 36 cases: 17 paralytic, 10 non-paralytic, and 9 unspecified. The paralytic cases are predominantly unvaccinated and of pre-school age.

Sixteen cases, 10 paralytic, have occurred in Marion County (Indianapolis), but there is no evidence of local concentration within the county or elsewhere in the state. Poliovirus type I has been isolated from several cases.

D. Maryland

Dr. Glen E. Gresham, EIS Officer, assigned to the Maryland State Health Department, reports no cases of poliomyelitis with recent onset in Garrett and Allegany Counties, which adjoin Somerset County, Pennsylvania (see PSU Report No. 208). Through August 31, there have been 19 paralytic cases of poliomyelitis in Maryland. Of these, 10 are from the City of Baltimore.

These ten cases have had onset as follows:

Week Ending:	<u>7-23</u>	<u>7-30</u>	<u>8-6</u>	<u>8-13</u>	<u>8-20</u>	<u>8-27</u>
Paralytic Cases:	1	2	2	3	0	2

As reported in last week's PSU Report, the majority of cases in Baltimore are among the negro population (7 out of 10). There have now been five isolations of type III poliovirus from Baltimore cases.

E. Kentucky

Dr. Jack Evans, EIS Officer, assisting Dr. Patricia Conlan and Mr. Clifford Todd, Bureau of Medical Services, Kentucky State Department of Health, reports no additional cases of poliomyelitis in Taylor County, scene of an outbreak described in PSU Report No. 208. Thus, in following the sudden and short-lived pattern also seen this year in Chicago, Jersey City-Hoboken, New Jersey and Somerset County, Pennsylvania, there has not been a case with onset since August 20. In the two weeks preceding August 20, there were a total of 19 cases, of which 8 were paralytic.

F. Puerto Rico

Through August 30, Dr. Manuel Feliberti, Epidemiologist, Bureau of Acute Communicable Disease Control, Puerto Rico Department of Health, reports a total of 399 cases of poliomyelitis with onset in 1960. Of these 394 are paralytic. This represents an increase of 19 paralytic cases during the past two weeks.

The current cases are still appearing sporadically throughout the island in unvaccinated pre-school children. For 380 cases with known onset, the epidemic has peaked during the weeks ending June 4 and 11, with 28 cases occurring each of these two weeks. Since then, the epidemic has progressively declined.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

Through August 29, there have been 871 cases of poliomyelitis with onset in 1960 reported to PSU on individual case forms. Of these cases, 658 are paralytic, 189 no paralytic and 24 unspecified. Thus, 69 percent of the paralytic cases reported to NOVS through August 27 have been reported to PSU.

The PSU has now received laboratory results on 119 stool specimens as shown below:

POLIOVIRUS ISOLATION					NEGATIVE	TOTAL	PERCENT POSITIVE
Type I	Type II	Type III	Type I and III	Type			
71	1	18	3		26	119	78.2

Type I poliovirus has appeared throughout the country while type III poliovirus has been centered in Florida, Maryland, Minnesota and Pennsylvania. Two of the cases with isolation of both type I and type III poliovirus are from Miami, Florida and the other is from Duluth, Minnesota. Both of these areas have had live poliovirus vaccine trials.

TABLE 3

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION HISTORY REPORTED ON PSU FORMS (Through August 29, 1960)

Age Group	Paralytic						Tot
	Doses of Vaccine						
	0	1	2	3	4/	Unk	
0-4	174	45	31	36	10	16	312
5-9	56	9	16	34	21	7	143
10-14	15	3	4	21	6	5	54
15-19	18	5	4	5	1	4	37
20-29	34	4	5	6	2	4	55
30-39	26	5	4	1	2	2	40
40/	14	=	-	1	-	2	17
Unk	-	-	-	-	-	-	-
Total	337	71	64	104	42	40	658
PER CENT DOSES	54.5	11.5	10.4	16.8	6.8	-	100.0

TABLE 3 (continued)

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION HISTORY REPORTED ON PSU FORMS
(Through August 29, 1960)

Age Group	Nonparalytic						Tot
	Doses of Vaccine						
	0	1	2	3	4/	Unk	
0-4	23	5	7	10	7	4	56
5-9	5	4	4	15	10	6	44
10-14	3	2	-	12	7	-	24
15-19	3	-	2	9	7	1	22
20-29	5	1	3	9	3	5	26
30-39	2	2	2	4	3	-	13
40/	3	-	1	-	-	-	4
Unk.	-	-	-	-	-	-	-
Total	44	14	19	59	37	16	189
Per Cent Doses	25.4	8.1	11.0	34.1	21.4	-	100.0

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset within 30 Days of Vaccination

During the past week, the Poliomyelitis Surveillance Unit was notified of 6 paralytic cases of poliomyelitis with onset within 30 days of vaccination. The 1960 total now stands at 50. Of these, 40 are paralytic (6 correlated) and 10 nonparalytic.

The paralytic cases reported this week are presented in Table II. Additional information is also listed on two previously reported under-30-day cases. One of these has been deleted as an under 30-day case.

B. Vaccine Distribution

The summary of current and cumulative data concerning poliomyelitis vaccine and quadruple antigen vaccine shipped is presented in Table III. Also included in this week's report is Figure II which depicts monthly shipments of poliomyelitis vaccine since January, 1959. It is noted that shipments have decreased for the second consecutive month.

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

FIG. 1 CURRENT U.S. POLIO INCIDENCE
 COMPARED WITH YEARS 1955-1959, APR.-DEC., BY WEEK

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS

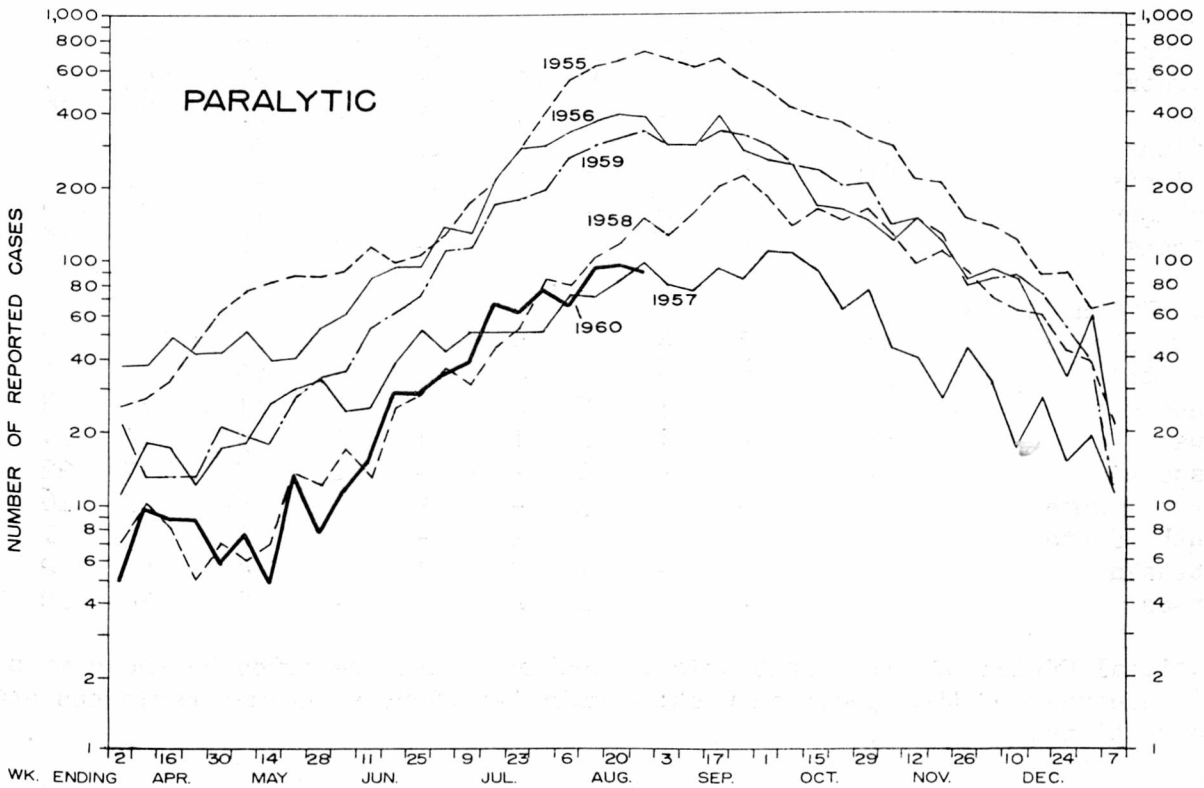
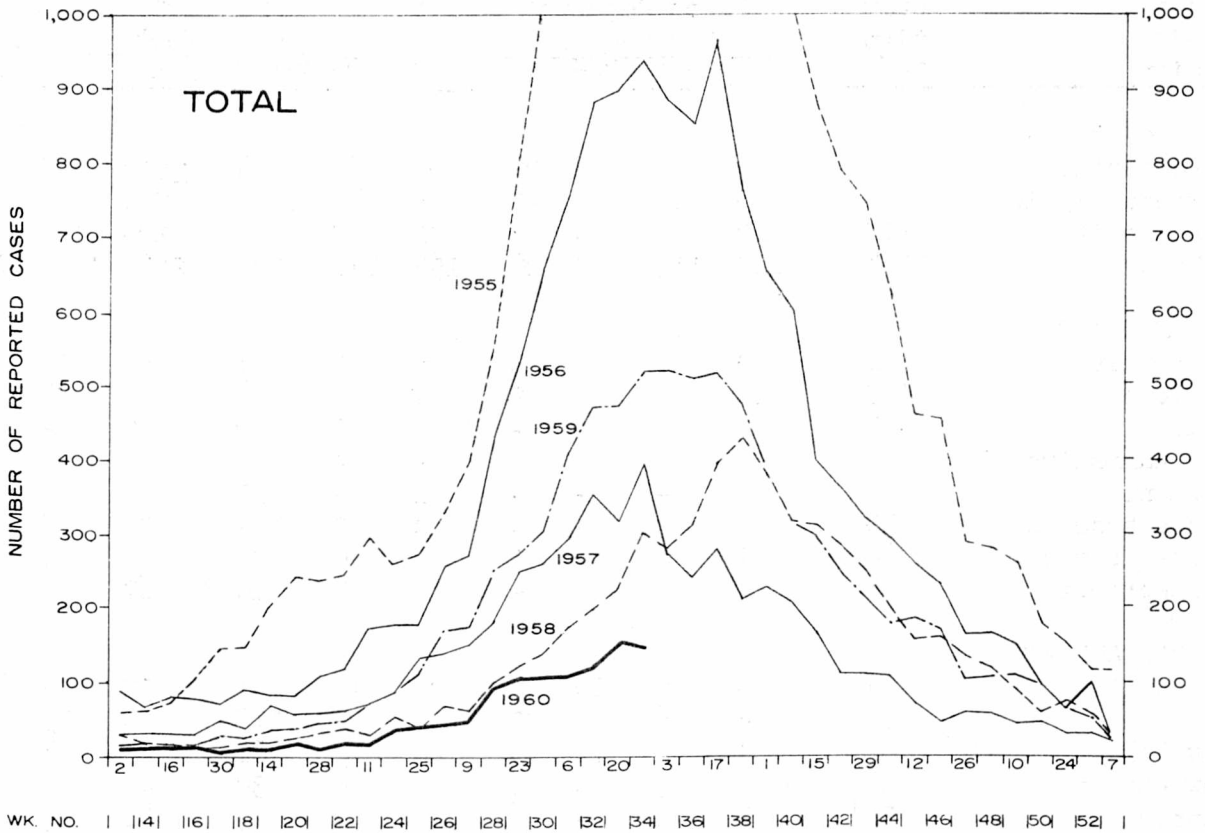


Table 1

TREND OF 1960 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1960	Cases Reported to NOV5*						Six Week Total	Comparable Six Weeks Totals in		
		7-23	7-30	8-6	8-13	8-20	8-27		1959	1958	1957
United States											
Paralytic	958	72	81	69	96	98	88	504	1,557	565	418
Nonparalytic	309	29	26	33	25	35	43	191	704	446	1132
Unspecified	117	12	6	10	7	22	17	74	203	168	336
Total	1384	113	113	112	128	155	148	769	2464	1179	1886
NEW ENGLAND											
Paralytic	101	10	9	6	3	6	7	41	69	10	6
Total	125	14	10	6	5	9	11	55	105	28	26
Maine	8	-	-	-	-	-	2	2	2	-	4
New Hampshire	-	-	-	-	-	-	-	-	1	4	3
Vermont	1	-	-	-	-	1	-	1	-	1	-
Massachusetts	19	1	3	-	4	3	2	13	34	7	8
Rhode Island	86	11	6	4	1	1	6	29	1	2	-
Connecticut	11	2	1	2	-	4	1	10	67	14	11
MIDDLE ATLANTIC											
Paralytic	133	3	14	10	18	27	19	91	93	100	23
Total	177	4	16	14	22	35	27	118	164	175	113
New York	101	1	12	11	5	20	12	61	83	74	64
New Jersey	38	2	3	3	11	3	8	30	40	74	29
Pennsylvania	38	1	1	-	6	12	7	27	41	27	20
EAST NORTH CENTRAL											
Paralytic	96	9	10	8	9	18	13	67	159	142	114
Total	188	18	13	23	16	28	26	124	353	344	623
Ohio	43	3	-	6	1	5	7	22	82	66	119
Indiana	36	8	2	4	4	11	5	34	56	25	61
Illinois	64	1	8	6	9	10	9	43	81	37	134
Michigan	36	6	2	4	2	2	3	19	121	200	189
Wisconsin	9	-	1	3	-	-	2	6	13	16	120
WEST NORTH CENTRAL											
Paralytic	38	3	4	8	4	1	1	21	255	32	23
Total	72	4	6	13	8	5	4	40	522	73	179
Minnesota	25	-	1	7	2	-	1	11	71	8	26
Iowa	13	-	1	1	1	1	1	5	152	14	28
Missouri	11	3	-	1	-	-	1	5	159	22	46
North Dakota	6	-	-	3	-	2	1	6	2	16	4
South Dakota	3	-	1	-	1	-	-	2	6	1	25
Nebraska	5	1	-	-	2	1	-	4	54	2	20
Kansas	9	-	3	1	2	1	-	7	78	10	30

*National Office of Vital Statistics: weekly figures reported by the states as of Wednesday of the specified week; cumulative figures include revisions and corrections.

Table 1 (Continued)

State and Region	Cumulative 1960	Cases Reported to NOVS For Week Ending						Six Week Total	Comparable Six Weeks Totals in:		
		7-23	7-30	8-6	8-13	8-20	8-27		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	160	13	14	15	21	12	20	95	282	79	84
Total	232	26	24	22	26	18	33	149	358	185	270
Delaware	-	-	-	-	-	-	-	-	1	9	2
Maryland	17	-	-	1	1	4	10	16	9	5	5
D. C.	-	-	-	-	-	-	-	-	3	4	22
Virginia	8	-	2	1	3	1	1	8	96	40	28
West Virginia	21	2	3	-	3	2	3	13	37	30	9
North Carolina	50	4	2	9	4	2	11	32	87	32	128
South Carolina	86	15	14	11	12	8	5	65	25	5	29
Georgia	9	1	-	-	-	1	3	5	62	5	22
Florida	41	4	3	-	3	-	-	10	38	55	25
EAST SOUTH CENTRAL											
Paralytic	50	7	5	2	8	3	4	29	238	26	37
Total	80	7	5	3	8	18	15	56	305	92	122
Kentucky	32	-	-	-	-	14	10	24	16	4	41
Tennessee	15	1	-	1	3	3	4	12	141	31	32
Alabama	9	1	1	-	1	-	-	3	120	14	12
Mississippi	24	5	4	2	4	1	1	17	28	43	37
WEST SOUTH CENTRAL											
Paralytic	93	13	12	6	8	5	1	45	248	99	67
Total	159	22	23	13	10	9	2	79	388	165	277
Arkansas	14	2	2	1	-	3	-	8	101	5	19
Louisiana	40	4	4	3	1	3	-	15	41	18	40
Oklahoma	8	3	-	1	-	-	-	4	66	21	53
Texas	97	13	17	8	9	3	2	52	180	121	165
MOUNTAIN											
Paralytic	19	4	-	-	2	-	-	6	23	20	17
Total	40	4	3	2	5	2	1	17	40	40	58
Montana	13	2	-	-	1	-	-	3	4	20	3
Idaho	5	-	-	-	1	-	-	1	1	4	10
Wyoming	7	-	1	2	2	1	-	6	-	1	4
Colorado	5	2	-	-	-	1	-	3	4	3	8
New Mexico	3	-	-	-	-	-	1	1	7	5	20
Arizona	4	-	-	-	1	-	-	1	21	4	11
Utah	3	-	2	-	-	-	-	2	2	3	2
Nevada	-	-	-	-	-	-	-	-	1	-	-
PACIFIC											
Paralytic	268	10	13	14	23	26	23	109	190	57	47
Total	311	14	13	16	28	31	29	131	229	77	218
Alaska	2	-	-	-	-	-	-	-	12	-	-
Washington	17	-	3	-	5	1	1	10	49	6	6
Oregon	22	2	1	-	1	-	2	6	59	7	12
California	264	12	9	16	21	30	26	114	109	40	200
Hawaii	6	-	-	-	1	-	-	1	-	24	-
TERRITORIES											
Puerto Rico	397	31	16	12	10	20	11	100	-	11	16

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION
(Cases Reported to PSU from August 23 through August 29, 1960)

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Ken- tucky	Pulaski	S.S.	2	F	7-28-60	unk. unk.	8-1-60	arm ?	rt. hip and leg
Miss.	Oktib- beha	R.G.	1	M	7-14-60	P-D 6505- 664032	7-16-60	hip	left leg
Miss.	Pearl River	B.L.	5 mos.	F	6-10-60	P-M 175B135	6-30-60	left arm	muscles of rt. side and muscles of dig- lutation
Miss.	Warren	R.B.	3	F	7-9-60	Lilly 5053- 749228	7-23-60	left arm ?	left leg
Texas	Travis	D.A.	7 mos.	F	7-29-60	P-D unk.	8-5-60	unk.	left leg
Texas	(Armed Forces)	A.W.	26	M	4-18-60	unk. unk.	4-19-60	unk.	quad- raplegic

(Comment: patient died 7-14-60)

Additional information received on Minnesota case M.C. listed in PSU Report 207 indicates the following information:

Date Inoculated: 7-6-60 (right arm)
Date First Symptoms: 8-4-60 (right leg and right arm)
Manufacturer and Lot Number: Pittman-Moore 175A136

Additional information received on South Carolina case J.F. listed in PSU Report 208 reveals that onset of polio was previous to vaccination and should be deleted as an under-30 day case.

Table III

POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS
(Data provided by the Polio Vaccine Activity, BSS, USPHS, through August 19, 1960)

POLIOMYELITIS VACCINE SHIPPED (1000's cc's)

Period	National Foundation	Public Agencies	Commercial Channels	Domestic Total	Export
1955	13,541	7,893	6,223	27,657	--
1956	194	45,588	24,784	70,566	6,477
1957	154	50,026	38,062	88,242	12,784
1958	203	18,533	28,319	47,055	33,571
1959	160	26,160	37,553	63,873	21,161
1960					
Jan-March	--	4,298	5,371	9,669	2,782
April-June	--	6,149	9,763	15,912	3,498
<u>Week Ending</u>					
7-8	--	480	621	1,101	95
7-15	--	1,175	500	1,675	106
7-22	--	245	608	853	70
7-29	--	839	553	1,392	158
8-5	--	487	711	1,198	58
8-12	1	120	417	538	50
1960 Total to Date	1	13,793	18,544	32,338	6,817
Cumulative Total	14,253	161,993	153,485	329,731	80,810
<u>QUADRUPLE ANTIGEN VACCINE SHIPPED (1000's cc's)</u>					
1959		157	4,020	4,177	59
1960					
Jan-March		118	1,308	1,426	65
April-June		165	1,928	2,093	62
<u>Week Ending</u>					
7-8		14	148	162	2
7-15		9	124	133	13
7-22		13	149	162	1
7-29		10	169	179	3
8-5		42	155	197	10
8-12		23	153	176	4
1960 Total to Date		394	4,134	4,528	160
Cumulative Total		551	8,154	8,705	219
GRAND TOTAL	14,253	162,544	161,639	338,436	81,029

FIGURE II

MONTHLY SHIPMENTS OF POLIOMYELITIS VACCINE; 1959-60

Million cc's

