



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 214

October 7, 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.

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SUMMARY

A moderate decrease in total and paralytic cases of poliomyelitis was reported to NOV5 this week in contrast to the increase reported during the preceding two weeks.

New cases continue to occur in the Baltimore City outbreak and a new concentration of cases in Minnesota is under investigation. Scattered cases are reported from Indiana, Kentucky, Michigan and Pennsylvania.

Narrative summaries from Maryland, Minnesota, Texas and a special report from Canada are included.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 178 cases of poliomyelitis, 120 paralytic, was reported to the National Office of Vital Statistics for the 39th week ending October 1, 1960. This represents a moderate decrease of both total and paralytic cases compared to figures for the previous week, and brings the total number of cases reported to date to 2,303 of which 1,553 are paralytic.

As shown in the table below the number of total and paralytic cases is currently lower than any others in recent years, although the number of paralytic cases is essentially equal to the comparable total of 1957.

Total (Cumulative Weekly) through the 39th Week for Past Five Years

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	1,553	4,055	1,860	1,583	5,300
Total	2,303	6,337	3,818	4,889	12,250

The weekly incidence of paralytic disease depicted in the lower half of Figure 1 remains above that of 1957.

The decrease in paralytic disease is reflected chiefly in the New England, East South Central and Pacific Regions, with slight increases in the remaining 6 Regions. The majority of cases reported from the South Atlantic Region has occurred in Maryland. Delayed reporting of cases in Kentucky and reports of scattered cases in Indiana, Michigan, and Pennsylvania contribute to the weekly incidence.

2. REPORTS

A. Maryland

Dr. Glen E. Gresham, EIS Officer, assisting Dr. Charlotte Silverman, Epidemiologist, Maryland State Health Department, reports 20 additional cases of paralytic poliomyelitis in the city of Baltimore during the past week. There have now been 63 cases reported from Baltimore, of which 60 are paralytic.

Of the 60 paralytic cases, 63.3 percent are in the pre-school age group and 83.3 percent are under 10 years of age. These paralytic cases are shown below by age group and vaccination history:

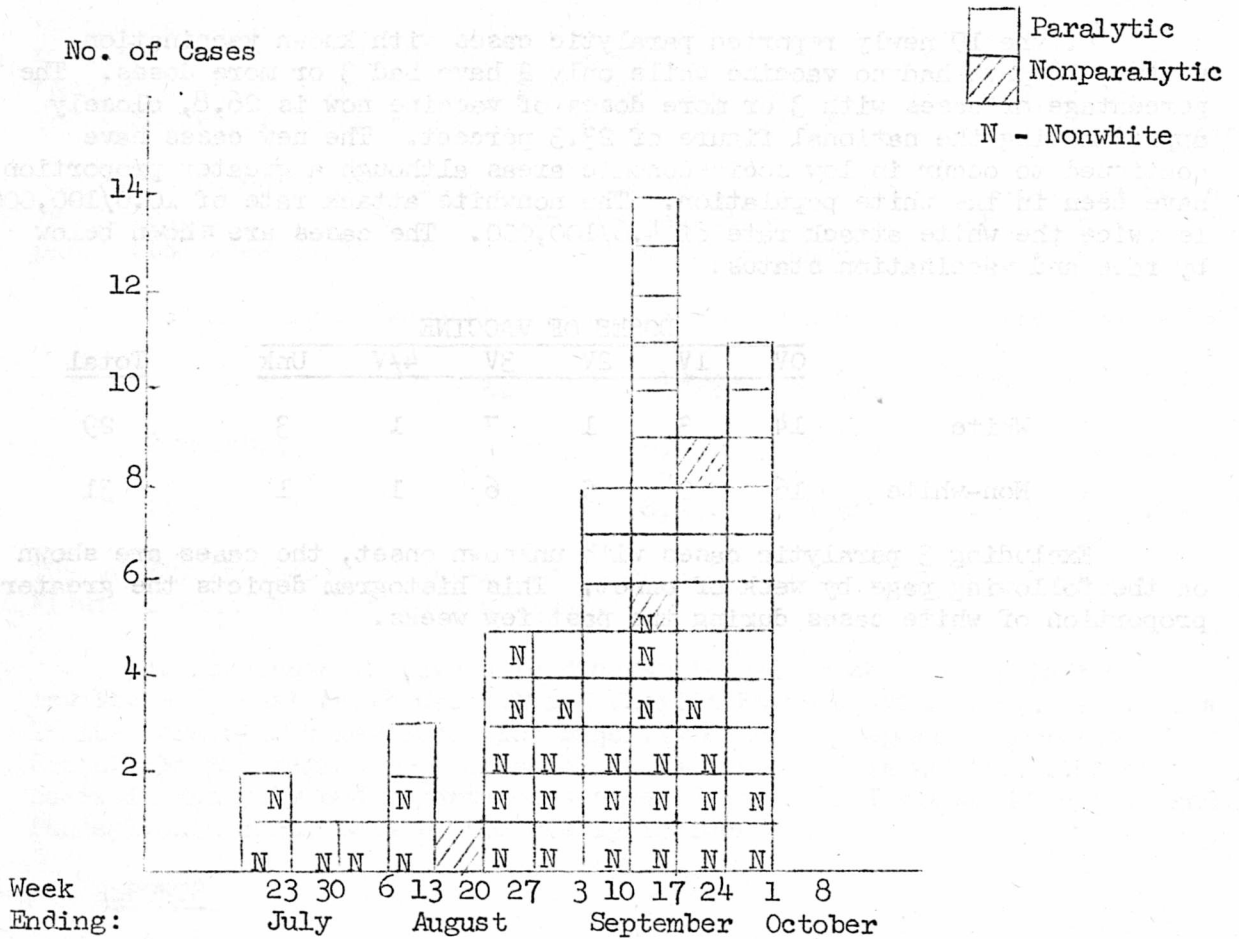
Age Group	DOSES OF VACCINE						Total
	0	1	2	3	4/	Unk.	
0-4	18	5	5	6	0	4	38
5-9	6	0	1	3	2	0	12
10-14	1	0	0	4	0	0	5
15-19	0	0	0	0	0	0	0
20/	<u>5</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>5</u>
TOTAL	30	5	6	13	2	4	60

Of the 19 newly reported paralytic cases with known vaccination status, 12 have had no vaccine while only 2 have had 3 or more doses. The percentage of cases with 3 or more doses of vaccine now is 26.8, closely approximating the national figure of 23.3 percent. The new cases have continued to occur in low socioeconomic areas although a greater proportion have been in the white population. The nonwhite attack rate of 10.6/100,000 is twice the white attack rate of 4.6/100,000. The cases are shown below by race and vaccination status:

	DOSES OF VACCINE						Total
	0V	1V	2V	3V	4/V	Unk	
White	14	3	1	7	1	3	29
Non-white	16	2	5	6	1	1	31

Excluding 3 paralytic cases with unknown onset, the cases are shown on the following page by week of onset. This histogram depicts the greater proportion of white cases during the past few weeks.

POLIOMYELITIS IN BALTIMORE, MARYLAND
BY WEEK OF ONSET - 1960



B. Minnesota

An outbreak of paralytic poliomyelitis on an Indian reservation in northern Minnesota is reported this week by Dr. Herman Kleinman of the State Division of Disease Prevention and Control. An investigation is currently underway to ascertain the incidence of cases on the Red Lake Indian Reservation (population approximately 2,500). Thus far, poliovirus has been isolated from 5 cases of paralytic disease in the area; four have been type I and one type III. Only one of these cases had had any polio vaccination. Dr. Kleinman states that the vaccination status of the population is poor, probably comparable to that of the nearby Nett Lake Indian Reservation where an outbreak due to type I poliovirus occurred last year.

The State total now is 37 cases reported, including 30 paralytic. No other concentrations have occurred except for 4 cases in Duluth and 3 cases in Shakopee, near Duluth. The latter cases all occurred in one family, with type I poliovirus isolated from 2 children and an as yet unidentified agent isolated from the father.

C. Texas

A report received from Dr. Van C. Tipton, Director, Division of Communicable Disease Control, Texas State Department of Health, indicates occurrence to date of 139 cases of poliomyelitis, 81 paralytic with onset in 1960. On the basis of State surveillance and PSU forms received thus far, no significant concentration of disease has occurred. The highest incidence by county this year is as follows: Harris County - 8 cases (5 paralytic), Winkler County - 3 cases, all paralytic in the town of Kermit, and 5 cases in Hidalgo County (4 paralytic). The total number of cases for the past six weeks in Texas has only been 49, far lower than in previous years as indicated below:

Cumulative Totals, 34-39th Week

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Total Cases	49	103	135	101

D. Canada

According to Dr. D. Kubryk, Medical Consultant to the Epidemiology Division, Canadian Department of National Health and Welfare, a total of 586 cases of paralytic poliomyelitis has been reported to date this year. Unlike the epidemic experience in 1959 when Quebec reported the largest number of cases, the majority of paralytic disease this year has been reported from the Western Provinces of Alberta and British Columbia. The following has been abstracted from surveillance reports of the Epidemiology Division.

INCIDENCE OF PARALYTIC POLIOMYELITIS
Through the 39th Week

	<u>1959</u>	<u>1960</u>
Alberta	28	134
British Columbia	43	148
Manitoba	21	8
New Brunswick	37	35
Newfoundland	112	41
Northwest Territories	10	1
Nova Scotia	2	9
Ontario	142	23
Prince Edward Island	4	1
Quebec	781	145
Saskatchewan	20	41
Yukon	<u>1</u>	<u>-</u>
TOTAL	1201	586

In British Columbia over 50 percent of cases have been reported from the Prince George area in the mountainous northwestern part of the province; this is near the Burns Lake area which was the scene of a winter outbreak of poliomyelitis (PSU No. 198). Aside from this concentration and an outbreak of 8 cases in Bonaventure County, Quebec, which involved 6 children and 2 adults, all unvaccinated, most of the cases have been scattered in the provinces.

Preliminary information from 8 of the 12 provinces suggests that the majority of paralytic disease is occurring in poorly vaccinated pre-school and school age children.

Preliminary laboratory reporting indicates that type I poliovirus was recovered from many cases earlier in the year, but since June poliovirus III has been more prominent.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

Through October 3, there have been 1,623 cases of poliomyelitis reported to the Poliomyelitis Surveillance Unit on individual case forms. Of these 1,623 cases, 1,200 are paralytic, 388 nonparalytic and only 35 unspecified as to paralytic status.

These cases are presented below:

TABLE 3

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION HISTORY REPORTED ON PSU FORMS
(Through October 3, 1960)

Age Group	Paralytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	301	60	58	67	17	27	530
5-9	113	19	29	65	34	17	277
10-14	27	7	10	36	11	10	101
15-19	34	7	5	14	1	7	68
20-29	89	10	9	7	4	7	126
30-39	50	7	5	4	2	3	71
40+	21	0	0	1	0	4	26
Unk.	1	0	0	0	0	0	1
Total	636	110	116	194	69	75	1200
PER	56.5	9.8	10.3	17.2	6.1	-	100.0
CENT							
DOSES							

Age Group	Nonparalytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	42	8	11	15	12	6	94
5-9	21	10	10	30	29	9	109
10-14	5	6	0	23	20	1	55
15-19	13	0	5	17	10	0	45
20-29	15	3	4	18	6	8	54
30-39	6	2	4	5	6	1	24
40+	5	0	1	0	0	1	7
Unk.	0	0	0	0	0	0	0
Total	107	29	35	108	83	26	388
PER	29.6	8.0	9.7	29.8	22.9	-	100.0
CENT							
DOSES							

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset within 30 Days of Vaccination

During the week ending October 3, the Poliomyelitis Surveillance Unit was notified of 4 cases of poliomyelitis, 2 paralytic, with onset within 30 days of vaccination. The 1960 total now stands at 95 cases. Of these, 71 are paralytic (7 correlated) and 24 nonparalytic.

The two paralytic cases reported this week are presented in Table II, which also includes additional information on previously reported under 30-day cases.

B. Vaccine Distribution

The summary of current and cumulative data concerning poliomyelitis vaccine and quadruple antigen vaccine shipped is presented in Table III.

Age	10-14	15-19	20-29	30-39	40+	Total	PER	CENT	DOSES
0-9	301	68	58	27	11	465	100.0		
10-14	110	19	39	22	17	197			
15-19	21	7	10	34	17	99			
20-29	34	7	19	10	7	77			
30-39	88	10	9	4	2	113			
40+	21	0	0	1	0	22			
Unk.	1	0	0	0	0	1			
Total	676	110	116	104	35	1041			
PER	64.3	10.3	11.2	10.0	3.2	100.0			

Age	10-14	15-19	20-29	30-39	40+	Total	PER	CENT	DOSES
0-9	2	0	0	0	0	2			
10-14	13	0	2	17	10	42			
15-19	13	0	2	17	10	42			
20-29	13	0	2	17	10	42			
30-39	6	0	1	4	1	12			
40+	2	0	0	1	0	3			
Unk.	0	0	0	0	0	0			
Total	46	0	5	68	22	141			
PER	32.6	0.0	3.5	48.2	15.7	100.0			

(This report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Joseph Oren, M. D., Chief, Michael Regan, M. D., and Mr. Leo Morris, Statistician, 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

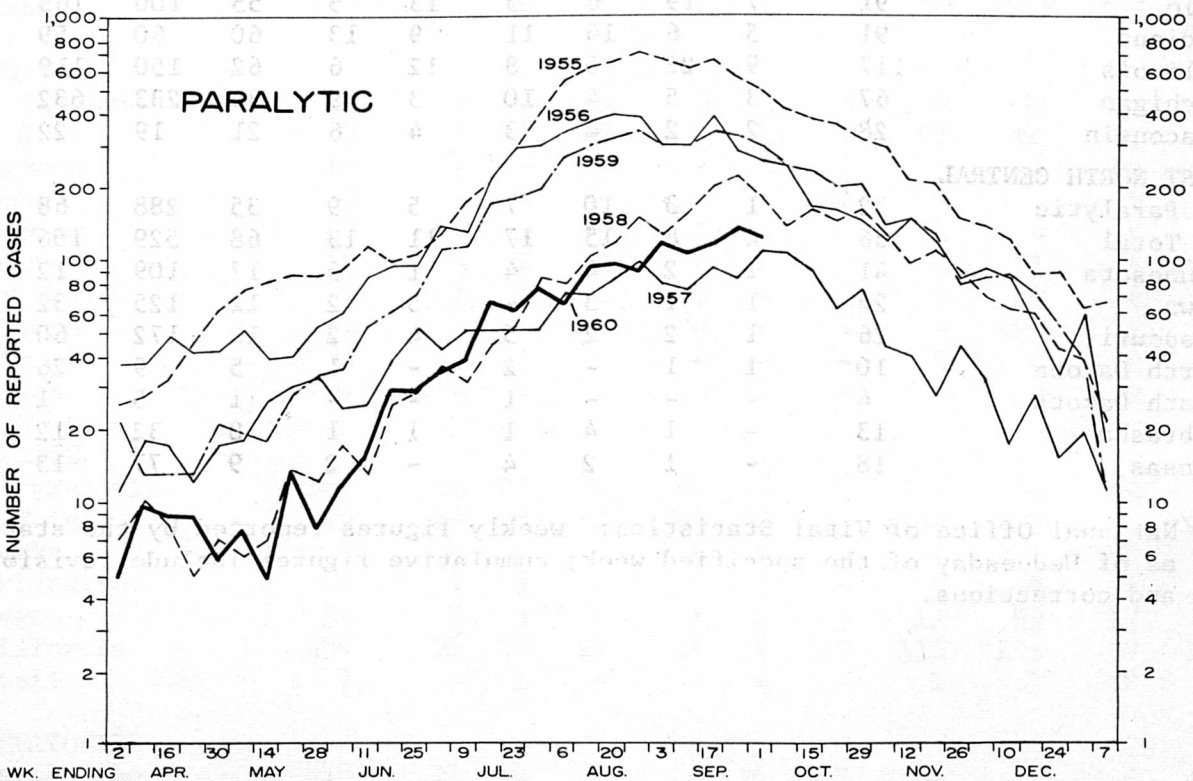
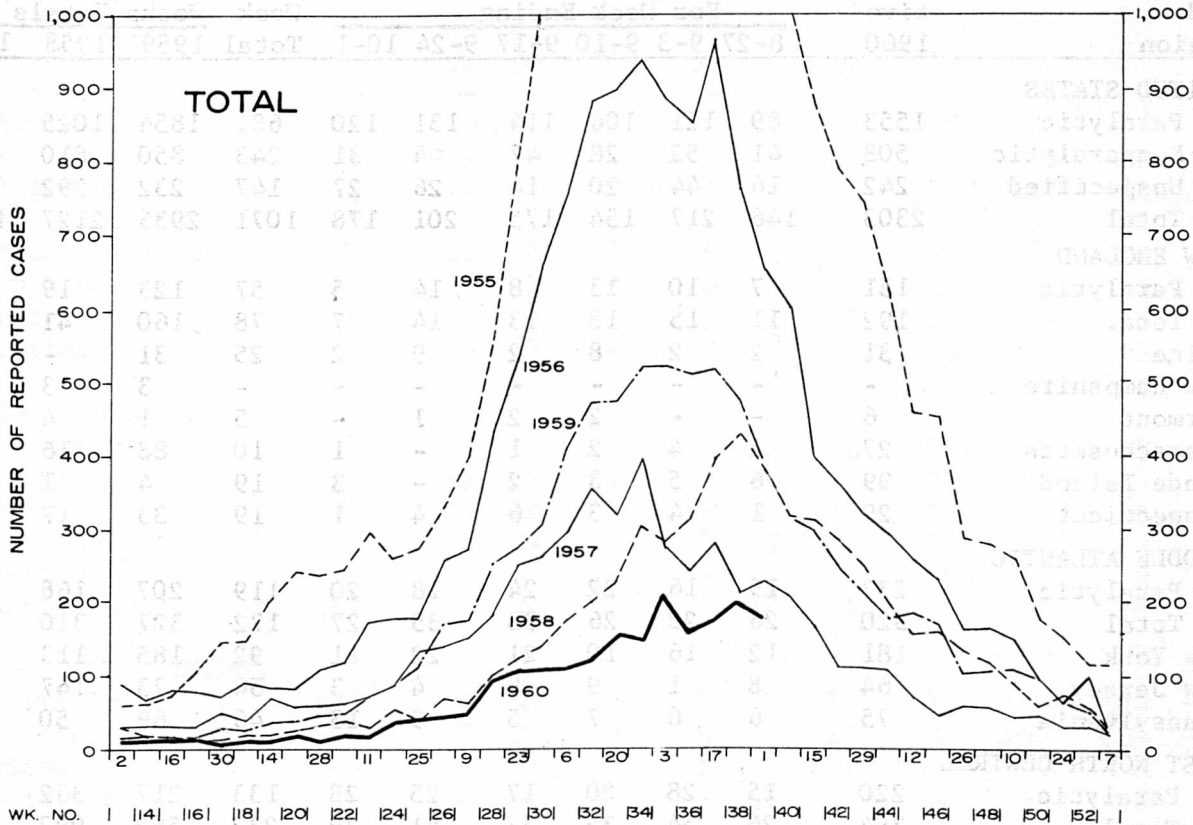


Table 1

TREND OF 1960 POLIOMYELITIS INCIDENCE

State and Region	Cumula- tive 1960	Cases Reported to NOVS*						Six Week Total	Comparable Six Weeks Totals in:		
		For Week Ending							1959	1958	1957
		8-27	9-3	9-10	9-17	9-24	10-1				
UNITED STATES											
Paralytic	1553	89	121	106	114	131	120	681	1854	1025	526
Nonparalytic	508	41	52	28	47	44	31	243	850	810	838
Unspecified	242	16	44	20	14	26	27	147	232	292	283
Total	2303	146	217	154	175	201	178	1071	2936	2127	1647
NEW ENGLAND											
Paralytic	151	7	10	13	8	14	5	57	123	19	8
Total	192	11	15	18	13	14	7	78	160	41	34
Maine	31	2	2	8	2	9	2	25	31	-	3
New Hampshire	-	-	-	-	-	-	-	-	3	3	1
Vermont	6	-	-	2	2	1	-	5	1	4	2
Massachusetts	27	2	4	2	1	-	1	10	88	16	11
Rhode Island	99	6	5	3	2	-	3	19	4	1	-
Connecticut	29	1	4	3	6	4	1	19	33	17	17
MIDDLE ATLANTIC											
Paralytic	233	19	16	22	24	18	20	119	207	168	39
Total	320	26	23	26	35	35	27	172	327	310	134
New York	181	12	16	10	21	22	11	92	185	113	83
New Jersey	64	8	1	9	9	4	3	34	73	147	41
Pennsylvania	75	6	6	7	5	9	13	46	69	50	10
EAST NORTH CENTRAL											
Paralytic	220	15	28	20	17	25	28	133	217	362	133
Total	394	26	54	35	37	41	39	232	562	997	640
Ohio	91	7	19	6	5	13	5	55	100	165	86
Indiana	91	5	6	16	11	9	13	60	60	59	72
Illinois	117	9	22	5	8	12	6	62	150	119	165
Michigan	67	3	5	4	10	3	9	34	233	632	235
Wisconsin	28	2	2	4	3	4	6	21	19	22	82
WEST NORTH CENTRAL											
Paralytic	72	1	3	10	7	5	9	35	288	68	39
Total	136	4	8	15	17	11	13	68	529	156	132
Minnesota	41	1	2	4	4	1	5	17	109	12	12
Iowa	24	1	1	3	-	5	2	12	125	32	42
Missouri	26	1	2	2	5	4	2	16	172	60	31
North Dakota	10	1	1	-	2	-	1	5	9	26	5
South Dakota	4	-	-	-	1	-	-	1	5	1	9
Nebraska	13	-	1	4	1	1	1	8	32	12	17
Kansas	18	-	1	2	4	-	2	9	77	13	16

* 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 I (Continued)

State and Region	Cumula- tive 1960	Cases Reported to NOVS For Week Ending:						Six Week Total	Comparable Six Weeks Totals in:		
		8-27	9-3	9-10	9-17	9-24	10-1		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	276	19	23	11	24	30	31	138	343	147	115
Total	380	32	34	16	32	33	36	183	441	227	213
Delaware	-	-	-	-	-	-	-	-	3	6	-
Maryland	72	10	4	2	11	17	21	65	16	8	7
D.C.	-	-	-	-	-	-	-	-	3	-	39
Virginia	19	-	1	2	4	2	3	12	117	47	38
West Virginia	34	3	8	-	2	3	2	18	90	81	21
North Carolina	72	11	8	5	5	2	2	33	87	20	41
South Carolina	117	5	8	4	6	6	7	36	36	7	23
Georgia	16	3	-	3	2	1	1	10	57	16	18
Florida	50	-	5	-	2	2	NR	9	32	42	26
EAST SOUTH CENTRAL											
Paralytic	71	4	5	2	2	9	3	25	230	43	44
Total	167	15	29	5	3	30	20	102	315	71	90
Kentucky	94	10	22	3	-	20	17	72	42	10	36
Tennessee	30	4	4	1	2	7	1	19	161	32	36
Alabama	14	-	1	1	-	2	1	5	78	9	10
Mississippi	29	1	2	-	1	1	1	6	34	20	8
WEST SOUTH CENTRAL											
Paralytic	137	1	12	6	7	9	10	45	170	129	70
Total	228	2	25	8	9	12	15	71	269	183	179
Arkansas	26	-	5	1	1	3	2	12	96	8	9
Louisiana	44	-	-	-	-	4	-	4	35	28	37
Oklahoma	14	-	-	2	2	-	2	6	35	12	32
Texas	144	2	20	5	6	5	11	49	103	135	101
MOUNTAIN											
Paralytic	33	-	2	1	3	3	5	14	36	20	17
Total	67	1	4	10	5	3	5	28	60	51	56
Montana	16	-	-	-	-	1	2	3	1	20	5
Idaho	5	-	-	-	-	-	NR	-	-	7	9
Wyoming	18	-	1	8	2	-	-	11	-	2	4
Colorado	13	-	1	1	2	2	2	8	11	6	16
New Mexico	7	1	1	1	1	-	1	5	14	4	6
Arizona	4	-	-	-	-	-	-	-	25	8	10
Utah	4	-	1	-	-	-	-	1	6	2	6
Nevada	-	-	-	-	-	-	-	-	3	2	-
PACIFIC											
Paralytic	360	23	22	21	22	18	9	115	240	69	61
Total	419	29	25	21	24	22	16	137	273	91	169
Alaska	2	-	-	-	-	-	-	-	3	1	1
Washington	25	1	3	-	2	3	-	9	84	4	7
Oregon	31	2	3	-	1	2	3	11	59	17	3
California	354	26	18	21	21	17	13	116	126	57	155
Hawaii	7	-	1	-	-	-	-	1	1	12	3
TERRITORIES											
Puerto Rico	448	11	14	7	9	16	5	62	1	5	8

Table III

POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS

(Data provided by the Polio Vaccine Activity, BSS, USPHS, through September 23, 1960)

POLIOMYELITIS VACCINE SHIPPED (1000's cc's)

<u>Period</u>	<u>National Foundation</u>	<u>Public Agencies</u>	<u>Commercial Channels</u>	<u>Domestic Total</u>	<u>Export</u>
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
July	--	2,740	2,282	5,022	430
August	1	2,937	2,558	5,496	293
<u>WEEK ENDING</u>					
9-9	--	355	431	786	36
9-16	--	420	486	906	64
1960 Total to Date	1	16,898	20,891	37,799	7,102
Cumulative Total	14,253	165,098	155,832	335,183	81,095
<u>QUADRUPLE ANTIGEN VACCINE SHIPPED (1000'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
July		47	589	636	20
August		128	797	925	28
<u>WEEK ENDING</u>					
9-9		5	129	134	2
9-16		22	105	127	5
1960 Total to Date		485	4,856	5,341	181
Cumulative Total		642	8,876	9,518	240
GRAND TOTAL	14,253	165,740	164,708	344,701	81,335

