



# POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 210

SEPTEMBER 9, 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

There was a sharp increase in both total and paralytic cases of poliomyelitis reported to NOVS this week. The total for the current week was 210 cases of which 116 were paralytic. For the previous week, the total was 148, including 88 paralytic.

This 32 percent rise in paralytic cases represents general increases in many areas throughout the nation with further investigation revealing cases being scattered in these areas with no newly reported outbreaks. Increases in New York, Ohio, Illinois and West Virginia represent cases appearing throughout those states with no concentrations in evidence. A sudden rise in Texas may be attributed to delayed reports, a majority of which are nonparalytic. Delayed cases are also reported from Kentucky, most of which are from the previously described Taylor County outbreak.

Narrative reports are included from Rhode Island, New York, Ohio, Illinois, West Virginia and South Carolina.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 210 cases, 116 paralytic, was reported to the National Office of Vital Statistics during the week ending September 3. This is an increase in both total and paralytic cases over the number reported last week and brings the cumulative 1960 total to 1,594 cases of which 1,075 are paralytic. These figures are presented in the following table:

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	1,075	2,828	1,108	1,229	4,108
Total	1,594	4,445	2,281	3,915	9,003

As can be seen from the above table and Figure I, while the cumulative total and paralytic cases reported in 1960 are lower than the past four years, the sharp increase in paralytic cases reported the current week has surpassed the number of paralytic cases reported during the corresponding week in 1957.

The 32 percent increase in paralytic cases and 42 percent increase in total cases seen this week is reflected mainly in the East North Central and West South Central regions. The rise in total cases in the East South Central region is due to unspecified reports received from Kentucky.

2. REPORTS

A. Rhode Island

Through September 6, 1960, a total of 111 poliomyelitis cases, 77 paralytic, have been reported from the three-month old epidemic in Rhode Island. Of this total, 91 cases have been reported to the National Office of Vital Statistics and 20 are not yet reported or still under investigation.

B. New York

Through September 1, 1960, there has been a total of 71 cases of poliomyelitis reported in New York (exclusive of New York City), of which 56 are paralytic, 11 nonparalytic and 4 unspecified. Of these cases reported in 1960, 16 paralytic, 3 nonparalytic and 1 unspecified are delayed reports from 1959.

Thus, 51 cases, 40 paralytic, have had onset in 1960. There has been no concentration of cases throughout the state with 8 cases (6 paralytic) in Cattaraugus County being the highest total in any one county. Polio Surveillance Reports have been received on all 51 cases with onset in 1960 and reveal that only 28 of these have had onset since August. This is shown below:

Week Ending	:	<u>8-6</u>	<u>8-13</u>	<u>8-20</u>	<u>8-27</u>	<u>9-3</u>
Paralytic cases	:	6	4	7	1	0
Nonparalytic cases	:	3	1	3	0	0
Unspecified	:	0	0	1	1	1

C. Ohio

Dr. Winslow Bashe, Chief, Communicable Diseases, Ohio Department of Health, reports that the increase to 19 cases reported last week to NOVS represents no concentration of cases in any one area of the state. The 1960 cumulative total now stands at 62 cases, of which only 48, 20 paralytic, have had onset in 1960.

There have been 4 cases each reported from Van Wert and Cuyahoga Counties and 3 cases each from both Medina and Licking County. These cases have not all had recent onset and represent the highest number of cases reported from any one county. In Ohio this year, poliomyelitis has occurred in predominantly rural areas with most cases being unvaccinated.

D. Illinois

Dr. Norman J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health, reports 22 cases of poliomyelitis, 12 paralytic, to NOVS for the week ending September 3. Although a substantial increase compared to the 9 cases, 6 paralytic, reported the previous week to NOVS, there is no apparent cluster of cases throughout the state.

The 1960 total of 85 cases is broken down as follows:

	<u>Paralytic</u>	<u>Nonparalytic</u>	<u>Total</u>
Illinois (exclusive of Chicago)	40	25	65
Chicago	<u>18</u>	<u>2</u>	<u>20</u>
State Total	58	27	85

Exclusive of Chicago, there have been 9 cases in Cook County, 8 cases in Macon County and 4 cases in Champaign County. Of the 8 cases in Macon, 5 have occurred in the city of Decatur over the past two months. No other county has had more than two cases reported.

E. West Virginia

Dr. L. A. Dickerson, Director of Preventive Medical Services, West Virginia State Department of Health, reports 8 cases of poliomyelitis, 6 paralytic, with onsets since August 7. Though the majority have occurred since August 21, there is no apparent concentration within the State. The State total now stands at 30 for the year.

Two of the 8 cases have been reported from Preston County and 1 from Mineral County; both of these counties lie near the Pennsylvania border and Somerset County, Pennsylvania, site of a recent outbreak of poliomyelitis (see PSU Report #209).

No virus has been isolated as yet from these recent cases, but poliovirus type I was found in earlier cases in the State.

F. South Carolina

Dr. G. E. McDaniel, Director, Division of Disease Control, South Carolina State Board of Health, reports 8 cases of poliomyelitis, 6 paralytic, to NOVS for the week ending September 3, bringing the State total to 94 cases. The 8 cases have had onsets since August 5, and are scattered in the western part of the State, scene of an outbreak earlier this year.

Poliovirus type I has been isolated from many previously reported cases.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

During the week ending September 5, 136 cases of poliomyelitis were reported to PSU on individual case forms bringing the 1960 total to 1,007 cases. Of these cases, 740 are paralytic, 242 nonparalytic and 25 unspecified as to paralytic status. Thus, 69 percent of the paralytic cases reported to NOVS through September 3, have been reported to PSU.

These cases are presented below:

TABLE 3

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

Age Group	Paralytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	196	48	34	38	11	17	344
5-9	61	14	19	40	22	8	164
10-14	18	5	3	23	6	8	63
15-19	21	4	4	6	1	7	43
20-29	40	5	7	7	2	4	65
30-39	29	5	4	1	2	2	43
40+	15	-	-	1	-	2	18
Unk.	-	-	-	-	-	-	-
Total	380	81	71	116	44	48	740
PER CENT DOSES	54.9	11.7	10.3	16.8	6.4	-	100.0

Age Group	Nonparalytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	27	6	7	12	9	5	66
5-9	7	6	5	19	18	8	63
10-14	4	3	-	14	11	-	32
15-19	3	-	4	9	9	1	26
20-29	7	2	4	12	3	5	33
30-39	4	2	2	4	3	1	16
40+	5	-	1	-	-	-	6
Unk.	-	-	-	-	-	-	-
Total	57	19	23	70	53	20	242
PER CENT DOSES	25.7	8.6	10.4	31.5	23.9	-	100.0

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset within 30 Days of Vaccination

During the week ending September 5, the Poliomyelitis Surveillance Unit was notified of 10 cases of poliomyelitis, 7 paralytic, with onset within 30 days of vaccination. The 1960 total now stands at 60. Of these, 47 are paralytic (6 correlated) and 13 nonparalytic.

The paralytic cases reported this week are presented in Table II. The two cases from Bristol County, Massachusetts, both fatalities, are siblings who received their inoculation on the same date. Information is being sought concerning unknown information.

B. Vaccine Distribution

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

Age Group	Doses of Vaccine			
	0	1	2	3
0-4	136	46	34	38
5-9	61	19	40	22
10-14	18	2	23	6
15-19	21	4	0	1
20-29	40	2	7	3
30-39	29	4	1	2
40+	12	-	-	-
Unk.	-	-	-	-
Total	340	81	116	44
PER CENT	11.7	10.7	16.8	6.4
POSES				

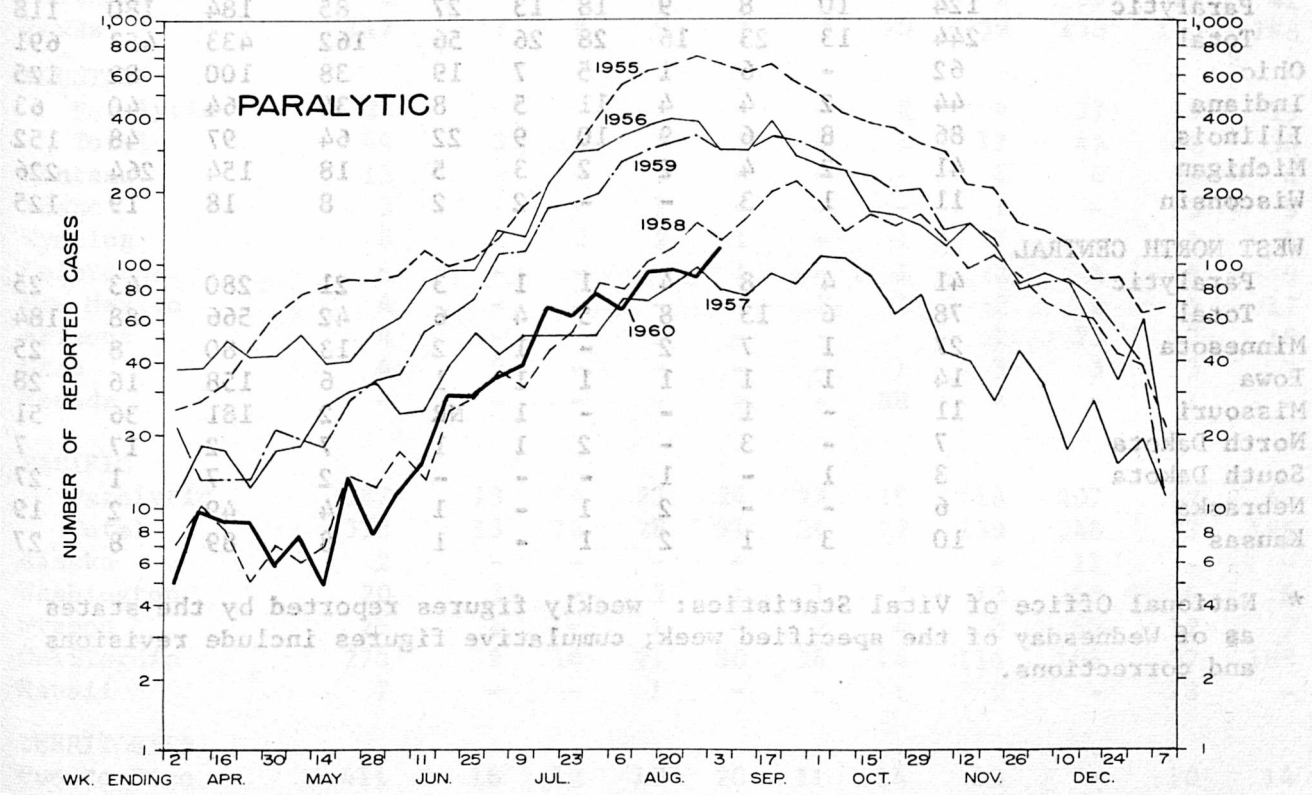
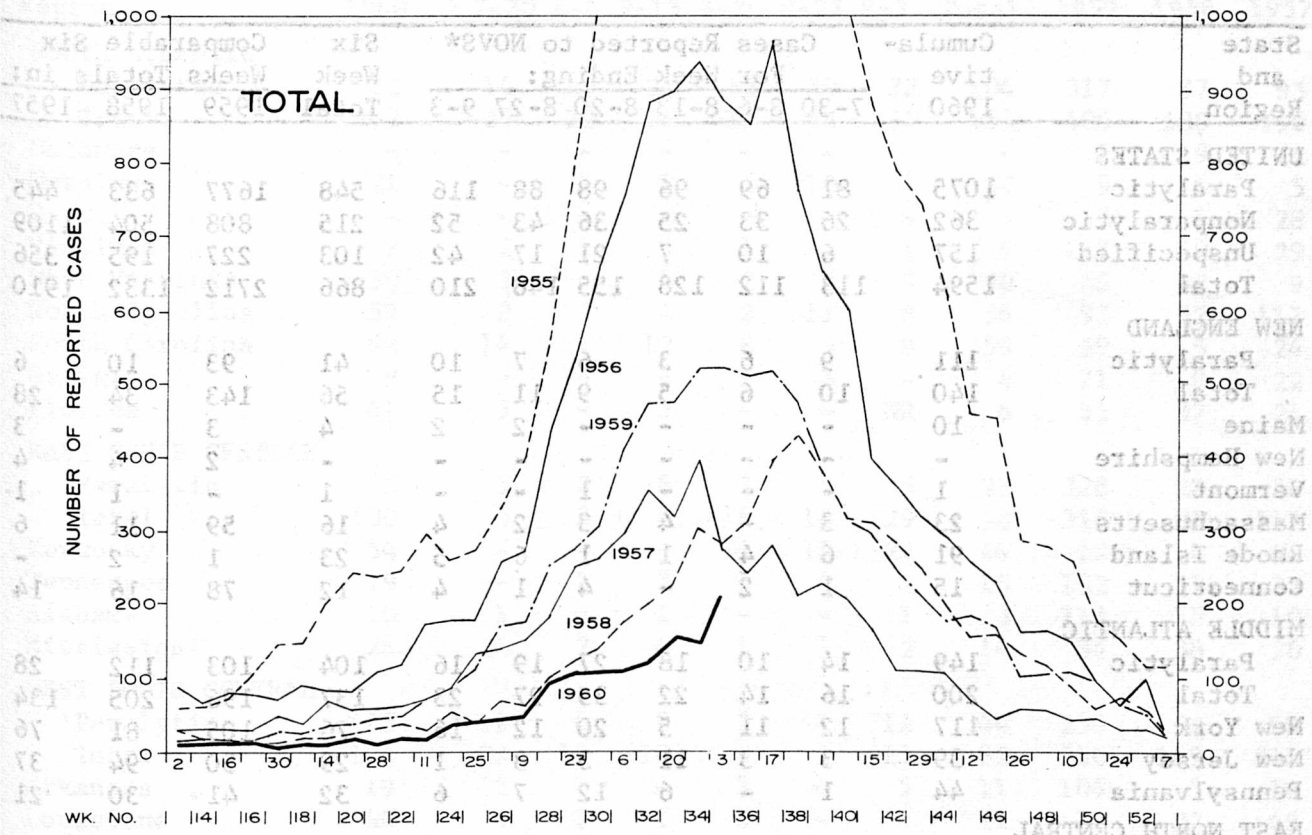
(This report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Michael J. Regan, M.D., and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)

Age Group	Doses of Vaccine			
	0	1	2	3
0-4	27	8	7	12
5-9	19	6	14	8
10-14	4	3	0	1
15-19	13	2	4	0
20-29	12	2	3	1
30-39	4	2	0	1
40+	2	-	-	-
Unk.	-	-	-	-
Total	57	19	20	20
PER CENT	22.7	8.6	10.4	31.2
POSES				

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

Table 1

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS



\* 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

## TREND OF 1960 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1960	Cases Reported to NOVS* For Week Ending:						Six Week Total	Comparable Six Weeks Totals in:		
		7-30	8-6	8-13	8-20	8-27	9-3		1959	1958	1957
<b>UNITED STATES</b>											
Paralytic	1075	81	69	96	98	88	116	548	1677	633	445
Nonparalytic	362	26	33	25	36	43	52	215	808	504	1109
Unspecified	157	6	10	7	21	17	42	103	227	195	356
Total	1594	113	112	128	155	148	210	866	2712	1332	1910
<b>NEW ENGLAND</b>											
Paralytic	111	9	6	3	6	7	10	41	93	10	6
Total	140	10	6	5	9	11	15	56	143	34	28
Maine	10	-	-	-	-	2	2	4	3	-	3
New Hampshire	-	-	-	-	-	-	-	-	2	4	4
Vermont	1	-	-	-	1	-	-	1	-	1	1
Massachusetts	23	3	-	4	3	2	4	16	59	11	6
Rhode Island	91	6	4	1	1	6	5	23	1	2	-
Connecticut	15	1	2	-	4	1	4	12	78	16	14
<b>MIDDLE ATLANTIC</b>											
Paralytic	149	14	10	18	27	19	16	104	103	112	28
Total	200	16	14	22	35	27	23	137	196	205	134
New York	117	12	11	5	20	12	16	76	105	81	76
New Jersey	39	3	3	11	3	8	1	29	50	94	37
Pennsylvania	44	1	-	6	12	7	6	32	41	30	21
<b>EAST NORTH CENTRAL</b>											
Paralytic	124	10	8	9	18	13	27	85	184	180	118
Total	244	13	23	16	28	26	56	162	433	453	691
Ohio	62	-	6	1	5	7	19	38	100	82	125
Indiana	44	2	4	4	11	5	8	34	64	40	63
Illinois	86	8	6	9	10	9	22	64	97	48	152
Michigan	41	2	4	2	2	3	5	18	154	264	226
Wisconsin	11	1	3	-	-	2	2	8	18	19	125
<b>WEST NORTH CENTRAL</b>											
Paralytic	41	4	8	4	1	1	3	21	280	43	25
Total	78	6	13	8	5	4	6	42	566	88	184
Minnesota	27	1	7	2	-	1	2	13	80	8	25
Iowa	14	1	1	1	1	1	1	6	158	16	28
Missouri	11	-	1	-	-	1	NR	2	181	36	51
North Dakota	7	-	3	-	2	1	1	7	2	17	7
South Dakota	3	1	-	1	-	-	-	2	7	1	27
Nebraska	6	-	-	2	1	-	1	4	49	2	19
Kansas	10	3	1	2	1	-	1	8	89	8	27

\* 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:		
		7-30	8-6	8-13	8-20	8-27	9-3		1959	1958	1957
<b>SOUTH ATLANTIC</b>											
Paralytic	182	14	15	21	12	20	22	104	317	87	95
Total	262	24	22	26	18	33	30	153	406	180	260
Delaware	-	-	-	-	-	-	-	-	1	9	2
Maryland	21	-	1	1	4	10	4	20	9	6	5
D. C.	-	-	-	-	-	-	-	-	3	1	28
Virginia	9	2	1	3	1	1	1	9	117	40	29
West Virginia	30	3	-	3	2	3	9	20	48	42	9
North Carolina	58	2	9	4	2	11	8	36	93	32	117
South Carolina	94	14	11	12	8	5	8	58	29	5	24
Georgia	9	-	-	-	1	3	-	4	71	8	22
Florida	41	3	-	3	-	-	NR	6	35	37	24
<b>EAST SOUTH CENTRAL</b>											
Paralytic	55	5	2	8	3	4	5	27	228	28	36
Total	109	5	3	8	18	15	29	78	315	88	113
Kentucky	54	-	-	-	14	10	22	46	16	4	40
Tennessee	19	-	1	3	3	4	4	15	152	31	33
Alabama	10	1	-	1	-	-	1	3	113	15	10
Mississippi	26	4	2	4	1	1	2	14	34	38	30
<b>WEST SOUTH CENTRAL</b>											
Paralytic	105	12	6	8	5	1	12	44	238	102	69
Total	184	23	13	10	9	2	25	82	360	169	248
Arkansas	19	2	1	-	3	-	5	11	106	3	16
Louisiana	40	4	3	1	3	-	-	11	37	22	43
Oklahoma	8	-	1	-	-	-	-	1	59	19	41
Texas	117	17	8	9	3	2	20	59	158	125	148
<b>MOUNTAIN</b>											
Paralytic	21	-	-	2	-	-	2	4	27	19	19
Total	44	3	2	5	2	1	4	17	45	42	56
Montana	13	-	-	1	-	-	-	1	4	18	4
Idaho	5	-	-	1	-	-	-	1	-	3	9
Wyoming	8	1	2	2	1	-	1	7	-	1	4
Colorado	6	-	-	-	1	-	1	2	6	4	9
New Mexico	4	-	-	-	-	-	1	2	9	5	17
Arizona	4	-	-	1	-	-	-	1	23	7	10
Utah	4	2	-	-	-	-	1	3	3	3	3
Nevada	-	-	-	-	-	-	NR	-	-	1	-
<b>PACIFIC</b>											
Paralytic	287	13	14	23	26	23	19	118	207	52	49
Total	333	13	16	28	31	29	22	139	248	73	196
Alaska	2	-	-	-	-	-	-	-	11	-	-
Washington	20	3	-	5	1	1	3	13	65	6	6
Oregon	26	1	-	1	-	2	4	8	66	12	7
California	278	9	16	21	30	26	14	116	106	37	183
Hawaii	7	-	-	1	-	-	1	2	-	18	-
<b>TERRITORIES</b>											
Puerto Rico	411	16	12	10	20	11	14	83	-	10	14

(Continued)

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION  
(Cases Reported to PSU from August 30 through September 5, 1960)

State	County	Initials	Age	Sex	Date Inoc.	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Calif.	Los Angeles	D.H.	14 mos.	F.	7-18-60	Wyeth AV-110 05 JoleH	8-10-60 362	right arm	left arm
Illinois	Douglas	R.C.	6	M.	8-13-60	unk. unk.	8-14-60	unk.	unk.
Kentucky	Pulaski	J.W.	11	F.	one week before onset	unk. unk.	8-16-60	unk.	unk.
Maryland	Baltimore City	R.C.	10 mos.	M.	8-24-60	unk. unk.	8-28-60	left arm	left hip
Mass.	Bristol	A.A.	8	F.	7-12-60	Lilly 3090-755 922	7-27-60	unk.	unk.
(Comment: patient died 7-29-60)									
Mass.	Bristol	J.A.	12	M.	7-12-60	Lilly 3090-755 922	8-7-60	unk.	unk.
(Comment: patient died 8-8-60)									
Tenn.	Tipton	W.T.	6	M.	7-27-60	Lilly 9001 755 922	8-5-60	left arm	tongue, legs & back

Additional information received on Texas Case D.A. listed in Report 209 indicates site of inoculation - left arm, vaccine manufacturer - Parke-Davis, and vaccine lot number - 05839A.

Table III

## POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS

(Data provided by the Polio Vaccine Activity, BSS, USPHS, through August 26, 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
8-19	--	1,376	473	1,849	47
1960 Total to Date	1	15,169	19,017	34,187	6,864
Cumulative Total	14,253	163,369	153,958	331,580	80,857
<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
8-19		36	150	186	3
1960 Total to Date		430	4,284	4,714	163
Cumulative Total		587	8,304	8,891	222
GRAND TOTAL	14,253	163,956	162,262	340,471	81,079

