



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 204

July 29, 1960

Table of Contents

SUMMARY

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS
2. REPORTS
3. 1960 POLIOMYELITIS CASES REPORTED TO PSU
4. ROUTINE POLIOMYELITIS SURVEILLANCE
 - A. Under 30-Day Vaccinated Cases
 - B. Vaccine Distribution



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.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
COMMUNICABLE DISEASE CENTER
Clarence A. Smith, Chief
Epidemiology Branch
Alexander D. Langmuir, Chief
Surveillance Section
E. Russell Alexander, Chief
Atlanta 22, Georgia

SUMMARY

There was only a small increase in the total number of poliomyelitis cases reported this week, a marked contrast to the steep rise seen during the previous week (see Figure I). Despite this slight increase in total cases, the reported number of paralytic cases was lower than last week.

Rhode Island and Puerto Rico continue as major epidemic areas with the outbreak in South Carolina, which was reported last week, still increasing. There is a new concentration of cases within a defined geographic area in Chicago, Illinois. Narrative reports are included from these areas.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 105 cases, 63 paralytic, was reported to the National Office of Vital Statistics during the 29th week of 1960, ending July 23. Although the total number of cases increased from 95 to 105, there was a slight decrease in paralytic cases as compared to the 69 reported to NOVS last week. (See Table I) During the corresponding week in 1959, a total of 278 cases, 177 paralytic, was reported to NOVS.

The 1960 cumulative total has now reached 724 cases, of which 518 (71.5 percent) are paralytic. These totals remain lower than any previous year with the exception of the paralytic total in 1958. These figures are presented below:

	<u>Total through 29th Week for Five Years</u>				
	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	518	1,151	475	784	2,064
Total	724	1,733	949	2,005	3,961

Although there was increased reporting this week from five of the nine regions, there are no new concentrations of cases in any of these areas. Six-week totals continue to be higher than those for the corresponding period in 1959 for the States of Rhode Island, South Carolina and California.

2. REPORTS

A. Rhode Island

Dr. R.F. McAteer, Medical Director, Division of Communicable Diseases, Rhode Island Department of Health, reports 10 new cases of poliomyelitis during the past week in the metropolitan Providence area. Seven of these cases are paralytic. This brings the total number of cases reported to the State Health Department through July 27, to 72, of which 58 are paralytic. In addition to these 72 cases, Dr. Joseph Oren, Chief, Poliomyelitis Surveillance Unit, CDC, assisting Dr. McAteer, cites another 13 cases under investigation.

Only 5 (8.6 percent) of the 58 paralytic cases have received three or more inoculations of Salk vaccine, while 28 are unvaccinated. The paralytic disease continues to be primarily confined to young children with 95 percent under 10 years of age, and 60 percent in the pre-school age group.

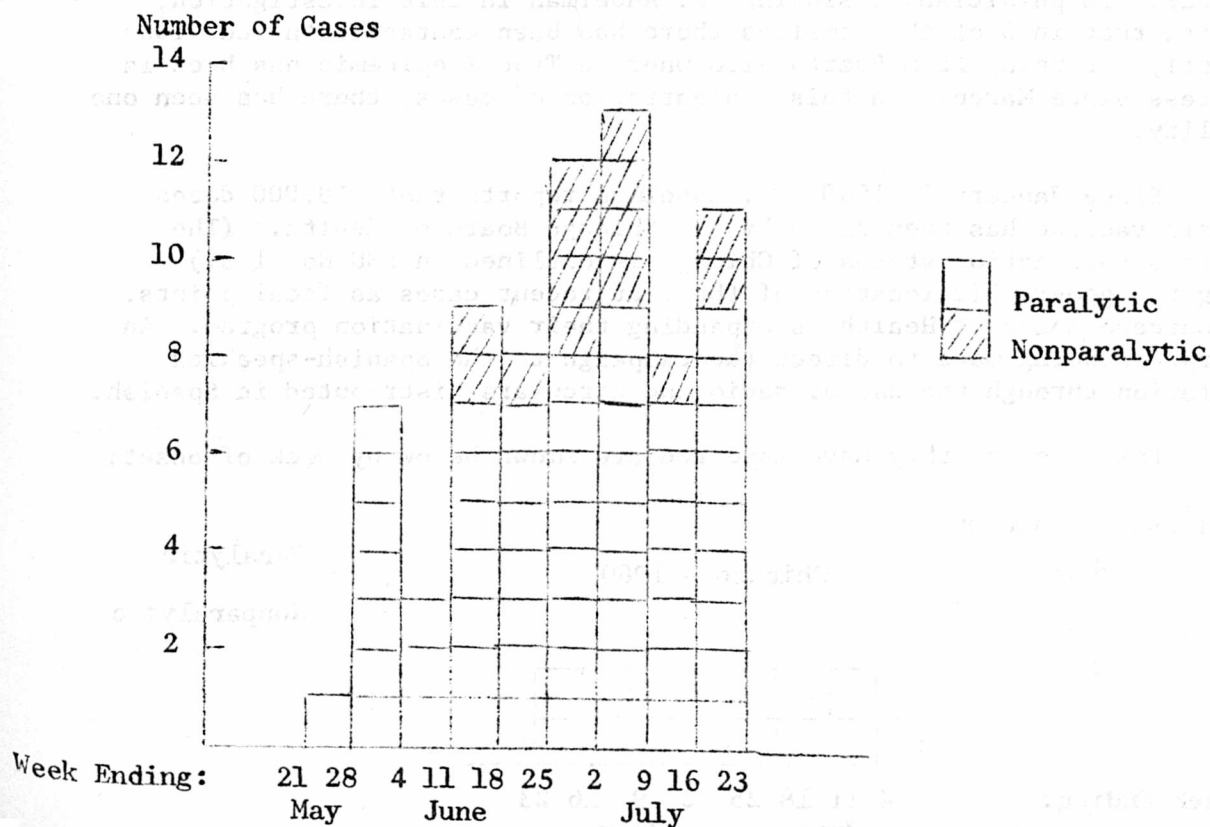
The paralytic cases are presented below by age group and immunization status:

Age Group	Doses of Vaccine					TOTAL
	OV	1V	2V	3V	4+V	
0-4	18	11	5	0	1	35
5-9	8	5	3	4	0	20
10-19	1	0	1	0	0	2
20+	1	0	0	0	0	1
Total	28	16	9	4	1	58

There have now been 216,945 doses of vaccine distributed to the public at free clinics. Since June 1, there has been a total of 271,231 doses of vaccine shipped into the State in addition to 105,237 doses shipped prior to June. This cumulative total of 376,468 thus far in 1960 is greater than the 297,055 doses of vaccine shipped into Rhode Island for the entire year of 1959.

Dr. Andrew Fodor, Chief, Virus Diagnostic Unit, CDC, reports the confirmation of type I poliovirus from stool specimens on 20 of the reported cases. These include 10 spinal, 4 bulbar, 3 bulbo-spinal, and 3 nonparalytic cases.

Of the ten cases reported this week, all but one had onset of symptoms during the week ending July 23. The 72 reported cases are presented below by week of onset:



B. Illinois

Dr. Norman J. Rose, Chief, Bureau of Epidemiology, Illinois Department of Public Health, reports a total of 31 cases of poliomyelitis, 24 paralytic, through July 29, 1960. With the exception of a cluster of cases in Chicago, there is no concentration throughout the State.

In Chicago, Dr. Samuel L. Andelman, Commissioner of Health, Chicago Board of Health, reports 13 cases of poliomyelitis with an additional 4 under investigation. These 17 cases, of which 15 are paralytic, have had onset since the last week in May.

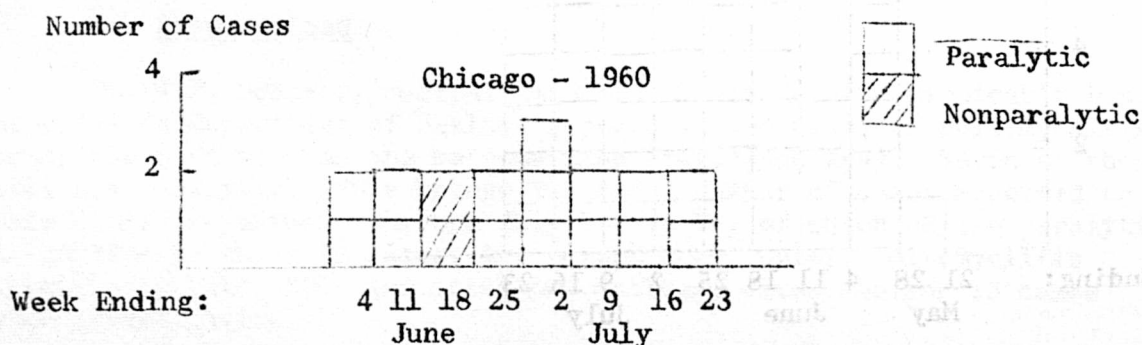
All the paralytic cases are under 10 years of age, 11 of whom are in the pre-school age group. There are 2 paralytic cases who have received three or more inoculations of Salk vaccine while 9 are in unvaccinated children. There have been nine isolations of Type I poliovirus from these patients. The paralytic cases are presented below by age group and vaccination status:

Age Group	Doses of Vaccine					Total
	0	1	2	3	4	
0-4	8	1	2	0	0	11
5-9	1	0	1	2	0	4
Total	9	1	3	2	0	15

There is a mild concentration of the cases within a low economic area. Twelve of the 17 cases are of Puerto Rican origin. Dr. David Kessner, EIS physician, assisting Dr. Andelman in this investigation, reports that in 6 of the families there has been contact with individuals recently returning from Puerto Rico where a Type I epidemic has been in progress since March. In this concentration of cases, there has been one fatality.

Since January 1, 1960, Dr. Andelman reports that 318,000 doses of Salk vaccine has been given by the Chicago Board of Health. (The previous vaccination status of Chicago is outlined in PSU No. 175.) Using the geographic location of the most recent cases as focal points, the Chicago Board of Health is expanding their vaccination program. An attempt is being made to direct the campaign to the Spanish-speaking population through the use of radio and circulars distributed in Spanish.

The cases as they have appeared are shown below by week of onset:



C. South Carolina

Through July 28, Dr. G. E. McDaniel, Director, Communicable Disease Control, South Carolina Board of Health, reports a total of 29 cases of poliomyelitis in Cherokee and Spartanburg Counties since the week ending June 11. This represents an increase of 14 cases over the 15 cases previously reported in this outbreak. (See PSU 203).

Of these cases, 21 are paralytic and 8 nonparalytic. The paralytic cases are presented below by age group and vaccination status:

<u>Age</u>	<u>Doses of Vaccine</u>					<u>Total</u>
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	
0-4	10	2	0	1	0	13
5-9	4	0	1	1	0	6
10-14	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>
Total	15	3	1	2	0	21

Thus, 15 cases (71 percent) are unvaccinated while only 2 cases have received 3 doses of vaccine. The majority of cases (62 percent) are in the pre-school age group.

Of the 8 non-paralytic cases, 7 are unvaccinated and the other has received only 1 dose of vaccine.

The cases are distributed as follows:

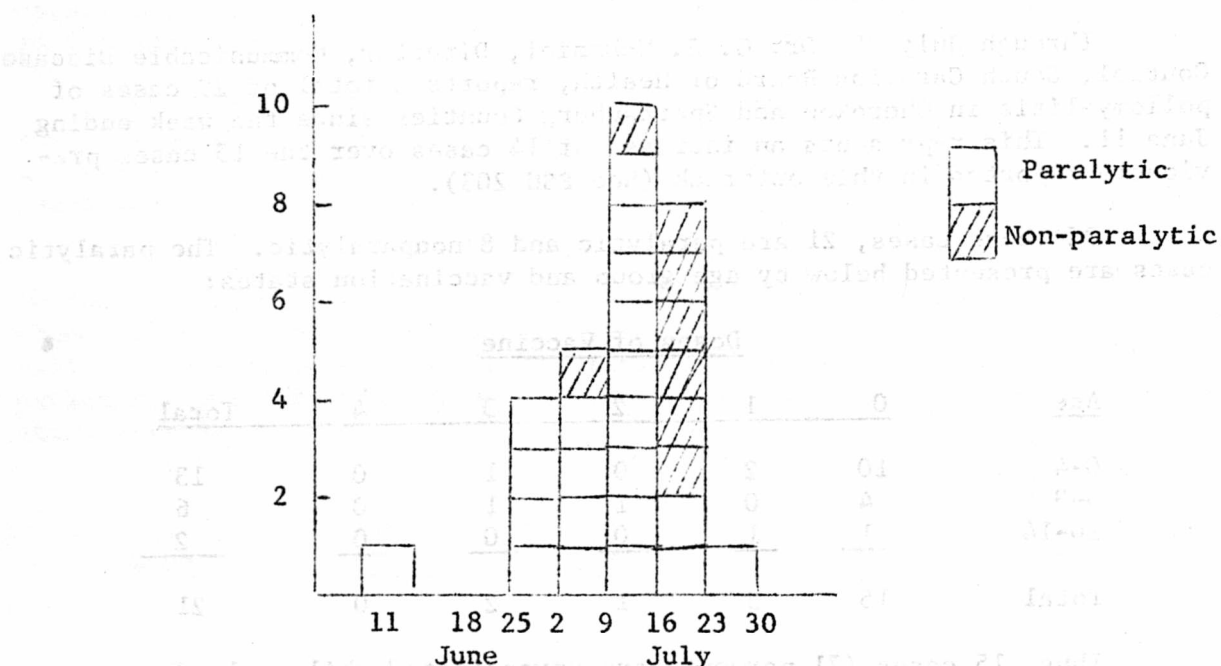
<u>COUNTY</u>	<u>WHITE</u>	<u>NEGRO</u>	<u>TOTAL</u>	<u>ATTACK RATE/100,000</u>
Cherokee	12	4	16	45.6
Spartanburg	<u>11</u>	<u>2</u>	<u>13</u>	<u>8.4</u>
Total	23	6	29	15.2

Thus, Cherokee County's attack rate is almost six times that of Spartanburg County. Home visits by Dr. Michael Regan, EIS officer, assisting Dr. McDaniel, reveal that most cases are in the rural population but involve families who work in textile mills.

The cases are presented on the following page by week of onset:

Cherokee-Spartanburg Counties, South Carolina

Number of Cases



Dr. Martin P. Hines, Section of Communicable Diseases, North Carolina State Board of Health, reports 7 cases of poliomyelitis, 6 paralytic, in Cleveland County, which is directly across the State line from Cherokee County, South Carolina. Of these 6 paralytic cases, Dr. Z. P. Mitchell, Cleveland County Health Officer, states that 2 are unvaccinated, 3 have received 1 dose of vaccine and 1 has received 4 doses. All are under 10 years of age. These cases have occurred as follows:

Week Ending:	<u>6-18</u>	<u>6-25</u>	<u>7-2</u>	<u>7-9</u>	<u>7-16</u>
No. of Cases	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>2</u>

D. Puerto Rico

Through July 28, 1960, Dr. Manuel Feliberti, Epidemiologist, Bureau of Communicable Disease Control, Puerto Rico Department of Health, reports 341 cases of poliomyelitis with onset in 1960. Of these cases, 336 are paralytic. This represents an increase of 13 paralytic cases during the past week.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

Through July 25, there have been 425 cases of poliomyelitis with onset in 1960 reported to PSU on individual case forms. Of these cases, 325 or 76 percent are paralytic. Thus, 62.7 percent of the paralytic cases of poliomyelitis reported to the NOVS through July 23, have been reported to PSU.

An interesting trend has been noted in the submission of individual case forms during the current year. There has been a greater percentage of case forms submitted earlier in the year on individuals who have received three or more doses of vaccine. This percentage has decreased every week since the first tabulation in 1960. This may reflect more intensive follow-up and prompt reporting on vaccinated cases. This trend is illustrated below:

<u>PSU Forms Reported Through:</u>	<u>Percent 3+V of those Specified</u>
6-13	33.8
7-1	29.1
7-11	27.6
7-18	24.0
7-25	23.2

TABLE 3
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION HISTORY REPORTED ON PSU FORMS
(through July 25, 1960)

Age Group	<u>Paralytic</u>							<u>Nonparalytic</u>							Unspecified <u>Total</u>	<u>TOTAL</u>
	0	<u>Doses of Vaccine</u>					0	<u>Doses of Vaccine</u>								
		1	2	3	4+Unk	Tot		1	2	3	4+Unk	Tot				
0-4	83	16	18	19	5	6	147	8	2	3	4	3	2	22	4	173
5-9	31	6	10	17	7	4	75	3	1	3	8	4	1	20	4	99
10-14	7	2	3	10	2	1	25	-	1	-	7	3	-	11	4	40
15-19	8	4	3	5	-	-	20	1	-	1	3	4	1	10	2	32
20-29	20	2	2	5	1	1	31	1	1	2	4	1	5	14	1	46
30-39	8	2	4	1	-	1	16	1	1	1	2	1	-	6	-	22
40+	9	-	-	-	-	2	11	1	-	-	-	-	-	1	-	12
Unkn.	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
TOTAL	166	32	40	57	15	15	325	15	6	10	28	17	9	85	15	425

4. ROUTINE POLIOMYELITIS SURVEILLANCE -- 1960

A. Cases with Onset within 30 Days of Vaccination

During the past week, the PSU was notified of three additional cases of poliomyelitis, 2 paralytic, with onset within 30 days of vaccination. The 1960 total now stands at thirteen. Of these, 8 are paralytic (2 correlated) and 5 nonparalytic. The paralytic cases reported this week are presented in Table II.

B. Vaccine Distribution

The summary of current and cumulative data concerning vaccine released, shipped and inventoried is presented in Table III. Also included are releases and shipments of quadruple antigen.

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

STATE	Total	Cases with Onset within 30 Days of Vaccination					Vaccine Distribution					Total
		Paralytic	Nonparalytic	Correlated	Uncorrelated	Unclassified	Released	Shipped	Inventoried	Quadruple		
AL	1	1	0	0	0	0	0	0	0	0	0	
AK	0	0	0	0	0	0	0	0	0	0	0	
AZ	0	0	0	0	0	0	0	0	0	0	0	
CA	1	1	0	0	0	0	0	0	0	0	0	
CO	0	0	0	0	0	0	0	0	0	0	0	
CT	0	0	0	0	0	0	0	0	0	0	0	
DE	0	0	0	0	0	0	0	0	0	0	0	
FL	0	0	0	0	0	0	0	0	0	0	0	
GA	0	0	0	0	0	0	0	0	0	0	0	
ID	0	0	0	0	0	0	0	0	0	0	0	
IL	0	0	0	0	0	0	0	0	0	0	0	
IN	0	0	0	0	0	0	0	0	0	0	0	
IO	0	0	0	0	0	0	0	0	0	0	0	
KS	0	0	0	0	0	0	0	0	0	0	0	
KY	0	0	0	0	0	0	0	0	0	0	0	
LA	0	0	0	0	0	0	0	0	0	0	0	
MA	0	0	0	0	0	0	0	0	0	0	0	
MD	0	0	0	0	0	0	0	0	0	0	0	
ME	0	0	0	0	0	0	0	0	0	0	0	
MI	0	0	0	0	0	0	0	0	0	0	0	
MO	0	0	0	0	0	0	0	0	0	0	0	
MT	0	0	0	0	0	0	0	0	0	0	0	
NE	0	0	0	0	0	0	0	0	0	0	0	
NH	0	0	0	0	0	0	0	0	0	0	0	
NJ	0	0	0	0	0	0	0	0	0	0	0	
NM	0	0	0	0	0	0	0	0	0	0	0	
NY	0	0	0	0	0	0	0	0	0	0	0	
NC	0	0	0	0	0	0	0	0	0	0	0	
ND	0	0	0	0	0	0	0	0	0	0	0	
OH	0	0	0	0	0	0	0	0	0	0	0	
OK	0	0	0	0	0	0	0	0	0	0	0	
OR	0	0	0	0	0	0	0	0	0	0	0	
PA	0	0	0	0	0	0	0	0	0	0	0	
RI	0	0	0	0	0	0	0	0	0	0	0	
SC	0	0	0	0	0	0	0	0	0	0	0	
SD	0	0	0	0	0	0	0	0	0	0	0	
SE	0	0	0	0	0	0	0	0	0	0	0	
SI	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	13	8	5	2	3	0	0	0	0	0	0	

Figure 1

CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1955-1959; APRIL-AUGUST, BY WEEK

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS

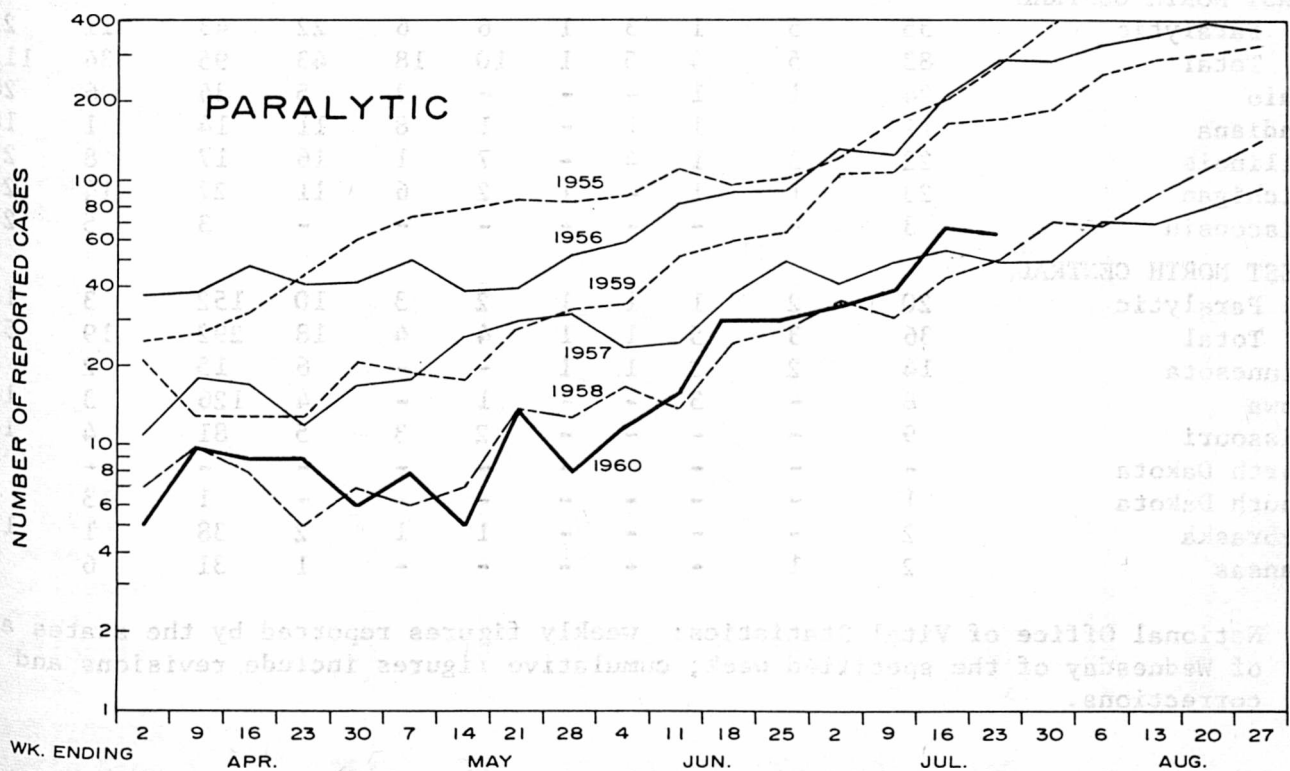
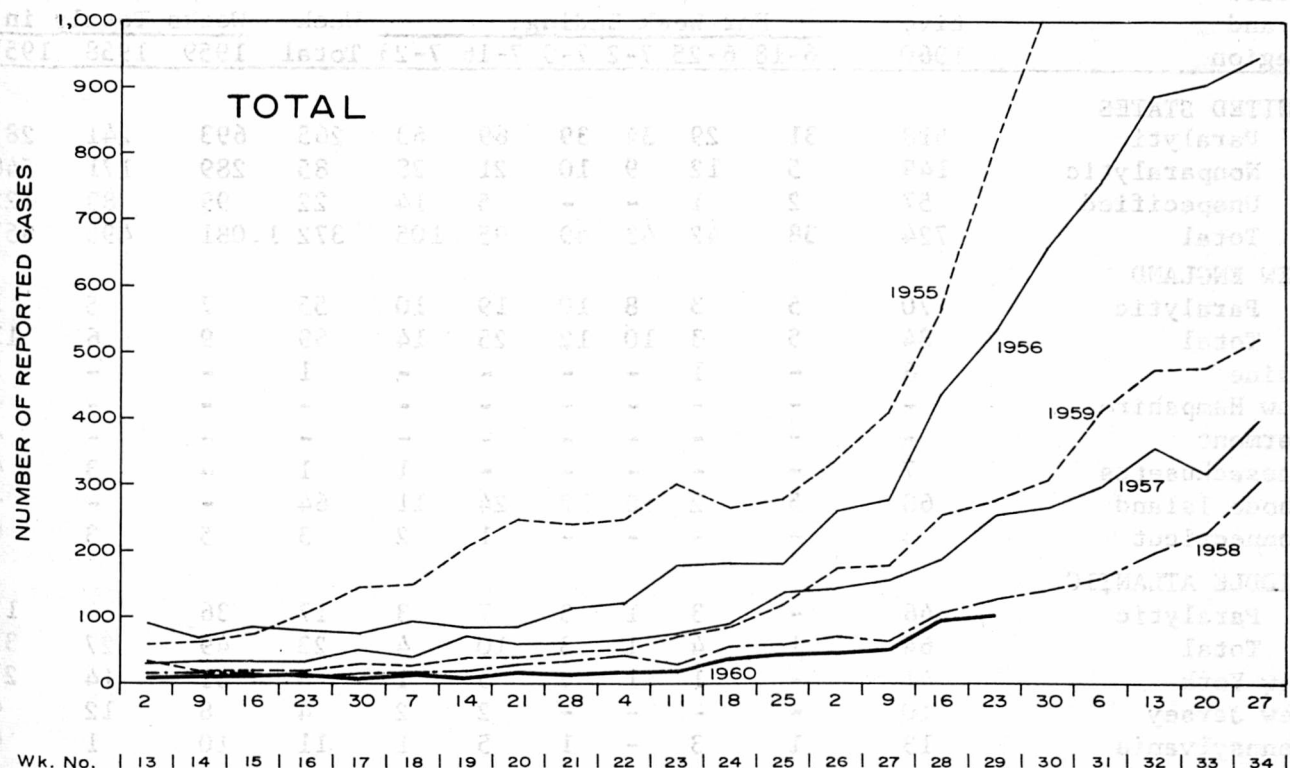


Table 1

TREND OF 1960 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1960	Cases Reported to NOVS*						Six Week Total	Comparable Six Weeks Totals in:		
		For Week Ending:							1959	1958	1957
		6-18	6-25	7-2	7-9	7-16	7-23				
UNITED STATES											
Paralytic	518	31	29	34	39	69	63	265	693	241	287
Nonparalytic	149	5	12	9	10	21	28	85	289	171	548
Unspecified	57	2	1	-	-	5	14	22	99	83	122
Total	724	38	42	43	49	95	105	372	1,081	495	957
NEW ENGLAND											
Paralytic	70	5	3	8	10	19	10	55	7	5	1
Total	84	5	3	10	12	25	14	69	9	6	13
Maine	6	-	1	-	-	-	-	1	-	-	1
New Hampshire	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	7	-	-	-	-	-	1	1	4	3	4
Rhode Island	68	5	2	10	12	24	11	64	-	-	-
Connecticut	3	-	-	-	-	1	2	3	5	3	8
MIDDLE ATLANTIC											
Paralytic	46	-	3	1	3	7	3	17	36	16	12
Total	64	1	4	1	3	10	4	23	49	27	35
New York	41	-	1	1	2	3	1	8	31	14	27
New Jersey	10	-	-	-	-	2	2	4	8	12	4
Pennsylvania	13	1	3	-	1	5	1	11	10	1	4
EAST NORTH CENTRAL											
Paralytic	35	5	1	3	1	6	6	22	43	11	25
Total	83	5	4	5	1	10	18	43	95	34	115
Ohio	24	1	1	-	-	-	3	5	34	6	26
Indiana	11	-	1	1	-	1	8	11	14	1	10
Illinois	22	3	1	4	-	7	1	16	17	8	27
Michigan	23	1	1	-	1	2	6	11	27	14	25
Wisconsin	3	-	-	-	-	-	-	-	3	5	27
WEST NORTH CENTRAL											
Paralytic	20	2	1	1	1	2	3	10	152	3	12
Total	36	3	5	1	1	4	4	18	292	19	53
Minnesota	14	2	2	1	1	-	-	6	15	2	3
Iowa	8	-	3	-	-	1	-	4	126	3	12
Missouri	9	-	-	-	-	2	3	5	81	4	18
North Dakota	-	-	-	-	-	-	-	-	-	-	-
South Dakota	1	-	-	-	-	-	-	-	1	3	1
Nebraska	2	-	-	-	-	1	1	2	38	1	11
Kansas	2	1	-	-	-	-	-	1	31	6	8

* 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:		
		6-18	6-25	7-2	7-9	7-16	7-23		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	78	3	5	2	5	9	13	37	92	56	46
Total	109	4	5	3	5	15	26	58	127	139	144
Delaware	-	-	-	-	-	-	-	-	2	1	1
Maryland	1	-	-	-	-	-	-	-	-	-	4
D. C.	-	-	-	-	-	-	-	-	-	3	-
Virginia	-	-	-	-	-	-	-	-	25	14	14
West Virginia	10	-	-	2	1	1	2	6	11	14	5
North Carolina	22	-	1	1	-	-	4	6	31	11	37
South Carolina	36	3	1	-	2	12	15	33	9	2	42
Georgia	5	-	1	-	-	-	1	2	23	11	17
Florida	35	1	2	-	2	2	4	11	26	83	24
EAST SOUTH CENTRAL											
Paralytic	23	-	-	1	3	6	2	12	103	10	23
Total	26	1	-	1	3	6	2	13	126	40	112
Kentucky	8	1	-	-	-	-	-	1	4	5	17
Tennessee	4	-	-	-	1	1	1	3	36	14	59
Alabama	7	-	-	-	1	4	1	6	64	2	6
Mississippi	7	-	-	1	1	1	NR	3	22	19	30
WEST SOUTH CENTRAL											
Paralytic	60	1	1	5	3	7	12	29	182	74	128
Total	101	1	4	8	9	12	19	53	278	125	315
Arkansas	10	-	-	2	1	3	2	8	57	4	20
Louisiana	29	-	-	3	4	3	4	14	39	14	45
Oklahoma	4	-	-	-	-	1	NR	1	38	10	37
Texas	58	1	4	3	4	5	13	30	144	97	213
MOUNTAIN											
Paralytic	17	-	1	1	-	-	4	6	21	9	5
Total	27	1	1	1	-	-	4	7	40	31	31
Montana	12	-	1	-	-	-	2	3	1	19	1
Idaho	4	-	-	-	-	-	-	-	5	2	3
Wyoming	1	-	-	-	-	-	-	-	1	-	2
Colorado	4	-	-	1	-	-	2	3	4	3	1
New Mexico	2	1	-	-	-	-	-	1	10	6	13
Arizona	3	-	-	-	-	-	-	-	17	1	5
Utah	1	-	-	-	-	-	-	-	-	-	4
Nevada	-	-	-	-	-	-	-	-	2	-	2
PACIFIC											
Paralytic	169	15	14	12	13	13	10	77	57	57	35
Total	194	17	16	13	15	13	14	88	65	74	139
Alaska	2	-	-	-	-	-	-	-	1	-	-
Washington	7	-	-	-	-	-	-	-	9	2	-
Oregon	18	4	-	-	-	-	2	6	15	7	8
California	162	13	16	13	15	12	12	81	40	40	131
Hawaii	5	-	-	-	-	1	-	1	-	25	-
TERRITORIES											
Puerto Rico	342	36	31	24	25	19	31	166	-	3	3

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION
(Cases Reported to PSU from July 19 through July 25, 1960)

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Calif.	San Diego	E.K.	19	M.	6-24-60	Wyeth 36001	7-8-60	Rt. Deltoid	Bulbar
(Fatality 7-8-60)									
Calif.	Santa Clara	H.S.	1	M.	6-22-60	Wyeth 34906	6-29-60	Left arm	Right arm

Table III

POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS*

(Data provided by the Polio Vaccine Activity, BSS, USPHS, through July 15, 1960)

POLIOMYELITIS VACCINE SHIPPED (1000's cc's)

Period	National Foundation	Public Agencies	Commercial Channels	Export	Total
1955	13,541	7,893	6,223	--	27,657
1956	194	45,588	24,784	6,477	77,043
1957	154	50,026	38,062	12,784	101,026
1958	203	18,533	28,319	33,571	80,626
1959	160	26,160	37,553	21,161	85,034
1960					
Jan-March	--	4,298	5,371	2,782	12,451
April-June	--	6,149	9,763	3,498	19,410
<u>Week Ending</u>					
7-8	--	480	621	95	1,196
Total to Date	--	10,927	15,755	6,375	33,057
Cumulative Total	14,252	159,127	150,696	80,368	404,443

* Excludes amounts of outdated unshipped vaccine.

QUADRUPLE ANTIGEN VACCINE SHIPPED (in cc's)

Period	Public Agencies	Commercial Channels	Export	Total
1959	157,251	4,019,577	59,143	4,235,971
1960				
Jan-March	117,915	1,307,923	64,700	1,490,538
April-June	165,415	1,927,955	62,014	2,155,384
<u>Week Ending</u>				
7-8	14,256	147,766	1,574	163,596
Total to Date	297,586	3,383,644	128,288	3,809,518
Cumulative Total	454,837	7,403,221	187,431	8,045,489

