



# POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 218

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## Table of Contents

### SUMMARY

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS
2. REPORTS
- 3A. 1960 POLIOMYELITIS CASES REPORTED TO PSU  
B. VIRUS ISOLATIONS REPORTED TO PSU
4. ROUTINE POLIOMYELITIS SURVEILLANCE
5. POLIOMYELITIS VACCINATION SURVEY RESULTS



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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

The declining trend of poliomyelitis incidence during the past month has continued with the reporting of 60 cases, 46 paralytic, to the National Office of Vital Statistics during the 46th week ending November 19.

An account of a rural concentration of poliomyelitis in Virginia, and a further report of the Baltimore epidemic are presented.

The results of the 1960 National Poliomyelitis Vaccination Survey conducted in September are presented along with comparable results of the 1959 survey.

An analysis of virus isolations by state in 1959 and preliminary results of laboratory investigations in 1960 are also included.

### 1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

During the 46th week ending November 19, a total of 60 cases of poliomyelitis, 46 paralytic, was reported to the National Office of Vital Statistics, continuing the downward trend of disease incidence during the past month illustrated in Figure I.

A comparison of cumulative poliomyelitis case reporting to date in 1960 with similar reporting in the past 5 years indicates the generally lower incidence of total and paralytic disease in 1960. As shown in Figure I and the table below, reports of total disease occurrence during this year to date make up a much lower total than any other in recent years. The current incidence of paralytic poliomyelitis, on the other hand, though lower than in most years, essentially equals that of 1957.

#### POLIOMYELITIS

TOTAL (CUMULATED WEEKLY) THROUGH THE 46th WEEK FOR THE PAST FIVE YEARS

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	2,089	5,310	2,790	2,020	6,370
Total	3,033	8,029	5,520	5,692	14,774

Aside from slight increases in the East Central and Pacific Regions, regional reports of poliomyelitis during the 46th week reflect the declining nationwide trend.

### 2. REPORTS

#### A. Virginia

According to Dr. Mason Romaine, Director, Bureau of Communicable Disease Control, a concentration of 6 cases of paralytic poliomyelitis

has occurred in Rockingham County, scene of an epidemic in 1958. The present localization has mainly involved poorly immunized school-age children as shown below.

<u>Age</u>	<u>Race</u>	<u>Sex</u>	<u>Date of Onset</u>	<u>Vaccination Status</u>	<u>Remarks</u>
6	W	M	9-22	OV )	Son
28	W	M	9-26	OV )	Father
7	W	M	10-15	1V	
7	W	F	11-8	OV )	Siblings
10	W	M	11-11	OV )	
9	W	M	11-13	2V(?)	

The county is situated in the largely rural northwestern part of the state. Immunization status of residents is generally good, but considerable resistance to vaccination has been met among members of a religious sect. This poorly vaccinated rural group has accounted for the majority of cases, and no cases have occurred to date in Harrisonburg, the County Seat. Preliminary 1960 census figures indicate the county population to be 52,355, giving a crude attack rate of 11.5/100,000.

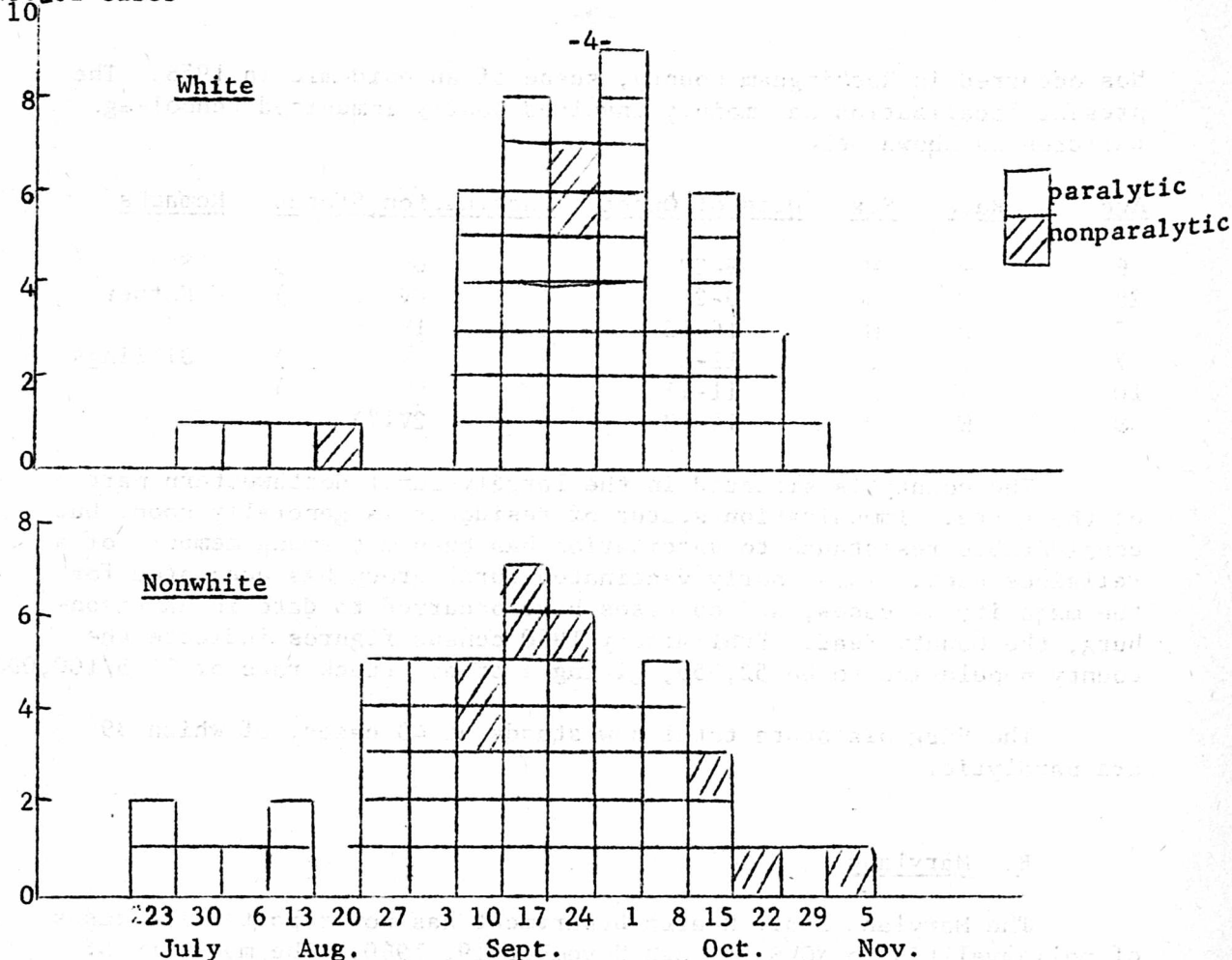
The Virginia state total now stands at 43 cases, of which 39 are paralytic.

#### B. Maryland

The Maryland State Health Department has now reported 150 cases of poliomyelitis to NOVS through November 19, 1960. The majority of these cases have occurred in Baltimore with the Poliomyelitis Surveillance Unit being notified of 104 cases, including 91 paralytic.

As seen in the histogram on the following page, the epidemic is waning with the latest case having onset on November 1. The earlier incidence in the Negro population is also evident.

No. of Cases

Baltimore - 1960Paralytic Cases by Race and Week of Onset

While approximately half of the paralytic cases among both white and nonwhite persons are unvaccinated, there is a greater proportion of cases with three or more doses of vaccine among the white population. This is shown with corresponding paralytic attack rates in the table below:

PARALYTIC CASES BY RACE AND VACCINATION STATUS

	Doses of Vaccine						Total	Paralytic Attack Rate
	0	1	2	3	4+	Unk		
White	23	4	5	10	5	2	49	7.8
Nonwhite	20	2	9	9	1	1	42	14.4
TOTAL	43	6	14	19	6	3	91	9.9

This has been a type III epidemic with isolation of type III poliovirus from 35 cases and type I poliovirus from only 2 cases in Baltimore.

### 3A. 1960 POLIOMYELITIS CASES REPORTED ON PSU FORMS

During the 3-week period from October 30 to November 19, 1960, 301 cases of poliomyelitis were reported to the Poliomyelitis Surveillance Unit on individual case forms. This brings the 1960 total reported to PSU to 2,455 cases of which 1,851 are paralytic, 547 nonparalytic and 57 unspecified as to paralytic status.

Thus, 81 percent of the 3,033 cases reported to NOVS through November 19 have been reported on PSU forms. In addition, the 1,851 paralytic cases reported represent 89 percent of the 2,089 paralytic cases reported to NOVS at that date. At this time last year, PSU had also received individual case forms on 89 percent of the paralytic cases reported to NOVS and as many as 86 percent of the total cases reported. The cases reported to PSU thus far in 1960 are presented below in Table 3A.

TABLE 3A

#### POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION HISTORY REPORTED ON PSU FORMS (Through November 19, 1960)

Age Group	Paralytic						Tot
	Doses of Vaccine						
	0,	1	2	3	4+	Unk	
0-4	452	84	100	101	41	36	814
5-9	182	28	45	107	54	18	434
10-14	36	13	11	50	22	11	143
15-19	59	8	6	17	4	5	99
20-29	140	18	13	14	8	8	201
30-39	84	7	7	9	5	4	116
40+	38	-	-	1	-	4	43
Unk	1	-	-	-	-	-	1
Total	992	158	182	299	134	86	1,851

PERCENT DOSES	56.2	9.0	10.3	16.9	7.6	-	100.0
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Age Group	Nonparalytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	63	13	12	21	16	8	133
5-9	30	14	17	43	36	11	151
10-14	8	7	1	27	27	2	72
15-19	16	1	9	22	13	-	61
20-29	27	8	5	27	12	8	87
30-39	10	2	5	6	7	3	33
40+	6	-	2	-	-	-	8
Unk	-	-	-	1	1	-	2
Total	160	45	51	147	112	32	547

PERCENT DOSES	31.1	8.7	9.9	28.5	21.7	-	100.0
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### 3B. VIRUS ISOLATIONS FROM CASES REPORTED TO PSU

In Table 3B are presented by states the results of laboratory studies on cases diagnosed as poliomyelitis in 1959 as reported to the Poliomyelitis Surveillance Unit. Last year 4,222 of 8,635 cases (49 percent) were studied virologically, and 2,775 of those studied (65.7 percent) had poliovirus isolations. The percentage of cases with laboratory studies reported varied markedly from state to state, but these data are more complete than in any previous year and a pattern of prevalence is evident. Type I poliovirus predominated in most areas, accounting for 88.8 percent of the isolations. Type III poliovirus was isolated from 10.8 percent, and type II was recovered from only 11 cases or less than one percent. Despite the relatively low incidence of type III, this virus tended to be concentrated in several areas, notably in Massachusetts, Maine, Pennsylvania and Nebraska. Although not the dominant poliovirus, type III was also isolated frequently in New York, Ohio, North Carolina, and Kentucky.

Comparable reports of laboratory studies on 1960 poliomyelitis cases are being submitted to the PSU by the state health departments. This reporting is only in its early stages for this year pending completion of diagnostic testing currently in progress in the many laboratories participating in this work. However, a preliminary evaluation of the small percentage of virus isolations reported through October 29, 1960, yields several interesting contrasts with the 1959 results. As the laboratory reporting becomes more complete it will be interesting to see whether these trends are maintained. As seen in the following Table studies were completed on 392 cases of which 69.9 percent had poliovirus isolation. Poliovirus was isolated much more frequently in paralytic than in non-paralytic cases, 77.3 percent versus 51.5 percent. Of great interest is the frequency with which type III poliovirus has been recovered thus far in 1960, more than 25 percent of all cases. As in 1959 these type III isolations have been primarily in the eastern part of the nation, including outbreaks in New York, Pennsylvania and Maryland (described in previous PSU Reports).

#### VIRUS ISOLATIONS REPORTED TO PSU through October 29, 1960

Paralytic Status	POLIOVIRUS				Other* Virus	Neg.	TOTAL	% POLIO ISOLATIONS
	Type I	Type II	Type III	Multiple types				
Paralytic	167	0	55	3	3	63	291	77.3
Non-paralytic	36	1	13	0	6	41	97	51.5
Unspecified	1	0	1	0	1	1	4	50.0
<b>TOTAL</b>	<b>204</b>	<b>1</b>	<b>69</b>	<b>3</b>	<b>10</b>	<b>105</b>	<b>392</b>	<b>69.9</b>

\* ECHO and Coxsackie as yet not typed

#### PERCENT DISTRIBUTION - POLIOVIRUS

Type I 74.4                      Type II 0.4                      Type III 25.2



It is evident that study of laboratory isolations on a nationwide scale by the PSU can yield much valuable surveillance information which may be of predictive help for the next polio season. The usefulness of these data increases progressively as reporting becomes increasingly complete, with the eventual participation of all virus diagnostic laboratories and the careful follow-up of all cases by the 50 state departments of health. Furthermore, these data on laboratory confirmation becomes most meaningful as it is correlated with the final evaluation of morbidity included in the 60-day follow-up reports now being received. This reporting has been excellent; due to the cooperation of the many state and local health officers 89% of all cases received such follow-up in 1959.

#### 4. ROUTINE POLIOMYELITIS SURVEILLANCE

During the period from October 30 through November 19, the Poliomyelitis Surveillance Unit received reports of 5 cases of poliomyelitis, 4 paralytic, with onsets within 30 days after inoculation. None of these were correlated. Thus, the reporting of under 30-day cases has decreased markedly during November as has the occurrence of poliomyelitis. The yearly total now stands at 128 cases of which 100 are paralytic (9 correlated).

These newly reported cases and additional information on previously reported cases are presented in Table II.

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

Table 3B

**POLIOMYELITIS BY STATE - 1959**  
**LABORATORY STUDIES AND POLIOVIRUS ISOLATIONS**

State and Region	Total Cases*	Total Cases Lab Studied	% Studied	Poliovirus Isolations			% III
				I	II	III	
UNITED STATES	8635	4222	49	2464	11	300	11
<b>NEW ENGLAND</b>							
Maine	94	27	29	3	0	17	85
New Hampshire	10	2	20	0	0	0	-
Vermont	12	2	17	0	0	0	-
Massachusetts	154	90	58	4	0	48	92
Rhode Island	10	3	30	0	0	1	-
Connecticut	125	82	66	51	0	5	9
<b>MIDDLE ATLANTIC</b>							
New York	522	312	60	185	2	32	15
New Jersey	122	97	80	59	0	9	13
Pennsylvania	212	156	74	27	0	57	68
<b>EAST NORTH CENTRAL</b>							
Ohio	290	198	68	85	1	11	11
Indiana	153	12	8	8	0	0	0
Illinois	309	146	47	82	0	4	5
Michigan	448	7	2	3	0	0	0
Wisconsin	58	22	38	14	0	3	18
<b>WEST NORTH CENTRAL</b>							
Minnesota	247	214	87	167	0	8	5
Iowa	471	220	47	131	0	6	4
Missouri	509	324	64	217	0	1	1
North Dakota	17	8	47	1	0	0	0
South Dakota	9	6	67	2	0	2	50
Nebraska	132	39	30	13	0	18	58
Kansas	189	137	72	79	0	1	1

\* Cases reported to PSU as Poliomyelitis on preliminary PSU forms.



Table 3B (Continued)

State and Region	Total Cases*	Total Cases Lab Studied	% Studied	Poliovirus Isolations			% III
				I	II	III	
SOUTH ATLANTIC							
Delaware	9	5	56	2	0	0	0
Maryland	41	32	78	14	0	6	30
D.C.	7	7	100	6	0	1	14
Virginia	330	162	49	98	0	4	4
West Virginia	195	146	75	23	0	1	4
North Carolina	323	114	35	85	0	17	17
South Carolina	83	42	51	30	0	0	0
Georgia	179	50	28	39	0	1	2
Florida	271	145	54	88	1	15	14
EAST SOUTH CENTRAL							
Kentucky	111	39	35	25	0	7	22
Tennessee	401	255	64	193	1	6	3
Alabama	259	127	49	115	0	1	1
Mississippi	116	51	44	15	0	1	6
WEST SOUTH CENTRAL							
Arkansas	304	234	77	135	0	1	1
Louisiana	143	113	79	74	2	1	1
Oklahoma	150	87	58	61	0	0	0
Texas	526	135	26	61	3	1	1
MOUNTAIN							
Montana	18	3	17	3	0	0	0
Idaho	7	4	57	3	0	0	0
Wyoming	2	0	0	0	0	0	-
Colorado	26	3	12	1	0	1	50
New Mexico	41	3	7	3	0	0	0
Arizona	87	3	3	3	0	0	0
Utah	12	2	17	2	0	0	0
Nevada	3	1	33	0	0	0	-
PACIFIC							
Washington	240	87	36	69	0	2	3
Oregon	197	137	70	104	1	3	3
California	439	126	29	80	0	8	9
Alaska	19	1	5	1	0	0	0
Hawaii	3	0	0	0	0	0	-

\* Cases reported to PSU as Poliomyelitis on preliminary PSU forms.

## 5. POLIOMYELITIS VACCINATION SURVEY RESULTS

In collaboration with the Communicable Disease Center, the National Office of Vital Statistics has been technically responsible during the past several years for estimates, derived from sample surveys, of the national population's participation in the Salk poliomyelitis inoculation program. Dr. Monroe G. Sirken, Chief, and Dr. Leona L. Davis, statistician, of the Actuarial Analysis and Survey Methods Section, National Office of Vital Statistics, report the following results based on estimates from the 1960 and 1959 surveys.

According to the results derived from the 1960 National Poliomyelitis Vaccination Survey, 40.2 percent of the population under 60 years of age, or more than 62 million persons, have not yet received any Salk polio vaccine inoculations. One-half of the population under 60 have received less than three inoculations, (i.e., two, one or no inoculations), whereas only one-fourth have received four or more inoculations. These figures are based on a national household sample survey conducted during September 1960 by the Bureau of the Census as a supplement to the Current Population Survey.\*

The study reveals striking variations between children and adults in polio inoculation status. For the population under 20 years, 13 percent have never been vaccinated, one-quarter have received less than three inoculations, and 40 percent have received four or more inoculations. For the population between 20 and 59 years of age, over three-fifths have not received any inoculations, 71 percent have received less than three inoculations, and only 12 percent have received four or more inoculations.

The 1960 data also reveal substantial variations within the broad age groups, those under 20 and those 20 to 59 (Table 5A). School children within the ages 5 to 14 years have the highest level of participation in the inoculation program. Of these school children, only 7 percent have received no inoculations and 15 percent have received less than three inoculations, whereas about half have received four or more inoculations. Of the pre-school children in the age group 1 to 4 about 13 percent have received no inoculations; about 28 percent have received less than three inoculations, and only 35 percent have received four or more inoculations. Participation levels for teenagers 15 to 19 years old are comparable to those for preschool children. Of the infants under one year, 45 percent are reported as having no inoculations. Within the broad age group 20 to 59, the highest proportion of persons with fewer than three inoculations (95 percent) is in the 50 to 59 year group and the lowest proportion (51 percent) is in the 20 to 29 year group.

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\* The Current Population Survey uses a probability sample design covering the noninstitutionalized civilian population of the United States. The sample is spread over 330 sample areas comprising 638 counties and independent cities with coverage of about 35,000 households.

The 1960 National Poliomyelitis Survey is the latest in a series of United States Public Health Service-sponsored surveys, conducted annually since 1957. Prior to the present investigation, estimates of the polio inoculation status of the population were based on the survey conducted during September 1959 (Table 5B). During the past twelve months, the proportion of persons under 60 with no inoculations has decreased by 4 percentage points from 44 to 40 percent. In the age group 20 to 59, the decrease has also amounted to 4 percentage points; in the age group under 20, the decrease has amounted to about 3 percentage points. The proportion of persons with four or more inoculations has increased by about 16 percentage points for the population under 20 and by about 6 percentage points for the adult population in the age group 20 to 59.

During the past twelve months, for preschool children aged 1 to 4, there has been an increase of about 13 percentage points among those with four or more inoculations, as compared with an increase of approximately 19 percentage points for children in the age group 5 to 14. At older ages, the size of the increase in the proportion of quadruply-vaccinated persons is smaller with advancing age. This increase has amounted to about 15 percentage points for the age group 15 to 19 years while it was less than one percentage point for the oldest age group, 50 to 59 years.

TABLE 5A

-12-

POLIOMYELITIS VACCINATION STATUS OF THE CIVILIAN NONINSTITUTIONAL  
POPULATION UNDER 60 YEARS, BY AGE: UNITED STATES, SEPTEMBER 1960

Age (Years)	Population (1,000's)	Distribution by Number of Inoculations Received					
		1 or more Inoculations					No Inocu- lations
		Total	4+	3	2	1	
NUMBER IN THOUSANDS							
Total, under 60--	155,251	92,833	38,203	39,727	10,573	4,330	62,418
Under 20-----	70,569	61,152	27,932	25,204	5,808	2,208	9,417
Under 1-----	4,232	2,318	116	752	919	531	1,914
1-4-----	16,679	14,445	5,775	6,268	1,797	605	2,234
5-9-----	19,385	17,894	9,808	6,447	1,193	446	1,491
10-14-----	17,308	16,041	8,145	6,622	947	327	1,267
15-19-----	12,965	10,454	4,088	5,115	952	299	2,511
20-59-----	84,682	31,681	10,271	14,523	4,765	2,122	53,001
20-29-----	20,743	12,721	4,259	5,966	1,846	650	8,022
30-39-----	23,623	12,176	4,195	5,477	1,738	766	11,447
40-49-----	22,294	5,302	1,498	2,425	878	501	16,992
50-59-----	18,022	1,482	319	655	303	205	16,540
PERCENT							
Total, under 60--	100.0	59.8	24.6	25.6	6.8	2.8	40.2
Under 20-----	100.0	86.7	39.6	35.7	8.2	3.1	13.3
Under 1-----	100.0	54.8	2.7	17.8	21.7	12.5	45.2
1-4-----	100.0	86.6	34.6	37.6	10.8	3.6	13.4
5-9-----	100.0	92.3	50.6	33.3	6.2	2.3	7.7
10-14-----	100.0	92.7	47.1	38.3	5.5	1.9	7.3
15-19-----	100.0	80.6	31.5	39.5	7.3	2.3	19.4
20-59-----	100.0	37.4	12.1	17.2	5.6	2.5	62.6
20-29-----	100.0	61.3	20.5	28.8	8.9	3.1	38.7
30-39-----	100.0	51.5	17.8	23.2	7.4	3.2	48.5
40-49-----	100.0	23.8	6.7	10.9	3.9	2.2	76.2
50-59-----	100.0	8.2	1.8	3.6	1.7	1.1	91.8

TABLE 5B

**POLIOMYELITIS VACCINATION STATUS OF THE CIVILIAN NONINSTITUTIONAL  
POPULATION UNDER 60 YEARS, BY AGE: UNITED STATES, SEPTEMBER 1959 (REVISED)**

Age (Years)	Population (1,000's)	Distribution by Number of Inoculations Received					
		1 or more Inoculations					No Inocu- lations
		Total	4+	3	2	1	
NUMBER IN THOUSANDS							
Total under 60--	152,133	84,914	21,580	45,084	13,217	5,033	67,219
Under 20-----	68,311	56,878	16,230	30,574	7,469	2,605	11,433
Under 1-----	4,251	2,201	33	359	1,263	546	2,050
1-4-----	16,416	13,759	3,611	7,067	2,368	713	2,657
5-9-----	18,598	16,596	5,954	8,568	1,578	496	2,002
10-14-----	16,516	14,826	4,574	8,806	1,054	392	1,690
15-19-----	12,530	9,496	2,058	5,774	1,206	458	3,034
20-59-----	83,822	28,036	5,350	14,510	5,748	2,428	55,786
20-29-----	20,532	11,532	2,042	6,164	2,456	870	9,000
30-39-----	23,656	10,948	2,314	5,594	2,138	902	12,708
40-49-----	22,006	4,338	836	2,118	868	516	17,668
50-59-----	17,628	1,218	158	634	286	140	16,410
PERCENT							
Total under 60--	100.0	55.8	14.2	29.6	8.7	3.3	44.2
Under 20-----	100.0	83.3	23.8	44.8	10.9	3.8	16.7
Under 1-----	100.0	51.8	0.8	8.4	29.7	12.8	48.2
1-4-----	100.0	83.8	22.0	43.0	14.4	4.3	16.2
5-9-----	100.0	89.2	32.0	46.1	8.5	2.7	10.8
10-14-----	100.0	89.8	27.7	53.3	6.4	2.4	10.2
15-19-----	100.0	75.8	16.4	46.1	9.6	3.7	24.2
20-59-----	100.0	33.4	6.4	17.3	6.9	2.9	66.6
20-29-----	100.0	56.2	9.9	30.0	12.0	4.2	43.8
30-39-----	100.0	46.3	9.8	23.6	9.0	3.8	53.7
40-49-----	100.0	19.7	3.8	9.6	3.9	2.3	80.3
50-59-----	100.0	6.9	0.9	3.6	1.6	0.8	93.1





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

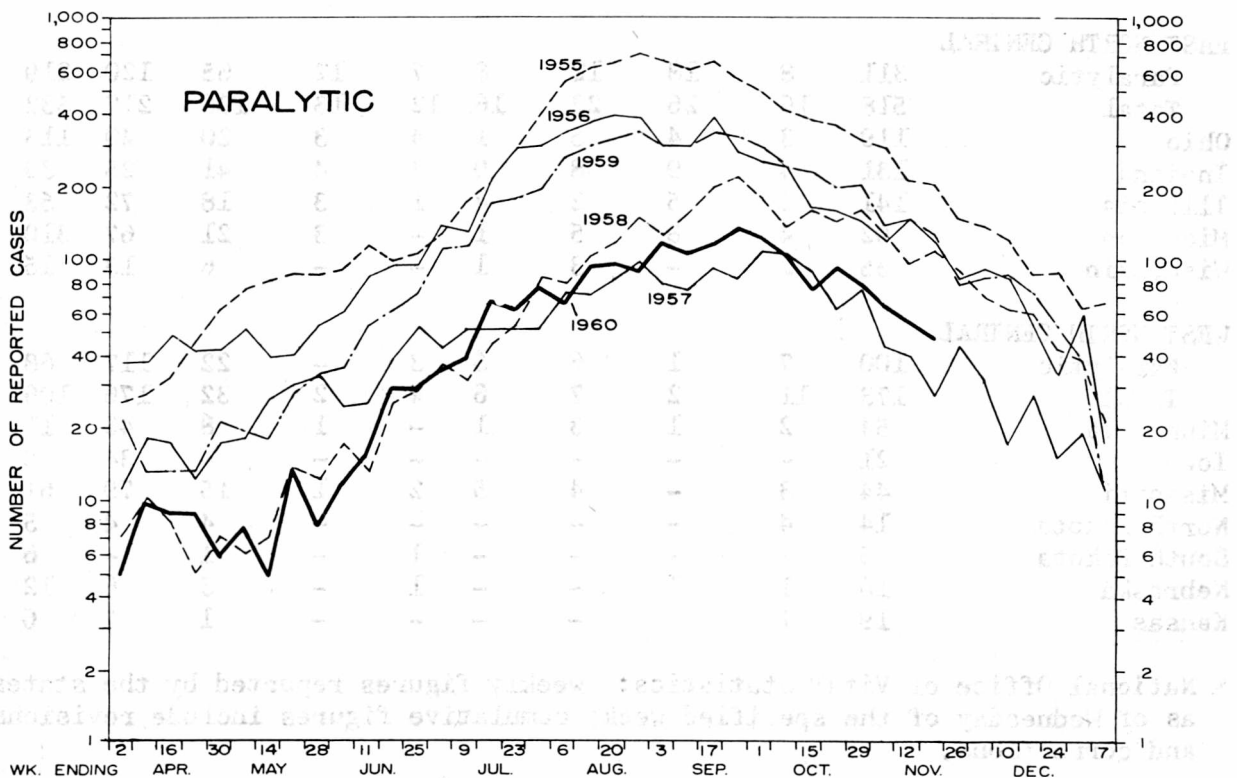
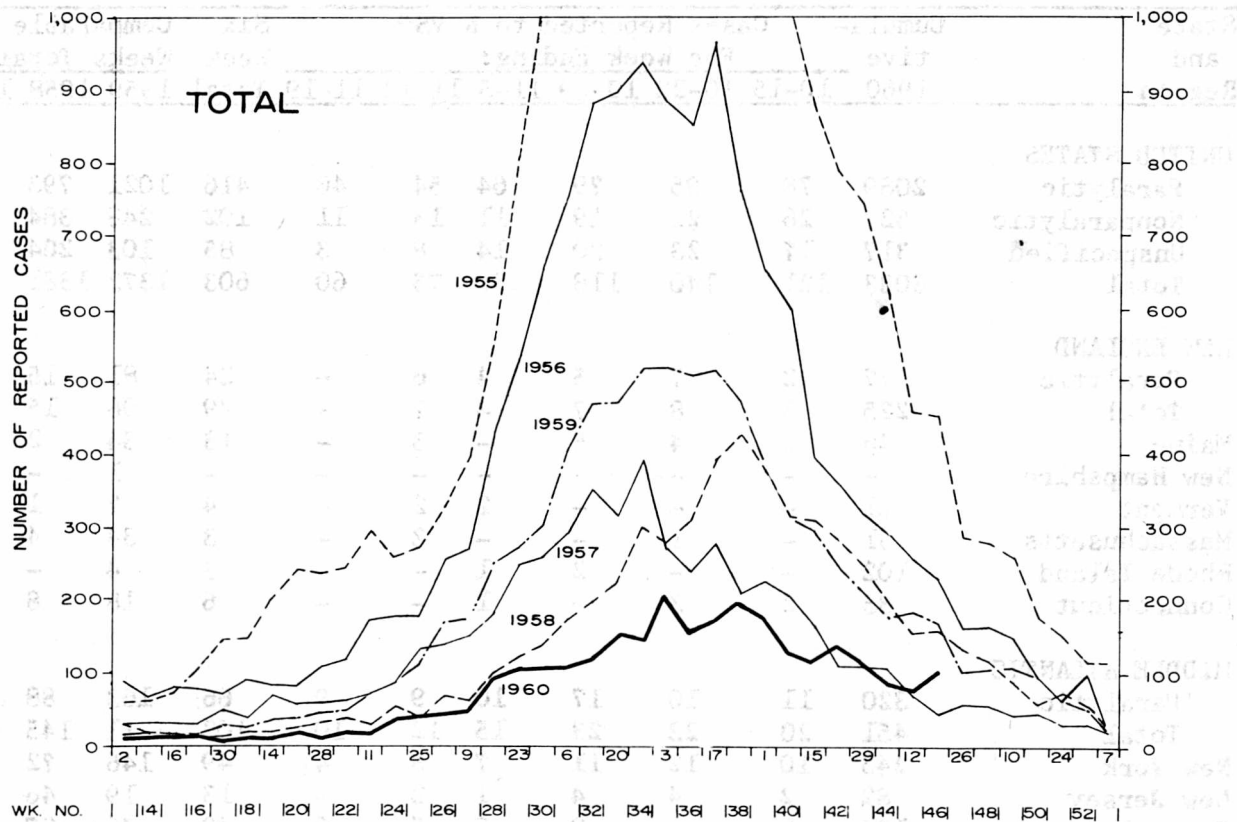




Table 1

## 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
		10-15	10-22	10-29	11-5	11-12	11-19				
UNITED STATES											
Paralytic	2089	78	95	79	64	54	46	416	1021	793	332
Nonparalytic	627	26	22	19	11	13	11	102	248	384	169
Unspecified	317	17	23	20	14	8	3	85	103	204	88
Total	3033	121	140	118	89	75	60	603	1372	1381	589
NEW ENGLAND											
Paralytic	177	2	7	5	4	6	-	24	81	15	5
Total	225	3	8	7	4	7	-	29	98	15	8
Maine	46	1	4	5	-	3	-	13	34	2	2
New Hampshire	-	-	-	-	-	-	-	-	1	-	-
Vermont	11	-	-	-	2	2	-	4	7	1	-
Massachusetts	31	-	1	-	-	2	-	3	34	4	2
Rhode Island	102	-	-	2	1	-	-	3	4	-	-
Connecticut	35	2	3	-	1	-	-	6	18	8	4
MIDDLE ATLANTIC											
Paralytic	320	11	10	17	10	9	9	66	163	88	23
Total	451	20	22	23	15	12	10	102	211	145	46
New York	245	10	12	11	7	5	4	49	146	72	31
New Jersey	82	2	4	4	1	2	-	13	19	46	6
Pennsylvania	124	8	6	8	7	5	6	40	46	27	9
EAST NORTH CENTRAL											
Paralytic	311	8	18	12	8	7	12	65	120	219	76
Total	518	16	26	23	16	12	13	106	217	532	177
Ohio	119	3	4	5	1	4	3	20	40	115	37
Indiana	131	4	9	8	9	7	4	41	25	39	35
Illinois	141	3	5	2	4	1	3	18	72	53	40
Michigan	92	4	8	5	1	-	3	21	67	310	58
Wisconsin	35	2	-	3	1	-	-	6	13	15	7
WEST NORTH CENTRAL											
Paralytic	100	7	1	6	5	3	-	22	117	68	17
Total	173	11	2	7	6	4	2	32	176	106	28
Minnesota	54	2	1	3	1	-	1	8	46	11	3
Iowa	21	-	-	-	-	-	-	-	34	5	4
Missouri	44	3	-	4	5	2	1	15	79	61	11
North Dakota	14	4	-	-	-	-	-	4	4	5	-
South Dakota	5	-	-	-	-	1	-	1	-	6	2
Nebraska	16	1	1	-	-	1	-	3	6	12	3
Kansas	19	1	-	-	-	-	-	1	7	6	5

\* 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:		
		10-15	10-22	10-29	11-5	11-12	11-19		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	440	26	33	19	19	19	9	125	191	116	62
Total	570	27	41	22	24	23	13	150	221	189	95
Delaware	-	-	-	-	-	-	-	-	2	7	1
Maryland	150	15	18	7	8	3	6	57	12	11	11
D.C.	5	2	-	3	-	-	-	5	-	-	9
Virginia	44	1	7	3	3	5	2	21	50	41	14
West Virginia	58	2	6	4	5	2	1	20	36	56	8
North Carolina	94	3	4	1	1	7	1	17	64	13	18
South Carolina	129	-	1	1	2	1	2	7	9	8	9
Georgia	23	2	-	1	1	3	-	7	26	17	13
Florida	67	2	5	2	4	2	1	16	22	36	12
EAST SOUTH CENTRAL											
Paralytic	100	3	7	7	1	1	6	25	97	65	21
Total	242	20	17	16	5	4	7	69	124	96	49
Kentucky	130	14	10	7	4	2	-	37	25	30	18
Tennessee	48	5	1	3	1	1	3	14	61	28	16
Alabama	23	-	6	-	-	-	2	8	19	17	9
Mississippi	41	1	-	6	-	1	2	10	19	21	6
WEST SOUTH CENTRAL											
Paralytic	176	11	5	3	4	6	5	34	71	115	47
Total	279	14	6	5	4	8	6	43	102	144	68
Arkansas	32	4	-	2	-	1	-	7	25	7	2
Louisiana	50	-	1	-	1	-	1	3	17	13	17
Oklahoma	17	2	-	-	1	-	-	3	16	5	6
Texas	180	8	5	3	2	7	5	30	44	119	43
MOUNTAIN											
Paralytic	48	2	3	-	6	2	1	14	13	18	13
Total	92	2	5	4	7	2	4	24	27	42	22
Montana	21	-	2	2	1	-	-	5	4	5	2
Idaho	9	-	2	1	1	-	-	4	1	1	-
Wyoming	20	-	1	-	-	-	1	2	-	8	-
Colorado	19	2	-	-	4	-	-	6	4	3	7
New Mexico	9	-	-	-	-	2	-	2	4	12	4
Arizona	8	-	-	-	1	-	3	4	10	11	8
Utah	6	-	-	1	-	-	-	1	3	1	1
Nevada	-	-	-	-	-	-	-	-	1	1	-
PACIFIC											
Paralytic	417	8	11	10	7	1	4	41	168	89	68
Total	483	8	13	11	8	3	5	48	196	112	96
Alaska	2	-	-	-	-	-	-	-	8	-	-
Washington	37	-	1	1	1	1	1	5	58	12	6
Oregon	36	1	-	1	1	2	-	5	34	4	7
California	400	7	12	9	6	-	3	37	96	88	82
Hawaii	8	-	-	-	-	-	1	1	-	8	1
TERRITORIES											
Puerto Rico	486	3	3	3	5	5	1	20	-	2	3

Table II

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

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Calif.	Orange	J.H.	13 mos.	F	9-20-60	P-D unk.	10-7-60	buttock	left arm & neck
Colorado	Costilla	F.P.	1	M	8-1960	unk. unk.	9-3-60	unk.	unk.
Ky.	Hardin	T.H.	10 mos.	M	10-21-60	P-D 061734	10-27-60	arm	lower extre- mities & one upper extre- mity
N.C.	Cleve- land	R.C.	8 mos.	M	7-19-60	Pfizer unk.	8-1-60	arm	right leg
Additional information received on previously reported cases:									
N.Y. City	Kings	S.B.	2	M	10-7-60	Pfizer 05364	10-13-60	left arm	left leg
Texas	Bexar	O.B.	1	M	10-11-60	Pfizer 05364	10-17-60	left arm	neck & back
Note: (Patient died 10-19-60)									
Texas	Harris	J.M.	10 mos.	M	6-6-60	P-D unk.	7-4-60	hip	left lower leg