



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 217

November 14, 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

Reports of total and paralytic cases of poliomyelitis received by the NOVS during the 44th week indicate the downward trend of disease incidence expected at this time of year.

Descriptive accounts of a recent outbreak in Missouri and of the declining epidemic in Baltimore are included along with a report from Pennsylvania.

The fatalities reported to PSU thus far in 1960 are presented by age group and vaccination history.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 87 cases of poliomyelitis, 63 paralytic, was reported to the National Office of Vital Statistics during the 44th week ending November 5. As illustrated in Figure I, the number of total and paralytic cases reported this week continues the declining trend expected at this time of year. The Figure demonstrates also that while the number of total cases of poliomyelitis during the current week has fallen below the comparable total of 1957, paralytic case incidence remains above that of 1957.

The table below compares current six-week summations of total and paralytic cases with those of recent years. The greater reporting of paralytic disease this year than in 1957 is supported also by these seasonal figures.

POLIOMYELITIS

TOTAL FOR 39th THROUGH 44th WEEKS FOR PAST FIVE YEARS

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	543	1,273	905	476	1,060
Total	778	1,721	1,767	916	2,683

A decrease in case reporting is evident from 8 of the 9 National Regions (Table I), with delayed reports from Colorado accounting for a small increase in the Mountain Region. Aside from continued occurrence of cases in Baltimore City and a newly reported outbreak in Missouri, no concentrations of disease are apparent.

2. REPORTS

A. Missouri

A concentration of 10 cases of poliomyelitis, 9 paralytic, has occurred in Howell County, Missouri, according to Dr. E. A. Belden, epidemiologist, Missouri Department of Public Health and Welfare. The great majority of these patients reside in rural areas of the county. A preliminary line listing of the cases is presented below.

<u>Age</u>	<u>Race</u>	<u>Sex</u>	<u>Onset Date</u>	<u>Paralytic Status</u>	<u>Vaccination Status</u>
1	W	F	9-19	P	OV
9	W	M	9-26	P	OV) Siblings
6	W	M	9-30	P	OV)
1 $\frac{1}{2}$	W	M	10-5	P	?
17	W	M	10-13	P	OV) Siblings
19	W	F	10-13	P	OV)
8	W	M	10-14	P	?
3	W	M	10-20	NP	OV) Siblings
13	W	F	10-20	P	OV)
12	W	F	10-21	P	OV

Preliminary 1960 census estimates indicate the population of Howell County to be 21,847 giving a paralytic attack rate of 41.2/100,000, one of the more sizable rural attack rates this year. Most of the onset dates fall in October, and no case has been reported with onset after October 21. Of interest are the occurrence of disease in three sibling pairs as shown in the listing, the notably poor vaccination status, and the distribution of cases into age groups somewhat older than might be expected considering the nation-wide experience.

<u>Age Group</u>	<u>Cases</u>
0-4	3
5-9	3
10-14	2
15-19	2

B. Maryland

During the ten-day period from October 26 to November 4, only 4 additional paralytic cases of poliomyelitis were reported to the Maryland State Health Department from the city of Baltimore. This brings the total number of cases in Baltimore during 1960 to 95 of which 91 are paralytic.

The outbreak continues to be confined mainly to the lower socio-economic areas with the Negro attack rate of 14.4/100,000 approximately double the attack rate of 7.8/100,000 among the white population. As of this date, the latest case has had onset on October 24.

The paralytic cases are shown below by age group and vaccination status:

Age Group	Doses of Vaccine						Total
	0	1	2	3	4+	Unk.	
0-4	22	6	11	6	3	2	50
5-9	8	0	2	8	2	0	20
10-14	1	0	0	5	1	0	7
15-19	0	0	0	0	0	1	1
20+	12	0	1	0	0	0	13
Total	43	6	14	19	6	3	91
Percent Doses	48.9	6.8	15.9	21.6	6.8	-	100.0

C. Pennsylvania

A total of 113 cases of poliomyelitis, 92 paralytic, has been reported to the Pennsylvania Department of Health according to Dr. I. F. Gratch, Chief, Section of Epidemiology. Of the 7 cases reported this week, 3 are from Allegheny, 2 from Philadelphia, and 1 each from Susquehanna and Potter Counties. No concentration locally within these counties has been evident.

A review of Philadelphia reports this year shows occurrence of 6 cases of poliomyelitis, 5 paralytic, in the city since early August as shown below.

Age	Race	Sex	Onset Date	Paralytic Status	Vaccination Status
1	N	M	8-8	P	3V
22	N	F	8-15	NP	4V
28	W	F	8-16	P	0V
18	W	M	9-31	P	0V
12	N	M	10-7	P	3V
22	W	M	10-28	P	0V Fatality

Philadelphia has been the scene of an intensive vaccination program, and response has been good according to local health authorities. The cases reported show no localization in the city, and make up a lower total to date than any other in recent years.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

Through October 29, 1960, there have been 2,154 cases of poliomyelitis reported to the Poliomyelitis Surveillance Unit on individual case forms. Of these cases, 1,614 are paralytic, 487 nonparalytic and 53 unspecified as to paralytic status.

Thus, 77 percent of the 2,813 total cases reported to NOV5 through October 29, have been reported to PSU. In addition, the 1,614 paralytic cases reported to PSU is 84 percent of the 1,922 paralytic cases reported to NOV5 at that date. The cases reported to PSU are presented below in Table 3:

TABLE 3
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION HISTORY REPORTED ON PSU FORMS
(Through October 29, 1960)

Age Group	Paralytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	397	80	83	86	28	36	710
5-9	149	26	41	90	47	19	372
10-14	32	13	10	42	17	12	126
15-19	48	8	6	17	2	6	87
20-29	128	17	12	12	5	8	182
30-39	73	7	6	5	4	4	99
40+	32	0	0	1	0	4	37
Unk	1	0	0	0	0	0	1
Total	860	151	158	253	103	89	1614
PERCENT DOSES	56.4	9.9	10.4	16.6	6.7	-	100.0

Age Group	Nonparalytic						Tot
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	55	13	12	19	16	8	123
5-9	25	12	15	36	34	10	132
10-14	7	6	1	26	24	1	65
15-19	15	1	7	20	11	0	54
20-29	21	7	5	24	12	8	77
30-39	7	2	5	5	6	2	27
40+	6	0	1	0	0	0	7
Unk	0	0	0	1	1	0	2
Total	136	41	46	131	104	29	487
PERCENT DOSES	29.7	9.0	10.0	28.6	22.7	-	100.0

There have been 122 fatalities due to poliomyelitis reported to PSU through October 29, 1960. In contrast to the great number of cases occurring in the pre-school age group, only 23 percent of the fatalities have been under 5 years of age. Of 117 fatalities with known vaccination history, 63 percent were unvaccinated while 18 percent had three or more doses of vaccine.

Attempts at virus isolation on 32 fatalities yielded 25 with poliovirus. Of these, 18 were type I poliovirus and 7 were type III. The fatalities are presented below by age group and vaccination status.

Age Group	Doses of Vaccine						Tot
	0	1	2	3	4+	Unk	
0-4	16	4	1	5	2	0	28
5-9	5	2	1	6	2	0	16
10-14	2	2	1	3	1	0	9
15-19	4	2	0	0	0	0	6
20-29	20	3	1	2	0	2	28
30-39	15	2	3	0	0	1	21
40+	12	0	0	0	0	2	14
Total	74	15	7	16	5	5	122

4. ROUTINE POLIOMYELITIS SURVEILLANCE

During the period October 18 through 29, the Poliomyelitis Surveillance Unit received accounts of 20 cases of poliomyelitis, 17 paralytic (1 correlated), with onsets within 30 days after inoculation. This brings the yearly total to date to 123 cases, 96 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 Diseases Surveillance Unit, Joseph Oren, M.D., Chief, Michael J. 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

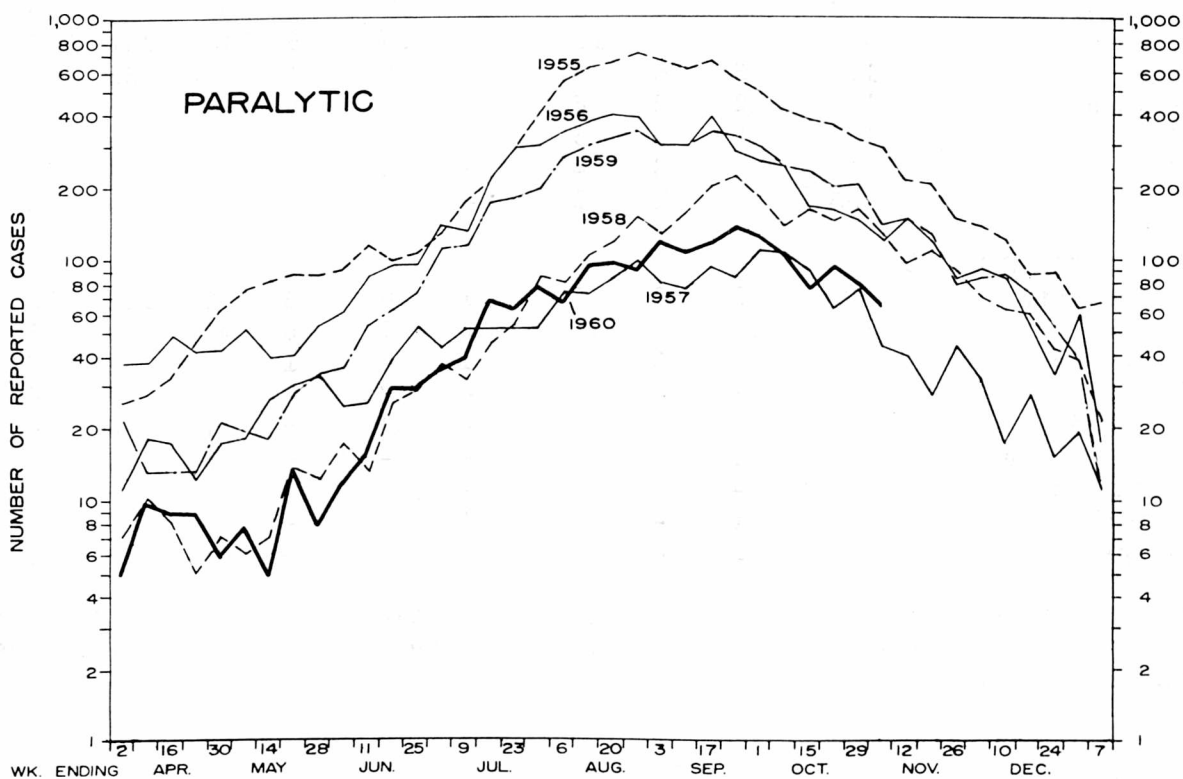
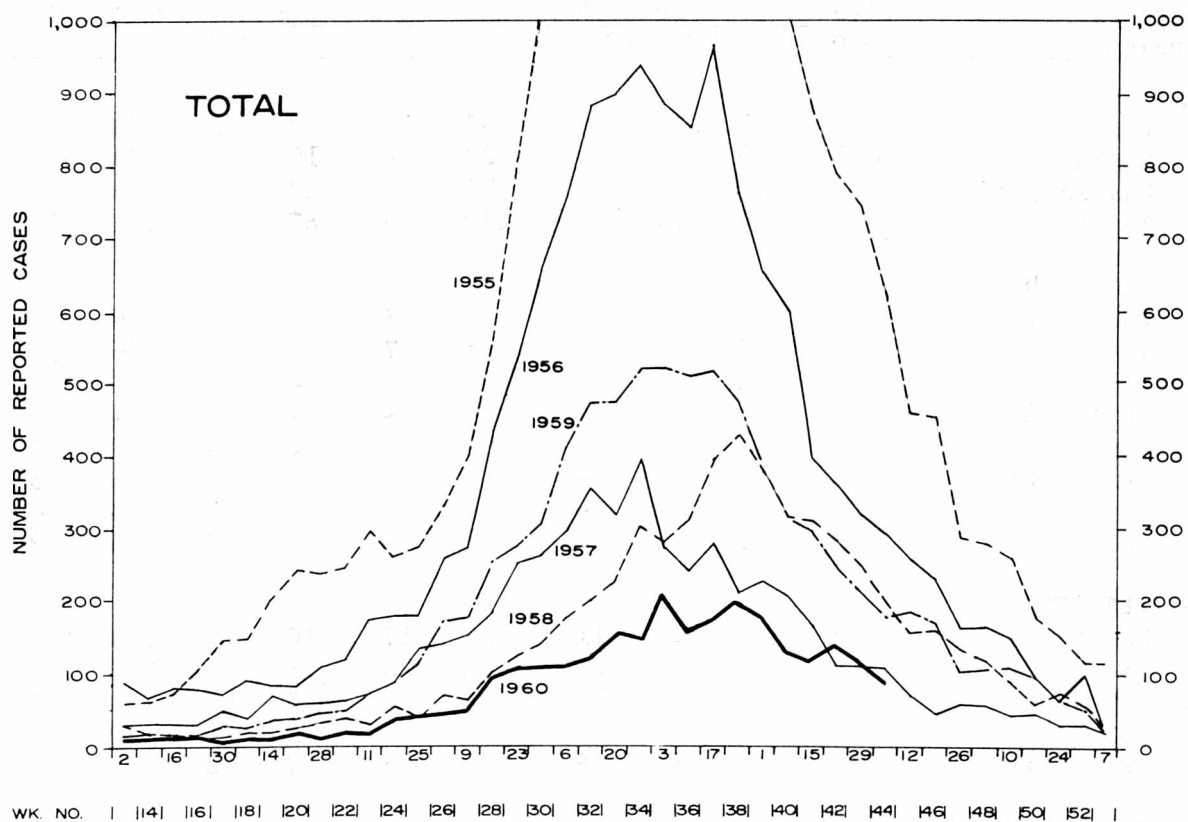


Table I

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
		10-1	10-8	10-15	10-22	10-29	11-5				
UNITED STATES											
Paralytic	1986	127	103	78	93	79	63	543	1273	905	476
Nonparalytic	602	30	24	26	22	19	10	131	342	599	302
Unspecified	311	22	5	17	25	21	14	104	106	263	133
Total	2899	179	132	121	140	119	87	778	1721	1767	916
NEW ENGLAND											
Paralytic	171	5	1	2	7	5	4	24	96	17	6
Total	218	7	3	3	8	7	4	32	106	19	12
Maine	43	2	1	1	4	5	-	13	47	2	1
New Hampshire	-	-	-	-	-	-	-	-	1	-	-
Vermont	9	-	1	-	-	-	2	3	3	3	1
Massachusetts	29	1	1	-	1	-	-	3	36	6	4
Rhode Island	102	3	-	-	-	2	1	6	4	-	-
Connecticut	35	1	-	2	3	-	1	7	15	8	6
MIDDLE ATLANTIC											
Paralytic	302	21	20	11	10	17	10	89	188	102	33
Total	429	27	30	20	22	23	15	137	238	203	84
New York	236	11	15	10	12	11	7	66	159	90	54
New Jersey	80	3	5	2	4	4	1	19	30	81	16
Pennsylvania	113	13	10	8	6	8	7	52	49	32	14
EAST NORTH CENTRAL											
Paralytic	288	32	16	8	16	11	8	91	158	289	120
Total	493	38	21	16	26	23	16	140	297	802	287
Ohio	112	5	8	3	4	5	1	26	56	141	55
Indiana	120	12	2	4	9	8	9	44	35	43	52
Illinois	137	6	6	3	5	2	4	26	96	80	72
Michigan	89	9	4	4	8	5	1	31	94	518	96
Wisconsin	35	6	1	2	-	3	1	13	16	20	12
WEST NORTH CENTRAL											
Paralytic	97	9	7	7	1	6	5	35	158	72	30
Total	167	13	8	11	2	7	6	47	239	115	57
Minnesota	53	5	5	2	1	3	1	17	68	10	12
Iowa	21	2	-	-	-	-	-	2	44	10	10
Missouri	41	2	3	3	-	4	5	17	94	64	16
North Dakota	14	1	-	4	-	-	-	5	2	9	2
South Dakota	4	-	-	-	-	-	-	-	-	2	2
Nebraska	15	1	-	1	1	-	-	3	19	11	8
Kansas	19	2	-	1	-	-	-	3	12	9	7

* 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:		
		10-1	10-8	10-15	10-22	10-29	11-5		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	414	33	35	26	33	20	19	166	233	138	104
Total	536	38	38	27	41	23	24	191	270	215	163
Delaware	-	-	-	-	-	-	-	-	2	6	1
Maryland	141	21	21	15	18	7	8	90	18	9	14
D. C.	5	-	-	2	-	3	-	5	-	-	17
Virginia	38	4	2	1	7	4	3	21	53	49	32
West Virginia	55	2	4	2	6	4	5	23	45	67	22
North Carolina	87	2	6	3	4	1	1	17	79	23	30
South Carolina	126	7	5	-	1	1	2	16	17	7	19
Georgia	20	1	-	2	-	1	1	5	34	15	13
Florida	64	1	-	2	5	2	4	14	22	39	15
EAST SOUTH CENTRAL											
Paralytic	93	3	4	3	7	7	1	25	138	64	37
Total	232	20	7	20	17	16	5	85	169	100	68
Kentucky	129	17	-	14	10	7	4	52	44	26	25
Tennessee	44	1	4	5	1	3	1	15	86	31	34
Alabama	21	1	1	-	6	-	-	8	23	9	4
Mississippi	38	1	2	1	-	6	-	10	16	34	5
WEST SOUTH CENTRAL											
Paralytic	165	10	6	11	5	3	4	39	92	116	60
Total	265	15	11	14	6	5	4	55	157	156	97
Arkansas	31	2	1	4	-	2	-	9	52	7	8
Louisiana	49	-	4	-	1	-	1	6	22	19	20
Oklahoma	17	2	-	2	-	-	1	5	17	6	14
Texas	168	11	6	8	5	3	2	35	66	124	55
MOUNTAIN											
Paralytic	45	5	1	2	3	-	6	17	15	23	15
Total	86	5	1	2	5	4	7	24	28	47	36
Montana	21	2	-	-	2	2	1	7	3	8	2
Idaho	9	-	-	-	2	1	1	4	1	3	6
Wyoming	19	-	-	-	1	-	-	1	-	6	1
Colorado	19	2	-	2	-	-	4	8	6	5	9
New Mexico	7	1	-	-	-	-	-	1	5	10	3
Arizona	5	-	-	-	-	-	1	1	9	11	13
Utah	6	-	1	-	-	1	-	2	2	3	2
Nevada	-	-	-	-	-	-	-	-	2	1	-
PACIFIC											
Paralytic	411	9	13	8	11	10	6	57	195	84	71
Total	473	16	13	8	13	11	6	67	217	110	112
Alaska	2	-	-	-	-	-	-	-	7	-	-
Washington	34	-	4	-	1	1	NR	6	66	16	5
Oregon	34	3	-	1	-	1	1	6	43	8	5
California	396	13	9	7	12	9	5	55	101	75	98
Hawaii	7	-	-	-	-	-	-	-	-	11	4
TERRITORIES											
Puerto Rico	480	5	8	3	3	3	5	27	1	1	3

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION
(Cases Reported to PSU from October 18, through October 29, 1960)

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Ark.	Pulaski	J.F.	2	M	10-3-60	Lilly 755922	10-8-60	right arm	left arm
Calif.	Los Angeles	A.K.	30	F	9-1-60	Wyeth 36506	9-17-60	right deltoid	stiff neck
Calif.	Los Angeles	P.C.	24	F	9-12-60	MS&D 63757	9-22-60	left arm	both legs
Calif.	Los Angeles	S.K.	11	M	9-10-60	Wyeth 37206-2- 2460	9-30-60	left arm	right leg & back
Calif.	San Diego	G.J.	7	M	9-8-60	P-D 060495B	10-1-60	left upper arm	right leg
Conn.	Wind- ham	D.E.	5	M	8-31-60	P-M 175D137	9-10-60	arm	legs
Ill.	Rock Island	M.W.	1	M	2/1960	unk. unk.	3-27-60	buttocks	unk.
Ind.	Lake	T.S.	4	F	9-23-60	P-D 060111	9-26-60	left arm	face
Ky.	Barren	J.E.	8	F	9-30-60	P-D 063289	10-5-60	arm	lower extre- mities
N.Y. City	Kings	S.B.	2	M	10-7-60	unk. unk.	10-13-60	unk.	unk.
N.C.	Rutherford	R.C.	3	M	8-3-60	unk. unk.	8-27-60	unk.	facial
Ohio	Jackson	B.M.	18 mos.	F	9-7-60	unk. unk.	10-1-60	hip	right leg & foot
Pa.	West- moreland	S.L.	8 mos.	F	7-26-60	P-D 4-1993-1	8-5-60	right buttock	left leg & face

Table II Continued

State	County	Ini- tials	Age	Sex	Date Inoc	Mfr. Lot No.	Date First Symp.	Site Inoc.	Site First Para.
Texas	Bexar	O.B.	1	M	10-11-60	Pfizer unk.	10-17-60	left arm	neck & back
Comment: Patient died 10-19-60									
Wash.	Spokane	L.P.	24	M	8-31-60	P-D 060496-A	9-20-60	palate	right arm
West Va.	Poco- hontas	F.R.	4	M	9-22-60	MS&D 63788- 52031B	9-25-60	right hip	left leg
West Va.	Preston	K.S.	3	F	9-10-60	unk. unk.	9-26-60	left arm	left arm

Additional information received on Illinois Case R.M. listed in Report 213 indicates Site of Inoculation - upper left arm, Site of First Paralysis - upper right arm, Vaccine Manufacturer and Lot Number - Pittman-Moore 175B138 or Pfizer 5364.

Maryland Case M.S. listed in Report 215 has been deleted as an under 30-day case.

