



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 199

June 17, 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

Poliomyelitis incidence, both total and paralytic cases, remains at seasonal low levels. This low incidence is present throughout the United States with the exception of Rhode Island where the first cluster of cases within the continental United States in 1960 has been reported in the metropolitan Providence area.

Puerto Rico continues as an epidemic area with additional cases being reported.

Most States are reporting isolations of type I poliovirus during the early months of 1960 with some type III also in evidence.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 19 cases, 16 paralytic, was reported to the NOVS during the 23rd week of 1960, ending June 11. This is the same total reported during the previous week but represents a slight increase over the 12 paralytic cases of last week. However, as seen in Figure I, the incidence of poliomyelitis remains at a low level.

The 1960 cumulative total has now reached 356 cases, including 255 paralytic. The paralytic total is lower than those for the comparable 23 weeks during the past four years with the exception of 1958.

Total through 23rd Week for Five Years

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	255	458	234	497	1121
Total	356	652	454	1048	2095

Furthermore, the six-week totals, both for paralytic and total cases, are below those for any recent year which emphasizes the seasonal low level.

Total for 18th-23rd Week for Five Years

	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
Paralytic	65	186	81	155	333
Total	91	269	176	369	678

Six-week totals are below those for 1959 in all national regions except New England (Tabel I) where the first cluster of cases in 1960 within the continental United States has been reported. This concentration is centered in the Providence, Rhode Island area where 4 cases have been reported to NOVS. (See later report on Rhode Island, Section 2.) The only other increase has been in Montana where scattered cases have been reported.

2. REPORTS

A. Rhode Island

An unusual increase in poliomyelitis was reported by Dr. R. A. McAteer, Medical Director, Division of Communicable Diseases, Rhode Island Department of Health, to the Poliomyelitis Surveillance Unit on June 11, 1960. This increase, represented by 2 cases with onset in May and 9 cases with onset in early June, is concentrated in the vicinity of Providence.

The last major occurrence of poliomyelitis in Rhode Island was during the year 1955. Total annual polio morbidity since 1955 is as follows:

	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
Annual Totals	422	9	0	3	10

At the request of Dr. McAteer, Dr. Joseph Oren, Chief, Poliomyelitis Surveillance Unit, CDC, Atlanta, and Dr. Jack Pickering, EIS Officer assigned to Massachusetts Department of Health, travelled to Providence to assist in the investigation of these cases. The following preliminary information has been furnished by Dr. McAteer with the assistance of Dr. Oren and Dr. Pickering:

Date of Onset	Initials	Age	Race	Sex	Vaccine Status	Residence	Remarks	SEG*
5-17	E.H.	49	W	F	OV	Seekonk, Mass. (Metropolitan Providence)	Paralytic	M
5-28	J.M.	3	N	M	OV	Providence	Paralytic	L
6-1	D.D.	5	W	F	2V	Pawtucket	Paralytic	L
6-1	W.T.	3	W	M	OV	Providence	Bulbar	L
6-3	D.C.**	6	W	F	1V	Warwick	Paralytic	M
6-4	E.C.**	5	W	M	OV	Warwick	Bulbar	M
6-4	M.T.	2	W	M	2V	Warwick	Bulbar	M
6-4	T.R.***	3	W	M	OV	Riverside	Paralytic	L
6-4	P.B.	5	W	F	1V	Providence	Paralytic	M
6-5	K.Mc.	3	W	M	1V	Providence	Paralytic	L
6-12	D.R.***	5	W	M	OV	Riverside	Non-paralytic	L

* Socio-Economic Group: L-lower; M-middle

** Siblings *** Siblings

In June 1959, an immunization survey was conducted in Providence and was similar to levels in that area of the United States. These results are reported in Poliomyelitis Surveillance Report #179. Within the last month, seven surveys of smaller townships have been done or are in progress. Although all the results are not available, it is known that from 30 to 40 per cent of the pre-school lower socio-economic group in two surveys (West Warwick and Woonsocket) had received no Salk vaccination.

Laboratory specimens from the outbreak have been shipped to Dr. Andrew Foder, Chief, Virus Diagnostic Unit, CDC, Atlanta.

B. Puerto Rico

Through June 11, 1960, Dr. Rafael Timothee, Chief, Bureau of Communicable Disease Control, Puerto Rico Department of Health, reports the occurrence of 171 paralytic cases of poliomyelitis with onset in 1960. This represents an increase of 30 cases during the past two weeks; the epidemic thus continues at a steady pace.

Cases have now been reported from 41 of the 76 municipalities in Puerto Rico with an overall attack rate of 7.3 per 100,000 for the island. The 23 municipalities with highest attack rates are as follows:

Municipality	Paralytic Cases	Attack Rate (per 100,000)	Municipality	Paralytic Cases	Attack Rate (per 100,000)
Villalba	9	54.7	Guayanilla	2	11.7
Ponce	38	26.1	Patillas	2	11.7
Lajas	4	26.0	Bayamon	8	11.1
Yauco	9	25.9	Barranquitas	2	10.5
Anasco	4	23.1	Barceloneta	2	10.4
Fajordo	4	21.8	Juana Diaz	3	10.0
Penuelas	3	20.2	Vega Baja	3	9.9
Catano	5	19.6	San Juan		
Maricao	1	14.3	(including		
Salinas	3	13.0	Rio Piedras)	39	8.7
Guaynabo	5	12.4	Coamo	2	7.8
Cabo Rojo	3	12.1	Arroyo	1	7.5
			Santa Isabel	1	7.4

Highest attack rates are centered around the vicinity of Ponce in the southern half of the island where the epidemic originated. Five of the seven municipalities with attack rates over 20/100,000 are in this coastal plains area.

3. 1960 POLIOMYELITIS CASES REPORTED TO PSU

Through June 13, there have been 181 cases of poliomyelitis with onset in 1960 reported to PSU on individual case forms. Of these cases, 145 or 80 per cent are paralytic.

California, Minnesota, Missouri, New Jersey, New York City, Ohio, Oregon, South Carolina, Texas, Washington, Wisconsin and Hawaii have isolated type I poliovirus from early 1960 cases. Type III poliovirus has been isolated from cases in Louisiana, Massachusetts, New York and Pennsylvania. One type II isolation has been noted in New York City.

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1960

A. Cases with Onset Within 30 Days of Vaccination

There has been one additional under 30-day case reported to the Poliomyelitis Surveillance Unit during the two week period ending June 15.

This makes the third such case reported during 1960 and is correlated. This paralytic case is in a two year old female from San Joaquin County, California. Vaccination was received on 5-12-60 in the right deltoid with onset of paralysis on 5-21-60 in the right shoulder. The vaccine used was Parke-Davis lot No. 06059A.

B. Vaccine Distribution

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

* * * * *

ERATTA: In PSU Report 197, May 16, 1960, in Section 2B - Report from Jamaica, B.W.I., page 5, the following sentence should be deleted:

"This outbreak is the largest to occur on the semi-tropical island since the epidemic of 1954 when 759 cases and 94 deaths occurred."
The figures for 1954 are correct but the current outbreak in 1960 is not the largest since then.

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

Figure 1. CURRENT U.S. POLIO INCIDENCE
compared with years 1956 through 1959

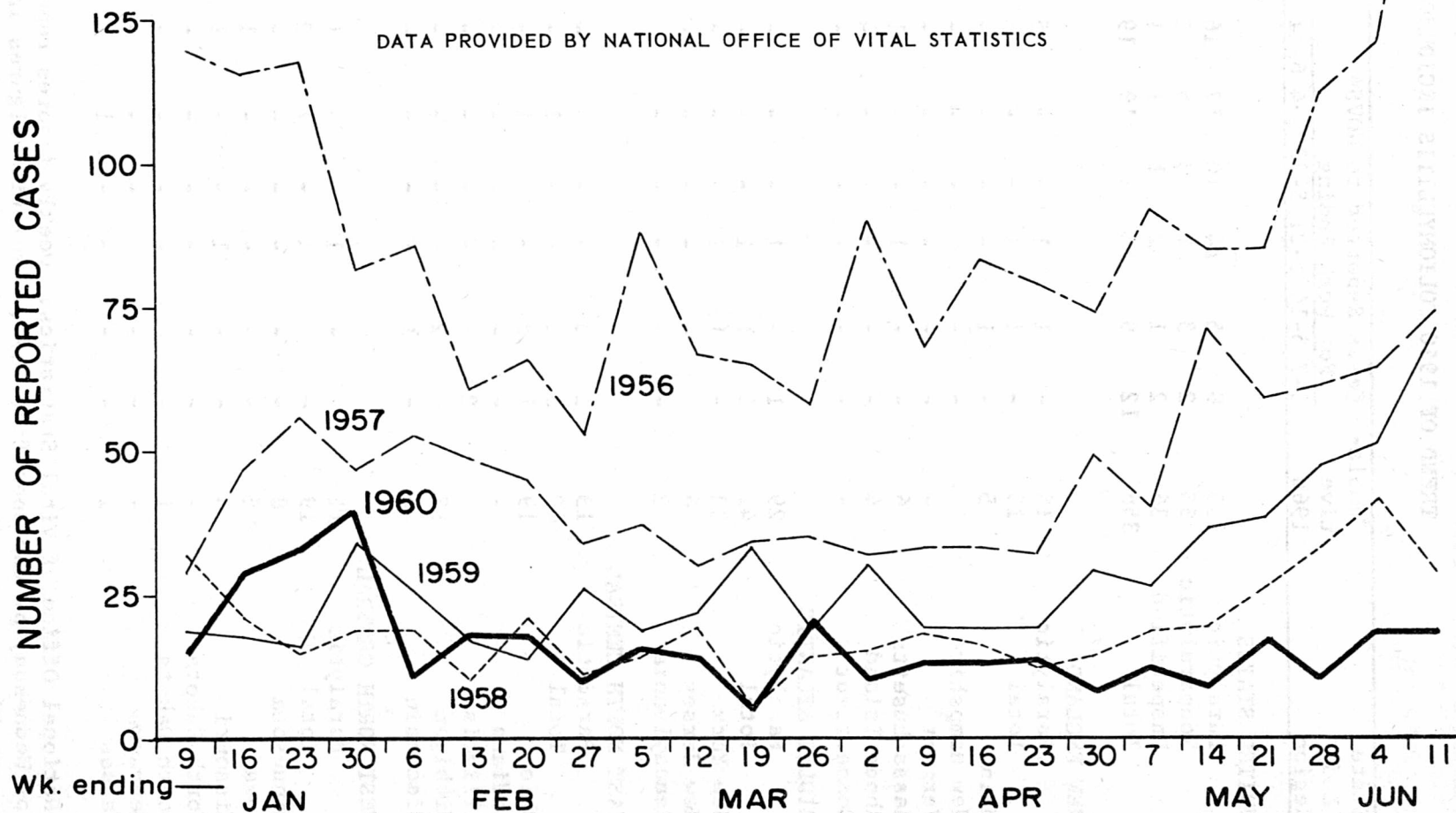


Table I

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
		5-7	5-14	5-21	5-28	6-4	6-11				
UNITED STATES											
Paralytic	255	8	5	14	10	12	16	65	186	81	155
Nonparalytic	65	2	3	2	3	6	2	18	61	66	172
Unspecified	36	2	1	2	1	1	1	8	22	29	42
Total	356	12	9	18	14	19	19	91	269	176	369
NEW ENGLAND											
Paralytic	15	-	1	1	-	-	5	7	2	2	2
Total	15	-	1	1	-	-	5	7	2	2	4
Maine	5	-	1	-	-	-	-	1	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	2
Massachusetts	6	-	-	1	-	-	1	2	-	-	1
Rhode Island	4	-	-	-	-	-	4	4	2	-	-
Connecticut	-	-	-	-	-	-	-	-	-	2	1
MIDDLE ATLANTIC											
Paralytic	29	1	-	1	-	-	-	2	8	4	2
Total	41	1	1	1	-	-	-	3	11	9	7
New York	33	-	1	1	-	-	-	2	6	6	3
New Jersey	6	1	-	-	-	-	-	1	5	3	1
Pennsylvania	2	-	-	-	-	-	-	-	-	-	3
EAST NORTH CENTRAL											
Paralytic	13	1	3	-	-	-	-	4	12	3	8
Total	40	3	5	-	-	1	-	9	28	12	23
Ohio	19	1	2	-	-	1	-	4	12	2	4
Indiana	-	-	-	-	-	-	-	-	3	1	3
Illinois	6	2	-	-	-	-	-	2	2	6	6
Michigan	12	-	2	-	-	-	-	2	10	2	8
Wisconsin	3	-	1	-	-	-	-	1	1	1	2
WEST NORTH CENTRAL											
Paralytic	11	-	-	1	-	-	1	2	28	2	6
Total	19	-	-	1	-	1	2	4	40	11	19
Minnesota	8	-	-	-	-	-	-	-	5	-	1
Iowa	5	-	-	-	-	-	1	1	16	5	1
Missouri	4	-	-	1	-	-	1	2	4	-	7
North Dakota	-	-	-	-	-	-	-	-	-	1	-
South Dakota	1	-	-	-	-	-	-	-	1	-	2
Nebraska	-	-	-	-	-	-	-	-	7	5	5
Kansas	1	-	-	-	-	1	-	1	7	-	3

*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	Cumulative 1960	Cases Reported to NOVS For Week Ending						Six Week Total	Comparable Six Weeks Totals in:		
		5-7	5-14	5-21	5-28	6-4	6-11		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	41	-	-	1	2	1	1	5	39	11	15
Total	53	-	1	1	4	1	1	8	48	27	37
Delaware	1	-	-	-	-	-	-	-	-	-	-
Maryland	1	-	-	-	-	-	-	-	-	-	-
D. C.	-	-	-	-	-	-	-	-	-	1	-
Virginia	-	-	-	-	-	-	-	-	10	2	5
West Virginia	4	-	-	-	1	-	-	1	5	3	1
North Carolina	16	-	-	-	-	1	1	2	4	5	7
South Carolina	3	-	-	-	1	-	-	1	1	1	7
Georgia	3	-	-	-	-	-	-	-	3	-	2
Florida	25	-	1	1	2	-	-	4	25	15	15
EAST SOUTH CENTRAL											
Paralytic	11	1	-	3	-	-	-	4	16	5	6
Total	13	1	-	3	1	-	-	5	24	16	18
Kentucky	7	-	-	-	1	-	-	1	2	4	2
Tennessee	1	-	-	1	-	-	-	1	9	5	3
Alabama	1	-	-	-	-	-	-	-	5	1	4
Mississippi	4	1	-	2	-	-	-	3	8	6	9
WEST SOUTH CENTRAL											
Paralytic	32	2	-	3	2	2	4	13	41	29	81
Total	49	3	-	4	3	7	5	22	64	55	157
Arkansas	3	-	-	-	-	-	-	-	8	2	8
Louisiana	15	-	-	2	2	4	1	9	6	1	21
Oklahoma	3	1	-	-	-	-	-	1	11	7	5
Texas	28	2	-	2	1	3	4	12	39	45	123
MOUNTAIN											
Paralytic	11	-	-	-	-	1	2	3	11	3	11
Total	20	-	-	2	-	1	3	6	16	13	28
Montana	9	-	-	2	-	-	3	5	2	2	1
Idaho	4	-	-	-	-	-	-	-	-	-	1
Wyoming	1	-	-	-	-	-	-	-	-	-	3
Colorado	1	-	-	-	-	-	-	-	-	1	6
New Mexico	1	-	-	-	-	-	-	-	3	-	6
Arizona	3	-	-	-	-	1	-	1	11	7	6
Utah	1	-	-	-	-	-	-	-	-	2	5
Nevada	-	-	-	-	-	-	-	-	-	1	-
PACIFIC											
Paralytic	92	3	1	4	6	8	3	25	29	22	24
Total	106	4	1	5	6	8	3	27	36	31	76
Alaska	2	-	-	-	1	-	1	2	-	1	-
Washington	7	-	-	1	-	-	-	1	-	-	-
Oregon	12	-	-	-	-	-	-	-	5	-	3
California	81	4	1	4	4	7	2	22	31	21	73
Hawaii	4	-	-	-	1	1	-	2	-	9	-
Puerto Rico	178	14	14	9	18	20	25	100	-	15	1

Table II

POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS*

(Data provided by the Polio Vaccine Activity, BSS, USPHS through June 10, 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	--	1,786	2,991	1,294	6,071
May	--	2,093	3,496	1,099	6,688
<u>Week Ending</u>					
6-3	--	420	579	80	1,079
Total to Date	--	8,597	12,437	5,255	26,289
Cumulative Total	14,252	156,797	147,378	79,248	397,675

* 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	43,317	502,731	1,989	548,037
May	60,156	604,436	27,117	691,709
<u>Week Ending</u>				
6-3	3,038	187,092	9,273	199,403
Total to Date	224,426	2,602,182	103,079	2,929,687
Cumulative Total	381,677	6,621,759	162,222	7,165,658