



I. Current Poliomyelitis Morbidity Trends

Poliomyelitis incidence by states for the weeks ending November 12 through December 17 is presented in Table 1, together with a six-week total for this and the three previous years. Incidence fell again this week and continues below that for the past three years, reflecting decreases in cases reported from almost all states. The usual figure, showing national incidence by weeks, is omitted from the present report, but will again appear in subsequent reports.

II. Laboratory Studies

PSU has compiled a tabulation of laboratory reports from 18 participating laboratories running polio diagnostic specimens. This tabulation is confined to reports of 1507 fecal specimens from individuals with a clinical diagnosis of paralytic, non-paralytic or suspect poliomyelitis and represents 20.5% of 7355 specimens reported to PSU through December 2, 1955.

Virus Isolations from Poliomyelitis Cases  
by Clinical Diagnosis and Type of Virus Isolated  
(Reports Received by PSU through December 2, 1955)

Laboratory Results	Clinical Diagnosis*						Total Specimens	
	Paralytic		Non-Paralytic		Suspect		No.	%
	No.	%	No.	%	No.	%		
Polio Virus								
I	178	35%	80	12%	26	8%	284	19%
II	19	4%	15	2%	5	1%	39	3%
III	39	8%	11	2%	5	1%	55	4%
Other Virus								
Coxsackie	-	-	1	-	4	1%	5	-
H. simplex	-	-	1	-	1	-	2	-
Orphan	18	3%	32	5%	12	4%	62	4%
Negative	257	50%	519	79%	284	85%	1060	70%
Totals	511	100%	659	100%	337	100%	1507	100%

\*Based on preliminary diagnosis made when specimens were collected.

This table shows that polio virus was isolated from 47% of specimens on paralytic cases, from 16% of specimens on non-paralytic cases, and from 10% of specimens on suspects. Among 236 polio viruses isolated from paralytic cases, 75% were Type I, 8% Type II and 17% Type III; among 106 polio virus isolated from non-paralytic cases, 75% were Type I, 15% Type II and 10% Type III; and among 36 polio viruses isolated from suspect cases, 72% were Type I, 14% Type II and 14% Type III. Orphan viruses were isolated from 3% of the paralytic specimens, 5% of non-paralytic specimens, and 4% of specimens run on suspects. A few coxsackie and Herpes simplex viruses were isolated from non-paralytic and suspect cases.

### III. Special Studies

Dr. Cecil B. Tucker, Director, Division Preventable Diseases, Tennessee, has compiled data on effectiveness of vaccine as used in Tennessee, in a news release, dated November 28, 1955:

"Since the poliomyelitis season is on the wane and the number of cases reported to the State Health Department each week is very small, data regarding occurrence of paralytic cases of the disease have been tabulated for two groups of children, 1) those receiving the poliomyelitis vaccine under the program sponsored by the National Foundation for Infantile Paralysis and 2) those not receiving the vaccine. The data are summarized in the following table.

NUMBER OF CASES OF PARALYTIC POLIOMYELITIS HAVING ONSETS FROM  
MAY 1 TO OCTOBER 31 AND ATTACK RATES PER 100,000 POPULATION  
AMONG CHILDREN 6-9 YEARS OF AGE ACCORDING TO TYPE OF CASE  
AND VACCINATION STATUS, TENNESSEE, 1955

Vaccination Status	Estimated Population	Paralytic Cases	
		Number	Rate
Total	273,760	15	5.5
Field trials, 1954	9,667	1	10.3
Vaccinated, 1955	160,990	3	1.9
Not vaccinated	103,103	11	10.7

When the 15 paralytic cases are divided according to whether or not the child had received poliomyelitis vaccine, striking differences are noted. Only three children who received the vaccine under the Foundation program developed paralytic poliomyelitis between May 1 and October 31, compared with eleven children who did not receive the vaccine. One child who received vaccine during the Field Trials conducted in 1954 developed paralytic poliomyelitis in 1955. When the cases are related to their corresponding population groups, a rate of 1.9 per 100,000 is obtained among children vaccinated in 1955 compared with a rate of 10.7 per 100,000 among those not vaccinated. Thus, there is a ratio of greater than 5 to 1 in favor of the vaccine. Tentative results reported by the Public Health Service reveal that in a group of 20 states the attack rates for paralytic poliomyelitis are from 2 to more than 5 times greater in the unvaccinated than in the vaccinated children."

### IV. Routine Poliomyelitis Surveillance

The tabular summary lists in detail the polio cases among vaccinated children accepted December 15 through December 21 with revisions of previously listed cases. Table 2 presents these cases and total cases to date. Of the 32 new cases, 11 are paralytic and 21 non-paralytic. None

of the paralytic and four of the non-paralytic cases had onsets 30 days or less after vaccination.

\* \* \* \* \*

No PSU Report will appear next week because of the holidays. Weekly reports will be resumed after the first of the year.

(This report was prepared by Dr. Neal Nathanson and Dr. Wm. Jackson Hall, with assistance from the Statistics Section, CDC.)

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Table 1

## TREND OF 1955 POLIOMYELITIS INCIDENCE

State	Cases Reported to NOVS*						6 Week Total	Comparable Totals in:		
	11/12	11/19	11/26	12/3	12/10	12/17		1954	1953	1952
United States	469	459	290	283	223	177	1901	3033	2639	4872
North East										
Maine	1	9	3	2	1	-	16	16	15	20
New Hampshire	-	1	-	1	1	2	5	7	16	5
Vermont	2	4	-	3	-	-	9	10	11	10
Massachusetts	43	52	37	17	20	5	174	82	98	28
Rhode Island	12	15	4	8	-	-	39	4	16	17
Connecticut	5	11	6	5	4	2	33	69	21	24
New York	40	38	22	23	12	19	154	383	290	252
New Jersey	5	11	3	8	3	4	34	132	32	60
Pennsylvania	8	15	2	8	5	3	41	149	85	112
North Central										
Ohio	26	7	15	4	3	13	68	189	161	194
Indiana	5	11	12	12	6	6	52	101	24	103
Illinois	15	14	14	10	5	1	59	150	102	281
Michigan	10	7	4	6	3	5	35	192	154	306
Wisconsin	40	25	18	23	10	10	126	82	55	133
Minnesota	6	5	5	3	4	5	28	25	100	355
Iowa	5	8	3	4	1	1	22	70	39	159
Missouri	11	7	1	5	8	-	32	31	50	115
North Dakota	-	-	1	1	-	3	5	4	15	48
South Dakota	-	-	-	-	1	4	5	23	19	118
Nebraska	2	-	2	3	-	-	7	28	12	149
Kansas	5	2	1	1	3	4	16	43	29	85
South										
Delaware	-	1	-	-	-	-	1	20	3	6
Maryland	3	3	3	5	3	-	17	26	31	21
District of Col.	1	-	-	1	1	-	3	7	5	7
Virginia	-	5	3	1	3	3	15	44	31	44
West Virginia	1	4	2	2	2	-	11	15	24	40
North Carolina	16	5	7	6	5	7	46	35	30	57
South Carolina	3	5	-	3	1	-	12	19	15	9
Georgia	2	6	1	5	2	-	16	26	11	43
Florida	2	4	10	2	-	4	22	125	73	95
Kentucky	18	5	2	1	4	2	32	54	29	126
Tennessee	4	2	1	2	1	-	10	36	23	55
Alabama	-	4	-	1	7	1	13	16	14	23
Mississippi	-	4	3	3	1	-	11	23	11	17
Arkansas	-	4	-	1	-	2	7	26	26	17
Louisiana	5	5	2	2	6	3	23	45	23	30
Oklahoma	4	10	1	2	2	1	20	10	33	53
Texas	18	32	20	7	22	14	113	127	128	90

Table 1 (Continued)

State	Cases Reported to NOVS*						6 Week Total	Comparable Totals in:		
	11/12	11/19	11/26	12/3	12/10	12/17		1954	1953	1952
West										
Montana	2	1	2	2	NR	-	7	27	40	33
Idaho	8	4	6	2	2	-	22	13	24	47
Wyoming	1	1	-	-	-	-	2	26	12	27
Colorado	3	4	3	1	1	2	14	19	8	82
New Mexico	3	2	1	3	1	2	12	14	6	39
Arizona	2	3	-	-	2	1	8	9	19	54
Utah	1	2	-	2	1	-	6	36	29	95
Nevada	1	3	-	-	-	-	4	1	3	36
Washington	23	18	19	14	16	5	95	60	41	111
Oregon	20	15	10	15	11	10	81	49	60	58
California	87	65	41	53	39	33	318	335	543	953

\*National Office of Vital Statistics.

Table 2

Poliomyelitis Cases in Vaccinated Individuals  
(PSU Accepted Cases through December 21, 1955)

	Vaccine Manufacturer and Paralytic Status**									
	C		L		PD		PM		W	
	P	NP	P	NP	P	NP	P	NP	P	NP
	CASES VACCINATED 5-7 OR BEFORE WITH ONSETS 30 DAYS OR LESS AFTER VACCINATION***									
Totals through 12-21	59	18	17	29	4	5	3	5	9	4
	77		46		9		8		13	
	CASES VACCINATED 5-7 OR BEFORE WITH ONSETS 31 DAYS OR MORE AFTER VACCINATION***									
Totals through 12-14 (Revised)	13	19	31	142	19	90	12	17	18	52
New Cases 12-15 through 12-21	0	0	2	1	1	1	0	0	2	9
Totals through 12-21	13	19	33	143	20	91	12	17	20	61
	32		176		111		29		81	
	CASES VACCINATED 5-8 OR LATER WITH ONSETS 30 DAYS OR LESS AFTER VACCINATION***									
Totals through 12-14 (Revised)			28	79	24	38*	4	9	4	11
New Cases 12-15 through 12-21			0	4	0	0	0	0	0	0
Totals through 12-21			28	83	24	38*	4	9	4	11
			111		62		13		15	
	CASES VACCINATED 5-8 OR LATER WITH ONSETS 31 DAYS OR MORE AFTER VACCINATION***									
Totals through 12-14 (Revised)			20	64	72	251*	0	1	1	5
New Cases 12-15 through 12-21			0	4	5	2	1	0	0	0
Totals through 12-21			20	68	77	253*	1	1	1	5
			88		330		2		6	

\*Including one case that received either Parke-Davis or Lilly vaccine.

\*\*Vaccine Manufacturers: C - Cutter; L - Lilly; PD - Parke-Davis; PM - Pitman-Moore; W - Wyeth  
Paralytic Status: P - Paralytic; NP - Non-Paralytic

\*\*\*Cases in individuals who had two inoculations are listed according to the second inoculation. No inoculations with Cutter vaccine given after May 7.





POLIOMYELITIS AMONG VACCINATED INDIVIDUALS  
(FSU Accepted Cases December 15 - December 21, 1955)

CASE NO.	County	Ini- tials	Age	Sex	Date Inoc.	Date	Date	Site	Site	Mfr.	Lot No.	Remarks
						lst Symp.	lst Para.	Inoc.	Para.			
Ill-90	Cook	RB	7	M	5-6	7-10	None	LA	None	PD	028846B? 028863B?	Spinal fluid, 620 cells.
Mich-27	Genesee	JN	7	M	5-20	8-24	?	LA	?	PD	?	
Mich-28	Mecosta	RW	8	F	April	8-3	?	?	?	PD	?	
Mich-29	Jackson	ST	8	M	May	11-25	?	?	?	PD	?	
					August			?		PM	?	
Mich-30	Calhoun	JD	8	M	May or June	8-4	?	Arm	?	PD	?	
Pa-43	Dauphin	JD	8	M	May	8-6	None	LA	None	W	23801? 23614?	Spinal fluid, 130 cells.
Pa-44	Cumberland	LG	8	M	May Oct.	9-27	None	RA RA	None	W L	23602 or 23801 ?7001-657210 ?7119-657206	Spinal fluid, 616 cells.
Pa-45	Cumberland	KN	7	F	May	8-7	None	RA	None	W	23612? 23801?	Spinal fluid, 193 cells.
Conn-43	Fairfield	JSB	9	M	Aug.	11-11	None	LA	None	L	6004-653807	Spinal fluid, 2 cells.
Conn-44	Hartford	SDH	3	M	9-22 10-14	10-21	None	LA LA	None	L L	8098-649344 8098-649344	Spinal fluid, 14 cells.
Conn-45	Hartford	RF	8-	M	May	11-5	None	?	None	PD	029126A	
Conn-46	Fairfield	AK	8	M	5-24	10-28	10-31	?	Bulbar	PD	029126A	
Conn-47	New Haven	DEO	8	M	5-20	8-5	?	LA	RL	PD	029126A	
Conn-48	New Haven	DJA	7	M	June Aug.	10-17	None	LA LA	None	PD? L?	029126A 653807	Spinal fluid, 54 cells.
Conn-49	Hartford	TLR	9	F	Aug. Aug.	10-12	None	? ?	None	PD? L?	029126A 6004-	Also vaccinated in 1954. Spinal fluid, 25 cells.
NY-176	Onondaga	JES	6	F	5-16	10-24	10-26	LA	RL	PD	029129A	
Tex-101	Lubbock	JIH	7	M	4-22	11-1	None	?	None	L	7080-649342	
Ohio-45	Stark	MW	7	F	4-27	8-11	None	Arm	None	W	23701	

PSU		Ini-			Date	Date	Date	Site	Site	Lot	
CASE NO.	County	tials	Age	Sex	Inoc.	Symp.	Para.	Inoc.	Para.	Mfr. No.	Remarks
NEW (Continued)											
Ohio-46	Hamilton	CB	18	F	4-28	8-6	?	Arm	LL	L	649336?649337?
Ohio-47	Stark	WC	7	M	4-27	8-24	?	LA	Legs	W	23701
Ohio-48	Stark	RP	6	M	4-27	8-21	None	LA	None	W	23701
Ohio-49	Hamilton	KH	10	F	4-18	7-21	?	Arm	Bulbar	L	?649336 ?649337
Ohio-50	Trumbull	RL	9	M	4-26	8-11	None	?	None	W	23704 or 23519
Ohio-51	Logan	MK	7	M	4-29	8-2	None	RA	None	W	23707 or 23708
Ohio-52	Darke	PW	8	F	4-26	9-19	None	Arm	None	W	23708
Ohio-53	Cuyahoga	AF	7	F	April	8-4	None	Arm	None	W	23701 or 23518
Ohio-54	Lucas	SB	7	F	April	8-8	?	?	RA,RL	W	23514 or 23516
Ohio-55	Montgomery	VS	7	M	4-27	8-16	None	LA	None	W	23705,23706 or 23709
Ohio-56	Cuyahoga	GT	6	M	10-15	11-1	None	LA	None	L	3825-649337 Spinal fluid, 27 cells.
Cal-147	Imperial	LB	5	F	12-2	12-12	None	LA	None	L	4050-658261
Wisc-69	Racine	MLM	7	M	May	11-10	None	RA	None	PD	029127A Spinal fluid, 2 cells.
					June			RA		PD	029127A
Me-4	Sagadahoc	DL	8	M	6-14	11-16	None	LA	None	L	5205-649348 Spinal fluid, 211 cells.
					7-19			LA		L	5205-649348

REVISIONS

(Revised Items Underlined)

Ohio-3	Weston	DL	8	M	4-28	<u>5-17</u>	<u>5-20</u>	LA	Bulbar	W	23516	<u>Type I isolated 5-26</u> <u>(Dr. Robbins).</u>
Ohio-17	Hamilton	RBP	8	M	4-27	<u>7-3</u>	None	LA	None	W	237	
Ohio-21	Summit	NK	7	M	4-28	<u>8-19</u>	None	LA	None	W	23703	<u>Type I isolated 9-1</u> <u>(Dr. Robbins).</u>
Ill-6	<del>DROPPED--SAME AS Ill-75-----</del>											
Ill-53	<del>DROPPED--SAME AS Ill-88-----</del>											
Ill-60	Cook	SL	8	F	April	9-9	?	?	<u>LL</u>	PD	?028846B, ?028850B	?028861B, ?028863B
					or May							
Ill-75	McHenry	WMcC	7	M	April	6-3	None	<u>LA</u>	None	PD	028846B?	028863B?

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POLIOMYELITIS SURVEILLANCE  
SPECIAL REPORT NUMBER 1  
MAY 14, 1955

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE                      COMMUNICABLE DISEASE CENTER

POLIOMYELITIS SURVEILLANCE UNIT  
50 7TH STREET, N.E., ATLANTA, GA.

SUPPLEMENTARY REPORTS  
ISSUED BY THE POLIOMYELITIS SURVEILLANCE UNIT  
DURING THE CALENDAR YEAR  
1955  
OF POLIOMYELITIS CASES AMONG UNVACCINATED PERSONS HAVING FAMILIAL  
CONTACT WITH INDIVIDUALS WHO HAVE RECEIVED POLIOMYELITIS VACCINE

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SPECIAL NOTES

This report has been prepared primarily for the Expert Committee on Poliomyelitis of the Public Health Service. The information has been obtained from poliomyelitis reporting officers on a confidential basis. Permission has been granted from some states to distribute the facts to the complete PSU mailing list. Other states have requested a delay for verification of the facts.

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This report has been prepared by Dr. Alexander D. Langmuir, J. Dr. Neal Nathanson, and Mr. Earl Diamond. Field investigations have been performed by the following Epidemic Intelligence Service officers: Dr. Helen A. Moore, Dr. Gerald M. Silverman, and Lt. Gerald D. LaVeck.



PSU		Ini-			Date	Date		Site		Lot	
CASE NO.	County	tials	Age	Sex	Inoc.	Symp.	Para.	Inoc.	Para.	Mfr. No.	Remarks

NEW (Continued)

Ohio-46	Hamilton	CB	18	F	4-28	8-6	?	Arm	LI	L	6493367649337?
Ohio-47	Stark	WC	7	M	4-27	8-24	?	LA	LI	W	23701
Ohio-48	Stark	RP	6	M	4-27	8-21	None	LA	LI	W	23701
Ohio-49	Hamilton	KH	10	F	4-18	7-21	?	Arm	LI	L	7649336 7649337
Ohio-50	Trumbull	RL	9	M	4-26	8-11	None	?	LI	W	23704 or 23519
Ohio-51	Logan	MK	7	M	4-29	8-2	None	RA	LI	W	23707 or 23708
Ohio-52	Darke	PW	8	F	4-26	9-19	None	Arm	LI	W	23708
Ohio-53	Cuyahoga	AF	7	F	April	8-4	None	Arm	LI	W	23701 or 23518
Ohio-54	Lucas	SB	7	F	April	8-8	?	?	LI	W	23514 or 23516
Ohio-55	Montgomery	VS	7	M	4-27	8-16	None	LA	LI	W	23705, 23706 or 23709
Ohio-56	Cuyahoga	GT	6	M	10-15	11-1	None	LA	LI	L	3825-649337 Spinal fluid, 27 cells.
Cal-147	Imperial	LB	5	F	12-2	12-12	None	LA	LI	L	4050-658261
Wis-69	Racine	MLM	7	M	May	11-10	None	RA	LI	PD	029127A Spinal fluid, 2 cells.
					June			RA	LI	PD	029127A
Me-4	Sagadahoc	DL	8	M	6-14	11-16	None	LA	LI	L	5205-649348 Spinal fluid, 211 cells.
					7-19			LA	LI	L	5205-649348

DOING THE CATECHISM LEVEL  
 BY THE BOWLING GREEN  
 2017

REVISIONS

(Revised Items Underlined)

Ohio-3	Weston	DL	8	M	4-28	5-17	5-20	LA	LI	W	23516	<u>Type I isolated 5-26</u> <u>(Dr. Robbins).</u>
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Ill-6	<del>DROPPED--SAME AS Ill-75-----</del>											
Ill-53	<del>DROPPED--SAME AS Ill-88-----</del>											
Ill-60	Cook	SL	8	F	April	9-9	?	?	LI	PD	7028846B, 7028850B 7028861B, 7028863B	
					or May							
Ill-75	McHenry	WMcC	7	M	April	6-3	None	LA	LI	PD	028846B? 028863B?	