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POLIOMYELITIS SURVEILLANCE REPORT NO. 45 OCTOBER 7, 1955

AND ATTACHMENT

Public Health Service Communic

Communicable Disease Center

Poliomyelitis Surveillance Unit 50 Seventh Street, N. E. Atlanta, Georgia

SPECIAL NOTE

The information in this report represents a factual summary of data reported to the Poliomyelitis Surveillance Unit from State Health Departments, Epidemic Intelligence Service Officers, participating laboratories and other Pertinent sources. Much of the material is preliminary in nature and is subject to change. The distribution of this report is strictly limited to federal and state officials, to directors of participating laboratories and to other official or non-official persons having responsibility for the control of poliomyelitis in the nation. It is understood that this report will not be quoted in public nor will its contents be released to the press or to unauthorized persons. Any release of this information will be made by the Office of the Surgeon General, U.S. Public Health Service. State Health Officers, of course, are free to reveal any information they may wish concerning data from their state.

All readers should be cautioned regarding the limitations of data presented herein. Current and cumulative data are given concerning reported cases of poliomyelitis in vaccinated persons and among their familial and community contacts. It should be recognized that these data do not constitute a controlled evaluation of poliomyelitis vaccine. For this reason, interpretations and conclusions based on material in these reports must be guarded.

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### I. Current Poliomyelitis Morbidity Trends

Poliomyelitis incidence by weeks for the current year, with similar data for the three preceding years, is presented in Figure 1, drawn from data published by the National Office of Vital Statistics. Incidence fell considerably this week and continues below that for the three preceding years.

Poliomyelitis incidence by states for the weeks ending August 27 through October 1 is presented in Table 1, together with a six-week total for this and the three previous years. The drop in national incidence is due to decreases in cases reported from almost all states.

### II. Age Distribution Analysis

For a number of years the National Foundation for Infantile Paralysis has received reports of almost all acute poliomyelitis admissions to hospitals throughout the country. From these reports the NFIP has compiled many tabulations of interest, including age-specific attack rates. The NFIP has now prepared a comparison of age-specific attack rates for 1953, 1954 and 1955 and has kindly granted permission for reproduction of these data, which appears as an attachment to the present PSU Report.

This week Age Distribution Analysis tabulations are limited to the NFIP data presented in the attachment. The usual presentation of tables and figures compiled from reports to PSU will be resumed next week.

## III. Special Studies

Dr. Morris Greenberg, New York City Department of Health, in a letter dated October 3, reports current poliomyelitis data for New York City:

"Last May we vaccinated children in grades 1 and 2 (ages 6 and 7) with one dose of Salk vaccine. Approximately 166,000 were vaccinated and 87,000 were not. The results as of September 30, 1955 are given in the table below:

POLIOMYELITIS ATTACK RATES IN VACCINATED AND UNVACCINATED CHILDREN, AGE 6 - 7, BY DIAGNOSIS, WITH ONSET BETWEEN JUNE 1st AND SEPT. 26, 1955

Vaccination	Estimated		No. of $0 + 1 = 50$		Rate	e per 10	00,000
Status	Number	Po	NP	Total	Po	NP.	Total
Vaccinated Unvaccinated	166,000 87,000	8 17	13 26	21 43	4.8 19.5	7.8 29.9	12.6 49.4
Total	253,000	25	39	64	9.9	15.4	25.3

In 1954 we gave three injections of Salk vaccine to about 16,000 children in grades 1, 2 and 3 (ages 6, 7 and 8). This spring we injected about 15,000 children in grades 2, 3 and 4 (ages 7, 8 and 9) that received placebos last year with 2 doses of Salk vaccine. There has not been a case of paralytic poliomyelitis in either of the two groups. The groups are too small for comparison with rates in the non-injected."

# IV. Routine Poliomyelitis Surveillance

The tabular summary lists in detail the polio cases among vaccinated children accepted September 29 through October 5 with revisions of previously listed cases. Table 2 tabulates these cases and total cases to date.

Table 3 presents a comparison of "reported" and "expected" cases among children who received first inoculations in the NFIP-supported school clinics through May 7. Table 4 presents a similar comparison among children who received first inoculations between May 8 and July 7; a total of 14 cases from states in which only a few first inoculations were given during this period are not included. The numbers of inoculations have been revised slightly since the last report and still are only approximate. The "expected" numbers represent rough estimates of the numbers of cases that would have occurred in the respective groups of first and second grade children if they had not been vaccinated.

# V. Polio-Like Diseases

PSU Report No. 43, carried a report from Dr. Martin Hines, Chief, Veterinary Public Health Section, North Carolina Board of Health, of 13 cases of EEE among horses in the southeastern part of the state. Dr. Robert Kissling, Montgomery Laboratory, CDC, reports the isolation of EEE virus from the brains of one of these equine cases. On October 7, in a telephone conversation to Dr. James H. Steele, Chief, Veterinary Section, CDC, Dr. Hines states that the number of reported cases of horse encephalitis in this part of the state is now ever 100, and noted the report of a disease, possibly encephalitis, in captive pheasants on a North Carolina Poultry farm. Three human deaths, possibly due to encephalitis, are under investigation by Dr. Jacob Koomen, Epidemic Intelligence Service Officer, assigned to North Carolina.

Dr. Philip Haims, Veterinarian, assigned to the Logan Field Station, of the Technology Branch of CDC, in a memorandum to Dr. A.D. Hess, Chief of that Station, reports 13 clinical cases of WEE among horses in the Cache Valley of Northern Utah. The diagnosis was confirmed in nine of these cases by serum neutralization tests ran at Greeley Field Station. Investigations of all hospitals in the area uncovered no cases of human encephalitis occurring this summer.

Dr. Andrew Offutt, State Health Officer of Indiana, has reported an Outbreak of encephalitis in the southwestern part of the state, with seven cases (four of them fatal) occurring in Gibson County, Indiana. The disease has also been noted in western Kentucky by Dr. Gwilym Jones, State Epidemiologist, and a total of seven cases, two of which were fatal, have been reported from Marshall County, Kentucky. Acute blood specimens from both cases submitted to the CDC Virus and Rickettsial Laboratory, Montgomery, have shown titers from 1:8 to 1:32 for St. Louis Encephalitis with negative titers for Western and Eastern Equine Encephalitis. An epidemiology team from CDC is assisting in investigation of the Kentucky Outbreak.

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

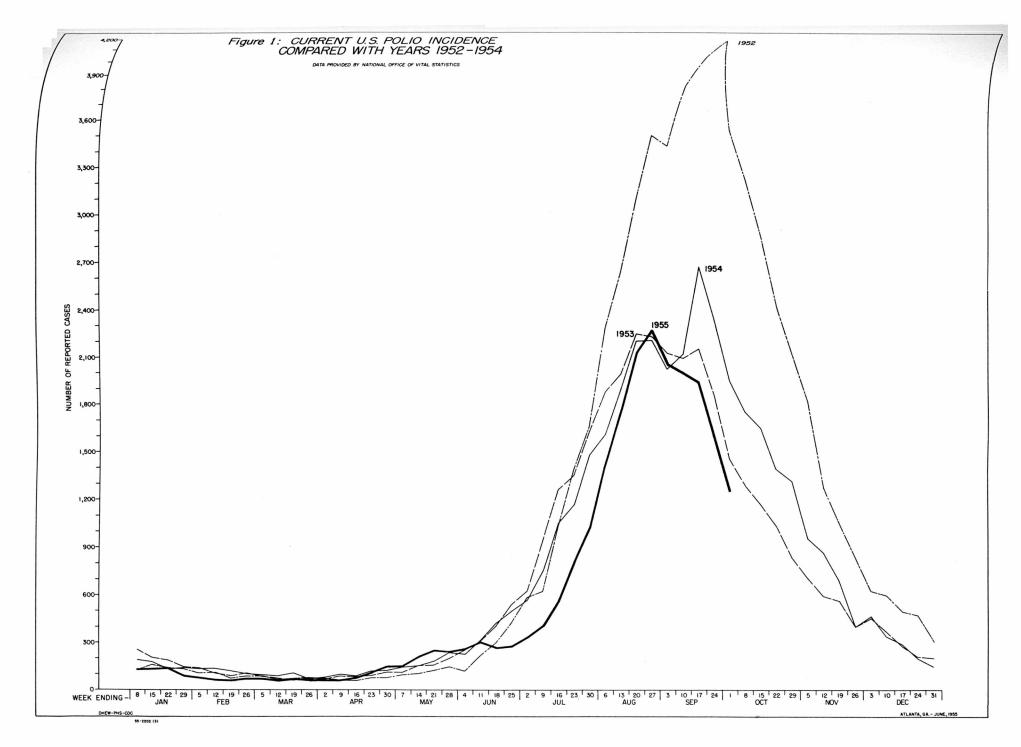


Table 1
TREND OF 1955 POLIOMYELITIS INCIDENCE

State	8/27		s Repo ring W	eek En			6 Week Total	To	mparab tals I 1953	n:
United States	2289	2059	2009	1950	1606	1260	11173	13333		
North East Maine New Hampshine	18 27	12	22 20	12	11	6	81 97	43 32	139	68
Vermont Massachusetts Rhode Island Connecticut	13 355 36 56	9 317 46 63	13 290 33 75	6 276 21 48	10 181 26 38	6 155 26 38	57 1574 188 318	24 485 64 139	47 243 154 144	12 264 45 184
New York New Jersey Pennsylvania	238 59 68	272 59 52	245 66 73	251 45 53	208 62 47	149 38 53	1363 329 346	800 299 560	1239 302 553	1080 350 675
North Contact			,,,	,,,	41	,,,	340	,,,,	,,,,	-12
Ohio Indiana Illinois Michigan Wisconsin	124 35 111 116 353	87 33 129 123 311	97 27 112 68 224	126 32 112 78 199	91 21 91 72 194	50 19 77 52 155	575 167 632 509 1436	996 314 1014 796 265	1043 267 795 886 348	1357 642 1960 1651 1077
Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	60 44 18 3 11 11 21	41 37 18 4 5 14	45 33 15 5 1 19 18	38 26 34 3 1 20 21	38 19 9 4 3 24 20	14 10 7 1 2 5	236 169 101 20 23 93 116	299 610 240 45 50 368 264	999 198 297 81 89 60 187	1946 1464 578 127 376 1094 748
South										
Delaware Maryland Dist. of Columb Virginia West Virginia North Carolina Georgia Florida South Carolina Kentucky Tennessee Alabama Mississippi Arkansas	14 38 14 16 21 36 16 10 6	3 15 2 10 13 27 15 3 14 10 4 3	3 12 4 20 20 21 6 23 22 19 20 12 3	15 6 16 11 23 21 13 10 33 19 4	20 2 15 13 19 29 8 21 15 19 5	2 7 4 7 12 7 8 11 3 7 14 4 5	11 94 22 93 83 135 93 74 90 124 98 39 26	18 100 35 230 183 243 227 415 75 318 213 91	12 212 19 234 167 177 104 172 36 93 116 75	46 72 71 287 260 183 163 153 79 778 245 90 198
Louisiana Oklahoma Texas	17 11 15 80	6 8 4 76	9 17 29 94	6 15 17 60	4 16 7 50	3 11 15 63	45 78 87 423	81 107 145 722	86 83 120 317	147 178 431 875

Table 1 (Continued)

		During	ported Week	Ending	:		6 Week	_	mparable tals In:
State	8/27	9/3	9/10	9/17	9/24	10/1	Total	1954	1953 1952 1953 1952
West  Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	3 10 10 10 10 3 4	12 5 1 21 6 10	10 5 2 12 5 8 7	17 14 8 18 9 7 2	18 6 - 9 4 8 1	7 11 -6 8 6 7 3	67 51 11 76 42 42 21	49 52 90 161 102 68 108 34	110 89 25 130 15 26 58 256 58 143 96 87 10 12
Washington Oregon California	16 18 86	20 22 63	38 20 64	48 20 115	30 18 89	21 26 90	173 124 507	131 105 1429	160 515 116 171 1061 1024

<sup>\*</sup> National Office of Vital Statistics

Table 2
Poliomyelitis Cases in Vaccinated Individuals
(PSU Accepted Cases through October 5, 1955)

	•		•		Va	ccine Manu	facture	r* and P	aralytic	Statu	s**		
			C			L		PD	PM			W	
		P	NP		P	NP	P	NP	P	NP	P	NP	
	CASES	VACCI	NATED	5-7	OR B	EFORE WITH	ONSETS	30 DAYS	OR LESS	AFTER	VACCINATI	ON***	
Totals through 9-28 New Cases 9-29 through 10-5		60 0	14 0		17 0	24 4	4 0	2 0	3 0	2 2	9	3 0	
Totals through 10-5		60	-14 74		17	28 45	4	6 2	3 7	4	9	3 12	
	CASES	VACCI	NATED	5-7	OR B	efore wi <b>t</b> h	ONSETS	31 DAYS	OR MORE	AFTER	VACCINATI	ON***	
Totals through 9-28 (Revised) New Cases 9-29 through 10-5		9 <u>1</u>	14 1		23 2	98 15	7 0	64 2	8 1	12 1	7 0	16 0	
Totals through 10-5		10	15 25		25	113 138	7,	66 73	9 22	13	7	16 23	
	CASES	VACCI	NATED	5-8	OR L	ATER WITH	ONSETS 3	30 DAYS	OR LESS	AFTER '	VACCINATIO	N <del>***</del>	
Totals through 9-28 (Revised) New Cases 9-29 through 10-5					16 0	43 6	20 2	25 7	1 0	3 1	1	5 0	
Totals through 10-5					16	49 65	22	32 54	1 5	4	1	6 5	
	CASES	VACCIN	NATED	5-8	OR L	ATER WITH	ONSETS 3	Bl DAYS (	OR MORE	AFTER V	VACCINATIO	<del>***</del>	
Totals through 9-28 New Cases 9-29 through 10-5					4	23 5	49 1	128 23	0 0	0 1	0	1	
Totals through 10-5					6	28 34	50 20	151 )1	0 1	1	0	1	

<sup>\*</sup> Vaccine Manufacturers: C-Cutter; L-Lilly; PD-Parke-Davis; PM-Pitman-Moore; W-Wyeth

<sup>\*\*</sup>Paralytic Status: P-paralytic; NP-Non-paralytic

<sup>\*\*\*</sup>Cases in individuals who had two inoculations are listed according to the second inoculation.

Table 3

Comparison of Reported\* and Expected\*\* Cases of Poliomyelitis

Among Children who Received First Inoculations in NFIP-Supported School Clinics

Vaccine Mfr. And Number Vaccinated***	Cases	from Apri 5 Weeks Apr.17- May 21	1 15 to M 5 Weeks May 22- June 25	ay 7, 1955 5 Weeks June 26- July 30	5 Weeks July 31-	Sept.	Sept.	Sept.
Reported CUITER 303,000 Expected	P NP <b>Total</b> Total	29 12 41 11	4 6 10 12	2 5 7 16	2 7 9 21	0 1 1	0 3 3 4	0 5
Reported LILLY 2,514,000 Expected	P NP Total	16 25 h1 26	11 42 53 52	15 50 65 95	7 57 64 140	4 5 9 26	2 2 2	1 1 17
Reported PARKE-DAVIS 860,000	P NP Total	2 0 2	3 7 10	5 <b>29</b> 34 43	2 24 26 108	0 6 6	0	0
Reported PITMAN-MOORE 411,000 Expected	P NP Total	2 4 6	 կ 5 կ	6 6 12 18	2 9 11 29	- 0 8	0 1 1	0 3
Reported WYETH 775,000 Expected	P NP Total Total	8 3 11 4	14 8 9	3 9 12 20	1 2 3 59	0 1 1	0 10	0 8

<sup>\*</sup>Reported Cases include only cases accepted by PSU through October 5 and vaccinated in NFIP Clinics April 16 through May 7, 1955.

<sup>\*\*</sup>Expected Cases among this group of children estimated from 1955 incidence of poliomyelitis (paralytic and non-paralytic) reported to National Office of Vital Statistics by the States.

Data on numbers of first inoculations are from the NFIP. CUTTER vaccine was used in Idaho, Nevada, Arizona, New Mexico, and southern California. LILLY vaccine was used in Texas, Oklahoma, Louisiana, Arkansas, Mississippi, Alabama, Tennessee, Florida, Georgia, South Carolina, North Carolina, Virginia, West Virginia, Indiana, and parts of Ohio, California and Colorado. PARKED DAVIS vaccine was used in Michigan, Illinois, Iowa, Wyoming, Utah, and part of Colorado. PITMAN-MOORE vaccine was used in Kentucky, Missouri, Kansas, and Oliotado. WYETH vaccine was used in Pennsylvania, Delaware, Maryland, District Nebraska. WYETH vaccine was used in Pennsylvania, Delaware, Maryland, District Of Columbia and part of Ohio.

Table 4

Comparison of Reported\* and Expected\*\* Cases of Poliomyelitis Among Children Who Received First Inoculations in NFIP-Supported School Clinics from May 8 to July 7, 1955

Vaccine Mfr. and Number Vaccinated***	Cases	Thru July 2	Cases July 16	with On July 30	Aug.	Two-Week Aug. 27	Period Sept.	Ending: Sept. 24
Reported LILLY 225,000 Expected	P NP Total Total	1 1 2 **	1 - 1 2	1 1 3	- 1 1 6	1 1 8	- 2 2 8	- 0 6
Reported PARKE-DAVIS 1,358,000	P NP Total	17 18 35	9 19 28	8 32 40	18 39 57	12 35 47	5 26 31	- 7 7
Expected	Total	**	32	77	135	158	136	96

<sup>\*</sup>Reported cases include only cases accepted by PSU through October 5 and the states listed below.

Cases with Onsets July 3 to September 24

Cases	PITMAN-MOORE	WYETH
Reported P	-	_
NP	-	1
Total	0	1
Expected Total	2	3

<sup>\*\*</sup>Expected cases among this group of children estimated from 1955 incidence poliomyelitis (paralytic and non-paralytic) reported to National Office of period beta states. No "expected" figures available for the when vaccinations were in progress.

<sup>\*\*\*</sup>Data on numbers of first inoculations are from the NFIP. PARKE-DAVIS
Vaccine was used during this period for first inoculations primarily in Arizona,
California, Connecticut, Massachusetts, Minnesota, New Hampshire, New York,
Morth Dakota, Oregon, Rhode Island, Utah, Vermont, Washington, and Wisconsin;
and LILLY vaccine was used during this period for first inoculations
primarily in California, Georgia, Indiana, Louisiana, Maine, Montana, New
inoculations with Dakota, Rhode Island, and South Dakota. About 12,000 first
and from 20,000 to 30,000 first inoculations with WYETH vaccine were given
than of this period in Pennsylvania. Small amounts of vaccine from various
"Meported" and "expected" comparisons for Pitman-Moore and Wyeth vaccinations
for this period are given below.

The following memorandum dated September 22, 1955, was prepared by the National Foundation for Infantile Paralysis. Permission for reproduction has been granted through the courtesy of the NFIP.

The National Foundation for Infantile Paralysis

#### AGE DISTRIBUTION OF ACUTE ADMISSIONS

"Presented in the attached tables and chart are comparative data on the age distribution of new poliomyelitis cases in 1953, 1954 and the period lat-September 17, 1955, as tabulated from hospital notices of poliomyelitis acute admissions 1/.

The admissions reported in 1955 include 12,034 patients with onset since May 1st 2/ of whom 10,496 were stricken since June 26. Shown in Table 1 for each period are: 1. Number of Admissions; 2. Percentage Distribution of Admissions; 3. Age-Specific Admission Rates Per 100,000 Estimated Mid-Year Population.

Patients aged 7 and 8 represent 8.9% of the total since May 1st and 8.3% of the total since June 26, as compared with 10.8% in 1954 and 10.3% in 1953. Statistically, however, the difference between these proportions is not highly significant. In view of annual shifts in the population at each single year of age, moreover, attention should be focused on the age-specific admission rates rather than the percentage distribution by age. In this respect, the current age pattern of admission rates is significantly different from the curves in 1953 and 1954.

In these early years, the admission rate climbed to a peak at ages 4-7 and then followed a gradual downward trend with advancing age. In 1955, on the other hand, there is a precipitous drop in admission rates at ages 7 and 8, especially for patients with onset since June 26. In this latter interval the rate at ages 7 and 8 is about twice the crude rate for all ages; in 1953 and 1954, the specific rate for ages 7 and 8 was about three times as high as the crude rate. Moreover, the distinct trough in 1955 admission rates at ages 7 and 8 as compared with the adjacent ages 6 and 9, is not evident in either of the two preceding years.

An even more striking comparison may be made from the information in Table 2 and Figure 1, based on patients with onset in comparable 12-week periods of 1955 and 1954. During the period June 20-September 10, 1954, the highest admission rates were encountered at age 6 with slightly lower rates at ages 7 and 8. In the interval June 26-September 17, 1955, however, admission rates declined abruptly at ages 7 and 8 and then were restored to a more nearly "normal" level starting with age 9. It will be observed that the ratios of 1955 admission rates to 1954 admission rates have remained fairly constant at all ages except 7 and 8. At ages 7 and 8, however, the rate is about half the level in the corresponding period of 1954."

V NFIP Form No. 609A

This total represents approximately 70% of the number of new cases reported by the U.S. Public Health Service during the comparable period.

Poliomyelitis Acute Admissions Reported to N.F.I.P., By Age: Based on Notices Received in 1953 and 1954 and Notices Received in 1955 for Cases with Onset since May 1, 1955

	No. Ad	mission N	Votices				cribution	1	Rate				
	Receip		1955 Or		Receipt	s In	1955 (	Onset	Receip	ots In	1955 C	nset	
Age	1953	1954	5/1- 9/17	6/26 <b>-</b> 9/17	1953	1954	5/1 <b>-</b> 9/17	6/26- 9/17	1953	1954	5/1- 9/17	6/26- 9/17	
Total, All Ages	23,698	24,950	12,034	10,496	100.0	100.0	100.0	100.0	15	15	7	6	
Under 1	352	438	185	171	1.5	1.8	1.6	1.7	9	11	5	4	
1	1,157	1,243	512	437	5.0	5.1	4.3	4.2	31	33	13	11	
2	1,349	1,464	682	580	5.8	6.0	5.8	5.6	37	39	18	15	
3	1,432	1,452	745	643	6.2	5.9	6.3	6.2	41	40	20	17	
Ž.	1,518	1,463	801	695	6.5	6.0	6.8	6.7	43	42	22	19	
5	1,647	1,573	812	721	7.1	6.4	6.9	7.0	47	44	23	21	
6	1,650	1,561	808	702	7.1	6.4	6 <b>.8</b>	6.8	43	44	23	20	
7	1,371	1,473	554	441	5.9	6.0	4.7	4.3	50	39	16	12	
8	1,022	1,168	501	409	4.4	4.8	4.2	4.0	38	42	13	11	
9	953	906	490	437	4.1	3.7	4.1	4.2	35 31	33	18	16	
10	890	844	387	331	3.9	3.5	3.3	3.2	31	31	14	12	
11	862	832	402	354	3.7	3.4	3.4	3.4	34	29	15	13	
12	678	804	389	345	2.9	: 3.3	3.3	3.3	28	32	13	12	
13	655	644	378	334	2.8	2.6	3.2	3.2	29	27	15	13	
14	525	543	340	305	2.3	2.2	2.9	3.0	23	24	14	13	
15	512	501	278	258	2.2	2.1	2.3	2.5	23	22	12	11	
16	501	501	246	221	2.2	2.1	2.1	2.1	23	22	11	10	
17	427	412	205	181	1.9	1.7	1.7	1.8	20	19	9	8	
18	331	340	193	171	1.4	1.4	1.6	1.7	15	16	9	8	
19	280	281	133	121	1.2	1.1	1.1	1.2	14	13	6	6	
20-24	1,468	1,588	759	681	6.3	6.5	6.4	6.6	13	15	7	6	
25-29	1,738	1,935	<b>97</b> 3	860	7.5	7.9	8.1	8.2	15	16	8	7	
30-34	1,013	1,275	589	526	4.4	5.2	5.0	5.1	8	10	5	4	
35-39	449	628	256	217	1.9	2.6	2.2	2.1	4	5	2	2	
40 & over	408	567	222	192	1.8	2.3	1.9	1.9	, I	1	*	*	
Age Unspecified		514	194	163		134 G. N. <del>-</del>	J. 5.		_	_	.s. 9/21		

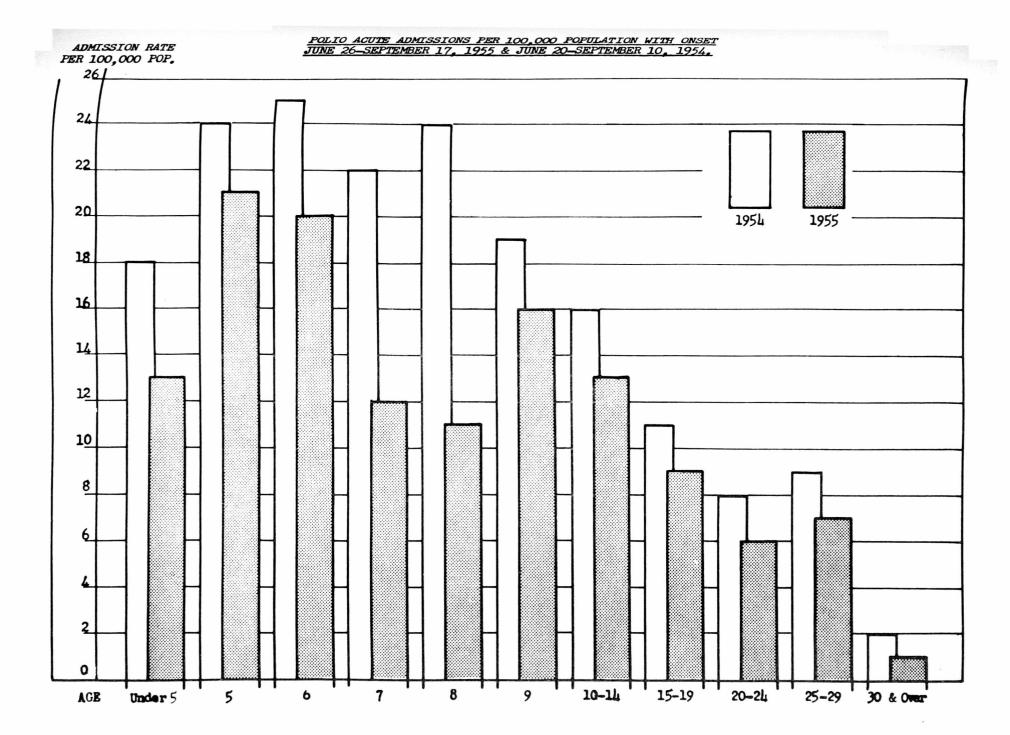
Table 2

Poliomyelitis Acute Admissions with onset June 20 - September 10, 1954 and June 26 - September 17, 1955 and Admission Rates Per 100,000 Population, By Age

AGE	Nc. Admission	s with onset:	Rate per 100,000 population	
	6/20 - 9/10/54	6/26 - 9/17/55	6/20 - 9/10/54 $6/26 - 9/17/55$	
Total, All ages	, 13,495	10,496*	8 6	
Under 5	3,394	2,526	18 13	
5	862	721	24 21	
6	881	702	25 20	
7	821	<i>հ</i>	22 12	
8	659	409	24 11	
9	522	437	19 16	
10-14	2,094	1,669	16 13	
15-19	1,163	952	11 9	
20-24	846	681	8 6	
25–29	1,021	860	9 7	
30 and over	1,232	935	. 2 1	

<sup>\*</sup> Includes 163 Admissions of Unspecified Age

<sup>#</sup> As reported on NFIP Standard hospital form





# POLIOMYELITIS AMONG VACCINATED INDIVIDUALS (PSU Accepted Cases September 29 - October 5, 1955)

•						Date	Date		Site		<del></del>	
PSU		Ini-			Date	lst	lst	Site	lst		Lot	
CASE NO.	County	tials	Age	Sex	Inoc.	Symp.	Para.	Inoc.	Para.	Mfr.	No.	Remarks
							NEW					
Wisc-27	Outagamie	AA	7	M	May	8-19	None	LA	None	PD	029127A	
Wisc-28	Sauk	TP	6	M	5-20	8-18	None	LA	None	PD	029127A	Spinal fluid, 1365 cells.
Wisc-29	Outagamie	SK	7	$\mathbf{F}$	May	8-?	None	ĻА	None	PD	029127A	
Wisc-30	Dane	$\mathbf{DJJ}$	7	M	5-19	9-7	None	Arm	None	PD	029127A	Spinal fluid,45 cells.
					6-16		_	Arm		PD	029127A	
Wisc-31	Brown	LP	7	F	5-27	8-18	8=19	LA	Bulbar	PD	029127A	
Wisc-32	Outagamie	MAK	8	F F	5-18	8-1	None	LA	None	PD	029127A	Spinal fluid,82 cells.
Wisc-33	Dane	LF	7	F	5-23	8-3	None	LA	None	PD	029127A	Spinal fluid, 110 cells.
					6-6			LA		PD	029127A	
Wisc-34	Dane	GWG	7	M	5-23	9-3	None	LA	None	PD	029127A	
					6-6			I.A		PD	029127A	
Md-4	Baltimore	Co. DA	2	F	9-22	9-29	9-30	LA	LL	PD	028850B	LA and RL also paralyzed.
NY-83	Kings	EA	8	M	5-23	5-25	None	LA	None	PD	?	Spinal fluid, 17 cells.
NY-84	Dutchess	DD	11	M	5-23	8-6	None	?	None	PD	029128C	Spinal fluid,84 cells.
NY-85	Westcheste	r MF	9	M	5-23	9-25	None	Arm	None	PD	029128C	Spinal fluid, 20 cells.
NY-86	Madison	GM	9	F	5-26	8-21	None	LA	None	PD	029129A	Spinal fluid, 300 cells.
			•		6-23			LA		PD	029129A	
NY-87	Broome	SD	10	F	5-24	8-31	None	Arm	None	PD	029129A	Spinal fluid, 298 cells.
				-	8-3			Arm		L	6002-653-	
NY-88	Nassau	WI	7	M	5-24	6-4	None	LA	None	PD	028850B	Spinal fluid, 102 cells.
NY-89	Ctsego	DB	7 6	F	5-20	9-30	None	LA	None	PD	029128C	
0,	0.0000		•	•	8-9	, ,,		I.A		L	6002-653-	805
NY-90	Montgomery	RM	7	M	5-15	6-20	None	?	None	L	?649334	Vaccinated in Virginia,
		1411	,	215	, .,	J. 10		•		_	?649335	Spinal fluid,65 cells.
											?649343	opanion indiago, conto
NY-91	Erie	PM	6	M	6-14	7-7	None	?	None	PD	0288508	
	TO T.	PIN	U	m	V-14	11	140110	•	740110		0200000	

PSU CASE NO.	Country	Ini- tials	Age	Sex	Date Inoc.	Date 1st Symp
ORDE NO.	Country	orars	Age	DEX	11100 6	
						_!
NY-92	Erie	BH	9	M	May	7-20
NY-93	Nassau	KP	7	M	May June	7-2
NY <b>-</b> 94	Schenectad	y DM	10	M	5-19	7-2
NY-95	Kings	JC	7	M	6-30 6-8	7-2
NY-96	Erie	MS	9	M	May	8-1
			_		June	ٔ ۔
Miss-15 La-15	Jeff Davis Orleans	REL DS	7 7	M M	4-21 5-3	5-1. 6-5
La-16	E.Baton Ro	nge JK	7	M	4-28	6-1
La-17	Caddo	JC	8	M	4-27 6-15	7-6
La-18	Avoyelles	JPB	8	M	4-20	7-1
La-19	E.Baton Ro	uge DC	7	M	6-22 4-27	7-2
La→20	Caddo	RJS	6	M	4-25	7-2
La-21	Bossier	PMcC	8	M	6-13 4-25	8-3
La-22	Bossier	110	8	M	6-17 4-25	8-1
La-23	Ouachita	VH	7	F	6-13 4-20	8-2
Tex-61	McLennan	CR	8	F	4-25	5-2
Tex-62	Potter	$\mathcal{I}\mathcal{B}$	8	M	4-20	5
Tex-63	Potter	DB	7	M	<i>t</i> −50	7-
Tex-64	Tarrant	ACL	в	M	April	- 7-

	Site			
Site				
Inoc.	Para.	Mfr.	No.	Remarks
inued)				
<u> </u>				
?	None	PD	029129A	y *
?	None	PD	02886 <b>1</b> B	Spinal fluid, 200 cells.
?		PD	02886 <b>1</b> B	
?	None	PD	029126A	· · ·
?		PD	029126A	· · · · · · · · · · · · · · · · · · ·
?	None	PD	029129A	* - x - + x - x - x - x - x - x - x - x -
?	None	PD	?	
?		PD	?	g. *
LA	None	${f L}$	5080-6493	39
LA	None	L	?649335	
			?649339	
			?649340	
			?649341	
ΙA	None	L	tt	Spinal fluid,569 cells.
LA	None	L	,tt	-
LA		L	5205-6493	48
?	None	L	5081-6493	40
?		L	5206-6493	47
LA	None	L	?649335,?	649339 Spinal fluid,
LA	LA	L	Et i	
LA		L	5080-6493	30
LA	None	L	?649335,?	649339, ?649340, ?649341
LA		${f r}$	5206-6493	47
LA	Right	L		649339, ?649340, ?649341
LA	_	L	?	
I.A	None	L	1581-6493	
Arm	None	L		
LA	None	$oldsymbol{r}$		
ALI	None	$\boldsymbol{L}$		343
$A_{L}I$	None	$oldsymbol{r}$		
			<i>3649336</i> 3649343	
	inued) ? ? ? ? ? ? !A IA	Site 1st Inoc. Para.  inued)  ? None !A None IA None IA None IA None IA None IA None IA LA LA IA None	Site 1st Inoc. Para. Mfr.  inued)  ? None PD ? None PD ? PD ? None PD ? None PD ? None PD ? PD IA None L IA None L IA None L IA None L IA LA L IA LA L IA LA L IA LA L IA None L IA None L IA None L IA None L IA LA L IA None L	Site lst

PSU CASE NO	• County	Ini⊶ tials	Age	Sex	Date Inoc.	Date 1st Symp.	Date 1st Para.	Site Inoc
						NEW (	Continu	ed)
Tex65	Tarrant	JAG	7	M	4-24	7-7	None	LA
Tex-66	Nueces	TT	8	M	7-22	9-4	None	?
Tex-67	Brazoria	CM	7	M	4-21	8-2	None	Arm Arm
Tex-68	Tarrant	MT	6	F	5-3	9-16	None	LA
Tex-69	Harris	DDW	7	M	May	9-9	None	Arm
Tex-70	Dallas	JRG	9	M	April	8-15	8-16	LA
Tex-71	Dallas	CW	9	M	4-30	<b>5</b> 30	None	LA
Tex-72	Harris	DBS	8	M	4-19 7-26	8-23	None	LA LA
Ohio-18	Hamilton	LOB	8	M	4-25	9-6	None	RA
Mo-7	Linn	DLK	6	F	5-24	8-8	None	LA
Tenn-22	Anderson	LKF	7	F	4-21	9-17	None	LA
Tenn-23	Shelby	EEM	9	M	4-27	7-5	None	Arm
Tenn-24	Johnson	JDC	9	M	4-22	8-12	None	LA
Tenn-25	Carter	JMB	7	F	4-25 9-15	9-19	None	RA RA
Cal-104	Alameda	WB	7	M	April	9-4	None	RA
Cal-105	Tulare	KER	7	F	4-26 5-31	6-21	None	LA LA
Cal-106	San Bernardino	MMcL	7	M	4-20 5-21	9-11	None	?
Cal-107	L. A. Co.	EJ	7	M	4-20	9-13	None	LA
Cal-108	L. A.Co.	GEW	2	M	9-14	9-19	90019	LA
Cal-109	San Luis Obispo	RT	6	M	May	9-16	Ncne	?
Cal-110	Sutter Yuba		?	?	4-27 7-25	7-30	None	la Ra
Call-111	San Diego (	Co. RKH	9	M	9-23	9-25	None	LA

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Site
lst
                Lot
        Mfr.
               No.
                          Remarks
Para.
None
               7078-649343
       L
       L
               8118-649330
                             Also vaccinated in 1954
None
               8124-649336
                               Spinal fluid,4 cells.
None
       T.
               8119-649331
       L
                               Spinal fluid, 77 cells.
       L
               7078-649343
None
               7078-649343
                               Spinal fluid, 237 cells.
None
       L
               7078-649343
T.L
       L
       L
               7078-649343
                               Spinal fluid.60 cells.
None
               7078-649343
                               Spinal fluid,57 cells.
None
       L
               8118-649330
       L
               ?649336
None
       L
               ?649337
       PM
               ?175009
None
               ?175014
               ?175027
               7079-649341
                               Spinal fluid, 110 cells.
None
       L
                               Spinal fluid, 255 cells.
               7079-649341
None
       L
               7079-649341
                               Spinal fluid, 215 cells .
       L
None
                               Spinal fluid, 122 cells.
       L
               7080-649342
None
               175A037
       PM
       PD
                          Vaccinated in Kansas.
None
               5977 or 5721
None
       C
               028847A
       PD
       C
               5928 or 6038
None
               029126A
       PD
None
       C
               E6037
RL,LL
               028861B
       PD
               ?0288L8A
None
      ?PD
                               Vaccinated in
                               Rhode Island.
               0288L7A
None
       PD
               028847A
       PD
               1027-653-803
       L
None
```

DCII		Tm#			Date	Date 1st	Date 1st	Site	Site lst		Lot	
PSU	•	Ini-	•							310		Domo-lo-
CASE NO.	County	tials	Age	Sex	Inoc.	Symp.	Para.	Inoc.	Para.	MIT.	No.	Remarks
						N	EW (Con	tinued)	_			
Ark-ll	Jefferson	RC	8 -	M	4-19	7–8	None	LA	None	L	7080-649	Bullet Bu
Ark-12	Craighead	JWC	7	M	4-21	8-4	?	LA	. ?	. · L	7080-6493	342
Ark-13	Greene	TER	10	M	4-21	8-5	None	LA	None	. L	7080-649	342
_					5-4			LA		- L	7080-649	342
Ark-14	Lonoke	JCO	6	M	4-20	7-30	None	?	None	L	7080-6493	342
Ark-15	Jefferson	WCT	2	M	4-19	7-9	None	LA	None	·PD	?	
TA-2	Fairbanks Alaska	RP	7	M	5-18	6-1	None	?	None	.PD	028848A	Few cells in spinal fluid
Minn-17	Hennepin	LJ	7	F	5-23	6-27	None	?	None	PD	028849A	
Minn-18	Hennepin	NN	8	F	6-1	7-20	None	?	None	PD	028849A	
Minn-19	Ramsey	DG	8	M	5-24	8-11	None	?	None	PD	028849A	
Minn-20	Ramsey	DH	8	M	5-23	8-20	None	?	None	PD	028849A	Spinal fluid, negative.
Minn-21	Ramsey	DJ	8	M	5-20	9-19	None	?	None	PD	028849A	Spinal fluid, 286 cells.
Minn-22	Hennepin	JN	8	F	May	8-9	None	?	None	PD	?028850B	Spinal fluid, 18 cells.
	•	<i>y</i>				•					?028849A ?028861B ?029126A	
NH-9	Belknap	DC	6	M	5-24	7-12	None	?	None	PD	029126A	
Neb-14	Cass	JJ	11	F	4-27	7–16	None 2	LA	None	PM	175B007	Spinal fluid, 19 cells.
Neb-15	Douglas	PM	8	M	5 <b>-</b> 6	5-14	None	LA	None	PM	?175006 ?175007 ?175009	Spinal fluid,1 cell.
Neb-16	Douglas	DS	8	M	5 <b>-</b> 3	5 <b>-</b> 19	None	LA	None	PM	?175007 ?175009	Spinal fluid, 15 cells.
Neb-17	Boone	DDS	7	М	April	7-17	7-17	?	Trunk	PM	?175006 ?175007 ?175009	
Z-HT	North Kor Hawaii	a GK	7	M	4-25	6-26	6-26	?	BL	C	E60283	

						Date	Date		Site			
PSU		Ini-			Date	1st	lst	Site	lst		Lot	
CASE NO.	County	tials	Age	Sex	Inoc.	Symp.	Para.	Inoc.	Para.	Mfr	. No. R	emarks
DEUTSTONS												
REVISIONS (Revised Items Underlined)												
Tenn-17	Franklin	CJC	7	M	4-22	8-14	None	LA	None	L	7079-649341	Sminol fluid Ob colle
Ida-21	Blaine	LDL	7	M	4-17	7-15	7-18	TW	RL,LL	C	E6039?	Spinal fluid, 24 cells.
100 21	DJULINO	121	•	ш	4-11	1-17	7-10	•	تتندو نتاء	U	E6058?	
Pa-13	Delaware	FG	6	M	May	7-26	None	Arm	None	W	?235 <b>,</b> ?236	
-			_	_	J	, 2-					?238	
Neb-13	York	DMcK	8	M	4-?	8-31	9-2	?	Left	PM	?175B006,?175	5B007
					8-4			?	facial	L	6004-653-807	
Wisc-7	Shawano	JAS	7	M	5-18	7-21	7-22	LA	Bulbar	PD	029127A	
					6-17			LA		PD	029127A	
Wisc-10	Dane	JDS	7	M	<u>5-17</u>	8-9	None	LA	None	PD	029127A	
Wisc-11	Milwaukee	MTK	8	M	7-21	8-6	8-9	LA	Bulbar	W	23914	
Wisc-12	Dane	DK	10	M	5-20	8-17	8-19	LA	LA	PD	029127A	
NW 10	W	T.OO	0	3.0	6-10	( 20	( 20	<u>LA</u> LA	D.T.	PD	029 <b>127A</b>	
NY-19	Westcheste	er hos	8	M	6 <b>-</b> 2 6 <b>-</b> 20	6–30	6 <b>–</b> 30	LA LA	RL	PD		sackie virus B <sub>2</sub>
					0-20			LA	RH	PD		plated from case and
												tact (Dr. Dalldorf,
NY-49	Manhattan	AL	7	F	5-25	8-16	None	LA.	None	PD		pinal fluid, 79 cells.
NY-52	Herkimer	DM	6	M	5-18	8-14	None		None	PD	029129A	That Trains // Corres
					8-3	·		RA RA	110110	L	6002-653-805	<u>,                                    </u>
PR-1	San Juan	JEF	7	M	4-27	9-8	None	RA	None	PD		oinal fluid, 124 cells.
	Puerto Ric	00	•			•						
Cal-87	Contra Cos	sta JCE	8	M	4-26	8-16	None	LA	None	L	8124-649336	Spinal fluid,
					8-4			LA		L	8119-649331	342 cells.
Cal-88	L. A. Cour	nty MB	6	F	4-21	8-19	8-30	LA	?RA	С	E6038	
			_		5-19			RA	LA,RL	PD	029126A	
Cal-97	Orange	DW	8	M	4-26	9-4	None	?	None	C	E6038?	
T - P			•	-	١.٥٥		( =0	٠.		_	E5928?	
La-7	Ouachita	EBS	8	F	4-20	6-17	6-18	LA	RL,LL	L	5081-649340	
La-15 Ala-5	DROPPED DROPPED											
Conn-17	Fairfield	JV	9	M	5-25	86	None	LA	None	PD	029126A	
Mo-3	Pemiscot	AG	2	M	4-29	6-1	6-7	LA	None RL	PM	175F014	
	Tempscoo	110	2	TAT	4-67	0-1	0-7	144	147	T.IM	T 121014	