COMMUNICABLE DISEASE CENTER

POLIOMYELITIS

SURVEILLANCE



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U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

PREFACE

Summarized in this report is information received from State Health Departments, university investigators, virology laboratories and other pertinent sources, domestic and foreign. Much of the information is preliminary. It is intended primarily for the use of those with responsibility for disease control activities. Anyone desiring to quote this report should contact the original investigator for confirmation and interpretation.

Contributions to the Surveillance Report are most welcome. Please address to: Chief, Poliomyelitis Surveillance Unit, Communicable Disease Center, Atlanta 22, Georgia.

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SUMMARY

A total of 77 cases of poliomyelitis, 66 paralytic, have been reported by State Health Departments during the two week period ending September 1, 1962. The similar two week period in 1961 accounted for 132 cases, 93 paralytic.

In Section 2 narrative reports concerning localized outbreaks in Alabama, California and Kentucky are given. Type specific oral polio vaccine has been released to these States from the epidemic reserve for mass immunizations in the relevant areas.

Paralytic cases which have occurred in 1962 and submitted on individual case forms are analyzed in Section 3. A summary of cases occurring within 30 days of vaccination is presented in Section 4.

A tabulation of non-poliomyelitis enterovirus isolates from 1962 specimens reported to the Poliomyelitis Surveillance Unit is presented in Section 5.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

During the two week period ending September 1, 1962, a total of 77 cases of poliomyelitis, 66 paralytic, were reported. Thirty-four cases, 29 paralytic were submitted for the current week ending September 1, while 43 cases, 37 paralytic were reported the previous week. The same two week period in 1961 accounted for 132 cases, 93 paralytic.

Of the twenty-three States reporting poliomyelitis during the two week period, Texas accounts for the largest proportion with 15 cases. California reported 10 cases, Alabama and Illinois 8 cases each and Kentucky 7. Case concentrations have been noted in Alabama, California and Kentucky. Special reports on these States and their use of type specific oral polio vaccine as an epidemic deterrent are made in Section 2.

The reported totals for poliomyelitis in 1962 are now sharply below similar totals for 1961, the previous low year. This is illustrated in the tabulations below showing total cumulative and six weeks incidence for 1962 and the preceding 4 years.

Polio (Cumulated Weekly) Through 35th Week for Past Five Years

r i see r Tii i i a ta	1962	<u>1961</u>	1960	1959	1958
Paralytic	365	417	1090	2828	1108
Total	464	617	1582	4445	2281

Six-Week Totals (30th thru 35th Week) for Past Five Years

	1962	1961	1960	1959	1958
mond Paralytic armq	ეგ 1,53 ე	231	562	80 1677 30	633
two week seriod ending in 1961 alator	5 185	.co cones 329⊖	858	2712	1332

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2. i STATE REPORTS Missol Laboration single swittens & molifoed mi

Alabama, California and Acetobly; are given. Type specific oral policity vaccine has been released to those States from the oni amedalkseck a for

In this State, Dr. W.H.Y Smith, Director, Division of Preventable Diseases, Alabama State Department of Public Health, has reported a total of 8 cases during the past two weeks, all paralytic. Six of the reported cases were from Mobile County and had onset of illness in August. All the cases were among the Negro residents of the County and all were in the pre-school age group. Only one patient had received any inactivated polic vaccine; he had had 2 doses. Two earlier cases had been reported from this County, occurring in the same race and age group noted above. The earlier cases yielded Type I policyirus strains as did the first of the August cases.

On September 5 and 6, over 250,000 persons availed themselves of Type I oral polio vaccine distributed by State and County health officials from the epidemic reserve of the United States Public Health Service.

paralytic were submitted for the current week ending September

CURRENT POLIONVELTYTS MORRIBETY TREMILE

1, while 43 cases, 37 carelynic sere reported the parents and the

Dr. Henry Renteln, Chief, Surveillance Section, has reported a total of ten cases of poliomyelitis during the past two weeks. All have been paralytic and all but two were reported from Los Angeles County. Thus far in 1962, this county has noted 16 cases of poliomyelitis; however, until the last week in August, no geographic clustering of cases within the county was noted. From the earlier cases, four isolates of Type I poliovirus and three of Type III had been made.

During August an increased number of cases were reported from the city of Pasadena. Epidemiologically they represent a clustering in an area within the city of three square miles. All the cases were among Negroes and all have yielded Type I poliovirus as shown in the line listing below:

Pasadena City Cases

Onset	Age	Race	Sex	1980 1PV	<u>opv</u>	Virus Isola	ted Paralytic Status
6/1 7/8 8/6 8/16 8/16	2½ 20 8 3 3	N N N N	M F M M	0 5880 2 0	0 0 0 0	I Alk I I I	P ESSOT P P P P P

Plans are being formulated to administer Type I oral polio vaccine to the 15,000 persons residing in the epidemiologically relevant area by using localized publicity and local saturation methods on Sunday September 9, 1962. The vaccine is to be supplied from the CDC epidemic reserve.

C. Kentucky

Mr. Clifford Todd, Director of Preventive Medicine, Kentucky State Department of Health has reported three cases of poliomyelitis from Greenup and Mason Counties in the Northeastern portion of the State, close to Flemming County, scene of an August outbreak of 5 cases of paralytic disease from which Type I poliovirus was recovered.

The use of type specific oral polio vaccine on August 19 in Flemming County was described in PSU Report No. 266, August 24, 1962. Type I poliovirus has been recovered from the cases in both Greenup and Mason Counties, and use of type specific oral polio vaccine from the epidemic reserve is planned in both of these counties.

3. 1962 PARALYTIC CASES REPORTED TO PSU

Of the 365 cases of paralytic poliomyelitis reported through the week ending September 1, 344 had onset in 1962. The Poliomyelitis Surveillance Unit has received individual case forms on 253 of the 344 paralytic cases. The vaccination status of the 253 paralytic cases by age group is shown below.

Paralytic Poliomyelitis by Age Group And Vaccination History Reported on PSU Forms (Through September 1, 1962)

Age		Doses	of I	nactiva	ated	Vaccine			
Group		ov c	1-2V	<u>3V</u>	4+V	Unk.	28	Total	Percent
0-4		84	26	7	7	6		130	51.4
5-9		23	5	6	11	30,2	EVAJ	47	18.6
10-14		11	3	6	4	1		25	9.9
15-19	Con vi	5.	2	4	0	0.000	1 34	to 11 H	4.3
20-29		11	4	1	2	2		20	7.9
30-39	90 252	6 5 7 0 W.D	2	0	2	orball no		12	4.7
40+								8	3.2
									o unergo moreal
TOTAL	asw od	147	43	24	26	13	o fin	253	100.0
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PERCEN	T 049 8.	insu.Ty	il engs	1 1 100		admaŭ a	TT	e lan b	
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Of the 130 cases in the 0-4 age group, 84 or 64.6% had no inactivated vaccine. Only 20% of cases thus far this year have given history of 3 or more doses of inactivated vaccine.

To date in 1962, the Poliomyelitis Surveillance Unit has received results of virological studies on 121 of the 253 paralytic cases. Poliovirus isolations have been reported on 99 (81.8 percent) of the 121 cases. Of these, 85 are Type I and 14 are Type III poliovirus. Texas has accounted for half of the isolates. Isolates have been reported from the following States.

						ADIOU2	nen	.)
			Polio	virus				
State	State State	thad avia	IIIreve	III	dd. Dire	Total	. Olt	711
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	Alabama							
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	California							
	Colorado	1	0	0		1		
palmon Di	Georgia	Facultio on	oifo	Isaolo	Priosea	eav 2 lo	e25 6.	.11
	. 1962. spe							
	Illinois							
	Kentucky							
	Louisiana							reserve i
	Massachusetts			0		2		
	Michigan	0		1		1		
			081	gr ger	ES ELLPOR	CAS SEE	PARAL	3. 1962
	Minnesota	3	0	0		3		
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	Montana	162. The	4 HI 00	80 00	i, 344 b	_ redimedo	ng Sop	ibbs Xen.
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	Pennsylvania	quean eas	Ag 802	TexO3	tio Poli	Pagaly		
	Texas	U29 1047					stA.	
	Utah	(8367	1 10	odge O	druouff)	1		
	Wyoming	_1	0	_0		1		
	- 1 - 1		50,000		Languar	the state of the s		920
	TOTAL	1870T 85	0	14	ME F	99 VO		98070

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1962

A. Cases with Onset Within 30 Days of Vaccine (Inactivated)

During the two week period ending September 1, two cases of paralytic poliomyelitis with onset within 30 days of vaccination with inactivated vaccine have been officially reported to the Poliomyelitis Surveillance Unit. One case was a 4-year-old male from Mobile County, Alabama who was immunized on July 31, and had the first symptoms of illness on August 6. The other case was a 13-year-old male from Cambria County, Pennsylvania who was immunized on July 17, and whose date of onset was July 24. The Alabama case had one previous vaccination on January 9. The case from Pennsylvania had 3 previous vaccinations, all in 1957.

vaccine. Only 20% of cases thus far this year have given history of 3 or

more doses of inachivated vaccine.

B. Cases with Onset Within 30 Days of Vaccine (Oral)

Three cases of paralytic poliomyelitis occurring within 30 days following administration of the oral vaccine were officially reported to the Poliomyelitis Surveillance Unit during the past two weeks. Ohio, Texas and Washington State accounted for one case each. All three cases had received oral polio vaccine during mass community feedings. A detailed listing of these cases is presented below:

State	County	Age	Sex	Onset	Date Fed	Type Fed	Onset Type Interval Illness
Ohio de la companya d	Portage	16	M	6-7-62	5-24-62	III	14 days P
Texas	Tarrant	33	F	8-3-62	7-29-62	I	5 days NP
Washington	Franklin	6	M	6-10-62	6-7-62	III	3 days NP

5. ENTEROVIRUS SURVEILLANCE

To date a total of 160 nonpolio enterovirus isolates has been reported to the Poliomyelitis Surveillance Unit. This year there is no marked predominance of any specific virus on a nationwide basis (unlike the 1961 experience when Coxsackie B-5 predominated - See PSU Report No. 247, November 27, 1961).

A sharp outbreak of Coxsackie A-4 illness was noted in Hawaii early in the year. ECHO 9 and ECHO 22 have been recovered from a number of cases of enterovirus illness in California. Coxsackie B viruses of several different types have been recovered in Ohio, with no reported large scale outbreaks.

Non-Polio Enterovirus Isolations from 1961 Specimens

			Cox	sacki	.e		
					Other and		
<u>State</u>	ECHO*	B-2	B-4	B-5	Unsp.	<u>Total</u>	Reported by
						_	
Alabama	1	_	-	-	-	1	T. Hosty
California	23	1	-	-	8	32	E. Lennette and
							H. Renteln
Connecticut	3	_	-	_	-	3	E. Borman
Florida	2	_	_	_	2	4	J. Bond
Hawaii	3	_	_	7	36 **	46	J. Enright
Illinois	1	_	_	_	1	2	H. Shaughnessy
Kansas	1	_	-	-	2	3	C. Hunter
Kentucky	-	-	_	-	1	1	C. Todd
Louisiana	6	-	-	-	3	9	G. Hauser
Maryland	2	-	-	-	5	7	J. Joseph
Michigan	4	-	-	3	2	9	G. Agate
Missouri	-	1		-	-	1	I. Adams
New Hampshire	-	_	-	1	-	1	R. Miliner
New Jersey	1	-	1	3	-	5	M. Goldfield and
•							W. Dougherty

following administration of the oral vaccine were officially reported

Non-Polio Enterovirus Isolations from 1961 Specimens (Continued)

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esso serus ilk	eschi	5800 91	10 1	Inted ic	ther and	and gair	Teres and "es
State State	ECHO*	B-2	B-4	B-5	Unsp.	Total I	Reported by
			1.40	fed bed	повета зі	4885 THE	is to guitefi
New York	-	2	_	1	2	5 1	R. Albrecht
Ohio	e qr ji	Date	1	7	2	21 (C. Croft
Pennsylvania	1.64	4.9H	_	2.410	Age - SgA	2	K. Hummeler and
<u>.</u>					3.04.040		I. Gratch
Virginia	III,	5-24-62		79-4-5	M 8 81	-8 -5110	E. Foxhall
F Jays H	T	19-57-65		8-3-62	33	destru	Texas T
TOTAL	47	15	2 2	24	72	160	bashington F

* Specific types include nine ECHO 9 in California and one each in Hawaii, Illinois, and Louisiana; five ECHO 22 in California; four ECHO 14 in Michigan and two in Louisiana; three ECHO 4 in Connecticut, two in California, two in Florida. Other types reported include ECHO 2, 6, 0210, 11, 15, 16, 20, and 21, serie as a sequence in the semention of bookses

Commence to B-5 preto ** Specific types include Coxsackie A-2, 4, 5, 9, 12, 16, and 2 cases of Coxsackie A undetermined.

early in the year. SCAC 3 and SCHO 22 have been recovered from a cumber of cames of encorprished diliness in Galifornia. Hemsedie B virtues of

garanta different cones back, been recovered in Obac, with me reposited large

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CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1957, 1959 and 1961 April-December, by week

DATA PROVIDED BY NATIONAL OFFICE OF VITAL STATISTICS AND COMMUNICABLE DISEASE CENTER

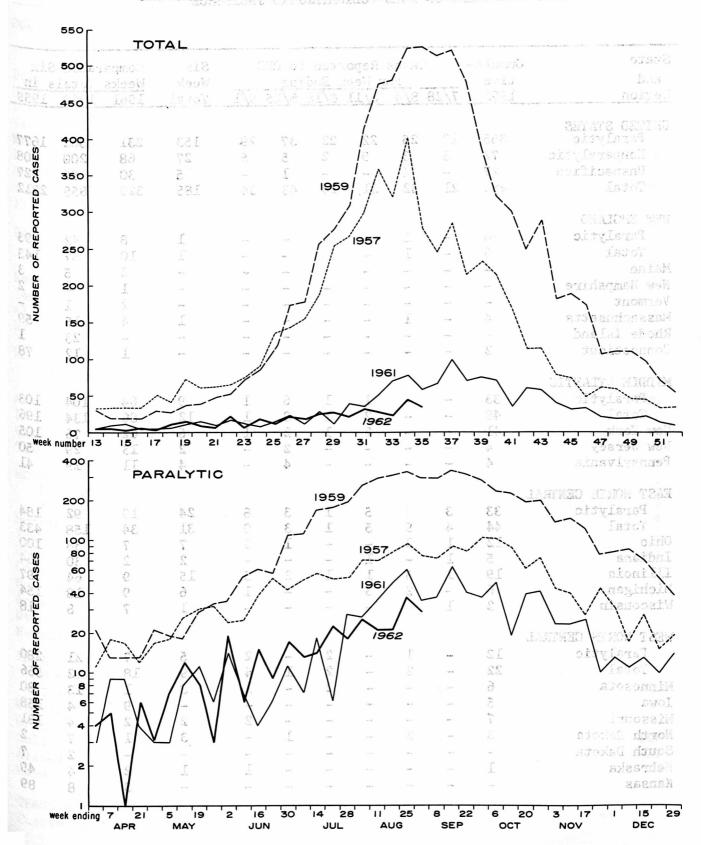


Table 1
TREND OF 1962 POLIOMYELITIS INCIDENCE

State Cumula- Cases Reported to CDC Six Comparable Six											
State	Cumula-						C	Six		rable	
and	tive			r Wee				Week		Total	
Region	1962	7/28	8/4	8/11	8/18	8/25	9/1	Total	1961	1960	1959
UNITED STATES											
Paralytic	365	18	25	22	22	37	29	153	231	562	1677
Nonparalytic	72	3	3	9	2	5	5	27	68	200	808
Unspecified	27	_	4	_	_	ĭ	_	5	30	96	227
Total	464	21	32	31	24	43	34	185	329	858	2712
NEW ENGLAND											
Paralytic	6	_	1			_		1	8	42	93
Total	6	_	i	_	_	_	_	i	10	57	143
Maine	-	_	_	_	_	_	_	_	2	5	3
New Hampshire	_	_	_	_	_	_	_	_	1	-	2
Vermont	_	_	_	_	_	_	_	_	2	ī	
Massachusetts	4	_	1	_	_	_	_	ī	4	16	59
Rhode Island	**	_		_	_	_	_	-	-	23	1
Connecticut	2	-	-		_	_	_	_	ī	12	78
connecticat	2		_		_	_	_	_		14	,,
MIDDLE ATLANTIC											
Paralytic	33	-	-	1	1	6	1	9	64	104	103
Total	49	-	-	2	1	8	1	12	86	134	196
New York	41	-	_	2	1	2	1	6	62	76	105
New Jersey	4	_	_	_	-	2	-	2	13	29	50
Pennsylvania	4	-	-	-	-	4	-	4	11	29	41
EAST NORTH CENTRAL	L										
Paralytic	33	3	4	5	1	3	8	24	19	92	184
Total	44	4	9	5	1	3	9	31	34	158	433
Ohio	12	1	2	_	_	1	3	7	7	38	100
Indiana	5	1	_	1	_	-	-	2	2	30	64
Illinois	19	1	5	1	1	2	5	15	9	64	97
Michigan	6	-	2	3	_	_	1	6	9	18	154
Wisconsin	2	1	-	-	-	-	-	1	7	8	18
WEST NORTH CENTRAL	۲.										
Paralytic	12	_	1	_	2	Z	2	5	7	21	280
Total	22	_	2	_	2	ī	4	9	18	42	566
Minnesota	6	_	-	_	2	_	ì	3	1	13	80
Iowa	5	_	_	_	-	_	_	- 3	9 *	4	158
Missouri	7	_	_	_	_	_	2	2	2	4	181
North Dakota	3	_	2		_	ī	-	3	í	7	2
South Dakota	3	_			_			-	_	2	7
Nebraska	ī	-	_	_	-	_	ī	ī	2	4	49
Kansas	7	-	-	-	-	-	<u>.</u>	_	3	8	89
nansas	-	_	-	-	-	-	-	_	J		0.5

State	Cumula-	C	ases	Report	ted to	CDC		Six	Compa	arable	Six
and	tive			or Weel				Week		s Tota	
Region	1962	7/28	8/4		8/18		9/1	Total	1961	1960	1959
SOUTH ATLANTIC											
Paralytic	28	2	1	4	3	3	3	16	61	109	317
Total	32	2	1	5	3	3	3	17	74	152	406
Delaware	_	_	1	-	-	_	_	_	_	_	1
Maryland	-	_	_	-	_	_	_	_	18	20	9
D.C.	1	_	_	_	_	_	_ '	-	1	_	3
Virginia	8	1	_ '	3	_	1	1	6	7	9	117
West Virginia	4	_	_	_	_	_	1	1	7	17	48
North Carolina	3	-	_	_	_	1	_	1	6	33	93
South Carolina	4	1		_	2	=	1	4	-7	58	29
Georgia	6	_	_	2	1	1.	_	4	11	4	71
Florida	6	-	1	_	_	_	_	i	17	11	35
EAST SOUTH CENTE) AT										
Paralytic	29	4	2	1	1	10	5	23	20	27	228
Total	34	4	2	ī	ī	11	5	24	24	77	315
Kentucky	15	i	2	_	_	6	ì	10	3	45	16
Tennessee	5	_	_	1	_	ì	_	2	7	15	152
Alabama	11	1	-	_		4	4	9	4	3	113
Mississippi	3	2	_	_	1	_	_	3	10	14	34
WEST SOUTH CENTE	ΔΤ.										
Paralytic	170	8	13	10	11	10	5	57	22	42	238
Total	216	10	14	17	13	11	7	72	44	79	360
Arkansas	5	_	1	1	1	-	1	4	8	10	106
Louisiana	11	1	1	_	1	_	_	3	17	9	37
^{UK} lahoma	7	_	1	_	2	1	1	5	2	1	59
Texas	193	9	11	16	9	10	5	60	17	59	158
MOUNTAIN											
Paralytic	8	_	1	-	_	_	-	1	9	4	27
Total	11	_	1	_	-	1	_	2	14	17	45
Montana	3	-	_	-	-	-	-	-	1	1	4
1daho	2	-	1	-	-	1	-	2	7	1	-
Wyoming	1	_	_	-	-	_	-	-	-	7	_
CoLorado	1	_	-	-	_		-	-	3	2	6
New Mexico	_	-	_	_	-	-	-	-	1	2	9
arizona	3	_	-	-	_	-	-	-	2	1	23
Utah	1	`	_	-	-	-	_	-	-	3	3
Nevada	-	-		-	-	-	-	-	<u>.</u>	-	-
PACIFIC											
Paralytic	46	1	2	1	3	5	5	17	21	121	207
Total	50	1	2	1	3	5	5	17	25	142	248
Washington	1	_	_	-	1	_	-	1	7	13	65
regon	5	_	_	_	_	_		_	4	7	66
California	43	1	2	1	2	5	5	16	14	120	106
Uaska	_	_	_	_	_	_	_	-	_	_	11
Hawaii	1	-	-	-	-	_	-	-	-	2	_
TERRITMOR**											
TERRITORY Puerto Rico	10	_	***		1			1	_	73	_
OF KILCO	10	_			_						

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