

COMMUNICABLE DISEASE CENTER

POLIOMYELITIS

S U R V E I L L A N C E

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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:
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SUMMARY

A total of 64 cases of poliomyelitis, 53 paralytic, was reported during the three-week period ending November 3. This compares favorably with the totals of 153 cases, 103 paralytic, reported for the comparable weeks in 1961.

No new case concentrations have been noted in the 23 States reporting occurrence of this disease. A report on Nebraska which has noted poliomyelitis only among oral vaccinees is presented in detail in Section 2.

The analysis of data submitted on individual case forms to the Poliomyelitis Surveillance Unit shows that 23% of reported paralytic cases had received 3 or more doses of inactivated vaccine. Seventy-six percent of the 204 cases of paralytic poliomyelitis where virus isolation has been made yielded Type I poliovirus.

In Section 4, poliomyelitis cases following inactivated vaccine and oral polio vaccine are listed. Included also are the eight cases of poliomyelitis noted among household contacts of oral vaccinees thus far in 1962. Coxsackie B₃ continues to dominate the enterovirus surveillance picture as shown in Section 5.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

During the three-week period ending November 3, a total of 64 cases of poliomyelitis, including 53 paralytic, has been reported. The greatest number reported during any one week in this period was 27 cases for the week ending October 20, (See Table 1). A total of 153 cases, 103 paralytic, was reported for the comparable three-week period in 1961.

Of the 23 States reporting cases during these three weeks, Illinois accounted for the largest number with 12 cases, 9 paralytic. Seven of these cases were from Chicago; however, only one new case has been noted in the last two weeks.

The 1962 incidence remains well below the totals reported for any previous year. This is illustrated in the following tables showing cumulative and six-week figures for 1962 and the preceding 4 years.

Polio (Cumulated Weekly) Through the 44th Week for Past Five Years

	<u>1962</u>	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>
Paralytic	581	764	1,997	5,044	2,585
Total	732	1,180	2,886	7,671	5,200

Six-Week Totals (39th through 44th Week) for Past Five Years

	<u>1962</u>	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>
Paralytic	142	207	551	1,273	905
Total	171	331	775	1,721	1,767

2. STATE REPORTS

Nebraska

Recent Poliomyelitis Surveillance Reports (266, 268, 269 and 270) have contained special supplements regarding the cases of poliomyelitis occurring less than 30 days after immunization with oral polio vaccines. Notably, seven of the fifteen cases reviewed by the Surgeon General's Oral Polio Vaccine Advisory Committee (see PSU Report 270) were reported from the State of Nebraska. To appraise the significance of this concentration of cases, an investigation was carried out by personnel from the State of Nebraska and a team from the Communicable Disease Center, composed of Drs. Tom Chin, Paul Glezen, Robert Eelkema, George Lamb, John Witte and Mr. David Crissman. The following is a report of the investigation. A preliminary report of these studies was released to the press by Dr. E.A. Rogers, Director of Health, Nebraska, on November 5.

The investigation covered the following factors:

- (1) Documentation of any additional cases of paralytic disease, whether associated with vaccine feeding or not.
- (2) Surveillance of other polio-like syndromes in the State during this period.
- (3) An appraisal of vaccine distribution.

In searching for cases of paralytic disease and other polio-like syndromes, physicians were contacted either personally or by phone (including virtually every neurologist, orthopedic surgeon, and pediatrician, as well as a considerable number of other practitioners throughout the State); hospital records were examined; and the results of cerebrospinal fluid examinations were reviewed at a number of hospitals. In addition, a letter was sent by the State Medical Society to every physician in Nebraska requesting that they inform the investigators of any further cases. The utilization of vaccine was determined by contact with the directors of each of the individual county programs.

(1) Cases of Paralytic Disease in Nebraska in 1962

To date, eight cases of polio have been officially reported from the State of Nebraska. The onset of illness in each case was within 30 days of receiving oral polio vaccine; seven following Type III and one following Type II. The seven cases following Type III have been reviewed in detail by the Surgeon General's Advisory Committee. (These cases are described in detail in P.S.U. Report No. 270).

The case following Type II has not yet been reviewed by the Committee. (Listed below as Nebr 8). This patient is a 5 year old white female who developed a febrile illness with nuchal rigidity followed by a flaccid paralysis of both legs and marked weakness of both arms, with no sensory changes. There were 9 cells in the C.S.F. (7 Polymorphynuclears) and the protein was 81 mg%. Viral studies are in process.

In addition a 55 year old white male who developed a febrile episode 11 days after receiving Type III oral polio vaccine has been studied. Within 72 hours, after onset of illness unilateral flaccid paralysis of the right leg was noted. The C.S.F. was not examined; viral studies are in process. Significant residual weakness of the right leg was noted to be present 60 days after onset. This case has not as yet been officially reported to the State. Another, as yet unreported case, occurred in a 10 year old white male who was seen by an orthopedic surgeon in mid-October with a two month history of weakness of the right leg. He had received Type III oral polio vaccine 18 days before onset. An osteopathic physician had treated him in early August for a febrile illness and for the weakness which followed. No C.S.F. examination was performed. Viral studies are in process.

A case of paralytic illness in an 8 year old white female who developed a foot drop in mid-September without any antecedent symptoms was also investigated. She received oral polio vaccine Types I and III, 108 and 80 days respectively prior to onset of weakness. Cerebrospinal fluid examination was normal; however, the foot drop has persisted. The physician of this patient did not feel there was sufficient evidence for a diagnosis of poliomyelitis, and hence it was not reported.

No other cases of paralytic disease are known at this time.

(2) Other Conditions

A total of 18 cases of aseptic meningitis and infectious polyneuritis (including Guillian-Barre Syndrome), were uncovered in the investigation. There were fifteen cases of non-paralytic aseptic meningitis between early July and mid-October from various parts of the State. Three cases of infectious polyneuritis with symmetrical ascending paralysis, elevated C.S.F. protein and absence of pleocytosis were also evaluated.

Among the cases investigated, 12 of the 18 received Type III oral polio vaccine, 3 had contact with Type III vaccinees and 3 had no known contact. Two of the cases became ill within 30 days of receiving Type III vaccine and 3 within 60 days of close contact with a vaccinee. Thus far, there are 4 viral isolates: three are ECHO 11 and one is ECHO 6.

The details of each case are listed below.

Cases of Aseptic Meningitis (ASM) and Infectious Neuritis (IPN) Nebraska, July 1 to October 15, 1962									
Case No.	County	Age	Sex	Doses IPV	Onset First Symptom	Interval From OPV (days)			Virus Studies
						I	II	III	
ASM 1	Douglas	21	F	3	10/13	>90	27*	>90	In process
ASM 2	Sarpy	8	M	?	7/22	-	-	28*	In process
ASM 3	Douglas	57	M	?	8/2	>90	>90	40	ECHO 6 (Stool)
ASM 4	Douglas	13	M	?	8/4	>90	>90	42	No specimen
ASM 5	Douglas	11	M	?	9/2	>90	>90	65	ECHO 11
ASM 6	Douglas	4	M	4	9/10	>90	-	70	No specimen
ASM 7	Phelps	68	F	3	9/6	82	-	40	ECHO 11
ASM 8	Phelps	38	M	3	9/10	86	-	44	ECHO 11
ASM 9	Kimball	22	M	5	9/16	-	-	14*	In process
ASM 10	Garden	39	F	3	10/1	-	-	3	No specimen
ASM 11	Sheridan	14	M	4	9/4	>90	-	23	No specimen
ASM 12	Antelope	42	M	0	8/17	-	-	**	No specimen
ASM 13	Hall	14	F	?	9/19	-	-	17*	No specimen
ASM 14	Adams	7	M	?	9/15	>90	-	41	In process
ASM 15	Phelps	27	M	4	9/9	-	-	**	No specimen
IPN 1	Douglas	30	M	7	8/14	>90	-	61	In Process
IPN 2	Lancaster	26	F	?	9/9	-	-	**	No specimen
IPN 3	Dodge	36	F	?	8/27	79	-	50	In process

* Contact of vaccinee

** No known close contact with oral polio vaccine

Thus 5 of the 18 cases developed symptoms less than 30 days after receiving Type III oral polio vaccine or within 60 days of having contact with a Type III vaccinee. In contrast, the 8 officially reported cases of

poliomyelitis all received oral polio vaccine less than 30 days prior to onset of illness as shown below. Seven developed symptoms between 7 and 22 days after Type III (See PSU Report #270 for clinical details) and one case became ill 15 days after vaccination with Type II. These cases have been similarly summarized.

Cases of Reported Paralytic Poliomyelitis
Nebraska 1962

Case No.	Age	Sex	Doses IPV	Onset First Symptom	Interval from OPV (days)			Virus Recovered	Antibody Response	Mfgr. & Lot (Coded)	Committee Appraisal
					I	II	III				
Neb 1	18	F	5	7/1	34	-	7	III	-	A3-	Compatible
Neb 2	51	M	0	7/16	51	-	22	0	-	A3-	Compatible
Neb 3	37	M	0	7/23	43	-	15	-	-	A3-	Compatible
Neb 4	50	F	4	8/16	61	-	19	(**)	(**)	A31	Compatible
Neb 5*	57	M	0	8/17	53	-	12	(**)	(**)	C31	Compatible
Neb 6	6	M	3	8/5-8/12	52	-	9	(**)	(**)	A3-	Compatible
Neb 7	13	F	3	9/3	41	-	16	III	(**)	C3-	Compatible
Neb 8	5	F	4	10/1	>90	15	>90	(**)			To be considered

* Note = Interval following type III listed in PSU #270 for Nebraska 5 in error - Should read 12 and not 23 days.

** In process

(3) Appraisal of Oral Poliomyelitis Vaccine Distribution

Throughout the summer and early autumn, oral vaccine was distributed in mass programs throughout the State. These were conducted on a county-wide basis, and in general under the aegis of the local medical societies. As a result, the dates of feeding of each type varied considerably from county to county. Most areas, however, began in early summer with Type I, followed with Type III after 4 or more weeks, and finally Type II after a similar interval. To date, the best estimate of vaccine usage is as follows:

<u>Vaccine Type</u>	<u>No. Doses</u>
Type I	911,356
Type II	816,133
Type III	931,422

Three separate type III vaccines were employed

Manufacturer	No. Doses	No. Cases*
A	650,115	5
B	228,628	2
C	52,679	0
TOTAL	931,422	7

* Officially reported cases occurring within 30 days of type III vaccination

The population of Nebraska is 1,411,330 (1960 census). A map of the State is included to illustrate vaccine utilization by county of Type III oral polio vaccine and shows the location of the 7 officially reported cases of paralytic illness following Type III vaccine. In addition, there is a graph of vaccine usage by type for two-week periods between May 26, and October 13.

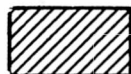
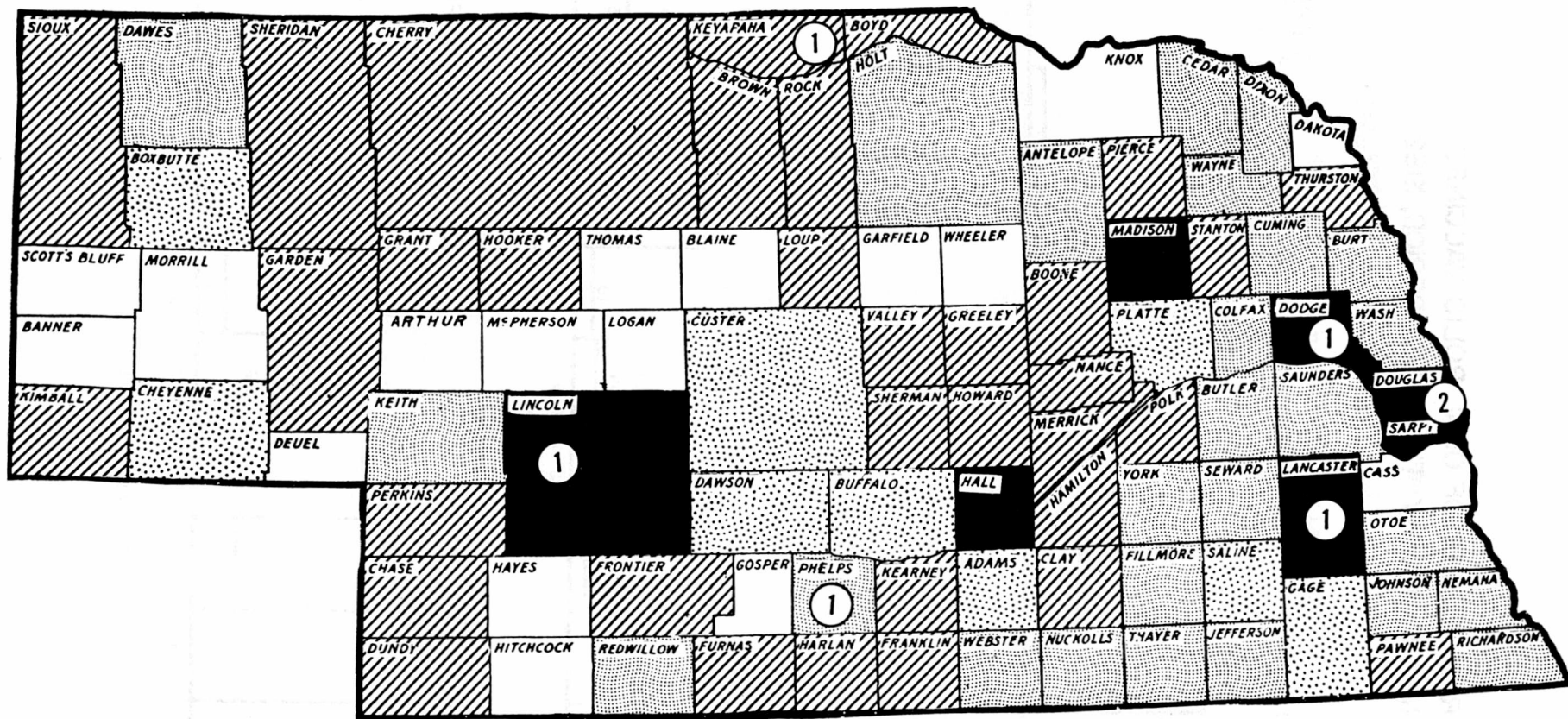
In summary, an intensive investigation has been carried out in Nebraska to attempt to define the poliomyelitis problem there more fully. An estimated 932,000 persons received Type III oral polio vaccine. Seven cases of paralytic poliomyelitis occurred within thirty days after receiving Type III oral vaccine, and one case following Type II vaccine. These represent the only cases of poliomyelitis officially reported this year. Investigation of cases of aseptic meningitis and infectious neuronitis did not reveal a similar correlation in time to oral polio vaccine feeding.

(3) Analysis of Oral Poliomyelitis Vaccine Distribution

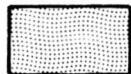
Throughout the summer and early autumn, oral vaccine was distributed in mass programs throughout the State. These were conducted on a county-wide basis, and in general under the aegis of the local medical societies. As a result, the dates of feeding of each type varied considerably from county to county. Most areas, however, began in early summer with Type I, followed with Type II after 4 or more weeks, and finally Type III after a similar interval. To date, the best estimate of vaccine usage is as follows:

Vaccine Type	No. Doses
Type I	911,386
Type II	916,133
Type III	931,422

COUNTIES IN WHICH TYPE III ORAL POLIO VACCINE WAS ADMINISTERED, NEBRASKA



Less than 5,000 doses



5,000 - 9,999 doses



10,000 - 20,000 doses

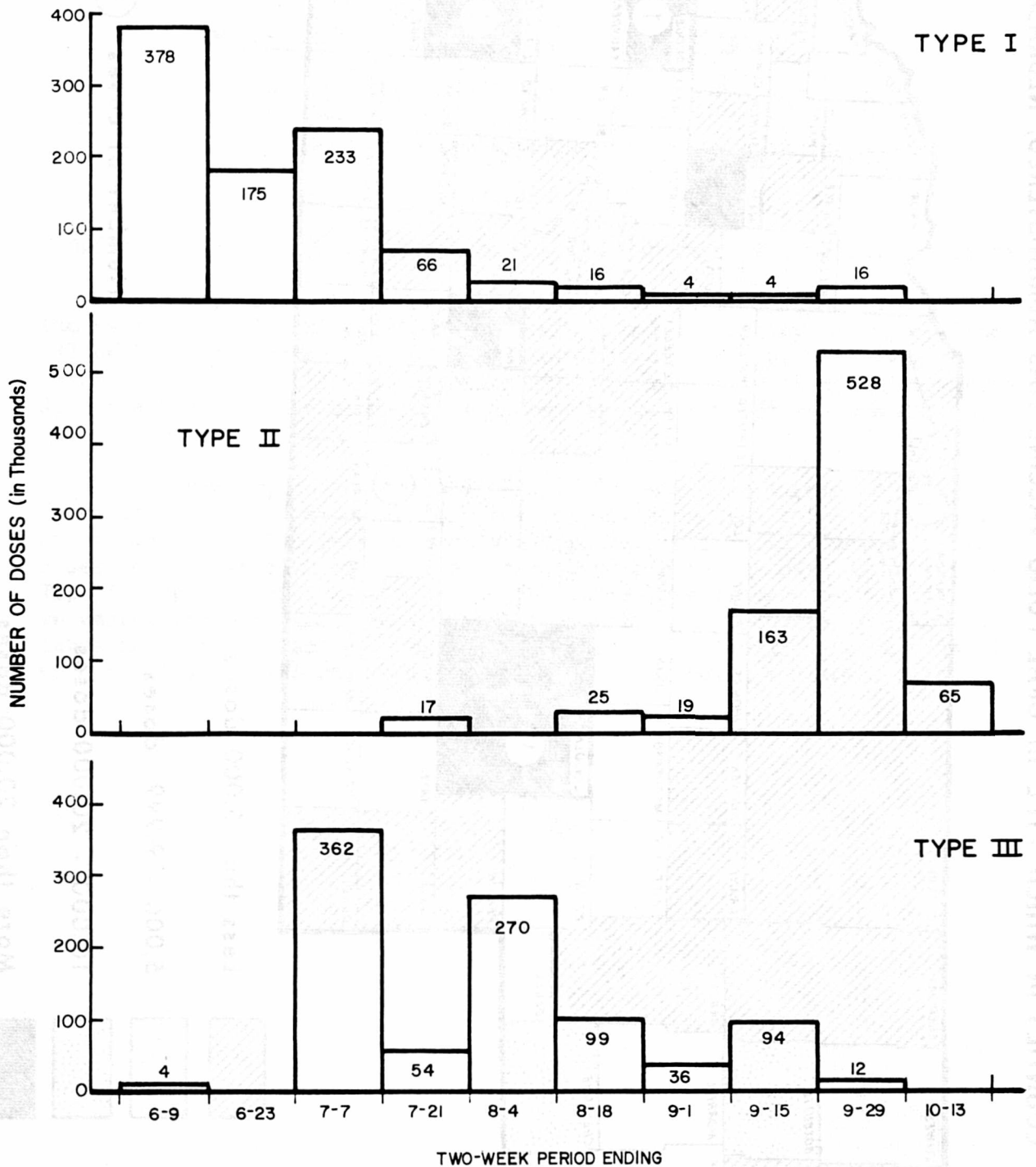


More than 20,000 doses

Number of cases

①

NUMBER OF DOSES OF ORAL POLIO VACCINES FED IN NEBRASKA BY TWO-WEEK PERIOD, 1962



3. 1962 PARALYTIC CASES REPORTED TO PSU

Of the 581 cases of paralytic poliomyelitis reported through the week ending November 3, 560 had onset in 1962. The Poliomyelitis Surveillance Unit has received individual case forms on 449 of the 560 paralytic cases. The vaccination status of the 449 paralytic cases by age group is shown below.

**Paralytic Poliomyelitis by Age Group
And Vaccination History Reported on PSU Forms
(Through November 2, 1962)**

Age Group	Doses of Inactivated Vaccine					Total	Percent
	OV	1-2V	3V	4+V	Unk.		
0-4	150	38	12	13	10	223	49.7
5-9	34	12	17	22	12	87	19.4
10-14	19	7	11	4	2	43	9.6
15-19	10	2	5	3	0	20	4.4
20-29	25	6	3	3	1	38	8.5
30-39	15	4	1	2	1	23	5.1
40+	11	1	0	2	1	15	3.3
TOTAL	264	70	49	49	17	449	100.0
PERCENT DOSES	61.1	16.2	11.3	11.3	--	100.0	

Of the 213 cases with known vaccination history in the 0-4 age group, 150 (70.4 percent) had not received any poliomyelitis vaccinations.

To date in 1962, the Poliomyelitis Surveillance Unit has received results of virological studies on 238 of the 449 paralytic cases. Poliovirus isolates have been recovered from 204 (85.7 percent) of the 238 cases. Of these, 155 are Type I, 3 are Type II, and 46 are Type III poliovirus. Isolates associated with clinical paralytic poliomyelitis have been reported from the following States:

State	Poliovirus			Total
	I	II	III	
Alabama	6	0	0	6
Arizona	2	0	0	2
Arkansas	1	0	0	1
California	7	0	7	14
Colorado	1	0	0	1
D.C.	0	0	1	1
Georgia	3	0	1	4
Idaho	0	0	1	1
Illinois	10	0	2	12
Kentucky	9	0	1	10
Louisiana	6	0	4	10
Maryland	1	0	0	1
Massachusetts	3	0	0	3
Michigan	6	0	5	11
Minnesota	4	0	0	4
Mississippi	0	0	3	3
Missouri	0	1	0	1
Montana	1	0	0	1
Nebraska	0	0	1	1
New Hampshire	1	0	1	2
New York	8	0	5	13
Ohio	8	0	4	12
Oregon	0	0	3	3
Pennsylvania	5	0	2	7
Tennessee	1	0	0	1
Texas	69	0	4	73
Utah	1	0	0	1
Washington	0	0	1	1
West Virginia	1	0	0	1
Wyoming	1	0	0	1
TOTAL	155	3	46	204

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1962

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

During the three-week period ending November 3, 3 cases of poliomyelitis, 2 paralytic, occurring within 30 days following vaccination have been reported to the Poliomyelitis Surveillance Unit. Two were from Texas and one was from Illinois. There was no correlation between site of injection and site of first paralysis in the two paralytic cases.

A detailed line listing of the 3 cases appears below:

<u>State</u>	<u>County</u>	<u>Age</u>	<u>Sex</u>	<u>Onset</u>	<u>Date Vaccinated</u>	<u>Onset Interval</u>	<u>Prior Vacc. Status</u>	<u>Paralytic Status</u>
Texas	Coryell	2	F	9/6	8/17	20 days	0	P
Texas	Moore	10	M	9/24	9/?/62	-	2	P
Illinois	Winnebago	4	M	8/26	8/16	10 days	3	NP

To date in 1962, 16 case reports of poliomyelitis occurring within 30 days following vaccination have been reported to the Poliomyelitis Surveillance Unit. Twelve of these have been paralytic. A correlation between site of injection and site of first paralysis was found in one case.

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

Four cases of poliomyelitis, including 3 paralytic occurring within 30 days following oral vaccine, were reported to the Poliomyelitis Surveillance Unit during the three weeks ending November 3. Three cases were from Texas, and one from Nebraska. Two had been fed Type I oral polio vaccine, one had received Type II vaccine, and one had taken Type III vaccine within 30 days prior to onset of illness. These 4 cases are listed below.

<u>State</u>	<u>County</u>	<u>Age</u>	<u>Sex</u>	<u>Onset</u>	<u>Date Fed</u>	<u>Type Fed</u>	<u>Onset Interval</u>	<u>Paralytic Status</u>	<u>Doses IPV</u>
Texas	Harris	36	M	9/25	9/9	III	16 days	P	0
Texas	Dawson	4	F	8/22	8/12	I	10 days	NP	0
Texas	Tarrant	24	F	8/21	8/5	I	16 days	P	0
Nebraska	Douglas	5	F	10/1	9/16	II	15 days	P	4

Thus far in 1962, 48 cases, 40 paralytic, occurring within 30 days of oral vaccination have been submitted to the Poliomyelitis Surveillance Unit on individual case forms.

(Note: The total number of under 30-day cases shown in PSU Report No. 270 is in error. It should read "44 cases.")

C. Poliomyelitis Within 60 Days Among Household Contacts of Oral Vaccinees

Thus far in 1962, eight cases of poliomyelitis occurring within 60 days of administration of oral vaccine to household contacts of patients

have been reported. These are presented in the line listing below.

Poliomyelitis in Household Contacts of Oral Vaccinees

State	County	Age	Sex	Doses		Onset	Interval from date Contact			Virus Recovered	Paralytic Status
				IPV	OPV		I	II	III		
*Texas	Webb	1	F	0	3/3	?	?	?	?	I	P
Texas	Bexar	20/12	M	0	5/29	-1	-	-	-	-	P
Texas	Bexar	20/12	M	2	6/8	9	-	-	-	I	P
Texas	Dallas	5	M	1	8/4	17	-	-	-	-	P
Mass.	Norfolk	42	F	4	6/25	?55	-	-	?25	No Spec.	P
Mass.	Essex	18/12	M	0	6/19	?59	-	-	?18	I	P
N.Y.	Suffolk	26	M	0	9/16	44	-	-	24	III	P
**Ohio	Hamilton	6/12	M	0	6/8	-	-	-	33	III	P

*Household contact of child fed trivalent vaccine in Mexico.

**Not strictly a household contact (see text).

The first four cases noted above occurred in counties experiencing an increased incidence of poliomyelitis. The fifth case, the adult from Massachusetts had no residual paralysis at 60 days. Suitable laboratory specimens were not obtained during this patient's illness. The next case, the child from Massachusetts, was in contact with siblings who had received Type I and Type III vaccine. The exact interval between first contact and onset in this case is being clarified. Type I virus was recovered from the pharynx and stool of this case. It was characterized as "wild-like" by the modified Wecker and McBride antigenic marker tests.

The adult from New York yielded Type III virus. Further investigation into the clinical illness and the characteristics of the recovered virus are being carried out.

The case listed from Ohio is not a household contact in the strict sense, being a child living in an apartment adjacent to a family whose members had received Type III oral vaccine. On epidemiologic investigation, close contact between the two families was established. The virus recovered from the case was shown to be Type III with antigenic characteristics similar to vaccine virus.

D. Known Mass Oral Polio Vaccination Programs

The table on page 15 presents a summary of the estimated number of doses of Types I, II, and III oral polio vaccines administered during known mass community programs from date of vaccine licensure. These data were obtained from State health authorities and in many instances represent "best" approximations. The data for October 1962 are incomplete since figures relating to several of the mass oral programs held in October have not been submitted as yet to the Poliomyelitis Surveillance Unit. More than 27 million doses of Type I oral polio vaccine have been given in community programs since August 1961 when it was licensed. A total of approximately 7.5 million doses of Type II oral polio vaccine was administered in mass programs after licensing in October 1961. Type III vaccine, licensed in March 1962, was given to more than 12 million persons in these programs.

The estimated number of persons who were fed Type I, II, and III oral polio vaccines during mass oral vaccination programs by month of administration from date of licensure is illustrated in the histogram on page 16. Type I vaccine was used most extensively in May and September of 1962. The largest proportion of Type II vaccine was fed after June 1962. Almost 50 percent of the total number of Type III vaccinees took the vaccine in June of this year.

5. ENTEROVIRUS SURVEILLANCE

Through November 6, 1962, reports of 417 non-poliovirus isolates from 1962 specimens had been received by the Poliomyelitis Surveillance Unit. The reports, from 25 States, originated from State and university viral laboratories within the States and are shown in Table 5.

A summary correlating virus isolates with the clinical syndromes observed from January 1 through November 1, 1962 has been received from Dr. D.S. Fleming, Director of the Division of Disease Prevention and Control for the State of Minnesota. Of 104 reported cases of aseptic meningitis, laboratory confirmation of viral infection has been made in 27; including 10 isolates of Coxsackie B₃, 5 ECHO₉, and 4 ECHO₁₁. Coxsackie B₃ has also been isolated from 2 of 12 cases classified as infectious encephalitis and from 6 of 11 enterovirus illnesses other than aseptic meningitis and encephalitis.

Non-Polio Enterovirus Isolations from 1962 Specimens

State	ECHO					Coxsackie				Total	Reported By
	4	9	14	22	Other*	B-2	B-3	B-5	Other*		
Alabama					6				6	12	T. Hosty
California	2	19	1	6	5	1	2	1	13	50	E. Lennette and P. Wehrle
Connecticut	17					2	6		10	35	E. Borman and G. Hsiung
Florida	2						1		2	5	J. Bond
Hawaii		1			2			7	36	46	J. Enright
Idaho		1								1	D.W. Brack
Illinois		2				3	4		3	12	H. Shaughnessy
Kansas		1			9	3	7		9	29	C. Hunter
Kentucky									1	1	C. Todd
Louisiana	16		3		1		7		5	32	G. Hauser
Maryland		1			3	3	7		5	19	J. Joseph
Massachusetts							2		3	5	R. MacReady and J. Daniels
Michigan			6				3	7	8	24	G. Agate
Minnesota		5			10	3	18	1	4	41	H. Bauer
Missouri						1	1			2	I. Adams
New Hampshire								2		2	R. Milner
New Jersey					1			3	1	5	M. Goldfield and W. Dougherty
New York				1	1	9	3	1	8	23	I. Albrecht
North Carolina									1	1	L. Madry
Ohio		6				6	10	4	7	33	C. Croft
Pennsylvania								3		3	K. Hummeler and I. Gratch
Tennessee		1					6		1	8	C.B. Tucker
Texas	4	12				1			1	18	J. Irons and A. Behbehani
Virginia					3		1			4	E. Foxhall
Washington		1	1		1		2		1	6	K. Berquist and W. Giedt
										417	

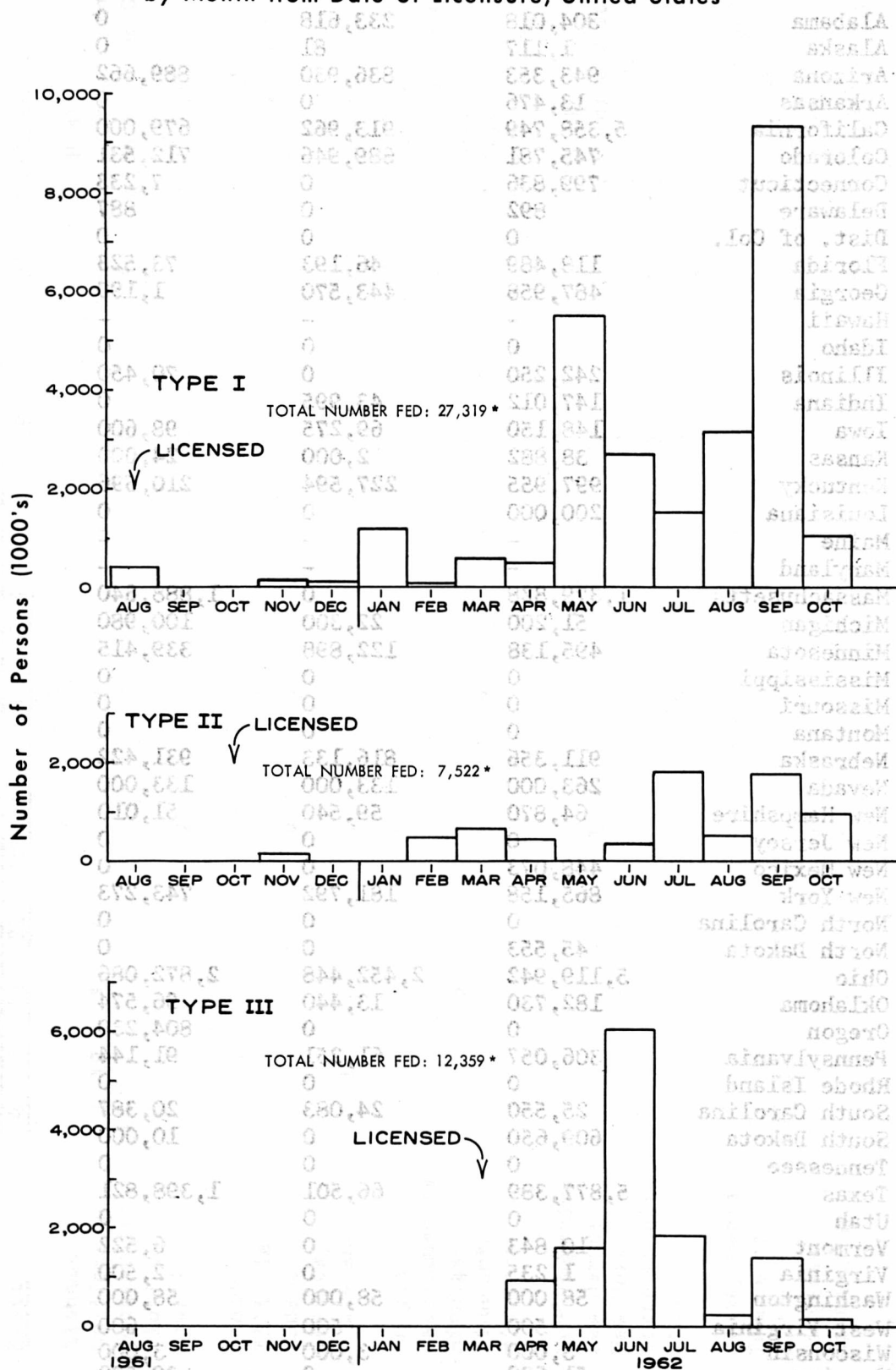
*Specific types include 15 Coxsackie A-4 and 12 A-5 in Hawaii, and 5 A-9 in Michigan. A variety of single isolates of other ECHO and Coxsackie types have been reported.

Mass Oral Polio Vaccination Programs from Month of Vaccine Licensure
Through October 10, 1962

State	Estimated Number of Doses Fed		
	Type I	Type II	Type III
Alabama	304,018	233,618	0
Alaska	1,117	81	0
Arizona	943,353	836,930	889,662
Arkansas	13,476	0	0
California	5,358,749	913,962	679,000
Colorado	745,781	689,946	712,531
Connecticut	799,836	0	7,233
Delaware	892	0	887
Dist. of Col.	0	0	0
Florida	118,489	46,193	73,523
Georgia	487,958	443,570	1,190
Hawaii	-	-	-
Idaho	0	0	0
Illinois	242,250	0	70,450
Indiana	147,012	43,995	0
Iowa	148,150	69,275	98,600
Kansas	38,882	2,000	24,000
Kentucky	997,955	227,594	210,696
Louisiana	200,000	0	0
Maine	-	-	-
Maryland	-	-	-
Massachusetts	1,379,828	0	1,888,640
Michigan	51,200	22,300	100,980
Minnesota	495,138	122,898	339,415
Mississippi	0	0	0
Missouri	0	0	0
Montana	0	0	0
Nebraska	911,356	816,133	931,422
Nevada	263,000	133,000	133,000
New Hampshire	64,870	59,540	51,010
New Jersey	0	0	0
New Mexico	448,073	0	0
New York	865,158	181,792	743,273
North Carolina	0	0	0
North Dakota	45,553	0	0
Ohio	5,119,942	2,452,448	2,872,086
Oklahoma	182,730	13,440	96,574
Oregon	0	0	804,239
Pennsylvania	306,057	61,251	91,144
Rhode Island	0	0	0
South Carolina	25,550	24,083	20,387
South Dakota	609,650	0	10,000
Tennessee	0	0	0
Texas	5,877,389	66,501	1,398,821
Utah	0	0	0
Vermont	10,843	0	6,522
Virginia	1,235	0	2,500
Washington	58,000	58,000	58,000
West Virginia	500	500	600
Wisconsin	3,000	3,000	3,000
Wyoming	51,600	0	39,500
TOTAL	27,318,590	7,522,050	12,358,885

Mass Oral Polio Vaccination Program from Month of Vaccine Licensure Through October 10, 1962

Estimate of the Number of Persons Fed During Known Mass Community Oral Polio Vaccination Programs by Month from Date of Licensure, United States



* INCLUDES VACCINE WITH MONTH OF FEEDING UNKNOWN

Figure 1

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

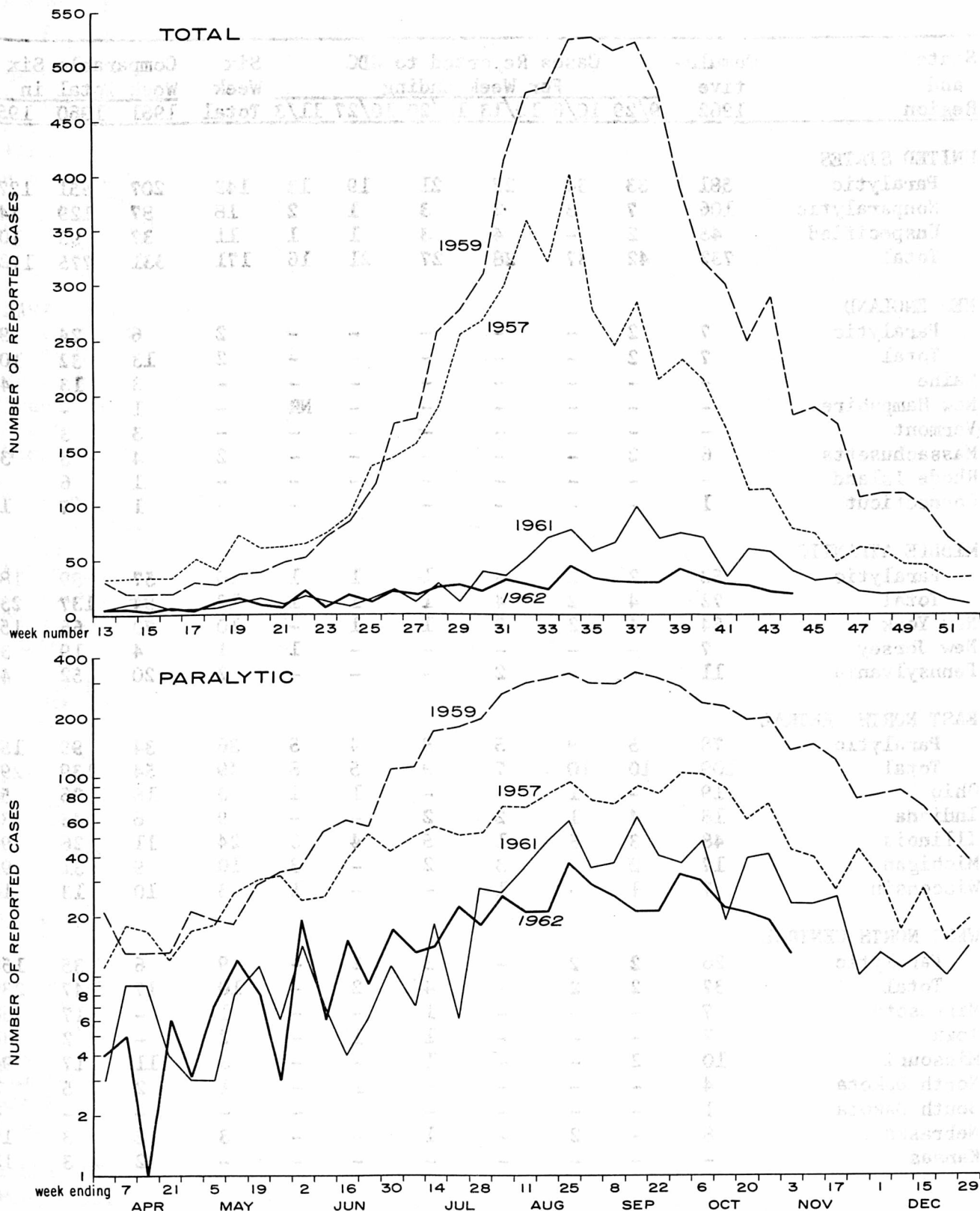


Table 1

TREND OF 1962 POLIOMYELITIS INCIDENCE

State and Region	Cumula- tive 1962	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Week Total in		
		9/29	10/6	10/13	10/20	10/27	11/3		1961	1960	1959
UNITED STATES											
Paralytic	581	33	34	22	21	19	13	142	207	551	1273
Nonparalytic	106	7	3	2	3	1	2	18	87	129	342
Unspecified	45	2	-	4	3	1	1	11	37	95	106
Total	732	42	37	28	27	21	16	171	331	775	1721
NEW ENGLAND											
Paralytic	7	2	-	-	-	-	-	2	6	24	96
Total	7	2	-	-	-	-	-	2	13	32	106
Maine	-	-	-	-	-	-	-	-	3	13	47
New Hampshire	-	-	-	-	-	-	NR	-	1	-	1
Vermont	-	-	-	-	-	-	-	-	3	3	3
Massachusetts	6	2	-	-	-	-	-	2	4	3	36
Rhode Island	-	-	-	-	-	-	-	-	1	6	4
Connecticut	1	-	-	-	-	-	-	-	1	7	15
MIDDLE ATLANTIC											
Paralytic	52	2	2	3	1	1	1	10	57	89	188
Total	72	4	2	4	1	1	1	13	94	137	238
New York	54	4	2	2	1	1	-	10	70	66	159
New Jersey	7	-	-	-	-	-	1	1	4	19	30
Pennsylvania	11	-	-	2	-	-	-	2	20	52	49
EAST NORTH CENTRAL											
Paralytic	78	5	9	5	8	4	5	36	34	99	158
Total	109	10	10	7	9	5	8	49	54	139	297
Ohio	19	-	1	-	-	1	1	3	18	26	56
Indiana	18	4	1	2	2	-	-	9	6	43	35
Illinois	48	3	8	1	5	4	3	24	11	26	96
Michigan	17	2	-	3	2	-	3	10	9	31	94
Wisconsin	7	1	-	1	-	-	1	3	10	13	16
WEST NORTH CENTRAL											
Paralytic	26	2	2	-	3	2	-	9	6	35	158
Total	37	2	2	-	4	2	-	10	17	47	239
Minnesota	7	-	-	-	1	-	-	1	-	17	68
Iowa	7	-	-	-	1	1	-	2	-	2	44
Missouri	10	2	-	-	1	-	-	3	11	17	94
North Dakota	4	-	-	-	-	1	-	1	2	5	2
South Dakota	1	-	-	-	-	-	-	-	-	-	-
Nebraska	8	-	2	-	1	-	-	3	2	3	19
Kansas	-	-	-	-	-	-	-	-	2	3	12

Table 1 (Continued)

State and Region	Cumula- tive 1962	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Total in		
		9/29	10/6	10/13	10/20	10/27	11/3		1961	1960	1959
SOUTH ATLANTIC											
Paralytic	52	3	5	3	1	-	2	14	47	166	233
Total	57	3	5	4	1	-	2	15	67	188	270
Delaware	-	-	-	-	-	-	-	-	-	-	2
Maryland	1	1	-	-	-	-	-	1	17	90	18
D.C.	2	-	-	-	-	-	-	-	2	5	-
Virginia	9	-	-	-	1	-	-	1	4	20	53
West Virginia	6	-	-	-	-	-	NR	-	10	23	45
North Carolina	11	-	3	2	-	-	1	6	7	15	79
South Carolina	6	-	1	-	-	-	NR	1	19	16	17
Georgia	14	1	1	2	-	-	-	4	3	5	34
Florida	8	1	-	-	-	-	1	2	5	14	22
EAST SOUTH CENTRAL											
Paralytic	54	9	2	3	2	1	-	17	10	25	138
Total	65	9	2	3	3	1	-	18	22	85	169
Kentucky	25	4	-	1	-	-	-	5	6	52	44
Tennessee	9	-	-	-	-	1	-	1	8	15	86
Alabama	22	5	-	-	-	-	-	5	1	8	23
Mississippi	9	-	2	2	3	-	-	7	7	10	16
WEST SOUTH CENTRAL											
Paralytic	230	7	9	4	4	8	1	33	18	39	92
Total	295	9	11	6	7	9	1	43	29	55	157
Arkansas	14	2	2	1	-	2	-	7	3	9	52
Louisiana	24	1	-	1	2	2	-	6	15	6	22
Oklahoma	21	1	3	1	1	3	1	10	1	5	17
Texas	236	5	6	3	4	2	-	20	10	35	66
MOUNTAIN											
Paralytic	10	-	-	2	-	-	-	2	2	17	15
Total	14	-	-	2	-	-	-	2	3	24	28
Montana	4	-	-	1	-	-	-	1	1	7	3
Idaho	2	-	-	-	-	-	-	-	-	4	1
Wyoming	2	-	-	-	-	-	-	-	-	1	-
Colorado	2	-	-	1	-	-	-	1	1	8	6
New Mexico	-	-	-	-	-	-	-	-	-	1	5
Arizona	3	-	-	-	-	-	-	-	1	1	9
Utah	1	-	-	-	-	-	-	-	-	2	2
Nevada	-	-	-	-	-	-	-	-	-	-	2
PACIFIC											
Paralytic	72	3	5	2	2	3	4	19	27	57	195
Total	76	3	5	2	2	3	4	19	32	68	217
Washington	5	-	-	-	-	3	NR	3	7	6	66
Oregon	5	-	-	-	-	-	-	-	4	6	43
California	66	3	5	2	2	-	4	16	19	56	101
Alaska	-	-	-	-	-	-	-	-	-	-	7
Hawaii	-	-	-	-	-	-	-	-	2	-	-
TERRITORY											
Puerto Rico	11	-	1	-	-	-	-	1	1	38	1

Table 1 (Continued)

State and Region	Commu- nitive 1962	Cases Reported to CDC For Week Ending	Six Week Total 1962	Comparable Six Weeks Total in 1960-1961
SOUTH ATLANTIC				
Paralytic	32	1	14	47
Total	32	3	12	67
Alabama	-	-	-	-
Arkansas	1	1	1	17
D.C.	2	-	-	2
Florida	9	-	1	4
Georgia	6	-	NR	10
South Carolina	11	3	6	7
North Carolina	6	1	1	19
Virginia	14	1	4	3
West Virginia	6	-	1	14
EAST SOUTH CENTRAL				
Paralytic	64	9	17	10
Total	62	9	18	22
Alabama	22	4	2	6
Arkansas	9	-	1	8
Florida	23	5	2	1
Georgia	9	-	1	10
Louisiana	2	-	1	1
Mississippi	2	-	1	1
Texas	2	-	1	1
WEST SOUTH CENTRAL				
Paralytic	230	7	13	18
Total	222	9	14	22
Alabama	14	2	7	3
Arkansas	24	1	6	12
Florida	21	1	10	1
Georgia	236	2	20	35
Louisiana	10	-	2	17
Mississippi	14	-	3	24
Montana	4	-	1	7
Idaho	2	-	-	4
Wyoming	2	-	-	1
Colorado	2	-	1	1
New Mexico	-	-	-	1
Arizona	3	-	-	1
Utah	2	-	-	2
Nevada	-	-	-	-
MOUNTAIN				
Paralytic	72	3	10	27
Total	76	3	19	32
Washington	2	-	NR	7
Oregon	2	-	-	4
California	66	2	4	19
Alaska	-	-	-	-
Hawaii	-	-	-	2
PACIFIC				
Paralytic	72	3	10	27
Total	76	3	19	32
Washington	2	-	NR	7
Oregon	2	-	-	4
California	66	2	4	19
Alaska	-	-	-	-
Hawaii	-	-	-	2