

715. CDC

POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 193 JANUARY 18, 1960

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SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, the National Office of Vital Statistics, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

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SUMMARY

With the reporting of only 15 cases during the first week of 1960, poliomyelitis is at its usual low for the early months of the year. No reports of winter epidemics in the United States have been received.

The preliminary totals for 1959 are presented and compared with the previous four years.

A summary of a current Canadian epidemic is presented.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

During the week ending January 9, the number of cases reported to the NOVS was characteristically low. Only 15 cases, 12 paralytic, were reported during this first week of 1960. (Figure I, Table I)

Through the week ending January 2, 1960, the 52nd week of 1959, a total of 8577 cases - 5694 paralytic - was reported to the NOVS. Presented below are these 1959 preliminary totals compared with totals through the 52nd week of each of the previous 4 years:

	Cumulative Totals through 52 Weeks				
	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>	<u>1955</u>
Paralytic	5694	3113	2164	6,717	10,663
Total	8577	6033	5949	15,465	29,298

The severity of the 1959 poliomyelitis season is demonstrated in this table; the 1959 paralytic total exceeded the totals for the previous two years and approached the 1956 totals.

2. REPORT FROM CANADA

According to the Surveillance Report of the Epidemiology Division of the Canadian Department of National Health and Welfare, a report of a winter outbreak of poliomyelitis in northern Alberta has been received from Dr. E.S. Orford Smith, Director of Local Health Services of the Provincial Department of Health. This outbreak has been reported from the district of La Crete, a small community approximately 500 miles northwest of Edmonton, by Dr. D.M. Cassidy of Fort Vermilion, Alberta. Since the middle of October, when the outbreak began in this small community, there have been 18 cases of paralytic poliomyelitis, all among children from age 1 to 9 years. Five of these cases have been fatal. During the same period there have also been 10 cases diagnosed as aseptic meningitis, ranging from 3 months to 6 years of age. Several multiple familial cases have occurred. All virus isolations were of Type I.

Although information on the vaccination status of these cases is incomplete, it is known that community response to a vaccination program carried out last spring was extremely poor. However, during November, 371 vaccinations were given, most of these being first doses. In addition, immune serum globulin was administered to 27 family case contacts.

3. 1959 POLIO CASES REPORTED TO PSU

The 1959 cumulative total of poliomyelitis cases reported to the PSU now stands at 7,719, of which 5,342 are paralytic. This total represents 90 per cent of the 8,577 cases reported to the NOVS at the close of the year. The following is a breakdown of these reported cases by paralytic status.

	<u>Reported to NOVS</u>	<u>Reported to PSU</u>	<u>Per cent</u>
Paralytic	5694	5342	94
Nonparalytic	2182	2064	95
Unspecified	701	313	45
TOTAL	8577	7719	90

In addition, 60-day follow-up reports have been received on 61 per cent of the 7,719 cases reported to PSU. Cooperation by the state epidemiologists in the submission of both preliminary and 60-day follow-up reports has been excellent. We hope to receive close to 100 per cent of the preliminary reports from all States by January 31. Also, follow-up reporting has improved

as we approach our cut off date of February 29, 1960, with only a few States accounting for most of the unreported cases. With additional reporting through the February deadline, the most complete nationwide data ever collected on poliomyelitis will be available. This early deadline will make possible a detailed analysis of the 1959 polio experience before the onset of the 1960 season.

Poliomyelitis Cases by Paralytic Status, Vaccination History, and Age Group - Reported on PSU Forms (Through January 11, 1960)

Age Group	Paralytic							Nonparalytic							Unsp. Tot	TOTAL
	Doses of Vaccine						Tot	Doses of Vaccine						Tot		
	0	1	2	3	4+	Unk			0	1	2	3	4+		Unk	
0-4	1458	221	213	262	51	83	2288	212	64	70	96	25	23	490	94	2872
5-9	560	110	137	249	60	53	1169	151	39	65	165	102	36	558	81	1808
10-14	176	28	49	107	26	10	396	90	22	29	131	50	19	341	34	771
15-19	204	22	27	57	5	12	327	74	10	20	68	29	11	212	19	558
20-29	480	28	44	65	15	46	678	124	19	29	63	21	25	281	44	1003
30-39	247	27	11	25	10	21	341	52	17	14	23	10	9	125	19	485
40+	97	3	4	5	1	8	118	21	2	5	6	1	2	37	10	165
Unk.	21	-	1	2	-	1	25	8	3	2	2	3	2	20	12	57
Total	3243	439	486	772	168	234	5342	732	176	234	554	241	127	2064	313	7719

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1959

A. Cases with Onset Within 30 Days of Vaccination

Since December 21, 1959, the PSU has received notification of 29 additional cases with onset within 30 days after vaccination. Of these, 21 cases were paralytic, but none were correlated. The total for 1959 now stands at 391 cases - 259 paralytic and 11 correlated. No vaccine lot has been found clearly related to more than one correlated case.

The newly reported paralytic cases are listed in Table II. Additional information received after investigation of previously listed cases is included in an addendum. All evidence indicates that vaccine safety has been fully maintained during 1959.

B. Vaccine Distribution

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

(This report was prepared by the Poliomyelitis and Polio-Like Diseases Surveillance Unit, Harold W. Wylie, Jr., M.D., Chief, Joseph Oren, M.D., and Mr. Leo Morris, Statistician, with the assistance of the Statistics Section, CDC.)

FIGURE 1

CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1955-1958, APR.-DEC., BY WEEK

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS

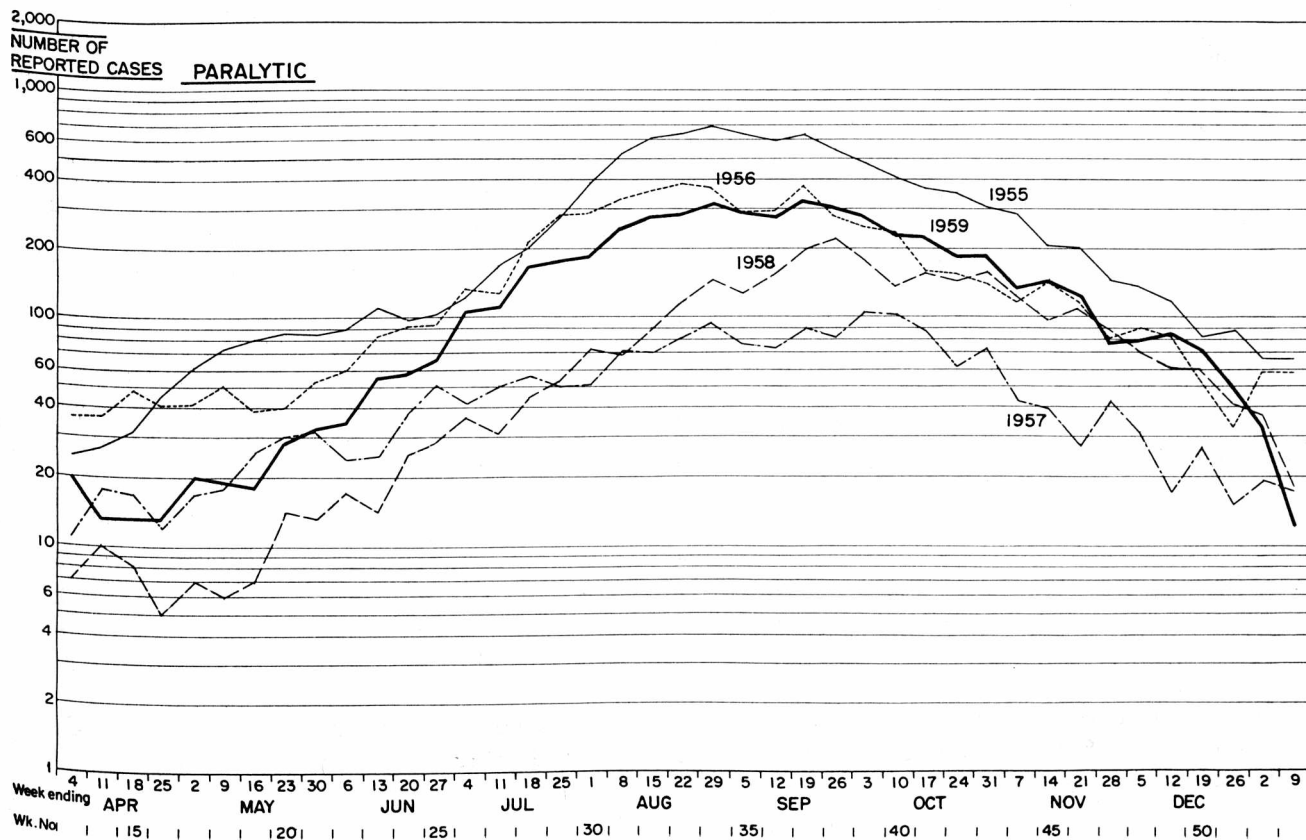
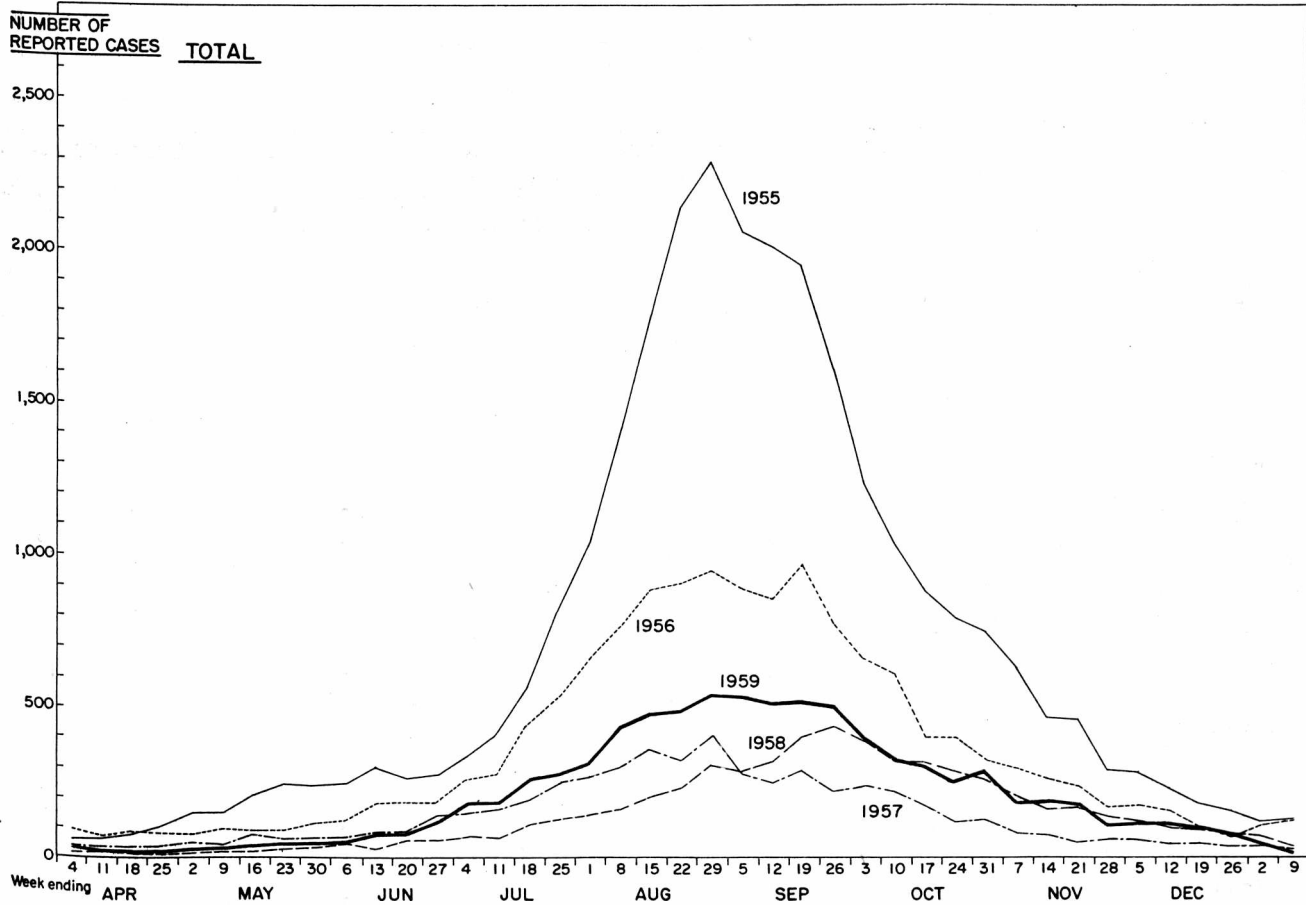


Table I

TREND OF 1960 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1960	Cases Reported to NOV5*						Six Week Total	Comparable Six Weeks totals in		
		12-5	12-12	12-19	12-26	1-2	1-9		1959	1958	1957
UNITED STATES											
Paralytic	12	80	85	71	50	33	12	331	281	127	333
Nonparalytic	1	20	19	21	15	4	1	80	90	76	167
Unspecified	2	9	6	4	4	9	2	34	84	36	118
Total	15	109	110	96	69	46	15	445	455	239	618
NEW ENGLAND											
Paralytic	-	3	1	6	3	3	-	16	-	2	4
Total	-	3	2	6	3	3	-	17	1	3	7
Maine	-	1	1	4	1	-	-	7	-	1	1
New Hampshire	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	1	-	1	-	-	-	2	-	-	-
Massachusetts	-	1	1	-	2	1	-	5	-	1	2
Rhode Island	-	-	-	-	-	-	-	-	-	-	-
Connecticut	-	-	-	1	-	2	-	3	1	1	4
MIDDLE ATLANTIC											
Paralytic	2	13	10	12	6	6	2	49	32	3	17
Total	3	18	12	16	10	8	3	67	51	11	43
New York	3	10	8	14	5	3	3	43	21	6	28
New Jersey	-	1	1	1	1	1	-	5	14	2	2
Pennsylvania	-	7	3	1	4	4	-	19	16	3	13
EAST NORTH CENTRAL											
Paralytic	-	12	9	17	8	5	-	51	45	11	65
Total	2	17	14	28	9	13	2	83	92	35	127
Ohio	2	-	3	6	2	7	2	20	30	11	25
Indiana	-	-	2	1	-	1	-	4	14	12	35
Illinois	-	6	2	21	7	2	-	38	8	2	21
Michigan	-	8	3	-	-	3	-	14	37	9	23
Wisconsin	-	3	4	-	-	-	-	7	3	1	23
WEST NORTH CENTRAL											
Paralytic	1	9	5	1	7	1	1	24	38	10	16
Total	1	14	9	2	13	2	1	41	53	15	48
Minnesota	1	4	1	-	-	1	1	7	1	3	3
Iowa	-	-	5	1	-	-	-	6	9	2	6
Missouri	-	10	2	1	5	1	-	19	33	6	13
North Dakota	-	-	-	-	-	-	-	-	7	-	3
South Dakota	-	-	-	-	-	-	-	-	1	2	1
Nebraska	-	-	1	-	-	-	-	1	-	-	20
Kansas	-	-	-	-	8	-	-	8	2	2	2

*National Office of Vital Statistics: weekly figures reported by the states as of Wednesday of the specified week; cumulative figures include revisions and corrections.

Table 1 (Continued)

State and Region	Cumulative 1960	Cases Reported to NOVS for Week Ending						Six Week Total	Comparable Six Weeks totals in		
		12-5	12-12	12-19	12-26	1-2	1-9		1959	1958	1957
SOUTH ATLANTIC											
Paralytic	3	11	18	6	9	3	3	50	58	30	38
Total	3	18	22	8	12	4	3	67	82	51	65
Delaware	-	-	-	-	-	-	-	-	6	-	1
Maryland	-	2	2	-	-	-	-	4	2	12	7
D. C.	-	-	-	-	-	1	-	1	4	4	-
Virginia	-	1	2	1	1	-	-	5	18	3	9
West Virginia	-	2	4	2	-	-	-	8	17	1	4
North Carolina	3	1	6	4	3	1	3	18	3	17	16
South Carolina	-	7	-	-	-	-	-	7	8	2	11
Georgia	-	-	6	1	5	1	-	13	2	4	4
Florida	-	5	2	-	3	1	-	11	22	8	13
EAST SOUTH CENTRAL											
Paralytic	1	5	11	8	3	-	1	28	30	8	25
Total	1	8	14	9	5	-	1	37	53	23	48
Kentucky	1	2	8	1	-	-	1	12	14	4	9
Tennessee	-	3	3	4	-	-	-	10	23	6	11
Alabama	-	3	-	2	-	-	-	5	8	6	11
Mississippi	-	-	3	2	5	-	-	10	8	7	17
WEST SOUTH CENTRAL											
Paralytic	-	4	9	3	3	2	-	21	58	23	93
Total	-	5	11	6	4	2	-	28	83	41	119
Arkansas	-	4	2	2	-	1	-	9	8	-	15
Louisiana	-	1	3	1	1	1	-	7	3	3	21
Oklahoma	-	-	3	1	2	-	-	6	4	3	5
Texas	-	-	3	2	1	-	-	6	68	35	78
MOUNTAIN											
Paralytic	-	2	2	1	1	2	-	8	1	7	24
Total	-	4	4	1	2	2	-	13	11	9	57
Montana	-	1	1	-	1	1	-	4	4	-	9
Idaho	-	1	-	-	-	-	-	1	-	-	3
Wyoming	-	-	-	-	-	-	-	-	1	-	4
Colorado	-	-	-	-	-	-	-	-	-	2	14
New Mexico	-	-	1	-	-	-	-	1	4	1	9
Arizona	-	1	2	1	1	1	-	6	-	5	2
Utah	-	-	-	-	-	-	-	-	1	1	14
Nevada	-	1	-	-	-	-	-	1	1	-	2
PACIFIC											
Paralytic	5	21	20	17	10	11	5	84	19	33	51
Total	5	22	22	20	11	12	5	92	29	51	104
Washington	-	1	7	2	4	3	-	17	3	4	10
Oregon	-	9	3	6	2	2	-	22	3	8	11
California	5	12	12	11	5	7	5	52	23	39	83
Alaska	-	-	-	1	-	-	-	1	-	-	-
Hawaii	-	-	-	-	-	-	-	-	1	-	1
Puerto Rico	-	-	4	-	-	1	-	5	6	1	-

Table II

PARALYTIC POLIOMYELITIS OCCURRING WITHIN 30 DAYS OF LAST VACCINE INOCULATION
Cases Reported to PSU December 14 through January 11, 1960

State	County	Ini- tials	Age	Sex	Date Inoc.	Mfr.	Lot No.	Date First Symp.	Site Inoc.	Site First Para
Alaska	Dill	P.K.	1	F	8-14-59	Lilly	?	8-16-59	Buttock	RL
Calif.	Los Angeles	J.C.	32	M	12-15-59	P-D	57864A	12-25-59	RA	LA
Calif.	San Francisco	F.B.	1	M	11-25-59	P-D	052264A	12-3-59	LA	Neck, back weak
Georgia	Muscogee	L.R.	17	M	7-14-59	P-D	050225	7-19-59	Arm	LL
		(Comment: Polio Type I isolated from stool specimen.)								
Ill.	Whiteside	R.M.	9	M	9-24-59	Lilly	?	9-25-59	Arm	Arm
Indiana	Lake	D.S.	5	M	9-8-59	P-D	?	9-10-59	LA	Legs, back abdomen
Iowa	Polk	R.S.	17	M	7-24-59	?	?	8-8-59	Arm	RA
Minn.	Dakota	J.H.	2	M	8-13-59	?	?	8-26-59	LA	Legs
		(Comment: Polio Type I isolated from stool specimen.)								
Mo.	Jackson	J.M.	4	M	7-9-59	Lilly	742207	7-18-59	LA	RL
		(Comment: Complete recovery - no residual paralysis.)								
Mo.	Bates	R.T.	4	F	8-1-59	?	?	8-12-59	Hip	Neck, back weak
Mo.	Jackson	O.M.	5	M	7-15-59	Lilly	742209	7-25-59	LA	RL
Mo.	Jackson	L.D.	7	M	7-6-59	?	?	7-12-59	?	Palate
Mo.	Jackson	D.H.	3	M	7-9-59	Lilly	742211	7-25-59	LA	Weak Legs
N.Y.	Westchester	M.H.	4	M	6-5-59	Lilly	740747	6-6-59	LA	RL
		(Comment: Polio Type I isolated from stool specimen.)								
N.Y.C.	Kings	D.T.	5 mo	F	11-27-59	?	?	12-6-59	?	?
		(Comment: Polio Type I isolated from stool specimen.)								
N.C.	Wilson	C.H.	1	M	10-8-59	P-M	175F132	10-11-59	LA	Legs
N.C.	Martin	S.C.	5	M	9-30-59	Lilly	746983	10-21-59	LA	R.Face
Ohio	Cuyahoga	D.B.	10 mo	M	9-12-59	Lilly	?	9-14-59	Arm	L.Thigh
Tenn.	Hamilton	T.B.	1	F	8-24-59	?	?	8-27-59	Buttock	RL
Utah	Utah	E.P.	30	M	6-26-59	?	?	6-29-59	?	R.Side
Wash.	Kitsap	G.E.	5	M	11-16-59	Wyeth	34807	11-22-59	Arm	LL

ADDENDUM TO TABLE II

(The following are revisions of cases listed in previous reports. Additional information has been received due to the cooperation of several state health departments. All newly added information is underlined)

<u>State</u>	<u>County</u>	<u>Ini- tials</u>	<u>Age</u>	<u>Sex</u>	<u>Date Inoc.</u>	<u>Mfr.</u>	<u>Lot No.</u>	<u>Date First Symp.</u>	<u>Site Inoc.</u>	<u>Site First Para.</u>	<u>Previous Report</u>
Iowa	Polk	R.J.	1	F	2-59	?	?	3-4-59	<u>Buttock</u>	<u>RL</u>	192
Iowa	Polk	J.G.	1	M	8-1-59	?	?	8-13-59	?	<u>LA</u>	192
Oregon	Multnomah	J.G.	1	M	8-31-59	?	?	9-20-59	<u>Arm</u>	<u>LL</u>	189
Pa.	Somerset	L.W.	6 mo	F	8-22-59	P-D	05163C	8-29-59	<u>L.Buttock</u>	Legs	186
Tenn.	Anderson	L.J.	1	F	8-15-59	<u>Lilly</u>	<u>746984</u>	8-24-59	<u>RA</u>	<u>LA</u>	192
Wisc.	Sheboygan	T.T.	5	M	9-22-59	<u>P-D</u>	?	10-14-59	RA	Weak Legs	192

Table III

POLIOMYELITIS AND QUADRUPLE ANTIGEN VACCINE REPORTS*

(Data provided by the Polio Vaccine Activity, BSS, USPHS through Jan. 1, 1960)

POLIOMYELITIS VACCINE SHIPPED (1000's cc's.)

Period	National Foundation	Public Agencies	Commercial Channels	Export	Total
1955	13,541	7,893	6,223	-	27,667
1956	194	45,588	24,784	6,477	77,043
1957	154	50,026	38,062	12,784	101,026
1958	203	18,533	28,319	33,571	80,626
1959	160	26,160	37,553	21,161	85,034
Jan-Mar	80	4,307	5,782	5,158	15,327
Apr-June	-	7,838	13,332	7,614	28,784
July-Sept	80	9,160	14,524	4,511	28,275
Oct-Dec	-	4,855	3,915	3,878	12,648
Cumulative Total 1955-1959	14,252	148,200	134,941	73,993	371,396

*Excludes amounts of outdated unshipped vaccine.

QUADRUPLE ANTIGEN VACCINE SHIPPED (in cc's)

Period	Public Agencies	Commercial Channels	Export	Total
<u>1959</u>				
Jan-Mar	(NOT SHIPPED)			
Apr-June	1,791	578,853	-	580,644
July-Sept	81,854	2,394,969	37,190	2,514,013
Oct-Dec	73,606	1,045,755	21,953	1,141,314
Total	157,251	4,019,577	59,143	4,235,971