CDC

POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 226 June 23, 1961

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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, 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.

SUMMARY

During the 24th week ending June 17 a total of 8 cases, 5 paralytic, was reported to the CDC, continuing the notably low incidence to date.

A further report of poliomyelitis in Atlanta, Georgia, is presented, with details of an intensive immunization campaign currently in progress.

A special report of an outbreak of obscure illness which suggests an enterovirus infection is also presented.

A current summary of enterovirus isolations reported to the Poliomyelitis Surveillance Unit is included.

A narrative report of an oral poliovaccine program in western Maryland is also presented.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 8 cases, 5 paralytic, was compiled from State telegraphic reports during the 24th week ending June 17. This continues the low seasonal incidence depicted in Figure 1. The contrastingly high weekly figures of past years emphasize the unusually low current case reporting.

Cumulative weekly reporting to date is presented below with comparable past figures. Both total and paralytic case reporting in 1961 remain well below those of recent years.

POLIO (CUMULATED WEEKLY) THROUGH THE 24th WEEK FOR PAST FIVE YEARS

	1961	1960	1959	1958	1957
Paralytic	131	284	519	262	535
Total	202	387	736	512	1137

During the 24th week no State reported more than one case. As shown in Table 1, single case reports were received from New York, Pennsylvania, Ohio, Georgia, Kentucky, Tennessee, Texas, and California.

2. REPORTS

A. Georgia

Notification of 2 further nonparalytic cases in Atlanta, Georgia, has been received. (See PSU Report No. 225) These are preliminary reports and are not yet reflected in the Georgia figures included in Table 1. This brings the Atlanta total to 8 cases, 4 paralytic. The 2 most recent nonparalytic cases are presented below.

Age	Race	Sex	Onset	Vaccination History
3	N	M	6-13	OV
11	N	M	6-14	3V

Specimens submitted on these cases are being studied.

An intensive immunization program is currently being carried out by the Georgia State Health Department and Health Departments of Fulton, DeKalb, Cobb, Gwinnett, and Clayton Counties, in collaboration with the Fulton County Medical Society. Type III oral poliovaccine has been furnished the State Health Department by Dr. A.B. Sabin, and a community-wide campaign to saturate all age groups 15 and under (estimated population 327,000) is in progress. The oral vaccine program began on June 22, and community response has been excellent. At the time this report is at press over 100,000 doses have been fed. In addition, numerous clinics utilizing killed virus vaccine have been widely attended.

B. Washington

An outbreak of obscure illness in rural Lind, Washington, is being investigated by Dr. Ernest A. Ager, Acting Head, Section of Communicable Disease Control, Washington State Department of Health. Because of clinical similarities to poliomyelitis and aseptic meningitis, a preliminary report of the outbreak is presented below.

"An outbreak of febrile illness occurring in and near Lind, Washington is under study. At least twenty cases have been reported and sixteen are being studied by the attending pnysician and this department cooperatively. Whether or not all cases are etiologically related is not known, but there is sufficient similarity between most of them that a constellation of signs and symptoms may be described.

"Onset of the illness in the 16 cases studied was between May 22 and June 10. A number of cases may have occurred since June 10, but have not been verified. Age range was from 8 months to 45 years. Five families are involved, with secondary attack rates ranging from 0/3 to 4/5. Meager information suggests an incubation period of 6 to 8 days.

"Sex attack ratios among the five families are 11 of 16 males and 5 of 14 females. Epidemiologic evidence obtained thus far does not suggest common vehicle transmission or association with occupation. Predominent symptoms include fever to 104° F orally, headache, dizziness, anorexia and myalgia usually involving leg and lower intercostal muscles. A tabulation of signs and symptoms found in the 16 cases is shown below.

Signs of Symptoms	Number
Fever (101 to 104° F.)	16
Headache (usually frontal)	12
Vertigo	11
Anorexia	12
Intercostal pain (diaphragmatic level)	7
Extremity pain	5
Abdominal pain	3
Pharyngitis	2
Cough	1

"In three of four patients the white blood count was low-normal, with a relative lymphocytosis. The fourth exhibited 13,750 wbc. with a normal differential count. Lumbar puncture done on one patient (age 8 mo.) revealed no abnormality. Sedimentation rates done on two patients were elevated.

"The clinical course has ranged from one or two days to more than two weeks. The illness in several cases was severe and has required hospitalization of two persons.

"The abrupt onset, severity and variety of symptoms can easily suggest pneumonia, acute surgical abdominal conditions as well as poliomyelitis and aseptic meningitis. Washington physicians are alerted to the possibility that this outbreak may extend into other parts of the state.

"Laboratory work currently under way includes examination of stool specimens for enteric viruses and enteric pathogenic bacteria, and examination of blood sera for antibodies."

3. 1961 POLIOMYELITIS CASES REPORTED TO PSU

Through June 19, there have been 110 cases of poliomyelitis with onset in 1961 submitted to the Poliomyelitis Surveillance Unit on individual case forms. Of these 110 cases, 92 (84 percent) are paralytic.

Nineteen poliovirus isolates have been obtained thus far from the 110 cases reported. Of these, ten are type III and nine are type I polioviruses. These isolates are listed by geographical location and month of onset of the respective cases.

Type I Isolations	Type III Isolations
Bunnock County, Idaho (Jan.)	Portland, Oregon (Jan.)
Gary, Indiana (Jan.)	Beaver Springs, Pa. (Jan.)
Chillicothe, Ohio (Jan.)	Salt Lake City, Utah (Jan.)
Phoenix, Oregon (Jan.)	Boise, Idaho (March)
Honolulu, Hawaii (Feb.)	Lake Stevens, Washington (March)
Coytesville, New Jersey (March)	Duluth, Minnesota (April)
New Orleans, La. (April)	Yakima County, Washington (April)
Sherburne County, Minn. (April)	Seattle, Washington (April)
Honolulu, Hawaii (April)	Olympia, Washington (April)
	Atlanta, Georgia (May)

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1961

A. Cases with Onset within 30 Days of Vaccination

The second under 30-day case with onset in 1961 has been reported to the Poliomyelitis Surveillance Unit during the past week. This 5 year old male case from Meade County, Kentucky, is a delayed report having onset on January 5, 1961 following inoculation on December 13, 1960. Additional information is being sought on this case concerning manufacturer and lot number of the vaccine.

B. Vaccine Distribution

The summary of current and cumulative shipments of poliomyelitis and multiple antigen vaccines is presented in Table II. Included also is a tabular summary of the amounts of vaccine unshipped at the end of each month since January, 1960. (These amounts unshipped exclude outdated vaccine removed from inventory). As can be seen, the inventory of unshipped vaccine has been decreasing since the end of last year's poliomyelitis season and is well below the inventory at this time last year.

5. ENTEROVIRUS SURVEILLANCE

A total of 63 enterovirus isolations including 19 type I and 8 type III polioviruses has been reported to the Poliomyelitis Surveillance Unit on 1961 specimens. Washington has accounted for 4 type III isolations, one each in Snohomish, Yakima, King, and Thurston Counties. Wisconsin has reported 4 ECHO isolations, 2 ECHO 10 and 1 ECHO 11 in LaCrosse, and 1 ECHO 4 in Milwaukee. Other States have reported scattered occurrences. A tabular summary of isolations is presented below.

The current concentration of cases in Atlanta, Georgia, has yielded one type III poliovirus as shown in the table, in addition to serologic evidence of type III infection in another case (See PSU Report No. 225).

Enterovirus Isolations on 1961 Specimens

State	Poliovirus I	Poliovirus II	Poliovirus III	ECHO**	Cox-*** sackie	Other and Unsp.	Total	Reported by
Florida	1	-	1	-	-	-	2	N. Schneider
Georgia	-	-	1	-	-	-	1	W. Murphy
Hawaii	2	-	-	-	1	2	5	K. Wilcox
Idaho	4*	-	1	-	-	-	5	A. Klotz
Illinois	1	-	-	-	-	-	1	A. Schaughnessy
Indiana	1	-	-	-	-	-	1	A. Marshall
Louisiana	1	-	-	-	-	-	1	J. Bruce
Maryland	-	-	-	2	1	2	5	C. Perry
Mass.	1	-	-	-	-	5	6	R. MacCready
Minn.	2	-	2	2	-	2	8	H. Bauer
Missouri	1	-	-	-	-	-	1	I. Adams
N. H.	-	-	-	-	1	-	1	R. Miliner
N. J.	1	-	-	-	-	-	1	M. Goldfield
N. C.	1	-	-	-	1	-	2	L. Maddry
Ohio	1	-	-	-	1	-	2	L. Ey
Oregon	1	-	1	-	-	1	3	G. Brandon & M. Skinner
Pa.	-	-	1	-	2	-	3	K. Hummeler
Texas	1	-	2	-	-	1	4	G. Irons
Utah	-	-	1	-	-	-	1	A. Jenkins
Washington	-	-	4	-	1	-	5	W. Giedt
Wisconsin	-	-	-	4	1	-	5	A. Evans
TOTAL	19	0	14	8	9	13	63	

* One family with one clinical case accounted for all isolates.

** Specific types include ECHO 1 and 14 in Minnesota, 2 ECHO 11 in Maryland and one in Wisconsin, 2 ECHO 10 and 1 ECHO 4 in Wisconsin.

*** Specific types include 2 Coxsackie B-5 in Pennsylvania and one each in Maryland, Ohio and Washington; 1 Coxsackie B-2 in New Hampshire; Coxsackie A-unspecified in Hawaii and North Carolina, and B-unspecified in Wisconsin.

6. ORAL POLIOVIRUS VACCINE PROGRAM

The following report of an oral poliovaccine program has been received from Dr. Charlotte Silverman, Acting Chief, Division of Epidemiology, Maryland State Department of Health.

"The Allegany-Garrett County Medical Society, in cooperation with Wyeth Laboratories, is sponsoring a mass immunization program with attenuated live poliovirus vaccine in Allegany County.

"Type I poliovirus vaccine, manufactured by Wyeth Laboratories, was administered during a three-day period from June 1 through June 3. All residents, particularly those between the ages of three months to 45 years, were urged to participate, and the invitation was extended to others residing in Garrett County and nearby areas of West Virginia and Pennsylvania. It is anticipated that over 70,000 people may receive type I vaccine during this three-day period. (The population of Allegany County is 84,000.) School children were fed the vaccine at their schools on June 1; adults and preschool children received the vaccine on June 2 and 3 at 17 dispensing centers conveniently located throughout Allegany County.

"Type III oral poliovirus vaccine will be administered in October, 1961 and Type II approximately four to six weeks later.

"This field trial, preparatory to licensure by the National Institutes of Health, is being made to obtain data on the antigenicity of the vaccine. It is planned that paired blood samples and rectal swabs will be obtained from several hundred children, with the consent of their parents.

"Since only Type I poliovirus will have been given prior to the coming 'polio season,' continued immunization with Salk vaccine has been urged."

(This surveillance report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Michael J. Regan, M. D. and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)

Figure 1

CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1955-1960; APRIL-AUGUST, BY WEEK

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS AND COMMUNICABLE DISEASE CENTER

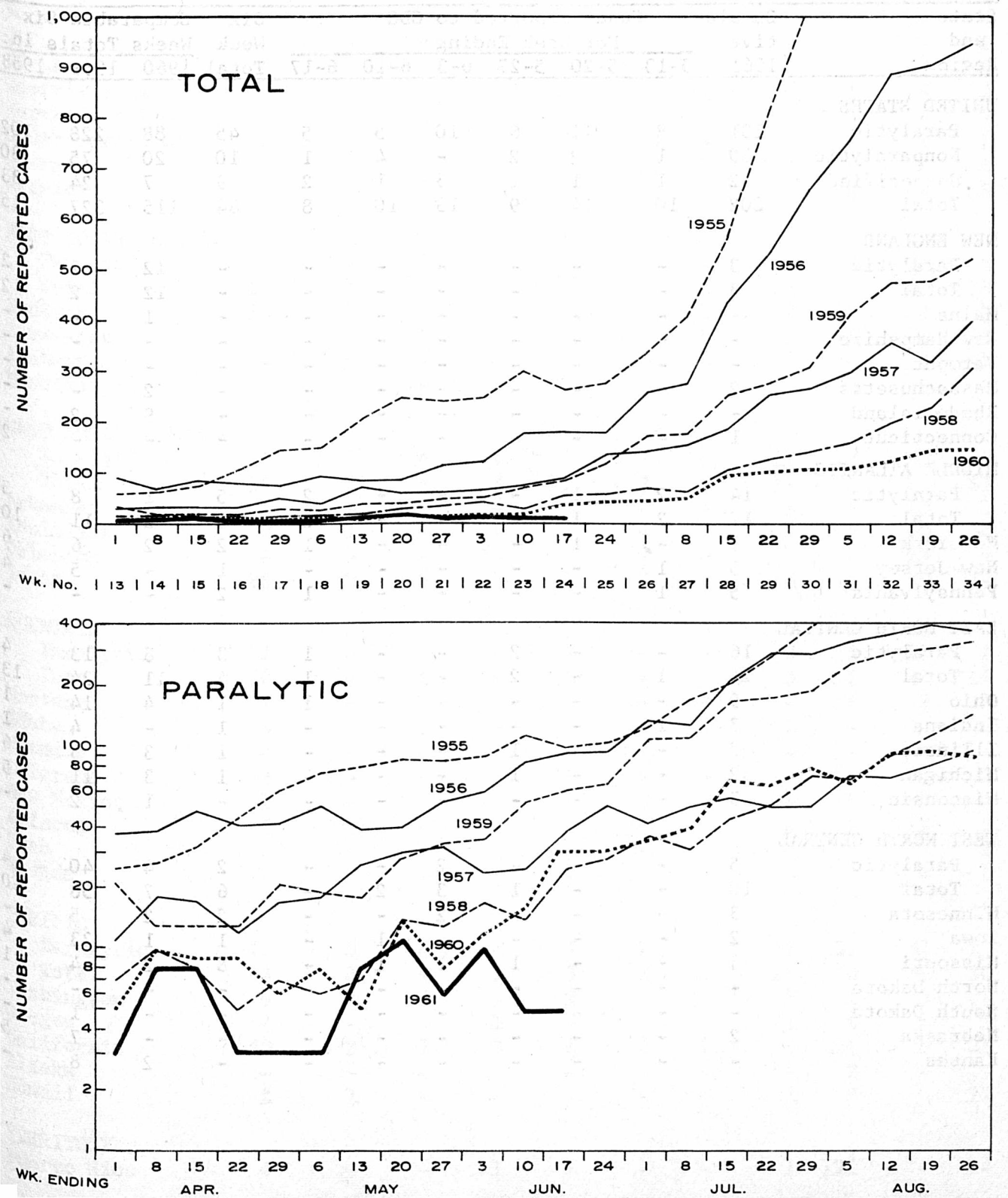

Table 1

TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending 5-13	5-20	5-27	6-3	6-10	6-17	Six Week Total	Comparable Six Weeks Totals in: 1960	1959	1958
UNITED STATES											
Paralytic	131	8	11	6	10	5	5	45	88	228	102
Nonparalytic	39	1	2	2	-	4	1	10	20	75	80
Unspecified	32	1	1	1	3	1	2	9	7	24	33
Total	202	10	14	9	13	10	8	64	115	327	215
NEW ENGLAND											
Paralytic	3	-	-	-	-	-	-	-	12	2	2
Total	3	-	-	-	-	-	-	-	12	2	2
Maine	-	-	-	-	-	-	-	-	1	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	2	-	-	-	-	-	-	-	2	-	-
Rhode Island	-	-	-	-	-	-	-	-	9	2	-
Connecticut	1	-	-	-	-	-	-	-	-	-	2
MIDDLE ATLANTIC											
Paralytic	14	2	1	-	-	-	2	5	1	8	5
Total	17	2	1	-	-	-	2	5	2	11	10
New York	7	-	1	-	-	-	1	2	2	6	6
New Jersey	5	1	-	-	-	-	-	1	-	5	4
Pennsylvania	5	1	-	-	-	-	1	2	-	-	-
EAST NORTH CENTRAL											
Paralytic	16	-	-	2	-	-	1	3	8	13	4
Total	24	1	-	2	-	-	1	4	11	34	13
Ohio	9	-	-	-	-	-	1	1	4	14	1
Indiana	3	1	-	-	-	-	-	1	-	4	1
Illinois	7	-	-	1	-	-	-	1	3	3	6
Michigan	2	-	-	1	-	-	-	1	3	11	5
Wisconsin	3	-	-	-	-	-	-	-	1	2	-
WEST NORTH CENTRAL											
Paralytic	5	-	-	-	2	-	-	2	4	40	4
Total	10	-	-	1	3	2	-	6	7	58	10
Minnesota	3	-	-	-	2	-	-	2	2	5	-
Iowa	2	-	-	-	-	1	-	1	1	33	4
Missouri	3	-	-	1	1	1	-	3	2	4	1
North Dakota	-	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	1	-
Nebraska	2	-	-	-	-	-	-	-	-	7	5
Kansas	-	-	-	-	-	-	-	-	2	8	-

Table 1 (Continued)

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending 5-13	5-20	5-27	6-3	6-10	6-17	Six Week Total	Comaprable Six Weeks Totals in 1960	1959	1958
SOUTH ATLANTIC											
Paralytic	16	-	1	-	2	3	1	7	8	44	19
Total	20	-	1	-	2	3	1	7	11	53	46
Delaware	2	-	-	-	-	-	-	-	-	-	1
Maryland	-	-	-	-	-	-	-	-	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-	1
Virginia	-	-	-	-	-	-	-	-	-	10	4
WestVirginia	3	-	-	-	-	1	-	1	1	5	4
North Carolina	4	-	1	-	-	-	-	1	2	8	7
South Carolina	2	-	-	-	-	1	-	1	4	1	1
Georgia	6	-	-	-	2	1	1	4	-	5	2
Florida	3	-	-	-	-	-	-	-	4	24	26
EAST SOUTH CENTRAL											
Paralytic	6	-	1	-	2	-	-	3	3	20	5
Total	20	1	1	-	2	-	2	6	5	28	19
Kentucky	15	1	-	-	-	-	1	2	2	4	3
Tennessee	2	-	1	-	-	-	1	2	1	9	6
Alabama	-	-	-	-	-	-	-	-	-	7	1
Mississippi	3	-	-	-	2	-	-	2	2	8	9
WEST SOUTH CENTRAL											
Paralytic	19	3	4	2	1	-	1	11	12	58	30
Total	34	3	6	3	1	3	1	17	20	85	63
Arkansas	1	-	-	-	-	-	-	-	-	13	3
Louisiana	7	1	-	1	-	-	-	2	9	10	4
Oklahoma	-	-	-	-	-	-	-	-	-	13	7
Texas	26	2	6	2	1	3	1	15	11	49	49
MOUNTAIN											
Paralytic	12	-	-	-	2	-	-	2	3	12	4
Total	20	-	1	-	2	-	-	3	7	18	14
Montana	1	-	-	-	-	-	-	-	5	2	2
Idaho	4	-	1	-	-	-	-	1	-	1	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-
Colorado	3	-	-	-	-	-	-	-	-	-	2
New Mexico	1	-	-	-	-	-	-	-	1	3	-
Arizona	5	-	-	-	2	-	-	2	1	12	7
Utah	6	-	-	-	-	-	-	-	-	-	2
Nevada	-	-	-	-	-	-	-	-	-	-	1
PACIFIC											
Paralytic	40	3	4	2	1	2	-	12	37	31	29
Total	54	3	4	3	3	2	1	16	40	38	38
Washington	8	-	3	-	2	-	-	5	1	3	-
Oregon	4	-	-	1	-	-	-	1	4	6	1
California	40	2	1	2	1	2	1	9	31	29	25
Alaska	-	-	-	-	-	-	-	-	2	-	-
Hawaii	2	1	-	-	-	-	-	1	2	-	12
TERRITORY											
Puerto Rico	4	-	-	1	-	-	-	1	121	-	14

Table II

THE NATIONAL FOUNDATION

MONTHLY REPORT OF POLIOMYELITIS VACCINE RELEASED AND SHIPPED*
(1,000 cc's)

May, 1961

	SINGLE ANTIGEN		MULTIPLE ANTIGEN		TOTAL	
	This Month	To Date	This Month	To Date	This Month	To Date
CC. Released	1,530	482,371	387	15,478	1,917	497,849
CC. Shipped:						
National Foundation	1	15,247	-	-	1	15,247
Public Agencies	1,725	172,218	52	1,132	1,777	173,350
Commercial Channels	2,459	172,350	610	13,222	3,069	185,572
Domestic Total	4,185	359,815	662	14,354	4,847	374,169
Export	1,830	106,101	25	600	1,855	106,701

* Includes manufacturer's adjustments of previously reported figures.

CC. UNSHIPPED, END OF MONTH*
(1,000 cc's)

	1960	1961
January	19,459	14,755
February	20,965	15,737
March	27,062	13,414
April	27,216	10,887
May	24,846	6,448
June	24,620	
July	23,830	
August	24,525	
September	23,091	
October	19,565	
November	16,319	
December	15,669	

* Excludes outdated vaccine removed from inventory.