

COMMUNICABLE DISEASE CENTER

POLIOMYELITIS

SURVEILLANCE

TABLE OF CONTENTS

SUMMARY

I. CURRENT POLIOMYELITIS MORBIDITY TRENDS

II. ROUTINE SURVEILLANCE - 1964

III. 1963 PARALYTIC POLIOMYELITIS REPORTED TO PSU - FINAL REPORT

IV. INDEX TO 1963 PSU REPORTS

SUPPLEMENT: 1963 U.S. IMMUNIZATION SURVEY RESULTS

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:
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SUMMARY

Nineteen cases of poliomyelitis, 13 paralytic, have been reported through the 15th week of 1964. This represents less than half the number of cases reported during the corresponding period in 1963.

The Poliomyelitis Surveillance Unit has received PSU forms for 9 of the 13 paralytic cases reported; 3 of the 9 followed the administration of oral vaccine. This data is presented in section II.

In 1963, 60 day follow-up reports were received on 96 percent of the preliminary PSU forms. For 1963 the "best available paralytic case count" was 328 paralytic cases as described in Section III. More than 60 percent of the 328 paralytic cases were unvaccinated (IPV) and less than 10 percent had received 4 doses of inactivated polio vaccine. There were 192 isolations of poliovirus from paralytic cases in 1963 with Type I poliovirus accounting for 83 percent of the total.

An index to the 1963 PSU Reports is presented in Section IV.

The supplement to this report contains the results of the 1963 national immunization survey conducted by the Bureau of the Census in cooperation with the Communicable Disease Center. These results include data regarding immunization status of the population for inactivated and oral polio vaccine, D-P-T, smallpox and influenza vaccines.

I. CURRENT POLIOMYELITIS MORBIDITY TRENDS

Nineteen cases of poliomyelitis, 13 paralytic, have been reported through the week ending April 11, 1964. This total represents less than half the number of cases reported during the corresponding period in 1963 as shown below.

Poliomyelitis (Cumulated Weekly) Through 15th Week For Five Years

	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>	<u>1960</u>
Paralytic	13	38	55	78	173
Total	19	43	83	123	239

II. ROUTINE POLIOMYELITIS SURVEILLANCE - 1964

SUMMARY

The Poliomyelitis Surveillance Unit has received individual surveillance case records on 9 of the 13 paralytic cases reported thus far in 1964. Three of these 9 cases occurred within 30 days following the administration of oral polio vaccine and are listed below.

Follow-up reports, 60 days after onset of illness on these 3 cases, show that two had complete recovery with no residual paralysis. The third case, a 42 year old white male from Alamance County, North Carolina, was reported to the Poliomyelitis Surveillance Unit as having received trivalent vaccine on March 1. Onset of bulbo-spinal poliomyelitis was March 18 and death occurred April 8. Laboratory specimens have been submitted to the CDC laboratory for viral and serological tests.

State	County	Age	Sex	Onset	Date Fed	Intv. (Days)	Type Fed	Virus Isol.	Doses IPV	Clinical Status at 60 Days
Colorado	Pueblo	5 mo.	F	2-4	1-12	23	III	III	0	Recovery
Florida	*	25	M	1-31	1-19	12	III	III	Unk.	Complete Recovery
N.C.	Alamance	42	M	3-18	3-1	17	Trivalent	---	0	Death

* Reported from Florida State Health Department as a Florida Case. Case received vaccine in Duval County, Florida but resides in Kingsland, Georgia.

Nineteen cases of poliomyelitis, 13 paralytic, have been reported through the week ending April 11, 1964. This total represents less than half the number of cases reported during the corresponding period in 1963 as shown below.

Poliomyelitis (Cumulated Weekly) Through 12th Week For Five Years					
	1960	1961	1962	1963	1964
Epidemiology Branch	173	78	55	38	13
Statistics Section	239	123	83	43	19
Poliomyelitis Surveillance Unit					John J. Witte, M.D., Chief Pierce Gordon, M.D.

III. 1963 POLIOMYELITIS REPORTED TO PSU - FINAL REPORT

During 1963, the Poliomyelitis Surveillance Unit received individual surveillance case records on 433 cases of poliomyelitis. Follow-up reports, 60 days after onset of illness, were received on 416 of these cases (96.1%). Diligent efforts of State and local health officials and epidemiologists have made this excellent percentage of follow-up reports possible.

The individual surveillance case records, consisting of a preliminary and 60-day follow-up report, have been submitted to the Poliomyelitis Surveillance Unit since 1958. Follow-up reports have been received on over 90 percent of preliminary forms for the past 4 years as shown below:

Year	No. States Participating	Total Poliomyelitis Cases Reported To MMWR	Poliomyelitis Surveillance Unit Case Records		
			Preliminary	60-Day Follow-ups	% 60-Day Follow-ups
1958	49	5,787	6,125	4,919	80.3
1959	50	8,425	8,635	7,523	87.1
1960	51	3,190	3,304	3,095	93.7
1961	51	1,312	1,356	1,284	94.7
1962	51	910	909	886	97.5
1963	51	431 (preliminary)	433	416	96.1

Since 1958, the best continuing index of paralytic disease due to poliomyelitis has been those cases with residual paralysis at 60 days and the paralytic cases with no 60-day follow-up report (Poliomyelitis Surveillance Unit, Surveillance of Poliomyelitis in the United States, 1958-61. Pub. Health Rep. December 1962, Vol. 77, No. 12; p. 1011). The total thus obtained represents the "best available paralytic poliomyelitis count."

The preliminary and 60-day follow-up classification for the 433 cases are compared in table IIIA. The "Best Available Paralytic Poliomyelitis Count" for 1963 is 328, representing 312 paralytic cases with residual paralysis plus 16 cases with a preliminary diagnosis of paralytic poliomyelitis without a follow-up report.

Table IIIA

Poliomyelitis Cases by Preliminary Diagnosis and
Final Classification, United States, 1963

<u>Final Classification</u>	<u>Preliminary Diagnosis</u>			<u>Total</u>
	<u>Paralytic</u>	<u>Non-Paralytic</u>	<u>Unspecified</u>	
Paralytic polio with residual paralysis	306	1	5	312
Paralytic polio - no residual paralysis	40	3	0	43
Nonparalytic polio	0	44	0	44
Aseptic Meningitis	1	9	0	10
Other Diagnosis	3	4	0	7
No Follow-up Report	16	1	0	17
TOTAL	366	62	5	433

The final case count of 328 paralytic poliomyelitis cases is presented in Table IIIB by age group and inactivated poliomyelitis vaccine history. More than 60 percent of the 328 cases had not received inactivated vaccine, and less than 10 percent had received four or more doses of inactivated vaccine.

Fifty percent of the cases occurred in pre-school age children and over 80 percent of the cases were under 20 years of age. Over 70 percent of the preschool cases had never received any inactivated vaccine and only 4 percent were adequately vaccinated.

Of the 50 adult cases, (age 20 or over), only 8 percent had received 4 or more doses of inactivated polio vaccine and 71 percent were unvaccinated.

There were 21 deaths attributed to paralytic poliomyelitis in 1963 resulting in a case fatality rate of 6.4 percent. Fifteen of the deaths were in persons less than 20 years of age yielding a case fatality rate of 5.4 percent and the remaining 6 deaths occurred in adults yielding a case fatality rate of 12.0 percent.

Table IIIB

Paralytic Poliomyelitis Cases by Age Group, and
Inactivated Vaccination History Reported in
the United States - 1963

Age Group	Doses of Inactivated Vaccine						Total	Percent	Deaths
	0V	1V	2V	3V	4+V	Unk.			
0-4	114	13	11	13	7	7	165	50.3	8
5-9	25	6	4	10	13	2	60	18.3	4
10-14	22	1	1	9	5	0	38	11.6	3
15-19	5	3	3	2	1	1	15	4.6	0
20-29	17	0	0	5	1	1	24	7.3	2
30-39	10	2	1	2	2	1	18	5.5	4
40+	7	0	0	0	1	0	8	2.4	0
TOTAL	200	25	20	41	30	12	328	100.0	21
PERCENT Doses	63.3	7.9	6.3	13.0	9.5	-	100.0		

During 1963, 50 of the 328 cases of paralytic poliomyelitis had received oral polio vaccine (OPV) prior to illness. Of the 50 cases, 36 cases received OPV within 30 days prior to onset of symptoms. These 36 cases will be the subject of a special report in the next Poliomyelitis Surveillance Report.

The 14 cases receiving OPV greater than 30 days prior to onset of symptoms are listed in Table IIIC. Four of the 14 cases had received all 3 monovalent types of oral polio vaccine and one received 2 doses of trivalent oral polio vaccine. Seven of the remaining 9 cases received two doses of monovalent oral polio vaccine.

Table IIIC
Paralytic Poliomyelitis Occurring
In Persons Who Had Received OPV
1963 (Excluding <30 Day Cases)

State	Age	Sex	Onset (1963)	IPV Status	OPV (Month & Year Received)				Virus Isol.	Serology*(CF-reciprocal)				Residual Paralysis***
					I	II	III	Tri- valent		Date	I	II	III	
Calif.	27	M	5-30	0	10-62	-	-	-	Neg.	-	-	-	-	4
Calif.	7	M	7-2	Unk.	10-62	-	2-63	-	-	-	-	-	-	5
Fla.	1	F	1-24	0	-	-	-	2-62 4-62	I	Unk.	<4	<4	<4	3
										Unk.	<4	<4	<4	
Minn.	35	M	Jan.	2	6-62	10-62	7-62	-	Neg.	-	-	-	-	2
Nebr.	54	M	6-18	0	7-62	12-62	8-62	-	-	Unk.	64**	256**	-	2
										Unk.	256	256	-	
Ohio	11	M	3-20	3	9-62	-	5-62	-	-	-	-	-	-	2
Ohio	17	M	6-15	0	11-62	12-62	4-62	-	Neg.	-	-	-	-	3
Oregon	8	M	4-23	3	6-62	9-62	7-62	-	Neg.	4-23	16	-	256	2
										5-13	16	-	1024	
Texas	3	M	6-28	0	9-62	-	3-62	-	Neg.	-	-	-	-	4
Texas	4	M	8-11	3	9-62	10-62	-	-	III	8-16	-	-	32	2
										9-9	-	-	32	
Texas	9	M	11-6	0	9-62	-	-	-	-	11-16	8	Neg.	32	3
										11-30	16	Neg.	32	
W. Va.	2	M	8-8	Unk.	5-63	6-63	-	-	Neg.	-	-	-	-	2
W. Va.	12	M	9-2	4	5-63	6-63	-	-	Neg.	9-6	Neg.	Neg.	Neg.	2
										10-7	Neg.	Neg.	Neg.	
W. Va.	6	M	8-20	3	4-63	6-63	-	-	Neg.	8-27	Neg.	Neg.	Neg.	2
										11-5	Neg.	Neg.	Neg.	

* -: No result received

Neg: Lab report did not state titer; only that serological test was negative

** Neutral. Test

*** 2 - Minor involvement

3 - Significant disability

4 - Severely disabled

5 - Death

Table III

Specimens for virologic study were obtained from 235 (72%) of the 328 cases of paralytic poliomyelitis reported in 1963. Poliovirus isolates were obtained from 192 of these cases, of which 83 percent were Type I. The poliovirus isolations are shown by State in the following table on page 8. Five states accounted for 117 (74 percent) of the Type I poliovirus isolations in 1963. These States were Alabama, Florida, Michigan, Pennsylvania and Virginia.

State	Number of Isolates	Percentage of Total Isolates
Alabama	43	22.4
Arizona	3	1.6
Arkansas	1	0.5
California	11	5.7
Colorado	1	0.5
Connecticut	1	0.5
Delaware	1	0.5
Dist. of Col.	1	0.5
Florida	37	19.3
Georgia	21	10.9
Idaho	1	0.5
Illinois	12	6.2
Indiana	2	1.0
Louisiana	3	1.5
Maine	1	0.5
Massachusetts	3	1.5
Michigan	14	7.3
Minnesota	3	1.5
Mississippi	14	7.3
Missouri	1	0.5
Nebraska	1	0.5
New Jersey	3	1.5
New Mexico	1	0.5
New York	5	2.6
North Carolina	1	0.5
Ohio	3	1.5
Oregon	1	0.5
Pennsylvania	74	38.5
South Carolina	3	1.5
South Dakota	1	0.5
Tennessee	12	6.2
Texas	7	3.6
Vermont	1	0.5
Virginia	10	5.2
Washington	2	1.0
West Virginia	7	3.6
Wisconsin	9	4.7
TOTAL	235	100.0
PERCENT		83.1

* States with no paralytic cases are not shown.

Table IIID

Specimens for virus isolation from 328 (72%) of the 328 cases of paralytic poliomyelitis reported in 1963. Isolates were obtained from 192 of these cases, of which 88 percent were type I. The poliovirus isolation shown by state in the following table on page 8. Five states (Alabama, Florida, Georgia, Idaho, and Tennessee) were not included in the table because they had no isolations.

State	Total Para. Cases	Total Lab Studied	Percent Studied	Isolations		
				I	II	III
Alabama	43	22	51.2	20	-	-
Arizona	3	3	100.0	3	-	-
Arkansas	1	1	100.0	1	-	-
California	11	7	63.6	2	-	3
Colorado	1	1	100.0	-	-	-
Connecticut	1	0	-	-	-	-
Delaware	1	1	100.0	-	-	-
Dist. of Col.	1	1	100.0	-	-	1
Florida	33	27	81.8	22	-	2
Georgia	21	13	61.9	8	-	3
Idaho	1	1	100.0	1	-	-
Illinois	12	6	50.0	6	-	-
Indiana	4	2	50.0	1	-	-
Louisiana	3	3	100.0	2	-	1
Maine	1	0	-	-	-	-
Massachusetts	3	3	100.0	1	-	2
Michigan	15	14	93.3	12	-	2
Minnesota	3	3	100.0	-	-	1
Mississippi	14	2	14.3	1	-	1
Missouri	1	1	100.0	-	-	1
Nebraska	1	0	-	-	-	-
New Jersey	3	3	100.0	1	-	-
New Mexico	1	1	100.0	1	-	-
New York	6	5	83.3	1	1	-
North Carolina	1	1	100.0	-	-	-
Ohio	4	3	75.0	-	-	2
Oregon	1	1	100.0	-	-	-
Pennsylvania	74	62	83.8	53	1	-
South Carolina	8	6	75.0	-	1	3
South Dakota	1	0	-	-	-	-
Tennessee	12	10	83.3	5	-	1
Texas	7	5	71.4	2	-	2
Vermont	1	1	100.0	-	-	1
Virginia	16	10	62.5	10	-	-
Washington	2	2	100.0	1	1	-
West Virginia	8	7	87.5	-	1	2
Wisconsin	9	7	77.8	5	-	-
TOTAL	328	235	71.6	159	5	28

PERCENT 82.8 2.6 14.6

* States with no paralytic cases are not shown.

IV. INDEX TO 1963 PSU REPORTS (NOS. 274-282)

Contents	PSU Report Number
1. <u>CURRENT POLIOMYELITIS MORBIDITY TRENDS</u>	274-282
A. <u>Reports From States</u>	
Alabama	278-281
California	275
Florida	282
Georgia	281
Kentucky	275
Michigan	280-281
Pennsylvania	278, 280
Vermont	280
Virginia	280-282
B. <u>Foreign Reports</u>	
Barbados	278
British Guiana	274-276
Canada	280
Marshall Islands	275-276
West Germany	277
2. <u>ORAL POLIOVIRUS VACCINATION PROGRAMS</u>	276-278, 281
3. <u>POLIOMYELITIS CASES REPORTED TO PSU</u>	
A. <u>1962</u>	
Cases by Age and Vaccination Status	274-276
Final Report by Age and Vaccination	277
History; Fatalities; Type of Paralytic Involvement; Virus Isolations.	
B. <u>1963</u>	
Paralytic Cases by Age and Vaccination Status	279, 281, 282
4. <u>ROUTINE POLIOMYELITIS SURVEILLANCE</u>	
A. <u>Cases with Onset Within 30-Days of Vaccination (Inactivated)</u>	
1962 Cases Reported	274-276
1962 Cases Reported-Final Report	277
1963 Cases Reported	278-282
B. <u>Cases with Onset Within 30-Days of Vaccination (Oral)</u>	
1962 Cases Reported	274-276
1962 Cases Reported-Final Report	277
1963 Cases Reported	278-282
C. <u>Polio Within 60-Days Among Household Contact of Oral Vaccinees</u>	275

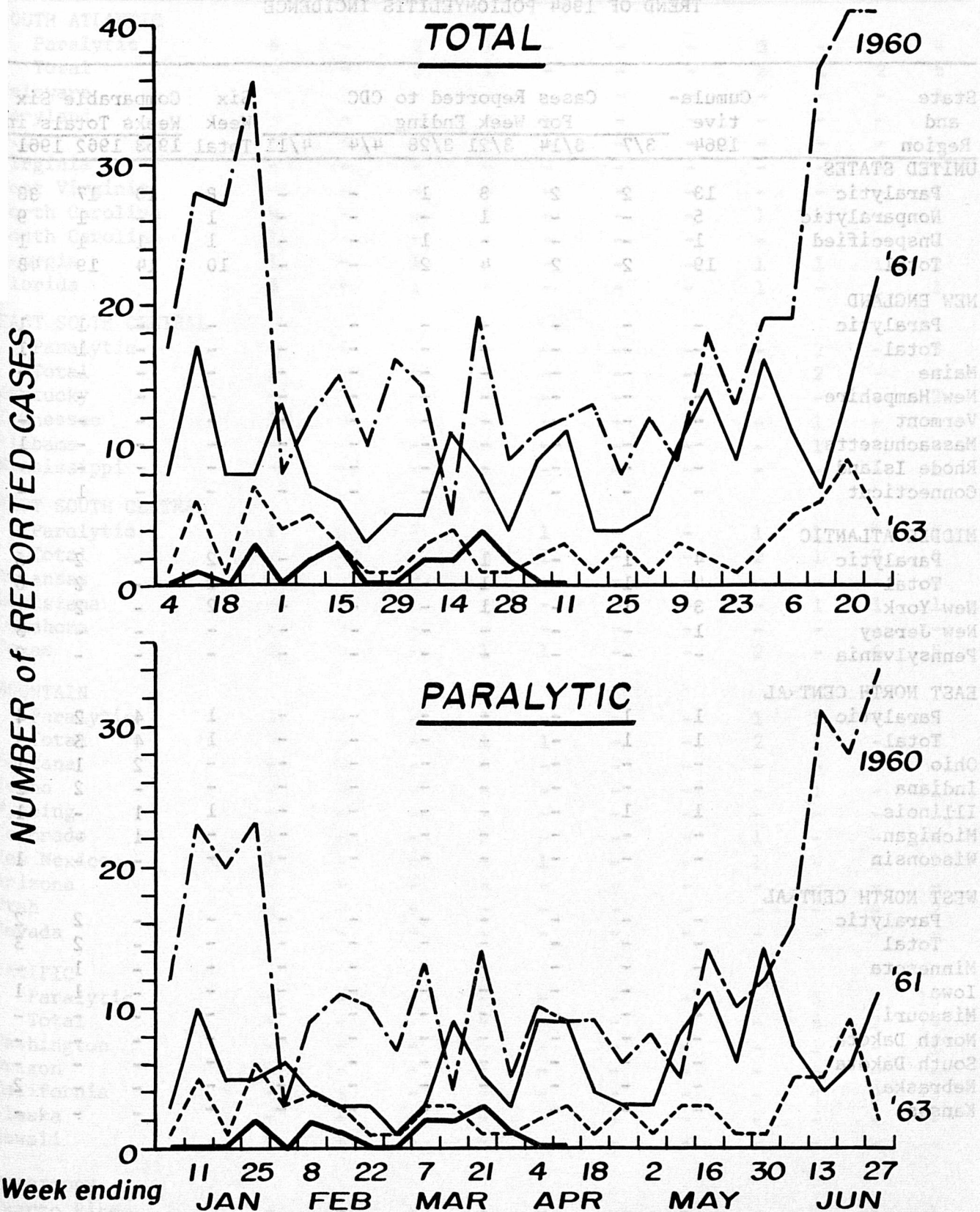
INDEX TO 1963 PSU REPORTS (CONTINUED)

VI

Contents	PSU Report Number
5. <u>POLIOVIRUS ISOLATIONS REPORTED TO PSU</u>	
1962 Poliovirus Isolates by State	274-277
1963 Poliovirus Isolates by State	279, 282
6. <u>NON-POLIOVIRUS ISOLATIONS REPORTED TO PSU</u>	
1962 Enterovirus Isolations by State	274, 275
1963 Enterovirus Isolations by State	280-282
7. <u>MISCELLANEOUS</u>	
Statement on the Use of OPV by the American Academy of Pediatrics	274
U.S. Poliomyelitis Vaccination Survey Results	275
8. <u>SUPPLEMENTS</u>	
Index to 1962 PSU Reports	274
U.S. Immunization Survey Results	276
9. <u>FIGURES</u>	
Current U.S. Polio Incidence	274-282
10. <u>TABLES</u>	
Trends of 1962 Poliomyelitis Incidence	274
Trends of 1963 Poliomyelitis Incidence	275-282
Inactivated Poliomyelitis Vaccination	275
Status of the Civilian Non-Institutional Population Under 50 Years by Age: U.S., September, 1962	275
Increase in the Proportion of the Civilian Non-Institutional Population by Age Participating in the Poliomyelitis Vaccination Program: U.S. September, 1961 to September, 1962	275
Civilian Non-Institutional Population Under 50 Years by Age with Specified Number of Oral Poliomyelitis Vaccine Doses, U.S., September, 1962	275

CURRENT U.S. POLIO INCIDENCE

Compared with selected years



TREND OF 1964 POLIOMYELITIS INCIDENCE

Table 1 (Continued)

[illegible]

Key to all disease surveillance activities are those in each State who serve the function as State epidemiologists. Responsible for the collection, interpretation and transmission of data and epidemiological information from their individual States, the State epidemiologists perform a most vital role. Their major contributions to the evolution of this report are gratefully acknowledged.

STATE	NAME
Alabama	Dr. W. H. Y. Smith
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D. C.	Dr. William E. Long
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Virginia	Dr. James B. Kenley
Washington	Dr. E. A. Ager
West Virginia	Dr. L. A. Dickerson
Wisconsin	Dr. Josef Preizler
Wyoming	Dr. Helen A. Moore

The immunization status of the population of the United States has been studied annually for the past several years. As a part of a supplemental schedule included each September in the annual immunization survey conducted by the United States Bureau of the Census, the survey includes the non-immunization status of the population of the United States, and the sample is spread over all areas, including the various large cities, with coverage of areas by the Bureau of the Census, District of Columbia. The data collected are reported separately by the Communicable Disease Center and the Bureau of the Census.

SUPPLEMENT TO PSU #284

APRIL 20, 1964

RESULTS OF THE SEPTEMBER 1963 UNITED STATES IMMUNIZATION SURVEY

The estimated percentages of persons who received a certain number of doses of particular vaccines are shown in tables 1 through 4 and 5 of this supplement.

Oral Poliovaccine

Inactivated Poliovaccine

Diphtheria-Pertussis-Tetanus

Smallpox

Influenza

Tables of data for the immunization status of the population of the United States are presented in this supplement. The data are presented by age group, sex, race, and on the number of persons who received influenza vaccine within the past 12 months are presented in tables 1 through 5 as follows:

Section 1. General Data	United States by Age Group
Section 2. Age Group Data	By Age by Standard Metropolitan Statistical Area (Metropolitan)
Section 3. Sex Data	By Age and Sex for United States
Section 4. Race Data	By Age by Geographic Division

Prepared by Lee L. Thompson, Mary Lou G. Galla-Wayne and Judy Williams, Statistics Section, Epidemiology Branch, Communicable Disease Center.

The immunization status of the population of the United States has been studied annually for the past several years by means of a supplemental schedule included each September in the Current Population Survey conducted by the United States Bureau of the Census. The Survey includes the non-institutional civilian population of the United States, and the sample is spread over 357 areas comprising 701 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. The 1963 schedule was designed cooperatively by the Communicable Disease Center and the Bureau of the Census. The standard error of the estimated percentages of persons who received respective numbers of doses of particular vaccines are shown in Tables A and B at the end of this Supplement.

Section A. United States by Age Groups

Tables of data derived from the national survey on the immunization status of the population with respect to oral poliovaccine, inactivated poliovaccine, diphtheria-pertussis-tetanus immunizations, smallpox vaccination, and on the number of persons who obtained influenza vaccine within the past 12 months are presented in Sections as follows:

Section A.	Tables 1-5.	United States by Age Groups
Section B.	Tables 6-9.	By Age by Standard Metropolitan Statistical Area Classification
Section C.	Tables 10-15.	By Age and Race for United States
Section D.	Tables 16-18.	By Age by Geographic Divisions

Prepared by Ida L. Sherman, Sara Wingo, Julia Stone and Judy Williams, Statistics Section, Epidemiology Branch, Communicable Disease Center.

Table 1. Total Population by Age Group, 1940

Age Group	Population	Male	Female	Male %	Female %	Male %	Female %	Male %	Female %
0-4	1,374	696	678	50.7	49.3	50.7	49.3	50.7	49.3
5-9	1,184	601	583	50.8	49.2	50.8	49.2	50.8	49.2
10-14	1,291	640	651	49.6	50.4	49.6	50.4	49.6	50.4
15-19	1,178	589	589	50.0	50.0	50.0	50.0	50.0	50.0

Tables 1 - 5

Age Group	Population	Male	Female	Male %	Female %	Male %	Female %	Male %	Female %
20-24	1,074	546	528	50.8	49.2	50.8	49.2	50.8	49.2
25-29	1,079	546	533	50.7	49.3	50.7	49.3	50.7	49.3
30-34	1,077	546	531	50.7	49.3	50.7	49.3	50.7	49.3
35-39	1,037	528	509	50.9	49.1	50.9	49.1	50.9	49.1
40-44	961	481	480	50.0	50.0	50.0	50.0	50.0	50.0
45-49	861	428	433	49.8	50.2	49.8	50.2	49.8	50.2
50-54	761	381	380	50.1	49.9	50.1	49.9	50.1	49.9
55-59	661	328	333	49.8	50.2	49.8	50.2	49.8	50.2
60-64	561	281	280	50.1	49.9	50.1	49.9	50.1	49.9
65-69	461	231	230	50.1	49.9	50.1	49.9	50.1	49.9
70-74	361	181	180	50.1	49.9	50.1	49.9	50.1	49.9
75-79	261	131	130	50.2	49.8	50.2	49.8	50.2	49.8
80-84	161	81	80	50.3	49.7	50.3	49.7	50.3	49.7
85-89	61	31	30	50.8	49.2	50.8	49.2	50.8	49.2
90-94	11	6	5	54.5	45.5	54.5	45.5	54.5	45.5
95-99	1	1	0	100.0	0.0	100.0	0.0	100.0	0.0
Total	117,442	58,721	58,721	50.0	50.0	50.0	50.0	50.0	50.0

Section A. United States by Age Groups

Table 1. Oral Poliovaccine Status - United States, 1963
Ages Under 50 Years

Age	Population (thousands)	No. of Doses					Percent with specified doses		
		3	1-2	0	Unknown		3	1-2	0
					No.	Stat.			
< 1	4 113	with 1 or more: 810					with 1 or more: 19.7		
1	3 974	998	587	2 373	4	12	25.1	14.8	59.7
2	4 168	1 181	633	2 330	5	19	28.3	15.2	55.9
3	4 291	1 300	671	2 302	4	14	30.3	15.6	53.6
4	4 196	1 289	643	2 246	2	16	30.7	15.3	53.5
1-4	16 629	4 768	2 534	9 251	15	61	28.7	15.2	55.6
5-9	19 879	6 686	3 270	9 820	8	95	33.6	16.4	49.4
10-14	18 074	6 138	2 772	9 085	7	72	34.0	15.3	50.3
15-19	15 012	4 230	2 212	8 446	8	116	28.2	14.7	56.3
20-29	22 061	4 720	2 930	14 091	7	313	21.4	13.3	63.9
30-39	22 872	5 275	3 180	14 134	22	261	23.1	13.9	61.8
40-49	23 065	4 575	2 788	15 373	12	317	19.8	12.1	66.7
1-49	137 592	36 392	19 686	80 200	79	1235	26.4	14.3	58.3

Table 2. Inactivated Poliovaccine Status - United States, 1963
Ages Under 50 Years

Age	Population (thousands)	No. of Injections				Unknown		Percent		
		> 4	3	1-2	0	No.	Stat.	> 4	> 3	0
< 1	4 113	with 1 or more: 1734						with 1 or more: 42.2		
1	3 974	728	1 276	808	1 146	9	12	18.3	50.4	28.8
2	4 168	1 607	1 215	502	818	14	12	38.6	67.7	19.6
3	4 291	2 023	1 143	403	705	5	12	47.1	73.8	16.4
4	4 196	2 205	1 069	348	549	7	18	52.6	78.0	13.1
1-4	16 629	6 563	4 703	2 061	3 218	33	51	39.5	67.7	19.4
5-9	19 879	12 417	4 337	1 323	1 701	21	80	62.5	84.3	8.6
10-14	18 074	11 044	4 361	1 096	1 449	40	84	61.1	85.2	8.0
15-19	15 012	7 670	4 160	998	2 023	50	111	51.1	78.8	13.5
20-29	22 061	6 914	5 301	2 320	7 102	121	303	31.3	55.4	32.2
30-39	22 872	5 485	4 541	2 521	9 979	72	274	24.0	43.8	43.6
40-49	23 065	2 893	3 176	1 835	14 787	66	308	12.5	26.3	64.1
1-49	137 592	52 986	30 579	12 154	40 259	403	1211	38.5	60.7	29.3

Table 3. Diphtheria-Pertussis-Tetanus (DPT) Immunization Status - United States, 1963
Ages Under 15 Years

Age	Population (thousands)	No. of Injections								Percent		
								Unknown				
		> 4	3	1-2	0	No. Stat.		> 4	3	0		
< 1	4 113	with 1 or more: 2412						with 1 or more: 58.6				
1	3 974	731	1 927	625	624	58	9	18.4	48.5	15.7		
2	4 168	1 452	1 526	525	576	75	14	34.8	36.6	13.8		
3	4 291	1 812	1 396	463	512	89	19	42.2	32.5	11.9		
4	4 196	2 002	1 271	398	401	104	20	47.7	30.3	9.6		
1-4	16 629	5 997	6 120	2 011	2 113	326	62	36.1	36.8	12.7		
5-9	19 879	11 964	4 218	1 706	1 261	632	98	60.2	21.2	6.3		
10-14	18 074	11 149	3 442	1 136	1 295	887	164	61.7	19.0	7.2		

Table 4. Smallpox Vaccination Status - United States, 1963
All Ages

Age	Population (thousands)	Total Ever Vac.	Vaccinated Within Past 12 Mo.				Vac. Stat. Unk.	Never Vac.	Percent		
			Total	1st	Revac.	Prior Stat. Unk.			Ever Vac.	Last Yr.	Never Vac.
< 1	4 113	654	-	-	-	-	-	-	15.9	-	-
1	3 974	1 988	1 615	1 562	34	19	65	1 921	50.0	40.6	48.3
2	4 168	2 357	729	644	67	18	85	1 726	56.5	17.5	41.4
3	4 291	2 717	467	380	74	13	58	1 516	63.3	10.9	35.3
4	4 196	2 826	473	333	130	10	66	1 304	67.3	11.3	31.1
1-4	16 629	9 888	3 284	2 919	305	60	274	6 467	59.5	19.7	38.9
5-9	19 879	17 457	3 419	1 778	1 509	132	174	2 248	87.8	17.2	11.3
10-14	18 074	16 787	1 664	311	1 253	100	143	1 144	92.9	9.2	6.3
15-19	15 012	14 094	1 222	114	1 063	45	114	804	93.9	8.1	5.4
20-29	22 061	20 535	1 336	110	1 170	56	251	1 275	93.1	6.1	5.8
30-39	22 872	21 087	776	63	647	66	259	1 526	92.2	3.4	6.7
40-49	23 065	20 505	714	44	627	43	312	2 248	88.9	3.1	9.7
50-64	26 360	21 055	699	54	608	37	434	4 871	79.9	2.7	18.5
≥ 65	16 933	12 150	246	28	192	26	326	4 457	71.8	1.5	26.3
≥ 1	180 885	153 558	13 360	5 421	7 374	565	2 287	25 040	84.9	7.4	13.8

Table 5. Influenza Vaccine Obtained Within the Past 12 Months, - United States, 1963
15 Years and Over by Age and Sex

Age Group	Population (thousands)	Number Receiving Influenza Vaccine	Percent
<u>Total</u>			
15-24	26 611	3 836	14.4
25-44	45 327	7 691	17.0
45-64	37 432	7 466	19.9
≥ 65	16 933	3 316	19.6
≥ 15	126 303	22 309	17.7
<u>Males</u>			
15-24	12 620	1 755	13.9
25-44	21 616	3 867	17.9
45-64	18 081	3 584	19.8
≥ 65	7 522	1 435	19.1
≥ 15	59 839	10 641	17.8
<u>Females</u>			
15-24	13 991	2 081	14.9
25-44	23 711	3 824	16.1
45-64	19 351	3 882	20.1
≥ 65	9 411	1 881	20.0
≥ 15	66 465	11 668	17.6

Table 9. Oral Poliovirus Status by Standard Metropolitan Statistical Area Classification - Seven Cities, 1962

Age Group	Population (1960)	Number of Cases	Percent with
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Central Cities

1-4	4 218	1 472	28.0
5-9	5 758	2 370	34.6
10-14	5 286	2 346	37.0
15-19	4 552	1 438	20.8
20-29	7 460	4 662	31.7

Tables 6 - 9

Section B. By Age by Standard Metropolitan Statistical Area Classification:

1-49	42 327	12 581	26.3
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Central Cities within SMSAs

SMSAs excluding Central Cities

Area outside SMSAs

1-4	5 667	1 713	29.0
5-9	7 018	2 479	34.0
10-14	6 086	2 361	33.9
15-19	4 621	2 613	29.5
20-29	7 045	4 472	22.1
30-39	8 341	5 114	23.7
40-49	7 805	3 257	19.1
1-49	46 692	22 187	23.0

Area Outside SMSA

1-4	2 025	1 504	27.4
5-9	2 112	2 280	32.1
10-14	5 689	3 578	21.1
15-19	5 668	2 374	24.2
20-29	7 358	5 090	14.4
30-39	7 450	4 558	24.3
40-49	7 371	3 193	14.7
1-49	48 673	28 958	21.7

Table 6. Oral Poliovaccine Status by Standard Metropolitan Statistical Area Classification - United States, 1963

Age Group	Population (thousands)	Number of Doses		Percent with	
		3	0	3	0
<u>Central Cities</u>					
1-4	4 910	1 402	2 650	28.6	54.0
5-9	5 749	1 985	2 572	34.5	44.7
10-14	5 286	1 954	2 346	37.0	44.4
15-19	4 652	1 362	2 439	29.3	52.4
20-29	7 460	1 620	4 662	21.7	62.5
30-39	7 080	1 561	4 360	22.0	61.6
40-49	7 690	1 582	5 012	20.6	65.2
1-49	42 827	11 466	24 041	26.8	56.1
<u>Remaining SMSA Areas</u>					
1-4	5 692	1 711	3 121	30.0	54.8
5-9	7 018	2 416	3 479	34.4	49.6
10-14	6 099	2 066	3 161	33.9	51.8
15-19	4 691	1 382	2 633	29.5	56.1
20-29	7 045	1 556	4 422	22.1	62.8
30-39	8 341	1 974	5 114	23.7	61.3
40-49	7 805	1 490	5 257	19.1	67.4
1-49	46 692	12 595	27 187	27.0	58.2
<u>Areas Outside SMSA</u>					
1-4	6 026	1 654	3 481	27.4	57.8
5-9	7 112	2 286	3 768	32.1	53.0
10-14	6 689	2 118	3 578	31.7	53.5
15-19	5 668	1 486	3 374	26.2	59.5
20-29	7 556	1 545	5 006	20.4	66.2
30-39	7 450	1 740	4 658	23.4	62.5
40-49	7 571	1 503	5 103	19.8	67.4
1-49	48 073	12 332	28 968	25.7	60.3

Table 7. DPT Immunization Status by Standard Metropolitan Statistical Area Classification. Percent of Children Under 15 Years of Age with Specified Number of DPT Injections - United States, 1963

Age Group	Central Cities	Remaining SMSA Areas	Areas Outside SMSA
<u>3 or More Injections</u>			
1-4	69.1	79.5	69.6
5-9	78.8	86.4	78.6
10-14	79.1	84.7	78.4
<u>4 or More Injections</u>			
1-4	35.1	41.8	31.4
5-9	57.7	67.4	55.0
10-14	61.0	67.2	57.2
<u>3 Injections</u>			
1-4	34.0	37.7	38.2
5-9	21.0	18.9	23.6
10-14	18.1	17.5	21.2
<u>0 Injections</u>			
1-4	13.8	7.8	16.5
5-9	6.7	3.9	8.5
10-14	7.2	5.2	8.9
<u>With 1 or More DPT Injections</u>			
< 1	59.1	60.8	56.2

Table 8. Smallpox Vaccination Status by Standard Metropolitan Statistical Area Classification - United States, 1963

Age Group	Population (thousands)	Percent of Persons			
		Total Ever Vaccinated	Received Vaccination Last Year	Vaccination Status Unk.	Never Vaccinated
Central Cities					
< 1	1 217	17.8	-	-	-
1-4	4 910	65.6	23.5	1.7	32.7
5-9	5 749	90.3	17.4	1.0	8.7
10-14	5 286	94.9	9.7	0.8	4.4
15-19	4 652	95.7	9.7	0.9	3.3
20-29	7 460	94.2	7.7	1.4	4.4
30-39	7 080	93.4	4.5	1.5	5.1
40-49	7 690	91.4	3.8	1.9	6.7
50-64	9 210	86.8	3.5	1.9	11.3
≥ 65	5 853	79.9	2.3	2.4	17.7
≥ 1	57 890	88.5	8.2	1.5	10.0
Remaining SMSA Areas					
< 1	1 411	17.8	-	-	-
1-4	5 692	66.7	19.8	1.5	31.8
5-9	7 018	91.7	15.3	0.7	7.6
10-14	6 099	95.3	9.2	0.6	4.1
15-19	4 691	96.5	7.8	0.7	2.8
20-29	7 045	95.3	6.0	1.1	3.7
30-39	8 341	95.5	3.1	0.8	3.7
40-49	7 805	92.5	3.5	1.1	6.4
50-64	7 613	86.8	2.8	1.1	12.1
≥ 65	4 305	80.5	1.6	1.8	17.7
≥ 1	58 609	89.6	7.4	1.0	9.3
Areas Outside SMSA					
< 1	1 485	12.5	-	-	-
1-4	6 026	47.7	16.7	1.7	50.6
5-9	7 112	82.0	18.9	0.9	17.1
10-14	6 689	89.1	8.8	1.0	9.9
15-19	5 668	90.2	7.1	0.6	9.2
20-29	7 556	90.0	4.6	1.0	9.1
30-39	7 450	87.3	2.7	1.1	11.5
40-49	7 571	82.7	2.0	1.1	16.2
50-64	9 538	67.7	1.7	1.8	30.5
≥ 65	6 776	59.1	0.7	1.7	39.3
≥ 1	64 387	77.3	6.6	1.2	21.4

Table 9. Influenza Vaccine Obtained Within Past 12 Months - United States, 1963

Age Group	Population (thousands)	Obtained Vaccine		Percent by Sex	
		Number	Percent	Male	Female
Central Cities					
15-24	8 733	1 385	15.9	14.9	16.6
25-44	14 413	2 512	17.4	17.9	17.0
45-64	12 944	2 587	20.0	20.2	19.8
> 65	5 853	1 109	18.9	19.2	18.8
> 15	41 943	7 593	18.1	18.2	18.0
Remaining SMSA Areas					
15-24	8 247	1 148	13.9	14.1	13.8
25-44	16 070	2 792	17.4	19.1	15.8
45-64	11 179	2 268	20.3	20.5	20.1
> 65	4 305	758	17.6	16.6	18.4
> 15	39 800	6 966	17.5	18.2	16.9
Areas Outside SMSA					
15-24	9 631	1 300	13.5	12.9	14.1
25-44	14 844	2 388	16.1	16.6	15.6
45-64	13 309	2 611	19.6	18.9	20.3
> 65	6 776	1 450	21.4	20.6	22.1
> 15	44 560	7 749	17.4	17.0	17.7

Table 10. Death Rates by Age and Sex - United States, 1954

Age	Population		Deaths		Percent	
	Male	Female	Male	Female	Male	Female
0-4	14,546	15,340	20	18	53.7	46.8
5-9	13,744	14,540	34	31	60.1	50.4
10-14	12,844	13,640	44	41	60.7	61.0
15-19	11,944	12,740	54	51	57.8	51.7
20-24	10,142	10,940	64	61	53.0	50.2
25-29	9,244	9,940	74	71	61.0	53.1
30-34	8,344	8,940	84	81	58.0	77.4
All	124,124	131,124	1,124	1,124	60.1	55.9

Tables 10 - 15

Section C. By Age and Race for United States

Table 10. Oral Poliovaccine Status - United States, 1963
by Age and Race

Age Group	Population (thousands)		Percent with 3 doses		Percent with zero doses	
	White	Nonwhite	White	Nonwhite	White	Nonwhite
1-4	14 096	2 533	30.4	19.1	53.7	66.5
5-9	17 064	2 815	35.2	24.1	47.5	60.8
10-14	15 589	2 485	35.5	24.3	48.6	61.0
15-19	13 144	1 868	29.1	21.8	55.5	61.7
20-29	19 412	2 650	22.2	15.5	63.0	70.2
30-39	20 285	2 586	23.9	16.2	61.0	68.1
40-49	20 735	2 330	20.4	14.8	66.0	72.4
1-49	120 325	17 267	27.5	19.4	57.2	65.9

Table 11. Inactivated Poliovaccine Status - United States, 1963
Percent of Persons with Specified Number of IPV Doses
by Age and Race

Age Group	Percent with ≥ 4		Percent with 3		Percent with 0	
	White	Nonwhite	White	Nonwhite	White	Nonwhite
1-4	42.1	25.0	29.0	24.7	17.2	31.0
5-9	65.4	44.5	21.2	25.6	7.4	15.8
10-14	63.2	48.2	23.4	28.6	7.4	12.1
15-19	53.0	37.4	27.5	29.0	12.1	23.0
20-29	32.8	21.0	24.5	20.3	30.7	42.8
30-39	25.5	11.7	20.2	16.9	41.9	57.4
40-49	13.0	8.4	14.1	11.2	63.5	69.2
1-49	40.0	28.0	22.2	22.2	28.3	35.9

Table 12. DPT Status - United States, 1963. Percent of Persons with Specified Number of Injections, by Age and Race, Under 15 Years of Age

Race	Age 1-4	Age 5-9	Age 10-14	Total 1-14
<u>Percent with 3 or More</u>				
White	76.6	84.2	83.2	81.6
Nonwhite	52.1	64.2	65.2	60.6
<u>Percent with 4 or More</u>				
White	38.0	63.3	64.4	56.0
Nonwhite	25.1	41.3	44.7	37.2
<u>Percent with 3</u>				
White	38.6	21.0	18.8	25.5
Nonwhite	27.0	22.8	20.5	23.4
<u>Percent with Zero</u>				
White	10.0	5.1	5.9	6.8
Nonwhite	27.7	13.9	15.0	18.7
<u>Age Under 1, Percent with One or More</u>				
White	61.3			
Nonwhite	45.1			

Table 13. Smallpox Vaccination by Age by Race - United States, 1963

Race	Age Group	Total Ever Vac.	Total Vac. Last Year	Vaccination Last Year			Vac. Status Unk.	Never Vac.
				1st	Revac.	Prior Status Unk.		
White	< 1	16.1	-	-	-	-	-	-
	1-4	61.2	19.7	17.3	2.0	0.3	1.6	37.2
	5-9	88.6	16.7	8.2	7.9	0.7	0.8	10.6
	10-14	93.3	8.8	1.3	7.0	0.5	0.8	6.0
	15-19	94.2	8.0	0.6	7.1	0.3	0.7	5.0
	20-29	93.5	6.2	0.5	5.5	0.3	1.0	5.4
	30-39	92.9	3.3	0.2	2.7	0.3	1.0	6.1
	40-49	89.7	3.0	0.2	2.7	0.2	1.2	9.1
	50-64	80.9	2.7	0.2	2.4	0.1	1.6	17.5
	> 65	73.0	1.4	0.1	1.2	0.2	2.0	25.1
Total	> 1	85.7	7.1	2.7	4.1	0.3	1.2	13.1
Nonwhite	< 1	15.0	-	-	-	-	-	-
	1-4	50.0	20.2	18.7	1.0	0.5	1.7	48.3
	5-9	83.1	19.9	13.6	5.5	0.7	1.1	15.8
	10-14	90.4	11.6	4.3	6.7	0.6	1.0	8.6
	15-19	91.5	8.9	1.8	6.9	0.3	0.9	7.5
	20-29	89.8	5.0	0.6	4.2	0.2	1.9	8.3
	30-39	86.7	4.4	0.6	3.7	0.2	1.9	11.4
	40-49	81.7	3.5	0.4	3.0	0.1	2.7	15.5
	50-64	69.7	2.2	0.2	1.8	0.2	2.5	27.8
	> 65	57.6	1.7	0.6	0.9	0.2	1.6	40.8
Total	> 1	78.7	9.2	5.0	3.9	0.3	1.7	19.6

Table 14. Influenza Vaccine Obtained in Past 12 Months
by Age, Race, and Sex - United States, 1963

	Males		Females	
	White	Nonwhite	White	Nonwhite
<u>Age 15-24</u>				
Population	11 087	1 532	12 255	1 736
% With	14.1	12.6	15.0	14.0
<u>Age 25-44</u>				
Population	19 336	2 280	20 917	2 795
% With	17.9	18.2	16.0	17.4
<u>Age 45-64</u>				
Population	16 392	1 689	17 509	1 842
% With	19.7	20.8	20.2	19.1
<u>Age ≥ 65</u>				
Population	6 916	605	8 702	709
% With	19.2	17.9	20.3	15.7
<u>Ages 15 and Over</u>				
Population	53 731	6 107	59 383	7 081
% With	17.8	17.5	17.6	16.8

Table 15. Immunization Status in Central Cities of Standard Metropolitan Statistical Areas - United States, 1963 - Percent with Specified Number of Doses by Race and Age

A. Oral Poliovaccine

Age Group	White	Nonwhite
<u>3 doses</u>		
1-4	31.4	21.2
5-9	37.2	26.8
10-14	39.8	28.1
15-19	30.2	25.9
20-29	23.4	15.5
30-39	23.6	16.7
40-49	21.5	16.4
1-49	28.4	21.1

B. Diphtheria-Pertussis-Tetanus Injection

Age Group	White	Nonwhite
<u>3 or more injections</u>		
1-4	74.3	55.6
5-9	82.8	67.3
10-14	82.3	69.2
<u>4 or more injections</u>		
1-4	38.2	27.0
5-9	62.2	44.9
10-14	64.9	49.0
<u>3 injections</u>		
1-4	36.1	28.6
5-9	20.5	22.4
10-14	17.4	20.2
<u>0 injections</u>		
1-4	10.3	23.1
5-9	5.1	11.2
10-14	5.6	12.2

Table 15. con't. -- Immunization Status by Race and Age in Central Cities of Standard Metropolitan Statistical Areas - United States, 1963

C. Smallpox Vaccination Status

Race	Age Group	Total Ever Vac.	Total Vac. Last Year	Vaccination Last Year		Prior Status Unk.	Vac. Status Unk.	Never Vac.
				1st	Revac.			
White	< 1	17.7	-	-	-	-	-	-
	1-4	68.2	23.5	21.0	2.2	0.3	1.6	30.1
	5-9	91.0	16.8	7.0	9.1	0.7	0.9	8.2
	10-14	95.7	8.5	0.7	7.3	0.5	0.6	3.7
	15-19	96.3	9.9	0.5	8.8	0.5	0.9	2.8
	20-29	94.8	8.3	0.5	7.4	0.4	1.2	3.9
	30-39	94.8	4.6	0.4	3.8	0.3	1.2	3.9
	40-49	92.7	3.8	0.1	3.4	0.3	1.7	5.6
	50-64	88.6	3.6	0.3	3.2	0.2	1.7	9.7
	> 65	81.4	2.2	0.2	1.8	0.2	2.4	16.2
Total	> 1	89.8	7.8	2.6	4.9	0.4	1.4	8.8
Nonwhite	< 1	18.2	-	-	-	-	-	-
	1-4	58.8	23.4	22.0	1.0	0.4	1.8	39.5
	5-9	88.3	19.1	11.3	6.9	0.9	1.3	10.4
	10-14	92.3	13.4	3.7	8.9	0.8	1.3	6.3
	15-19	93.6	9.0	1.4	7.5	0	1.1	5.3
	20-29	91.8	5.4	0.9	4.4	0.1	2.1	6.1
	30-39	88.5	4.2	0.4	3.6	0.2	2.4	9.1
	40-49	85.5	3.7	0.6	3.0	0	2.7	11.9
	50-64	76.4	2.4	0.4	1.8	0.2	3.3	20.2
	> 65	67.6	2.6	1.3	1.0	0.3	2.0	30.4
Total	> 1	83.4	9.6	4.9	4.3	0.3	2.0	14.5

D. Percent with Influenza Vaccine Obtained in Past 12 Months

Age Group	Male		Female	
	White	Nonwhite	White	Nonwhite
15-24	15.5	12.7	16.9	15.5
25-44	17.6	19.2	16.6	18.4
45-64	20.1	21.0	20.1	18.0
> 65	19.4	18.1	19.3	13.9
> 15	18.2	18.1	18.2	17.2

Tables 16 - 18

Section D. By Age by Geographic Divisions

Table 16. Percent of Persons with Specified Number of Doses by Age Group, by Geographic Division - United States, 1963

Summary Table

Age Group	New Eng.	Mid. Atl.	E.N. Cent.	W.N. Cent.	So. Atl.	E.S. Cent.	W.S. Cent.	Mtn.	Pac.
<u>Percent with 3 OPV</u>									
1-4	41.6	10.3	25.8	26.4	13.8	16.6	56.4	61.8	44.6
5-9	50.8	12.4	28.9	35.2	16.9	19.4	60.6	76.5	54.8
10-14	51.5	12.0	28.0	34.1	17.4	21.0	63.0	76.2	57.7
15-19	31.8	8.3	25.5	28.3	13.6	13.8	56.5	66.1	48.9
20-29	13.6	6.9	20.1	23.1	10.3	11.5	48.3	52.2	36.8
30-39	14.5	7.2	21.1	26.1	9.6	12.0	55.1	60.1	42.4
40-49	11.0	5.5	19.1	22.0	6.8	11.4	46.3	49.5	39.1
Total 1-49	28.4	8.6	23.7	27.8	12.3	15.0	54.8	62.7	45.6
<u>Percent with 4 or more DPT</u>									
1-4	35.5	37.3	32.0	33.1	39.4	38.5	40.5	24.1	39.6
5-9	61.6	56.0	61.0	63.0	64.3	57.9	60.6	58.5	58.7
10-14	62.9	54.6	63.2	67.4	62.1	58.1	60.4	65.4	66.3
Total 1-14	54.0	49.8	53.2	55.2	56.0	52.2	54.4	48.7	55.3
<u>Percent Ever Receiving Smallpox</u>									
1-4	64.2	67.5	65.5	61.4	47.3	41.3	37.2	64.1	73.7
5-9	94.2	94.0	88.3	83.6	86.5	79.7	82.0	87.4	88.3
10-14	96.7	96.5	92.4	87.1	94.3	88.7	91.4	93.9	92.6
15-19	96.1	98.0	94.1	87.0	95.2	86.7	91.6	96.5	94.1
20-29	96.9	96.7	90.7	87.6	94.8	86.4	93.0	94.7	93.9
30-39	93.4	96.7	90.4	88.2	93.2	87.1	88.9	92.6	93.8
40-49	92.2	95.8	88.6	83.4	88.5	77.2	82.9	90.8	89.5
50-64	88.8	92.0	79.1	68.0	77.9	62.4	70.2	77.2	83.2
> 65	84.8	87.0	69.1	61.3	70.1	46.7	61.1	71.2	75.0
Total > 1	90.1	92.2	84.5	78.0	84.0	73.9	78.2	85.7	87.7

Table 17. Percent of Persons by Age Groups with Specified Number of Doses
OPV, DPT, and Smallpox in each Geographic Division - United States, 1963

A. New England

Age Group	OPV			DPT				Smallpox				
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year		
1-4	41.6	33.6	24.5	35.5	42.6	11.3	7.9	64.2	34.5	21.4		
5-9	50.8	39.3	9.4	61.6	22.1	6.6	5.6	94.2	5.2	10.2		
10-14	51.5	37.7	10.4	62.9	18.5	5.8	7.3	96.7	3.0	5.6		
15-19	31.8	36.1	31.3	-	-	-	-	96.1	3.4	7.4		
20-29	13.6	23.8	60.9	-	-	-	-	96.9	2.6	5.1		
30-39	14.5	29.3	54.9	-	-	-	-	93.4	5.8	2.3		
40-49	11.0	21.8	66.0	-	-	-	-	92.2	6.7	3.0		
50-64	-	-	-	-	-	-	-	88.8	10.3	3.5		
≥ 65	-	-	-	-	-	-	-	84.8	13.6	1.3		
Total 1-49	28.4	30.7	39.9	Total 1-14	54.0	27.3	7.7	6.9	Total ≥ 1	90.1	9.0	6.0
<1 yr.	with 1 or more: 35.2			with 1 or more: 57.4				ever vaccinated: 14.1				

B. Middle Atlantic

Age Group	OPV			DPT				Smallpox				
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year		
1-4	10.3	14.2	74.7	37.3	37.6	13.0	9.8	67.5	30.8	21.1		
5-9	12.4	19.3	67.7	56.0	23.8	11.0	5.6	94.0	5.5	13.9		
10-14	12.0	18.2	69.3	54.6	23.0	9.7	6.9	96.5	3.0	5.8		
15-19	8.3	14.3	76.9	-	-	-	-	98.0	1.6	7.4		
20-29	6.9	9.6	81.8	-	-	-	-	96.7	2.2	6.6		
30-39	7.2	11.0	80.5	-	-	-	-	96.7	2.5	2.8		
40-49	5.5	8.3	84.7	-	-	-	-	95.8	3.2	3.1		
50-64	-	-	-	-	-	-	-	92.0	6.8	3.3		
≥ 65	-	-	-	-	-	-	-	87.0	11.5	2.2		
Total 1-49	8.6	13.0	77.4	Total 1-14	49.8	27.8	11.2	7.3	Total ≥ 1	92.2	6.8	6.6
<1 yr.	with 1 or more: 10.9			with 1 or more: 60.8				ever vaccinated: 21.2				

Table 17. con't. -- Percent of Persons by Age Groups with Specified Number of Doses
OPV, DPT, and Smallpox in each Geographic Division - United States, 1963

C. East North Central

Age Group	OPV			DPT				Smallpox			
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year	
1-4	25.8	9.8	64.0	32.0	40.2	14.7	11.5	65.5	32.9	20.4	
5-9	28.9	12.1	58.4	61.0	21.4	10.3	4.8	88.3	10.6	15.3	
10-14	28.0	12.1	59.5	63.2	19.2	7.1	5.8	92.4	6.6	9.6	
15-19	25.5	10.4	63.1	-	-	-	-	94.1	5.1	6.8	
20-29	20.1	8.2	70.1	-	-	-	-	90.7	7.7	4.1	
30-39	21.1	9.1	68.1	-	-	-	-	90.4	8.2	2.5	
40-49	19.1	8.6	70.7	-	-	-	-	88.6	10.0	2.2	
50-64	-	-	-	-	-	-	-	79.1	18.8	1.7	
≥ 65	-	-	-	-	-	-	-	69.1	28.5	1.2	
Total				Total			Total				
1-49	23.7	10.0	65.2	1-14	53.2	26.2	10.5	7.1	84.5	13.9	6.5
<1 yr.	with 1 or more: 15.8			with 1 or more: 58.0				ever vaccinated: 15.6			

D. West North Central

Age Group	OPV			DPT				Smallpox			
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year	
1-4	26.4	16.3	57.3	33.1	42.6	10.1	13.1	61.4	37.3	16.7	
5-9	35.2	14.6	49.8	63.0	21.0	8.7	5.9	83.6	15.7	14.0	
10-14	34.1	13.8	51.6	67.4	17.5	6.5	6.5	87.1	11.8	10.7	
15-19	28.3	14.4	55.8	-	-	-	-	87.0	12.3	6.3	
20-29	23.1	13.7	61.9	-	-	-	-	87.6	10.9	6.0	
30-39	26.1	14.2	58.9	-	-	-	-	88.2	10.8	3.2	
40-49	22.0	11.9	64.3	-	-	-	-	83.4	14.1	2.1	
50-64	-	-	-	-	-	-	-	68.0	30.5	1.4	
≥ 65	-	-	-	-	-	-	-	61.3	36.9	0.7	
Total				Total				Total			
1-49	27.8	14.1	57.3	1-14	55.2	26.5	8.4	8.3	78.0	20.6	6.3
< 1 yr.	with 1 or more: 21.3			with 1 or more: 63.1				ever vaccinated: 17.4			

Table 17. con't. -- Percent of Persons by Age Groups with Specified Number of Doses
OPV, DPT, and Smallpox in each Geographic Division - United States, 1963

E. South Atlantic

Age Group	OPV			DPT				Smallpox		
	3	1-2	0	> 4	3	1-2	0	Ever	Never	Last Year
1-4	13.8	10.1	75.4	39.4	31.4	10.5	14.6	47.3	50.5	18.4
5-9	16.9	11.9	70.7	64.3	17.9	6.2	5.7	86.5	12.2	20.0
10-14	17.4	10.9	71.0	62.1	16.9	4.6	8.3	94.3	5.0	7.5
15-19	13.6	9.1	76.2	-	-	-	-	95.2	3.8	8.1
20-29	10.3	9.2	78.7	-	-	-	-	94.8	4.3	6.0
30-39	9.6	9.7	79.6	-	-	-	-	93.2	5.6	3.7
40-49	6.8	8.0	84.2	-	-	-	-	88.5	10.5	3.2
50-64	-	-	-	-	-	-	-	77.9	20.8	2.4
> 65	-	-	-	-	-	-	-	70.1	28.5	1.1
Total				Total			Total			
1-49	12.3	9.8	76.9	1-14	56.0	21.7	7.0	9.2	> 1	84.0 14.8 7.5
<1 yr.	with 1 or more: 12.4			with 1 or more: 60.7				ever vaccinated: 9.7		

F. East South Central

Age Group	OPV			DPT				Smallpox		
	3	1-2	0	> 4	3	1-2	0	Ever	Never	Last Year
1-4	16.6	7.9	74.9	38.5	32.7	9.3	16.1	41.3	56.9	12.7
5-9	19.4	7.8	72.3	57.9	19.5	7.4	10.0	79.7	19.2	18.5
10-14	21.0	7.1	71.6	58.1	19.0	6.0	8.3	88.7	10.3	8.8
15-19	13.8	5.8	79.8	-	-	-	-	86.7	12.6	6.2
20-29	11.5	7.2	80.8	-	-	-	-	86.4	12.3	4.1
30-39	12.0	8.2	78.4	-	-	-	-	87.1	11.6	2.0
40-49	11.4	7.9	79.3	-	-	-	-	77.2	21.0	2.2
50-64	-	-	-	-	-	-	-	62.4	35.4	1.1
> 65	-	-	-	-	-	-	-	46.7	52.2	0
Total				Total			Total			
1-49	15.0	7.5	76.8	1-14	52.2	23.2	7.5	11.3	> 1	73.9 24.7 6.1
<1 yr.	with 1 or more: 15.8			with 1 or more: 55.9				ever vaccinated: 16.7		

Table 17. con't. -- Percent of Persons by Age Groups with Specified Number of Doses
OPV, DPT, and Smallpox in each Geographic Division - United States, 1963

G. West South Central

Age Group	OPV			DPT				Smallpox				
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year		
1-4	56.4	21.2	22.2	40.5	26.0	8.9	22.5	37.2	60.7	14.9		
5-9	60.6	21.6	17.5	60.6	19.4	4.9	11.8	82.0	16.9	21.5		
10-14	63.0	22.0	14.9	60.4	18.9	3.2	12.3	91.4	8.0	7.8		
15-19	56.5	22.6	20.2	-	-	-	-	91.6	8.1	9.5		
20-29	48.3	24.5	26.2	-	-	-	-	93.0	6.2	7.0		
30-39	55.1	23.7	20.9	-	-	-	-	88.9	10.7	4.2		
40-49	46.3	23.7	29.0	-	-	-	-	82.9	16.3	3.3		
50-64	-	-	-	-	-	-	-	70.2	28.9	2.4		
≥ 65	-	-	-	-	-	-	-	61.1	37.9	1.3		
Total 1-49	54.8	22.9	21.9	Total 1-14	54.4	21.3	5.6	15.2	Total ≥ 1	78.2	20.9	7.5
<1 yr.	with 1 or more: 32.8			with 1 or more: 51.5				ever vaccinated: 10.9				

H. Mountain

Age Group	OPV			DPT				Smallpox				
	3	1-2	0	> 4	3	1-2	0	Ever	Never	Last Year		
1-4	61.8	12.7	25.2	24.1	49.8	11.0	13.5	64.1	34.0	23.3		
5-9	76.5	10.1	12.5	58.5	26.5	7.8	4.3	87.4	11.1	27.0		
10-14	76.2	9.9	13.6	65.4	20.2	4.3	5.5	93.9	6.0	16.2		
15-19	66.1	12.6	20.5	-	-	-	-	96.5	3.0	12.6		
20-29	52.2	13.8	33.0	-	-	-	-	94.7	4.5	7.8		
30-39	60.1	12.6	26.9	-	-	-	-	92.6	6.4	7.3		
40-49	49.5	12.9	37.3	-	-	-	-	90.8	9.1	5.1		
50-64	-	-	-	-	-	-	-	77.2	18.8	3.9		
> 65	-	-	-	-	-	-	-	71.2	23.6	2.1		
Total 1-49	62.7	12.1	24.5	Total 1-14	48.7	32.6	7.8	7.9	Total > 1	85.7	12.7	12.1
<1 yr.	with 1 or more: 31.7			with 1 or more: 61.4				ever vaccinated: 14.9				

Table 17. con't. -- Percent of Persons by Age Groups with Specified Number of Doses
OPV, DPT, and Smallpox in each Geographic Division - United States, 1963

I. Pacific

Age Group	OPV			DPT				Smallpox			
	3	1-2	0	≥ 4	3	1-2	0	Ever	Never	Last Year	
1-4	44.6	22.3	32.8	39.6	34.6	14.5	9.5	73.7	25.5	25.9	
5-9	54.8	18.2	26.6	58.7	21.4	9.5	6.3	88.3	11.1	20.1	
10-14	57.7	14.2	27.5	66.3	16.8	5.4	5.1	92.6	6.6	15.0	
15-19	48.9	18.0	31.9	-	-	-	-	94.1	4.3	11.3	
20-29	36.8	21.0	40.8	-	-	-	-	93.9	5.0	8.6	
30-39	42.4	19.0	36.9	-	-	-	-	93.8	4.6	5.2	
40-49	39.1	16.8	42.1	-	-	-	-	89.5	8.4	4.9	
50-64	-	-	-	-	-	-	-	83.2	14.2	4.5	
≥ 65	-	-	-	-	-	-	-	75.0	21.9	2.8	
Total	Total			Total				Total			
1-49	45.6	18.5	34.7	1-14	55.3	23.9	9.7	6.9	87.7	10.8	10.4
<1 yr.	with 1 or more: 25.3			with 1 or more: 59.1				ever vaccinated: 20.7			

Table 18. Percent of Persons Over 15 Years of Age Receiving Influenza Vaccine in Past 12 Months by Geographic Division, Sex, and Age Groups
United States, 1963

Age Group	North East					
	New England			Middle Atlantic		
	Total	Male	Female	Total	Male	Female
15-24	14.9	13.1	16.8	14.2	13.6	14.7
25-44	19.3	20.1	18.5	16.6	17.1	16.2
45-64	20.8	20.5	21.0	19.7	19.9	19.5
> 65	15.5	13.3	17.5	17.8	17.2	18.3
> 15	18.3	17.7	18.8	17.3	17.3	17.2

Age Group	North Central					
	E. No. Central			W. No. Central		
	Total	Male	Female	Total	Male	Female
15-24	13.8	12.9	14.7	13.1	12.3	13.8
25-44	15.9	16.2	15.6	15.7	15.1	16.3
45-64	20.1	19.4	20.9	18.3	18.1	18.5
> 65	19.7	20.5	19.0	19.1	18.8	19.3
> 15	17.2	17.0	17.5	16.6	16.0	17.1

Age Group	South Central								
	South Atlantic			E. So. Central			W. So. Central		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
15-24	16.3	16.4	16.2	11.4	10.0	12.7	14.9	14.8	15.0
25-44	19.6	22.4	17.3	15.9	16.5	15.3	17.4	19.5	15.6
45-64	21.0	22.2	19.8	15.6	15.1	16.2	20.1	20.8	19.4
> 65	18.9	19.0	18.9	18.8	18.2	19.3	22.6	19.2	25.1
> 15	19.2	20.6	18.0	15.2	14.9	15.5	18.4	18.8	18.0

Age Group	West					
	Mountain			Pacific		
	Total	Male	Female	Total	Male	Female
15-24	17.7	18.7	16.8	14.2	14.4	14.1
25-44	17.9	19.2	16.7	15.8	16.8	15.0
45-64	24.3	22.9	25.8	20.4	19.5	21.3
> 65	30.9	34.3	28.0	21.8	20.8	22.7
> 15	20.9	21.6	20.3	17.5	17.5	17.4

Current Population Survey Supplement, Bureau of the Census, September 1963

Table A. Standard Error of Estimated Percentages of Persons Who Received

Oral Poliovaccine
Inactivated Poliovaccine
Smallpox Vaccination

Estimated Percentage	Base of Percentage (000)									
	250	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000	150,000
2 or 98	1.9	1.3	1.0	0.6	0.4	0.3	0.2	0.1	0.1	0.1
5 or 95	3.0	2.1	1.5	0.9	0.7	0.5	0.3	0.2	0.2	0.1
10 or 90	4.1	2.9	2.0	1.3	0.9	0.6	0.4	0.3	0.2	0.2
25 or 75	5.9	4.1	2.9	1.9	1.3	0.9	0.6	0.4	0.3	0.2
50	6.8	4.8	3.4	2.1	1.5	1.1	0.7	0.5	0.3	0.3

Table B. Standard Error of Estimated Percentages of Persons Who Received
Diphtheria-Pertussis-Tetanus Immunization
Influenza Vaccine Within Past 12 Months

Estimated Percentage	Base of Percentage (000)							
	250	500	1,000	2,500	5,000	10,000	25,000	50,000
2 or 98	2.1	1.5	1.0	0.7	0.5	0.3	0.2	0.2
5 or 95	3.3	2.4	1.7	1.1	0.7	0.5	0.3	0.2
10 or 90	4.6	3.2	2.3	1.5	1.0	0.7	0.5	0.3
25 or 75	6.6	4.7	3.3	2.0	1.5	1.0	0.7	0.5
50	7.6	5.4	3.8	2.4	1.7	1.2	0.8	0.5

Illustration of use of Tables A and B: of approximately 17,000,000 children in the age group 1-4, a total of 28.7 percent had received 3 doses of oral polio-vaccine (Table 1) as of September, 1963. Table A shows that the standard error for this percentage with a base of 17 million is between 0.9 and 0.6 percentage points.