



State of Maryland
Department of Health

2411 N. CHARLES ST., BALTIMORE-18

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Bureau of Preventive Medicine
EDWARD DAVENS, M. D., CHIEF

Division of
Maternal and Child Health

July 29, 1955

Dr. Neal Nathanson, Chief
Poliovirus Surveillance Unit
Communicable Disease Center
50 Seventh Street, N.E.
Atlanta 5, Georgia

Dear Doctor Nathanson:

This is by way of reply to your letter of July 21, 1955 requesting information about the lot numbers of Wyeth vaccine received and used in Maryland. The figures quoted in your letter are completely erroneous. On April 18, 1955, Maryland received its initial supply of 14,000.9 cc. vials; 9,500 of these vials, all lot 236, were consigned to the State Health Department as follows: 1930 packages - lot 23602; 1908 packages - lot 23603; 1891 packages - lot 23604; 1906 packages - lot 23605; 1827 packages - lot 23606; 44 packages - lot 23607. On the same day, the remaining 4500.9 cc. vials were consigned to the Baltimore City Health Department. In other words, the initial shipment of 14,000 vials was all lot number 236. Subsequently, when it appeared that we would not have quite enough to finish the first shots, we requested an additional supply of 310.9 cc. vials which was received on April 26th and was, I believe, all lot 234. On May 5, when we postponed inoculations, scarcely any of the 234 had been used. However, at a later date (around June 13th) when lot 234 was recalled, we gathered all of this lot number together and there was just enough to complete the first shots in Anne Arundel County. During that week 2,001 children received lot 234. I estimate that previously approximately 400 children had received lot 234. This means, then, that of the 111,742 children who received their first shot in Maryland, 109,342 received lot number 236 and approximately 2400 received lot 234.

The 111,742 figure receiving the first inoculations represents 90.5% of the 126,542 who requested it. As you know, lot 236 was recalled by Wyeth Company. We actually returned to them in three separate shipments 1352.9 cc. vials which included some partially filled vials. We also delivered, with the knowledge and approval of the National Foundation for Infantile Paralysis, about 2100 cc. of Wyeth 236 to Dr. David Bodian for research purposes. We also gave Dr. Bodian a few vials of lot 234 for monitoring purposes. At present, there is no polio vaccine in the State or City Health Department.

Copy of this part of letter sent to Dick Seibert 8-29-55 wjg

2. Dr. Neal Nathanson

July 29, 1955

Under separate cover I am sending you the completed PHS 400 Surveillance Forms on all paralytic cases to date, as well as on non-paralytic cases.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Ed Davens", with a long horizontal flourish extending to the right.

Edward Davens, M.D., Chief
Bureau of Preventive Medicine

ED:id



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Division of
Vital Records and Statistics

A. W. HEDRICH, SC. D., CHIEF

ROBERT H. RILEY, M. D., DR. P. H., DIRECTOR
PERRY F. PRATHER, M. D., DEPUTY DIRECTOR

Copy for Dr. Nathanson

May 13, 1955

To: County Health Officers

From: A. W. Hedrich, Sc.D., Chief, Division of Vital Records
and Statistics

Attached hereto are some graphs and tables concerning
poliomyelitis which are of particular interest at this time.
If there are any questions concerning these data, we shall
be glad to hear from you.

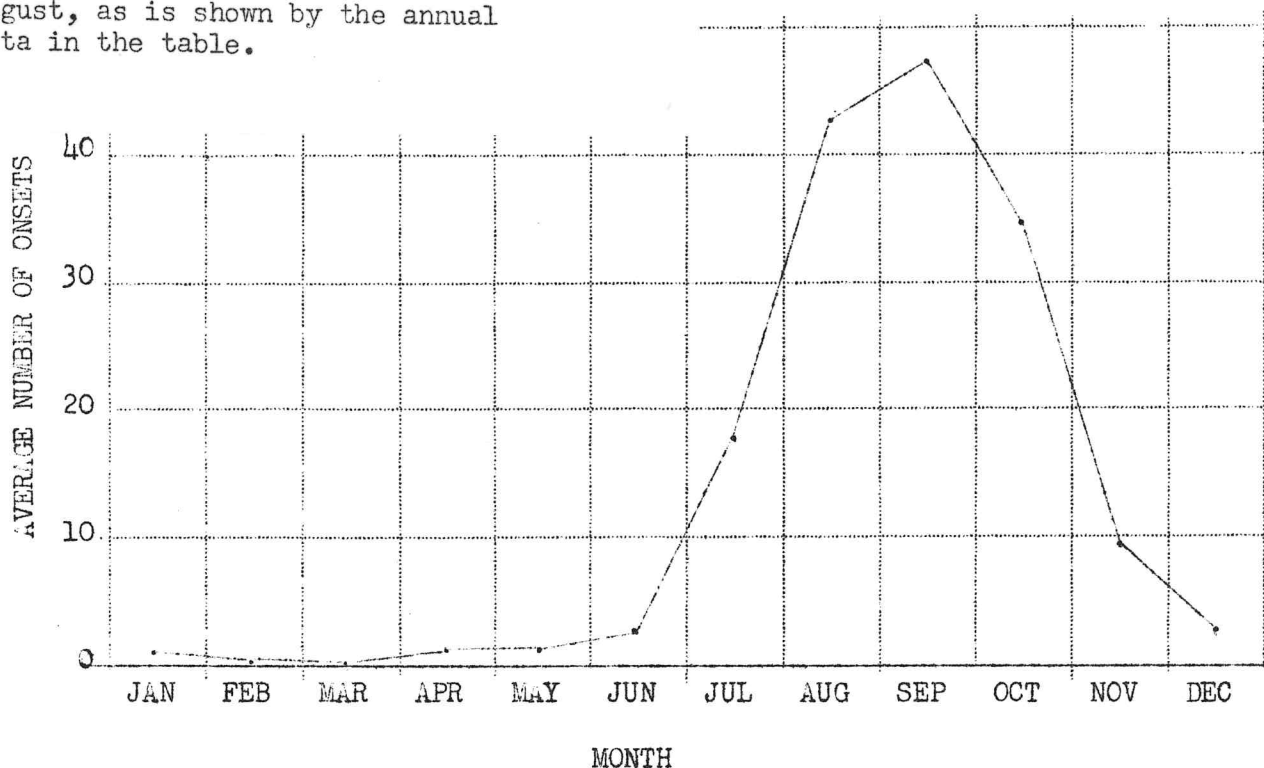
The enclosed data represent the work of Mr. Miller of the
Division of Vital Records and Statistics and Miss Potter of
the Division of Communicable Disease.

Enc.

AWH/aa

Figure 1 shows the seasonal cycle characteristic of poliomyelitis in Maryland. For the 1950-54 average, September was the peak month; however, peaks have occurred as frequently in August, as is shown by the annual data in the table.

POLIOMYELITIS CASES
 Onset
 1950-1954 Average



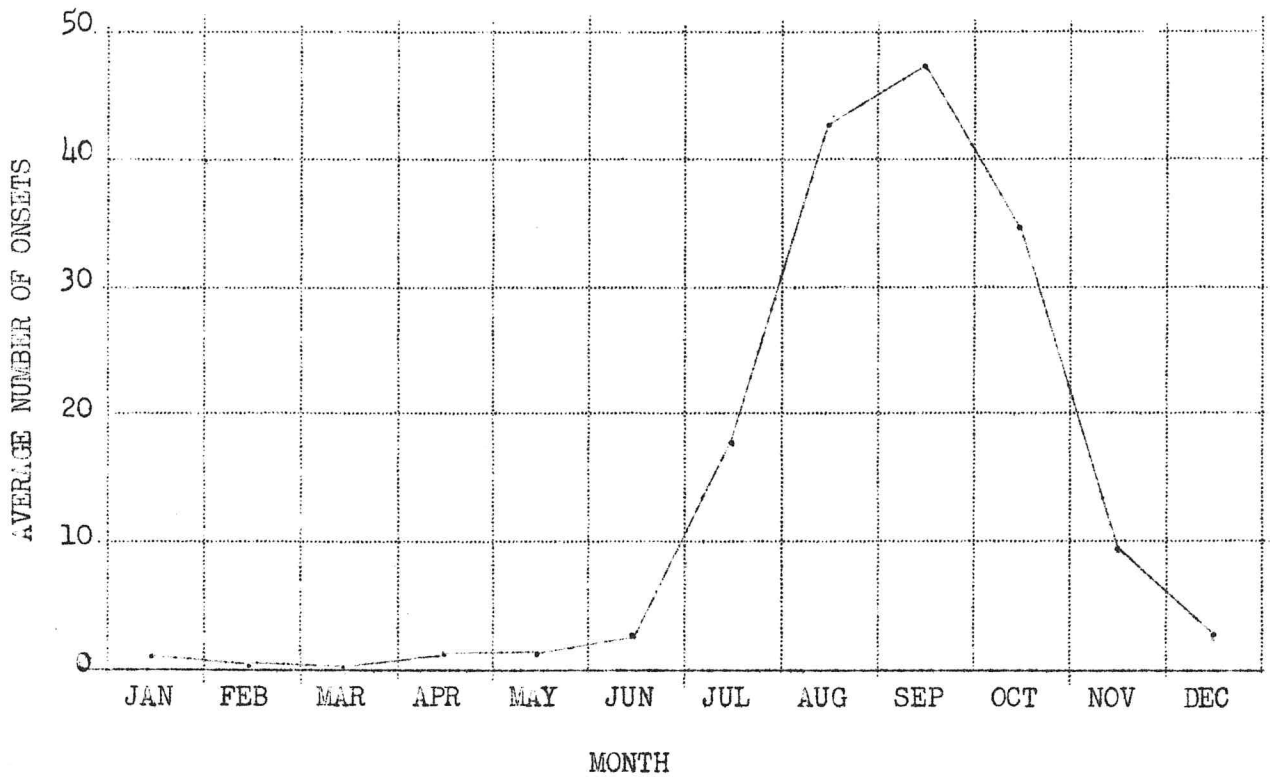
PARALYTIC POLIOMYELITIS CASES
 By Month of Onset
 Maryland Counties, 1950-1954

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1950	-	-	-	1	1	-	25	53	80	70	22	4	256
1951	2	-	-	1	-	5	9	19	11	9	4	3	63
1952	2	-	-	1	-	3	16	58	52	23	2	4	161
1953	-	-	-	2	3	4	33	64	58	34	16	3	217
1954	1	1	-	-	1	2	10	21	37	37	5	1	116
Total 5 years	5	1	-	5	5	14	93	215	238	173	49	15	813
Average 5 years	1	0.2	-	1	1	2.8	18.6	43	47.6	34.6	9.8	3.0	162.6

5/9/55
 Maryland State Department of Health
 Division of Vital Records & Statistics

Figure 1

PARALYTIC POLIOMYELITIS CASES
By Month of Onset
Maryland Counties, 1950-1954 Average



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1953	-	-	-	2	3	4	33	64	58	34	16	3	217
1954	1	1	-	-	1	2	10	21	37	37	5	1	116
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Average 5 years	1	0.2	-	1	1	2.8	18.6	43	47.6	34.6	9.8	3.0	162.6

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Maryland State Department of Health
Division of Vital Records & Statistics

Figure 2.

Poliomyelitis Case Rates - Paralytic, Non-Paralytic
and Death Rates
Maryland 1940 - 1954

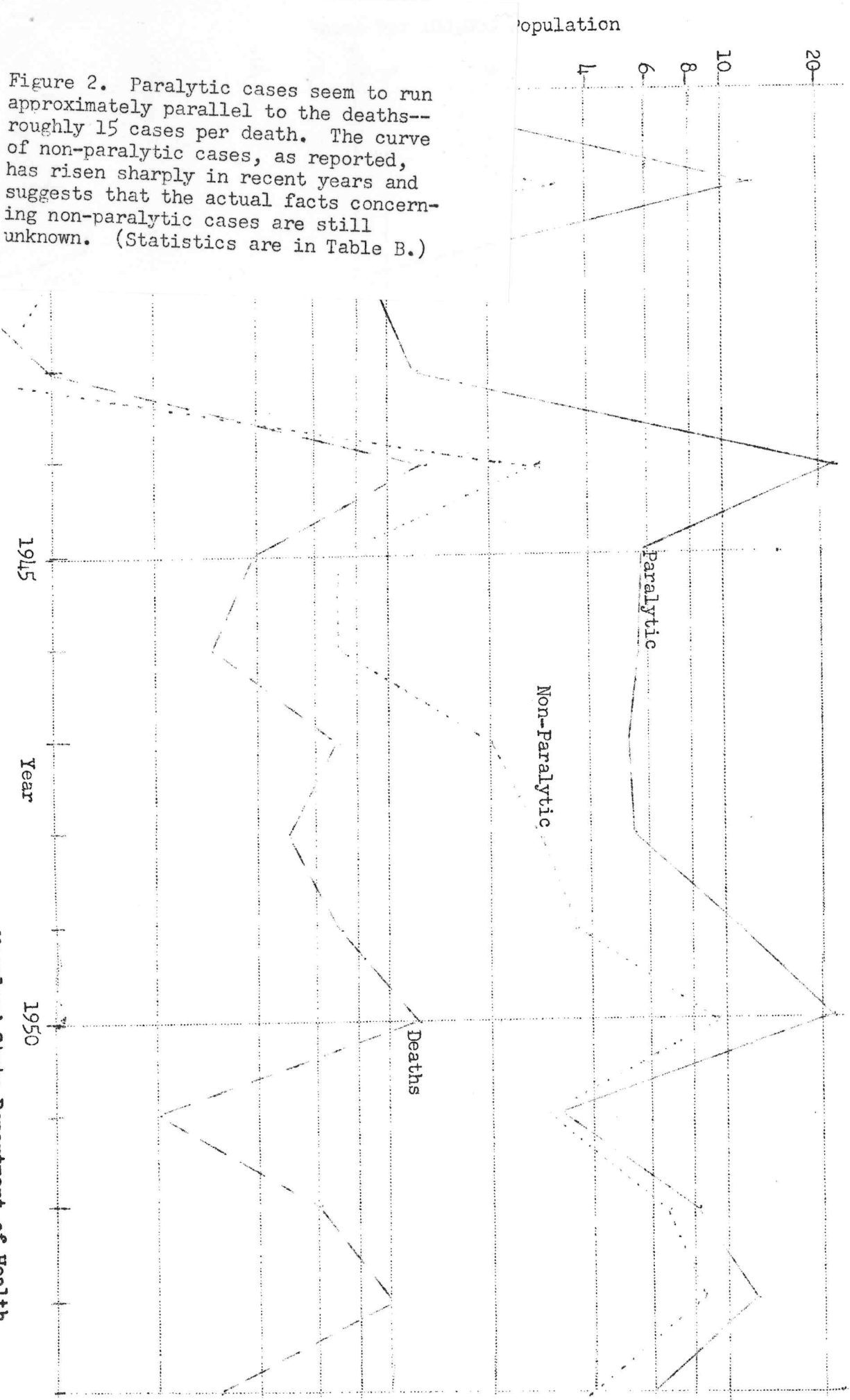
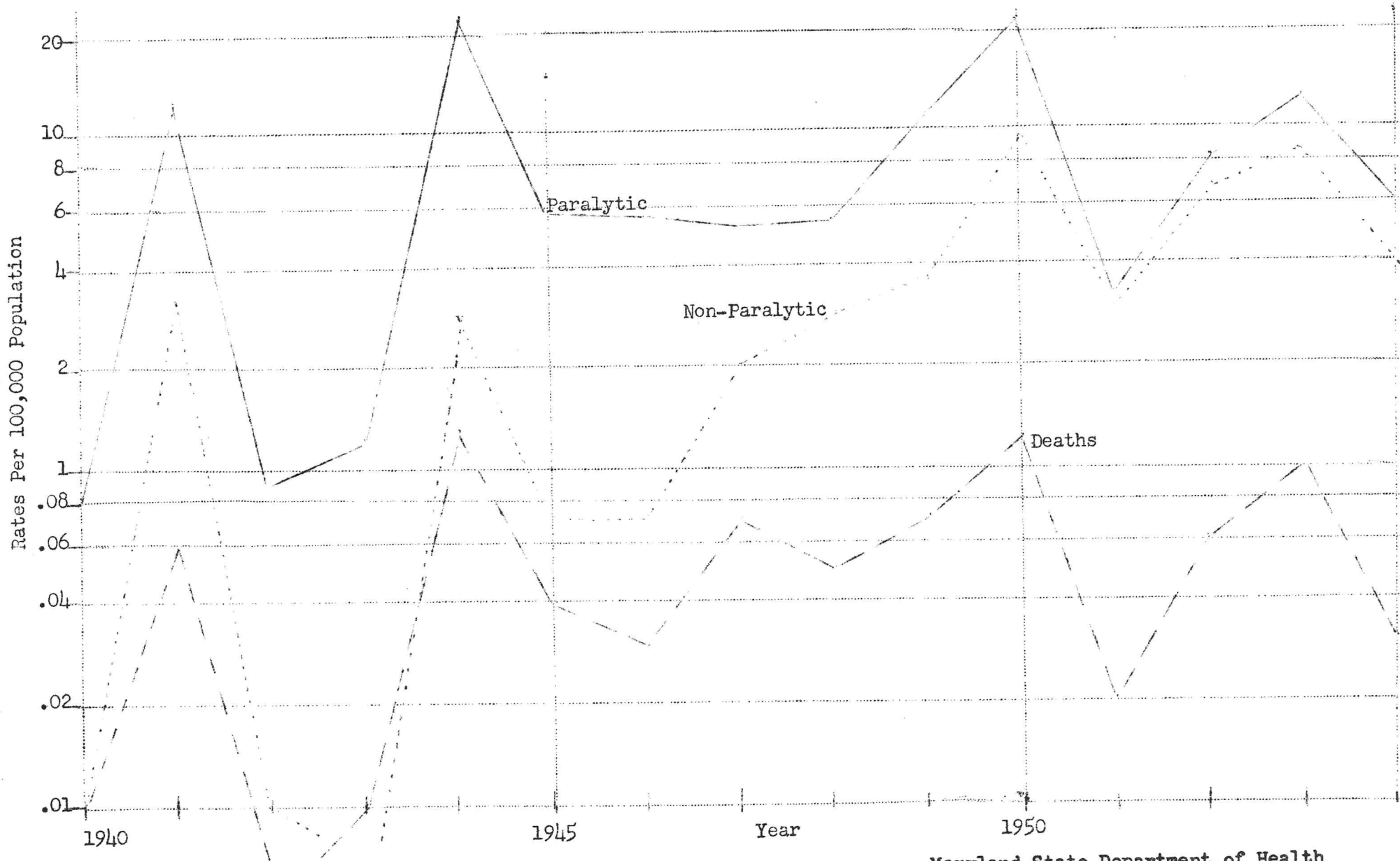


Figure 2. Paralytic cases seem to run approximately parallel to the deaths--roughly 15 cases per death. The curve of non-paralytic cases, as reported, has risen sharply in recent years and suggests that the actual facts concerning non-paralytic cases are still unknown. (Statistics are in Table B.)

Figure 2.

Poliomyelitis Case Rates - Paralytic, Non-Paralytic
and Death Rates
Maryland 1940 - 1954



5/9/55

Figure 3.

Paralytic Poliomyelitis Case Rates
1940 - 1954
Maryland Counties and Baltimore City

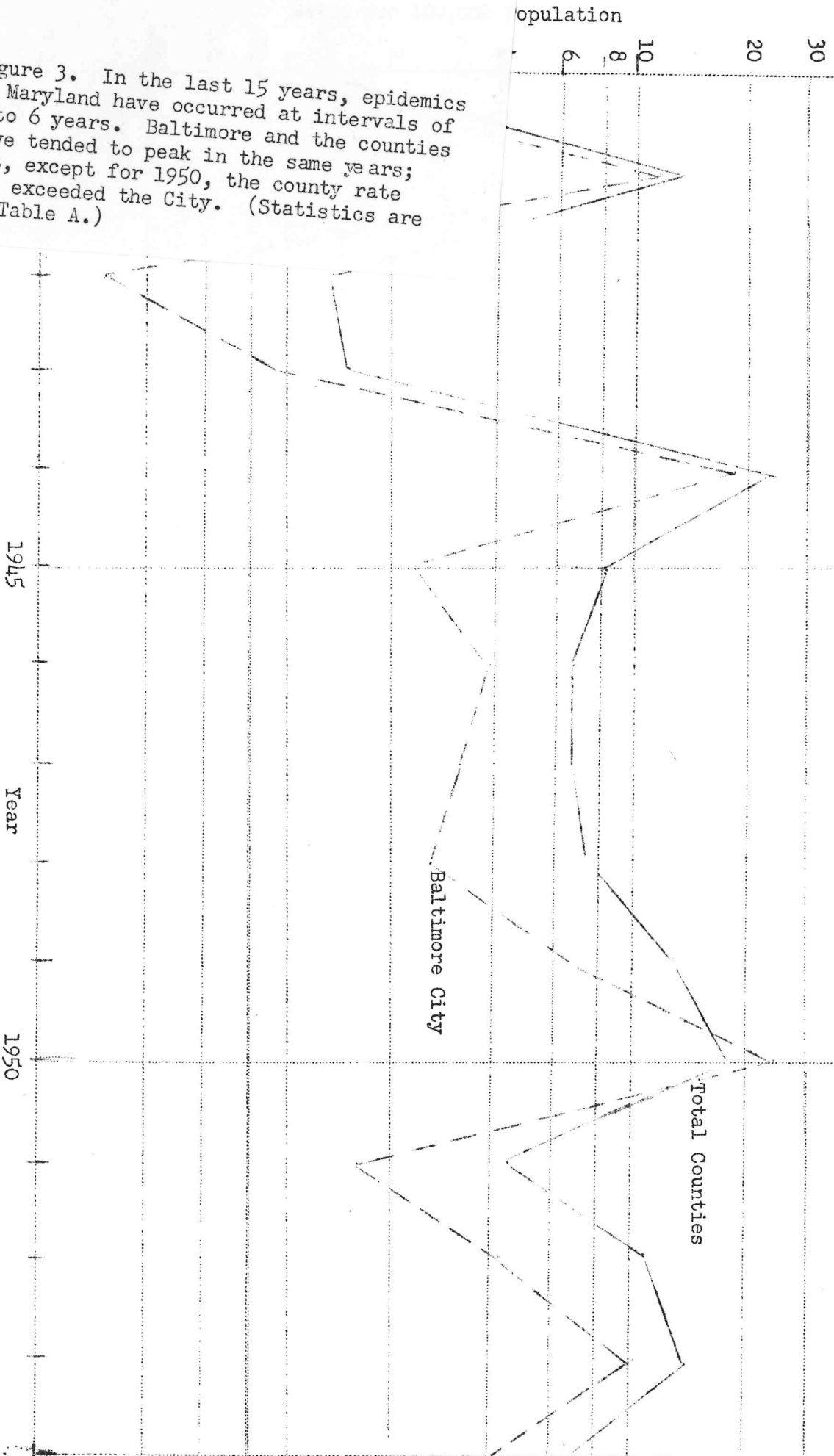
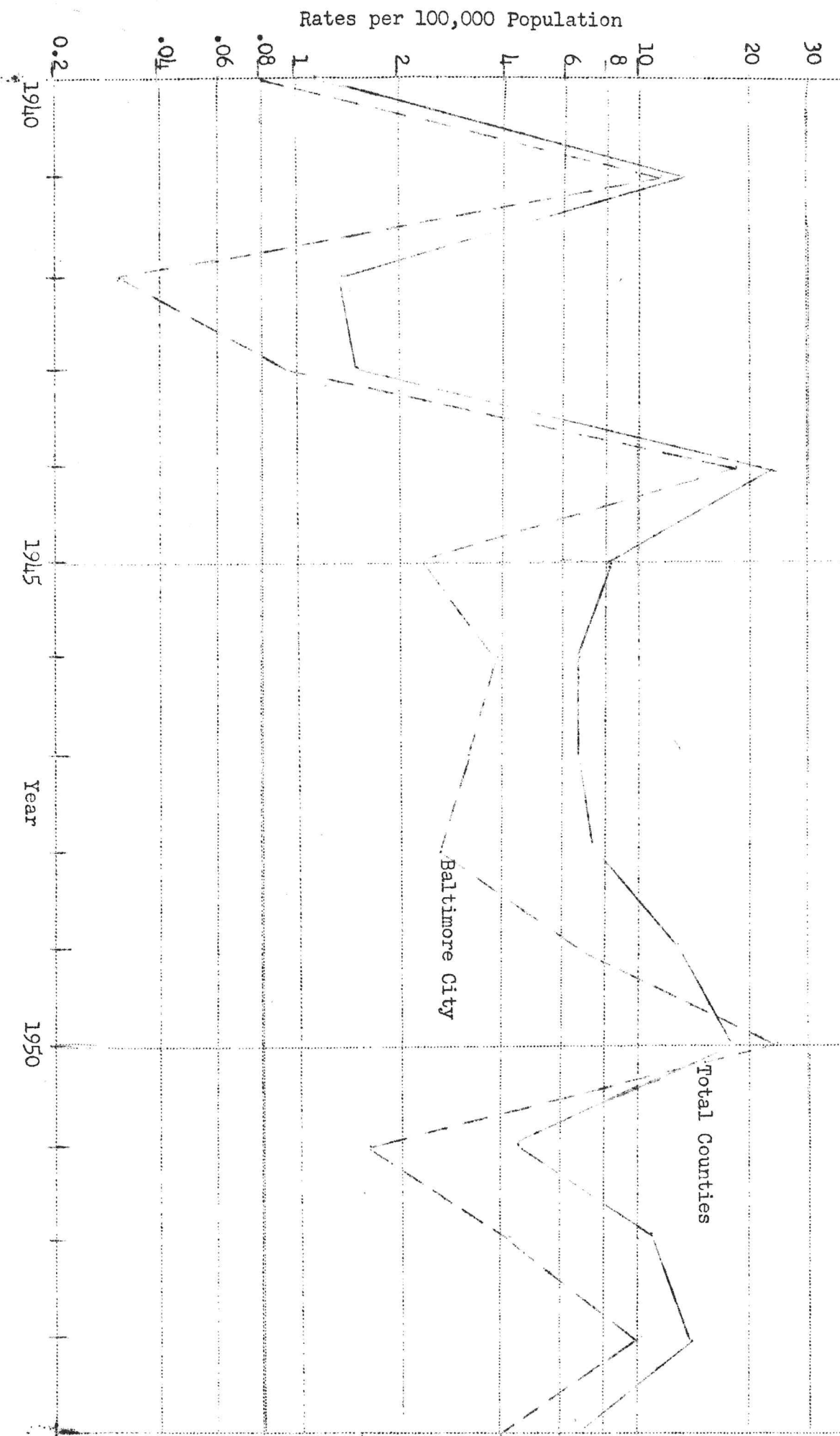


Figure 3. In the last 15 years, epidemics in Maryland have occurred at intervals of 3 to 6 years. Baltimore and the counties have tended to peak in the same years; but, except for 1950, the county rate has exceeded the City. (Statistics are in Table A.)

Figure 3.

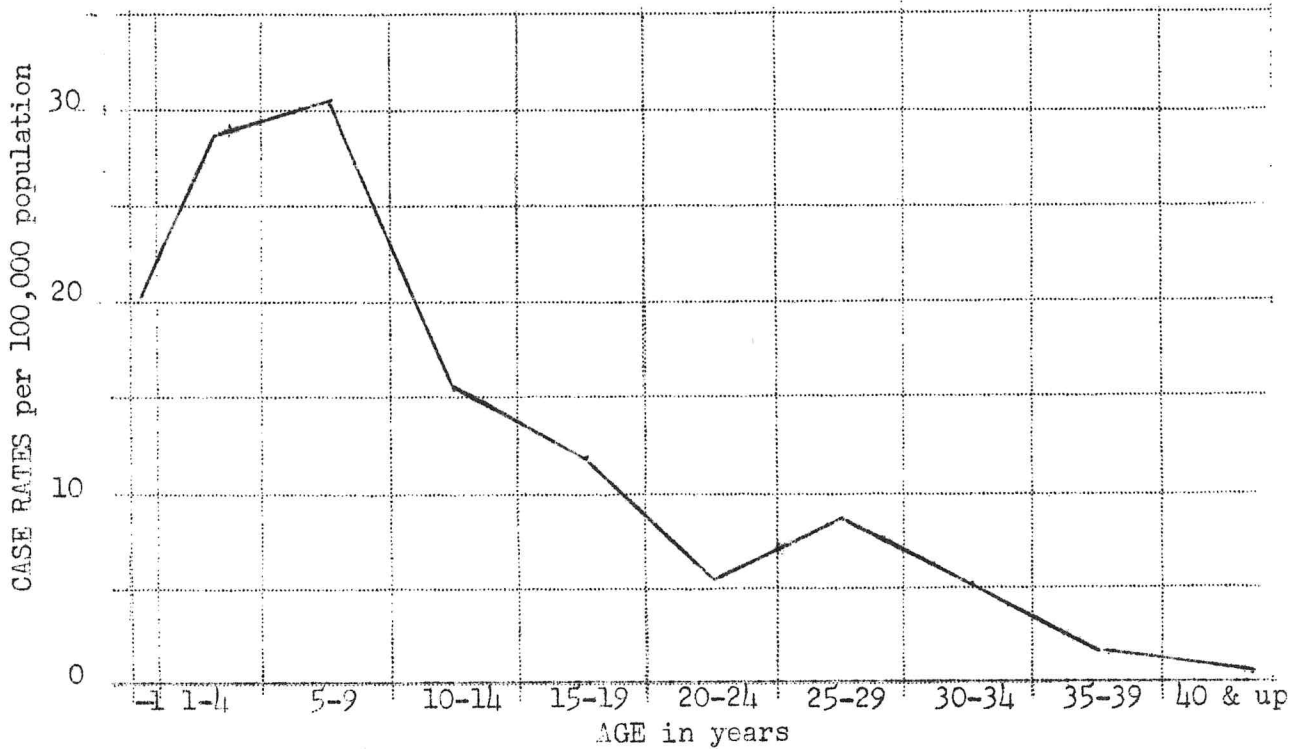
Paralytic Poliomyelitis Case Rates
1940 - 1954
Maryland Counties and Baltimore City



5/9/55

Figure 4. Case rates for the State are much higher for children than for adults. (Other data show that in infancy, the great majority of the paralytic cases occur in the latter half of the first year.)

5 CASE RATE BY AGE
ME: 1948-1952



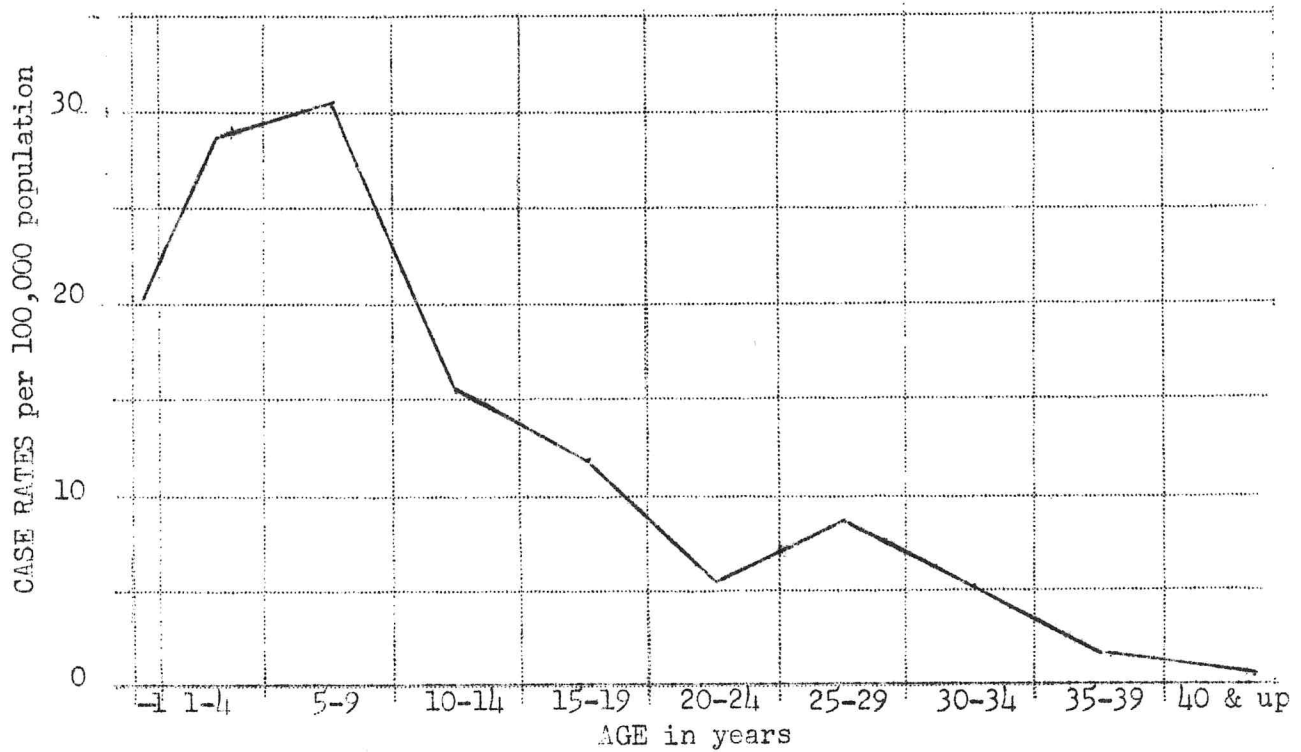
PARALYTIC POLIOMYELITIS CASES BY AGE
MARYLAND 1948-1952

AGE	NUMBER OF CASES		Average annual case rate ^a
	Total 1948-52	Average per year	
All Ages	1,109	221.8	9.5
Under 1	49	9.8	20.1
1 - 4	303	60.6	28.9
5 - 9	312	62.4	30.3
10 - 14	127	25.4	15.7
15 - 19	93	18.6	11.9
20 - 24	53	10.6	5.7
25 - 29	93	18.6	8.7
30 - 34	52	10.4	5.2
35 - 39	15	3.0	1.6
40 & over	12	2.4	0.3

^a Annual rates per 100,000 population of specified age.

Figure 4

PARALYTIC POLIOMYELITIS CASE RATE BY AGE
MARYLAND, AVERAGE: 1948-1952



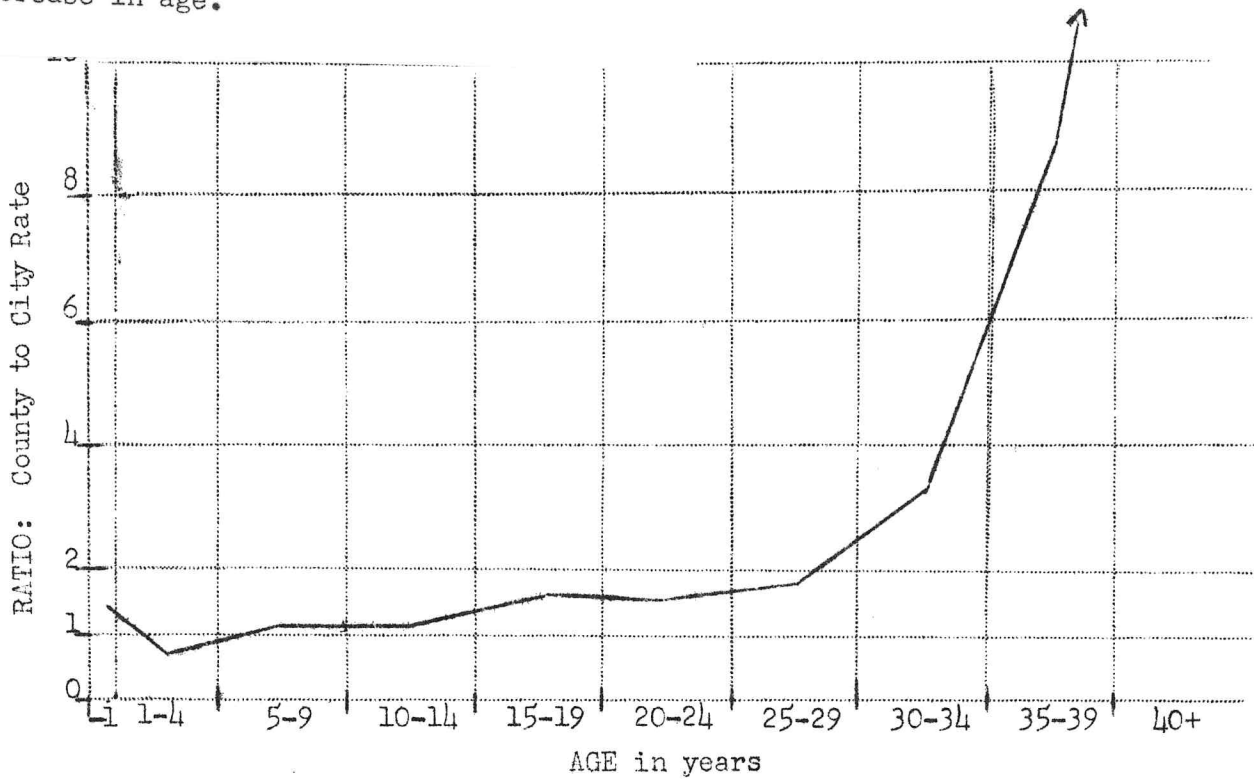
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40 & over	12	2.4	0.3

^a Annual rates per 100,000 population of specified age.

Figure 5. Except at ages 1-4, the counties show a higher attack rate from paralytic polio, and this excess risk in the counties becomes greater with increase in age.

PARALYTIC POLIOMYELITIS CASE RATES BY AGE
MARYLAND 1948-1952



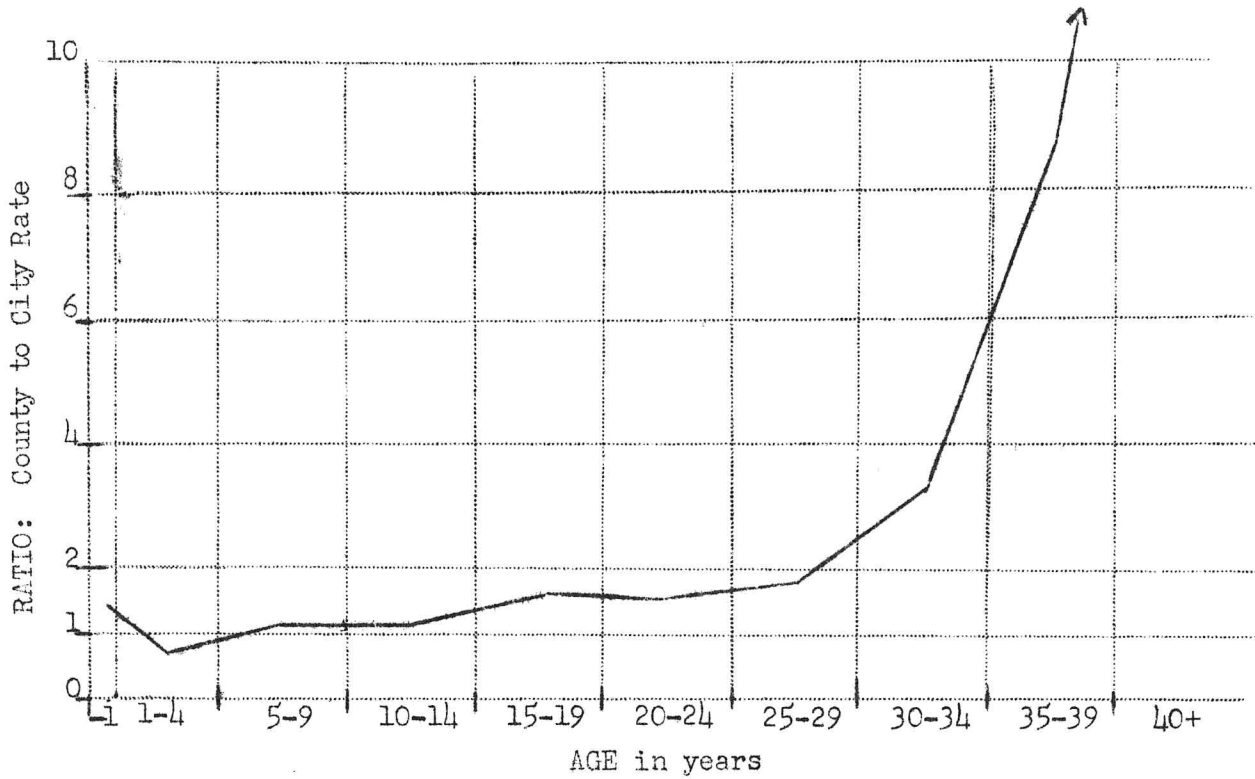
PARALYTIC POLIOMYELITIS CASE RATES BY AGE
Baltimore City and Maryland Counties, Average 1948-52

AGE	BALTIMORE CITY		MARYLAND COUNTIES		RATIO: County Rate City Rate
	Cases per Year	Case Rate ^a	Cases per Year	Case Rate ^a	
ALL AGES	72.8	7.7	149.0	10.7	1.4
Under 1	2.8	15.5	7.0	22.9	1.5
1 - 4	26.2	35.2	34.4	25.4	.7
5 - 9	20.2	27.5	42.2	31.9	1.2
10 - 14	8.2	13.8	17.2	16.8	1.2
15 - 19	5.0	8.4	13.6	14.1	1.7
20 - 24	3.2	4.2	7.4	6.6	1.6
25 - 29	5.2	5.9	13.4	10.6	1.8
30 - 34	1.8	2.2	8.6	7.2	3.3
35 - 39	0.2	0.3	2.8	2.6	8.7
40 & over	0	0	2.4	0.5	-

^a Annual rates per 100,000 population of specified age

Figure 5

RATIO OF COUNTY TO CITY CASE RATES BY AGE
PARALYTIC POLIOMYELITIS, MARYLAND 1948-1952



PARALYTIC POLIOMYELITIS CASE RATES BY AGE
Baltimore City and Maryland Counties, Average 1948-52

AGE	BALTIMORE CITY		MARYLAND COUNTIES		RATIO: County Rate City Rate
	Cases per Year	Case Rate ^a	Cases per Year	Case Rate ^a	
ALL AGES	72.8	7.7	149.0	10.7	1.4
Under 1	2.8	15.5	7.0	22.9	1.5
1 - 4	26.2	35.2	34.4	25.4	.7
5 - 9	20.2	27.5	42.2	31.9	1.2
10 - 14	8.2	13.8	17.2	16.8	1.2
15 - 19	5.0	8.4	13.6	14.1	1.7
20 - 24	3.2	4.2	7.4	6.6	1.6
25 - 29	5.2	5.9	13.4	10.6	1.8
30 - 34	1.8	2.2	8.6	7.2	3.3
35 - 39	0.2	0.3	2.8	2.6	8.7
40 & over	0	0	2.4	0.5	

^a Annual rates per 100,000 population of specified age

Table A

PARALYTIC POLIOMYELITIS CASES
MARYLAND COUNTIES and BALTIMORE CITY, 1940-1954

Year	MARYLAND COUNTIES		BALTIMORE CITY	
	Number of Cases	Case Rate*	Number of Cases	Case Rate*
1940	11	1.1	4	0.8
1941	137	13.5	101	11.6
1942	14	1.3	3	0.3
1943	16	1.5	8	0.9
1944	283	24.7	167	18.6
1945	98	8.2	21	2.3
1946	80	6.5	34	3.7
1947	83	6.5	29	3.1
1948	94	7.1	24	2.6
1949	171	12.6	61	6.5
1950	256	18.2	225	23.7
1951	63	4.3	15	1.6
1952	161	10.8	39	4.1
1953	217	14.1	92	9.5
1954	116	7.3	36	3.7
Average	120	9.2	57	6.2

Table B

POLIOMYELITIS CASES AND RESIDENT DEATHS
MARYLAND 1940-1954

Year	PARALYTIC CASES		NON-PARALYTIC CASES		DEATHS	
	Number of Cases	Case Rate*	Number of Cases	Case Rate*	Number of Deaths	Death Rate*
1940	15	0.8	1	0.1	1	0.1
1941	238	12.6	60	3.2	11	0.6
1942	17	0.9	2	0.1	0	-
1943	24	1.2	0	-	1	0.1
1944	450	22.0	58	2.8	27	1.3
1945	119	5.7	14	0.7	8	0.4
1946	114	5.6	15	0.7	6	0.3
1947	112	5.1	45	2.0	15	0.7
1948	118	5.2	64	2.8	11	0.5
1949	232	10.1	83	3.6	16	0.7
1950	481	20.4	225	9.5	28	1.2
1951	78	3.2	70	2.9	5	0.2
1952	200	8.1	163	6.6	14	0.6
1953	309	12.4	216	8.6	26	1.0
1954	152	6.0	98	3.9	7	0.3
Average	177	7.9	74	3.6	12	0.5

* Case and Death rates per 100,000 population

5/9/55 Maryland State Department of Health, D.V.R.S.