# poliomyelitis sunvellance repor 

SEPTEMBER 1, 1961

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heal U. S. DEPARTMENT OF TH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE Communicable Disease Center

Clarence A. Smith, Chief
Epidemiology Branch
Alexander D. Langmuir, Chief
Surveillance Section
D. A. Henderson, Chief

Atlanta 22, Georgia

## 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

Total and paralytic cases continued to rise during the 34 th week ending August 26 with reports of 74 cases, 58 paralytic.

A review of the occurrence of poliomyelitis during the first six months of 1961 has shown a record fall in incidence when compared with previous years. A graph of attack rates is included.

Part of the Type I oral poliovaccine epidemic reserve has been rushed to the scene of an explosive outbreak of poliomyelitis in upper New York State. A report of this outbreak is included, along with reports from Maryland, Pennsylvania, and Louisiana.

## 1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

Telegraphic reports of total and paralytic cases continued to mount during the 34 th week ending August 26. A total of 74 cases, 58 paralytic, was reported, the fifth consecutive weekly increase in paralytic cases as shown in Figure 1. Current levels remain well below those of recent years, however.

The following table presents a comparison of current six-week reporting figures with those of the past four years. The 1961 mid-summer seasonal total of 282 cases, 201 paralytic, is far below similar seasonal figures in recent years.

Six-Week Totals (29th Week through 34th Week) for Past Five Years

|  | $\frac{1961}{}$ | $\underline{1960}$ | $\underline{1959}$ | $\underline{1958}$ | $\underline{1957}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Paralytic | 201 | 512 | 1,557 | 565 | 418 |
| Total | 282 | 756 | 2,464 | 1,179 | 1,886 |

New York, with 24, cases accounted for a large part of the current week's reporting total. The majority of these cases were from the tricounty focus in New York State. Pennsylvania reported six cases, Louisiana five, and Maryland four. Reports from these States are included in Section 2.

A review of poliomyelitis incidence during the first six months of each year since 1912 has been carried out. The histogram on the following page graphically illustrates that the incidence in the first six months of this year was lower than that reported for the comparable period in any previous year since reporting was initiated in 1912.

INCIDENCE OF POLIOMYELITIS January Through June United States, 1912-1961


## 2. REPORTS

## A. New York

Type I oral polio vaccine from the Public Health Service's epidemic reserve stockpile has been flown to Syracuse to combat the tri-county outbreak in that area. This shipment of at least 650,000 doses represents the first large-scale distribution of the vaccine licensed by the Public Health Service last month.

Through Wednesday, August 30, 40 cases of paralytic poliomyelitis have occurred in the counties of Onondaga (Syracuse), Madison and Oneida. Of the 40 cases, 17 have occurred in Onondaga County (12 in Syracuse), 14 in Madison County and 9 in Oneida County. The explosive character of this outbreak is illustrated in the histogram below; all but four cases have had onset in August.

POLIOMYELITIS BY WEEK OF ONSET
ONONDAGA - MADISON - ONEIDA COUNTIES, NEW YORK


The 40 paralytic cases by week of onset and by county are shown below:

| WEEK ENDING: | Before July | 7/29 | 8/5 | 8/12 | 8/19 | 8/26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Onondaga County | 1 | 1 | 2 | 1 | 4 | 8 |
| Madison County | 1 | 0 | 4 | 3 | 5 | 1 |
| Oneida County | 1 | 0 | 2 | 2 | 2 | 2 |
| TOTAL | 3 | 1 | 8 | 6 | 11 | 11 |

In addition to the 40 paralytic cases, there are two nonparalytic cases in Onondaga County and one nomparalytic case in Oneida County. There has been one death. Type I poliovirus has been isolated from seven cases. The majority of cases have occurred among pre-school children in each county. The age group and vaccination status of the 40 paralytic cases are shown in the following table:

| Age | Vaccination History |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Group | 0 | 1 | 2 | 3 | $4+$ | Total |
| $0-4$ | 9 | 2 | 4 | 7 | 3 | 25 |
| $5-9$ | 1 | 0 | 1 | 4 | 2 | 8 |
| $10-19$ | 1 | 0 | 0 | 0 | 1 | 2 |
| $20+$ | 4 | 0 | 0 | 0 | 1 | 5 |
|  |  |  |  |  |  |  |
| TOTAL | 15 | 2 | 5 | 11 | 7 | 40 |

Dr. Robert M. Albrecht, Director, and Dr. Julia L. Freitag, Epidemiology Division, New York State Department of Health, report that the first 150,000 doses of the oral vaccine were received in Syracuse on Monday. The vaccine was diluted for distribution and administered on Tuesday at 36 clinics -- in schools, firehouses and other public buildings in the three counties. Twenty clinics were set up in Syracuse, nine in the remainder of Onondaga County, four in the upper one-third of Madison County and three in the lower one-third of Oneida County. All 650,000 doses of the vaccine will be distributed by Friday.

Three drops of the vaccine ( $300,000 \mathrm{TCID}_{50}$ ) have been administered to persons over six months of age. Infants below that age have received five drops. There is no age limit for vaccine recipients. The population in the tri-county area is about 742,000 .

## B. Maryland

Dr. John H. Janney, Epidemiologist, Maryland State Department of Health, reports that none of the four cases of paralytic poliomyelitis reported for the week ending August 26, are from Frederick County. The last case to occur in Frederick County had onset on August 11. Of the cases reported this week, two were from adjacent Washington County, both unvaccinatied pre-school children.

The distribution of cases in Frederick County and adjacent Washington County is shown below. Nine of the 13 Frederick County cases have now yielded type III poliovirus isolate.


Baltimore

## C. Pennsylvania

The six cases reported this week include four paralytic cases from different counties, according to Dr. I. F. Gratch, Epidemiologist, Pennsylvania Department of Health. One of the paralytic cases involved a 21 year-old unvaccinated white male from Dauphin County, whose onset was July 30. This patient had not participated in the community oral poliovaccine program conducted in that county earlier this year (See P.S.U. Report No. 223).

Two cases of poliomyelitis, one paralytic, in Schuylkill County, have also been reported. Both of these involved school-age children with onsets in mid-August. The patient with paralytic involvement had received one dose of killed-virus vaccine and the other patient was triply vaccinated. No additional cases in this county have been recognized since mid-August. A type III poliovirus isolate has been obtained from one previous Schuylkill County case.

## D. Louisiana

The five cases of poliomyelitis reported by Louisiana for the current week ending August 26 , were from five different parishes (counties). The Louisiana Weekly Report states that one paralytic case occurred in each of the following four parishes: Lincoln, Washington, Lafayette and Orleans. One nonparalytic case occurred in Richland Parish.

The paralytic case from New Orleans (Orleans Parish) was an unvaccinated two-year old female with onset on July 17. Type I poliovirus has been isolated.
(This surveillance report was prepared by the Poliomyelitis and Poliolike Diseases Surveillance Unit, Michael J. Regan, M.D., Chief, and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)
3. 1961 POLIOMYELITIS CASES REPORTED TO PSU

Through August 26, there have been 357 cases of poliomyelitis with onset in 1961 submitted to the Poliomyelitis Surveillance Unit on individual case forms. Of these 357 cases, 271 are paralytic, 73 nonparalytic and 13 unspecified as to paralytic status.

These cases are presented in Table 3 by paralytic status, age group and vaccination history.

TABLE 3
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION STATUS REPORTED ON PSU FORMS
(Through August 26, 1961)
Paralytic

| Age Group | Doses of Vaccine |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 0 | 1 | 2 | 3 | $4+$ | Unk | Tot |
| 0-4 | 74 | 14 | 14 | 13 | 10 | 3 | 128 |
| 5-9 | 17 | 4 | 4 | 11 | 14 | 3 | 53 |
| 10-14 | $10^{\circ}$ | 0 | 3 | 8 | 9 | 1 | 31 |
| 15-19 | 6 | 0 | 2 | 3 | 1 | 1 | 13 |
| 20-29 | 13 | 0 | 1 | 2 | 2 | 1 | 19 |
| 30-39 | 11 | 2 | 1 | 0 | 1 | 1 | 16 |
| 40+ | 9 | 0 | 0 | 0 | 0 | 2 | 11 |
| Total | 140 | 20 | 25 | 37 | 37 | 12 | 271 |
| PERCENT |  |  |  |  |  |  |  |
| DOSES | 54.1 | 7.7 | 9.6 | 14.3 | 14.3 | - | 100.0 |

Nonparalytic

| Age <br> Group | Doses of Vaccine |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | $4+$ | Unk | Tot |
| 0-4 | 9 | 0 | 4 | 5 | 1 | 1 | 20 |
| 5-9 | 3 | 0 | 1 | 4 | 7 | 1 | 16 |
| 10-14 | 0 | 2 | 1 | 5 | 6 | 1 | 15 |
| 15-19 | 1 | 0 | 1 | 1 | 2 | 0 | 5 |
| 20-29 | 4 | 0 | 0 | 4 | 2 | 2 | 12 |
| 30-39 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| 40+ | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total | 20 | 2 | 7 | 19 | 20 | 5 | 73 |
| PERCENT |  |  |  |  |  |  |  |
| DOSES | 29.4 | 2.9 | 10.3 | 27.9 | 29.4 | - | 100.0 |

## 4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset Within 30 Days of Vaccination

No additional cases of poliomyelitis within thirty days of vaccination have been reported to the Poliomyelitis Surveillance Unit during the past week ending August 26. Thus, the 1961 total remains at 8 cases, of which 7 are paralytic (one correlated).





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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 | Cumulative 1961 | Cases Reported to CDC For Week Ending |  |  |  |  |  | Six <br> Week | Compa <br> Weeks | able <br> Tota | $\begin{aligned} & \text { Six } \\ & \frac{1 \text { sin }}{1958} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region |  | 7-22 | 7-29 | 8-5 | 8-12 | 8-19 | 8-26 | Total | 1960 | 1959 | 195 |
| UNITED STATES |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 381 | 6 | 26 | 27 | 36 | 48 | 58 | 201 | 512 | 1557 | 565 |
| Nonparalytic | 117 | 5 | 5 | 7 | 16 | 13 | 9 | 55 | 178 | 704 | 68 |
| Unspecified | 66 | - | 7 | 2 | 2 | 8 | 7 | 26 | 66 | 203 | 168 |
| Total | 564 | 11 | 38 | 36 | 54 | 69 | 74 | 282 | 756 | 2464 | 9 |
| NEW ENGLAND 10 |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 7 | 1 | - | - | 1 | 1 | 1 | 4 | 42 | 69 | 8 |
| Total | 9 | 1 | - | - | 1 | 3 | 1 | 6 | 56 | 105 |  |
| Maine | - | - | - | - | - | - | - | - | 3 | 2 | 4 |
| New Hampshire | 1 | - | - | - | - | 1 | - | 1 | - | 1 | + |
| Vermont | 2 | 1 | - | - | - | 1 | - | 2 | 1 | - | 1 |
| Massachusetts | 4 | - | - | - | - | 1 | 1 | 2 | 13 | 34 |  |
| Rhode Island | - | - | - | - | - | - | - | - | 29 | 1 | 14 |
| Connecticut | 2 | - | - | - | 1 | - | - | 1 | 10 | 67 | 14 |
| MIDDLE ATLANTIC 100 |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 72 | - | 5 | 6 | 7 | 7 | 27 | 52 | 91 | 93 | 175 |
| Total | 86 | - | 5 | 6 | 7 | 12 | 33 | 63 | 115 | 164 | 74 |
| New York | 51 | - | 2 | 1 | 6 | 9 | 24 | 42 | 61 | 83 | 74 |
| New Jersey | 20 | - | - | 4 | 1 | 2 | 3 | 10 | 30 | 40 | 27 |
| Pennsylvania | 15 | - | 3 | 1 | - | 1 | 6 | 11 | 24 | 41 | 2 |
| EAST NORTH CENTRAL 142 |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 32 | - | - | - | 3 | 2 | 8 | 13 | 75 | 159 | 344 |
| Total | 55 | - | 2 | - | 7 | 5 | 11 | 25 | 123 | 353 | 66 |
| Ohio | 18 | - | 1 | - | 1 | - | 4 | 6 | 22 | 82 | 25 |
| Indiana | 5 | - | - | - | - | - | 1 | 1 | 33 | 56 | 27 |
| Illinois | 16 | - | 1 | - | 3 | 2 | 2 | 8 | 43 | 81 | 200 |
| Michigan | 10 | - | - | - | 1 | 3 | 3 | 7 | 19 | 121 | 16 |
| Wisconsin | 6 | - | - | - | 2 | - | 1 | 3 | 6 | 13 | 1 |
| WEST NORTH CENTRAL 32 |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 16 | - | - | 1 | 1 | 2 | 3 | 7 | 21 | 255 | 73 |
| Total | 33 | - | 2 | 2 | 3 | 4 | 3 | 14 | 38 | 522 | 8 |
| Minnesota | 4 | - | - | - | - | - | 1 | 1 | 11 | 71 | 14 |
| Iowa | 11 | - | 1 | 1 | 2 | 4 | 1 | 9 | 3 | 152 | 22 |
| Missouri | 8 | - | - | - | - | - | - | - | 5 | 159 | 16 |
| North Dakota | 1 | - | - | - | 1 | - | - | 1 | 6 | 2 | 1 |
| South Dakota | - | - | - | - | - | - | - | - | 2 | 6 | 2 |
| Nebraska | 4 | - | - | 1 | - | - | 1 | 2 | 4 | 54 | 10 |
| Kansas | 5 | - | 1 | - | - | - | - | 1 | 7 | 78 |  |


| State and Region | $\begin{gathered} \text { Cumula- } \\ \text { tive } \\ 1961 \\ \hline \end{gathered}$ | Cases Reported to CDC For Week Ending |  |  |  |  |  | Six Week Total | Comparable Six <br> Weeks Totals in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7-22 | 7-29 | 8-5 | 8-12 | 8-19 | 8-26 |  | 1960 | 1959 | 1958 |
| SOUTH ATLANTIC |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 91 | - | 7 | 9 | 14 | 21 | 8 | 59 | 96 | 282 | 79 |
| Total | 118 | 1 | 10 | 10 | 17 | 23 | 11 | 72 | 145 | 358 | 185 |
| Delaware | 2 | - | - | - | - | - | - | - | - | 1 | 9 |
| Maryland | 21 | - | 3 | 2 | 3 | 6 | 4 | 18 | 16 | 9 | 5 |
| D. C. | 1 | - | - | 1 | - | - | - | 1 | - | 3 | 4 |
| Virginia | 8 | - | - | 1 | 4 | 2 | - | 7 | 8 | 96 | 40 |
| West Virginia | 14 | - | - | - | 4 | - | 3 | 7 | 11 | 37 | 30 |
| North Carolina | 8 | 1 | 2 | - | - | 1 | - | 4 | 30 | 87 | 32 |
| South Carolina | 11 | - | - | 3 | 1 | 2 | 1 | 7 | 65 | 25 | 5 |
| Georgia | 27 | - | 1 | 2 | 3 | 3 | 2 | 11 | 5 | 62 | 5 |
| Florida | 26 | - | 4 | 1 | 2 | 9 | 1 | 17 | 10 | 38 | 55 |
| EAST SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 22 | - | 4 | 2 | - | 3 | 1 | 10 | 29 | 238 | 26 |
| Total | 42 | - | 4 | 3 | - | 4 | 2 | 13 | 56 | 305 | 92 |
| Kentucky | 19 | - | 2 | - | - | - | 1 | 3 | 24 | 16 | 4 |
| Tennessee | 10 | - | 1 | 2 | - | 2 | - | 5 | 12 | 141 | 31 |
| Alabama | 6 | - | 1 | - | - | 1 | - | 2 | 3 | 120 | 14 |
| Mississippi | 7 | - | - | 1 | - | 1 | 1 | 3 | 17 | 28 | 43 |
| WEST SOUTH CENTRAL |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 49 | 2 | 3 | 1 | 4 | 8 | 5 | 23 | 43 | 248 | 99 |
| Total | 92 | 5 | 6 | 5 | 10 | 12 | 8 | 46 | 75 | 388 | 165 |
| Arkansas | 8 | 1 | - | 1 | - | 3 | 2 | 7 | 6 | 101 | 5 |
| Louisiana | 30 | - | 2 | - | 7 | 3 | 5 | 17 | 13 | 41 | 18 |
| Oklahoma | 3 | - | 1 | - | - | 1 | - | 2 | 4 | 66 | 21 |
| Texas | 51 | 4 | 3 | 4 | 3 | 5 | 1 | 20 | 52 | 180 | 121 |
| MOUNTAIN |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 23 | 1 | 2 | 3 | 1 | 2 | 1 | 10 | 6 | 23 | 20 |
| Total | 38 | 2 | 3 | 5 | 3 | 2 | 1 | 16 | 17 | 40 | 40 |
| Montana | 3 | - | - | 1 | - | - | - | 1 | 3 | 4 | 20 |
| Idaho | 12 | 1 | 2 | 2 | 2 | 1 | - | 8 | 1 | 1 | 4 |
| Wyoming | - | - | - | - | - | - | - | - | 6 | - | 1 |
| Colorado | 6 | - | - | - | 1 | 1 | 1 | 3 | 3 | 4 | 3 |
| New Mexico | 3 | 1 | 1 | - | - | - | - | 2 | 1 | 7 | 5 |
| Arizona | 7 | - | - | 2 | - | - | - | 2 | 1 | 21 | 4 |
| Utah | 7 | - | - | - | - | - | - | - | 2 | 2 | 3 |
| Nevada | - | - | - | - | - | - | - | - | - | 1 | - |
| PACIFIC |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 69 | 2 | 5 | 5 | 5 | 2 | 4 | 23 | 109 | 190 | 57 |
| Total | 91 | 2 | 6 | 5 | 6 | 4 | 4 | 27 | 131 | 229 | 77 |
| Washington | 17 | - | 3 | - | 2 | - | 2 | 7 | 10 | 49 | 6 |
| Oregon | 11 | - | 1 | - | 2 | 1 | - | 4 | 6 | 59 | 7 |
| California | 61 | 2 | 2 | 5 | 2 | 3 | 2 | 16 | 114 | 109 | 40 |
| Alaska |  | - | - | - | - | - | - | - | - | 12 | - |
| Hawaii | 2 | - | - | - | - | - | - | - | 1 | - | 24 |
| TERRITORY |  |  |  |  |  |  |  |  |  |  |  |
| Puerto Rico | 5 | - | - |  | - | - | NR | - | 89 | - | 11 |



