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REPORT NO. 262
July 13, 1962

## communicable disease Center

# POLIOMYELITIS <br> S U R V E I L L A N C E 



## 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: Chief, Poliomyelitis Surveillance Unit, Communicable Di sease Center, Atlanta 22, Georgia.

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## SUMMARY

Seventeen cases of poliomyelitis, 12 paralytic, were reported for the week ending July 7, 1962.

Twelve of the 17 cases, including 8 paralytic, were from Texas. The Minnesota case reported this week was the second to occur in Polk County with onset in June. Narrative reports from both Texas and Minnesota are included in Section 2.

There have been 124 cases of poliomyelitis with onset in 1962 reported to the Poliomyelitis Surveillance Unit on individual case forms; 68 percent have been unvaccinated. There have been 56 poliovirus isolates, the majority being Type I. This data is presented in Section 3.

## 1. CURRENT MORBIDITY TRENDS

Seventeen cases of poliomyelitis, 12 paralytic, were reported for the 27th week of 1962 ending July 7. Texas again reported the largest proportion of cases with 12 cases, of which 8 were paralytic. California reported two paralytic cases and Minnesota and West Virginia accounted for one each. The Minnesota case was the second to occur in Polk County with onset in June. Reports from both Texas and Minnesota are included in Section 2.

There have now been 220 cases, 170 paralytic, reported in the United States through July 7, 1962 (See Table I). A comparison with past years shows that more paralytic cases have been reported in 1962 than in 1961 to date.

Poliomyelitis (Cumulated Weekly) thru 27th Week for Past Five Years

|  | $\underline{1962}$ | $\underline{1961}$ | $\underline{1960}$ | $\underline{1959}$ | $\underline{1958}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Paralytic | 170 | 162 | 385 | 805 | 368 |
| Total | 220 | 249 | 518 | 1,203 | 710 |

During the last four of the past six weeks, weekly reports of paralytic poliomyelitis have topped those in 1961 (See Figure 1). The six week totals for the past five years, as shown below, reflect this increase in paralytic cases.

Six-Week Totals (22nd thru 27th Week) for Past Five Years

|  | 1962 | 1961 | 1960 | $\underline{1959}$ | 1958 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Paralytic | 75 | 49 | 160 | 435 | 170 |
| Total | 90 | 80 | 206 | 673 | 331 |

## REPORTED PARALYTIC POLIOMYELITIS IN TEXAS BY COUNTY



## 2. STATE REPORTS

## A. Texas

Dr. Van C. Tipton, Chief, Communicable Disease Division, Texas State Department of Health, reports an additional 12 cases, 8 paralytic, for the week ending July 7. Dallas County reported two paralytic cases and the Counties of Brazoria, Lubbock, Maverick, Medina, Nueces and Tarrant accounted for one each.

There have now been 103 cases, 84 paralytic, reported by Texas in 1962. The 1962 experience in Texas is compared with that of the past four years below. The total number of paralytic cases through the 27 th week exceeds the number of paralytic cases in 1960 and 1961, and approximates that of 1958.

## Paralytic Polio in Texas for Past Five Years

|  | 1962 | 1961 |  | 1960 | $\frac{1959}{}$ | $\frac{1958}{}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Thru 27th Week | 84 | 16 | 21 | 109 | 88 |  |
| Complete Year | - | 37 | 118 | 325 | 423 |  |

The 84 paralytic cases during the current year have occurred throughout the State as shown in the map on page 2. Five counties have reported six or more cases: Bexar County (San Antonio), Webb County (Laredo), Frio County, Dallas County (Dallas), and Harris County (Houston). Although the scene of poliomyelitis activity was focused initially in the South Texas counties, it has since shifted to Dallas, Harris and other counties in the more northern part of the State. All counties with at least 6 paralytic cases are shown below by week of onset.


Oral vaccine programs were carried out during late May and early June in the several southern counties as shown on the map. In these counties, only one case has occurred since June 13. This case had received neither inactivated nor oral vaccine.

Both Harris and Dallas Counties plan oral vaccine programs in late July. Type I poliovirus has been isolated from cases in both these areas.

Of the 84 paralytic cases reported thus far in 1962 , the Poliomyelitis Surveillance Unit has received individual case forms on 69. These cases are shown below by age group and history of immunization with inactivated vaccine. Seventy-one percent of the cases have been among pre-school children; 78 percent have been unvaccinated.

> Paralytic Poliomyelitis by Age Group and Vaccination History, Texas, $1962 *$

| Age | Inactivated Vaccine |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Group | OV | $1-2 \mathrm{~V}$ | $\underline{3+V}$ | Total |
| $0-4$ | 38 | 9 | 2 | 49 |
| $5-9$ | 9 | 0 | 3 | 12 |
| $10+$ | 7 | 1 | 0 | 8 |
| TOTAL |  | 54 | 10 | 5 |

*Cases reported to the CDC Poliomyelitis Surveillance Unit on individual case forms through July 12, 1962.

## B. Minnesota

The 2 cases of paralytic poliomyelitis reported during the past three weeks by Minnesota are both from Polk County (pop. 37,000). Dr. C.B. Nelson, Chief, Section of Acute Diseases, Minnesota Department of Health, reports that both cases are unvaccinated teen-agers with onset in early June.

Type I poliovirus has been isolated from both patients, who are listed below:

|  |  |  |  | Vaccine |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Community | Onset | Age | Sex |  | Inactivated | Oral |
| Crookston | June |  | 14 | M |  | 0 |
| Parnell | June 12 | 17 | F |  | 0 | 0 |

No contact has been established between the two cases. The 14 year old male came to Minnesota from Texas (San Antonio area) approximately two weeks before onset. Polk County is in the Red River Valley and attracts numerous migrant workers during the summer season.
3. 1962 POLIOMYELITIS REPORTED TO PSU

Of the 170 cases of paralytic poliomyelitis reported through the week ending July 7,148 had onset in 1962. Twenty-two cases represent delayed reports with onsets of illness in 1961.

To date in 1962, there have been 55 poliovirus isolates reported from the 148 paralytic cases. Of these, 48 are Type $I$ and 7 are Type III poliovirus. Texas has accounted for over half of the isolates which have been reported. The isolates have been reported from the following States:

| State | Poliovirus |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | I | II | III |  |
| Arizona | 2 | 0 | 0 | 2 |
| Arkansas | 0 | 0 | 1 | 1 |
| California | 0 | 0 | 1 | 1 |
| Georgia | 0 | 0 | 1 | 1 |
| Illinois | 1 | 0 | 0 | 1 |
| Kentucky | 1 | 0 | 1 | 2 |
| Louisiana | 2 | 0 | 0 | 2 |
| Massachusetts | 2 | 0 | 0 | 2 |
| Minnesota | 2 | 0 | 0 | 2 |
| Montana | 1 | 0 | 0 | 1 |
| New York | 3 | 0 | 0 | 3 |
| Ohio | 0 | 0 | 2 | 2 |
| Texas | 32 | 0 | 1 | 33 |
| Utah | 1 | 0 | 0 | 1 |
| Wyoming | 1 | 0 | 0 | 1 |
| TOTAL | 48 | 0 | 7 | 55 |

The Poliomyelitis Surveillance Unit has received individual case forms on 124 of the 148 paralytic cases with onset in 1962 . Of these 124 cases, 83 ( 68 percent) have been unvaccinated as shown below.

|  | Vaccination Status |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{0 V}$ | $\frac{1-2 V}{}$ | $\frac{3 V}{L+V}$ | $\underline{U n k}$. | Total |  |
| 1962 Paralytic Cases | 83 | 18 | 11 | 10 | 2 | 124 |

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1962
A. Cases with Onset Within 30 Days of Vaccine (Inactivated)

There have been no cases with onset within 30 days of vaccination with inactivated vaccine reported to the Poliomyelitis Surveillance Unit during the current week.
B. Cases with Onset Within 30 Days of Vaccination (Oral)

During the week ending July 7, one under-30-day paralytic case (OPV) has been reported to the Poliomyelitis Surveillance Unit. This case, a 52 year old male from Benton County, Oregon, had received Type I oral polio vaccine on May 5, and Type III vaccine on June 7. The onset of this patient's illness was June 26.

To date in 1962, there have been 11 under-30-day cases, 10 paralytic, reported.


Figure 1
CURRENT U.S. POLIO INCIDENCE


Table I
TREND OF 1962 POLIOMYELITIS INCIDENCE

| State and | $\begin{aligned} & \text { Cumula- } \\ & \text { tive } \\ & 1962 \end{aligned}$ | Cases Reported to CDC For Week Ending |  |  |  |  |  | Six Week Total | Comparable Six Weeks Totals in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region |  | 6/2 | 6/9 | 6/16 | 6/23 | 6/30 | 7/7 |  | 1961 |  | 1959 |
| UNITED STATES |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 170 | 18 | 6 | 14 | 9 | 16 | 12 | 75 | 49 | 160 | 435 |
| Nonparalytic | 32 | 2 | - | 3 | 2 | 3 | 4 | 14 | 21 | 41 | 172 |
| Unspecified | 18 | - | - | - | - | - | 1 | 1 | 10 | 5 | 66 |
| Total | 220 | 20 | 6 | 17 | 11 | 19 | 17 | 90 | 80 | 206 | 673 |

NEW ENGLAND
Paralytic
Total
Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
MIDDLE ATLANTIC
Paralytic 19
Total 32
New York 32
New Jersey
-
Pennsylvania
EAST NORTH CENTRAL

| $\quad$ Paralytic | 7 | - | - | - | - | 1 | - | 1 | 3 | 10 | 25 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| $\quad$ Total | 10 | - | - | - | - | 1 | - | 1 | 4 | 15 | 58 |
| Ohio | 5 | - | - | - | - | 1 | - | 1 | 3 | 3 | 24 |
| Indiana | 3 | - | - | - | - | - | - | - | - | 1 | 6 |
| Illinois | 1 | - | - | - | - | - | - | - | - | 8 | 5 |
| Michigan | - | - | - | - | - | - | - | - | 1 | 3 | 21 |
| Wisconsin | 1 | - | - | - | - | - | - | - | - | - | 2 |

WEST NORTH CENTRAL

Paralytic
Total
Minnesota
Iowa
Missouri
North Dakota
South Dakota
Nebraska
Kansas

State
and
Region

SOUTH ATLANTIC Paralytic Total
Delaware
Maryland
D. C.

Virginia
West Virginia
North Carolina
South Carolina Georgia
Florida
EAST SOUTH CENTRAL
Paralytic
Total
Kentucky
Tennessee
Alabama
Mississippi
WEST SOUTH CENTRAL

| Paralytic | 91 | 16 | 5 | 14 | 4 | 7 | 8 | 54 | 7 | 16 | 122 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 112 | 18 | 5 | 17 | 6 | 10 | 12 | 68 | 11 | 33 | 177 |
| Arkansas | 1 | - | - | - | - | - | - | - | - | 2 | 38 |
| Louisiana | 7 | - | - | 2 | - | - | - | 2 | 4 | 12 | 24 |
| 0 kl ahoma | 1 | - | - | - | - | - | - | - | - | - | 29 |
| Texas | 103 | 18 | 5 | 15 | 6 | 10 | 12 | 66 | 7 | 19 | 86 |
| MOUNTAIN |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 7 | - | 1 | - | - | - | - | 1 | 3 | 5 | 16 |
| Total | 8 | - | 1 | - | - | - | - | 1 | 4 | 7 | 28 |
| Montana | 3 | - | 1 | - | - | - | - | 1 | 1 | 4 | 1 |
| Idaho | - | - | - | - | - | - | - | - | - | - | 3 |
| Wyoming | 1 | - | - | - | - | - | - | - | - | - | 1 |
| Colorado | - | - | - | - | - | - | - | - | - | 1 | 2 |
| New Mexico | - | - | - | - | - | - | - | - | - | 1 | 7 |
| Arizona | 3 | - | - | - | - | - | - | - | 2 | 1 | 14 |
| Utah | 1 | - | - | - | - | - | - | - | 1 | - | - |
| Nevada | - | - | - | - | - | - | - | - | - | - | - |
| PACIFIC |  |  |  |  |  |  |  |  |  |  |  |
| Paralytic | 22 | - | - | - | 1 | 5 | 2 | 8 | 7 | 65 | 40 |
| Total | 25 | - | - | - | 1 | 5 | 2 | 8 | 12 | 72 | 47 |
| Washington | - | - | - | - | - | - | - | - | 2 | - | 5 |
| Oregon | 2 | - | - | - | - | 1 | - | 1 | 3 | 4 | 6 |
| California | 22 | - | - | - | 1 | 4 | 2 | 7 | 7 | 66 | 36 |
| Alaska | - | - | - | - | - | - | - | - | - | 1 | - |
| Hawaii | 1 | - | - | - | - | - | - | - | - | 1 | - |

TERRITORY
Puerto Rico

Cumula- Cases Reported to CDC
tive $\begin{array}{lllllll}1962 & 6 / 2 & 6 / 9 & 6 / 16 & 6 / 23 & 6 / 30 & 7 / 7\end{array}$

Six Comparable Six Week Weeks Totals in Total 196119601959

| $\quad$ Paralytic | 10 | - | - | - | - | 1 | 1 | 2 | 15 | 17 | 60 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| $\quad$ Total | 13 | - | - | - | - | 1 | 1 | 2 | 24 | 19 | 79 |
| Delaware | - | - | - | - | - | - | - | - | - | - | 1 |
| Maryland | - | - | - | - | - | - | - | - | 1 | - | - |
| D. C. | 1 | - | - | - | - | - | - | - | - | - | - |
| Virginia | 2 | - | - | - | - | - | - | - | - | - | 15 |
| West Virginia | 2 | - | - | - | - | 1 | 1 | 2 | 3 | 3 | 4 |
| North Carolina | 2 | - | - | - | - | - | - | - | - | 4 | 18 |
| South Carolina | 1 | - | - | - | - | - | - | - | 3 | 6 | 6 |
| Georgia | 2 | - | - | - | - | - | - | - | 12 | 1 | 18 |
| Florida | 3 | - | - | - | - | - | - | - | 5 | 5 | 17 |


| $\quad$ Paralytic | 5 | 1 | - | - | 1 | 1 | - | 3 | 5 | 4 | 53 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| $\quad$ Total | 7 | 1 | - | - | 1 | 1 | - | 3 | 10 | 5 | 70 |
| Kentucky | 2 | 1 | - | - | - | - | - | 1 | 2 | 1 | 4 |
| Tennessee | 3 | - | - | - | - | 1 | - | 1 | 4 | 1 | 15 |
| Alabama | 2 | - | - | - | 1 | - | - | 1 | 1 | 1 | 29 |
| Mississippi | - | - | - | - | - | - | - | - | 3 | 2 | 22 |




