REPORT NO. 257 MAY 25, 1962

COMMUNICABLE DISEASE CENTER

POLIOMYELITIS

SURVEILLANCE

TABLE OF CONTENTS

SUMMARY

- I. CURRENT MORBIDITY TRENDS
- II. STATE REPORTS
- III. 1962 CASES REPORTED TO PSU
- V. ROUTINE SURVEILL ANCE 1962
- V. ENTEROVIRUS SURVEILLANCE

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

der determine Prancis

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 Disease Center, Atlanta 22, Georgia.

Communicable Disease Center

Epidemiology Branch
Statistics Section
Surveillance Section
Poliomyelitis Surveillance Unit

Clarence A. Smith, M.D., Chief
Alexander D. Langmuir, M.D., Chief
Robert E. Serfling, Ph.D., Chief
Donald A. Henderson, M.D., Chief
Michael Regan, M.D., Chief
James A. Bryan, II, M.D.
Leo Morris, Statistician

SUMMARY

During the week ending May 19, nine cases of poliomyelitis, all paralytic, were reported. This represents a decline from the twelve cases reported during the previous week.

Cases continue to be reported from south Texas. A discussion of these and description of a crash oral poliovaccine immunization program in Webb County (Laredo) are presented in Section 2.

A summary of isolates obtained from 1962 cases is presented in Section 3. Poliovirus type I continues to predominate accounting for over 75 percent of isolates reported.

Nonpolio enterovirus surveillance is presented in Section 5.

1. CURRENT MORBIDITY TRENDS

Nine cases of poliomyelitis, all paralytic, were reported for the week ending May 19. This marks a decline in the number of weekly reported cases as compared with the number of cases reported in the two previous weeks (See Figure 1). Six of these cases were reported from Texas, and one each from California, Florida, and Oregon (See Table I).

The following table, which gives the incidence of poliomyelitis during the 15th through the 20th week for the years 1958-1962, shows that the current six-week total and paralytic case counts mirror the 1961 figures for the same period of time. During the past 6 weeks, Texas has contributed more than one-half of the nation's paralytic cases.

Six Week Totals (15th through 20th Week) for Past Five Years

| | 1962 | 1961 | 1960 | 1959 | 1958 |
|-----------------|------------------|------|------|------|------|
| Paralytic | 38 | 38 | 51 | 113 | 53 |
| Total communica | e in 47 octobril | 48 | 72 | 168 | 111 |

The table below compares the current cumulative poliomyelitis experience with those of past years. Of the 93 paralytic cases reported thus far in 1962, 71 have had onset since January 1.

Polio (Cumulated Weekly) through 20th Week for Past Five Years

| | | | | the second of th | |
|-----------|------|------|------|--|------|
| | 1962 | 1961 | 1960 | 1959 | 1958 |
| Paralytic | 93 | 107 | 215 | 337 | 184 |
| Total | 126 | 160 | 299 | 483 | 345 |

2. REPORT - TEXAS

The six paralytic cases reported by Texas this week include four from Bexar County (San Antonio), and one each from Webb and Hidalgo Counties. According to Dr. Van C. Tipton, Director, Division of Communicable Disease Control, the Bexar County total in 1962 now stands at ten paralytic cases, seven with onsets in May. Virologic study is in progress. Two additional suspect cases are under observation.

In Webb County (Laredo), 100,000 doses of type I epidemic reserve oral poliovaccine are being offered in a crash immunization program beginning Sunday, May 27. Dr. James Bryan, CDC Polio Surveillance Unit, and Mr. George Stenhouse, CDC Information Officer, are assisting State and local health officials in this program. A total of eight paralytic cases, four with May onsets, has been reported thus far from Webb County, and evidence of type I poliovirus infection has been obtained in four patients.

The single case report from Hidalgo County this week brings that county total to four paralytic cases. Thus in the south Texas counties of Bexar, Webb, and Hidalgo, twenty-two paralytic cases have been reported to date. Most of the patients are unvaccinated pre-school age children as shown in the following table.

| Age | Vaco | Vaccination History | | | | | | | | | |
|------------|------|---------------------|----|------|--|---------|--|--|--|--|--|
| Group | 0 | 1-2 | 3+ | Unk. | | Total | | | | | |
| 0-4 5-9 | 12 | 1 | 0 | 1 | | 14 | | | | | |
| 5-9 | 4 | 0 | 1 | 0 | | 5 | | | | | |
| 10-19 | 0 | 2 | 0 | 0 | | 2 | | | | | |
| 20+ | 1 | _0 | 0 | _0 | | <u></u> | | | | | |
| Total | 17 | 3 | 1 | 1 | | 22 | | | | | |

3. 1962 POLIOMYELITIS REPORTED TO PSU

Of the 93 cases of paralytic poliomyelitis reported thus far in 1962, 71 had onset since January 1. Twenty-two cases represent delayed reports with onsets of illness in 1961.

Fifteen poliovirus isolates have been obtained thus far from the 71 paralytic cases. Of these, 12 are type I and 3 are type III polioviruses. These isolates are listed on the following page by geographic location and month of onset.

| County | Month of Onset | Isolation |
|--|-------------------|--|
| Maricopa Co., Arizona Maricopa Co., Arizona Maricopa Co., Arizona Hopkins Co., Kentucky Jeff Davis Co., Louisiana Jefferson Co., Louisiana Montgomery Co., New York Montgomery Co., New York Wyoming Co., New York Wyoming Co., Ohio San Patricio Co., Texas Webb Co., Texas Webb Co., Texas | | Isolation Type I Type I Type III Type I Type I Type I Type I Type I Type I Type III Type IIII Type IIII Type III Type I |
| Webb Co., Texas San Juan Co., Utah | May January | Type I Type I |

The Poliomyelitis Surveillance Unit has received individual case forms on 47 of the 71 paralytic cases with onset in 1962. Over 60 percent of these cases have been unvaccinated as follows:

| \$701 000 TO COTTO CA | V | | | | | |
|--|----|-------------|-----------|-----|------|-------|
| Company of the control of the contro | ov | <u>1-2V</u> | <u>3V</u> | 4+V | Unk. | Total |
| the Large A Later | | 44312 | | | | |
| 1962 Paralytic Cases: | 28 | 9 | 4 | 4 | 2 | 47 |

4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1962

A. Cases With Onset Within 30 Days of Vaccination (Inactivated)

Through May 19, 1962, there have been no under-30-day cases (IPV) reported to the Poliomyelitis Surveillance Unit

B. Cases With Onset Within 30 Days of Vaccination (Oral)

The case of paralytic poliomyelitis reported during the current week from Oregon had received oral vaccine within 30 days prior to onset of symptoms. This case, from Portland, is a 48 year old female who had onset of symptoms on May 8 with subsequent paralysis in both legs. This patient received type I oral vaccine on April 1 and type III oral vaccine on April 28 during a community program.

There have now been two under-30-day cases (OPV) officially reported to the Poliomyelitis Surveillance Unit in 1962.

C. Vaccine Distribution

A summary of current and cumulative shipments of poliomyelitis and multiple antigen vaccine through April 1962 is presented in Table II at the end of this report.

A total of one million doses of inactivated doses of inactivated vaccine was released during the month of April. During this month 3.3 million doses were shipped for domestic use and another 0.2 million doses for export. There were 3 million doses (2.5 million cc's) unshipped at the end of the month.

5. ENTEROVIRUS SURVEILLANCE

A total of 46 nonpolio enterovirus isolates from 1962 specimens has been reported to the Poliomyelitis Surveillance Unit thus far. Of the thirty Coxsackie isolates sixteen Coxsackie A and four Coxsackie B-5 isolates have been reported from Hawaii. Nine ECHO subtypes have been reported from California. No neighborhood concentrations or family clusters have been recognized. A listing of isolates is presented below.

NONPOLIO ENTEROVIRUS ISOLATES REPORTED DURING 1962

| State | ECHO* | Coxsackie** | Total | Reported by |
|--------------|-------|-------------|-------|-----------------------------|
| California | 9 | 1 | 10 | E. Lennette |
| Florida | 2 | 2 | 4 | J. Bond |
| Hawaii | _ | 20 | 20 | K. Wilcox & J. Enright |
| Louisiana | 2 | - | 2 | G. Hauser |
| Michigan | 2 | - | 2 | G. Agate |
| Missouri | | 1 | 1 | I. Adams |
| New Jersey | 1 | 5 | 6 | W. Dougherty & M. Goldfield |
| Pennsylvania | _= | 1 | 1 | I. Gratch & K. Hummeler |
| TOTAL | 16 | 30 | 46 | W 1 |

^{*} Specific types include two ECHO 4 from Florida, and one from California; two ECHO 22 from California; two ECHO 14 from Michigan; two ECHO 9 from Louisiana. Other scattered types include ECHO 2, 10, 11, 18, 20.

^{**} Specific types include sixteen Coxsackie A (various subtypes) from Hawaii, four Coxsackie B5 from New Jersey and four from Hawaii. Other scattered types are B2, B3, and B4.

COMPARED WITH YEARS 1957, 1959, and 1961

DATA PROVIDED BY NATIONAL OFFICE OF VITAL STATISTICS
AND COMMUNICABLE DISEASE CENTER

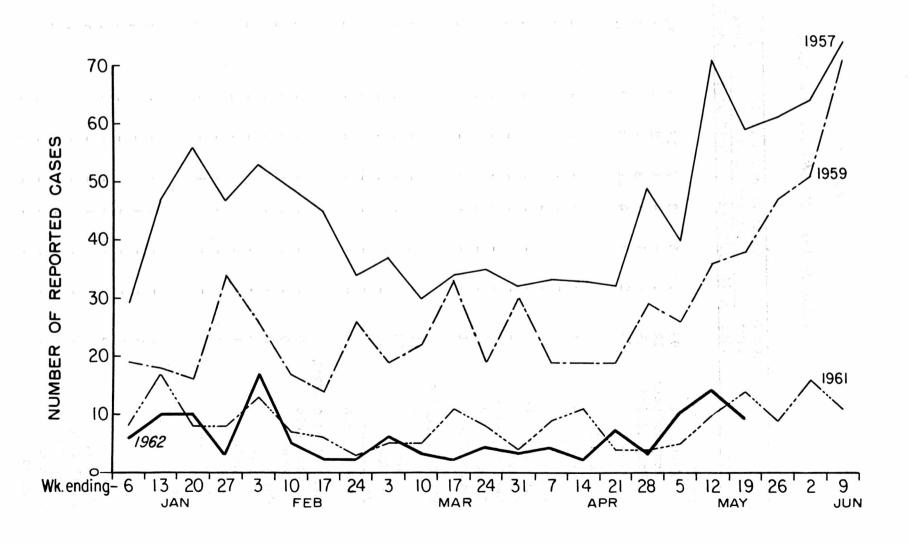


Table I
TREND OF 1962 POLIOMYELITIS INCIDENCE

| State | Cumula | - | | | | ed to | CDC | Six | Compa | rable | Six |
|------------------|--------|------|------|------|-----|-------|------|-------|-------|-------|------|
| and | tive | | | | | nding | | Week | | Total | |
| Region | 1962 | 4/14 | 4/21 | 4/28 | 5/5 | 5/12 | 5/19 | Total | 1961 | 1960 | 1959 |
| UNITED STATES | | | | | | | | | | | |
| Paralytic | 93 | 1 | 6 | 3 | 7 | 12 | 9 | 38 | 38 | 51 | 113 |
| Nonparalytic | 14 | 1 | - | - | 1 | 2 | _ | 4 | 6 | 15 | 37 |
| Unspecified | 19 | - | 1 | 1 | 3 | - | _ | 5 | 4 | 6 | 18 |
| Total | 126 | 2 | 7 | 4 | 11 | 14 | 9 | 47 | 48 | 72 | 168 |
| NEW ENGLAND | | | | | | | | | | | |
| Paralytic | 1 | _ | - | _ | - | - | - | - | - | 4 | - |
| Total | 1 | - | _ | _ | - | - | - | - | - | 4 | 1 |
| Maine | _ | - | _ | - | _ | _ | - | - | - | 3 | - |
| New Hampshire | - | _ | - | _ | - | - | - | - | - | _ | - |
| Vermont | - | _ | _ | - | _ | _ | - | _ | - | _ | - |
| Massachusetts | - | _ | _ | - | _ | - | - | - | - | 1 | 1 |
| Rhode Island | - | _ | _ | - | _ | _ | - | - | _ | - | - |
| Connecticut | 1 | - | - | - | - | - | - | - | - | - | - |
| MIDDLE ATLANTIC | | | | | | | | | | | |
| Paralytic | 17 | - | 1 | - | _ | - | - | 1 | 8 | 6 | 7 |
| Total | 30 | - | 1 | - | - | - | - | 1 | 8 | 7 | 13 |
| New York | 30 | - | 1 | - | - | - | - | 1 | 3 | 4 | 9 |
| New Jersey | _ | - | _ | - | - | - | - | _ | 3 | 3 | 4 |
| Pennsylvania | - | - | - | - | - | - | - | - | 2 | - | - |
| EAST NORTH CENTE | RAL | | | | | | | | | | _ |
| Paralytic | 6 | - | - | - | - | - | - | - | 3 | 6 | 7 |
| Total | 9 | - | - | - | 1 | - | - | 1 | 5 | 12 | 18 |
| Ohio | 4 | - | _ | - | - | - | - | - | - | 3 | 10 |
| Indiana | 3 | - | - | - | - | - | - | - | 2 | - | 1 |
| Illinois | 1 | - | - | - | - | - | - | - | 3 | 3 | 2 |
| Michigan | - | - | - | - | - | - | - | - | - | 5 | 3 |
| Wisconsin | 1 | - | - | - | 1 | • | - | 1 | - | 1 | 2 |
| WEST NORTH CENTI | RAL | | | | | | | | | | - 0 |
| Paralytic | 4 | - | - | 1 | - | - | - | 1 | 1 | 2 | 10 |
| Total | 7 | - | - | 1 | - | - | - | 1 | 2 | 2 | 16 |
| Minnesota | 1 | - | - | - | - | - | - | - | - | - | 2 |
| Iowa | 3 | - | - | - | - | - | - | - | 1 | - | 1 |
| Missouri | 3 | - | - | 1 | - | - | - | 1 | - | 2 | 5 |
| North Dakota | - | - | - | - | - | - | - | - | - | - | • |
| South Dakota | - | - | - | - | - | - | - | - | - | - | - |
| Nebraska | - | - | - | - | - | - | - | - | 1 | - | 3 |
| Kansas | - | _ | - | - | - | - | - | - | - | - | 5 |

| State and | Cumula- tive | C | ases F For V | lepor leek l | | | C | Six Week | Compa: Weeks | rable Tota | ls in |
|---------------------------|-----------------|-------------|---------------------------|---------------------------------------|--------------------|-----------------|-------------------------------|-------------------------|--------------------|---------------|-------|
| Region | 1962 | 4/14 | | | | | 5/19 | Total | 1961 | 1960 | 1959 |
| | / | | HOITA | | 12.4 | (31) | 1. | | | | |
| SOUTH ATLANTIC | | | | , | | • | 1 | 2 | 2 | 2 | 31 |
| Paralytic | 10 | | | 7.5 V.: | TES | 1 | | | 2 | 4 | 40 |
| Total Delaware | 10 | 1 | 7:1 | 50 TO | | 1 | T | 3 | 4 | 4 | _ |
| | - | - | - | _ | ~ | - | - | _ | - | | |
| Maryland | | , | | 32. | ing. | _ | - | - | _ | - | |
| D. C. | 2 | - | - | ī | _ | _ | - | ī | _ | - | 4 |
| Virginia West Virginia | 2 | | | - | - | _ | - | 1 | | - | 2 |
| North Carolina | 2 | | | 51.6 | | 15.4 | - | ī | ī | ī | 3 |
| South Carolina | | a | | _ | 9.7 | 7. | | - | i | 1 | 2 |
| Georgia | 1 2 | | 98 | | | - 1 | - 15 - | | | ī | 2 |
| Florida | 3 | ī | _ | _ | _ | - | - | 2 | - | 2 | 27 |
| riorida UALLES CED.I | Libr.€ | | | 763 | : , = :: | 530 | 1 | 2 | 1.075. | . • | 00-1 |
| EAST SOUTH CENTRA | L | | | | | | | | | | |
| Paralytic | 3 | | 1 | - | _ | - | - | 1 | 1 | 4 | . 4 |
| Total | 5 | - | 1 | _ | 1 | - | _ | 2 | 2 | 4 | 9 |
| Kentucky | _0 1 | ~) | 1 | : 05 | - | (1) | | aris i ta | . 1 (1 .0) | | - |
| Tennessee | 2 | - | - | - | ī | - | - | 1 | 1 | 1 | 4 |
| Alabama | 7 📆 📑 | - f. | - | ~ | . (| ₹35 | | <u>⇒</u> , `~ : | eg (- i | - | |
| Mississippi | 2 | - | _ | _ | - | - | _ | - | - | 3 | 4 |
| WEST SOUTH CENTRA | L Cit | I 03 | | U II. | 1.0.1 | 20. | and the second | dominati. | Isiono | Eiro | |
| Paralytic | 36 | 1 | 4 | | 5 | 7 | 6 | 23 | 9 | 9 | 26 |
| Total | 39 | , 1 | | _ | | | 6 | 24 24 | 12 | 14 | 37 |
| Arkansas | 1 | r - | ì | 7.70 | , 5 , 8 | 0 | | 1 |) i 12 ii. | . 14 | 5 |
| Louisiana | 5 | _ | i | _ | _ | _ | _ | i | 3 | 3 | 2 |
| Oklahoma | 5 | _ | 7 | _ | _ | | _ | 1 | 3 | 2 | 1 |
| Texas | 33 | ī | 2 | <u> </u> | 5 | 8 | 6 | 22 | 9 | 9 | 29 |
| MOUNTAIN | | | | | | | | | | | |
| Paralytic | 5 | | | - GV | | 1 | | 1 | 1 | - | 6 |
| Total | 9 | - | (1) | a 1 00 | .1 | 1 | _ | 4 | 3 | 4 | 8 |
| Montana | 2 | | - | | _ | _ | *** | - | - | 2 | - |
| Idaho | | | #.I | _ | - | | | - | 1 | - | - |
| Wyoming | - | - | _ | - | - | · _ | | | - | 1 | - |
| Colorado | · · · · | _5 | 1, 4 | _ | - | - 1 | doth <u>a</u> ka. . No loo | _ | - | | 1 |
| | 3 |): | 1 | 1 | 1 | - (| 100 <u>-</u> | 3 | 7. L. | 1 | 6 |
| | - 3 | | 12,11 | - | - | 1 | 16U <u>-</u> 1 - 1 | 1 | 1 | | 1 |
| 7 7042 | 1 | -1 | 10 (14.5 | - | - | - | | - | 1 | 7 | 4 |
| Nevada | - | | _ | - | - | - | | - | - | - In- | |
| PACIFIC | | | 00 g0 | | | | and ski | | | 1.1. | |
| Paralytic | 13 | - () | | 1 | 2 | 3 | 2.0 | 8 | 13 | 18 | 22 |
| Total | 16 | - 0 | orige ori a | ī | 2 | 4 | 2.5 | 9 | 14 | 21 | 26 |
| Washington | | -0 | 72 — | _ | _ | - : | | _ | | 1 | 1 |
| Oregon | 1 | | | - | _ | _ | 1 | 1 | | ∘ | 5 |
| California | 14 | -0: | od et | 1 | 2 | 4 | \mathbf{i} | 8 | | 18 | 19 |
| Alaska | | | | _ | _ | _ | _ | _ | _ | | |
| Hawaii | | | onta =) c | · · · · · · · · · · · · · · · · · · · | an t or | G he | FB (= 27) | rgair a esti | achilm. | 1 | 1 |
| * SATEST CO | | 50 0 L V | oracy at | | | 18 1915 | | | return a | | |
| TERRITORY Promto Price | * Y, | | | | | | | | ٠, | 60 | - |
| Puerto Rico | 5 | - | - | _ | - | - | - | - | 1 | 69 | 2500 |

Table II
THE NATIONAL FOUNDATION

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

April 1962

| | | | SINGLE | ANTIGEN | MULTIF | LE | тот | AL | |
|-----|--|--------------|--|------------|---|---------------|----------------------------------|------------|---|
| _ | | · · | This Month | To Date | This Month | To Date | This Month | To Date | _ |
| cc. | Released | | 1,039 | 523,297 | 0 | 15,843 | 1,039 | 539,140 | |
| cc. | Shipped | | | | | Ç. | | | |
| | National Fo | oundation | 30 | 14,293 | 0 | 0 | 30 | 14,293 | |
| | Public Ager | ncies | 1,255 | 190,268 | 1 | 1,416 | 1,256 | 191,684 | |
| | Commercial | Channels | 1,992 | 193,039 | <u>59</u> | 13,481 | 2,051 | 206,520 | |
| 5. | | | | | | | | | |
| | Domestic | Total | 3,277 | 397,600 | 60 | 14,897 | 3,337 | 412,497 | |
| | Export | " a i | 237 | 111,776 | 2 2 2 0 0 p | 634 | 237 | 112,410 | |
| | | 9 9 | CC. UNSH | (1,000 | OF MONTH | (* | | | |
| | | | 1960 | | 1961 | | 1962 | | |
| | January February March April May June | | 19,459 20,965 27,062 27,216 24,846 | | 14,755 15,737 13,414 10,887 6,448 | | 4,963 5,220 5,142 2,523 | | |
| | July August September October November December | | 24,620 23,830 24,525 23,091 19,565 16,319 15,669 | | 6,558 4,233 4,599 6,181 5,543 5,139 4,038 | | | | |

^{*} Includes manufacturers adjustments of previously reported figures.
** Excludes outdated vaccine removed from inventory.