# U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE 

BOTULISM - Fullerton, California

Two cases of suspected botulism were reported by the Orange County Health Department on October 1, 1965. The patients were a 43 -year-old woman and her daughter of 18 years. Both had eaten some home-canned albacore. This tuna fish had been brought home from a fishing trip by the father of the family on September 10. On September 13 parts of the fish were cooked in a pressure cooker for $11 / 2$ hours at $220^{\circ} \mathrm{F}$ and then placed in Mason jars which were stored at room temperature. The rest of the fish was frozen or given away as fillets.

On September 19 the daughter ate two small pieces of albacore from one of the Mason jars. Three days later she developed symptoms of blurred vision and diplopia
 ability resulting. On that day the mothe $\oint\{$ nd daughter prepared a salad containing some of the canned fish, pickles, mayonnaise and olives. The father was away from home when the salad was served for lunch on the same day it was prepared. The two sons of the family tasted the salad, complained of the taste and did not eat any of it. The mother and the daughter ate quantities which have not been determined.

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES (Cumulative totals include revised and delayed reports through previous weeks)

| DISEASE | 40th WEEK ENDED |  | $\begin{aligned} & \text { MEDIAN } \\ & 1960-1964 \end{aligned}$ | CUMULATIVE, FIRST 40 WEEKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OCTOBER 9 , 1965 | $\begin{gathered} \text { OCTOBER 3, } \\ 1964 \end{gathered}$ |  | 1965 | 1964 | MEDIAN $1960-1964$ |
| Aseptic meningitis | 76 | 52 | 89 | 1,572 | 1.564 | 1.945 |
| Brucellosis . . . . | 4 | 8 | 8 | 197 | 326 | 326 |
| Diphtheria | 3 | 7 | 10 | 116 | 192 | 323 |
| Encephalitis, primary infectious | 39 | 86 | --- | 1,388 | 2,460 | --- |
| Encephalitis, post-infectious .. | 9 | 4 | - | 567 | 703 | --- |
| Hepatitis, infectious including |  |  |  |  |  |  |
| serum hepatitis | 561 | 735 | 884 | 26,090 | 29,773 | 33,519 |
| Measles | 830 | 718 | 888 | 242,096 | 463,650 | 398,286 |
| Meningococcal infections | 48 | 37 | 37 | 2.424 | 2,149 | 1,688 |
| Poliomyelitis, Total | 2 | 3 | 37 | 45 | 87 | 645 |
| Paralytic . . . . | - | 2 | 34 | 35 | 71 | 507 |
| Nonparalytic | - | - | --- | 6 | 10 | --- |
| Unspecified | 2 | 1 |  | 4 | 6 | --- |
| Streptococcal Sore Throat and |  |  |  |  |  |  |
| Scarlet fever | 5.487 | 5,565 | 4,406 | 304,085 | 310,111 | 249,989 |
| Tetanus | 5.8 | 5.56 | --- | 205 | 214 | , |
| Tularemia | 5 | 8 | --- | 197 | 262 | --- |
| Typhoid fever | 18 | 12 | 15 | 332 | 328 | 489 |
| Rabies in Animals | 52 | 104 | 60 | 3,428 | 3,591 | 2,955 |

## NOTIFIABLE DISEASES OF LOW FREQUENCY



BOTULISM - Fullerton, California<br>(Continued from front page)

The same night, September 26, the daughter's symptoms became worse and over the next few days she developed dysphagia, dysphonia and postural hypotension. The mother also became ill that same night with weakness, difficulty in talking and parasthesias, later developing dysphagia and nausea without vomiting. Her symptoms continued to increase in severity, she became progressively weaker and by September 30 had developed frank dysphonia and inability to swallow. She was admitted to the hospital that day. Meantime the daughter had begun to have difficulty in respiration and she in turn was taken to the hospital on October 1.

On October 1, the State Bureau of Communicable Diseases was notified that these were two suspected cases of botulism; antitoxin, polyvalent for types A, B, E and F was obtained from the CDC San Francisco Field Station. The mother and daughter were each given one dose of antitoxin on the night of October 1 and one dose on the morning of October 2. The daughter has since made an uninterrupted recovery. The mother, however,
required four additional doses of antitoxin. One was given on the night of October 2 but after some improvement the next morning, she developed respiratory difficulty which required tracheostomy to maintain breathing. Two further doses were given on October 3 and one on October 4. The mother is recovering slowly and it will be some time before she is well enough to leave the hospital.

Serum was obtained from both patients before antitoxin was given. Aliquots of the serum, the remainder of the salad, the unopened jars of albacore and the frozen fillet are being examined concurrently at each of the California Department of Public Health Laboratory, the Hooper Foundation, and the CDC Laboratory.
(Reported by Dr. Henry A. Renteln, Head, Special Surveillance Section, Bureau of Communicable Diseases, California Department of Public Health; Dr. Russell Watson, Orange County Community Disease Control Officer; Dr. William Cohen, the Attending Physician, and an EIS Officer.)

## EPIDEMIOLOGIC NOTES AND REPORTS

## MEASLES - Current Trends

A total of 242,096 cases of measles has been reported from January 1 through October 9, 1965. The relationship of this total to the years of highest and lowest incidence during the past decade is shown in Figure 1. The seasonal occurrence of measles by 4 -week periods during the past 10 years and its distribution through the geographic divisions of the United States are shown in Figure 2 and Table 1 respectively.

Figure 1.
REPORTED MEASLES
BY FOUR-WEEK PERIODS, UNITED STATES 1965 COMPARED WITH II YEAR PERIOD, 1954-1964


For 10 years past, the lowest incidence of measles has occurred during the 37 th to 40 th weeks. This year scattered outbreaks in various parts of the United States, particularly in ruralareas, have given rise to a higher total for this 4 -week period than for the one immediately preceding. Five counties in Colorado, Kentucky and Tennessee, with a combined population of 54,000 , have reported more than 250 cases in the past 4 weeks.

According to mortality data for measles for the past 10 years, an average of 434 deaths occur each year. Preliminary data, based on a 10 percent sampling of

TABLE 1
REPORTED CASES OF MEASLES BY GEOGRAPHIC DIVISION, WEEKS 1-40, 1960-65

| Geographic Division | 1960 | 1961 | 1962 | 1963 | 1964 | 1965* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England | 40,097 | 37,382 | 56,677 | 14,202 | 17,062 | 36,876 |
| Middle Atlantic | 56,127 | 79,343 | 85,795 | 41,286 | 52,263 | 14,945 |
| East North Central | 123,087 | 106,938 | 64,811 | 148,330 | 103,101 | 56,104 |
| West North Central | 8,334 | 13,680 | 15,955 | 20,026 | 30,301 | 16,646 |
| South Atlantic | 20,246 | 40,368 | 28,327 | 32,551 | 38,499 | 25,028 |
| East South Central | 32,026 | 28,183 | 35,070 | 18,128 | 67,877 | 13,978 |
| West South Central | 51,554 | 16,257 | 69,632 | 21,031 | 72,194 | 31,026 |
| Mountain | 21,903 | 17,570 | 27,025 | 28,603 | 18,784 | 19,852 |
| Pacific | 50,521 | 49,562 | 62,402 | 36,730 | 63,569 | 27,641 |
| Total | 403,895 | 389,283 | 445,694 | 360,887 | 463,650 | 242,096 |

- Provisional data

Figure 2.
REPORTED MEASLES BY FOUR-WEEK PERIODS

death certificates, indicate that there were 440 measles deaths in 1964 (Monthly Vital Statistics Report, National Center for Health Statistics.)

Since the live attenuated measles virus vaccine was licensed for general use in 1962, seven million doses had been distributed by January 1965; an additional four million doses have been distributed since. This is enough vaccine to immunize nearly all children born in the United States in 3 years, although the proportion of the 11 million doses used to immunize children actually susceptible to measles is unknown.

Major epidemics of measles are to be expected during the next 6 months in areas of the United States where vaccine is not being used extensively to immunize susceptible age groups, particularly among pre-school children. Accordingly, the experience of measles during the coming winter among both well vaccinated and inadequately vaccinated groups of children is confidently expected to demonstrate the preventive impact of the currently used measles vaccine both on reported incidence and on mortality.
(Reported by the Childhood Virus Disease Unit of CDC.)

Figure 3
CASES OF MEASLES -- BY MONTHS AND YEARS ORANGE COUNTY, CALIFORNIA


CaSES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
OCTOBER 9, 1965 AND OCTOBER 3, 1964 (40th WEEK)

| Area | Aseptic Meningitis |  | Encephalitis |  | Poliomyelitis |  |  |  |  |  | Diphtheria |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Primary | Post-Inf. | Total Cases |  |  | Paralytic |  |  |  | Cum. |
|  | 1965 | 1964 | 1965 | 1965 | 1965 | Cumulative |  | 1965 | Cumulative |  | 1965 |  |
|  |  |  |  |  |  | 1965 | 1964 |  | 1965 | 1964 |  | 1965 |
| UNITED STATES... | 76 | 52 | 39 | 9 | 2 | 45 | 87 | - | $35$ | 71 | 3 | 116 |
| NEW ENGLAND........... | 4 <br> - <br> - <br>  <br> 2 <br> 2 | 1 | 2 | - | - | - | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | - | - | 2 | - | 2 |
| Maine.............. |  |  |  |  |  |  |  |  |  | 1 | - | - |
| New Hampshire*..... |  | - | --- | --- |  |  | - |  | - | - | --- | - |
| Vermont............. |  | - | 2 |  | - | - | - | - | - | - | - | - |
| Massachusetts...... |  | - |  | - | - | - | - | - | - | - | - | 2 |
| Rhode Island....... |  | 1 | - - |  |  |  |  |  |  |  | - | - |
| Connecticut........ |  | - |  |  | - | - | 1 | - | - | 1 | - | - |
| Middle atlantic...... | 6 | 6 | 12 | 1 | - | 4 | 13 | - | 3 | 12 | - | 5 |
| New York City...... | 1 | - | 8 | - | - | 1 | 1 | - | - | 1 | - | 3 |
| New York, Up-State. | - | 1 | 3 | - | - | - | 10 | - | - | 9 | - | - |
| New Jersey......... | 3 | 5 | 1 | - | - | 3 | 2 | - | 3 | 2 | - | - |
| Pennsylvania....... | 2 | - | - | 1 | - | - | - | - | - | - | - | 2 |
| EAST NORTH CENTRAL... | 16 | 7 | 6 | 2 | - | 2 | 19 | - | 2 | 15 | 1 | 5 |
| Ohio................ | 3 | 2 | 3 | - | - | - | 2 | - | - | 2 | - | 1 |
| Indiana............. |  | - | 2 | - | - | - | 6 | - | - | 5 | - | 2 |
| Illinois........... | 8 | 3 | 1 | 2 | - | 1 | 6 | - | 1 | 5 | 1 | 1 |
| Michigan. . . . . . . . . | 4 | 2 | - |  | - | 1 | 3 | - | 1 | 2 | - | - |
| Wisconsin.......... | 1 | - | - | - | - | - | 2 | - | - | 1 | - | 1 |
| WEST NORTH CENTRAL... | 9 | 1 | 5 | - | - | 10 | 9 | - | 7 | 7 | - | 18 |
| Minnesota.......... | 9 | 1 | - | - | - | 1 | 3 | - | 1 | 2 | - | 7 |
| Iowa................ | - | - | - | - | - | 4 | - | - | 2 | - | - | 1 |
| Missouri............ | - | - | - | - | - | 1 | 4 | - | - | 3 | - | 1 |
| North Dakota. . . . . . | - | - | 1 | - | - | - | 1 | - | - | 1 | - | - |
| South Dakota....... | - | - | - | - | - | - | - | - | - | - | - | 7 |
| Nebraska.. . . . . . . . . | - | - | 1 | - | - | 3 | - | - | 3 | - | - | 1 |
| Kansas.............. | - | - | 3 | - | - | 1 | 1 | - | 1 | 1 | - | 1 |
| SOUTH ATLANTIC....... | 2 | 5 | 4 | 3 | - | 1 | 21 | - | 1 | 16 | 1 | 30 |
| Delaware........... |  | - | - | - | - | - | - | - | - | - | - | - |
| Maryland........... | - | - | 1 | - | - | 1 | 1 | - | 1 | 1 | - | - |
| Dist. of Columbia.. | - | - | - | - | - | - | - | - | - | - | - | 3 |
| Virginia........... | - | 4 | 3 | - | - | - | - | - | - | - | - | - |
| West Virginia...... | - | - | - | - | - | - | 1 | - | - | 1 | - | - |
| North Carolina..... | - | - | - | - | - | - | 10 | - | - | 6 | - | 2 |
| South Carolina..... | 1 | - | - | - | - | - | - | - | - | - | - | 1 |
| Georgia............ | - | - | - | - | - | - | 1 | - | - | 1 | 1 | 15 |
| Florida............ | 1 | 1 | - | 3 | - | - | 8 | - | - | 7 | 1 | 9 |
| EAST SOUTH CENTRAL... | 1 | 3 | - | - | - | 1 | 6 | - | 1 | 5 | 1 | 18 |
| Kentucky............ | - | - | - | - | - | - | - | - | - | - | - | - |
| Tennessee.......... . | 1 | 3 | - | - | - | 1 | 3 | - | 1 | 2 | 1 | 1 |
| Alabama............ | - | - | - | - | - | - | 2 | - | - | 2 | - | 15 |
| Mississippi........ | - | - | - | - | - | - | 1 | - | - | 1 | - | 2 |
| WEST SOUTH CENTRAL... | 12 | 3 | - | - | - | 16 | 8 | - | 14 | 8 | - | 29 |
| Arkansas............ | - | - | - | - | - | - | - | - | - | - | - | 2 |
| Louisiana........... | - | 1 | - | - | - | 1 | - | - | 1 | - | - | 6 |
| Oklahoma............ |  | - | - | - | - | 1 | 2 | - | 1 | 2 | - | - |
| Texas............... | 12 | 2 | - | - | - | 14 | 6 | - | 12 | 6 | - | 21 |
| MOUNTAIN.............. | - | 3 | 6 | - | - | 5 | 6 | - | 3 | 3 | - | - |
| Montana............. | - | - | 1 | - | - | - | - | - | - | - | - | - |
| Idaho............... | - | - | - | - | - | - | - | - | - | - | - | - |
| Wyoming. . . . . . . . . . . | - | - | - | - | - | - | 2 | - | - | 2 | - | - |
| Colorado........... | - | 3 | - | - | - | - | 1 | - | - | 1 | - | - |
| New Mexico......... | - | - | 5 | - | - | 1 | 3 | - | 1 | - | - | - |
| Arizona............ | - | - | - | - | - | 4 | - | - | 2 | - | - | - |
| Utah............... | - | - | - | - | - | - | - | - | - | - | - | - |
| Nevada............. | - | - | - |  | - | - | - | - | - | - | - | - |
| PACIFIC.............. | 26 | 23 | 4 | 3 | 2 | 6 | 3 | - | 4 | 3 | - | 9 |
| Washington*......... | --- | - | --- | - | --- | 2 | 3 | --- | 2 | - | --- | 3 |
| Oregon.............. | - | - | 1 | - | - | 1 | 1 | - | 1 | 1 | - | 1 |
| California......... | 25 | 23 | 3 | 3 | 2 | 3 | 2 | - | 1 | 2 | - | 5 |
| Alaska.............. | - | - | - | - | - | - | - | - | - | - | - | - |
| Hawaii.............. | 1 | - | - | - | - | - | - | - |  | - | - | - |
| Puerto Rico | - | - |  | - | - | - | - | - | - | - | - | 12 |

*Reports for 40 th week not received.

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

## FOR WEEKS ENDED

OCTOBER 9, 1965 AND OCTOBER 3, 1964 (40th WEEK) - Continued

| Area | $\begin{aligned} & \text { Brucel- } \\ & \text { losis } \end{aligned}$ | Infectious Hepatitis including Serum Hepatitis |  |  |  |  | Meningococeal Infections |  |  | Tetanus |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | Total <br> incl. unk. <br> 1965 | $\begin{gathered} \begin{array}{c} \text { Under } \\ 20 \text { years } \end{array} \\ \hline 1965 \end{gathered}$ | 20 years and over <br> 1965 | Cumulative Totals |  | 1965 | Cumulative. |  | 1965 | $\begin{gathered} \text { Cum. } \\ \hline 1965 \end{gathered}$ |
|  |  |  |  |  | 1965 | 1964 |  | 1965 | 1964 |  |  |
| UNITED STATES... | 4 | 561 | 275 | 261 | 26,090 | 29,773 | 48 | 2,424 | 2,149 | 6 | 205 |
| NEW ENGLAND. . . . . . . . . . Maine. New Hampshire. Vermont Massachusetts Rhode Is land Connecticut | - | 29 | 13 | 15 | 1,522 | 2,734 | 3 | 123 | 61 | - | 5 |
|  | - | 4 | 3 | 1 | 269 | 868 | - | 16 | 5 | - | - |
|  | -- | 3 | - | -- | 153 | 212 | --- | 7 | 1 | --- | 1 |
|  | - | 3 | 1 | 2 | 83 | 342 | - | 7 | 4 | - | - |
|  | - | + | 1 | 2 | 601 | 599 153 | 3 | 43 14 | 24 10 | - | 3 |
|  | - | 7 | 2 | 4 | 245 | 560 | - | 36 | 17 | - | 1 |
| Middle atlantic...... <br> New York City....... <br> New York, Up-State. <br> New Jersey.......... <br> Pennsylvania........ | - | 107 | 46 | 61 | 4,648 | 6,605 | 3 | 314 | 272 | - | 13 |
|  | - | 30 | 11 | 19 | 925 | 1,011 | - | 54 | 36 | - | - |
|  | - | 28 | 12 | 16 | 1,774 | 2,884 | 1 | 91 | 75 | - | 5 |
|  | - | 19 | 7 | 12 | 877 | 1,128 | 1 | 81 | 93 | - | 1 |
|  | - | 30 | 16 | 14 | 1,072 | 1,582 | 1 | 88 | 68 | - | 7 |
| EAST NORTH CENTRAL... Ohio.................. Indiana. Illinois ........... <br> Michigan. ............ Wisconsin | - | 116 | 67 | 45 | 5,021 | 4,665 | 7 | 347 | 293 | 1 | 29 |
|  | - | 28 | 12 | 14 | 1,379 | 1,234 | 1 | 93 | 75 | - | 2 |
|  | - | 15 | 10 | 4 | 440 | 407 | 2 | 45 | 46 | - | 7 |
|  | - | 25 | 14 | 11 | 956 | 859 | 1 | 94 | 75 | 1 | 14 |
|  | - | 39 | 24 | 15 | 1,923 | 1,833 | 2 | 76 | 67 | - | 3 |
|  | - | 9 | 7 | 1 | 323 | 332 | 1 | 39 | 30 | - | 3 |
| WEST NORTH CENTRAL. <br> Minnesota. $\qquad$ <br> Iowa. $\qquad$ <br> Missouri . . . . . . . . . . <br> North Dakota....... . <br> South Dakota....... <br> Nebraska. $\qquad$ <br> Kansas. $\qquad$ | 4 | 27 | 12 | 13 | 1,497 | 1,598 | - | 123 | 128 | - | 18 |
|  | - | 2 | 1 | 1 | 155 | 183 | - | 27 | 29 | - | 8 |
|  | 3 | 6 | 4 | 1 | 525 | 246 | - | 9 | 7 | - | 4 |
|  | - | 9 | 3 | 5 | 318 | 394 | - | 52 | 57 | - | 2 |
|  | - | - | - | - | 27 | 58 | - | 11 | 18 | - | - |
|  | - | 5 | 3 | 2 | 20 | 126 | - | 3 | 3 | - | - |
|  | 1 | 5 | 1 | 4 | 69 383 | 42 549 | - | 11 | 6 8 | - | 2 |
| SOUTH ATLANTIC <br> Delaware. Maryland. $\qquad$ Dist. of Columbia. Virginia. West Virginia. North Carolina South Carolina. Georgia $\qquad$ Florida. ............. . . | - | 49 | 22 | 19 | 2,698 | 2,803 | 6 |  |  |  |  |
|  | - | 1 | 2 | 1 | 2,698 | 2,803 | 1 | 462 8 | 421 | 1 | 47 |
|  | - | 9 | 3 | 4 | 473 | 524 | - | 44 | 31 | - | 1 |
|  | - | 1 | - | - | 39 | 51 |  | 9 | 13 |  |  |
|  | - | 20 | 8 | 7 | 642 | 439 | 2 | 56 | 49 | - | 7 |
|  | - | 3 |  | 2 | 376 | 407 | 1 | 25 | 33 | - | 1 |
|  | - | 2 | 1 | 1 | 256 | 469 | 1 | 94 | 72 | 1 | 7 |
|  | - | - | - | - | 122 | 104 | 1 | 60 | 50 | - | 6 |
|  | - | - | - | - | 93 | 85 | - | 57 | 62 | - | 5 |
|  | - | 13 | 9 | 4 | 632 | 669 | - | 109 | 105 | - | 20 |
| BAST SOUTH CENTRAL... <br> Kentucky. $\qquad$ <br> Tennessee........... <br> Alabama. $\qquad$ Mississippi......... | - | 16 | 6 | 10 | 1,849 | 2,068 | 5 | 190 | 173 | 3 | 27 |
|  | - | 4 | 3 | 1 | 1,859 | 2,755 | 2 | 73 | - 57 | 3 | 6 |
|  | - | 5 | 2 | 3 | 621 | 719 | - | 60 | 55 | 2 | 9 |
|  | - | 5 | - | 5 | 336 | 388 | 1 | 35 | 37 | 1 | 10 |
|  | - | 2 | 1 | 1 | 233 | 206 | 2 | 22 | 24 | $-$ | 2 |
| WEST SOUTH CENTRAL... <br> Arkansas............ <br> Louisiana........... <br> Oklahoma. <br> Texas. . .......... | - | 45 | 18 | 24 | 2,275 | 2,332 | 4 | 315 |  | 1 |  |
|  | - | 4 | 18 | 2 | 293 | 2, 220 | - | 15 | 2463 | 1 | 45 |
|  | - | 5 | 2 | 3 | 368 | 573 | 3 | 174 |  | - | 5 |
|  | - | 5 | 2 | 3 | 49 | 110 | 3 | 174 | 119 10 | - | 5 |
|  |  | 37 | 15 | 19 | 1,565 | 1,429 | 1 | 106 | 94 | - | 28 |
| MOUNTAIn. <br> Montana. <br> ................... <br> Idaho............... <br> Wyoming. . . . . . . . . . . <br> Colorado. <br> New Mexico. <br> Arlzona. <br> Utah. <br> Nevada | - |  |  |  |  |  |  |  |  |  |  |
|  | - | 22 | 11 | 4 2 | 1,457 118 | 1,785 158 | 12 | 86 | 73 | - | 3 |
|  | - | 9 | 4 | 2 | 183 | 252 | 1 | 2 9 | - | - | - |
|  | - | - | - | - | 183 40 | - 57 | 1 | 5 | 3 | - | - |
|  | - | 6 | 6 | - | 311 | 476 | 9 | 24 | 12 | - |  |
|  |  | 2 |  | 2 | 309 | 250 | - | 11 | 29 | - | 2 |
|  | - | 4 | - | - | 307 | 395 | - | 16 | 7 | - | 1 |
|  | - | 1 | 1 | - | 180 | 146 | 2 | 16 | 7 | - | - |
|  | - | - | - |  | 9 | 51 | - | 3 | 10 | - | - |
| Pacraic |  |  |  |  |  |  |  |  |  |  |  |
| Washington*.......... | --- | 150 | 80 | --- | 5,123 387 | 5,183 538 | 8 | 464 | 482 | - | 18 |
| ${ }^{\text {Oregon.............. }}$ | -- |  | 8 | 5 | 387 | 538 | --- | 34 | 33 | --- | - |
| California............ | - | 125 | 88 | 5 | 436 | 553 | 7 | 33 | 21 | - | 4 |
| Alaska.............. | - | 125 4 | 69 | 56 | 4,061 | 3,807 | 7 | 371 | 409 | - | 14 |
| Puerto Rico |  |  |  |  |  |  |  |  |  | - | - |
|  | - | 5 | 5 | - | 1,117 | 805 | 2 | 9 | 31 | 2 | 44 |

*Reports for 40 th week not received.

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
OCTOBER 9, 1965 AND OCTOBER 3, 1964 (40th WEEK) - Continucd

| Area | Measles |  |  | Strept. Sore Th. \& Scarlet Fev. | Tularemia |  | Typhoid Fever |  | Rabies in Animals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | Cumulative |  | 1965 | 1965 | Cum.$1965$ | 1965 | Cum. | 1965 | Cum.$1965$ |
|  |  | 1965 | 1964 |  |  |  |  | 1965 |  |  |
| UNITED STATES.. | 830 | 242,096 | 463,650 | 5,487 | 5 | 197 | 18 | 332 | 52 | 3,428 |
| NEW ENGLAND. . . . . . . . . | 37 | 36,876 | 17,062 | 506 | - | 1 | 2 | 6 | - | 39 |
| Maine............. | 14 | 2,816 | 3,028 | 37 | - | - | - | - | - | 4 |
| New Hampshire*..... | -- | 381 | 255 | --- | - | - | --- | - | --- | 1 |
| Vermont............ | 15 | 1,283 | 2,332 | 36 | - | - | - | - | - | 31 |
| Massachusetts...... | 5 | 19,303 | 5,375 | 103 | - | 1 | - | 3 | - | 2 |
| Rhode Is land....... | - | 3,938 | 1,938 | 16 | - | - | - | 1 | - | - |
| Connecticut........ | 3 | 9,155 | 4,134 | 314 | - | - | 2 | 2 | - | 1 |
| MIDDLE ATLANTIC...... | 102 | 14,945 | 52,263 | 230 | - | - | 5 | 60 | 4 | 143 |
| New York City...... | 23 | 2,439 | 15,360 | 4 | - | - | 2 | 29 | - | $\stackrel{-}{7}$ |
| New York, Up-State. | 14 | 4,157 | 12,727 | 180 | - | - | 2 | 15 | 4 | 130 |
| New Jersey......... | 45 | 2,622 | 12,223 | 34 | - | - | - | 7 | - | - |
| Pennsylvania....... | 20 | 5,727 | 11,953 | 12 | - | - | 1 | 9 | - | 13 |
| EAST NORTH CENTRAL... | 213 | 56,104 | 103,101 | 367 | - | 13 | - | 39 | 14 | 529 |
| Ohio................ | 7 | 8,902 | 19,643 | 24 | - | - | - | 9 | 10 | 272 |
| Indiana. . . . . . . . . . | 41 | 1,888 | 22,817 | 88 | - | 5 | - | 8 | - | 64 |
| Illinois........... | 13 | 2,777 | 16,644 | 63 | - | 5 | - | 10 | 1 | 82 |
| Michigan........... | 106 | 26,579 | 28,969 | 146 | - | 2 | - | 7 | 2 | 53 |
| Wisconsin. . . . . . . . | 46 | 15,958 | 15,028 | 46 | - | 1 | - | 5 | 1 | 58 |
| WEST NORTH CENTRAL... | 68 | 16,646 | 30,301 | 192 | 2 | 25 | - | 11 | 8 | 695 |
| Minnesota.......... | 2 | 690 | , 334 | 9 | - | 1 | - | 1 | 1 | 140 |
| Iowa................ | 49 | 9,050 | 23,332 | 47 | - | - | - | 2 | 3 | 198 |
| Missouri............ | 3 | 2,594 | 1,019 | 23 | - | 18 | - | 7 | 1 | 97 |
| North Dakota. . . . . . | 14 | 3,745 | 4,772 | 101 | - | - | - | - | 1 | 44 |
| South Dakota....... | - | 115 | 32 | 10 | - | 2 | - | - | - | 52 |
| Nebraska. . . . . . . . . | - | 452 | 812 | - | - | - | - | 1 | 1 | 36 |
| Kansas.............. | NN | NN | NN | 2 | 2 | 4 | - | - | 1 | 128 |
| SOUTH ATLANTIC....... | 145 | 25,028 | 38,499 | 953 | - | 31 | 2 | 66 | 4 | 464 |
| Delaware........... | - | 505 | 411 | 18 | - | - | - | 4 | - | - |
| Maryland........... | 3 | 1,166 | 3,408 | 83 | - | - | 1 | 20 | - | 22 |
| Dist, of Columbia.. | 1 | 78 | , 354 | 21 | - | - | - | - | - | $\stackrel{-}{-}$ |
| Virginia........... | 23 | 3,895 | 12,717 | 197 | - | 8 | - | 8 | 1 | 285 |
| West Virginia..... | 58 | 13,897 | 8,730 | 230 | - | - | - | 3 | - | 21 |
| North Carolina..... | - | , 390 | 1,161 | 19 | - | 6 | - | 15 | - | 3 |
| South Carolina..... | 34 | 1,052 | 4,261 | 171 | - | 3 | - | 8 | - | 2 |
| Georgia............ | , | 617 | 198 | 1 | - | 14 | 1 | 4 | 1 | 59 |
| Florida............ | 26 | 3,428 | 7,259 | 213 | - | - | - | 4 | 2 | 72 |
| EAST SOUTH CENTRAL... | 30 | 13,978 | 67,877 |  | 1 | 21 | 1 | 33 | 6 | 734 |
| Kentucky............ | - | 2,586 | 18,476 | 28 | - | 3 | , | 9 | 2 | 78 |
| Tennessee.......... | 27 | 7,937 | 24,340 | 839 | 1 | 17 | 1 | 12 | 4 | 603 |
| Alabama............ | - | 2,335 | 18,372 | 56 | - | 1 | - | 7 | - | 16 |
| Mississippi........ | 3 | 1,120 | 6,689 | 24 | - | - | - | 5 | - | 37 |
| WEST SOUTH CENTRAL... | 68 | 31,026 | 72,194 | 551 | 2 | 82 | 5 | 48 | 7 | 549 |
| Arkansas............ | - | 1,084 | 1,124 | 2 | 2 | 56 | - | 13 | 1 | 80 |
| Louisiana.......... | 1 | 108 | 115 | 2 | - | 5 | 1 | 7 | - | 70 |
| Oklahoma. . . . . . . . . | 3 | 206 | 1,019 | 20 | - | 10 | - | 6 | 3 | 120 |
| Texas............. | 64 | 29,628 | 69,936 | 527 | - | 11 | 4 | 22 | 3 | 279 |
| mountain. . . . . . . . . . . | 35 | 19,852 | 18,784 | 746 | - | 15 | 1 | 28 | 1 | 75 |
| Montana............. | 8 | 3,739 | 3,122 | 22 | - | 4 | - | 1 | - | 5 |
| Idaho................ | 4 | 2,798 | 1,943 | 78 | - | - | - | - | - | - |
| Wyoming. . . . . . . . . . . | 1 | 849 | 262 | 12 | - | 3 | - | 1 | - | - |
| Colorado........... . | 12 | 5,690 | 3,239 | 345 | - | - | - | - | - | 9 |
| New Mexico......... |  | 5,677 | 457 | 197 | - | - | - | 11 | - | 14 |
| Arizona........... |  | 1,339 | 6,684 | 69 | - | - | , | 12 | 1 | 45 |
| utah............... | 3 | 4,556 | 2,085 | 23 | - | 8 | 1 | 1 | - | 1 |
| Nevada........... | - | 204 | 992 | - | - | - | - | 2 | - | 1 |
| PACIFIC.............. | 132 | 27,641 | 63,569 | 995 | - | 9 | 2 | 41 | 8 | 200 |
| Washington*......... | 6 | 7,245 | 20,068 | - | --- | - | - | 4 | --- | 7 |
| Oregon.............. | 16 | 3,277 | 8,681 | 25 | - | 5 | 1 | 8 | - | 7 |
| California.......... | 52 | 13,055 | 33,123 | 727 | - | 4 | 1 | 28 | 8 | 184 |
| Alaska.............. | - | 186 | 1,112 | 16 | - | - | - | - | - | 2 |
| Hawaii.............. | 64 | 3,878 | 585 | 227 | - | - | - | 1 | - | $-$ |
| Puerto Rico | 28 | 2,463 | 6,454 | 16 | - | - | - | 9 | - | 13 |

*Reports for 40 th week not received.

## Week No.

40
DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED OCTOBER 9. 1965
(By place of occurrence and week of filing certificate. Excludes fetal deaths)

| Area | All Causes |  | Pneumonia and Influenza All Ages | Under 1 year All Causes | Area | All Causes |  | Pneumonia and Influenza All Ages | Under <br> 1 year <br> All <br> Causes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { All } \\ & \text { Ages } \end{aligned}$ | 65 years and over |  |  |  | Al1 <br> Ages | 65 years and over |  |  |
| NEW ENGLAND: | 691 | 436 | 28 | 30 | SOUTH ATLANTIC: | 1,097 | 561 | 45 | 82 |
| Boston, Mass | 231 | 135 | 2 | 10 | Atlanta, Ga. | 125 | 59 | 10 | 7 |
| Bridgeport, Conn. | 39 | 26 | 4 | 2 | Baltimore, Md. | 266 | 136 | 7 | 18 |
| Cambridge, Mass.------ | 20 | 14 | - | - | Charlotte, N. C | 53 | 24 | - | 3 |
| Fall River, Mass.----- | 26 | 16 | 1 | 1 | Jacksonville, Fla. | 67 | 30 | 1 | 4 |
| Hartford, Conn.------- | 57 | 27 | 2 | 7 | Miami, Fla.-...- | 84 | 43 | 2 | 8 |
| Lowell, Mass.--------- | 25 | 19 | - | 1 | Norfolk, Va.-- | 47 | 19 | 5 | 6 |
| Lynn, Mass | 24 | 20 | - | - | Richmond, Va.-----.-.-. | 78 | 41 | 1 | 5 |
| New Bedford, Mass.--- | 38 | 28 | 3 | - | Savannah, Ga....-....--- | 28 | 9 | 1 | 2 |
| New Haven, Conn.------ | 45 | 25 | 1 | 1 | St. Petersburg, Fla.--- | 62 | 52 | 3 | 1 |
| Providence, R. I | 60 | 37 | 3 | 4 | Tampa, Fla.----------- | 67 | 44 | 7 | 1 |
| Somerville, Mass.----- | 14 | 8 | 2 | 1 | Washington, D. C.------ | 174 | 83 | 5 | 24 |
| Springfield, Mass.---- | 34 | 23 | 5 | - | Wilmington, Del.------- | 46 | 21 | 3 | 3 |
| Waterbury, Conn.------ | 28 | 20 | - | 2 |  |  |  |  |  |
| Worcester, Mass.------ | 50 | 38 | 5 | 1 | EAST SOUTH CENTRAL: | 538 | 299 | 25 | 26 |
|  |  |  |  |  | Birmingham, Ala.------ | 89 | 53 | 4 | 1 |
| MIddle atlantic; | 3,191 | 1,856 | 117 | 145 | Chattanooga, Tenn.----- | 47 | 22 | 1 | 6 |
| Albany, N. Y. | 45 | 24 | 1 | 2 | Knoxville, Tenn.- | 23 | 10 | - | - |
| Allentown, Pa.-------- | 35 | 21 | 2 | 2 | Louisville, Ky..--.---- | 114 | 72 | 9 | 1 |
| Buffalo, N. Y.-------- | 148 | 89 | 2 | 12 | Memphis, Tenn.--------- | 94 | 45 | 5 | 10 |
| Camden, N. J.--------- | 41 | 23 | - | 5 | Mobile, Ala. | 50 | 32 | 1 | 3 |
| Elizabeth, N. J.------ | 26 | 18 | - | 1 | Montgomery, Ala.----.-- | 26 | 13 | 1 | - |
| Erie, Pa.------------- | 36 | 19 | 5 | 3 | Nashville, Tenn.------ | 95 | 52 | 4 | 5 |
| Jersey City, N. J.---- | 59 | 36 | 4 | 2 |  |  |  |  |  |
| Newark, N. J.---------- | 83 | 37 | 3 | 1 | WEST SOUTH CENTRAL: | 1,076 | 550 | 30 | 75 |
| New York City, N. Y.-- | 1,628 | 941 | 54 | 61 | Austin, Tex. | 36 | 17 | 2 | 3 |
| Paterson, N. J.------- | 37 | 28 | 3 | 1 | Baton Rouge, La | 28 | 12 | - | 3 |
| Philadelphia, Pa.----- | 495 | 279 | 11 | 34 | Corpus Christi, Tex.--- | 17 | 8 | - | - |
| Pittsburgh, Pa.------- | 201 | 107 | 4 | 6 | Dallas, Tex.----------- | 149 | 78 | 2 | 9 |
| Reading, Pa.---------- | 42 | 20 | 3 | 2 | El Paso, Tex.- | 24 | 8 | 4 | 3 |
| Rochester, N. Y.------ | 101 | 73 | 13 | 3 | Fort Worth, Tex.------ | 78 | 45 | 1 | 5 |
| Schenectady, N. Y.---- | 27 | 18 | 1 | - | Houston, Tex.--------- | 211 | 111 | 4 | 10 |
| Scranton, Pa. | 40 | 30 | 2 |  | Little Rock, Ark.------ | 54 | 29 | 1 | 4 |
| Syracuse, N. Y.------- | 60 | 37 | 4 | 4 | New Orleans, La.------- | 186 | 81 | 4 | 17 |
| Trenton, N. J.-------- | 40 | 20 | 1 | 1 | Oklahoma City, Okla.--- | 74 | 44 | 1 | 7 |
| Utica, N. Y.---------- | 23 | 18 | 2 | - | San Antonio, Tex.------ | 98 | 54 | 4 | 6 |
| Yonkers, N. Y.--------- | 24 | 18 | - | 1 | Shreveport, La.------------ | 62 59 | 30 | 4 3 | 5 |
| EAST NORTH CENTRAL: | 2,416 | 1,344 | 84 | 139 | Tulsa, Okla.----------- | 59 | 33 | 3 | 3 |
| Akron, Ohio----------- | 78 | 32 | - | 6 | MOUNTAIN: | 343 | 192 | 8 | 24 |
| Canton, Ohio---------- | 40 | 26 | 6 | 3 | Albuquerque, N. Mex.--- | 38 | 22 | 2 | 3 |
| Chicago, I11.--------- | 729 | 377 | 29 | 36 | Colorado Springs, Colo. | 12 | 8 | - | - |
| Cincinnati, Ohio------ | 162 | 102 | 9 | 6 | Denver, Colo.---------- | 107 | 66 | 2 | 7 |
| Cleveland, Ohio------ | 168 | 97 | 3 | 12 | Ogden, Utah- | 17 | 5 | 1 | 2 |
| Columbus, Ohio-------- | 114 | 56 | 4 | 11 | Phoenix, Ariz | 64 | 32 | 1 | 6 |
| Dayten, Ohio---------- | 73 | 47 | - | 5 | Pueblo, Colo.-...---.--- | 16 | 7 | 1 | 3 |
| Detroit, Mich.------- | 290 | 171 | 9 | 12 | Salt Lake City, Utah--- | 45 | 23 | - | 2 |
| Evansville, Ind.------ | 39 | 25 | 1 | - | Tucson, Ariz.--------- | 44 | 29 | 1 | 1 |
| Flint, Mich.----------- | 45 | 21 | 3 | 5 |  |  |  |  |  |
| Fort Wayne, Ind.------ | 35 | 20 | 3 | 1 | PACIFIC: | 1,601 | 923 | 27 | 81 |
| Gary, Ind.------------- | 25 | 12 | 5 | I | Berkeley, Calif.*------ | 18 | 12 | - | 1 |
| Grand Rapids, Mich.--- | 48 | 29 | 5 | 3 | Fresno, Calif.-------.-- | 43 | 24 | 1 | 2 |
| Indianapolis, Ind.---- | 164 | 82 | 3 | 13 | Glendale, Calif.------- | 34 | 23 | - | 1 |
| Madison, Wis.-------- | 50 | 26 | - | 4 | Honolulu, Hawaii------- | 48 | 23 | 2 | 3 |
| Milwaukee, Wis.------- | 110 | 66 | 1 | 6 | Long Beach, Calif.----- | 69 | 42 | 2 | - |
| Peoria, Ill.--------- | 30 | 16 | - | 5 | Los Angeles, Calif.---- | 491 | 268 | 9 | 39 |
| Rockford, Ill.*------- | 27 | 16 | 2 | 2 | Oakland, Calif.-------- | 124 | 66 | 2 | 3 |
| South Bend, Ind.------ | 40 | 24 | - | 2 | Pasadena, Calif.------- | 43 | 36 |  |  |
| Toledo, Ohio----------- | 92 | 63 | 1 | 4 | Portland, Oreg.-------- | 88 | 59 | - | 1 |
| Youngstown, Ohio----- | 57 | 36 | - | 2 | Sacramento, Calif.------- | 71 108 | 39 | 1 | 1 |
| WEST NORTH CENTRAL: | 762 | 477 | 19 | 51 | San Diego, Calif.------ | 108 | 61 120 | 1 | 7 |
| Des Moines, Iowa------ | 64 | 42 |  | 2 | San Jose, Calif.------- | 27 | 120 16 | 4 | 2 |
| Duluth, Minn.--------- | 21 | 16 | - | 1 | Seattle, Wash.--------- | 145 | 84 | 3 | 9 |
| Kansas City, Kans.---- | 38 | 19 | 2 | 7 | Spokane, Wash.--------- | 28 | 20 | - | 2 |
| Kansas City, Mo.------ | 125 | 87 | 1 | 5 | Tacoma, Wash | 42 | 30 | 1 | 3 |
| Lincoln, Nebr.--...--- | 33 | 22 | - | 1 |  |  |  |  |  |
| Minneapolis, Minn.---- | 101 | 66 | 2 | 7 | Total | 11,715 | 6,638 | 383 | 653 |
| Onaha, Nebr.------------- | 55 | 31 118 | 4 | 6 | Cumulative Totalsincluding |  |  |  |  |
| St. Louis, Mo.-------- | 201 | 118 | 4 | 11 |  |  |  |  |  |  |  |
| St. Paul, Minn.------- | 85 | 51 | 4 | 6 | including reported | correc | ons for | revious w |  |
| Wichita, Kans.-------- | 39 | 25 | 4 | 5 | All Causes, All Ages -------------------------492,210 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| *Estimate - based on average percent of divisional total. |  |  |  |  | Pneumonia and Influenza, All Ages------------- 19,938 <br>  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## MEASLES - Orange County, California

Records of measles morbidity in Orange County, California, from 1958 through September 1965 are depicted in Figure 3. Between January 1 and the end of the 40th week of 1963 , the County had experienced an epidemic of 2,737 reported cases. In the State of California as a whole, however, it was not until the comparable period of 1964 that an epidemic was recorded. During this time a total of 33,065 cases was reported in the State compared to the total of 20,904 cases during 1963 .

In Orange County a total of 221 cases was recorded at the end of the 40th week of this year, compared to 168 cases in 1964. The next epidemic peak in the County would normally be predicted for the coming winter, following the cyclic pattern of the past. However, the increasing level in the County of immunization with measles vaccine may be expected to modify the pattern, assuming that the active immunization measures already undertaken among pre-school children can be intensified.
(Reported by Dr. Edward Lee Russell, Health Officer, Orange County Health Department, California; and Dr. Henry A. Renteln, Head Special Surveillance Section, Bureau of Communicable Disease, California Department of Public Health.)

Editorial Note: The recommendations of the Public Health Service Advisory Committee on Immunization Practice regarding the dosage schedule for measles vaccine are in the MMWR, Vol. 14, No. 7. A statement prepared by the same Committee on the importance of measles and methods for achieving high levels of measles immunization in the community is in the MMWR, Vol. 14, No. 36 .

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULA THE MORBIDITY AND MORTALITY WEEKLYREPORT, WITH A CIRCULA. CENTER, ATLANTA, GEORGIA.

CHIEF, COMMUNICABLE DISEASE CENTER CHIEF, EPIDEMIOLOGY BRANCH ACTING CHIEF. STATISTICSSECTION CHIEF, SURVEILLANCE SECTION EDITOR: MMWR

## JAMES L. GODDARD. M-D

 A. D. LANGMUIR, M. D. D. A. HENDERSON, M.D. D.J.M.MACKENZIE, M.B.IN ADDITION TO THE ESTABLISHED PROCEOURES FOR REPORTING MOREIDITY ANO MORTALITY. THE COMMUNICABLE DISEASE CENTEF WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE IN VESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEAL OF COMCIALSAND WHICH ARE DIRECTLYRELATEDTO THE CUNO BE AD RESSED TO:

## THE EDITOR

MORBIDITY ANO MORTALITY WEEKLY REPORT
COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333
NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE EASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATTHE. SUCCEEDING FRIDAY


