

## CURRENT TRENDS

INFLUENZA - Recent Reports
Further reports of influenza-like disease have been received by NCDC. In addition to the confirmed outbreaks of influenza $A_{2}$ in Kalamazoo and Lansing (MMHR, Vol. 16, No. 49), influenza-like disease was reported from southern and central Michigan. No new outbreaks were reported from Florida, but hemagglutination inhibition tests further support the diagnosis of $\mathrm{A}_{2}$ influenza in Jacksonville and North Miami.

In Bergen County, New Jersey, four schools had increases in absentecism from 10 to 30 percent beginning the week of November 26 . Of six paired sera three showed

## CONTENTS

Current Trends
Influenza-Recent Reports . . . . . . . . . . . . . . . . . . . 409
Mensles-Nationwide. . . . . . . . . . . . . . . . . . . . . . . 411
Monsles-Chicago. . . . . . . . . . . . . . . . . . . . . . . . . 411
Epidemiologic Notes and Reports
Cowpox-Indiana
Change of Dingnosis . . . . . . . . . . . . . . . . . . . . 410
International Notes
Quarantine Mcasures . . . . . . . . . . . . . . . . . . . . . . . 416
diagnostic rises to influenza $A$ by the complement fixation technique; one showed a diagnostic rise to $\mathrm{A}_{2}$ influenza by hemagglutination inhibition. Geometric mean titers were significantly different between unpaired groups of acute and convalescent sera when tested for $A$ influenza antigen by complement fixation.
(Continued on page 310 )

| CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES <br> (Cumulative totals include revised and delayed reports through previous weeks) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 49th WEEK ENDED |  | $\begin{gathered} \text { MEDIAN } \\ 1962-1966 \end{gathered}$ | CUMULATIVE, FIRST 49 WEEKS |  |  |
| DISEASE | $\begin{gathered} \text { DECEMBER } 9 \\ 1967 \end{gathered}$ | $\begin{gathered} \text { DECEMBER } 10 \\ 1966 \end{gathered}$ |  | 1967 | 1966 | MEDIAN $1962-1966$ |
| Aseptic meningitis | 58 | 52 | 38 | 2,885 | 2,834 | 2,041 |
| Brucellosis...... | 3 | 3 | 8 | 236 | 235 | 343 |
| Diphtheria. | 10 | - | 9 | 197 | 184 | 262 |
| Encephalitis, primary: | 25 | 32 |  | 1,498 | 2,054 | --- |
| Arthropod-borne \& unspecified Encephalitis, post-infectious . | 14 | 9 | -.- | 1,498 724 | 2,054 686 | -. - |
| Hepatitis, serum . . . . . . . . . | 75 | 38 | 770 | 2,203 | 1,383 | 35,647 |
| Hepatitis, infectious | 895 | 732 |  | 36,503 | 30,561 | 35,647 |
| Malaria . . . . . . | 51 | 14 | 4 | 1,984 | 472 | 101 |
| Measles (rubeola) | 372 | 1,358 | 3.071 | 61,110 | 199,343 | 377,354 |
| Meningococcal infections, total | 34 | 53 | 51 | 2,033 | 3.230 | 2,619 |
| Civilian . . . . . . . . | 33 | 45 | --- | 1,909 | 2.917 | --- |
| Military ... | 1 | 8 | - - | 124 | 313 | --. |
| Poliomyelitis, total | 2 | 1 | 2 | 41 | 97 | 114 |
| Paralytic. . . . . . . . . . . . . . . . . . . . . . . | 9 | 1 | 2 | 27 | 91 | 91 |
| Rubella (German measles) . . . . . . . . . . . | 409 | 407 |  | 43,067 | 44,918 | -- |
| Streptococcal sore throat \& scarlet fever .. | 10,028 | 9.732 | 7,744 | 419,342 | 396.822 | 367.161 |
| Tetanus. . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 7 | 2 | 5 | 216 | 187 | 266 |
| Tularemia | 2 | 4 | 4 | 160 | 172 | 272 |
| Typhoid fever . . . . . . . . . . . . . . . . . . . . | 6 | 11 | 11 | 389 | 363 | 432 |
| Typhus, tick-borne (Rky. Mt. spotted fever). | - | 6 | - | 297 | 251 | 220 |
| Rabies in animals . . . . . . . . . . . . . . . . . . . . | 85 | 65 | 72 | 4,001 | 3,803 | 3,803 |

## NOTIFIABLE DISEASES OF LOW FREQUENCY

|  | Cum |  | Cum. |
| :---: | :---: | :---: | :---: |
| Anthrax: | 2 | Rabies in man: | 2 |
| Botulism: | 3 | Rubella, Congenital Syndrome: Ore.-1 | 9 |
| Leptospirosis: Mont.-1 | 41 | Trichinosis: Calif.-1, Kans.-1, N.Y.C.-1 | 57 |
| Plague: | 2 | Typhus, murine: . . . . . . . . . . . . . . . . | 42 |
| Psittacosis: Wash.-1 | 43 | Polio, Unsp. Calif.-2. | 13 |

## INFLUENZA - Recent Reports (Continued from front page)

There is presumptive evidence that influenza $A$ is occurring in the greater Chicago area. Throat smears from two ill students at Northwestern University and from six ill persons in Kane County, Illinois, were positive by the experimental fluorescent antibody technique for influenza A. Results of culture studies are pending.

Focal outbreaks of febrile respiratory disease manifested primarily by increased school absenteeism have occurred in Indiana, Alabama, and Oklahoma. Attempts at virus isolation are progressing in each area where febrile illness has been reported, but to date no virus has been identified.
(Reported by W. H. Y. Smith, M.D., C.P.H., Alabama State Department of Public Health; E. Charlton Prather, M.D., M.P.H., Florida State Board of Health; Norman J. Rose, M.D., M.P.H., and Richard Morrissey, M.P.H., Illinois Department of Public Health; A. L. Marshall, Jr., M.D., and William Turner, M.D., Indiana State Board of Health; George H. Agate, M.D., M.S.P.H., and Maurice Becker, M.D., Michigan Department of Public Health; R. Altman, M.D., and Martin Goldfield, M.D., New Jersey State Department of Health; R. L. Carpenter, M.D., M.P.H., Oklahoma State Department of Health; and EIS Officers.)

# EPIDEMIOLOGIC NOTES AND REPORTS COWPOX - Indiana 

Change of Diagnosis

The clinical case of cowpox in a 56 -year-old woman (M.W.) from Indiana (MMWR, Vol. 16, No. 46) has now been attributed to vaccinia virus on the basis of additional laboratory and epidemiologic evidence. Contrary to the earlier report, further tissue culture and histopathologic studies have demonstrated viral characteristics indicative of vaccinia. Epidemiologic investigation, furthermore, suggested a probable pattern of contact spread of vaccinia virus from a recently immunized infant.

On October 5, a 1-year-old female infant was vaccinated and developed a primary "take" with marked local reaction. This infant was in intimate contact with members of two related households; the first includes the infant, her parents, and three other children. The second is comprised of the infant's grandmother (M.W.) and three of M.W.'s children. About October 15, one of M.W.'s children (D.W.) developed lesions on the hands, becoming the first known human infection. Subsequently, the other members of this household also developed lesions, but M.W. was the only one to become systemically ill, requiring hospitalization. None of these persons had been vaccinated previously. In the other household, which included the vaccinated infant, no lesions were noted. The infant's parents were unvaccinated, but the three children had undocumented histories of smallpox immunization. Between October 10 and 15 , one dairy cow of a herd of 20 , tended and milked by hand by members of both households, developed Iesions on the udder. Subsequently, lesions were noted on an additional 10 to 12 cows of this herd.

Epidemiologic data are insufficient to ascertain definitely the path of spread of vaccinia virus from the vacci-
nated child. However, it appears that virus from the infant's lesion may have been transferred to the index cow, with appearance of udder lesions which then produced the lesions in the unvaccinated human contacts. The remainder of the herd was then cross-infected during milking. Scrapings from lesions on one of these cows have been submitted to NCDC for virus isolation. Serologic studies are also in progress.

Initial laboratory study demonstrated the presence of pox virus in scrapings from lesions on the hands of M.W. Electronmicroscopy revealed pox virus particles in tissue culture; agar gel diffusion test was positive for pox virus group; and virus from first passage of crust material in embryonated eggs produced hemorrhagic pocks on the chorioallantoic membranes (CAM). This morphology was accepted as characteristic of cowpox, as opposed to vaccinia virus. The second passage of crust material, however, produced pocks most of which were without central hemorrhage, and were morphologically typical of vaccinia virus.

Histopathologic sections of the first passage CAMs, originally diagnosed as typical of cowpox, were subsequently found to have the granular and amorphous intracytoplasmic inclusion bodies, similar to the inclusion bodies of vaccinia and variola. These were distinctly different from the inclusion bodies of cowpox.

[^0]
## CURRENT TRENDS <br> MEASLES - Nationwide

Figure 1

## REPORTED CASES OF MEASLES IN THE UNITED STATES

 4.WEEK TOTALS - JULY-DECEMBER 1964-1967For the week ending December 9,372 cases of measles were reported. This is the twenty-first consecutive week with less than 400 cases per week, an occurrence that has not been previously observed according to records dating back to 1912 when reporting of measles cases began on a national basis. The 4-week total for November 11 to December 9 is 1,213 cases (Figure 1), which is 25 percent of the cases reported for the same period in 1966 , and 14 percent of the cases reported for the same periods in 1964 and 1965. By this time in the past four years a seasonal increase was evident; however, to date no seasonal increase has occurred.

## MEASLES - Chicago

In the Chicago area from January to September 1967, 312 measles cases were reported. Investigation revealed 11.2 percent ( 35 cases) to be other diseases. Of the remaining 277 confirmed cases ( 147 males and 130 females), 80 percent were preschool children and 52 were children under 10 months of age (Table 1). Of the confirmed cases, 42 percent were hospitalized. Complications of otitis media, pharyngitis, and pneumonia occurred in 17 percent of the cases. No measles encephalitis was confirmed; however, encephalitis occurred in a person with positive measles serology but no clinical evidence of measles. Death from pneumonia occurred in two children, ages 8 and 11 months.

## Table 1

Confirmed Measles by Race and Age*
Chicago, Illinois - January-September 1967

| Age Groups | Race |  | Total | \% Total |
| :--- | :---: | :---: | ---: | :---: |
|  | White | Negro |  |  |
| Under 10 months | 17 | 35 | 52 | 20 |
| 10 months-4 years | 28 | 132 | 160 | 60 |
| $5-14$ years | 16 | 37 | 53 | 20 |
| 15 years and older | 1 | 0 | 1 | $<1$ |
| Total | 62 | 204 | 266 | 100 |

*Race and/or Age Unknown - 11 cases
Diagnosis of 97 percent of the 277 cases was by a visit to the patient's home, physician's office, private clinic, or hospital. Telephone calls established diagnosis in 3 percent. Of the diagnosed cases, 96 percent had not been immunized. Among eleven persons giving a history of immunization, eight had been immunized. In most cases the source of exposure to measles was difficult to determine; however, 44 children were exposed at school, 18
exposed at home, and 40 were exposed to neighborhood playmates. Only 2 percent were exposed outside the Chicago area.

In August and September 1967, a Preschool Child Immunization Index Survey ${ }^{1}$ by socio-economic status, was conducted in 778 households in 200 city blocks. Results indicated that children under age 5 in the middle and lower socio-economic groups were most susceptible to measles as determined by a history of measles or measles vaccination (Figure 2). Although Chicago has had an active immunization program for 4 years, approximately 11,000 children per month are being vaccinated to decrease the number of susceptible children.

Figure 2
PERCENT OF MEASLES IMMUNES BY SOCIO-ECONOMIC

(Continued on page 416)

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

| AREA | ASEPTIC MENINGITIS |  | brucellosis | diphtheria | ENCEPHALITIS |  |  | HEPATITIS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Primary including unsp. cases |  | PostInfectious | Serum |  | Infectious |  |
|  | 1967 | 1966 |  | 1967 | 1967 | 1967 | 1966 | 1967 | 1967 | 1966 | 1967 | 1966 |
| UNITED STATES... | 58 | 52 | 3 | 10 | 25 | 32 | 14 | 75 | 38 | 895 | 732 |
| NEW ENGLAND. . . . . . . . . | 1 | 3 | - | - | 1 | 3 | 1 | - | 2 | 28 | 48 |
| Maine.............. | - | - | - | - | - | - | - | - | - | 2 | 10 |
| New Hampshire...... | 1 | - | - | - | - | - | - | - | - | - | 1 |
| Vermont. . . . . . . . . . | - | - | - | - | - | - | 1 | - | - | - | - |
| Massachusetts...... | - | 1 | - | - | - | - | - | - | 2 | 12 | 25 |
| Rhode Is land. . . . . . | - | 2 | - | - | - | 3 | - | - | - | 3 | 1 |
| Connecticut........ | - | - | - | - | 1 | - | - | - | - | 11 | 11 |
| middle atlantic...... | 8 | 2 | - | - | 1 | 9 | 1 | 28 | 22 | 157 | 102 |
| New York City...... | 2 | 1 | - | - | - | 6 | - | 17 | 15 | 72 | 27 |
| New York, Up-State. | - | - | - | - | 1 | 2 | - | 4 | 4 | 11 | 32 |
| New Jersey......... | 5 | - | - | - | - | - | - | 4 | 3 | 25 | 24 |
| Pennsylvania....... | 1 | 1 | - | - | - | 1 | 1 | 3 | - | 49 | 19 |
| EAST NORTH CENTRAL... | 6 | - | - | - | 9 | 8 | 4 | 2 | - | 124 | 129 |
| Ohio............... | - | - | - | - | 7 | 6 | - | 1 | - | 48 | 31 |
| Indiana............. | - | - | - | - | - | 1 | - | - | - | 13 | 2 |
| Illinois........... | 1 | - | - | - | 1 | - | 2 | - | - | 22 | 24 |
| Michigan............ | 4 | - | - | - | 1 | 1 | 2 | 1 | - | 35 | 39 |
| Wisconsin.......... | 1 | - | - | - | - | - | - | - | - | 6 | 33 |
| WEST NORTH CENTRAL... | - | - | 2 | - | 1 | 1 | 1 | 1 | 1 | 53 | 51 |
| Minnesota.......... | - | - | - | - | 1 | 1 | 1 | 1 | - | 26 | 9 |
| Iowa. . . . . . . . . . . . . | - | - | 2 | - | - | - | - | - | - | - | 1 |
| Missouri............ | - | - | - | - | - | - | - | - | 1 | 20 | 30 |
| North Dakota....... | - | - | - | - | - | - | - | - | - | - | 8 |
| South Dakota....... | - | - | - | - | - | - | - | - | - | 1 | - |
| Nebraska............ | - | - | - | - | - | - | - | - | - | 2 | 1 |
| Kansas.............. | - | - | - | - | - | - | - | - | - | 4 | 2 |
| SOUTH ATLANTIC....... | 8 | 8 | - | 4 | 6 | 1 | 1 | 2 | 1 | 74 | 85 |
| Delaware........... | - | 1 | - | - | - | 1 | - | - |  | - | 4 |
| Maryland............ | 4 | 1 | - | - | 2 | - | - | - | - | 10 | 16 |
| Dist. of Columbia.. | - | - | - | - | - | - | - | - | - | 2 | 2 |
| Virginia........... | - | - | - | 4 | - | - | - | - | - | 6 | 14 |
| West Virginia...... | - | - | - | - | - | - | 3 | - | - | 8 | 5 |
| North Carolina..... | 2 | 1 | - | - | 2 | - | - | - | 1 | 12 | 5 |
| South Carolina..... | 2 | - | - | - | - | - | - | - | - | 4 | 3 |
| Georgia............ | - | - | - | - | - | - | - | - | - | 18 | 26 |
| Florida............ | - | 5 | - | - | 2 | - | 1 | 2 | - | 14 | 10 |
| EAST SOUTH CENTRAL... | 8 | 2 | - | 1 | 1 | - | - | - | - | 92 | 47 |
| Kentucky............ | - | 1 | - | - | - | - | - | - | - | 40 | 13 |
| Tennessee........... | 1 | 1 | - | 1 | 1 | - | -0 | - | - | 26 | 26 |
| Alabama............. | 1 | - | - | - | - | - | - | - | - | 9 | 4 |
| Mississippi........ | 6 | - | - | - | - | - |  | - | - | 17 | 4 |
| WEST SOUTH CENTRAL... | 1 | 12 |  | 5 | 1 | 3 | 3 | 4 | 2 | 75 | 66 |
| Arkansas........... | 1 | - | - | 3 | 1 | 1 | - | 2 | - | - | 3 |
| Louisiana.......... | - | 1 | - | - | - | 1 | 1 | 1 | 2 | 13 | 13 |
| Oklahoma............ | - | - | - | - | - | - | - | - | - | 10 | 6 |
| Texas.............. |  | 11 | - | 2 | - | 1 | 2 | 1 | - | 52 | 44 |
| MOUNTATN. . . . . . . . . . . . | - | - | - | - | - | 2 | 1 | - | - | 25 | 50 |
| Montana............. | - | - | - | - | - | - | - | - | - | 5 | 4 |
| Idaho............... | - | - | - | - | - | - | - | - | - | 4 | 2 |
| Wyoming............. . | - | - | - | - | - | - | 1 | - | - | 1 | - |
| Colorado........... | - | - | - | - | - | - | - | - | - | 4 | 5 |
| New Mexico. . . . . . . | - | - | - | - | - | 2 | - | - | - | 8 | 19 |
| Arizona............ | - | - | - | - | - | - | - | - | - | 3 | 10 |
| Utah................ | - | - | - | - | - | - | - | - | - | - | 10 |
| Nevada. . . . . . . . . . . | - | - | - | - | - | - | - | - | - | - | - |
| PACIFIC............... | 26 | 25 | 1 | - | 5 | 5 | 2 | 38 | 10 | 267 | 154 |
| Washington. . . . . . . | 2 | 1 | - | - | - | - | - |  | - | 18 | 17 |
| Oregon.............. | - | 2 | 1 | - | - | 1 | - | 1 | - | 18 | 21 |
| California......... | 24 | 21 | - | - | 5 | 4 | 2 | 37 | 10 | 227 | 115 |
| Alaska.............. | - | - | - | - | - | - | - | - | - | 3 | 1 |
| Hawaii............. | - | 1 | - | - | - | - | - | - | - | 1 | - |
| Puerto Rico | - | - | - | - | - | - | - | - | - | 9 | 28 |

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED
DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

| AREA | MALARIA | MEASLES (Rubeola) |  |  | MENINGOCOCCAL INFECTIONS, TOTAL |  |  | POLIOMYELITIS |  |  | RUBELLA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1967 | Cumulative |  |  | Cumulative |  | Total | Paralytic |  |  |
|  |  |  | 1967 | 1966 | 1967 | Cum | 1966 | 1967 | 1967 | $\begin{aligned} & \hline \text { Cum. } \\ & 1967 \\ & \hline \end{aligned}$ |  |
| UNItEd States... | 51 | 372 | 61,110 | 199,343 | 34 | 2,033 | 3,230 | 2 | - | 27 | 409 |
| NEW England. . . . . . . . | - | 4 | 935 | 2,560 | 1 | 81 | 149 | - | - | - | 41 |
| Maine............... | - | - | 262 | 294 | - | 3 | 12 | - | - |  | 5 |
| New Hampshire...... | - | 1 | 78 | 80 | - | 3 | 9 | - | - | - | - |
| Vermont. . . . . . . . . . | - | - | 42 | 344 | - | 1 | 4 | - | - | - | 4 |
| Massachusetts..... | - | 2 | 393 | 831 | 1 | 37 | 62 | - | - | - | 9 |
| Rhode Isiand.... | - | - | 62 | 73 | - | 6 | 19 | - | - | - | 10 |
| Connecticut....... | - | 1 | 98 | 938 | - | 31 | 43 | - | - | - | 13 |
| Middle atlantic...... | 11 | 35 | 2,517 | 18,480 | 6 | 337 | 429 | - | - | 5 | 38 |
| New York City...... | - | 6 | 514 | 8,365 | 2 | 62 | 65 | - | - | 1 | 13 |
| New York, Up-State. | - | - | 629 | 2,648 | 1 | 82 | 113 | - | - | 1 | 3 |
| New Jersey......... | 8 | 20 | 595 | 1,986 | 2 | 110 | 129 | - | - | - | 21 |
| Pennsylvania....... | 3 | 9 | 779 | 5,481 | 1 | 83 | 122 | - | - | 3 | 1 |
| EAST NORTH CENTRAL... | 2 | 62 | 6,090 | 70,154 | 2 | 279 | 509 | - | - | 6 | 114 |
| Ohio................ | - | 4 | 1,181 | 6,452 | 2 | 94 | 147 | - | - | - | 19 |
| Indiana. . . . . . . . . . | - | 9 | 656 | 5,804 | - | 31 | 88 | - | - | 3 | 8 |
| Illinois............ | 2 | 3 | 1,165 | 11,520 | - | 61 | 91 | - | - | - | 8 |
| Michigan. | - | 11 | 1,017 | 15,057 | - | 72 | 130 | - | - | 3 | 37 |
| Wisconsin.......... | - | 35 | 2,071 | 31,321 | - | 21 | 53 | - | - | - | 42 |
| WEST NORTH CENTRAL... | - | 10 | 2,953 | 9,251 | 1 | 94 | 166 | - | - | 3 | 29 |
| Minnesota.......... | - | 1 | 134 | 1,681 | - | 21 | 36 | - | - | - | 2 |
| Iowa. . . . . . . . . . . . | - | 8 | 784 | 5,433 | - | 19 | 22 | - | - | 1 | 23 |
| Missouri. | - | - | 340 | 538 | 1 | 19 | 64 | - | - |  | - |
| North Dakota. . . . . . | - | - | 886 | 1,374 | - | 3 | 11 | - | - |  | 4 |
| South Dakota....... | - | - | 58 | 40 | - | 7 | 6 | - | - |  | - |
| Nebraska. . . . . . . . | - | 1 | 657 | 185 | - | 15 | 11 | - | - | - | - |
| Kansas.............. | - | - | 94 | NN | - | 10 | 16 | - | - | 2 | - |
| SOUTH ATLANTIC....... | 17 | 81 | 7,295 | 16,012 | 11 | 399 | 548 | - | - | 2 | 22 |
| Delaware........... | - | 1 | 51 | 267 | - | 8 | 7 | - | - | - | - |
| Maryland........... | 3 | 4 | 178 | 2,123 | - | 55 | 49 | - | - | 1 | - |
| Dist. of Columbia.. | - | 1 | 25 | 390 | - | 15 | 15 | - | - | - | - |
| Virginia............ | 3 | 61 | 2,315 | 2,259 | - | 43 | 68 | - | - | - | 11 |
| West Virginia...... | - | 6 | 1,463 | 5,523 | 1 | 38 | 43 | - | - |  | 9 |
| North Carolina..... | 10 | 1 | 927 | 670 | 6 | 86 | 139 | - | - | 1 | - |
| South Carolina..... | - | 1 | 513 | 664 | - | 32 | 54 | - | - | - | - |
| Georgia............ | - | - | 42 | 241 | 2 | 59 | 77 | - | - |  | - |
| Florida............. | 1 | 6 | 1,781 | 3,875 | 2 | 63 | 96 | - | - | - | 2 |
| EAST SOUTH CENTRAL... | 3 | 27 | 5,487 | 20,568 | 6 | 162 | 277 | - | - | 2 | 13 |
| Kentucky........... | 1 | 2 | 1,430 | 4,834 | - | 45 | 96 | - | - | - | 5 |
| Tennessee.......... | - | 21 | 2,023 | 12,643 | 4 | 72 | 93 | - | - | - | 8 |
| Alabama............. | - | 3 | 1,357 | 1,788 | - | 29 | 59 | - | - | - | - |
| Mississippi........ | 2 | 1 | 677 | 1,303 | 2 | 16 | 29 | - | - | 2 | - |
| WEST SOUTH CENTRAL... | 2 | 73 | 18,078 | 26,433 | , | 261 | 431 | - | - | 9 | 3 |
| Arkansas........... | - | - | 1,404 | 994 | 1 | 47 | 37 | - | - | 1 | - |
| Louisiana.......... | - | - | 156 | 100 | 1 | 99 | 163 | - | - | - | - |
| Oklahoma............ | 2 | - | 3,359 | 630 | - | 18 | 23 | - | - | 1 | - |
| Texas.............. | - | 73 | 13,159 | 24,709 | 1 | 97 | 208 | - | - | 7 | 3 |
| mountain. . . . . . . . . . . | 8 | 22 | 4,870 | 12,571 | - | 40 | 94 | - | - | - | 29 |
| Montana. . . . . . . . . . | - | 3 | 331 | 1,910 | - | 5 | 5 | - | - | - | 1 |
| Idaho.............. | - | 4 | 399 | 1,690 | - | 3 | 5 | - | - | - | - |
| Wyoming . . . . . . . . . . | - | - | 202 | 234 | - | 1 | 6 | - | - | - | - |
| Colorado............ | 8 | 9 | 1,626 | 1,429 | - | 13 | 49 | - | - | - | 13 |
| New Mexico......... | - | - | 606 | 1,220 | - | 5 | 10 | - | - | - | - |
| Arizona............. | - | 5 | 1,053 | 5,359 | - | 6 | 13 | - | - | - | 15 |
| Urah............... | - | 1 | 384 | 664 | - | 4 | 1 | - | - | - |  |
| Nevada. . . . . . . . . . | - | - | 269 | 65 | - | 3 | 5 | - | - | - | - |
| PACIFIC............... | 8 | 58 | 12,885 | 23,314 | 4 | 380 | 627 | 2 | - |  | 120 |
| Washington. . . . . . . . | - | 31 | 5,654 | 4,980 | - | 37 | 54 | - | - | - | 36 |
| Oregon.............. | - | 4 | 1,702 | 2,435 | - | 30 | 41 | - | - |  | 8 |
| Californía......... | 5 | 23 | 5,206 | 15,116 | 4 | 298 | 510 | 2 | - | - | 58 |
| Alaska............. | - | - | 141 | 619 | - | 11 | 18 | - | - | - | 16 |
| Hawaii.............. | 3 | - | 182 | 164 | - | 4 | 4 | - | - | - | 2 |
| Puerto Rico.......... | - | 5 | 2,241 | 3,412 | - | 15 | 18 | - | - | - | 2 |

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDED

DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

| AREA | STREPTOCOCCAL SORE THROAT \& SCARLET FEVER | TETANUS |  | TULAREMIA |  | TYPHOID |  | TYPHOS FEVERTICK- BORNE(Rky. Mt. Spotted) |  | RABIES IN ANIMALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1967 | $\begin{aligned} & \text { Cum, } \\ & 1967 \\ & \hline \end{aligned}$ | 1967 | Cum. $1967$ | 1967 | Cum. $1967$ | 1967 | Cum. 1967 | 1967 | $\overline{\text { Cum. }}$ $1967$ |
| UNITED STATES... | 10,028 | 7 | 216 | 2 | 160 | 6 | 389 | - | 297 | 85 | 4,001 |
| NEW ENGLAND. . . . . . . . | 1,136 | 1 | 3 | - | 1 | - | 10 | - | 1 | 4 | 103 |
| Maine.. | 55 | - | - | - | - | - | - | - | $-$ | - | 24 |
| New Hampshire. | 30 | - | - | - | - | - | - | - | - | 1 | 48 |
| Vermont............ | 6 | - | - | - | - | - | - | - | - | 3 | 25 |
| Massachusetts. | 201 | - | 1 | - | 1 | - | 6 | - | 1 | - | 4 |
| Rhode Island. | 140 | - | - | - | - | - | 1 | - | - | - | 2 |
| Connecticut... | 704 | 1 | 2 | - | - | - | 3 | - | - | - | - |
| middle atlantic...... | 194 | 2 | 16 | - | 1 | 1 | 40 | - | 35 | 2 | 97 |
| New York City...... | 13 | 1 | 9 | - | - | 1 | 21 | - | - | - | - |
| New York, Up-State. | 147 | - | 1 | - | 1 | - | 11 | - | 9 | 2 | 81 |
| New Jersey......... | NN | - | 1 | - | - | - | 4 | - | 15 | - | - |
| Pennsylvania....... | 34 | 1 | 5 | - | - | - | 4 | - | 11 |  | 16 |
| EAST NORTH CENTRAL... | 984 | - | 26 | - | 15 | 1 | 42 | - | 22 | 2 | 372 |
| Ohio................ | 68 | - | 4 | - | - | - | 14 | - | 11 | - | 131 |
| Indiana............ | 188 | - | 3 | - | 2 | - | 11 | - | 1 | - | 84 |
| Illinois........... | 166 | - | 13 | - | 13 | 1 | 7 | - | 10 | 2 | 71 |
| Michigan........... | 412 | - | 5 | - | - | - | 8 | - | - | - | 23 |
| Wisconsin.......... | 150 |  | 1 | - |  | - | 2 | - | - | - | 63 |
| WEST NORTH CENTRAL... | 463 | - | 16 | - | 22 | - | 21 | - | 4 | 24 | 946 |
| Minnesota.......... | 29 | - | 5 | - | - | - | 2 | - | 1 | 5 | 189 |
| Iowa................ | 139 | - | 2 | - | 1 | - | 3 | - | - | 3 | 128 |
| Missouri............ | 38 | - | 7 | - | 9 | - | 10 | - | 1 | 4 | 170 |
| North Dakota....... | 174 | - | - | - | - | - | - | - | - | 7 | 166 |
| South Dakota....... | 47 | - | 1 | - | 2 | - | - | - | - | - | 116 |
| Nebraska. . . . . . . | - | - | - | - | - | - | 4 | - | 2 | 4 | 70 |
| Kansas............ | 36 | - | 1 | - | 10 | - | 2 | - | - | 1 | 107 |
| SOUTH ATLANTIC....... | 1,077 | 1 | 46 | 1 | 11 | 1 | 63 | - | 119 | 3 | 475 |
| Delaware.......... | 4 | - | - | - | - | - | 6 | - | - | - | 475 |
| Maryland............ | 95 | - | - | - | - | - | 2 | - | 21 | - | 4 |
| Dist. of Columbia.. | 85 | - | - | - | - | - | 3 | - | - | - | 6 |
| Virginia........... | 436 | - | 10 | 1 | 1 | 1 | 9 | - | 28 | 3 | 205 |
| West Virginia...... | 327 | - | 1 | - | 2 | - | 2. | - | 1 | - | 62 |
| North Carolina..... | 31 | - | 7 | - | - | - | 4 | - | 47 | - | 3 |
| South Carolina..... | 4 | - | 1 | - | 2 | - | 10 | - | 5 | - | 2 |
| Georgia............. | 16 | - | 4 | - | 5 | - | 21 | - | 17 | - | 115 |
| Florida............. | 79 | 1 | 23 | - | 1 | - | 12 | - | - | - | 78 |
| EAST SOUTH CENTRAL... | 1,603 | 2 | 33 | - | 12 | - | 64 | - | 53 | 22 | 762 |
| Kentucky............ | 116 | - | 4 | - | 2 | - | 24 | - | 15 | 5 | 173 |
| Tennessee.......... | 1,239 | - | 8 | - | 7 | - | 11 | - | 26 | 15 | 529 |
| Alabama............ | 169 | - | 11 | - | 1 | - | 12 | - | 12 | 2 | 50 |
| Mississippi........ | 79 | 2 | 10 | - | 2 | - | 17 | - | - | - | 10 |
| WEST SOUTH CENTRAL... | 1,108 | 1 | 51 | - | 81 | 2 | 42 | - | 43 | 24 | 896 |
| Arkansas............ | 11 | 1 | 7 | - | 48 | - | 12 | - | 14 | 2 | 113 |
| Louistana........... | 6 | - | 4 | - | 8 | 1 | 17 | - | 2 | 1 | 68 |
| Oklahoma.. | 48 | - | 4 | - | 18 | 1 | 8 | - | 16 | 14 | 353 |
| Texas. | 1,043 | - | 36 | - | 7 | - | 5 | - | 11 | 7 | 362 |
| MOUNTAIN. . . . . . . . . . . | 2,029 | - | 3 | 1 | 11 | - | 21 | - | 9 | - | 113 |
| Montana........... | 74 | - | - | 1 | 2 | - | 2 | - | - | - | - |
| Idaho. . . . . . . . . . . | 64 | - | - | - | - | - | - | - | - | - | - |
| Wyoming . . . . . . . . . . | 191 | - | - | - | 2 | - | 1 | - | - | - | 5 |
| Colorado........... | 1,257 | - | 2 | - | 1 | - | 12 | - | 9 | - | 10 |
| New Mexico.......... | 298 | - | 1 | - | - | - | 2 | - | - | - | 34 |
| Arizona............. | 76 | - | - | - | - | - | 4 | - | - | - | 52 |
| Utah............... | 67 | - | - | - | 6 | - | - | - | - | - | 3 |
| Nevada. . | 2 | - | - | - |  |  | - | - | - | - | 9 |
| PACIFIC............... | 1,434 | - | 22 | - | 6 | 1 | 86 | - | 11 | 4 | 237 |
| Washington......... | 384 | - | - | - | 2 | - | 2 | - | 2 | - | 2 |
| Oregon.............. | 114 | - | 1 | - | 1 | - | 3 | - | 3 | - | 4 |
| California......... | 781 | - | 17 | - | 3 | 1 | 78 | - | 6 | 4 | 231 |
| Alaska. | 83 | - | - | - | - | - | - | - | - | - | - |
| Hawaii.............. | 72 | - | 4 | - | - |  | 3 | - | - | - | - |
| Puerto Rico.......... | 8 | - | 18 | - | - | - | 8 | - | - | - | 32 |

Week No.
49
(By place of occurrence and week of filing certificate. Excludes fetal deaths)

| Area | All Causes |  | Pneumonia <br> and <br> Influenza <br> All Ages | Under <br> 1 year <br> All <br> Causes | Area | All Causes |  | Pneumonia and <br> Influenza <br> All Ages | Under <br> 1 year <br> A11 <br> Causes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A11 <br> Ages | 65 years and over |  |  |  | $\begin{aligned} & \text { All } \\ & \text { Ages } \end{aligned}$ | 65 years and over |  |  |
| NEW ENGLAND: | 760 | 475 | 41 | 38 | SOUTH ATLANTIC: | 1,249 | 623 | 58 | 96 |
| Boston, Mass | 221 | 128 | 14 | 15 | Atlanta, Ga | 133 | 54 |  | 14 |
| Bridgeport, Conn. | 54 | 36 | 3 | 2 | Baltimore, Md. | 241 | 126 | 1 | 10 |
| Cambridge, Mass. | 19 | 11 | - | 1 | Charlotte, N. C. | 53 | - 20 | -12 | 4 |
| Fall River, Mass.----- | 37 | 24 | 1 | 1 | Jacksonville, Fla. | 82 | 28 | 3 | 1 |
| Hartford, Conn.- | 71 | 46 | 1 | 3 | Miami, Fla. | 123 | 65 | 2 | 6 |
| Lowell, Mass.---.---- | 26 | 17 | 3 | 1 | Norfolk, Va | 64 | 29 | 5 | 6 |
| Lynn, Mass.----------- | 19 | 9 | 1 | 2 | Richmond, Va.---------- | 75 | 48 | 2 | 4 |
| New Bedford, Mass.-.-- | 23 | 16 | 2 | - | Savannah, Ga | 30 | 19 | 3 | 2 |
| New Haven, Conn.---.-- | 60 | 35 | - | 7 | St. Petersburg, Fla.--- | 84 | 70 | 6 | - |
| Providence, R. I....-- | 63 | 42 | 2 | 1 | Tampa, Fla | 93 | 52 | 12 | 2 |
| Somerville, Mass. | 19 | 11 | 2 | 1 | Washington, D. C.------ | 225 | 86 | 18 | 47 |
| Springfield, Mass. | 37 | 31 | 7 | 1 | Wilmington, Del.------ | 46 | 26 | 3 | - |
| Waterbury, Conn.------ | 40 | 28 | - | - |  |  |  |  |  |
| Worcester, Mass.------ | 71 | 41 | 5 | 3 | EAST SOUTH CENTRAL: | 740 | 402 | 32 | 35 |
| Middle atlantic: |  |  |  |  | Birmingham, Ala.-.-.--- | 114 | 51 | 4 | 3 |
|  | 3,599 | 2,134 | 129 | 157 | Chattanooga, Tenn.----- | 67 | 37 | 6 | 4 |
| Albany, N. Y.- | 45 | 28 | 2 | 1 | Knoxville, Tenn. | 57 | 38 | 5 | 1 |
| Allentown, Pa.-...---- | 38 | 26 | 2 | 2 | Louisville, Ky. | 150 | 87 | 11 | 8 |
| Buffalo, N. Y.------- | 153 | 86 | 3 | 17 | Memphis, Tenn.--.------ | 170 | 91 | - | 7 |
| Camden, N. J.--------- | 47 | 24 | - | 3 | Mabile, Ala.-.-.-.-...- | 44 | 24 | - | - |
| Elizabeth, N. J.------ | 31 | 16 | 1 | 2 | Montgomery, Ala | 48 | 28 | 3 | 4 |
| Erie, Pa.------------ | 32 | 15 | 1 | 1 | Nashville, Tenn..------ | 90 | 46 | 3 | 8 |
| Jersey City, N. J.-.- | - 82 | 47 | 2 | 2 |  |  |  |  |  |
| Newark, N. J.--------- | 97 | 44 | 2 | 5 | WEST SOUTH CENTRAL: | 1,218 | 660 | 54 | 69 |
| New York City, N. Y, -- | 1,824 | 1,073 | 68 | 75 | Austin, Tex. | 35 | 31 | 5 | 1 |
| Paterson, N. J.------- | - 44 | 28 | 2 | 2 | Baton Rouge, La.-.-.-- | 35 | 20 | 1 | - |
| Philadelphia, Pa.*--- | 551 | 324 | 12 | 24 | Corpus Christi, Tex.--- | 36 | 14 | - | 4 |
| Pittsburgh, Pa.------- | 202 | 117 | 3 | 8 | Dallas, Tex. | 170 | 93 | 3 | 10 |
| Reading, Pa,--------- | 50 | 33 | 4 | 3 | El Paso, Tex | 46 | 18 | 4 | 3 |
| Rochester, N. Y.--.--- | 118 | 77 | 9 | 6 | Fort Worth, Tex | 94 | 53 | 5 | 5 |
| Schenectady, N. Y.*--- | 29 | 18 | 1 | 1 | Houston, Tex. | 211 | 97 | 8 | 11 |
| Scranton, Pa.--------- | 52 | 39 | 4 | 1 | Litcle Rock, Ark | 62 | 32 | 3 | 5 |
| Syracuse, N. Y.------- | 66 | 38 | - | 3 | New Orleans, La. | 163 | 89 | 5 | 14 |
| Trenton, N. J.-------- | 63 | 44 | 4 | 1 | Oklahoma City, Okla | 102 | 57 | 1 | 4 |
| Urica, N. Y.---------- | 34 | 24 | 7 | - | San Antonio, Tex. | 113 | 60 | 4 | 5 |
| Yonkers, N. Y.-------- | 41 | 33 | 2 | - | Shreveport, La. | 66 | 41 | 3 | 2 |
| EAST NORTH CENTRAL: | 2,786 | 1,579 | 82 145 |  |  | 85 |  | 12 |  |
|  |  |  |  |  | 17 |  |  |  |  |
| Akron, Ohio----------- | 60 | 33 | - | 3 |  | MOUNTAIN: | 392 | 221 | 17 |
| Canton, Ohic---.------ | 34 | 19 | 3 | 4 | Albuquerque, N. Mex.--- | 47 | 27 | 8 | 2 |
| Chicago, Ill.--------- | 770 | 395 | 25 | 50 | Colorado Springs, Colo. | 22 | 14 | 1 | - |
| Cincinnati, ohio------ | 220 | 137 | 7 | 9 | Denver, Colo.----------- | 93 | 51 | 2 | 6 |
| Cleveland, Ohio---...- | 226 | 138 | 3 | 4 | Ogden, Utah | 20 | 7 | 1 | 1 |
| Columbus, Ohio------- | 138 | 80 | - | 6 | Phoenix, Ariz | 92 | 48 | , | 1 |
| Dayten, Ohio---------- | 95 | 58 | 4 | 3 | Pueblo, Colo.----------- | 9 | 6 | 1 | 1 |
| Detroit, Mich.------- | 369 | 202 | 8 | 18 | Salt Lake City, Utah--- | 52 | 32 | 2 | 3 |
| Evansville, Ind.--..-- | 44 | 25 | 5 | 3 | Tucson, Ariz.---------- | 57 | 36 | 1 | 3 |
| F1int, Mich.---------- | 57 | 31 | 1 | 6 | PACIFIC: | 1,627 | 98016 |  |  |
| Fort Wayne, Ind.----- | 37 | 26 | 1 | 1 |  |  |  | 49 | 61 |
| Gary, Ind.------------- | 28 | 17 | 4 | 1 | Berkeley, Calif.------- | 2558 |  | - | - |
| Grand Rapids, Mich.--- | 77 | 49 | 11 | 2 | Fresno, Calif.-.......-- |  | 16 33 | 1 | 3 |
| Indianapolis, Ind.---- | 177 | 106 | 4 | 7 | Glendale, Calif.------- | 32 | 23 | - | 2 |
| Madison, Wis.--------- | 51 | 24 | - | 7 | Honolulu, Hawait------- | 42 | 26 | 3 | 2 |
| Milwaukee, Wis.------- | 142 | 79 | 3 | 6 | Long Beach, Calif.----- | 65 | 33 | 5 | 6 |
| Peoria, Ill.--------- | 59 | 31 | 1 | 7 | Los Angeles, Calif.---- | 520 | 326 | 13 | 19 |
| Rockford, I11.----.---- | 29 | 13 | 1 | 1 | Oakland, Calif.--------- | 80 | 39 | 1 | 3 |
| South Bend, Ind.------ | 21 | 17 | 1 | 1 | Pasadena, Calif.------- | 32 | 22 | 1 | 1 |
| Toledo, Ohio---------- | 100 | 62 | - | 5 | Portland, Oreg.-------- | 111 | 73 | 3 | 7 |
| Youngstown, Ohio-..--- | 52 | 37 | - | 1 | Sacramento, Calif.---. <br> San Diego, Calif. | 59 89 | 49 | 1 | 1 |
| WEST NORTH CENTRAL: | 826 | 519 | 26 | 52 | San Francisco, Calif.-- | 215 | 134 | 8 | 7 |
| Des Moines, Iowa-...-- | 54 | 30 | 1 | 5 | San Jose, Calif...--.-- | 49 | 30 | 4 | - |
| Duluth, Minn.--------- | 34 | 27 | - | 1 | Seattle, Wash.--------- | 154 | 86 | 7 | 3 |
| Kansas City, Kans.---- | 49 | 32 | 2 | 3 | Spokane, Wash.--------- | 53 | 33 | 1 | 2 |
| Kansas City, Mo.------ | 116 | 75 | 4 | 7 | Tacoma, Wash.--------- | 43 | 30 | 1 | , |
| Lincoln, Nebr.----.--- | 27 | 20 | 3 | 7 | Total |  |  |  |  |
| Minneapolis, Minn.---- | 113 | 73 |  |  |  | 13,197 | 7,593 | 488 | 670 |
| Omaha, Nebr,---------- | 66268 | 39 | 2 | 8 | Cumulative Totals |  |  |  |  |
| St. Louis, Mo.-------- |  | 162 | 9 | 17 |  |  |  |  |  |  |  |  |  |
| St. Paul, Minn.------- | 69 | 44 | 2 | 2 | including reported corrections for previous weeks |  |  |  |  |
| Wichita, Kans.-.---.-- | 30 | 17 | 3 | 1 | A11 Causes, All Ages ------------------------- 603, 355 <br> A11 Causes, Age 65 and over-------------------- 344, 537 <br> Pneumonia and Influenza, All Ages------------- 21, 101 <br>  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Estimate - based on a | age percent of divisional total. |  |  |  |  |  |  |  |  |  |  |  |  |

MEASLES - Chicago (Continued from page 411)
In the years 1962, -64, and -66 , for Chicago and Illinois, the peak incidence of measles occurred in early spring preceded in the late fall and winter by increases in reported measles cases (Figure 3), To date this expected early seasonal increase has not occurred.

Figure 3
REPORTED CASES OF MEASLES BY MONTH

(Reparted by Samuel L. Andelson, M.D., M.P.H., Commissioner of Health, Hilliam I Fishbein, M.D., Medical Director, Bureau of Health Services, and Hyman G. Orbach, Ph.D., Epidemiologist, Chicago Board of Health.)

## REFERENCE

${ }^{1}$ serfling, Robert F . and sherman, Idn 1..: Ateribute Sampling Hethods, United states Government Printing Office, Washington, D.C., 1965

## INTERNATIONAL NOTES QUARANTINE MEASURES

Immunization Information for International Travel 196\%-68 edition-Public Health Service Publication No. 384

## Section 5

## OCEANIA <br> Nauru Islands - Page 78 <br> SMALLPOX

Delete all previous information. Insert: Smallpox vaccination is required from all arrivals, except Australia and Tasmania, British Solomon Islands, Christmas (Indian Ocean) and Cocos (Keeling) Islands, Fiji, Gilbert and Ellice, Heard, Kerguelen, Lord Howe, Macquarie, New Zealand, Norfolk and Ocean Islands, Australian Territory of Papua and New Guinea, Tonga, provided travelers have not been outside these areas for at least 14 days before arrival and these areas are free of smallpox. Nauru reserves the right, in respect of arrivals, from other areas, to isolate any person who arrives without certificate and refused to be vaccinated.


NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON THE SUCCEEDING FRIDAYTA ON A NATIONAL BASISARE RELEASED ON THE SUCCEEDING FRIDAY



[^0]:    (Reported by A. L. Marshall, Jr., M.D., Director, Division of Communicable Disease Control, Indiana State Board of Health; Viral Exanthems Laboratory, and an EIS Officer, NCDC.)

