

## EPIDEMIOLOGIC NOTES AND REPORTS OUTBREAK OF TUBERCULOSIS IN A HIGH SCHOOL Abbeville, Alabama

On March 24, 1969, active far-advanced bilateral pulmonary tuberculosis was diagnosed in a 17-year-old 11th grade student in Abbeville, Henry County, Alabama. He had been ill for some time but had continued to attend school.

Following the diagnosis of his case, 379 students in his school in grades 7-12 were tuberculin tested on April 1 using jet injector guns and intermediate strength PPD; 77 (20.3 percent) had a reaction of 10 mm or more at 48 hours (positive) (Table 1) and 14 (3.7 percent) had a reaction of 5 to 9 mm (doubtful). Students in grades 8 and 12 had been tuberculin tested on Dec. 11, 1968, as part of the county health department's first school skin testing program; two

## CONTENTS

Epidemiologic Notes and Reports
Outbreak of Tuberculosis in a High School -
Abbeville, Alabama
Potential Trichinosis Outbreak Averted - Vermont. . . . . . 403
Outbreak of Shigellosis - Medford, Oregon . . . . . . . . . . . 403
Cutaneous Anthrax - North Carolina. . . . . . . . . . . . . . 408
of 36 eighth graders and 16 of 48 12th graders who had had negative tests in December were positive when tested in April. Of 147 family and neighborhood contacts of the in dex case who were also tuberculin tested, 24 had a positive reaction; 10 of the 24 had had negative tests within the previous 9 months. Of the 27 students who rode the school bus with the index case and who were included in
(Continued on page 402)

| TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES (Cumulative totals include revised and delayed reports through previous weeks) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DISEASE | 46th WEEK ENDED |  | $\begin{gathered} \text { MEDIAN } \\ 1964-1968 \end{gathered}$ | CUMULATIVE, FIRST 46 WEEKS |  |  |
|  | $\begin{gathered} \text { November } 15, \\ 1969 \end{gathered}$ | $\begin{gathered} \text { November } 16, \\ 1968 \end{gathered}$ |  | 1969 | 1968 | $\begin{gathered} \text { MEDIAN } \\ 1964-1968 \end{gathered}$ |
| Aseptic meningitis | 75 | 85 | 63 | 3,146 | 3,975 | 2,689 |
| Brucellosis | 2 | 3 | 4 | 206 | 199 | 221 |
| Diphtheria. | 12 | 3 | 4 | 167 | 209 | 172 |
| Encephalitis, primary: <br> Arthropod-borne \& unspecified . . . . . . . . . . . | 31 | 27 | 39 | 1,159 | 1,276 | 1,728 |
| Encephalitis, post-infectious ............... | 3 | 10 | 7 | 275 | 432 | 657 |
| Hepatitis, serum . . . . . . . . . . . . . . . . . . . . | 110 | 78 | 754 | 4,702 | 4,038 | 33,705 |
| Hepatitis, infectious ...................... | 1,076 | 902 | 754 | 42,192 | 40,168 | 33,705 |
| Malaria . . . . . . . | 62 | 70 | 12 | 2,744 | 2,108 | 429 |
| Measles (rubeola) | 303 | 242 | 1,166 | 22,141 | 21,055 | 195,563 |
| Meningococcal infections, total | 28 | 19 | 46 | 2.625 | 2,270 | 2,454 |
| Civilian . . . . . . . . . . . . . . . | 26 | 19 | --- | 2,414 | 2,079 | - - |
| Military . . . . . . . . . . . . . . . . . . . . . . . . . . | 2 | - |  | 211 | 191 | --. |
| Mumps . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 1,679 | 2,029 | -- | 76,966 | 136,113 | --- |
| Poliomyelitis, total . . . . . . . . . . . . . . . . . | - | 2 | 2 | 16 | 56 | 56 |
| Paralytic . . . . . . . . . . . . . . . . . . . . . . . . . | 443 | 2 319 | 1 | 15 | 56 | 56 |
| Rubella (German measles) . . . . . . . . . . . . | 443 | 319 | $\cdots$ | 52,214 | 46,405 | -.- |
| Streptococcal sore throat \& scarlet fever.... | 9,551 | 8,886 | 8,260 | 370,563 | 372,468 | 369,505 |
| Tetanus | 4 | 1 | 4 | 144 | 151 | 198 |
| Tularemia . . . . . . . . . . . . . . . . . . . . . . . . . . | 1 | 1 | 4 | 128 | 160 | 164 |
| Typhoid fever . .......................... | 2 | 6 | 7 | 291 | 354 | 371 |
| Typhus, tick-borne (Rky. Mt. spotted fever). | $5 \overline{-}$ | 1 44 | 1 72 | 437 2.972 | 270 3.038 | 256 3.815 |
| Rabies in animals . . . . . . . . . . . ............. | 53 | 44 | 72 | 2,972 | 3.038 | 3,815 |

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

|  | Cum. |  | Cum. |
| :---: | :---: | :---: | :---: |
| Anthrax: | 3 | Rabies in man: | 1 |
| Botulism: | 12 | Rubella congenital syndrome: La.-1, Nebr.-2, Ore.-1 | 13 |
| Leptospirosis: Calif.-2 | 74 | Trichinosis: | 170 |
| Plague: . . | 5 | Typhus, murine: | 47 |

TUBERCULOSIS - (Continued from front page)
Table 1
Results of Two Tuberculin Skin Testing Programs at a School in Alabama

| Grade | April 1 |  | May 7* |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number Positives/ |  |  |  |
|  | Number Tested | Percent <br> Reactors | Number Positives/ <br> Number Tested | Percent <br> Converters |
| 7 | $3 / 62$ | 4.8 | $2 / 59$ | 3.4 |
| 8 | $3 / 40$ | 7.5 | $0 / 37$ | 0.0 |
| 9 | $4 / 51$ | 7.8 | $2 / 47$ | 4.4 |
| 10 | $19 / 78$ | 24.4 | $3 / 59$ | 5.1 |
| 11 | $32 / 84$ | 38.1 | $5 / 52$ | 9.6 |
| 12 | $16 / 64$ | 25.0 | $5 / 48$ | 10.4 |
| Total | $77 / 379$ | 20.3 | $17 / 302$ | 5.6 |

*Those students positive in April were not retested in May.

Table 2
Data on Eight Cases of Tuberculosis - Henry County, Alabama, 1969

| Case | Age | Grade | Sex | Contact History | Diagnosis Date | Tuberculin Tests |  | Roentgenogram | Sputum Culture | Stage at Diagnosis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 12/11/69 | 4/1/69 |  |  |  |
| 1 | 17 | 11 | M | Index Case | 3/24/69 | No Test | No Test | Bilat. <br> Infiltrate | + | Far-advanced |
| 2 | 16 | 11 | F | Classmate and Friend | 5/23/69 | No Test | 15 mm | Negative | + | Minimal |
| 3 | 17 | 12 | F | Classmate | 5/26/69 | Negative | 15 mm | Negative | + | Minimal |
| 4 | 19 | 12 | M | Friend | 5/26/69 | No Test | 20 mm | Negative | + | Minimal |
| 5 | 73 | - | M | Neighbor | $6 / 2 / 69$ | Negative* | 10 mm | Left Pleural Effusion | + | Mod.-advanced |
| 6 | 14 | 8 | M | Friend | 6/9/69 | Negative | 20 mm | Right Hilar Adenopathy | + | Minimal |
| 7 | 28 | - | F | Family | 6/19/69 | No Test | 20 mm | Bilat. Hilar Adenopathy | + | Minimal |
| 8 | 16 | 11 | M | Classmate and Friend | 6/26/69 | No Test | 22 mm | Bilat. <br> Infiltrate | - | Minimal |

* Tested on Dec. 11, 1968, because he was a school employee at another school where tuberculin testing was also being done.
the 379 students tested in the school and the school bus driver who was also tuberculin tested, 22 ( 78.6 percent) had positive reactions.

Roentgenograms were obtained from 235 persons with reactions of 5 mm or more and sputum containers were distributed for voluntary submission of specimens; four persons had roentgenographic findings compatible with recent tuberculosis infection, and three of these four had positive sputum cultures. Three other persons whose roentgenograms appeared normal had sputum cultures positive for Mycobacterium tuberculosis (Table 2). The 17 -year-old boy and the seven contact cases were hospitalized at the state tuberculosis hospital.

On May 7, all students who had had negative or doubtful reactions on April 1 were retested, and 17 were found to have positive reactions. These students submitted sputum specimens and had roentgenograms taken, but no new cases were identified.

On October 1, all students in all schools in Henry County were tuberculin tested. About 230 students who had attended the implicated school during the previous school year and had had negative tuberculin tests in April and May were included; four had become reactors. Each of the four had a history of contact with the index case or a secondary case.

Throughout this investigation, any student who had a reaction of 5 mm or more and no previous history of a positive tuberculin test was started on a year of isoniazid therapy. A total of 290 contacts of the index case or subsequent cases in this outbreak were placed on isoniazid.
(Reported by F.S. Wolf, M.D., Director, Bureau of Preventable Diseases, Alabama State Health Department; George E. Johnson, M.D., Health Officer, and Nan Clenny, R.N., Public Health Nursing Supervisory, Henry County Health Department; and an EIS Officer.)

## POTENTIAL TRICHINOSIS OUTBREAK AVERTED - Vermont

In the fall of 1967 , a cooperative survey was begun to determine the prevalence of trichinosis in the black bear population of the northeastern United States. The survey still in progress - is being carried out by the Parasitic Diseases Branch, Epidemiology Program, NCDC, and wildlife conservation personnel of Maine, New Hampshire, New York, Pennsylvania, West Virginia, and Vermont. Samples of bear tongue and diaphragm are collected by game biologists as hunters register their kill at Department of Fish and $G$ ame checking stations in each state and are then submitted to NCDC for laboratory examination. Of 138 bears examined since 1967, three have been found infected.

In October 1969, samples of tongue and diaphragm from a bear killed in Vermont were found to be infected with trichina larvae. The Vermont Fish and Game Department were notified, and they, in turn, contacted the hunter. It was learned that the hunter, a woman, had shot the bear on

Sept. 3, 1969, and had eaten one meal of well-cooked bear meat with no ill effects. She then sold the remainder of the bear to the local game club for their annual feast; between 25 and 50 persons were expected to attend. Fortunately, the feast had not yet taken place. The game cluh was notified that the bear meat was infected with trichina larvae, and a recommendation was made that the meat be destroyed and that if any other bear meat were used for the feast, it should be treated as if it were pork and cooked thoroughly.

The game biologist when he collected the congue and diaphragm samples from the bear found meat in its stomach. He reported that hunters in this area often attract bears by setting out raw meat scraps. This practice may provide a possible means of trichinosis transmission to bears.
(Reported by Charles H. Willey, Game Biologist, Vermont Fish and Game Department; and an EIS Officer.)

## OUTBREAK OF SHIGELLOSIS - Medford, Oregon

Between July 23 and Aug. 17, 1969, in Medford, Oregon, 37 persons developed an acute illness characterized by abdominal cramps, diarrhea, fever, and headache, and two children presented with febrile convulsions. Six persons required hospitalization; there were no fatalities. Shigella sonnei was recovered from stool cultures of 15 patients.

Table 3 shows the age and sex distribution of the cases. Eight family groups were affected, and the index case in each family was a child between the ages of 2 and 6 years. The only factor common to these children was their use of a municipal wading pool between July 20 and 25. This small wading pool was filled with chlorinated water from the large regular swimming pool and drained at the end of each day. A water sample from the wading pool on August 14 had a chlorine level of 0.5 parts per million and gross contamination with coliform organisms.

It could not be proved that the index cases acquired their infection at the wading pool, and no parents gave a history of their child having waded while having diarrhea, but the gross coliform contamination despite chlorination makes such an occurrence plausible. Factors contributing to such a possibility include 1) the smaller size of the wading pool with higher concentrations of any fecal inoculum, 2) the habits of children, some not yet toilet trained and uninhibited in their ingestion of pool water, 3) inactivation of chlorine by ultraviolet light, and 4) lack of a systematic measuring of chlorine levels in the wading pool.

Table 3
Age and Sex Distribution of Cases, Outbreak of Shigellosis Medford, Oregon - Summer 1969

| Age <br> (Years) | Male | Female | Total |
| :---: | :---: | :---: | :---: |
| $<1$ | 0 | 0 | 0 |
| $1-3$ | 1 | 5 | 6 |
| $4-6$ | 5 | 3 | 8 |
| $7-12$ | 4 | 5 | 9 |
| $13-21$ | 1 | 4 | 2 |
| $>21$ | 3 | 1 | 7 |
| Unknown | 4 | 19 | 5 |
| Total | 18 |  | 37 |

The primary control measure instituted in this outbreak was the closing of the wading pool for the remainder of the season to avoid recontamination by secondary cases in the community. Fluid therapy and antibiotic treatment of individual patients were handled by private physicians. After these measures, the outbreak quickly abated with no further shigella isolates reported in subsequent months.
(Reported by A. Erin Merkel, M.D., Health Officer, and Otie S. Moore, Chief Sanitarian, Jackson County Health Department; Gatlin Brandon, M.S., Director, Oregon State Public Health Laboratory, and Monroe Holmes, D.V.M., Acting Director, Epidemiology Section, Oregon State Board of Health; and an EIS Officer.)

FOR WEEKS ENDED
NOVEMBER 15, 1969 AND NOVEMBER 16, 1968 (46th WEEK)

| AREA | ASEPTIC <br> MENIN- <br> GITIS | $\begin{gathered} \text { BRUCEL- } \\ \text { LOSIS } \end{gathered}$ | diphtheria | ENCEPHALITIS |  |  | HEPATITIS |  |  | MALARIA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Primary including unsp. cases |  | Post- <br> Infectious | Serum | Infectious |  |  |  |
|  | 1969 | 1969 | 1969 | 1969 | 1968 | 1969 | 1969 | 1969 | 1968 | 1969 | $\begin{aligned} & \hline \text { Cum. } \\ & 1969 \end{aligned}$ |
| UNITED STATES... | 75 | 2 | 12 | 31 | 27 | 3 | 110 | 1,076 | 902 | 62 | 2,744 |
| NEW ENGLAND........... | 4 | - | - | 1 | 3 | - | - | 134 | 52 | 2 | 91 |
| Maine.. | - | - | - | - | - | - | - | 20 | 8 | - | 7 |
| New Hampshire...... | - | - | - | - | 1 | - | - | 8 | 5 | - | 2 |
| Vermont............ | - | - | - | - | - | - | - | 9 | - | - | - |
| Massachusetts...... | 4 | - | - | - | - | - | - | 53 | 23 | - | 56 |
| Rhode Island....... | - | - | - | - | 2 | - | - | 26 | 11 | 1 | 10 |
| Connecticut....... | - | - | - | 1 | - | - | - | 18 | 5 | 1 | 16 |
| MIDDLE ATLANTIC...... | 15 | - | - | 4 | 1 | - | 46 | 212 | 144 | 4 | 322 |
| New York City...... | 2 | - | - | 2 | 1 | - | 31 | 79 | 24 | - | 22 |
| New York, up-Stare. | - | - | - | - | - | - | 2 | 40 | 10 | 1 | 69 |
| New Jersey.*........ | 3 | - | - | 2 | - | - | 6 | 40 | 35 | 2 | 126 |
| Pennsylvania....... | 10 | - | - | - | - | - | 7 | 53 | 75 | 1 | 105 |
| EAST NORTH CENTRAL... | 14 | - | - | 8 | 7 | 1 | 9 | 164 | 153 | 2 | 277 |
| Ohio............... | 3 | - | - | 4 | 3 | - | 1 | 41 | 30 | 1 | 25 |
| Indiana............ | - | - | - | - | 1 | - | - | 18 | 12 | 1 | 25 |
| Illinois........... | 3 | - | - | 2 | 1 | 1 | 3 | 25 | 36 | - | 170 |
| Michigan........... | 7 | - | - | 2 | 2 | - | 5 | 71 | 65 | - | 56 |
| Wisconsin.......... | 1 | - | - | - | - | - | - | 9 | 10 | - | 1 |
| WEST NORTH CENTRAL... | 3 | - | - | 2 | - | 1 | - | 36 | 61 | 2 | 190 |
| Minnesota.......... | 3 | - | - | - | - | 1 | - | 12 | 7 | 1 | 14 |
| Iowa.*.............. | - | - | - | - | - | - | - | 4 | 6 | - | 20 |
| Missouri........... | - | - | - | 2 | - | - | - | 8 | 25 | - | 42 |
| North Dakota....... | - | - | - | - | - | - | - | 1 | 1 | - | 3 |
| South Dakota....... | - | - | - | - | - | - | - | - | 1 | - | 1 |
| Nebraska........... | - | - | - | - | - | - | - | 4 | 3 | - | 4 |
| Kansas............. | - | - | - | - | - | - | - | 7 | 18 | 1 | 106 |
| SOUTH ATLANTIC....... | 7 | 1 | - | 3 | 9 | - | 12 | 117 | 94 | 11 | 710 |
| Delaware........... | - | - | - | - | - | - | - | 2 | - | 1 | 4 |
| Maryland............ | 2 | - | - | 1 | 1 | - | 1 | 13 | 13 | - | 33 |
| Dist. of Columbia.. | - | - | - | - | 5 | - | - | - | - | - | 2 |
| Virginia........... | 1 | 1 | - | 1 | 3 | - | 2 | 11 | 42 | - | 26 |
| West Virginia.*.... | - | - | - | - | - | - | - | 13 | 8 | - | - |
| North Carolina.*... | 3 | - | - | 1 | - | - | 1 | 28 | 6 | 10 | 285 |
| South Carolina.*... | 1 | - | - | - | - | - | - | 7 | 5 | - | 58 |
| Georgia............. | - | - | - | - | - | - | - | 5 | - | - | 262 |
| Florida............ | - | - | - | - | - | - | 8 | 38 | 20 | - | 40 |
| EAST SOUTH CENTRAL... | 4 | - | - | 3 | - | - | - | 60 | 53 | - | 135 |
| Kentucky.*......... | - | - | - | - | - | - | - | 18 | 19 | - | 108 |
| Tennessee........... | 2 | - | - | 3 | - | - | - | 21 | 25 | - | - |
| Alabama............. | 2 | - | - | - | - | - | - | 7 | 6 | - | 23 |
| Mississippi........ | - | - | - | - | - | - | - | 14 | 3 | - | 4 |
| WEST SOUTH CENTRAL... | 6 | 1 | 12 | 1 | 1 | 1 | 2 | 84 | 60 | 12 | 231 |
| Arkansas........... | - | - | - | - | - | - | - | 1 | 2 | - | 13 |
| Louisiana.*........ | - | 1 | 10 | 1 | 1 | 1 | 2 | 16 | 11 | - | 45 |
| Oklahoma............ | - | - | - | - | - | - | - | 14 | 11 | 2 | 72 |
| Texas.............. | 6 | - | 2 | - | - | - | - | 53 | 36 | 10 | 101 |
| mountain. . . . . . . . . . . | - | - | - | 2 | - | - | 2 | 42 | 38 | 4 | 137 |
| Montana............. | - | - | - | 1 | - | - | - | 1 | 3 | - | 3 |
| Idaho............... | - | - | - | - | - | - | - | - | 3 | - | 5 |
| Wyoming............ | - | - | - | - | - | - | - | 1 | - | - | - |
| Colorado........... | - | - | - | 1 | - | - | 1 | 17 | 9 | 2 | 112 |
| New Mexico......... | - | - | - | - | - | - | - | 4 | 5 | 2 | 9 |
| Arizona.*........... | - | - | - | - | - | - | - | 16 | 16 | - | 1 |
| Utah............... | - | - | - | - | - | - | 1 | 1 | 2 | - | 1 |
| Nevada. . . . . . . . . . . | - | - | - | - | - | - | - | 2 | - | - | 6 |
| PACIFIC.............. | 22 | - | - | 7 | 6 | - | 39 | 227 | 247 | 25 | 651 |
| Washington. . . . . . . | - | - | - | - | 2 | - | - | 43 | 50 | - | 5 |
| Oregon.............. | 5 | - | - | 1 | - | - | - | 20 | 14 | - | 16 |
| California......... | 17 | - | - | 6 | 4 | - | 38 | 163 | 181 | 13 | 506 |
| Alaska............. | --- | - | -- | -- | - | -- | --- | --* | 2 | --- | 3 |
| Hawaii.............. | - | - | - | - | - | - | 1 | 1 | - | 12 | 121 |
| Puerto Rico.......... | - | - | - | - | - | - | - | 18 | 24 | - | 4 |

*Delayed reports: Aseptic meningitis: Iowa 1, Ariz. 2
Encephalitis, primary: Iowa 5, W. Va. delete 5
Hepatitis, serum: Ky. 1
Hepatitis, infectious: N.J. delete 1, S.C. delete 3, N.C. delete 1, La. 31
Malaria: Lowa 1, N.C. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

## FOR WEEKS ENDED

NOVEMBER 15, 1969 AND NOVEMBER 16, 1968 (46ch WEEK) - CONTINUED

| AREA | MEASLES (Rubeola) |  |  | MENINGOCOCCAL INFECTIONS, TOTAL |  |  | MUMPS | POLIOMYELITIS |  |  | RUBELLA $1969$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cumulative |  |  | Cumulative |  | 1969 | $\begin{array}{r} \hline \text { Total } \\ \hline 1969 \\ \hline \end{array}$ | Paralytic |  | $1969$ |
|  | 1969 | 1969 | 1968 | 1969 | 1969 | 1968 |  |  | 1969 | $\begin{aligned} & \text { Cum. } \\ & 1969 \end{aligned}$ |  |
| UNITED STATES... | 303 | 22,141 | 21,055 | 28 | 2,625 | 2,270 | 1,679 | - | - | 15 | 443 |
| NEW ENGLAND.......... | 19 | 1,152 | 1,207 | - | 105 | 134 | 352 | - | - | 2 | 38 |
| Maine. | - | 9 | 38 | - | 7 | 6 | 60 | - | - | 1 | 6 |
| New Hampshire. | 1 | 243 | 141 | - | 4 | 8 | 13 | - | - | - | 7 |
| Vermont............ | - | 3 | 2 | - | - | 1 | 28 | - | - | - | 2 |
| Massachusetts..... | 6 | 235 | 372 | - | 41 | 70 | 105 | - | - | - | 16 |
| Rhode Island. | - | 27 | 22 | - | 14 | 9 | 50 | - | - | - | 6 |
| Connecticut. | 12 | 635 | 632 | - | 39 | 40 | 96 | - | - | 1 | 1 |
| middle a'tlantic. . . . . | 32 | 7,684 | 4,396 | 5 | 437 | 404 | 76 | - | - | 2 | 24 |
| New York City. | 9 | 4,980 | 2,292 | 3 | 85 | 84 | 51 | - | - | - | 8 |
| New York, Up-State. | - | 610 | 1,294 | 1 | 83 | 72 | NN | - | - | 1 | 7 |
| New Jersey......... | 17 | 978 | 671 | 1 | 169 | 136 | 25 | - | - | - | 2 |
| Pennsylvania....... | 6 | 1,116 | 139 | - | 100 | 112 | NN | - | - | 1 | 7 |
| EAST NORTH CENTRAL... | 84 | 2,574 | 4,014 | 7 | 358 | 282 | 453 | - | - | 1 | 78 |
| Ohio. | 48 | 462 | 313 | 1 | 133 | 77 | 74 | - | - | - | 8 |
| Indiana. | 2 | 476 | 702 | 1 | 46 | 39 | 34 | - | - | - | 13 |
| Illinois........... | 18 | 661 | 1,399 | 2 | 51 | 63 | 67 | - | - | 1 | 6 |
| Michigan........... | 11 | 343 | 307 | 1 | 101 | 83 | 87 | - | - | - | 34 |
| Wisconsin.......... | 5 | 632 | 1,293 | 2 | 27 | 20 | 191 | - | - | - | 17 |
| WEST NORTH CENTRAL. . | 37 | 880 | 401 | 2 | 130 | 125 | 63 | - | - | 1 | 26 |
| Minnesota.. | - | 17 | 18 | 1 | 29 | 29 | 11 | - | - | - | 9 |
| Iowa. . | - | 336 | 104 | - | 19 | 10 | 27 | - | - | - | 8 |
| Missouri.......... | - | 31 | 81 | - | 53 | 40 | 12 | - | - | - | - |
| North Dakota....... | 10 | 43 | 138 | - | 2 | 4 | 10 | - | - | - | 9 |
| South Dakota....... | - | 3 | 4 | - | 1 | 5 | NN | - | - | - | - |
| Nebraska........... | 27 | 443 | 46 | 1 | 10 | 9 | 3 | - | - | - | - |
| Kansas. | - | 7 | 10 | - | 16 | 28 | - | - | - | 1 | - |
| South atlantic. . . . . | 33 | 2,651 | 1,636 | 5 | 466 | 451 | 115 | - | - | 1 | 41 |
| Delaware.. | 6 | 401 | 17 | - | 13 | 9 | - | - | - | - | - |
| Maryland........... | 3 | 80 | 103 | - | 41 | 40 | 4 | - | - | - | 7 |
| Dist. of Columbia.. | - | 28 | 6 | - | 9 | 16 | - | - | - | - | - |
| Virginia........... | 1 | 907 | 373 | 1 | 57 | 44 | 25 | - | - | - | 5 |
| West Virginia.*.... | 6 | 220 | 310 | - | 24 | 13 | 65 | - | - | - | 17 |
| North Carolina..... |  | 326 | 284 | 3 | 87 | 86 | NN | - | - | - | 5 |
| South Carolina..... | 4 | 131 | 17 | - | 59 | 58 | 2 | - | - | - | 2 |
| Georgia............. | - | 2 | 4 | - | 77 | 90 | - | - | - | - | - |
| Florida............. | 12 | 556 | 522 | 1 | 99 | 95 | 19 | - | - | 1 | 5 |
| EAST SOUTH CENTRAL... | - | 116 | 502 | 3 | 168 | 204 | 77 | - | - | 1 | 78 |
| Kentucky........... | - | 66 | 103 | - | 55 | 93 | 30 | - | - | - | 3 |
| Tennessee.......... . | - | 20 | 63 | 1 | 69 | 61 | 35 | - | - | - | 74 |
| Alabama.... | - | 6 | 95 | - | 25 | 27 | 12 | - | - | 1 | 1 |
| Mississippi. | - | 24 | 241 | 2 | 19 | 23 | - | - | - | - | - |
| WEST SOUTH CENTRAL... | 62 | 4,882 | 5,105 | 2 | 345 | 326 | 116 | - | - | 6 | 46 |
| Arkansas........... | - | 16 | 2 | - | 32 | 20 | - | - | - | - | - |
| Louisiana. | 1 | 125 | 24 | 1 | 93 | 93 | - | - | - | - | 2 |
| Oklahoma.*.......... | - | 142 | 128 | - | 34 | 52 | 4 | - | - | - | 3 |
| Texas.... | 61 | 4,599 | 4,951 | 1 | 186 | 161 | 112 | - | - | 6 | 41 |
| mountain. . . . . . . . . . . . | 29 | 1,056 | 1,042 | 1 | 52 | 39 | 52 | - | - | - | 24 |
| Montana. | 20 | 92 | 58 | - | 8 | 6 | 6 | - | - | - | 5 |
| Idaho.. | - | 90 | 21 | - | 11 | 11 | 3 | - | - | - | 1 |
| Wyoming. . . . . . . . . . | - | - | 54 | - | - | 3 | - | - | - | - | - |
| Colorado........... | - | 141 | 518 | - | 9 | 11 | 14 | - | - | - | 3 |
| New Mexico......... | 5 | 275 | 135 | 1 | 7 | - | 5 | - | - | - | 4 |
| Arizona............ | 4 | 446 | 230 | - | 10 | 4 | 18 | - | - | - | 9 |
| Utah. | - | 11 | 21 | - | 5 | 1 | 6 | - | - | - | 2 |
| Nevada. | - | 1 | 5 | - | 2 | 3 | - | - | - | - | - |
| PACIFIC. | 7 | 1,146 | 2,752 | 3 | 564 | 305 | 375 | - | - | 1 | 88 |
| Washington......... | - | 67 | 581 | - | 57 | 47 | 210 | - | - | - | 36 |
| Oregon.............. | - | 200 | 564 | 1 | 20 | 24 | 38 | - | - | - | 16 |
| California......... | 7 | 821 | 1,561 | 2 | 466 | 217 | 115 | - | - | 1 | 28 |
| Alaska.............. | --- | 13 | 11 | --- | 11 | 3 | --- | --- | --- | - | --- |
| Hawaii............. | - | 45 | 35 | - | 10 | 14 | 12 | - | - | - | 8 |
| Puerto Rico.......... | 18 | 1,784 | 481 | - | 19 | 20 | 18 | - | - | - | - |

Delayed reports: Meningococcal infections: W. Va. 3
Mumps: Okla. 11
Rubella: Okla. 5

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

## FOR WEEKS ENDED

NOVEMBER 15, 1969 AND NOVEMBER 16, 1968 (46rh WEEK) - CONTINUED

| AREA | STREPTOCOCCAL SORE THROAT \& SCARLET FEVER | te tanus |  | tularemia |  | TYPHOIDFEVER |  | TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted) |  | RABIES IN ANIMALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1969 | 1969 | $\begin{aligned} & \hline \text { Cum. } \\ & 1969 \\ & \hline \end{aligned}$ | 1969 | $\begin{aligned} & \hline \text { Cum. } \\ & 1969 \\ & \hline \end{aligned}$ | 1969 | $\begin{aligned} & \text { Cum. } \\ & 1969 \end{aligned}$ | 1969 | $\begin{aligned} & \text { Cum. } \\ & 1969 \\ & \hline \end{aligned}$ | 1969 | $\begin{aligned} & \hline \text { Cum. } \\ & 1969 \\ & \hline \end{aligned}$ |
| UNITED STATES... | 9,551 | 4 | 144 | 1 | 128 | 2 | 291 | - | 437 | 53 | 2,972 |
| NEW ENGLAND........... | 1,109 | - | 1 | - | 16 | - | 15 | - | 1 | 8 | 49 |
| Maine.............. | 18 | - | - | - | - | - | 1 | - | - | - | 6 |
| New Hampshire...... | 35 | - | - | - | - | - | - | - | - | - | 5 |
| Vermont............ | 35 | - | - | - | 16 | - | - | - | - | 8 | 27 |
| Massachusetts...... | 177 | - | 1 | - | - | - | 8 | - | 1 | - | 3 |
| Rhode Island....... | 107 | - | - | - | - | - | 1 | - | - | - | - |
| Connecticut...... | 737 | - | - | - | - | - | 5 | - | - | - | 8 |
| middle atlantic...... | 338 | 1 | 18 | - | 5 | - | 31 | - | 46 | 4 | 212 |
| New York City...... | 29 | 1 | 10 | - | 1 | - | 17 | - | - | - | - |
| New York, Up-State. | 244 | - | 3 | - | 4 | - | 6 | - | 7 | 4 | 198 |
| New Jersey......... | NN | - | 3 | - | - | - | 3 | - | 15 | - | - |
| Pennsylvania....... | 65 | - | 2 | - | - | - | 5 | - | 24 | - | 14 |
| EAST NORTH CENTRAL... | 690 | - | 19 | - | 15 | - | 32 | - | 3 | 3 | 216 |
| Ohio................ | 79 | - | 4 | - | - | - | 11 | - | - | 1 | 72 |
| Indiana. . . . . . . . . . | 130 | - | - | - | 4 | - | - | - | - | 2 | 52 |
| Illinois.......... | 138 | - | 10 | - | 4 | - | 15 | - | 3 | - | 36 |
| Michigan............ | 189 | - | 5 | - | - | - | 5 | - | - | - | 7 |
| Wisconsin.......... | 154 | - | - | - | 7 | - | 1 | - | - | - | 49 |
| WESt north Central... | 379 | - | 11 | - | 14 | - | 10 | - | 8 | 7 | 559 |
| Minnesota.......... | 39 | - | 3 | - | - | - | 4 | - | - | 2 | 148 |
| Iowa................ | 124 | - | - | - | - | - | 1 | - | 7 | 3 | 88 |
| Missouri........... | 3 | - | 4 | - | 10 | - | 3 | - | - | 2 | 132 |
| North Dakota. . . . . . | 108 | - | - | - | - | - | - | - | - | - | 69 |
| South Dakota....... | 19 | - | - | - | - | - | - | - | 1 | - | 43 |
| Nebraska. . . . . . . . . | 72 | - | - | - | 1 | - | 1 | - | - | - | 13 |
| Kansas.............. | 14 | - | 4 | - | 3 | - | 1 | - | - | - | 66 |
| SOUTH ATLANTIC....... | 1,154 | 1 | 28 | - | 22 | - | 46 | - | 246 | 12 | 704 |
| Delaware........... | 10 | - | - | - | - | - | 2 | - | 3 | - | - |
| Maryland........... | 77 | - | 1 | - | - | - | 4 | - | 48 | - | 3 |
| Dist. of Columbia.. | - | - | 2 | - | - | - | 2 | - | - | - | - |
| Virginia........... | 534 | - | 1 | - | 4 | - | 1 | - | 81 | 6 | 351 |
| West Virginia...... | 216 | - | 1 | - | 2 | - | 2 | - | 5 | 2 | 102 |
| North Carolina..... | NN | 1 | 3 | - | 6 | - | 9 | - | 64 | - | 5 |
| South Carolina..... | 133 | - | 1 | - | 2 | - | 1 | - | 30 | - | - |
| Georgia............. | 5 | - | 7 | - | 4 | - | 11 | - | 15 | 2 | 83 |
| Florida............. | 179 | - | 12 | - | 4 | - | 14 | - | - | 2 | 160 |
| EAST SOUTH CENTRAL... | 1,681 | 2 | 22 | - | 14 | - | 45 | - | 63 | 5 | 380 |
| Kentucky........... | 169 | - | 7 | - | - | - | 8 | - | 13 | 2 | 195 |
| Tennessee.......... | 1,029 | - | 4 | - | 13 | - | 19 | - | 41 | 1 | 127 |
| Alabama............ | 231 | - | 6 | - | - | - | 4 | - | 6 | 2 | 52 |
| Mississippi........ | 252 | 2 | 5 | - | 1 | - | 14 | - | 3 | - | 6 |
| WEST SOUTH CENTRAL... | 886 | - | 27 | 1 | 21 | - | 29 | - | 48 | 9 | 430 |
| Arkansas........... | 9 | - | 2 | 1 | 3 | - | 13 | - | 7 | - | 30 |
| Louisiana........... | 20 | - | 7 | - | 4 | - | 3 | - | - | 3 | 36 |
| Oklahoma.......... . | 68 | - | 1 | - | 8 | - | - | - | 29 | 2 | 66 |
| Texas.............. | 789 | - | 17 | - | 6 | - | 13 | - | 12 | 4 | 298 |
| mountain. . . . . . . . . . . | 2,121 | - | 6 | - | 17 | - | 28 | - | 17 | 1 | 118 |
| Montana.*........... | 49 | - | 1 | - | - | - | 2 | - | - | - | - |
| Idaho............... | 169 | - | - | - | - | - | 4 | - | 6 | - | 5 |
| Wyoming. . . . . . . . . . | 348 | - | - | - | 4 | - | 5 | - | - | 1 | 55 |
| Colorado............ | 1,092 | - | 2 | - | - | _ | 3 | - | 9 | - | 3 |
| New Mexico......... | 294 | - | - | - | 1 | - | 7 | - | - | - | 17 |
| Arizona............. | 99 | - | 3 | - | - | - | 6 | - | - | - | 22 |
| Utah............... | 70 | - | - | - | 12 | - | - | - | 2 | - | 5 |
| Nevada. . . . . . . . . . . | - | - | - | - | - | - | 1 | - | - | - | 16 |
| PACIFIC.............. | 1,193 | - | 12 | - | 4 | 2 | 55 | - | 5 | 4 | 304 |
| Washington......... | 887 | - | 1 | - | 2 | - | 2 | - | 3 | - | 4 |
| Oregon.............. | 159 | - | - | - | 1 | - | 6 | - | - | - | 4 |
| California......... | --- | - | 11 | - | 1 | 2 | 43 | - | 2 | 4 | 296 |
| Alaska.............. | --- | - | - | - | - | --- | - | --- | - | - | - |
| Hawail. . . . . . . . . . | 147 | - | - | - | - | - | 4 | - | - | - | - |
| Puerto Rico.......... | 2 | - | 12 | - | - | - | 7 | - | - | 3 | 28 |

*Delayed reports: SST: Mont. delete 3

Week No. TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED NOVEMBER 15, 1969
46
(By place of occurrence and week of filing certificate. Excludes fetal deaths)


## CUTANEOUS ANTHRAX - North Caralina

A case of cutaneous anthrax was recently reported from North Carolina. The patient, a 45 -year-old man, worked as a twister in a worsted wool mill; he had worked there for about 15 years. On Aug. 10, 1969, he developed a "pimple" on the ulnar side of his right wrist, which was pruritic but not painful. Shortly thereafter, a central vesicle with dark fluid appeared which was surrounded by several smaller vesicles. Within a week, the lesion became larger and the vesicular area became depressed; containing a black eschar. The lesion was surrounded by edema and inflammation. Approximately 1 week after the appearance of the initial lesion, a second lesion appeared on the lateral aspect of the middle finger of the right hand and proceeded through the same evolutionary stages as the first lesion.

The patient gave no history of fever or chills but did note a red streak extending halfway up the ulnar surface of the right forearm. On August 20, he consulted his physician and on August 22 was admitted to a local hospital with initial diagnostic impression of nonhealing ulcer; anthrax and malignancy were included in the differential diagnosis. The lesion was excised on August 23; microscopic examination revealed extensive necrosis of the epidermis and dermis, suggestive of ischemic necrosis. Cultures taken at this time were negative. The patient was placed on penicillin, discharged, and, except for secondary infection, made an uneventful recovery.

An environmental sampling program was conducted at the mill on October $23 ; 27$ surface swabs within the plant and 15 gross samples of wool were obtained from lots with which the patient was working at the time of onset of illness. Bacillus anthracis was not recovered from any of these specimens. The wool being processed at the time of his infection was a mixture of domestic and Australian wool. This is the first reported case from this plant that employs about 350 people.
(Reported by Martin P. Hines, D.V.M., Director, Division of Epidemiology, John Freeman, D.V.M., Chief, Section of Veterinary Public Health, North Carolina State Board of Health; A.M. Covington, M.D., Rockingham, North Carolina; Z.F. Long, M.D., Director, Richmond County Health Department, Rockingham; and two EIS Officers.)

## Editorial Note:

The clinical details would support the diagnosis of cutaneous anthrax. Two simultaneous cutaneous lesions in one patient has not previously been reported from the United States, but has been reported in other countries. Whether this represents a co-primary infection or secondary spread from the initial foci is not clear.

Of 211 cases of anthrax reported in the United States since 1955,33 including this case have been associated with wool. The majority, 106, have had contact with imported goat hair. ${ }^{1}$

## Reference:

1. Brachman, Philip S.: Anthrax. The New York Academy of Sciences, Conference on Unusual Isolates from Clinical Material, Nov. 5-8, 1969, (To be published).

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATHE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH CO CIRCULAE DISEASE GENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER
DAVID J. SENCER, M.D.
EPIDEMIOLOGY PROGRAM
A. D. LANGM

EDITOR
MICHAEL B. GREGG, M.D.
EDITOR pro tem PRISCILLA B. HOLMAN

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY. THE NATIONAL COMMUNICAELE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUGH COMMUNICATIONS SHOULD BE ADDRESSED TO:

```
NATIONAL COMMUNI
ble disease center
``` ATTN: THE EDITOR

MOREIDITY AND MORTALITY WEEKLY REPORT ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTIITH COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THEPUBLIC ON THE SUCCEEDING FRIDAY.```

