

COMMUNICABLE DISEASE CENTER



Vol. 15, No. 18

**WEEKLY
REPORT**

Week Ending
May 7, 1966

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

PUBLIC HEALTH SERVICE

EPIDEMIOLOGIC NOTES AND REPORTS

SALMONELLA ORANIENBURG - Arizona

Between March 15 and April 4, 1966, six patients in a community hospital developed gastroenteritis due to *Salmonella oranienburg*. One of the patients was admitted on March 16 with diarrhea; the other five patients developed a febrile diarrheal illness subsequent to hospital admission.

Since these six isolations of *Salmonella oranienburg* were obtained from six individuals in the hospital within a period of 3 weeks, a review of the patients' records was undertaken. There was no area of the hospital common to all patients; they were cared for by different doctors and nurses and received different diets. There

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was no evidence of increased incidence of diarrheal illness in the surrounding community or in other hospitals in the area.

Food for all patients and personnel in the hospital is prepared in a central kitchen from where it is distributed in appropriate containers to individual diet kitchens in patient-care units. It is then served by the employees

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

| DISEASE | 18th WEEK ENDED | | MEDIAN 1961-1965 | CUMULATIVE, FIRST 18 WEEKS | | |
|---|-----------------|----------------|---------------------|----------------------------|---------|---------------------|
| | MAY 7, 1966 | MAY 8, 1965 | | 1966 | 1965 | MEDIAN 1961-1965 |
| Aseptic meningitis | 25 | 26 | 23 | 488 | 516 | 433 |
| Brucellosis | - | 5 | 7 | 65 | 69 | 129 |
| Diphtheria | 1 | 1 | 6 | 50 | 73 | 107 |
| Encephalitis, primary: | | | | | | |
| Arthropod-borne & unspecified | 23 | 24 | --- | 433 | 534 | --- |
| Encephalitis, post-infectious | 9 | 18 | --- | 294 | 278 | --- |
| Hepatitis, serum | 29 | 675 | 804 | 443 | 13,709 | 17,962 |
| Hepatitis, infectious | 609 | | | 12,206 | | |
| Measles (rubeola) | 8,117 | 11,272 | 19,088 | 134,084 | 173,301 | 238,186 |
| Poliomylitis, Total (including unspecified) | - | 1 | 1 | 7 | 7 | 48 |
| Paralytic | - | 1 | 1 | 6 | 5 | 43 |
| Nonparalytic | - | | --- | - | 2 | --- |
| Meningococcal infections, Total | 102 | 80 | 58 | 1,799 | 1,534 | 1,081 |
| Civilian | 94 | 77 | --- | 1,577 | 1,400 | --- |
| Military | 8 | 3 | --- | 222 | 134 | --- |
| Rubella (German measles) | 1,780 | | | 26,409 | | |
| Streptococcal sore throat & Scarlet fever | 8,814 | 8,769 | 8,183 | 206,343 | 194,351 | 169,872 |
| Tetanus | 2 | 4 | --- | 37 | 68 | --- |
| Tularemia | 1 | 2 | --- | 48 | 63 | --- |
| Typhoid fever | 5 | 7 | 8 | 98 | 110 | 124 |
| Typhus, tick-borne (Rky. Mt. Spotted fever) | 1 | 1 | --- | 10 | 9 | --- |
| Rabies in Animals | 84 | 70 | 95 | 1,602 | 1,851 | 1,538 |

NOTIFIABLE DISEASES OF LOW FREQUENCY

| | Cum. | | Cum. |
|---|------|--|------|
| Anthrax: | 2 | | 1 |
| Leptospirosis: Hawaii-1, Texas-1 | 12 | | 37 |
| Malaria: Md-5, Pa.-2, Colo.-1, Calif.-1 | 100 | | 1 |
| Psittacosis: | 16 | | 10 |
| Typhus, murine: | 6 | | |
| | | | |
| | | | |

EPIDEMIOLOGIC NOTES AND REPORTS
SALMONELLA ORANIENBURG - Arizona
(Continued from front page)

permanently assigned to the relevant unit. However, the scale of accommodation and equipment in the central kitchen has not maintained progress with demands. Adequate and efficient working space in the kitchen is at a premium until the new central kitchen unit, now under construction, has been completed. Water supplies are obtained from wells in the hospital grounds which are adequately and regularly checked bacteriologically. Milk from the local contractor is likewise checked and has always been within acceptable bacteriological limits.

During the investigation five employees concerned with the preparation and distribution of food were also found to have stool cultures positive for Salmonella C₁, later confirmed as *S. oranienburg*. Three of them worked permanently in the individual diet kitchens of three separate areas of the hospital; two others worked in the serving line of the employees' cafeteria. Although none worked in the central kitchen where food common to all patients was prepared, they frequently ate food from this kitchen. Two could recall a well defined recent diarrheal illness

compatible with salmonella infection.

Epidemiologic evidence indicated that this was a salmonella outbreak related to a source of infection present over a period of time and not a single common source of infection such as one meal. Attention was then focused on the central kitchen. Cultures obtained from stool specimens of personnel working in the central kitchen were negative for salmonella. Dietary histories then narrowed down the range of foodstuffs that were most commonly eaten until it was found that frozen unpasteurized egg products were being used in the preparation of puddings, custards and pie frequently consumed by all those affected. It was also noted that in March, about the time of the start of the outbreak, the dietary department had used up the stocks of commercially prepared pudding and custard mixes, and had begun to prepare its own mixes in the hospital central kitchen using basic ingredients which included frozen, unpasteurized egg products.

(Continued on page 160)

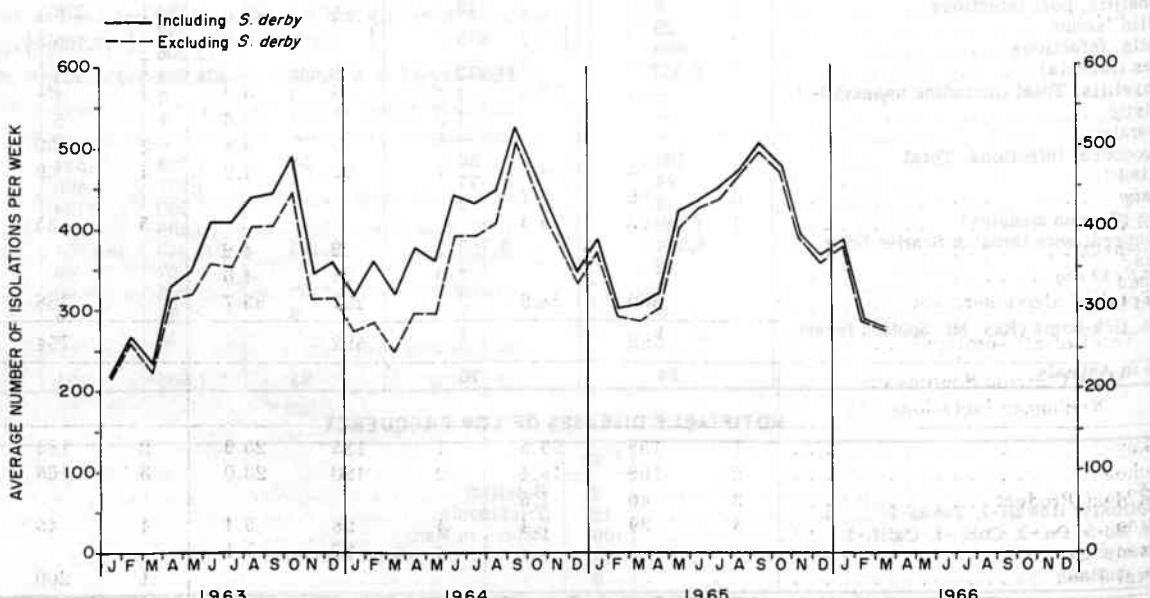
SURVEILLANCE SUMMARY
SALMONELLOSIS - January, February and March, 1966

During the months of January, February and March, 1966, the reported numbers of human isolations of salmonellae were 1,531, 1,149 and 1,374 respectively. The numbers generally correspond to the expected seasonal pattern, although the February total was the lowest

recorded for any one month since the same period during 1963 (See Figure 1).

The seven most frequently reported human serotypes for the 3 months are listed in Table 1. The seven most common ones accounted for 68.1 percent, 62.4 percent and

Figure 1
**REPORTED HUMAN ISOLATIONS OF SALMONELLA
 IN THE UNITED STATES**



SURVEILLANCE SUMMARY
SALMONELLOSIS - January, February and March, 1966
(Continued from page 154)

Table 1

The Seven Most Commonly Reported Serotypes From Human Sources - January-March, 1966

| Serotype | January | | | February | | | March | | |
|--|---------|--------|---------|----------|--------|---------|-------|--------|---------|
| | Rank | Number | Percent | Rank | Number | Percent | Rank | Number | Percent |
| <i>S. typhi-murium & S. typhi-murium</i> | | | | | | | | | |
| var. <i>copenhagen</i> | 1 | 492 | 32.1 | 1 | 286 | 24.9 | 1 | 420 | 30.6 |
| <i>S. heidelberg</i> | 4 | 104 | 6.8 | 4 | 78 | 6.8 | 3 | 97 | 7.1 |
| <i>S. newport</i> | 5 | 82 | 5.4 | 3 | 81 | 7.0 | 4 | 77 | 5.6 |
| <i>S. enteritidis</i> | 2 | 123 | 8.0 | 5 | 68 | 5.9 | 5 | 68 | 4.9 |
| <i>S. infantis</i> | 3 | 117 | 7.6 | 2 | 111 | 9.7 | 2 | 144 | 10.5 |
| <i>S. thompson</i> | 6 | 68 | 4.4 | | | | | | |
| <i>S. saint-paul</i> | 7 | 57 | 3.7 | 7 | 46 | 4.0 | 6 | 58 | 4.2 |
| <i>S. typhi</i> | | | | 6 | 47 | 4.1 | 7 | 48 | 3.5 |
| <i>S. oranienburg</i> | | | | | | | | | |
| Total of above serotypes | | 1,043 | 68.1 | | 717 | 62.4 | | 912 | 66.4 |
| Total of all serotypes | | 1,531 | | | 1,149 | | | 1,374 | |

66.4 percent respectively of all isolations in each month. The age and sex distribution of persons with salmonellae for the 3 months is compatible with past experience. The percentage of persons reported as harboring salmonellae who had other members in their families simultaneously infected was consistent: 21.3 percent in January; 19.2 percent in February; 23.1 percent in March.

The seven most commonly reported serotypes from

nonhuman sources for this period are listed in Table 2. It is evident that the frequent nonhuman sources of salmonellae have been turkeys, chickens, and bovines. In March, however, a variation in this pattern was introduced with the high number of isolations from various types of animal feed. A large portion of the latter isolates were from surveys of animal feed conducted in one State.

(Reported by the Salmonella Surveillance Unit, CDC.)

Table 2
 The Seven Most Commonly Reported Serotypes From Nonhuman Sources - January-March, 1966

| Serotype | January | | | February | | | March | | |
|--|---------|--------|---------|----------|--------|---------|-------|--------|---------|
| | Rank | Number | Percent | Rank | Number | Percent | Rank | Number | Percent |
| <i>S. typhi-murium & S. typhi-murium</i> | | | | | | | | | |
| var. <i>copenhagen</i> | 1 | 76 | 14.5 | 1 | 115 | 22.0 | 1 | 131 | 17.4 |
| <i>S. heidelberg</i> | 3 | 52 | 9.9 | 2 | 46 | 8.8 | 2 | 68 | 9.0 |
| <i>S. infantis</i> | 4 | 40 | 7.6 | | | | 7 | 31 | 4.1 |
| <i>S. saint-paul</i> | 2 | 54 | 10.3 | 4 | 26 | 5.0 | 6 | 34 | 4.5 |
| <i>S. oranienburg</i> | | | | 3 | 33 | 6.3 | | | |
| <i>S. montevideo</i> | | | | 5 | 25 | 4.8 | 3 | 50 | 6.6 |
| <i>S. anatum</i> | 5 | 34 | 6.5 | 7 | 22 | 4.2 | 4 | 39 | 5.2 |
| <i>S. derby</i> | 6 | 30 | 5.7 | | | | | | |
| <i>S. blockley</i> | 7 | 23 | 4.4 | | | | 5 | 35 | 4.6 |
| <i>S. thompson</i> | | | | 7 | 22 | 4.2 | | | |
| <i>S. senftenberg</i> | | | | 6 | 24 | 4.6 | | | |
| Total of above serotypes | | 309 | 58.9 | | 291 | 55.7 | | 388 | 51.5 |
| Total of all serotypes | | 525 | | | 522 | | | 754 | |
| Most Common Sources of Nonhuman Isolations | | | | | | | | | |
| Turkey | 1 | 155 | 29.5 | 1 | 135 | 25.9 | 2 | 185 | 24.5 |
| Chicken | 2 | 102 | 19.4 | 2 | 120 | 23.0 | 3 | 168 | 22.3 |
| Pork Meat Product | 3 | 40 | 7.6 | | | | | | |
| Bovine | 4 | 39 | 7.4 | 4 | 28 | 5.4 | 4 | 45 | 6.0 |
| Frozen Egg | | | | 3 | 37 | 7.1 | | | |
| Animal Feed | | | | | | | 1 | 200 | 26.5 |

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
 FOR WEEKS ENDED
 MAY 7, 1966 AND MAY 8, 1965 (18th WEEK)

| AREA | ASEPTIC MENINGITIS | BRUCELLOSIS | ENCEPHALITIS | | | DIPHTHERIA | HEPATITIS | | |
|-----------------------|-----------------------|-------------|-------------------------------------|---------------------|-------|------------|------------|---------------|------|
| | | | Primary including unsp. cases | Post- Infectious | Serum | | Infectious | Both Types | |
| | 1966 | 1965 | 1966 | 1966 | 1965 | 1966 | 1966 | 1965 | 1965 |
| UNITED STATES... | 25 | 26 | - | 23 | 24 | 9 | 1 | 1 | 29 |
| NEW ENGLAND..... | - | 1 | - | 1 | 2 | 1 | - | - | 31 |
| Maine..... | - | - | - | - | - | - | - | - | 4 |
| New Hampshire..... | - | - | - | - | - | - | - | - | 5 |
| Vermont..... | - | - | - | - | - | - | - | - | 6 |
| Massachusetts..... | - | 1 | - | 1 | 2 | 1 | - | - | 20 |
| Rhode Island..... | - | - | - | - | - | - | - | - | 3 |
| Connecticut..... | - | - | - | - | - | - | - | - | 8 |
| MIDDLE ATLANTIC..... | 2 | 5 | - | 4 | 9 | 2 | - | 1 | 121 |
| New York City..... | 1 | 1 | - | 1 | 4 | - | - | 9 | 13 |
| New York, Up-State. | - | 2 | - | - | 1 | - | - | - | 23 |
| New Jersey..... | 1 | - | - | 2 | 3 | - | - | 2 | 36 |
| Pennsylvania..... | - | 2 | - | 1 | 1 | 2 | - | 1 | 38 |
| EAST NORTH CENTRAL... | 6 | 2 | - | 5 | 3 | - | - | 2 | 80 |
| Ohio..... | 1 | 1 | - | 3 | 1 | - | - | 1 | 19 |
| Indiana..... | - | - | - | 2 | 1 | - | - | - | 20 |
| Illinois..... | 4 | 1 | - | - | 1 | - | - | - | 22 |
| Michigan..... | - | - | - | - | - | - | - | 1 | 27 |
| Wisconsin..... | 1 | - | - | - | - | - | - | 6 | 68 |
| WEST NORTH CENTRAL... | - | 1 | - | - | 2 | - | - | - | 49 |
| Minnesota..... | - | 1 | - | - | 1 | - | - | - | 5 |
| Iowa..... | - | - | - | - | - | - | - | - | 16 |
| Missouri..... | - | - | - | - | - | - | - | - | 8 |
| North Dakota..... | - | - | - | - | 1 | - | - | - | - |
| South Dakota..... | - | - | - | - | - | - | - | - | 1 |
| Nebraska..... | - | - | - | - | - | - | - | - | 5 |
| Kansas..... | - | - | - | - | - | - | - | - | 5 |
| SOUTH ATLANTIC..... | 2 | - | - | 6 | 1 | 2 | - | 3 | 73 |
| Delaware..... | 1 | - | - | - | - | - | - | - | 4 |
| Maryland..... | - | - | - | - | - | - | - | - | 13 |
| Dist. of Columbia.. | - | - | - | - | - | - | - | - | 1 |
| Virginia..... | - | - | - | 2 | - | - | - | - | 7 |
| West Virginia..... | - | - | 4 | - | - | - | - | - | 15 |
| North Carolina..... | 1 | - | - | - | 1 | - | - | 2 | 7 |
| South Carolina..... | - | - | - | - | - | - | - | - | 4 |
| Georgia..... | - | - | - | - | - | - | - | - | 1 |
| Florida..... | - | - | - | - | - | 2 | - | 1 | 26 |
| EAST SOUTH CENTRAL... | 2 | 2 | - | 2 | - | - | - | - | 59 |
| Kentucky..... | - | 1 | - | - | - | - | - | - | 17 |
| Tennessee..... | - | - | - | 1 | - | - | - | - | 24 |
| Alabama..... | 1 | 1 | - | - | - | - | - | - | 15 |
| Mississippi..... | 1 | - | - | 1 | - | - | - | - | 6 |
| WEST SOUTH CENTRAL... | 1 | 1 | - | 1 | - | 2 | - | 1 | 57 |
| Arkansas..... | - | - | - | 1 | - | 1 | - | - | 10 |
| Louisiana..... | - | - | - | - | - | - | - | - | 7 |
| Oklahoma..... | - | - | - | - | - | - | - | - | - |
| Texas..... | 1 | 1 | - | - | - | 1 | - | 1 | 35 |
| MOUNTAIN..... | - | 2 | - | 3 | 3 | - | 1 | - | 19 |
| Montana..... | - | - | - | - | - | - | - | - | 2 |
| Idaho..... | - | - | - | - | - | - | - | - | 4 |
| Wyoming..... | - | 1 | - | - | - | - | - | - | 2 |
| Colorado..... | - | - | - | 1 | 3 | - | - | - | 9 |
| New Mexico..... | - | - | - | - | - | - | 1 | - | 7 |
| Arizona..... | - | 1 | - | 2 | - | - | - | - | 5 |
| Utah..... | - | - | - | - | - | - | - | 1 | 10 |
| Nevada..... | - | - | - | - | - | - | - | - | - |
| PACIFIC..... | 12 | 12 | - | 1 | 4 | 2 | - | 11 | 120 |
| Washington..... | 1 | - | - | 1 | 2 | 1 | - | - | 10 |
| Oregon..... | 1 | - | - | - | - | - | - | - | 5 |
| California..... | 9 | 12 | - | - | 2 | 1 | - | 11 | 96 |
| Alaska..... | - | - | - | - | - | - | - | - | 115 |
| Hawaii..... | 1 | - | - | - | - | - | - | - | 3 |
| Puerto Rico..... | - | - | - | 1 | - | - | - | - | 2 |
| | | | | | | | - | 24 | 33 |

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**CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
MAY 7, 1966 AND MAY 8, 1965 (18th WEEK) - CONTINUED**

| AREA | MEASLES (Rubeola) | | | MENINGOCOCCAL INFECTIONS, TOTAL | | POLIOMYELITIS | | | | RUBELLA | |
|-------------------------|-------------------|------------|---------|------------------------------------|------------|---------------|------|------|------|---------|--|
| | 1966 | Cumulative | | 1966 | Cumulative | | 1966 | 1965 | 1966 | | |
| | | 1966 | 1965 | | 1966 | 1965 | | | | | |
| UNITED STATES... | 8,117 | 134,084 | 173,301 | 102 | 1,799 | 1,534 | - | 1 | - | 6 | |
| NEW ENGLAND..... | 100 | 1,559 | 31,159 | 4 | 79 | 77 | - | - | - | 164 | |
| Maine..... | 4 | 166 | 2,204 | - | 7 | 9 | - | - | - | 7 | |
| New Hampshire..... | 7 | 33 | 345 | - | 7 | 5 | - | - | - | 3 | |
| Vermont..... | - | 204 | 639 | - | 3 | 2 | - | - | - | 1 | |
| Massachusetts..... | 22 | 586 | 17,176 | 1 | 31 | 28 | - | - | - | 104 | |
| Rhode Island..... | 17 | 79 | 3,412 | - | 7 | 11 | - | - | - | 6 | |
| Connecticut..... | 50 | 491 | 7,383 | 3 | 24 | 22 | - | - | - | 43 | |
| MIDDLE ATLANTIC..... | 566 | 14,884 | 7,678 | 16 | 198 | 214 | - | - | - | 95 | |
| New York City..... | 205 | 7,407 | 860 | 4 | 30 | 31 | - | - | - | 28 | |
| New York, Up-State..... | 57 | 1,579 | 2,323 | 4 | 55 | 56 | - | - | - | 63 | |
| New Jersey..... | 48 | 1,578 | 1,331 | 4 | 56 | 64 | - | - | - | - | |
| Pennsylvania..... | 256 | 4,320 | 3,164 | 4 | 57 | 63 | - | - | - | 4 | |
| EAST NORTH CENTRAL... | 2,465 | 49,336 | 33,530 | 11 | 267 | 182 | - | - | - | 453 | |
| Ohio..... | 511 | 4,573 | 6,670 | 3 | 73 | 53 | - | - | - | 23 | |
| Indiana..... | 243 | 3,411 | 1,169 | 4 | 45 | 25 | - | - | - | 89 | |
| Illinois..... | 313 | 9,462 | 1,412 | 2 | 51 | 48 | - | - | - | 77 | |
| Michigan..... | 455 | 8,127 | 17,589 | 1 | 72 | 32 | - | - | - | 82 | |
| Wisconsin..... | 943 | 23,763 | 6,690 | 1 | 26 | 24 | - | - | - | 182 | |
| WEST NORTH CENTRAL... | 392 | 6,343 | 13,208 | 3 | 96 | 83 | - | - | - | 238 | |
| Minnesota..... | 64 | 1,449 | 424 | - | 24 | 17 | - | - | - | 1 | |
| Iowa..... | 264 | 3,610 | 7,362 | - | 13 | 3 | - | - | - | 234 | |
| Missouri..... | 5 | 381 | 2,070 | 3 | 38 | 39 | - | - | - | 1 | |
| North Dakota..... | 35 | 831 | 2,967 | - | 4 | 4 | - | - | - | 3 | |
| South Dakota..... | - | 4 | 68 | - | 3 | 2 | - | - | - | - | |
| Nebraska..... | 24 | 68 | 317 | - | 7 | 9 | - | - | - | - | |
| Kansas..... | NN | NN | NN | - | 7 | 9 | - | - | - | - | |
| SOUTH ATLANTIC..... | 601 | 10,248 | 19,185 | 20 | 290 | 302 | - | - | - | 176 | |
| Delaware..... | 18 | 152 | 413 | - | 3 | 3 | - | - | - | 2 | |
| Maryland..... | 65 | 1,522 | 762 | 4 | 29 | 31 | - | - | - | 4 | |
| Dist. of Columbia..... | 12 | 338 | 31 | 1 | 7 | 4 | - | - | - | 1 | |
| Virginia..... | 58 | 1,080 | 3,077 | 4 | 42 | 31 | - | - | - | 43 | |
| West Virginia..... | 156 | 3,771 | 10,981 | 1 | 10 | 23 | - | - | - | 16 | |
| North Carolina..... | 18 | 185 | 213 | 8 | 62 | 51 | - | - | - | - | |
| South Carolina..... | 20 | 471 | 795 | - | 39 | 45 | - | - | - | 6 | |
| Georgia..... | 7 | 192 | 538 | 1 | 42 | 41 | - | - | - | 1 | |
| Florida..... | 247 | 2,537 | 2,375 | 1 | 56 | 73 | - | - | - | 104 | |
| EAST SOUTH CENTRAL... | 851 | 14,983 | 10,719 | 15 | 159 | 110 | - | - | - | 230 | |
| Kentucky..... | 106 | 4,085 | 2,000 | 3 | 69 | 47 | - | - | - | 52 | |
| Tennessee..... | 673 | 8,850 | 6,004 | 6 | 47 | 33 | - | - | - | 172 | |
| Alabama..... | 12 | 1,279 | 1,863 | 4 | 32 | 22 | - | - | - | 6 | |
| Mississippi..... | 60 | 769 | 852 | 2 | 11 | 8 | - | - | - | - | |
| WEST SOUTH CENTRAL... | 1,157 | 16,231 | 24,546 | 11 | 271 | 234 | - | 1 | - | 4 | |
| Arkansas..... | 5 | 528 | 883 | 1 | 15 | 12 | - | - | - | 1 | |
| Louisiana..... | 2 | 74 | 60 | 3 | 108 | 134 | - | - | - | - | |
| Oklahoma..... | 42 | 365 | 136 | 1 | 11 | 16 | - | - | - | - | |
| Texas..... | 1,108 | 15,264 | 23,467 | 6 | 137 | 72 | - | 1 | - | 3 | |
| MOUNTAIN..... | 711 | 7,775 | 13,509 | 7 | 67 | 53 | - | - | - | 193 | |
| Montana..... | 82 | 1,155 | 2,936 | - | 4 | 1 | - | - | - | 10 | |
| Idaho..... | 35 | 747 | 1,862 | 1 | 4 | 7 | - | - | - | - | |
| Wyoming..... | 7 | 100 | 660 | 2 | 3 | 2 | - | - | - | - | |
| Colorado..... | 46 | 783 | 3,410 | 3 | 36 | 12 | - | - | - | 34 | |
| New Mexico..... | 156 | 686 | 506 | - | 9 | 8 | - | - | - | - | |
| Arizona..... | 319 | 3,998 | 621 | 1 | 9 | 15 | - | - | - | 147 | |
| Utah..... | 66 | 282 | 3,371 | - | - | 6 | - | - | - | 2 | |
| Nevada..... | - | 24 | 143 | - | 2 | 2 | - | - | - | - | |
| PACIFIC..... | 1,274 | 12,725 | 19,767 | 15 | 372 | 279 | - | - | 1 | 227 | |
| Washington..... | 202 | 2,162 | 5,768 | 2 | 24 | 21 | - | - | 1 | 83 | |
| Oregon..... | 71 | 914 | 2,515 | - | 24 | 21 | - | - | - | 49 | |
| California..... | 997 | 9,511 | 9,048 | 13 | 307 | 226 | - | - | - | 80 | |
| Alaska..... | 3 | 61 | 107 | - | 14 | 6 | - | - | - | 10 | |
| Hawaii..... | 1 | 77 | 2,329 | - | 3 | 5 | - | - | - | 5 | |
| Puerto Rico..... | 120 | 1,673 | 1,270 | 1 | 4 | 3 | - | - | - | 3 | |

Morbidity and Mortality Weekly Report

 CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
 FOR WEEKS ENDED
 MAY 7, 1966 AND MAY 8, 1965 (18th WEEK) - CONTINUED

| AREA | STREPTOCOCCAL SORE THROAT & SCARLET FEVER | TETANUS | | TULAREMIA | | TYPHOID | | TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted) | | RABIES IN ANIMALS | |
|-----------------------|---|---------|------|--------------|------|--------------|------|--|------|----------------------|-------|
| | | 1966 | 1966 | Cum. 1966 | 1966 | Cum. 1966 | 1966 | Cum. 1966 | 1966 | Cum. 1966 | 1966 |
| UNITED STATES... | 8,814 | 2 | 37 | 1 | 48 | 5 | 98 | 1 | 10 | 84 | 1,602 |
| NEW ENGLAND..... | 1,150 | - | 2 | - | 1 | - | 4 | - | - | - | 22 |
| Maine..... | 44 | - | - | - | - | - | - | - | - | - | 2 |
| New Hampshire..... | 13 | - | - | - | - | - | - | - | - | - | 8 |
| Vermont..... | 19 | - | - | - | - | - | - | - | - | - | 12 |
| Massachusetts..... | 227 | - | 2 | - | 1 | - | 1 | - | - | - | - |
| Rhode Island..... | 46 | - | - | - | - | - | - | - | - | - | - |
| Connecticut..... | 801 | - | - | - | - | - | 3 | - | - | - | - |
| MIDDLE ATLANTIC..... | 415 | 1 | 6 | - | - | - | 24 | - | 1 | 3 | 113 |
| New York City..... | 30 | - | 3 | - | - | - | 12 | - | - | - | - |
| New York, Up-State. | 260 | - | - | - | - | - | 3 | - | - | 3 | 107 |
| New Jersey..... | NN | - | - | - | - | - | 6 | - | - | - | - |
| Pennsylvania..... | 125 | 1 | 3 | - | - | - | 3 | - | 1 | - | 6 |
| EAST NORTH CENTRAL... | 1,191 | - | 3 | - | 12 | - | 15 | - | - | 12 | 228 |
| Ohio..... | 159 | - | - | - | 3 | - | 7 | - | - | 7 | 124 |
| Indiana..... | 231 | - | 1 | - | 3 | - | 1 | - | - | 2 | 49 |
| Illinois..... | 276 | - | 1 | - | 5 | - | 2 | - | - | 1 | 18 |
| Michigan..... | 284 | - | 1 | - | - | - | 2 | - | - | 2 | 19 |
| Wisconsin..... | 241 | - | - | - | 1 | - | 3 | - | - | - | 18 |
| WEST NORTH CENTRAL... | 658 | - | 2 | - | 3 | 1 | 11 | - | 1 | 23 | 349 |
| Minnesota..... | 17 | - | - | - | - | - | - | - | - | 7 | 69 |
| Iowa..... | 258 | - | - | - | - | - | 3 | - | - | 6 | 77 |
| Missouri..... | 4 | - | 2 | - | 1 | - | 5 | - | - | 7 | 130 |
| North Dakota..... | 221 | - | - | - | - | - | - | - | - | - | 6 |
| South Dakota..... | 12 | - | - | - | - | - | - | - | - | 1 | 34 |
| Nebraska..... | 3 | - | - | - | - | - | 1 | - | - | - | 7 |
| Kansas..... | 143 | - | - | - | 2 | 1 | 2 | - | 1 | 2 | 26 |
| SOUTH ATLANTIC..... | 949 | - | 8 | - | 6 | 1 | 19 | 1 | 7 | 10 | 212 |
| Delaware..... | 25 | - | - | - | - | - | - | - | - | - | - |
| Maryland..... | 160 | - | - | - | - | 1 | 6 | 1 | 1 | - | - |
| Dist. of Columbia.. | 4 | - | - | - | - | - | - | - | - | - | - |
| Virginia..... | 282 | - | - | - | 2 | - | 6 | - | 2 | 5 | 134 |
| West Virginia..... | 180 | - | - | - | 1 | - | 1 | - | - | 1 | 30 |
| North Carolina..... | 20 | - | - | - | 2 | - | 2 | - | 3 | - | - |
| South Carolina..... | 12 | - | 1 | - | 1 | - | 2 | - | - | - | - |
| Georgia..... | 7 | - | 3 | - | - | - | - | - | 1 | 4 | 31 |
| Florida..... | 259 | - | 4 | - | - | - | 2 | - | - | - | 17 |
| EAST SOUTH CENTRAL... | 1,484 | - | 2 | 1 | 13 | 1 | 8 | - | - | 9 | 227 |
| Kentucky..... | 73 | - | - | - | 2 | - | 1 | - | - | 1 | 34 |
| Tennessee..... | 1,225 | - | - | 1 | 7 | - | 4 | - | - | 7 | 184 |
| Alabama..... | 92 | - | 2 | - | 4 | - | 2 | - | - | 1 | 9 |
| Mississippi..... | 94 | - | - | - | - | 1 | 1 | - | - | - | - |
| WEST SOUTH CENTRAL... | 750 | - | 8 | - | 11 | 1 | 5 | - | 1 | 15 | 328 |
| Arkansas..... | - | - | 2 | - | 9 | 1 | 1 | - | 1 | 1 | 39 |
| Louisiana..... | - | - | 3 | - | 1 | - | 1 | - | - | 2 | 19 |
| Oklahoma..... | 34 | - | - | - | - | - | 1 | - | - | 6 | 94 |
| Texas..... | 716 | - | 3 | - | 1 | - | 2 | - | - | 6 | 176 |
| MOUNTAIN..... | 1,197 | - | 1 | - | 1 | - | 6 | - | - | 2 | 31 |
| Montana..... | 44 | - | - | - | - | - | - | - | - | - | 7 |
| Idaho..... | 64 | - | - | - | - | - | - | - | - | - | - |
| Wyoming..... | 50 | - | - | - | - | - | - | - | - | - | - |
| Colorado..... | 450 | - | 1 | - | - | - | 2 | - | - | - | 1 |
| New Mexico..... | 228 | - | - | - | - | - | - | - | - | - | 5 |
| Arizona..... | 147 | - | - | - | - | - | 1 | - | - | 2 | 17 |
| Utah..... | 214 | - | - | - | 1 | - | 3 | - | - | - | - |
| Nevada..... | - | - | - | - | - | - | - | - | - | - | 1 |
| PACIFIC..... | 1,020 | 1 | 5 | - | 1 | 1 | 6 | - | - | 10 | 92 |
| Washington..... | 268 | - | - | - | - | - | - | - | - | - | - |
| Oregon..... | 47 | - | - | - | - | - | 1 | - | - | - | - |
| California..... | 642 | 1 | 5 | - | 1 | - | 3 | - | - | 10 | 92 |
| Alaska..... | 33 | - | - | - | - | - | - | - | - | - | - |
| Hawaii..... | 30 | - | - | - | - | 1 | 2 | - | - | - | - |
| Puerto Rico..... | 4 | 4 | 19 | - | - | - | 4 | - | - | 1 | 4 |

Week No.

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED MAY 7, 1966

18

(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 1 year All Causes |
|----------------------|-------------|----------------------|---|----------------------------------|---|-------------|----------------------|---|----------------------------------|
| | All Ages | 65 years and over | | | | All Ages | 65 years and over | | |
| NEW ENGLAND: | | | | | SOUTH ATLANTIC: | | | | |
| Boston, Mass. | 775 | 491 | 42 | 34 | Atlanta, Ga. | 1,185 | 636 | 57 | 61 |
| Bridgeport, Conn. | 264 | 150 | 10 | 15 | Baltimore, Md. | 123 | 47 | 4 | 7 |
| Cambridge, Mass. | 58 | 37 | 5 | 2 | Charlotte, N. C. | 288 | 163 | 11 | 21 |
| Fall River, Mass. | 31 | 21 | - | - | Jacksonville, Fla. | 46 | 24 | 3 | - |
| Hartford, Conn. | 18 | 9 | - | - | Miami, Fla. | 57 | 29 | 2 | 6 |
| Lowell, Mass. | 64 | 40 | 6 | 4 | Norfolk, Va. | 72 | 38 | 2 | 1 |
| Lynn, Mass. | 35 | 27 | 2 | 1 | Richmond, Va. | 53 | 35 | 4 | 2 |
| New Bedford, Mass. | 29 | 20 | 2 | 1 | Savannah, Ga. | 85 | 39 | 3 | 3 |
| New Haven, Conn. | 34 | 27 | 1 | 1 | St. Petersburg, Fla. | 35 | 15 | 3 | 1 |
| Providence, R. I. | 52 | 32 | - | 1 | Tampa, Fla. | 72 | 56 | 3 | 2 |
| Somerville, Mass. | 61 | 41 | 4 | 3 | Washington, D. C. | 83 | 53 | 5 | 2 |
| Springfield, Mass. | 14 | 12 | 2 | - | Wilmington, Del. | 218 | 104 | 15 | 14 |
| Waterbury, Conn. | 32 | 24 | 2 | 2 | | 53 | 33 | 2 | 2 |
| Worcester, Mass. | 33 | 20 | - | 1 | | | | | |
| MIDDLE ATLANTIC: | 50 | 31 | 8 | 3 | EAST SOUTH CENTRAL: | 720 | 399 | 52 | 41 |
| Albany, N. Y. | 3,213 | 1,884 | 151 | 133 | Birmingham, Ala. | 101 | 54 | 4 | 6 |
| Allentown, Pa. | 56 | 25 | 4 | 3 | Chattanooga, Tenn. | 63 | 38 | 6 | 3 |
| Buffalo, N. Y. | 34 | 19 | 4 | 2 | Knoxville, Tenn. | 92 | 33 | 6 | 2 |
| Camden, N. J. | 154 | 92 | 6 | 8 | Louisville, Ky. | 142 | 77 | 16 | 9 |
| Elizabeth, N. J. | 33 | 14 | 2 | 2 | Memphis, Tenn. | 158 | 97 | 7 | 6 |
| Erie, Pa. | 38 | 24 | 3 | 2 | Mobile, Ala. | 45 | 20 | - | 4 |
| Jersey City, N. J. | 44 | 19 | 1 | 5 | Montgomery, Ala. | 46 | 24 | 8 | 4 |
| Newark, N. J. | 69 | 41 | 4 | 4 | Nashville, Tenn. | 113 | 56 | 5 | 7 |
| New York City, N. Y. | 92 | 36 | 5 | 5 | WEST SOUTH CENTRAL: | 1,103 | 556 | 55 | 68 |
| Paterson, N. J. | 1,711 | 1,052 | 78 | 52 | Austin, Tex. | 31 | 18 | 6 | 1 |
| Philadelphia, Pa. | 39 | 18 | 5 | - | Baton Rouge, La. | 39 | 26 | - | - |
| Pittsburgh, Pa. | 421 | 225 | 8 | 22 | Corpus Christi, Tex. | 24 | 12 | 2 | - |
| Reading, Pa. | 155 | 82 | 3 | 12 | Dallas, Tex. | 174 | 86 | 9 | 13 |
| Rochester, N. Y. | 50 | 37 | 3 | 3 | El Paso, Tex. | 52 | 23 | 5 | 8 |
| Schenectady, N. Y. | 102 | 69 | 7 | 5 | Fort Worth, Tex. | 63 | 38 | 2 | 1 |
| Scranton, Pa. | 25 | 15 | 5 | - | Houston, Tex. | 190 | 89 | 8 | 18 |
| Syracuse, N. Y. | 40 | 26 | 6 | 1 | Little Rock, Ark. | 68 | 35 | 6 | 2 |
| Trenton, N. J. | 51 | 33 | 1 | 5 | New Orleans, La. | 162 | 79 | 5 | 9 |
| Utica, N. Y. | 34 | 16 | - | 1 | Oklahoma City, Okla. | 91 | 38 | 2 | 6 |
| Yonkers, N. Y. | 22 | 14 | 3 | 1 | San Antonio, Tex. | 98 | 54 | 3 | 2 |
| EAST NORTH CENTRAL: | 43 | 27 | 3 | - | Shreveport, La. | 56 | 27 | 1 | 6 |
| Akron, Ohio | 2,633 | 1,539 | 83 | 153 | Tulsa, Okla. | 55 | 31 | 6 | 2 |
| Canton, Ohio | 70 | 34 | - | 7 | MOUNTAIN: | 373 | 234 | 22 | 18 |
| Chicago, Ill. | 30 | 19 | 1 | 2 | Albuquerque, N. Mex. | 47 | 32 | 8 | 1 |
| Cincinnati, Ohio | 812 | 452 | 25 | 54 | Colorado Springs, Colo. | 21 | 15 | 1 | 1 |
| Cleveland, Ohio | 173 | 106 | 3 | 6 | Denver, Colo. | 92 | 64 | 5 | 3 |
| Columbus, Ohio | 203 | 116 | 3 | 15 | Ogden, Utah | 15 | 7 | 4 | 2 |
| Dayton, Ohio | 106 | 63 | 2 | 5 | Phoenix, Ariz. | 62 | 38 | 1 | 2 |
| Detroit, Mich. | 80 | 45 | 1 | 4 | Pueblo, Colo. | 21 | 13 | - | 1 |
| Evansville, Ind. | 334 | 202 | 15 | 18 | Salt Lake City, Utah | 63 | 33 | - | 3 |
| Flint, Mich. | 36 | 22 | 3 | 5 | Tucson, Ariz. | 52 | 32 | 3 | 3 |
| Fort Wayne, Ind. | 65 | 37 | 2 | 4 | PACIFIC: | 1,538 | 888 | 30 | 76 |
| Gary, Ind. | 43 | 31 | 3 | 1 | Berkeley, Calif. | 17 | 11 | 1 | - |
| Grand Rapids, Mich. | 42 | 29 | 6 | 1 | Fresno, Calif. | 55 | 30 | 2 | 3 |
| Indianapolis, Ind. | 50 | 33 | 5 | 1 | Clendale, Calif. | 20 | 11 | - | - |
| Madison, Wis. | 138 | 78 | 3 | 3 | Honolulu, Hawaii | 46 | 22 | - | 5 |
| Milwaukee, Wis. | 35 | 19 | - | 3 | Long Beach, Calif. | 66 | 39 | 2 | 4 |
| Peoria, Ill. | 126 | 75 | 3 | 9 | Los Angeles, Calif. | 480 | 286 | 6 | 18 |
| Rockford, Ill. | 37 | 22 | 1 | 4 | Oakland, Calif. | 85 | 43 | 1 | 9 |
| South Bend, Ind. | 38 | 22 | - | 6 | Pasadena, Calif. | 42 | 29 | - | 1 |
| Toledo, Ohio | 46 | 28 | 3 | 1 | Portland, Oreg. | 110 | 65 | 2 | 3 |
| Youngstown, Ohio | 112 | 63 | 4 | 4 | Sacramento, Calif. | 62 | 39 | 2 | 5 |
| WEST NORTH CENTRAL: | 57 | 43 | - | - | San Diego, Calif. | 108 | 53 | 5 | 7 |
| Des Moines, Iowa | 890 | 538 | 41 | 58 | San Francisco, Calif. | 177 | 98 | 4 | 11 |
| Duluth, Minn. | 53 | 34 | 4 | 2 | San Jose, Calif. | 38 | 25 | - | 2 |
| Kansas City, Kans.* | 26 | 17 | 1 | 1 | Seattle, Wash. | 143 | 74 | 2 | 5 |
| Kansas City, Mo. | 42 | 21 | 4 | 5 | Spokane, Wash. | 40 | 25 | - | 2 |
| Lincoln, Nebr. | 138 | 88 | 6 | 7 | Tacoma, Wash. | 49 | 38 | 3 | 1 |
| Minneapolis, Minn. | 37 | 24 | 4 | 1 | Total | 12,430 | 7,165 | 533 | 642 |
| Omaha, Nebr. | 109 | 66 | 2 | 10 | | | | | |
| St. Louis, Mo. | 88 | 56 | 5 | 2 | Cumulative Totals | | | | |
| St. Paul, Minn. | 241 | 140 | 8 | 22 | including reported corrections for previous weeks | | | | |
| Wichita, Kans. | 108 | 67 | 4 | 5 | All Causes, All Ages | 238,210 | | | |
| | 48 | 25 | 3 | 3 | All Causes, Age 65 and over | 138,568 | | | |
| | | | | | Pneumonia and Influenza, All Ages | 11,654 | | | |
| | | | | | All Causes, Under 1 Year of Age | 12,150 | | | |

*Estimate - based on average percent of divisional total.

EPIDEMIOLOGIC NOTES AND REPORTS

SALMONELLA ORANIENBURG - Arizona

(Continued from page 154)

Cultures were then made from both opened and unopened cans of frozen, unpasteurized egg products which were all processed by and obtained from the same company. *S. oranienburg* as well as two other serotypes were isolated as a result (Table 3). The isolation of multiple serotypes of salmonella from unpasteurized egg products was not unexpected, but no cases of illness could be traced which were related to the *S. thompson* and *S. kentucky* serotypes.

Table 3
Results of Bacteriologic Cultures from Foods

| Item | Result* |
|------------------------------------|-----------------------|
| Whole Eggs - Thawed (opened can) | <i>S. thompson</i> |
| Egg Whites - Thawed (opened can) | Negative |
| Egg Yolks - Thawed (opened can) | Negative |
| Whole Eggs - Frozen (unopened can) | Negative |
| Egg Whites - Frozen (unopened can) | <i>S. kentucky</i> |
| Egg Yolks - Frozen (unopened can) | <i>S. oranienburg</i> |
| Cooked Custard (4 samples) | Negative |

* Cultured only for salmonellae.

A bacteriological survey was made of work areas in the central kitchen and included tables, meat slicers, serving trays, chopping boards and cooking utensils. All specimens were negative for salmonella.

The outbreak of *S. oranienburg* infection in both patients and employees coincided with a change in the method of preparation of a food consumed by all involved. Used as an ingredient in pudding and custard mixes, the unpasteurized frozen eggs contaminated with *S. oranienburg* would suggest this food item as the likely source of infection.

(Reported by Dr. Frederick J. Brady, Director, Pima County Health Department, Arizona; Dr. Philip Hotchkiss, Chief, Section of Acute Communicable Diseases, Arizona State Department of Health; Dr. George Spendlove, Director, Preventive Medical Services, Arizona State Department of Health; and an EIS Officer.)

INTERNATIONAL NOTES

VARIOLA MINOR - Britain

Following on the report published in the MMWR, Vol. 15, No. 17, the United Kingdom on May 5 has declared infected with smallpox the Stoke-on-Trent County Borough, the Wallsall County Borough and the Warley New Administrative District, all in Staffordshire, north of Birmingham, England. The total of cases of variola minor reported from Britain, as of May 9, is eight.

(Compiled from reports by the World Health Organization, Geneva.)

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 15,600, IS PUBLISHED AT THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

CHIEF, COMMUNICABLE DISEASE CENTER
CHIEF, EPIDEMIOLOGY BRANCH
ACTING CHIEF, STATISTICS SECTION

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IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE 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. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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