

# PUBLIC HEALTH STATISTICS

STATE OF

OKLAHOMA

1947



PART I

REPORTABLE DISEASES

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## REPORTABLE DISEASES

Oklahoma State Health Department  
Oklahoma City, Oklahoma  
G. F. MATHEWS, M. D., Commissioner

# FOREWORD

The reporting of diseases is a prerequisite to the adequate planning of control programs to protect the people of the State from communicable diseases. Much valuable information can be gleaned from the statistical analysis of accumulated morbidity reports. In order to be of maximum value, however, the reports should be complete and accurate. Data, such as age, sex, race, are extremely important in the epidemiological study of some diseases; for other diseases, when cases are too numerous for individual listings, the total number of cases is sufficient.

The following diseases, some of them rare in Oklahoma, are of public health significance, and are considered reportable in Oklahoma:

|                                   |                               |
|-----------------------------------|-------------------------------|
| Anthrax                           | Plague                        |
| Botulina Food Poisoning           | Pneumonia - By Type           |
| Cancer                            | Polio                         |
| Chancroid                         | Polymyositis                  |
| Chickpox                          | Paralytic                     |
| Cholera                           | Non-Paralytic                 |
| Coccidioidomycosis                | Psittacosis                   |
| Cryptosporidiosis                 | Pyoderma                      |
| Cryptosporidiosis of the Newborn  | Pyoderma Septicemia           |
| Dengue                            | Rabies                        |
| Diphtheria                        | In man                        |
| Diarrhea of the Newborn, Epidemic | In animals                    |
| Dysentery, Amebic                 | Rat-Bite Fever                |
| Dysentery, Bacillary              | Relapsing Fever               |
| Encephalitis, Infectious          | Rheumatic Fever               |
| Erysipeloid                       | Ringworm of the scalp         |
| German Measles                    | Rocky Mountain Spotted Fever  |
| Gonorrhea                         | Saltwater Poisoning           |
| Granuloma Inguinale               | Scarlet Fever                 |
| Hepatitis, Infectious             | Smallpox                      |
| Hookworm Disease                  | Staphylococcal Food Poisoning |
| Influenza                         | Septic Sore Throat            |
| Leprosy                           | Syphilis - By Stage           |
| Lymphogranuloma Venereum          | Tetanus                       |
| Malaria                           | Trench Fever                  |
| Acquired in the U.S.              | Tuberculosis                  |
| Acquired outside the U.S.         | Tuberculosis Pulmonary -      |
| Measles                           | By Stage and Activity         |
| Meningococcus Meningitis          | Tuberculosis, Other Forms -   |
| Mononucleosis, Infectious         | Specified                     |
| Mumps                             | Tularia                       |
| Ophthalmia Neonatorum             | Typhoid Fever                 |
| Paratyphoid Fever                 | Typhus Fever                  |
| Pellagra                          | Undulant Fever (Brucellosis)  |
| Pertussis                         | Virulent Agents               |
|                                   | Whooping Cough in Children    |
|                                   | Whooping Cough                |
|                                   | Yellow Fever                  |

The cooperation of all physicians, hospitals, and institutions in the State is needed to improve reporting of diseases.

*G. F. Matthews*  
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Commissioner of Health

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## PUBLIC HEALTH STATISTICS OF OKLAHOMA REPORTABLE DISEASES 1947

The sub-title for this fourth edition of Part I of Public Health Statistics has been changed from "Communicable Diseases" to "Reportable Diseases". The growing interest of the public in diseases, in addition to the communicable diseases, that are of public health significance has resulted in increased efforts on the part of physicians, hospitals, clinics, official and voluntary agencies to meet the health needs of the people of the State. It has become necessary, also, to accumulate data pertaining to these disease problems as an aid to those primarily concerned with determining the extent and nature of the problems and planning control procedures which will best serve the communities. On August 15, 1947 cancer was added to the list of reportable diseases. Statistics compiled from the cancer reports during the last four and a half months of 1947 are included in this discussion.

The bulletin is prepared and published for the use of all those who are interested in improving the health status of the people. It contains statistical information accumulated from weekly reports received from practicing physicians, hospitals, health departments and other authoritative sources during the year 1947. Although every effort is made to obtain complete and accurate reports, it is recognized that for many of the diseases reporting is far from complete. The data may be used, however, to contribute to the knowledge of the epidemiology of diseases and to show general disease trends within the State.

In order to follow the periodic and seasonal incidence of certain diseases, figures for a ten year period are included and the 1947 information is broken down by months (Tables I and III). The data by age, sex, and race may be useful in determining in what population groups the incidence of specific diseases is highest (Tables II, IV, and V). The table listing the number of reported cases for each disease by counties (Table VI) is helpful in determining in which counties or areas of the State disease problems are of greatest importance.

Insofar as possible cases have been allocated to the place where the disease was contracted. Cases reported by military installations have been tabulated separately and included in the State totals but have not been allocated to the counties. Duplication of reports has been reduced to a minimum, and the addition of cases reported by death certificates only compensates in part for under-reporting. Table I indicates to some extent the degree of under-reporting of cases. For some of the more serious communicable diseases, queries have been distributed routinely in an effort to secure missing information about cases and to encourage complete and accurate reporting.

**Table 1**  
Cases of Selected Communicable Diseases Reported by  
Death Certificates only

| Disease                            | Total<br>Number<br>Reported<br>Cases | Cases<br>Reported<br>by Death<br>Certificates | Per Cent<br>Reported<br>by Death<br>Certificates |
|------------------------------------|--------------------------------------|-----------------------------------------------|--------------------------------------------------|
| Diphtheria                         | 209                                  | 6                                             | 2.9                                              |
| Dysentery                          | 149                                  | 16                                            | 10.7                                             |
| Encephalitis, infectious           | 13                                   | 6                                             | 46.2                                             |
| Influenza                          | 25,095                               | 22                                            | 0.1                                              |
| Meningitis, meningococcus          | 67                                   | 7                                             | 10.4                                             |
| Pellagra                           | 38                                   | 24                                            | 63.2                                             |
| Pneumonia, all forms               | 2,002                                | 862                                           | 43.1                                             |
| Puerperal septicemia               | 11                                   | 11                                            | 100.0                                            |
| Rocky Mountain spotted fever       | 36                                   | 2                                             | 5.6                                              |
| Scarlet fever & septic sore throat | 551                                  | 13                                            | 2.4                                              |
| Tetanus                            | 14                                   | 8                                             | 57.1                                             |
| Tuberculosis, all forms            | 2,435                                | 300                                           | 12.3                                             |
| Typhoid and paratyphoid fevers     | 139                                  | 5                                             | 3.6                                              |
| Whooping cough                     | 1,055                                | 36                                            | 3.4                                              |

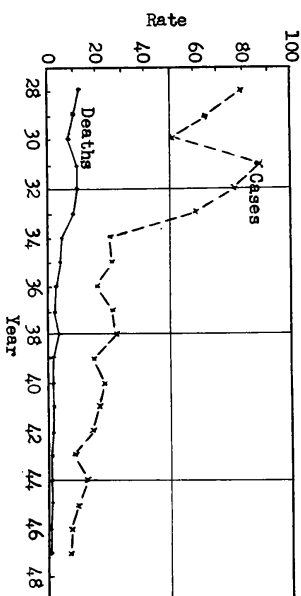
Rates per 100,000 estimated population have been computed for the three racial groups - White, Negro, and Indian - which may be used for comparison with data from other states and with previous years. The population estimate for the State as a whole was based on the added estimates computed for each county. The net increase in the population of each county as determined by the excess in resident live births over resident deaths since 1940 was added to the 1940 census enumeration figure for each county. This represented the population which would be expected in the county without migration. The estimate of the extent and direction of migration was based on the percentage change in the number of children 6-21 years of age as enumerated in the annual school census, modified by the amount of natural change in that age group brought on by varying levels of birth rates in previous years. Provisional death information for 1947 has been used for computing fatality rates by age groups for some of the diseases. Fatality rates show the number of deaths per each 100 cases reported for a specific disease.

#### Diphtheria

Although the case and death rates for diphtheria have been declining steadily, cases and deaths are still occurring each year in Oklahoma. The 209 cases reported in 1947, however, was the lowest number on record, with a correspondingly low rate of 9.0 per 100,000 population. Chart 1

shows the general trend downward for both cases and deaths. The very rapid decline in the early 1930's was probably influenced by widespread immunization programs.

**Chart 1**  
Reported Cases and Deaths from Diphtheria  
Per 100,000 Population  
Oklahoma, 1928-1947



The case fatality rate, 7.2, for 1947 was less than the rates for preceding years. The fatality rate for the population under ten years of age remained high, but showed a drop from the 1945 and 1946 rates for this group. Table 2 shows the fatality rates for 1947 by age groups.

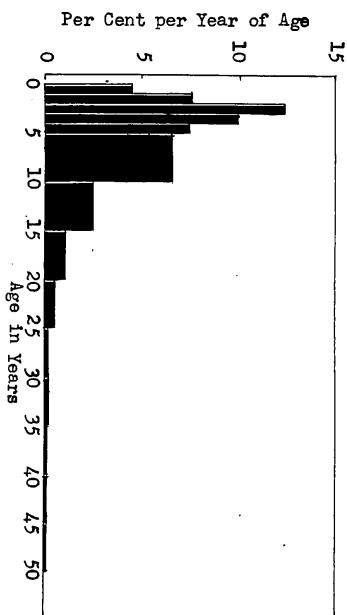
**Table 2**

Reported Cases and Deaths from Diphtheria by Age Groups

| Age Group         | Reported Cases | Deaths | Case Fatality<br>Rate |
|-------------------|----------------|--------|-----------------------|
| Total             | 209            | 15     | 7.2                   |
| Under 1 year      | 10             | 1      | 10.0                  |
| 1-4 years         | 72             | 5      | 6.9                   |
| 5-9 years         | 65             | 6      | 9.2                   |
| 10 years and over | 56             | 3      | 5.4                   |
| Unknown           | 6              | -      | -                     |

A four-year average percentage distribution of cases by age groups, illustrated in Chart 2, emphasizes the importance of immunizing children against diphtheria at an early age. More cases, about 42 per cent, occurred in children under five years of age than in any other five-year age group, and the four-year average case fatality rate was highest for that group.

Chart 2  
Percentage Distribution by Age of  
Reported Cases of Diphtheria  
Oklahoma, 1944-1947



#### Intestinal Diseases

During the year, 96 cases of typhoid fever and 43 of paratyphoid fever were reported. The combined total was an increase over the number reported for each of the three preceding years, but the increase may have been due to more thorough epidemiological investigations and a special effort to effect complete reporting, rather than to an actual increase in the incidence of the diseases. About 57 per cent of the typhoid fever cases occurred in the hot months, July, August, and September, and 79 per cent of the paratyphoid fever cases were reported during that period.

Only 46 cases of food poisoning were reported during the year. One outbreak of shapyllococcal food poisoning, with 8 cases reported, occurred in Oklahoma City in July. Another outbreak of shapyllococcal food poisoning with 6 cases was reported in September for Kay County. About 30 cases of salmoneila food poisoning occurred, following a social gathering, in Oklahoma County in December. Two other cases of unidentified food poisoning were reported in August from Sequoyah County.

Infectious diarrhea of the newborn was rarely reported; 9 cases in infants under one month of age were reported by death certificates.

#### Malaria

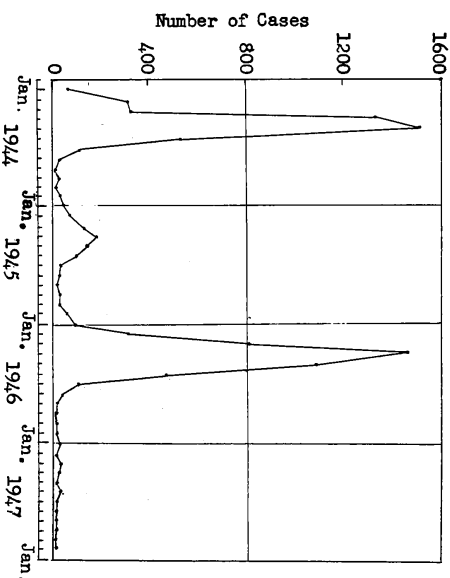
The malaria problem in Oklahoma is still concentrated in the southeastern section of the State. During 1947, 536 cases were reported for the State, including 9 cases in the military population.

Most of the cases were reported for McIntosh, Choctaw, Okmulgee, McCurtain, Lincoln, Oklahoma, Pottawatomie, Atoka, and Jefferson Counties. The remainder of the cases were somewhat scattered throughout the State, with 38 of the 77 counties reporting at least one case. In addition to the cases apparently contracted in Oklahoma, 71 cases were reported as having been acquired outside of the United States.

#### Measles

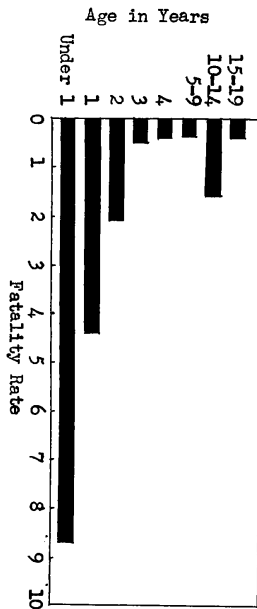
Measles cases did not reach epidemic proportions in 1947. The number of cases reported, 168, gave the lowest attack rate on record, following the epidemic in the Spring of 1946 when 4,387 cases were reported and an estimated 16,000 or more other cases were unreported. The biennial occurrence of measles epidemics and the seasonal incidence of cases for the last four years are shown on Chart 3.

Chart 3  
Reported Cases of Measles by Month  
Oklahoma, 1944-1947



About 60 per cent of the cases reported during 1947 were under five years of age. During the past four-year period, 36.1 per cent of the reported cases were under five years of age and 78.7 per cent were under ten. The fatality rate for those children under five for the same four-year period was 2.5, which was higher than for any other age group. The cases in babies under one year of age brought the highest mortality. The fatality rate for these first five years of life are compared with rates for other ages on Chart 4.

Chart 4  
Average Fatality Rate for Measles by Age, Under 20  
Oklahoma, 1944-1947



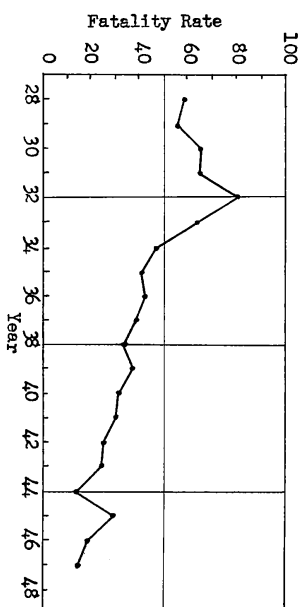
Although about 63 per cent of the measles cases reported in the civilian population during the four-year period, 1944-1947, were in the cities having a population of 2,500 or more, less than thirty per cent of the deaths occurred in the urban areas. The fatality rate, then, for the rural cases for the same period was 1.4 deaths per 100 cases, as compared to 0.3 for the urban cases. There is the possibility, of course, that the diagnosis and reporting of rural cases were far more incomplete than for the urban cases, though the registration of deaths was fairly complete for both the rural and urban population.

### Meningococcus Meningitis

During the year, 67 cases of meningococcus meningitis were reported, giving a rate of 2.9 per 100,000 estimated population. This was the lowest incidence rate for the last five years, but it was not as low as the rates for the years 1938 - 1942. The cases were somewhat scattered throughout the State, with Oklahoma County reporting only eight cases, Tulsa and Stephens five each, Blaine and Garvin four each, no other county reported more than three cases.

The case fatality rate of 14.9 for meningococcus meningitis was the lowest on record, with the exception of the 1944 rate, 13.7. During the past twenty years for which records are available, the fatality rate has shown a considerable drop. Chart 5 indicates the general downward trend of deaths from cases of the disease.

Chart 5  
Fatality Rates for Meningococcus Meningitis  
Oklahoma, 1928-1947



The fatality rates were increasingly higher for the older age groups as shown in Table 3. The four-year average fatality rates, 1944-1947, show somewhat the same trend. The percentage distributions of reported cases and deaths, however, show a higher proportion of the cases and deaths occurred in the younger age groups; these trends are compared in Chart 6.

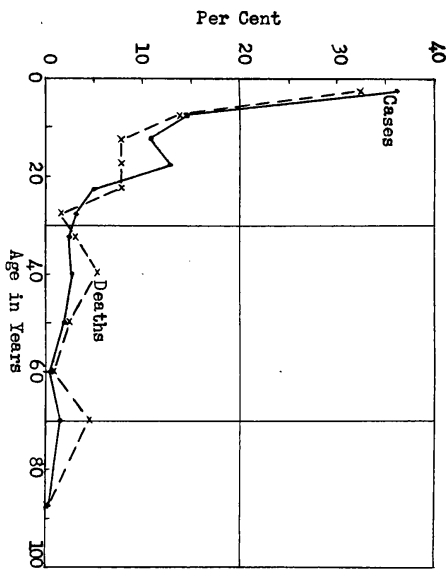
Table 3

Reported Cases and Deaths from Meningococcus Meningitis by Age Groups

| Age Group         | Reported Cases | Deaths | Case Fatality Rate |
|-------------------|----------------|--------|--------------------|
| Total             | 67             | 10     | 14.9               |
| Under 1 year      | 10             | -      | -                  |
| 1-4 years         | 15             | 2      | 13.3               |
| 5-9 years         | 15             | 3      | 20.0               |
| 10-19 years       | 14             | -      | -                  |
| 20-29 years       | 6              | 2      | 33.3               |
| 30 years and over | 5              | 3      | 60.0               |
| Unknown           | 2              | -      | -                  |

Chart 6

Percentage Distribution by Age of Reported Cases and Deaths from Meningococcus Meningitis Oklahoma, 1944-1947



### Pneumonia and Influenza

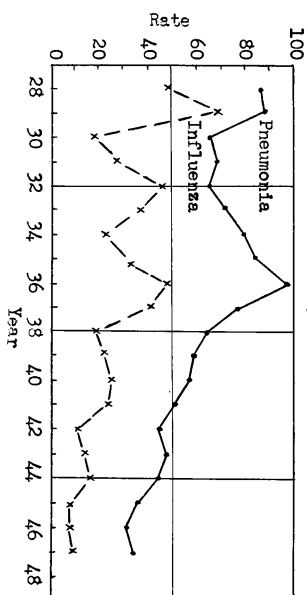
The number of reported cases of influenza, 25,095, in 1947 was almost four times higher than in the previous year when only 6,585 cases were reported. This was the largest number of cases reported in any one year since 1929 when 27,310 cases were reported in the State, and may in part have been caused by the high rate of influenza infection. The reporting of cases was stimulated somewhat in March of 1947 by special requests for information regarding the incidence of influenza issued from state and local health officials.

Pneumonia, too, showed a 17 per cent increase in the number of reported cases over the 1946 figure though the number of cases, 2,002, was not excessively high in comparison to data for some of the previous years.

Although the reporting of cases of influenza and pneumonia is believed to be too incomplete to furnish any tangible evidence of control of the number of cases, the death rates for the two respiratory infections have declined. This decrease has been especially evident since 1938 as shown on Chart 7.

Chart 7

Deaths from Pneumonia and Influenza Per 100,000 Population Oklahoma, 1928-1947



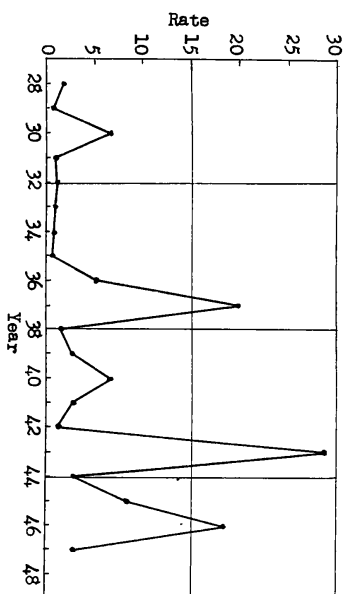
Of the 2,002 cases of pneumonia reported during the year, 355 or 16.7 per cent were under one year of age. Mortality for this age group was very high; 199, or 25.3 per cent, of the 788 deaths assigned to pneumonia were under one year of age. Not overlooking the fact that reporting was incomplete, the fatality rate for the infants based on the reported cases of pneumonia was 56.1.



# Poliomyelitis

The year 1947 was a low one for poliomyelitis. According to the records available since 1928, the general pattern of poliomyelitis epidemics has been about every three years, 1946 being the last peak year. Chart 8 shows the periodic occurrence of poliomyelitis in Oklahoma. The five consecutive low years, 1931-1935, are unexplained, but reporting of cases in the earlier years, prior to 1943, was believed to be incomplete. The death rate for 1933 was higher than for the two years preceding and the two years following, suggesting that the attack rate for that year may have been higher than shown by the records of reported cases.

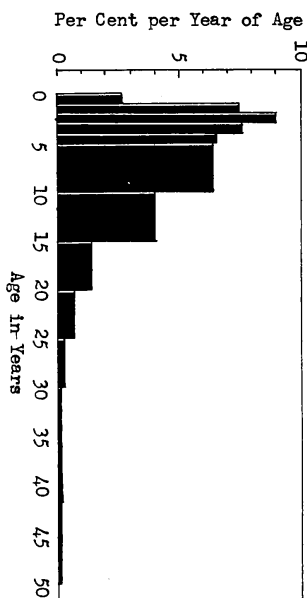
Chart 8  
Reported Cases of Poliomyelitis  
Per 100,000 Population  
Oklahoma, 1928-1947



About 86 per cent of the cases during the last four years, 1944-1947, occurred in children under fifteen years of age. The highest percentage of cases for any five-year age group was for those under five years of age, 33 per cent. The population age 5-9 suffered almost as high an attack rate, with 236 cases, 32.2 per cent of the reported cases, during the four-year period. Graphic presentation of the cases by age is shown in Chart 9.

# Chart 9

Percentage Distribution of Reported Cases  
of Poliomyelitis by Age  
Oklahoma, 1944 - 1947



The fatality rate for the four-year period was 7.4. The 10-14 age group experienced the greatest loss, with 12.8 per cent of the cases in that age group terminating in death. Table 4 shows the fatality rate by five-year age groups for the cases reported during 1944-1947.

Table 4  
Reported Cases and Deaths from Poliomyelitis  
by Age Groups  
1944-1947

| Age Group         | Reported Cases | Deaths | Case Fatality Rate |
|-------------------|----------------|--------|--------------------|
| Total             | 747            | 55     | 7.4                |
| Under 1 year      | 20             | -      | -                  |
| 1-4 years         | 225            | 5      | 2.2                |
| 5-9 years         | 236            | 22     | 9.3                |
| 10-14 years       | 148            | 19     | 12.8               |
| 15 years and over | 104            | 9      | 8.7                |
| Unknown           | 14             | -      | -                  |

### Respiratory Streptococcal Infection

The number of reported cases of scarlet fever, 353, was the lowest on record, with a correspondingly low rate of 15.3 as compared to the previous low rate of 22.9 per 100,000 population in 1946. Septic sore throat, on the other hand, showed a slight increase over the preceding year from 180 cases to 198. This figure, however, was in line with the data for the last four years when the number of cases fell below two hundred.

For the first time, according to available records, no deaths were assigned to scarlet fever. The fatality rate has been dropping over the last twenty years as shown by the decrease in these five-year average rates:

| Period      | Rate |
|-------------|------|
| 1928 - 1932 | 3.2  |
| 1933 - 1937 | 2.6  |
| 1938 - 1942 | 1.0  |
| 1943 - 1947 | 0.6  |

The fatality rate for septic sore throat declined from 10.3 in 1945 and 10.6 in 1946 to 6.1 in 1947. The three-year average rate was 8.9. The fatality rate for both diseases during the past three years was higher for cases under 5 years of age than for any other age group.

Table 5

### Reported Cases and Deaths from Respiratory Streptococcal Infections by Age Groups 1945 - 1947

| Age Group         | Scarlet Fever  |        |               | Septic Sore Throat |        |               |
|-------------------|----------------|--------|---------------|--------------------|--------|---------------|
|                   | Reported Cases | Deaths | Fatality Rate | Reported Cases     | Deaths | Fatality Rate |
| Total             | 1,902          | 13     | 0.7           | 572                | 51     | 8.9           |
| Under 1 year      | 30             | 1      | 3.3           | 12                 | 6      | 50.0          |
| 1-4 years         | 479            | 5      | 1.0           | 94                 | 16     | 17.0          |
| 5-9 years         | 769            | 4      | 0.5           | 85                 | 5      | 5.9           |
| 10 years and over | 454            | 3      | 0.7           | 315                | 24     | 7.6           |
| Unknown           | 190            | -      | -             | 66                 | -      | -             |

The incidence of scarlet fever was higher in the 5-9 age group than for any other five-year group, with 44 per cent of the reported cases in the last three years in that age group. Although the incidence for both diseases declined with age, septic sore throat showed a higher percentage of cases in the older age groups than scarlet fever; 32 per cent of the septic sore throat cases were over 25 years of age as compared to 3 per cent of the scarlet fever cases.

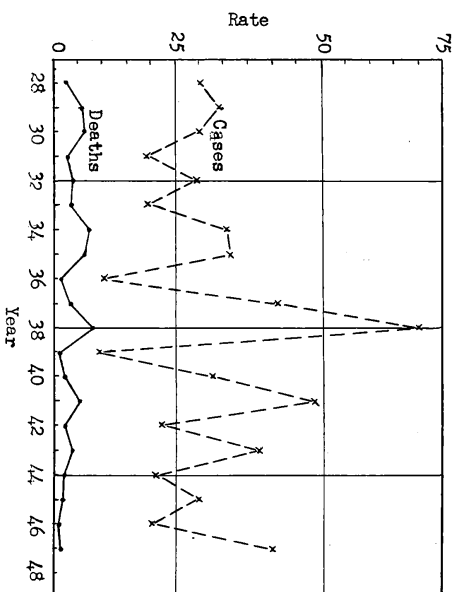
### Whooping Cough

The attack rate for whooping cough has shown no appreciable decline over the last twenty years, but seems to have followed a rather irregular pattern with peak years alternating with low years. The death rate, however, has shown a drop in the last ten years; the average rate for the last five years was lower than for the preceding five-year period. The case and death trends are shown on Chart 10. The five-year average death rates per 100,000 estimated population were:

| Period      | Rate |
|-------------|------|
| 1928 - 1932 | 4.5  |
| 1933 - 1937 | 4.6  |
| 1938 - 1942 | 3.9  |
| 1943 - 1947 | 2.2  |

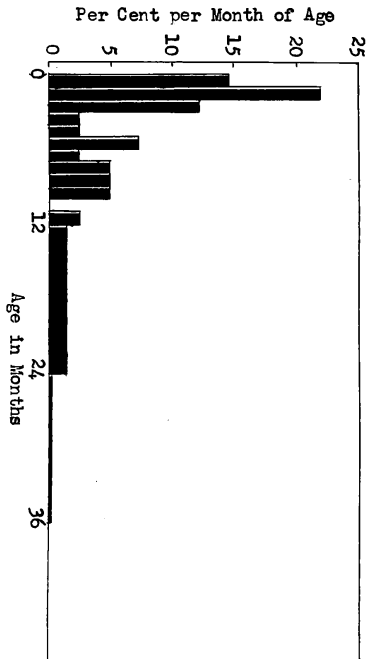
Chart 10

### Reported Cases and Deaths from Whooping Cough per 100,000 Population Oklahoma, 1928 - 1947



Whooping cough still remains one of the most important causes of death among infants under one year of age. In 1947, 33 of the 41 deaths from whooping cough, 80.5 per cent, occurred in babies. This was the largest number of deaths from any of the infectious diseases, with the exception of the pneumonias in the population under one. The remaining deaths occurred in children who had not reached their third birthday. Chart 11 shows the percentage distribution of the deaths by age in months.

Chart 11  
Percentage Distribution of Deaths from Whooping Cough  
by Age in Months  
Oklahoma, 1947



About 25 per cent of the reported cases were in infants under one, and the case fatality for that group was 14.6 as compared to 3.9 for the total cases. Approximately 68 per cent of the cases were under 5 years of age, and another 28 per cent occurred in the 5-9 age group. The percentage distribution of the reported cases by age is shown in Chart 12.

Chart 12  
Percentage Distribution of Reported Cases of  
Whooping Cough by Age  
Oklahoma, 1947

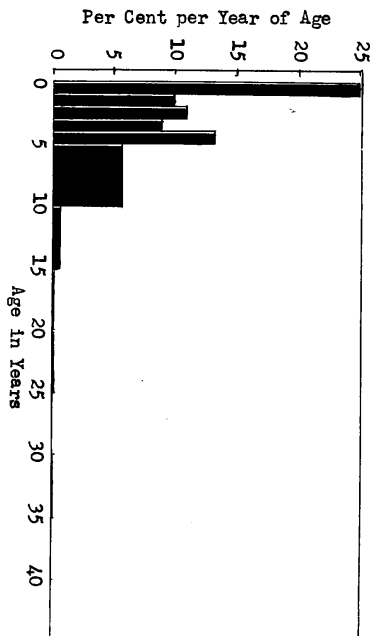


Table 6  
Reported Cases and Deaths from Whooping Cough  
by Age Group

| Age Group         | Reported Cases | Deaths | Case Fatality Rate |
|-------------------|----------------|--------|--------------------|
| Total             | 1,055          | 41     | 3.9                |
| Under 1 year      | 226            | 33     | 14.6               |
| 1-4 years         | 388            | 8      | 2.1                |
| 5-9 years         | 255            | -      | -                  |
| 10 years and over | 40             | -      | -                  |
| Unknown           | 146            | -      | -                  |

### Other Acute Communicable Diseases

During the year, 36 cases of Rocky Mountain spotted fever were reported in Oklahoma. Only two of the cases died. All but four of the cases occurred in the eastern half of the State, with LeFlore County reporting 11 cases, the largest number for any one county. Muskogee County had three cases, and Delaware, Adair, Creek, Oklahoma, Pontotoc and Kiowa reported two each. The other reporting counties recorded only one case each.

Only four cases of smallpox were reported during the year. This was the lowest number and rate, 0.2 per 100,000 population, on record. Twenty years ago in 1928, a total of 3,347 cases, with a rate of 143.4 per 100,000 estimated population, were reported. Two of the 1947 cases occurred in Lincoln, one in Muskogee, and one in Tillman Counties.

The 130 tularemia cases reported was an increase over the 86 cases reported the previous year. The rate of 5.6 cases per 100,000 population is the highest on record. For 28 of the cases, no reports were received other than the positive laboratory reports from the State Department of Health Laboratory.

Reported cases of undulant fever totaled 89 for the year, giving a rate of 3.8 cases per 100,000 estimated population. Kiowa County reported 25 cases, which was the largest number for any one county. These did not occur during one outbreak, however, but were somewhat scattered throughout the year with small outbreaks in May, September, and October. Tulsa County reported nine cases, Garfield and Oklahoma six each, Grady and Kay five each. No other county reported more than three cases for the year.

Four cases of erysipelas were reported during the year -- three in Oklahoma County and one in Grady County. One case of relapsing fever was reported in Caddo County; two cases of syphilis, one in Bryan County and one in Ottawa County were recorded; and one case of infectious hepatitis in Jackson County was reported.

### Cancer

With the addition of cancer to the list of reportable diseases, effective August 15, 1947, physicians throughout the State were requested to report all cases of malignant neoplasms in their practice and each new case as it was diagnosed.

During the period August 15 through December 31, 1947, 866 cases of malignancy were reported. When these cases were distributed according to the primary anatomical site of the malignancy, 176, or 20.3 per cent of the total, had the primary site on the skin. The next largest group of 158, or 18.2 per cent, had the primary site in the digestive organs and

peritoneum. Cancer of the uterus with 134 cases and cancer of the breast with 122, together comprised 28.4 per cent of the total. Only 9 cases, one per cent, had the primary site in the brain or nervous system. Table 7 shows the distribution of the reported cases by primary site of lesion.

Table 7

| Reported Cases of Cancer, by Primary Site of Lesion<br>August 15 - December 31, 1947 |              |          |
|--------------------------------------------------------------------------------------|--------------|----------|
| Primary Site                                                                         | No. of Cases | Per Cent |
| Total                                                                                | 866          | 100.0    |
| Buccal cavity and pharynx                                                            | 68           | 7.9      |
| Digestive organs and peritoneum                                                      | 158          | 18.2     |
| Respiratory system                                                                   | 29           | 3.3      |
| Uterus                                                                               | 134          | 15.5     |
| Other female genital organs                                                          | 14           | 1.6      |
| Breast                                                                               | 112          | 12.9     |
| Male genital organs                                                                  | 55           | 6.4      |
| Urinary organs                                                                       | 17           | 2.0      |
| Skin (except vulva, scrotum, and anus)                                               | 176          | 20.3     |
| Brain and other parts of central nervous system                                      | 9            | 1.0      |
| Other and unspecified organs                                                         | 94           | 10.9     |

A biopsy was performed in 327 of the 866 cases; reports indicated that no biopsy was performed for 282 cases; and no statement as to biopsy was made for the remaining 247 cases.

Reports showed that in 266, or 47.7 per cent, of the cases metastasis had occurred; 292, or 52.3 per cent, reported no metastasis. The remaining 308 case reports did not specify whether metastasis had occurred or not. Metastasis was reported for 72.9 per cent of the cases having breast cancer and for 72.7 per cent of the cases having malignancy of other female genital organs. Only five per cent of the skin cancers metastasized.

The annual rate of occurrence in the white population, based on data for four and one-half months, was 104.3 per 100,000 estimated population, while that for the non-white population was only 58.2. About 56 per cent of the total cases were female and 44 per cent male. There was a noticeably higher percentage of males than females who had the primary site of the cancer in the buccal cavity and pharynx, respiratory system, skin. Approximately 51 per cent of the cases of malignancy in females had the primary site in the uterus or breast.

Table 8

Reported Cases of Cancer by Race and Sex, and  
Rate per 100,000 Estimated Population by Race  
August 15 - December 31, 1947

| Race      | Total  |       | Male | Female |
|-----------|--------|-------|------|--------|
|           | Number | Rate  |      |        |
| Total     | 866    | 99.9  | 384  | 482    |
| White     | 817    | 104.3 | 367  | 450    |
| Non-white | 49     | 58.2  | 17   | 32     |

The age group having the greatest number of reported cases of cancer was 65-74 years, with 213 cases reported. Only 6 cases were reported for persons under 15 years of age; the number increased with each age group to the 213 peak at 65-74 years and then dropped to 113 cases for persons 75 years and over, probably because of the smaller population in that age group.

The 866 cases were reported from 73 of the 77 counties. No cases were reported from Beaver, Cimarron, Cotton, or Pushmataha Counties. The greatest number of cases, 155, was reported for Oklahoma County; 141 were residents of Oklahoma City. Tulsa County reported the next largest number, 72 for the entire county, of which 65 were residents of the city of Tulsa. Pittsburg County reported 38 cases, Cleveland and Kay Counties reported 26 each.

#### Tuberculosis

The number of reported cases of tuberculosis remained high in 1947, as extensive case finding programs were continued. During the year 2,435 cases were reported for the first time, giving a rate of 105.3 per 100,000 estimated population. The morbidity rate for the Indians and Negroes, 486.3 and 143.8, respectively, were extremely high as compared to 89.3 for the White population.

Of the 2,373 respiratory cases, 751, or 31.6 per cent, were arrested, inactive or apparently cured; 619, or 26.1 per cent, were unqualified as to stage and activity. Of the 1,003 active cases reported, 38.5 per cent were far advanced. Table 9 shows the distribution of the reported cases by type, stage and activity, and race. The percentage of the active cases in the Indian group that were far advanced was higher than for either of the other racial groups: 43.9 per cent for Indians, 38.0 for Whites, and 33.7 for Negroes. The White active cases reported for the first time included only a slightly higher percentage of minimal cases than the Negro and Indian groups, 20.6, 19.8, and 19.4, respectively.

Table 9

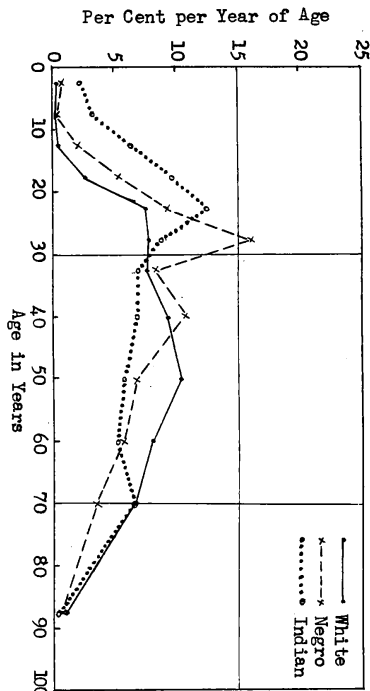
Reported Cases of Pulmonary Tuberculosis by Type,  
Stage and Activity, and by Race

| Type<br>Stage and Activity | Total | White | Negro | Indian | Unknown |
|----------------------------|-------|-------|-------|--------|---------|
| Tuberculosis of            |       |       |       |        |         |
| Respiratory system:        | 2,373 | 1,825 | 227   | 292    | 29      |
| Minimal, active            | 205   | 155   | 20    | 27     | 3       |
| Mod. Adv., active          | 412   | 311   | 47    | 51     | 3       |
| Far Adv., active           | 386   | 286   | 34    | 61     | 3       |
| Inactive (any stage)       | 58    | 47    | 6     | 2      | 5       |
| Arrested (any stage)       | 672   | 554   | 46    | 67     | 5       |
| Ap. cured (any stage)      | 21    | 20    | -     | 1      | -       |
| Unqualified                | 619   | 452   | 74    | 83     | 10      |
| Tuberculosis of:           | 62    | 39    | 5     | 15     | 3       |
| Meninges                   | 14    | 8     | -     | 4      | 2       |
| Intestines and peritoneum  | 9     | 4     | 3     | 2      | -       |
| Vertebral column           | 8     | 8     | -     | -      | -       |
| Bones and joints           | 9     | 3     | 1     | 5      | -       |
| Skin                       | -     | -     | -     | -      | -       |
| Lymphatic system           | 1     | 1     | -     | -      | -       |
| Genito-urinary system      | 6     | 4     | -     | 2      | -       |
| Other organs               | -     | -     | -     | -      | -       |
| Miliary                    | 15    | 11    | 1     | 2      | 1       |

Almost half of the cases of non-pulmonary tuberculosis were either tuberculosis of the meninges or miliary tuberculosis, 24.0 per cent and 22.4 per cent, respectively, for the past three years. Approximately 63 per cent of these non-respiratory cases of tuberculosis were in the White population and 24 per cent were Indian in 1947.

In general, the new cases reported were in younger age groups for Indians than for the other two races, and the Negroes were younger than the White cases. Comparison of the percentage distribution by age of the reported cases is shown in Chart 13. About 49 per cent of the reported cases in the Indian group were under thirty-five years of age as compared to 43 per cent for the Negro group and 27 per cent for the White cases.

Chart 13  
Percentage Distribution by Age of Reported Cases  
of Tuberculosis by Race  
Oklahoma, 1947



The percentage of cases reported by practicing physicians and county health departments may be some indication of earlier reporting of cases at the time of diagnosis. The number first reported by death certificates, however, remains high, with 12.3 per cent of the cases reported from this source. Table 10 shows the distribution of reported cases according to the source of the first report.

Table 10  
Reported Cases of Tuberculosis among Civilians  
by Source of Report

| Source of Report                 | Number | Per Cent |
|----------------------------------|--------|----------|
| Total cases reported             | 2,435  | 100.1    |
| Practising physicians            | 155    | 6.4      |
| County health departments        | 910    | 37.4     |
| Tuberculosis sanatoria           | 338    | 13.9     |
| Mental institutions              | 65     | 2.7      |
| Other hospitals and institutions | 320    | 13.1     |
| Other public agencies            | 214    | 8.8      |
| Death certificates               | 300    | 12.3     |
| Positive laboratory reports      | 38     | 1.6      |
| Sources out of state             | 85     | 3.5      |
| Other                            | 10     | 0.4      |

## Veneral Disease

During the year, 7,177 cases of syphilis were reported for the first time. Of these 3,828 were white, giving a rate of 183.3 per 100,000 white population. The Negro rate was 1,649.2 per 100,000 Negro population and the Indian rate was 286.7. The cases were fairly evenly distributed between the two sexes, with 47 per cent male and 53 per cent female.

Gonorrhea cases totaled 9,335, with a rate of 236.5 for the white, 2,387.0 for the Negro, and 288.3 for Indians. The male cases outnumbered the female, with 58 per cent of the cases in that group. About 78 per cent of the chancroid, granuloma inguinale and lymphogranuloma cases were male.

The distribution of the reported cases of venereal diseases by stage and sex is shown in Table 11.

Table 11  
Reported Cases of Venereal Diseases by Stage and Disease, by Sex

| Disease and Stage       | Total | Male  | Female | Unknown |
|-------------------------|-------|-------|--------|---------|
| Gonorrhea               | 9,335 | 5,386 | 3,924  | 25      |
| Syphilis, all stages    | 7,177 | 3,348 | 3,815  | 14      |
| Primary and secondary   | 1,446 | 818   | 628    | -       |
| Early latent            | 1,913 | 695   | 1,216  | 2       |
| Late and late latent    | 2,984 | 1,439 | 1,539  | 6       |
| Congenital              | 317   | 127   | 190    | -       |
| Not stated              | 517   | 269   | 242    | 6       |
| Ophthalmia neonatorum   | 6     | 5     | 1      | -       |
| Other venereal diseases | 125   | 98    | 27     | -       |
| Chancroid               | 97    | 78    | 19     | -       |
| Granuloma inguinale     | 12    | 7     | 5      | -       |
| Lymphogranuloma         | 16    | 13    | 3      | -       |

Of the total number of syphilis cases with the stage specified, only 21.7 per cent were primary or secondary cases, 28.7 per cent were early latent, and 44.8 per cent were diagnosed late, and late latent, cardiovascular, or neuro syphilis. About 4.8 per cent of the cases were congenital. The late and late latent cases were largely in older age groups, while the early and secondary cases were younger, as shown by Table 12.

Table 12

Reported Cases of Syphilis for Specified Stages, by Age Group

| <u>Age Group</u>               | <u>Primary and Secondary</u> |                 | <u>Early Latent</u> |                 | <u>Late Latent</u> |                 |
|--------------------------------|------------------------------|-----------------|---------------------|-----------------|--------------------|-----------------|
|                                | <u>Number</u>                | <u>Per Cent</u> | <u>Number</u>       | <u>Per Cent</u> | <u>Number</u>      | <u>Per Cent</u> |
| Total cases with age specified | 1,382                        | 100.0           | 1,775               | 99.9            | 2,623              | 99.9            |
| Under 20 years                 | 322                          | 23.3            | 304                 | 17.1            | 30                 | 1.1             |
| 20-24 years                    | 524                          | 37.9            | 531                 | 29.9            | 95                 | 3.6             |
| 25-29 years                    | 243                          | 17.6            | 359                 | 20.2            | 215                | 8.2             |
| 30-34 years                    | 124                          | 9.0             | 233                 | 13.1            | 334                | 12.7            |
| 35-44 years                    | 118                          | 8.5             | 252                 | 14.2            | 858                | 32.7            |
| 45 years & over                | 51                           | 3.7             | 96                  | 5.4             | 1,091              | 41.6            |

Symbols Used in Tables

- Number or rate is zero
- .. Item not applicable
- 0.0 Rate is more than 0 but less than 0.5





TABLE IV. REPORTED CASES OF SELECTED COMMUNICABLE DISEASES BY SEX AND RACE,  
OKLAHOMA, 1947

| Disease                      | ALL CASES |        |         | WHITE |        |         | NEGRO |        |         | INDIAN |        |         | UNKNOWN |        |         |
|------------------------------|-----------|--------|---------|-------|--------|---------|-------|--------|---------|--------|--------|---------|---------|--------|---------|
|                              | Male      | Female | Unknown | Male  | Female | Unknown | Male  | Female | Unknown | Male   | Female | Unknown | Male    | Female | Unknown |
| Anthrax in man               | 1         | -      | -       | 1     | -      | -       | -     | -      | -       | -      | -      | -       | -       | -      | -       |
| Chickenpox                   | 363       | 364    | 239     | 326   | 341    | 14      | 4     | 8      | 3       | 11     | 5      | -       | 18      | 14     | 222     |
| Diphtheria                   | 101       | 105    | 3       | 92    | 93     | 1       | 3     | 8      | -       | 4      | 2      | -       | 2       | 2      | 2       |
| Dysentery                    | 62        | 54     | 33      | 53    | 45     | 4       | 4     | 8      | 3       | 2      | -      | 20      | 3       | 1      | 6       |
| Encephalitis, infectious     | 9         | 4      | -       | 9     | 4      | -       | -     | -      | -       | -      | -      | -       | -       | -      | -       |
| German measles               | 31        | 26     | 14      | 30    | 23     | -       | 1     | 2      | -       | -      | -      | -       | -       | 1      | 14      |
| Gonorrhea                    | 5,386     | 3,924  | 25      | 2,888 | 2,045  | 5       | 2,308 | 1,542  | -       | 72     | 110    | -       | 118     | 227    | 20      |
| Hookworm                     | 23        | 37     | 12      | 21    | 36     | -       | -     | -      | -       | 1      | 1      | -       | 1       | -      | -       |
| Influenza                    | 1,950     | 1,991  | 21,154  | 1,531 | 1,469  | 966     | 87    | 130    | 175     | 266    | 350    | 561     | 66      | 42     | 19,452  |
| Malaria                      | 114       | 48     | 374     | 75    | 23     | 97      | 4     | 1      | 18      | 8      | 5      | 171     | 27      | 19     | 88      |
| Measles                      | 79        | 87     | 2       | 69    | 72     | -       | -     | -      | -       | 9      | 15     | -       | 1       | -      | 2       |
| Meningitis, meningococcus    | 37        | 27     | 3       | 34    | 25     | 3       | 2     | 2      | -       | 1      | -      | -       | -       | -      | -       |
| Mumps                        | 369       | 250    | 41      | 327   | 233    | -       | 9     | 6      | -       | 9      | 3      | -       | 24      | 8      | 41      |
| Ophthalmia neonatorum        | 5         | 1      | -       | 2     | 1      | -       | 3     | -      | -       | -      | -      | -       | -       | -      | -       |
| Pellagra                     | 6         | 29     | 3       | 5     | 24     | 3       | 1     | 4      | -       | -      | -      | -       | -       | -      | -       |
| Pneumonia, all forms         | 1,017     | 857    | 128     | 817   | 676    | 13      | 103   | 97     | 3       | 94     | 72     | 2       | 3       | 12     | 110     |
| Polioomyelitis, acute        | 33        | 26     | -       | 29    | 25     | -       | 1     | 1      | -       | 2      | -      | -       | 1       | -      | -       |
| Puerperal septicemia         | -         | 11     | -       | -     | 7      | -       | -     | 4      | -       | -      | -      | -       | -       | -      | -       |
| Rocky Mountain spotted fever | 26        | 10     | -       | 20    | 10     | -       | -     | -      | -       | 1      | -      | -       | 5       | -      | -       |
| Scarlet fever                | 161       | 185    | 7       | 157   | 182    | 5       | 3     | 2      | -       | -      | -      | -       | 1       | 1      | 2       |
| Septic sore throat           | 80        | 97     | 21      | 75    | 88     | 13      | 2     | 8      | -       | 3      | 1      | -       | -       | -      | 8       |
| Smallpox                     | -         | 4      | -       | -     | 3      | -       | -     | -      | -       | -      | -      | -       | -       | -      | -       |
| Syphilis                     | 3,348     | 3,815  | 14      | 1,916 | 1,911  | 1       | 1,132 | 1,528  | -       | 82     | 99     | -       | 218     | 277    | 13      |
| Tetanus                      | 9         | 5      | -       | 6     | 4      | -       | 3     | -      | -       | -      | 1      | -       | -       | -      | -       |
| Trachoma                     | 79        | 120    | -       | 44    | 46     | -       | 2     | 7      | -       | 31     | 64     | -       | 2       | 3      | -       |
| Tuberculosis, respiratory    | 1,339     | 1,031  | 3       | 1,076 | 749    | -       | 109   | 118    | -       | 136    | 156    | -       | 18      | 8      | 3       |
| Tuberculosis, other forms    | 37        | 25     | -       | 25    | 14     | -       | 5     | -      | -       | 6      | 9      | -       | -       | -      | -       |
| Tularemia                    | 76        | 47     | 7       | 46    | 22     | -       | 2     | 2      | -       | 6      | 3      | -       | 22      | 20     | 7       |
| Typhoid, paratyphoid fevers  | 76        | 63     | -       | 65    | 60     | -       | 3     | 1      | -       | 4      | 2      | -       | 4       | -      | -       |
| Typhus fever                 | 3         | 1      | -       | 2     | 1      | -       | -     | -      | -       | -      | -      | -       | 1       | -      | -       |
| Undulant fever               | 47        | 42     | -       | 44    | 38     | -       | 2     | -      | -       | 1      | 1      | -       | -       | 3      | -       |
| Veneral diseases, other      | 98        | 27     | -       | 31    | 5      | -       | 99    | 19     | -       | 2      | 2      | -       | 8       | 1      | -       |
| Whooping cough               | 402       | 521    | 132     | 365   | 454    | 30      | 18    | 26     | 3       | 17     | 38     | 3       | 2       | 3      | 96      |

TABLE V. REPORTED CASES OF SELECTED COMMUNICABLE DISEASES BY AGE,  
OKLAHOMA, 1947

| Disease                      | All Ages | Age in Years |     |     |    |     |     |       |       |       |       |       |       |       |       |       |           |
|------------------------------|----------|--------------|-----|-----|----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
|                              |          | Under 1 Year | 1   | 2   | 3  | 4   | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75 & Over |
| Anthrax in man               | 1        | -            | -   | -   | -  | -   | -   | -     | -     | -     | -     | -     | -     | -     | -     | -     | 1         |
| Chickenpox                   | 966      | 24           | 21  | 45  | 62 | 57  | 363 | 68    | 17    | 13    | 4     | -     | 8     | 2     | 1     | -     | 280       |
| Diphtheria                   | 209      | 10           | 16  | 19  | 21 | 16  | 65  | 29    | 9     | 7     | 3     | 7     | -     | 1     | -     | -     | 6         |
| Dysentery                    | 149      | 10           | 3   | 1   | 1  | 3   | 6   | 10    | 7     | 9     | 3     | 5     | 15    | 13    | 4     | 8     | 46        |
| Encephalitis, infectious     | 13       | -            | 1   | -   | 1  | 1   | 2   | -     | -     | -     | 1     | -     | 2     | 2     | 2     | -     | 1         |
| German measles               | 71       | 7            | 6   | 2   | 4  | 3   | 20  | 9     | 1     | 1     | -     | -     | -     | -     | -     | -     | 18        |
| Gonorrhea                    | 9,335    | 6            | 2   | 9   | 6  | 10  | 47  | 65    | 2,113 | 3,743 | 1,687 | 710   | 553   | 147   | 36    | 14    | 4         |
| Hookworm                     | 72       | -            | -   | -   | -  | 2   | 13  | 15    | 9     | 8     | 2     | 5     | 3     | -     | 1     | 1     | 13        |
| Influenza                    | 25,095   | 62           | 114 | 127 | 94 | 88  | 378 | 372   | 258   | 222   | 203   | 213   | 388   | 326   | 269   | 195   | 90        |
| Malaria                      | 536      | -            | 2   | 1   | 2  | 3   | 11  | 6     | 7     | 19    | 14    | 8     | 15    | 12    | 7     | 4     | 5         |
| Measles                      | 168      | 32           | 24  | 17  | 11 | 13  | 27  | 14    | 18    | 2     | 2     | -     | 1     | 1     | -     | -     | 6         |
| Meningitis, meningococcus    | 67       | 10           | 5   | 5   | 3  | 2   | 15  | 9     | 5     | 3     | 3     | 2     | 1     | 2     | -     | -     | 2         |
| Mumps                        | 660      | 2            | 11  | 16  | 25 | 26  | 162 | 100   | 66    | 41    | 37    | 20    | 40    | 13    | 5     | -     | 96        |
| Ophthalmia neonatorum        | 6        | -            | -   | -   | -  | -   | -   | -     | -     | -     | -     | -     | -     | -     | -     | -     | -         |
| Pellagra                     | 38       | -            | -   | -   | -  | -   | -   | -     | -     | -     | -     | -     | 1     | 4     | 3     | 17    | 10        |
| Pneumonia, all forms         | 2,002    | 355          | 86  | 69  | 48 | 34  | 92  | 53    | 39    | 55    | 50    | 38    | 94    | 109   | 119   | 215   | 355       |
| Polioomyelitis, acute        | 59       | 1            | 5   | 6   | 8  | 1   | 16  | 6     | 3     | 4     | 3     | 3     | 1     | 1     | -     | -     | 1         |
| Puerperal septicemia         | 11       | -            | -   | -   | -  | -   | -   | -     | 1     | 2     | 3     | 3     | 2     | -     | -     | -     | -         |
| Rocky Mountain spotted fever | 36       | -            | -   | -   | 1  | 4   | 5   | 7     | 1     | 1     | 1     | 3     | 6     | 1     | -     | -     | 5         |
| Scarlet fever                | 353      | 3            | 15  | 22  | 46 | 32  | 159 | 42    | 6     | 2     | 3     | 2     | 2     | -     | 2     | -     | 17        |
| Septic sore throat           | 198      | 4            | 6   | 9   | 6  | 5   | 40  | 22    | 17    | 17    | 13    | 10    | 13    | 5     | 1     | 1     | 28        |
| Smallpox                     | 4        | -            | 1   | -   | -  | -   | -   | -     | -     | -     | -     | 2     | -     | 1     | -     | -     | -         |
| Syphilis                     | 7,177    | 42           | 6   | 7   | 3  | 6   | 45  | 99    | 716   | 1,246 | 891   | 752   | 1,328 | 770   | 354   | 161   | 32        |
| Tetanus                      | 14       | 2            | 1   | -   | 1  | 2   | 2   | 1     | -     | -     | -     | -     | 3     | -     | 1     | -     | -         |
| Trachoma                     | 199      | -            | 2   | 1   | 2  | 8   | 65  | 60    | 16    | 5     | 2     | 2     | 7     | 2     | 5     | -     | 20        |
| Tuberculosis, respiratory    | 2,373    | 3            | 3   | 2   | 1  | 4   | 15  | 32    | 89    | 194   | 206   | 176   | 409   | 440   | 351   | 292   | 111       |
| Tuberculosis, other forms    | 62       | 5            | 4   | 2   | -  | -   | 2   | 1     | 3     | 2     | 6     | 6     | 10    | 5     | 2     | 3     | 45        |
| Tularemia                    | 130      | -            | -   | -   | -  | -   | 2   | 3     | -     | 8     | 8     | 12    | 21    | 6     | 9     | 5     | 56        |
| Typhoid, paratyphoid fevers  | 139      | 1            | 4   | 1   | 2  | 6   | 31  | 10    | 6     | 7     | 8     | 7     | 17    | 10    | 1     | 4     | 22        |
| Typhus fever                 | 4        | -            | -   | -   | -  | -   | -   | -     | -     | -     | -     | 1     | -     | 1     | -     | -     | -         |
| Undulant fever               | 89       | -            | -   | -   | -  | -   | 1   | 3     | 3     | 2     | 10    | 12    | 23    | 20    | 5     | -     | 9         |
| Veneral diseases, other      | 125      | -            | -   | -   | -  | -   | -   | -     | 31    | 47    | 25    | 8     | 6     | 3     | 1     | -     | 1         |
| Whooping cough               | 1,055    | 226          | 89  | 99  | 80 | 120 | 255 | 26    | 4     | 4     | 1     | 2     | 1     | 1     | -     | 1     | 146       |

TABLE VI. REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTY, OKLAHOMA, 1947

| Disease                      | State  | Adair | Altamont | Ashe | Bailey | Beckham | Belt | Bryan | Caddo | Canadian |
|------------------------------|--------|-------|----------|------|--------|---------|------|-------|-------|----------|
| Anthrax in man               | 1      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Diphtheria                   | 964    | 7     | 3        | 1    | 2      | 2       | 4    | 9     | 9     | 11       |
| Dysentery, amoebic           | 209    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, bacillary         | 72     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, unspecified       | 20     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Epidemic typhus              | 13     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Erysipeloid                  | 71     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Gonorrhea                    | 9,335  | 28    | 3        | 14   | 2      | 60      | 56   | 138   | 135   | 53       |
| Hockworm                     | 25,092 | 67    | 31       | 646  | 7      | 284     | 61   | 256   | 492   | 191      |
| Measles                      | 1,312  | 168   | 1        | 8    | 3      | 1       | 4    | 5     | 5     | 7        |
| Meningitis, meningococcus    | 67     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Optic atrophy                | 60     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pellagra                     | 38     | 10    | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, bronchial         | 602    | 10    | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, lobar             | 1,312  | 10    | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Poliomyelitis, acute         | 968    | 19    | 2        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Postoperative septicemia     | 11     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rabies in man                | 36     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rocky Mountain spotted fever | 353    | 2     | 4        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Scarlet fever                | 198    | 3     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Septic sore throat           | 7,177  | 4     | 10       | 42   | 5      | 61      | 40   | 69    | 108   | 87       |
| Syphilis                     | 14     | 20    | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tetanus                      | 199    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tuberculosis, respiratory    | 2,373  | 55    | 2        | 15   | 2      | 5       | 21   | 22    | 37    | 12       |
| Tuberculosis, other forms    | 132    | 7     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhoid fever                | 96     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhus fever                 | 43     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Veneral diseases, other      | 125    | 2     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Vincent's angina             | 1,055  | 5     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Whooping cough               | 1,055  | 5     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |

| Disease                      | Adair | Altamont | Ashe | Bailey | Beckham | Belt | Bryan | Caddo | Canadian |
|------------------------------|-------|----------|------|--------|---------|------|-------|-------|----------|
| Anthrax in man               | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Diphtheria                   | 12    | 3        | 3    | 2      | 2       | 4    | 9     | 9     | 11       |
| Dysentery, amoebic           | 9     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, bacillary         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, unspecified       | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Epidemic typhus              | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Erysipeloid                  | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Gonorrhea                    | 144   | 129      | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Hockworm                     | 894   | 281      | 15   | 408    | 1       | 167  | 110   | 357   | 215      |
| Measles                      | 2     | 2        | 1    | 4      | 1       | 1    | 1     | 1     | 1        |
| Meningitis, meningococcus    | 2     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Optic atrophy                | 10    | 3        | 12   | 1      | 1       | 1    | 1     | 1     | 1        |
| Pellagra                     | 3     | 4        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, bronchial         | 3     | 3        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, lobar             | 6     | 3        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Poliomyelitis, acute         | 31    | 12       | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Postoperative septicemia     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rabies in man                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rocky Mountain spotted fever | 4     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Scarlet fever                | 4     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Septic sore throat           | 102   | 38       | 79   | 16     | 155     | 9    | 55    | 123   | 87       |
| Syphilis                     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tetanus                      | 110   | 54       | 49   | 1      | 42      | 2    | 17    | 50    | 12       |
| Tuberculosis, respiratory    | 3     | 9        | 3    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tuberculosis, other forms    | 2     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhoid fever                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhus fever                 | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Veneral diseases, other      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Vincent's angina             | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Whooping cough               | 30    | 4        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |

TABLE VII. REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTY, OKLAHOMA, 1947 (Continued)

| Disease                      | Adair | Altamont | Ashe | Bailey | Beckham | Belt | Bryan | Caddo | Canadian |
|------------------------------|-------|----------|------|--------|---------|------|-------|-------|----------|
| Anthrax in man               | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Diphtheria                   | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, amoebic           | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, bacillary         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, unspecified       | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Epidemic typhus              | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Erysipeloid                  | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Gonorrhea                    | 94    | 3        | 13   | 1      | 1       | 1    | 1     | 1     | 1        |
| Hockworm                     | 273   | 109      | 62   | 175    | 474     | 232  | 369   | 169   | 65       |
| Measles                      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Meningitis, meningococcus    | 3     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Optic atrophy                | 2     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pellagra                     | 2     | 2        | 10   | 10     | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, bronchial         | 2     | 2        | 10   | 10     | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, lobar             | 13    | 2        | 4    | 2      | 1       | 1    | 1     | 1     | 1        |
| Poliomyelitis, acute         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Postoperative septicemia     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rabies in man                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rocky Mountain spotted fever | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Scarlet fever                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Septic sore throat           | 98    | 6        | 5    | 139    | 55      | 20   | 21    | 2     | 2        |
| Syphilis                     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tetanus                      | 13    | 35       | 2    | 26     | 2       | 2    | 2     | 2     | 2        |
| Tuberculosis, respiratory    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tuberculosis, other forms    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhoid fever                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhus fever                 | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Veneral diseases, other      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Vincent's angina             | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Whooping cough               | 8     | 10       | 6    | 36     | 1       | 1    | 1     | 1     | 1        |

| Disease                      | Adair | Altamont | Ashe | Bailey | Beckham | Belt | Bryan | Caddo | Canadian |
|------------------------------|-------|----------|------|--------|---------|------|-------|-------|----------|
| Anthrax in man               | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Diphtheria                   | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, amoebic           | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, bacillary         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Dysentery, unspecified       | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Epidemic typhus              | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Erysipeloid                  | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Gonorrhea                    | 2     | 2        | 44   | 32     | 127     | 178  | 478   | 259   | 342      |
| Hockworm                     | 203   | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Measles                      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Meningitis, meningococcus    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Optic atrophy                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pellagra                     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, bronchial         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Pneumonia, lobar             | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Poliomyelitis, acute         | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Postoperative septicemia     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rabies in man                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Rocky Mountain spotted fever | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Scarlet fever                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Septic sore throat           | 4     | 6        | 61   | 65     | 12      | 18   | 137   | 23    | 40       |
| Syphilis                     | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tetanus                      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tuberculosis, respiratory    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Tuberculosis, other forms    | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhoid fever                | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Typhus fever                 | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Veneral diseases, other      | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Vincent's angina             | 1     | 1        | 1    | 1      | 1       | 1    | 1     | 1     | 1        |
| Whooping cough               | 2     | 2        | 15   | 11     | 1       | 1    | 1     | 1     | 1        |

TABLE VI. REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTY, OKLAHOMA, 1947 (Continued)

| Disease                       | Lafayette | Lincoln | Logan | Low | McFadden | McGurtin | McIntosh | Major | Marshall | Mayes |
|-------------------------------|-----------|---------|-------|-----|----------|----------|----------|-------|----------|-------|
| Anthrax in man                | 3         | 29      | 9     | -   | 5        | 16       | 6        | -     | 9        | -     |
| Cholera                       | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Diphtheria                    | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Dysentery, amoebic            | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Dysentery, bacillary          | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Dysentery, unspecified        | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Epidemic typhus               | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| German measles                | 63        | 87      | 156   | 6   | 17       | 45       | 30       | 1     | 6        | 55    |
| Hepatitis, infectious         | 1         | 1       | 1     | -   | -        | 52       | 6        | -     | -        | 5     |
| Influenza                     | 451       | 1088    | 402   | 227 | 86       | 1166     | 960      | 10    | 150      | 50    |
| Measles                       | 9         | 12      | 12    | -   | 3        | 393      | 3        | 1     | 1        | 1     |
| Mumps                         | 1         | 6       | 12    | -   | 3        | 3        | 3        | 1     | 1        | 1     |
| Optic neuritis, meningococcus | 1         | 1       | 1     | -   | 3        | 3        | 3        | 1     | 1        | 1     |
| Optic neuritis, pneumococcus  | 1         | 1       | 1     | -   | 3        | 3        | 3        | 1     | 1        | 1     |
| Pneumonia, bronchial          | 7         | 5       | 12    | 2   | 9        | 9        | 7        | 1     | 2        | 2     |
| Pneumonia, lobar              | 10        | 4       | 14    | 2   | 5        | 8        | 5        | 1     | 1        | 9     |
| Pneumonia, unspecified        | 32        | 22      | 11    | 2   | 5        | 41       | 23       | -     | 1        | 5     |
| Poliovirus, acute             | 1         | -       | -     | -   | 1        | 1        | -        | -     | -        | -     |
| Poliovirus, chronic           | 1         | -       | -     | -   | 1        | 1        | -        | -     | -        | -     |
| Rabies in man                 | 11        | -       | 1     | -   | -        | 1        | -        | -     | -        | -     |
| Rocky Mountain spotted fever  | 4         | 3       | 6     | -   | -        | 1        | 2        | -     | -        | 1     |
| Scarlet fever                 | 2         | 2       | 2     | -   | -        | 2        | 2        | -     | -        | 1     |
| Septic sore throat            | 65        | 64      | 98    | 8   | 21       | 89       | 85       | 2     | 10       | 35    |
| Syphilis                      | 1         | 1       | 1     | -   | -        | 38       | 1        | -     | -        | 1     |
| Tetanus                       | 39        | 34      | 8     | -   | 3        | 38       | 29       | 5     | 2        | 53    |
| Tuberculosis, respiratory     | 1         | 1       | 1     | -   | -        | 18       | -        | -     | -        | 3     |
| Tuberculosis, other forms     | 4         | 3       | 1     | 1   | 2        | 8        | 5        | -     | -        | 5     |
| Typhoid fever                 | 1         | 1       | 1     | -   | -        | 1        | -        | -     | -        | -     |
| Typhus fever                  | 1         | 1       | 1     | -   | -        | 1        | -        | -     | -        | -     |
| Undulant fever                | 2         | -       | 2     | -   | -        | 2        | 2        | -     | -        | -     |
| Veneral diseases, other       | 1         | -       | -     | -   | -        | 1        | -        | -     | -        | 1     |
| Vincent's angina              | 1         | 23      | 11    | -   | 17       | 45       | 7        | -     | 6        | 1     |
| Whooping cough                | -         | -       | -     | -   | -        | -        | -        | -     | -        | -     |

TABLE VI. REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTY, OKLAHOMA, 1947 (Continued)

| Disease                       | Peru | Pittsburg | Ponca | Pottawatomie | Pushmataha | Regis | Rocky | Seminole | Sequoyah | Stephens |
|-------------------------------|------|-----------|-------|--------------|------------|-------|-------|----------|----------|----------|
| Anthrax in man                | 36   | 6         | 4     | 34           | -          | -     | -     | 2        | 4        | 9        |
| Cholera                       | 15   | 15        | 1     | 2            | -          | -     | -     | 1        | 1        | 1        |
| Diphtheria                    | 2    | -         | -     | -            | -          | -     | -     | -        | -        | -        |
| Dysentery, amoebic            | 2    | -         | -     | -            | -          | -     | -     | -        | -        | -        |
| Dysentery, bacillary          | 2    | -         | -     | -            | -          | -     | -     | -        | -        | -        |
| Dysentery, unspecified        | 2    | -         | -     | -            | -          | -     | -     | -        | -        | -        |
| Epidemic typhus               | 2    | -         | -     | -            | -          | -     | -     | -        | -        | -        |
| German measles                | 42   | 1         | 72    | 92           | 12         | 1     | 18    | 145      | 32       | 53       |
| Hepatitis, infectious         | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Influenza                     | 804  | 457       | 355   | 603          | 9          | 2     | 1     | 4        | 356      | 40       |
| Measles                       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Mumps                         | 23   | 3         | 11    | 5            | -          | -     | -     | 2        | 1        | 18       |
| Optic neuritis, meningococcus | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Optic neuritis, pneumococcus  | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliomyelitis, acute          | 13   | 13        | 20    | 4            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliomyelitis, chronic        | 13   | 26        | 26    | 28           | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliovirus, acute             | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliovirus, chronic           | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Rabies in man                 | 22   | 1         | 2     | 20           | 1          | 1     | 1     | 1        | 1        | 1        |
| Rocky Mountain spotted fever  | 11   | 7         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Scarlet fever                 | 79   | 140       | 155   | 123          | 24         | 15    | 53    | 138      | 16       | 57       |
| Septic sore throat            | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Syphilis                      | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Tetanus                       | 28   | 41        | 34    | 44           | 15         | 1     | 59    | 95       | 16       | 16       |
| Tuberculosis, respiratory     | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Tuberculosis, other forms     | 6    | 4         | 2     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Typhoid fever                 | 2    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Typhus fever                  | 2    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Undulant fever                | 2    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Veneral diseases, other       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Vincent's angina              | 30   | 5         | 14    | 8            | -          | -     | -     | 2        | 1        | 12       |
| Whooping cough                | -    | -         | -     | -            | -          | -     | -     | -        | -        | -        |

| Disease                       | Mayes | McFadden | McGurtin | McIntosh | Major | Marshall | Mayes |
|-------------------------------|-------|----------|----------|----------|-------|----------|-------|
| Anthrax in man                | 1     | 2        | 10       | 27       | 12    | 14       | -     |
| Cholera                       | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Diphtheria                    | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Dysentery, amoebic            | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Dysentery, bacillary          | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Dysentery, unspecified        | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Epidemic typhus               | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| German measles                | 35    | 385      | 51       | 260      | 24    | 72       | 4     |
| Hepatitis, infectious         | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Influenza                     | 36    | 158      | 294      | 1007     | 17    | 405      | 1     |
| Measles                       | 45    | 13       | 13       | 13       | 1     | 1        | -     |
| Mumps                         | 3     | 1        | 1        | 1        | 1     | 1        | -     |
| Optic neuritis, meningococcus | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Optic neuritis, pneumococcus  | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Poliomyelitis, acute          | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Poliomyelitis, chronic        | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Poliovirus, acute             | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Poliovirus, chronic           | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Rabies in man                 | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Rocky Mountain spotted fever  | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Scarlet fever                 | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Septic sore throat            | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Syphilis                      | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Tetanus                       | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Tuberculosis, respiratory     | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Tuberculosis, other forms     | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Typhoid fever                 | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Typhus fever                  | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Undulant fever                | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Veneral diseases, other       | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Vincent's angina              | 1     | 1        | 1        | 1        | 1     | 1        | -     |
| Whooping cough                | 1     | 1        | 1        | 1        | 1     | 1        | -     |

| Disease                       | Peru | Pittsburg | Ponca | Pottawatomie | Pushmataha | Regis | Rocky | Seminole | Sequoyah | Stephens |
|-------------------------------|------|-----------|-------|--------------|------------|-------|-------|----------|----------|----------|
| Anthrax in man                | 6    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Cholera                       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Diphtheria                    | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Dysentery, amoebic            | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Dysentery, bacillary          | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Dysentery, unspecified        | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Epidemic typhus               | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| German measles                | 19   | 1180      | 9     | 27           | 39         | 32    | 6     | 14       | 394      | 1095     |
| Hepatitis, infectious         | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Influenza                     | 194  | 4         | 111   | 14           | 490        | 135   | 423   | 210      | 14       | 2266     |
| Measles                       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Mumps                         | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Optic neuritis, meningococcus | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Optic neuritis, pneumococcus  | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliomyelitis, acute          | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliomyelitis, chronic        | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliovirus, acute             | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Poliovirus, chronic           | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Rabies in man                 | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Rocky Mountain spotted fever  | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Scarlet fever                 | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Septic sore throat            | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Syphilis                      | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Tetanus                       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Tuberculosis, respiratory     | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Tuberculosis, other forms     | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Typhoid fever                 | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Typhus fever                  | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Undulant fever                | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Veneral diseases, other       | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Vincent's angina              | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |
| Whooping cough                | 1    | 1         | 1     | 1            | 1          | 1     | 1     | 1        | 1        | 1        |

