PUBLIC HEALTH STATISTICS

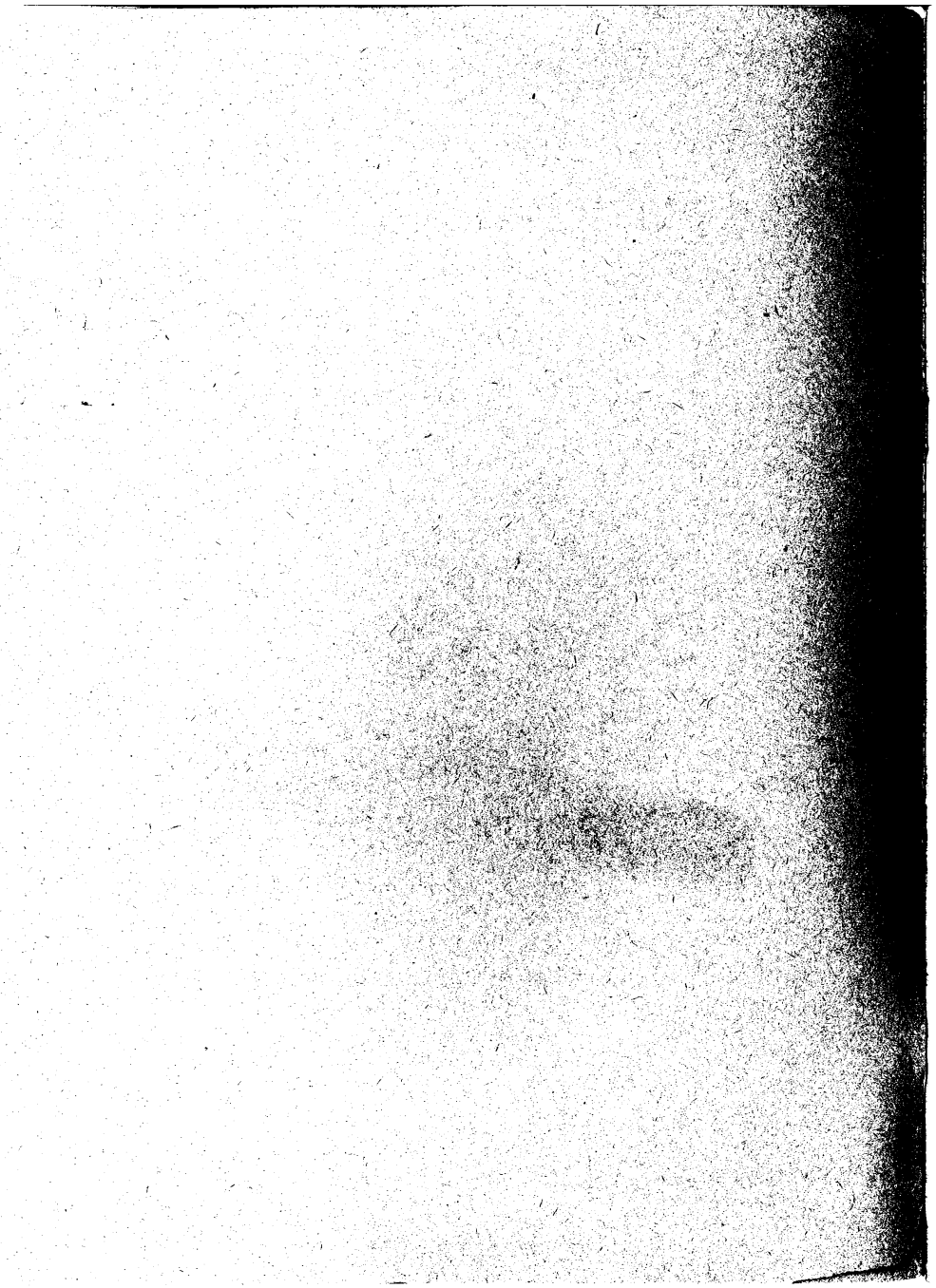
STATE OF

OKLAHOMA

1947

PART I

REPORTABLE DISEASES



PUBLIC HEALTH STATISTICS

STATE OF

OKLAHOMA

1947

PART I

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
Botulina Food Poisoning
Cancer
Chancroid
Chickenpox
Cholera
Choriomeningitis
Coccidiosis
Conjunctivitis of the Newborn
Dengue
Diarrhea of the Newborn, Epidemic
Diphtheria
Dysentery, Amebic
Dysentery, Bacillary
Encephalitis, Infectious
Erysipelas
German Measles
Glanders
Gonorrhea
Granuloma Inguinale
Hepatitis, Infectious
Hookworm Disease
Influenza
Leprosy
Lymphogranuloma Venereum
Malaria
  Acquired in the U.S.
  Acquired outside the U.S.
Measles
Meningococcus Meningitis
Mononucleosis, Infectious
Mumps
Ophthalmia Neonatorum
Paratyphoid Fever
Pellagra
Pertussis
Plague
Pneumonia - By Type
Poliomyelitis
  Paralytic
  Non-Paralytic
Psittacosis
Puerperal Septicemia
Rabies
  In animals
  In man
Rat-Bite Fever
Relapsing Fever
Rheumatic Fever
Ringworm of the scalp
Rocky Mountain Spotted Fever
Salmonella Food Infection
Scarlet Fever
Smallpox
Staphylococcal Food Poisoning
Septic Sore Throat
Syphilis - By Stage
Tetanus
Trachoma
Trichiniasis
Tuberculosis, Pulmonary -
  By Stage and Activity
Tuberculosis, Other Forms -
  Specified
Tularemia
Typhoid Fever
Typhus Fever
Undulant Fever (Brucellosis)
Vincents Angina
Vulvovaginitis 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. Mathews

G. F. Mathews, M. D.,
Commissioner of Health

TABLE OF CONTENTS

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 practising 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 1 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 Number Reported Cases	Cases Reported by Death Certificates	Per Cent Reported by Death 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.

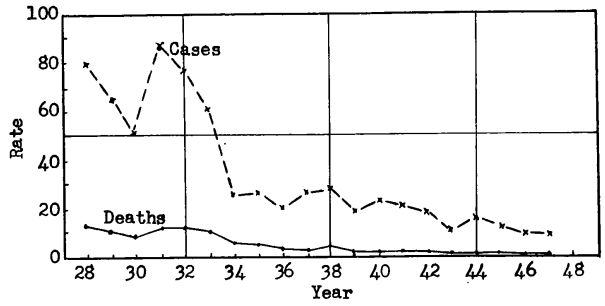
Diphtheria

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

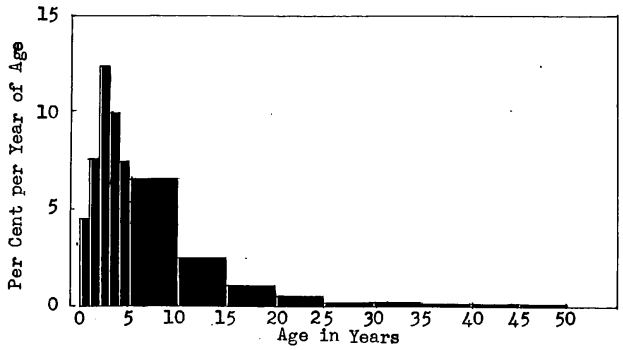
Reported Cases and Deaths from Diphtheria by Age Groups

Age Group	Reported Cases	Deaths	Case Fatality 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 staphylococcal food poisoning, with 8 cases reported, occurred in Oklahoma City in July. Another outbreak of staphylococcal food poisoning with 6 cases was reported in September for Kay County. About 30 cases of salmonella 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.

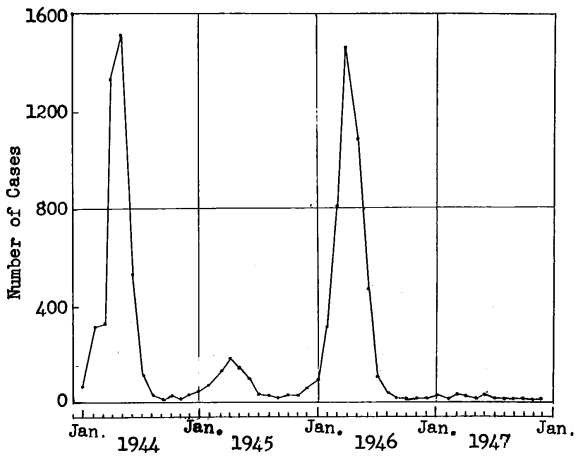
Most of the cases were reported for McIntosh, Choctaw, Okmulgee, McCurtain, Lincoln, Oklahoma, Pottawatomie, Atoka, and Jefferson Counties. The remainder of the cases were somewhat scattered throughout the State, with 38 of the 77 counties reporting at least one case. In addition to the cases apparently 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

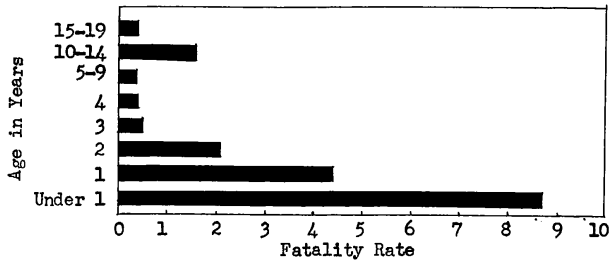
Reported Cases of Measles by Month
Oklahoma, 1944-1947



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.

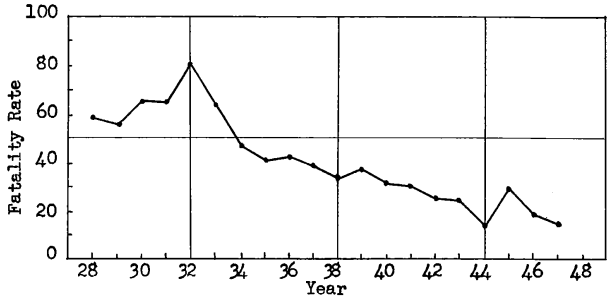
Meningococcus Meningitis

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.

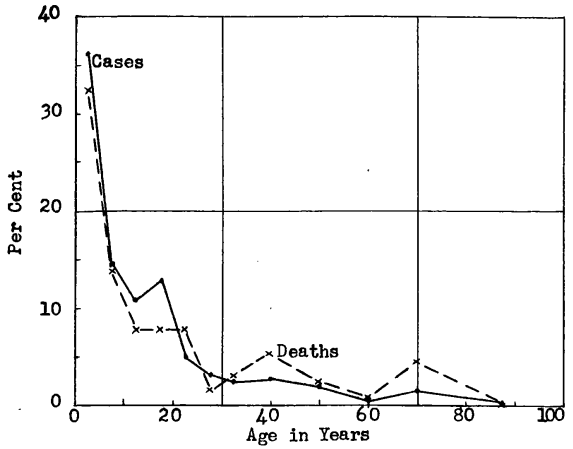
Table 3

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

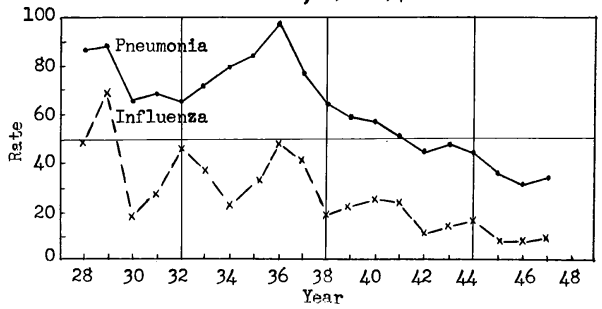
The number of reported cases of influenza, 25,095, in 1947 was almost four times higher than in the previous year when only 6,585 cases were reported. This was the largest number of cases reported in any one year since 1929 when 27,310 cases were reported in the State, and may in part have been caused 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



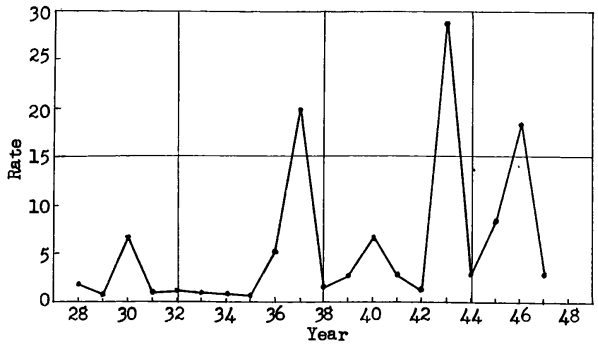
Of the 2,002 cases of pneumonia reported during the year, 355 or 16.7 per cent were under one year of age. Mortality for this age group was very high; 199, or 25.3 per cent, of the 788 deaths assigned to pneumonia were under one year of age. Not overlooking the fact that reporting was incomplete, the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

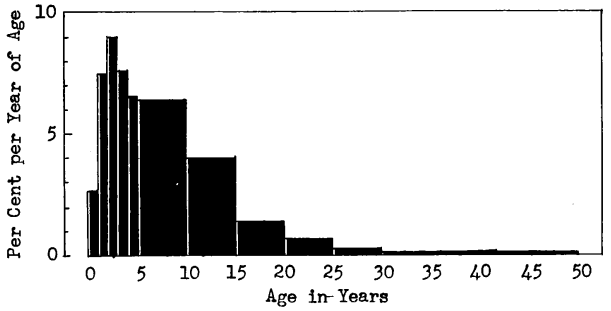
Reported Cases of Poliomyelitis
Per 100,000 Population
Oklahoma, 1928-1947



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	749	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.

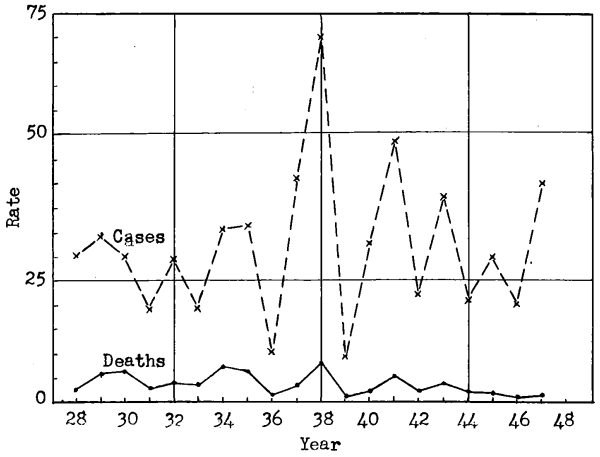
Whooping Cough

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

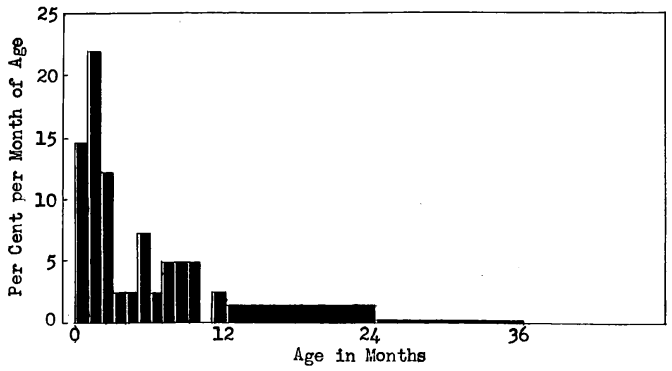
Reported Cases and Deaths from Whooping Cough per 100,000 Population Oklahoma, 1928 - 1947



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

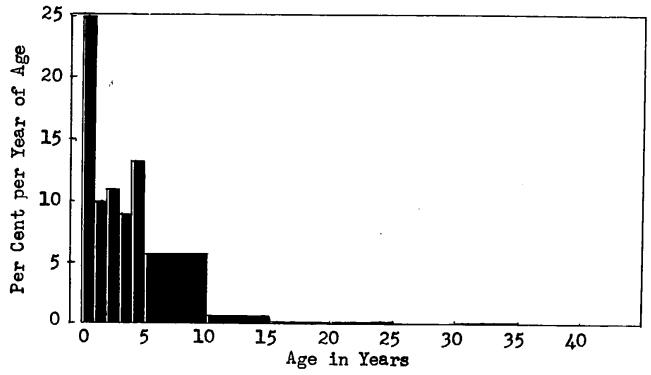


Table 6

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, Okfuskee, 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 rat-bite fever was reported in Caddo County; two cases of mycoses, 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
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

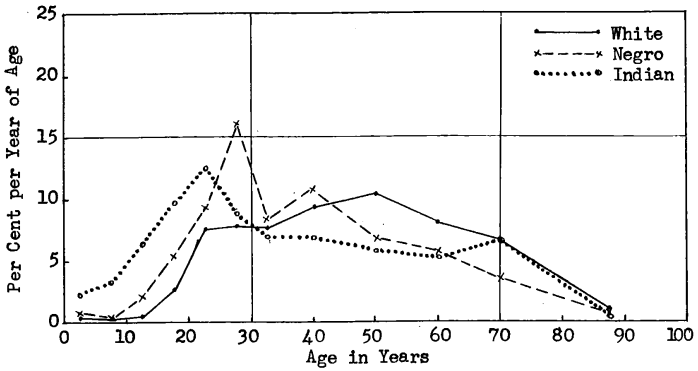
Type Stage and Activity	Total	White	Negro	Indian	Unknown
Tuberculosis of Respiratory system:	2,373	1,825	227	292	29
Minimal, active	205	155	20	27	3
Mod. Adv., active	412	311	47	51	3
Far Adv., active	386	286	34	61	5
Inactive (any stage)	58	47	6	2	3
Arrested (any stage)	672	554	46	67	5
Ap. cured (any stage)	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 practising 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

Venereal 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

Age Group	Primary and Secondary		Early Latent		Late and Late Latent	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
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 I. REPORTED CASES OF COMMUNICABLE DISEASES, NUMBER AND RATE (NUMBER PER 100,000 ESTIMATED POPULATION), OKLAHOMA, 1938-1947

Disease	1938		1939		1940		1941		1942	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Anthrax in man	2	0.1	-	-	-	-	-	-	-	-
Chickenpox	1,109	47.3	1,005	42.9	785	33.9	734	32.9	1,029	47.8
Dengue	-	-	-	-	-	-	1	0.0	-	-
Diphtheria	665	28.3	458	19.6	535	23.1	473	21.2	399	18.5
Dysentery	209	8.9	379	16.1	649	28.0	308	13.8	328	15.3
Encephalitis, infectious	6	0.3	8	0.3	11	0.5	14	0.6	7	0.3
Gonorrhea	3,377	143.9	3,072	131.2	2,804	121.1	2,551	114.2	3,626	168.5
Influenza	4,234	180.4	5,918	252.8	11,088	478.8	14,327	641.2	3,701	171.9
Malaria	1,516	64.6	1,972	84.2	1,874	80.9	2,028	90.8	1,516	70.4
Measles	2,822	120.2	4,793	204.7	444	19.2	2,429	108.7	6,331	294.1
Meningitis, meningococcus	45	1.9	33	1.4	38	1.6	29	1.3	39	1.8
Mumps	126	5.4	230	9.8	413	17.8	1,083	48.5	1,490	69.2
Pellagra	259	11.0	191	8.2	149	6.4	97	4.3	75	3.5
Pneumonia, all forms	1,738	74.1	1,829	78.1	3,104	134.0	2,703	121.0	1,589	73.8
Poliomyelitis, acute	36	1.5	65	2.8	159	6.9	58	2.6	28	1.3
Rabies in man	-	-	1	0.0	1	0.0	2	0.1	-	-
Rocky Mountain spotted fever	1	0.0	2	0.1	10	0.4	12	0.5	22	1.0
Scarlet fever	1,440	61.4	1,246	53.2	926	40.0	859	38.4	772	35.9
Septic sore throat	555	23.6	623	26.6	596	25.7	716	32.0	342	15.9
Smallpox	605	25.8	873	37.4	198	8.5	43	1.9	20	0.9
Syphilis	5,096	217.1	8,614	368.0	5,897	254.6	8,132	363.4	8,914	414.1
Tuberculosis, all forms	1,300	55.4	1,362	58.2	1,661	71.8	1,538	68.8	1,461	67.9
Tularemia	50	2.1	54	2.3	62	2.7	51	2.3	40	1.9
Typhoid, paratyphoid fevers	517	22.0	489	20.9	386	16.7	227	10.2	200	9.3
Typhus fever	1	0.0	1	0.0	3	0.1	2	0.1	3	0.1
Undulant fever	1,589	67.7	378	16.1	112	4.8	117	5.2	69	3.2
Whooping cough	1,772	75.5	214	9.1	766	33.1	1,206	54.0	475	22.1

	1943		1944		1945		1946		1947	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Anthrax in man	1	0.0	-	-	2	0.1	-	-	1	0.0
Chickenpox	841	40.6	821	40.4	682	28.6	632	26.5	966	41.8
Dengue	-	-	-	-	-	-	-	-	-	-
Diphtheria	239	11.5	334	16.5	300	12.6	222	9.3	209	9.0
Dysentery	139	6.7	242	11.9	211	8.9	80	3.4	149	6.4
Encephalitis, infectious	8	0.4	22	1.1	8	0.3	24	1.0	13	0.6
Gonorrhea	4,694	226.7	6,596	325.0	9,216	386.6	11,050	463.8	9,335	403.7
Influenza	6,841	330.4	11,778	580.2	6,924	290.4	6,585	276.4	25,095	1,085.1
Malaria	1,421	68.6	1,408	69.4	1,101	46.2	308	12.9	536	23.2
Measles	2,376	114.7	4,316	212.6	841	35.3	4,387	184.1	168	7.3
Meningitis, meningococcus	124	6.0	117	5.8	84	3.5	77	3.2	67	2.9
Mumps	651	31.4	460	22.7	759	31.8	452	19.0	660	28.5
Pellagra	55	2.7	66	3.3	42	1.8	23	1.0	38	1.6
Pneumonia, all forms	1,446	69.8	2,346	115.6	1,958	82.1	1,709	71.7	2,002	86.6
Poliomyelitis, acute	594	28.7	54	2.7	200	8.4	434	18.2	59	2.6
Rabies in man	1	0.0	3	0.1	-	-	2	0.1	-	-
Rocky Mountain spotted fever	16	0.8	15	0.7	25	1.0	30	1.3	36	1.6
Scarlet fever	1,030	49.7	1,003	49.4	1,003	42.1	546	22.9	353	15.3
Septic sore throat	222	10.7	141	6.9	194	8.1	180	7.6	198	8.6
Smallpox	19	0.9	7	0.3	13	0.5	16	0.7	4	0.2
Syphilis	9,511	459.3	8,142	401.1	5,978	250.8	7,903	331.7	7,177	310.3
Tuberculosis, all forms	1,751	84.6	2,867	141.2	2,246	94.2	2,664	111.8	2,435	105.3
Tularemia	33	1.6	10	0.5	25	1.0	86	3.6	130	5.6
Typhoid, paratyphoid fevers	168	8.1	109	5.4	100	4.2	58	2.4	139	6.0
Typhus fever	4	0.2	1	0.0	3	0.1	6	0.3	4	0.2
Undulant fever	30	1.4	50	2.5	37	1.6	36	1.5	89	3.8
Whooping cough	885	42.7	426	21.0	713	29.9	479	20.1	1,055	45.6

TABLE II. REPORTED CASES OF COMMUNICABLE DISEASES, NUMBER AND RATE (NUMBER PER 100,000 ESTIMATED POPULATION), BY RACE, OKLAHOMA, 1947

Disease	TOTAL		WHITE		NEGRO		INDIAN		UNKNOWN
Estimated Pop. July 1, 1947	2,312,586		2,088,171		161,290		63,125		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number
Anthrax in man	1	0.0	1	0.0	-	-	-	-	-
Chickenpox	966	41.8	681	32.6	15	9.3	16	25.3	254
Diphtheria	209	9.0	186	8.9	11	6.8	6	9.5	6
Dysentery, amoebic	72	3.1	61	2.9	7	4.3	-	-	4
Dysentery, bacillary	20	0.9	16	0.8	4	2.5	-	-	-
Dysentery, unspecified	57	2.5	25	1.2	4	2.5	22	34.9	6
Encephalitis, infectious	13	0.6	13	0.6	-	-	-	-	-
German measles	71	3.1	53	2.5	3	1.9	-	-	15
Gonorrhea	9,335	403.7	4,938	236.5	3,850	2387.0	182	288.3	365
Hookworm	72	3.1	69	3.3	-	-	2	3.2	1
Influenza	25,095	1085.1	3,966	189.9	392	243.0	1,177	1864.6	19,560
Malaria	536	23.2	195	9.3	23	14.3	184	291.5	134
Measles	168	7.3	141	6.8	-	-	24	38.0	3
Meningitis, meningococcus	67	2.9	62	3.0	4	2.5	1	1.6	-
Mumps	660	28.5	560	26.8	15	9.3	12	19.0	73
Ophthalmia neonatorum	6	0.3	3	0.1	3	1.9	-	-	-
Pellagra	38	1.6	32	1.5	5	3.1	1	1.6	-
Pneumonia, bronchial	602	26.0	452	21.6	64	39.7	50	79.2	36
Pneumonia, lobar	432	18.7	314	15.0	53	32.9	48	76.0	17
Pneumonia, unspecified	968	41.9	740	35.4	86	53.3	70	110.9	72
Poliomyelitis, acute	59	2.6	54	2.6	2	1.2	2	3.2	1
Puerperal septicemia	11	0.5	7	0.3	4	0.2	-	-	-
Rabies in man	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	36	1.6	30	1.4	-	-	1	1.6	5
Scarlet fever	353	15.3	344	16.5	5	3.1	-	-	4
Septic sore throat	198	8.6	176	8.4	10	6.2	4	6.3	8
Smallpox	4	0.2	3	0.1	1	0.6	-	-	-
Syphilis	7,177	310.3	3,828	183.3	2,660	1649.2	181	286.7	508
Tetanus	14	0.6	10	0.5	3	1.9	1	1.6	-
Trachoma	199	8.6	90	4.3	9	5.6	95	150.5	5
Tuberculosis, respiratory	2,373	102.6	1,825	87.4	227	140.7	292	462.6	29
Tuberculosis, other forms	62	2.7	39	1.9	5	3.1	15	23.8	3
Tularemia	130	5.6	68	3.3	4	2.5	9	14.3	49
Typhoid fever	96	4.2	83	4.0	4	2.5	5	7.9	4
Paratyphoid fever	43	1.9	42	2.0	-	-	1	1.6	-
Typhus fever	4	0.2	3	0.1	-	-	-	-	1
Undulant fever	89	3.8	82	3.9	2	1.2	2	3.2	3
Venereal diseases, other	125	5.4	36	1.7	78	48.4	2	3.2	9
Vincent's angina	22	1.0	19	0.9	1	0.6	2	3.2	-
Whooping cough	1,055	45.6	849	40.7	47	29.1	58	91.9	101

TABLE III. REPORTED CASES OF COMMUNICABLE DISEASES, BY MONTHS, OKLAHOMA, 1947

Disease	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total cases	51,501	2,928	3,042	19,129	8,408	2,903	2,311	2,203	1,985	2,059	1,973	2,253	2,307
Anthrax in man	1	-	-	-	-	-	-	-	-	-	-	1	-
Chickenpox	966	154	142	211	128	97	57	15	8	2	10	44	98
Diphtheria	209	9	20	29	10	7	9	10	9	6	13	34	53
Dysentery, amoebic	72	4	2	5	1	10	4	7	5	12	10	10	2
Dysentery, bacillary	20	-	-	3	-	-	2	2	3	2	1	2	5
Dysentery, unspecified	57	1	2	1	4	2	4	20	4	-	15	4	-
Encephalitis, infectious	13	-	-	1	-	4	2	1	-	4	-	1	-
German measles	71	14	5	10	5	6	11	10	-	2	3	3	2
Gonorrhea	9,335	824	811	794	740	908	716	798	776	905	835	642	586
Hookworm	72	4	5	12	17	1	2	-	4	16	6	3	2
Influenza	25,095	454	630	16,260	6,143	348	135	26	64	76	106	329	524
Malaria	536	15	28	35	36	74	102	72	87	19	61	4	3
Measles	168	25	11	22	22	22	22	12	5	7	7	5	8
Meningitis, meningococcus	67	3	5	10	2	4	4	5	9	2	3	5	15
Mumps	660	63	96	146	68	88	70	40	21	23	6	12	27
Ophthalmia neonatorum	6	-	1	-	2	-	-	2	-	-	-	-	1
Pellagra	38	3	3	7	3	2	3	7	1	3	3	3	-
Pneumonia, bronchial	602	113	80	77	93	38	32	21	22	20	31	32	43
Pneumonia, lobar	432	73	51	90	49	41	18	9	13	14	18	24	32
Pneumonia, unspecified	968	120	109	217	167	72	39	30	31	27	28	53	75
Poliomyelitis, acute	59	3	9	2	1	3	-	7	9	7	10	5	3
Puerperal septicemia	11	-	2	4	1	-	-	1	-	-	-	2	1
Rabies in man	-	-	-	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	36	1	1	5	1	6	3	1	3	3	8	2	-
Scarlet fever	353	26	34	57	27	14	19	18	9	16	32	45	56
Septic sore throat	198	13	16	29	6	9	4	31	20	13	22	18	17
Smallpox	4	-	-	-	3	1	-	-	-	-	-	-	-
Syphilis	7,177	784	743	846	519	619	568	574	502	539	440	609	434
Tetanus	14	-	-	3	-	1	1	1	3	1	2	1	1
Trachoma	199	7	15	17	10	12	12	8	11	9	10	53	35
Tuberculosis, respiratory	2,373	131	135	135	253	322	247	220	203	162	182	218	165
Tuberculosis, other forms	62	4	2	3	9	10	5	7	7	2	5	4	4
Tularemia	130	27	14	5	7	22	10	14	7	6	8	1	9
Typhoid fever	96	1	6	3	6	4	9	25	14	16	7	3	2
Paratyphoid fever	43	-	-	1	1	1	4	2	6	26	1	1	-
Typhus fever	4	2	-	-	-	1	-	-	-	-	1	-	-
Undulant fever	89	3	4	5	3	12	3	7	10	13	14	11	4
Venereal diseases, other	125	12	17	11	15	11	9	7	9	5	12	12	5
Vincent's angina	22	2	3	1	2	7	2	2	1	-	-	-	2
Whooping cough	1,055	32	39	70	52	121	181	182	107	94	62	56	59

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	8	4	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	12	-	-	-	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	-	-	1	-	-	-	-
Pneumonia, all forms	1,017	857	128	817	676	13	103	97	3	94	72	2	3	12	110
Poliomyelitis, 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	-	-	1	-	-	-	-	-	-	-	-
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	-	1	2	-
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	-
Venereal diseases, other	98	27	-	31	5	-	59	19	-	-	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	Age Unknown
Anthrax in man	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Chickenpox	966	24	21	45	62	57	363	68	17	13	4	1	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	5	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	183
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	21,696
Malaria	536	-	2	1	2	3	11	6	7	19	14	8	15	12	7	4	5	420
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	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pellagra	38	-	-	-	-	-	-	-	-	-	-	-	1	4	3	17	10	3
Pneumonia, all forms	2,002	355	86	69	48	34	92	53	39	55	50	38	94	109	119	215	355	191
Poliomyelitis, 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	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	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	719
Tetanus	14	2	1	-	1	2	2	1	-	-	-	-	3	-	1	1	-	-
Trachoma	199	-	2	1	2	8	65	60	16	5	2	2	7	2	5	2	-	20
Tuberculosis, respiratory	2,373	3	3	2	1	4	15	32	89	194	206	176	409	440	351	292	111	45
Tuberculosis, other forms	62	5	4	2	-	-	2	1	3	2	6	6	10	5	10	2	3	1
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	2	22
Typhus fever	4	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	-	-
Undulant fever	89	-	-	-	-	-	1	3	3	2	10	12	23	20	5	-	1	9
Venereal diseases, other	125	-	-	-	-	-	-	-	31	47	25	8	6	3	1	-	1	3
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	Alfalfa	Atoka	Beaver	Beckham	Blaine	Bryan	Caddo	Canadian
Anthrax in man	1	-	-	-	-	-	-	-	-	-
Chickenpox	966	4	2	8	2	2	2	1	18	10
Diphtheria	209	3	-	-	-	-	4	9	9	1
Dysentery, amoebic	72	1	-	-	-	-	-	-	-	-
Dysentery, bacillary	20	-	-	-	-	-	-	1	-	-
Dysentery, unspecified	57	3	-	4	1	3	-	-	-	-
Encephalitis, infectious	13	-	-	-	-	-	1	-	-	2
German measles	71	-	-	-	-	-	-	-	-	-
Gonorrhea	9,335	28	3	14	2	60	56	138	135	53
Hookworm	72	-	-	-	-	-	-	-	-	-
Influenza	25,095	67	313	646	7	284	61	256	492	191
Malaria	536	1	-	8	3	-	-	1	-	1
Measles	168	1	-	-	-	2	-	-	5	7
Meningitis, meningococcus	67	1	-	-	-	1	4	1	-	-
Mumps	660	2	-	-	3	6	-	-	20	9
Ophthalmia neonatorum	6	-	-	-	-	-	-	-	-	-
Pellagra	38	-	-	-	-	-	-	-	1	-
Pneumonia, bronchial	602	10	1	1	3	8	14	5	37	8
Pneumonia, lobar	432	3	5	1	1	5	5	6	11	4
Pneumonia, unspecified	968	19	4	5	1	9	13	12	47	4
Poliomyelitis, acute	59	-	2	-	-	-	-	-	-	-
Puerperal septicemia	11	-	-	-	-	-	-	1	-	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	36	2	-	-	-	-	-	-	-	-
Scarlet fever	353	2	4	-	-	2	-	-	7	2
Septic sore throat	198	3	-	-	-	3	1	1	-	-
Smallpox	4	-	-	-	-	-	-	-	-	-
Syphilis	7,177	20	10	42	5	61	40	60	108	87
Tetanus	14	-	-	-	-	-	-	1	-	-
Trachoma	199	1	-	-	-	-	5	-	58	4
Tuberculosis, respiratory	2,373	55	2	15	2	5	21	22	37	12
Tuberculosis, other forms	62	-	1	1	1	2	1	1	4	-
Tularemia	130	4	-	5	-	1	-	3	1	-
Typhoid fever	96	1	1	-	-	3	-	-	6	-
Paratyphoid fever	43	-	2	-	-	-	-	-	-	-
Typhus fever	4	-	-	-	-	-	-	-	-	-
Undulant fever	89	2	1	-	1	1	-	-	-	-
Venereal diseases, other	125	-	-	1	-	-	1	-	4	1
Vincent's angina	22	-	-	-	-	-	-	-	1	1
Whooping cough	1,055	5	1	3	-	7	5	10	39	18

Disease	Carter	Cherokee	Choctaw	Cimarron	Cleveland	Coal	Comanche	Cotton	Craig	Creek
Anthrax in man	-	-	-	-	-	-	-	-	-	-
Chickenpox	12	3	2	-	13	-	27	5	-	107
Diphtheria	9	5	5	-	1	-	15	-	-	8
Dysentery, amoebic	2	-	-	-	2	-	1	-	-	1
Dysentery, bacillary	1	-	-	-	-	-	-	-	-	1
Dysentery, unspecified	-	-	-	-	1	-	1	-	-	-
Encephalitis, infectious	-	1	-	-	-	-	-	-	-	-
German measles	-	-	-	-	1	-	-	-	-	1
Gonorrhea	144	41	121	-	64	2	303	6	3	215
Hookworm	-	-	9	-	-	-	-	-	-	-
Influenza	834	281	393	-	408	-	167	110	-	357
Malaria	2	4	15	-	-	-	-	-	-	4
Measles	8	22	3	-	4	-	3	-	-	1
Meningitis, meningococcus	-	-	-	-	-	-	1	1	-	2
Mumps	10	3	12	1	48	-	59	8	-	9
Ophthalmia neonatorum	-	-	-	-	1	-	-	-	-	-
Pellagra	3	-	-	-	-	-	-	-	-	2
Pneumonia, bronchial	5	4	3	1	7	1	15	1	1	22
Pneumonia, lobar	6	5	3	1	4	-	20	4	2	9
Pneumonia, unspecified	31	7	12	-	14	1	5	-	3	41
Poliomyelitis, acute	-	-	-	-	1	1	-	1	-	-
Puerperal septicemia	-	-	-	-	-	-	-	-	-	1
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	-	1	-	-	-	-	-	-	-	2
Scarlet fever	4	-	-	1	8	-	5	4	-	5
Septic sore throat	9	6	13	-	2	-	1	3	-	9
Smallpox	-	-	-	-	-	-	-	-	-	-
Syphilis	102	38	79	1	61	16	155	9	55	123
Tetanus	-	-	-	-	-	-	1	-	1	-
Trachoma	-	9	59	-	1	-	17	-	-	3
Tuberculosis, respiratory	110	54	43	-	35	6	42	2	13	50
Tuberculosis, other forms	3	1	1	-	1	1	3	-	-	1
Tularemia	-	9	3	-	-	1	-	-	5	3
Typhoid fever	2	1	2	1	-	-	-	3	-	1
Paratyphoid fever	2	-	-	1	1	1	-	-	-	-
Typhus fever	-	-	-	-	-	-	-	-	-	-
Undulant fever	-	-	-	-	-	-	-	-	-	1
Venereal diseases, other	-	-	2	-	1	-	6	-	1	4
Vincent's angina	1	1	-	-	10	-	-	-	-	-
Whooping cough	30	4	36	1	5	-	50	6	-	100

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

Disease	Custer	Delaware	Dewey	Ellis	Garfield	Garvin	Grady	Grant	Greer	Harmon
Anthrax in man	-	-	-	-	-	-	-	-	-	-
Chickenpox	5	17	4	4	24	13	48	4	-	-
Diphtheria	1	9	3	-	15	14	1	2	-	2
Dysentery, amoebic	-	-	-	-	-	-	-	-	-	-
Dysentery, bacillary	-	-	-	-	2	-	-	-	-	-
Dysentery, unspecified	-	-	-	-	1	-	1	-	-	-
Encephalitis, infectious	-	-	-	-	-	-	-	-	-	-
German measles	-	-	1	-	-	1	6	-	-	-
Gonorrhea	94	3	13	1	52	22	86	1	7	4
Hookworm	-	-	-	-	-	-	-	-	-	-
Influenza	273	169	85	175	414	235	360	169	3	65
Malaria	-	-	2	-	1	2	3	-	-	-
Measles	-	-	-	-	3	-	1	-	-	-
Meningitis, meningococcus	3	-	1	-	1	4	3	-	-	-
Mumps	2	-	-	-	7	-	16	-	-	-
Ophthalmia neonatorum	-	-	-	-	-	-	-	-	-	-
Pellagra	-	-	-	-	1	-	1	-	-	-
Pneumonia, bronchial	2	2	10	-	9	8	9	2	1	-
Pneumonia, lobar	2	10	4	-	10	5	10	1	2	2
Pneumonia, unspecified	15	23	6	1	19	9	16	6	2	7
Poliomyelitis, acute	1	1	-	2	3	-	1	-	1	-
Puerperal septicemia	-	-	-	-	-	-	1	-	-	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	-	2	-	-	-	-	-	1	-	-
Scarlet fever	2	1	2	-	38	2	3	1	-	-
Septic sore throat	1	5	3	-	1	10	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-
Syphilis	58	6	5	-	139	55	92	5	17	15
Tetanus	-	-	-	-	-	-	-	-	-	-
Trachoma	-	1	-	-	-	-	-	-	-	-
Tuberculosis, respiratory	13	35	2	1	26	20	21	2	10	2
Tuberculosis, other forms	-	-	-	-	-	2	2	-	-	-
Tularemia	1	3	-	-	-	-	2	-	-	-
Typhoid fever	2	-	-	-	5	-	-	-	-	-
Paratyphoid fever	-	-	-	-	1	-	2	-	-	-
Typhus fever	-	-	-	-	-	-	-	-	-	-
Undulant fever	1	-	2	-	6	-	5	1	1	-
Venereal diseases, other	-	-	-	-	-	-	1	-	-	-
Vincent's angina	-	-	-	-	2	-	1	-	-	-
Whooping cough	8	10	6	-	36	-	29	10	2	-

Disease	Harper	Haskell	Hughes	Jackson	Jefferson	Johnston	Kay	Kingfisher	Kiowa	Latimer
Anthrax in man	-	-	-	-	-	-	-	-	-	-
Chickenpox	1	-	-	2	3	4	74	15	4	-
Diphtheria	-	-	-	3	1	1	3	2	-	-
Dysentery, amoebic	-	-	-	-	-	-	-	-	-	-
Dysentery, bacillary	-	-	-	-	-	-	-	-	1	-
Dysentery, unspecified	-	-	-	-	-	-	-	-	-	-
Encephalitis, infectious	-	-	1	-	-	-	1	-	-	-
German measles	-	-	-	10	2	-	2	-	-	-
Gonorrhea	3	6	44	33	11	15	50	22	17	1
Hookworm	-	-	-	-	-	-	-	-	-	-
Influenza	203	-	1	569	127	178	478	259	342	38
Malaria	-	-	-	1	8	1	1	1	-	-
Measles	1	-	-	1	1	3	11	1	5	-
Meningitis, meningococcus	-	-	-	-	1	-	1	-	-	-
Mumps	-	6	-	34	1	6	9	3	4	-
Ophthalmia neonatorum	-	-	-	-	-	-	-	-	-	-
Pellagra	-	1	-	-	1	-	-	-	-	1
Pneumonia, bronchial	1	7	7	19	1	4	17	3	5	1
Pneumonia, lobar	-	1	3	2	2	6	6	1	3	2
Pneumonia, unspecified	4	5	2	11	15	2	23	6	6	9
Poliomyelitis, acute	-	1	1	-	-	2	1	-	1	-
Puerperal septicemia	-	-	-	-	-	-	-	-	1	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	-	-	-	-	-	-	-	-	2	-
Scarlet fever	2	-	-	5	-	-	8	5	1	-
Septic sore throat	3	1	1	3	-	3	2	3	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-
Syphilis	4	6	81	65	12	18	137	23	40	22
Tetanus	-	-	1	-	1	-	1	-	-	-
Trachoma	-	-	-	-	-	-	-	1	1	-
Tuberculosis, respiratory	6	6	62	11	4	17	39	6	11	7
Tuberculosis, other forms	-	-	2	1	-	-	1	-	-	1
Tularemia	-	1	-	-	-	-	2	-	-	5
Typhoid fever	-	-	6	-	1	1	-	-	-	-
Paratyphoid fever	-	-	25	-	-	-	-	-	-	-
Typhus fever	-	-	-	-	-	-	-	-	1	-
Undulant fever	-	1	-	-	1	-	5	1	25	-
Venereal diseases, other	-	-	-	-	-	1	-	-	-	-
Vincent's angina	-	-	-	-	-	-	1	-	1	-
Whooping cough	2	2	13	-	11	1	36	13	30	-

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

Disease	LeFlore	Lincoln	Logan	Love	McClain	McCurtain	McIntosh	Major	Marshall	Mayes
Anthrax in man	-	-	-	-	-	-	-	-	-	-
Chickenpox	3	29	9	-	5	16	6	-	9	-
Diphtheria	1	1	-	-	-	1	6	-	-	5
Dysentery, amoebic	-	-	1	-	-	52	-	-	-	-
Dysentery, bacillary	-	-	-	-	-	-	-	-	-	-
Dysentery, unspecified	1	-	-	-	-	-	31	-	-	-
Encephalitis, infectious	-	-	-	-	-	-	-	-	-	-
German measles	-	1	3	-	1	-	-	-	-	-
Gonorrhea	63	87	156	6	17	45	30	1	6	55
Hookworm	1	-	-	-	-	48	-	-	-	-
Influenza	451	1088	402	227	86	1166	960	10	150	50
Malaria	-	9	1	-	1	12	393	-	-	1
Measles	-	4	2	-	1	11	3	1	-	-
Meningitis, meningococcus	1	-	-	-	-	2	-	-	1	-
Mumps	-	6	12	-	3	-	3	-	1	-
Ophthalmia neonatorum	-	-	-	-	-	-	-	-	-	-
Pellagra	-	3	1	-	-	3	3	-	-	1
Pneumonia, bronchial	7	5	12	2	-	2	7	1	2	2
Pneumonia, lobar	10	4	14	1	-	9	5	1	1	9
Pneumonia, unspecified	32	22	11	2	5	41	23	-	1	5
Poliomyelitis, acute	1	-	-	-	1	2	-	-	1	-
Puerperal septicemia	-	-	-	-	-	-	-	-	-	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	11	-	1	-	-	1	-	-	-	-
Scarlet fever	4	3	6	-	-	-	2	-	-	-
Septic sore throat	6	1	5	-	-	1	2	-	13	1
Smallpox	-	2	-	-	-	-	-	-	-	-
Syphilis	65	64	98	8	21	89	85	2	10	35
Tetanus	-	-	-	-	-	-	1	-	-	1
Trachoma	1	-	-	-	-	34	1	-	-	-
Tuberculosis, respiratory	39	34	8	3	3	38	29	5	2	53
Tuberculosis, other forms	-	1	-	-	-	2	-	-	-	3
Tularemia	1	2	1	-	-	18	-	-	-	5
Typhoid fever	4	3	1	1	2	8	5	-	-	-
Paratyphoid fever	-	-	-	-	-	2	-	-	-	-
Typhus fever	1	-	-	-	-	-	-	-	-	-
Undulant fever	2	-	2	-	-	1	2	-	-	-
Venereal diseases, other	2	-	-	-	-	2	-	-	-	-
Vincent's angina	-	-	-	-	-	-	-	-	-	1
Whooping cough	-	23	11	-	17	45	7	-	6	-

Disease	Murray	Muskogee	Noble	Nowata	Okfuskee	Oklahoma	Okmulgee	Osage	Ottawa	Pawnee
Anthrax in man	1	-	-	-	-	-	-	-	-	-
Chickenpox	12	53	-	5	2	107	27	12	14	-
Diphtheria	-	6	-	-	-	2	7	-	2	-
Dysentery, amoebic	-	-	-	-	-	6	-	1	-	-
Dysentery, bacillary	-	-	-	-	2	3	-	-	-	-
Dysentery, unspecified	1	-	-	-	-	1	5	-	-	-
Encephalitis, infectious	-	-	-	-	-	5	1	-	-	-
German measles	-	-	-	-	3	6	1	17	-	-
Gonorrhea	35	385	14	4	51	3753	260	24	72	4
Hookworm	-	-	-	-	-	-	-	-	-	-
Influenza	45	369	50	54	158	2944	1007	171	405	1
Malaria	-	3	-	-	1	9	13	3	2	-
Measles	-	1	1	-	-	13	5	1	1	-
Meningitis, meningococcus	3	1	-	-	-	8	2	2	2	-
Mumps	1	3	-	-	8	174	20	40	5	-
Ophthalmia neonatorum	-	-	-	-	-	1	-	-	-	-
Pellagra	1	2	-	1	-	1	-	-	-	-
Pneumonia, bronchial	-	15	2	2	5	98	9	16	8	1
Pneumonia, lobar	-	18	1	5	5	66	12	17	6	3
Pneumonia, unspecified	11	17	2	2	10	109	31	5	19	1
Poliomyelitis, acute	-	1	-	-	-	9	-	-	2	-
Puerperal septicemia	-	2	-	-	-	1	1	-	-	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	1	3	-	-	2	-	-	1	-	-
Scarlet fever	1	6	1	-	-	87	2	4	6	-
Septic sore throat	-	1	-	-	-	35	2	4	4	1
Smallpox	-	1	-	-	-	-	-	-	-	-
Syphilis	36	483	20	20	105	1685	202	88	102	25
Tetanus	-	-	-	-	-	-	-	1	1	2
Trachoma	-	-	-	-	-	-	1	-	-	-
Tuberculosis, respiratory	23	155	7	8	46	263	36	19	66	11
Tuberculosis, other forms	-	1	-	-	1	3	3	3	2	1
Tularemia	-	8	1	2	1	3	2	1	9	1
Typhoid fever	1	3	2	2	-	4	2	-	2	-
Paratyphoid fever	-	-	-	-	-	30	-	-	1	-
Typhus fever	-	-	-	-	-	-	1	-	-	-
Undulant fever	1	3	1	-	-	6	-	-	2	-
Venereal diseases, other	-	7	-	-	-	10	2	-	-	-
Vincent's angina	-	-	-	-	-	1	-	-	-	1
Whooping cough	8	9	6	5	10	134	37	2	26	1

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

Disease	Payne	Pittsburg	Pontotoc	Pottawatomie	Pushmataha	Roger Mills	Rogers	Seminole	Sequoyah	Stephens
Anthrax in man	-	-	-	-	-	-	-	-	-	-
Chickenpox	36	6	4	34	-	-	-	2	-	9
Diphtheria	2	15	1	2	-	-	-	-	4	-
Dysentery, amoebic	1	-	-	-	-	-	-	1	-	1
Dysentery, bacillary	2	-	-	-	-	-	-	-	-	-
Dysentery, unspecified	-	-	-	-	1	-	-	-	-	-
Encephalitis, infectious	-	1	-	-	-	-	-	-	-	-
German Measles	2	1	-	-	-	-	-	-	-	-
Gonorrhea	56	199	72	95	12	1	18	145	32	53
Hookworm	-	-	-	-	1	-	-	-	-	8
Influenza	804	457	355	603	-	2	1	4	356	40
Malaria	1	2	-	9	-	-	-	1	3	-
Measles	8	5	-	4	-	-	-	-	-	1
Meningitis, meningococcus	-	2	2	2	-	-	-	2	-	5
Mumps	23	3	11	5	-	-	-	-	-	18
Ophthalmia neonatorum	-	-	-	-	-	-	-	1	-	-
Pellagra	-	3	1	1	1	-	1	1	1	-
Pneumonia, bronchial	7	18	20	4	3	1	2	9	7	1
Pneumonia, lobar	3	8	-	3	3	1	1	5	3	3
Pneumonia, unspecified	13	26	26	28	1	1	2	18	4	4
Poliomyelitis, acute	-	2	-	1	-	-	1	1	1	-
Puerperal septicemia	-	-	-	-	-	-	-	-	-	-
Rabies in man	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	-	1	2	1	-	-	-	-	1	-
Scarlet fever	22	7	1	20	-	-	-	5	2	4
Septic sore throat	11	-	3	1	-	-	-	-	1	6
Smallpox	-	-	-	-	-	-	-	-	-	-
Syphilis	79	140	155	123	24	-	53	138	16	57
Tetanus	-	-	-	-	-	-	-	1	-	-
Trachoma	-	-	-	-	-	-	-	2	-	-
Tuberculosis, respiratory	28	40	34	44	18	1	59	95	53	16
Tuberculosis, other forms	-	1	-	-	-	-	2	-	-	-
Tularemia	2	5	2	-	2	-	2	1	1	-
Typhoid fever	6	4	1	1	-	-	-	-	3	-
Paratyphoid fever	-	1	-	-	-	-	-	-	-	-
Typhus fever	-	-	-	-	-	-	-	-	-	-
Undulant fever	2	-	-	1	-	-	-	1	-	-
Venereal diseases, other	1	1	2	1	-	-	1	2	-	1
Vincent's angina	-	-	-	-	-	-	-	-	-	-
Whooping cough	30	5	14	8	-	1	-	2	1	12

Disease	Texas	Tillman	Tulsa	Wagoner	Washington	Washita	Woods	Woodward	Military	Oklahoma City	Tulsa City
Anthrax in man	-	-	-	-	-	-	-	-	-	-	-
Chickenpox	6	1	68	4	21	14	7	4	1	93	54
Diphtheria	-	1	8	5	2	10	1	1	-	2	5
Dysentery, amoebic	-	-	2	-	-	-	-	-	-	1	2
Dysentery, bacillary	3	-	3	-	-	-	1	-	-	-	3
Dysentery, unspecified	-	-	2	-	-	-	-	-	-	1	2
Encephalitis, infectious	-	1	-	-	-	-	-	-	-	3	-
German measles	-	-	9	-	-	-	2	1	-	4	8
Gonorrhea	-	19	1180	27	39	32	6	14	394	3408	1035
Hookworm	-	4	1	-	-	-	-	-	-	-	1
Influenza	945	194	1114	141	490	138	423	210	14	2266	686
Malaria	1	-	1	2	-	-	-	-	9	8	-
Measles	-	4	12	-	-	-	4	1	2	11	9
Meningitis, meningococcus	-	-	5	1	1	-	-	-	-	5	5
Mumps	1	12	6	-	8	4	1	-	14	136	6
Ophthalmia neonatorum	-	-	1	1	1	-	-	-	-	1	1
Pellagra	-	-	-	-	-	-	-	-	1	-	-
Pneumonia, bronchial	2	4	22	3	39	3	1	5	-	77	16
Pneumonia, lobar	1	6	25	5	8	3	-	-	-	47	16
Pneumonia, unspecified	4	10	40	11	5	5	1	-	5	86	27
Poliomyelitis, acute	-	-	7	-	-	-	6	3	-	6	7
Puerperal septicemia	1	2	-	-	-	-	-	-	-	1	-
Rabies in man	-	-	-	-	-	-	-	-	-	-	-
Rocky Mountain spotted fever	-	-	1	-	-	-	-	-	-	-	-
Scarlet fever	12	3	24	-	9	1	3	4	-	57	13
Septic sore throat	-	-	8	1	-	1	1	1	1	22	7
Smallpox	-	1	-	-	-	-	-	-	-	-	-
Syphilis	5	61	993	40	101	17	11	18	31	1496	872
Tetanus	-	-	1	-	-	-	-	-	-	-	1
Trachoma	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis, respiratory	-	14	215	40	17	11	7	6	-	221	167
Tuberculosis, other forms	1	-	7	-	-	-	-	-	-	2	6
Tularemia	-	-	5	2	2	-	1	-	1	2	4
Typhoid fever	-	1	2	-	-	1	1	-	-	4	1
Paratyphoid fever	-	-	4	-	-	-	-	-	-	-	3
Typhus fever	-	-	-	-	-	1	-	-	-	-	-
Undulant fever	-	-	9	-	-	1	-	-	-	3	6
Venereal diseases, other	-	-	59	-	1	-	-	-	10	9	55
Vincent's angina	-	-	-	-	-	-	-	-	-	1	-
Whooping cough	8	4	52	6	5	10	20	1	-	107	30