MONTHLY BULLETIN

# Indiana State Board of Health

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**The MONTHLY BULLETIN will be sent to all health officers and deputies in the State. Health officers and deputies should carefully read and file each copy for future reference. This is very important, for we expect to print instructions, rules and general information, which it will be necessary for officers to preserve.**

## CONTENTS.



## BIRTHS FOR SEPTEMBER, 1919.

Total Births, 4,599 (stillbirths excluded); State rate, 18.7.

Males numbered 2,359; females, 2,240.

White males, 2,310; white females, 2,183.

Colored births, 106; males, 49; females, 57.

Stillbirths, 135; white, 127, colored, 8.

The Northern Sanitary Section, population 1,042,514 reports 1,779 births; rate, 20.6.

The Central Sanitary Section, population 1,219,131, reports 1,781 births; rate, 17.6.

The Southern Sanitary Section, population 686,443, reports 1,039 births; rate, 18.0.

The highest birth rate, Pulaski County, rate 38.8.

The lowest birth rate, Ripley County, rate 8.6.

Total births to date for 1919, 42,641.

Total births to date for 1918, 49,246.

## ABSTRACT OF MORTALITY STATISTICS FOR SEPTEMBER, 1919.

Total deaths reported, 2,364; rate, 9.6. In the preceding month, 2,388 deaths; rate, 9.7. In the same month last year, 2,614 deaths; rate, 10.8. Deaths by important ages were: Under 1 year of age, 332, or 14.0 per cent of total; 1 to 10, 192; 10 to 20, 87; 65 and over, 851, or 35.9 per cent of total.

SANITARY SECTIONS: The Northern Sanitary Section, population 1,042,514, reports 849 deaths; rate, 9.8. In the preceding month, 792 deaths; rate, 9.1. In the same month last year, 941 deaths; rate, 11.1.

THE CENTRAL SANITARY SECTION, population 1,219,131, reports 1,015 deaths; rate, 9.9. In the preceding month, 1,069 deaths; rate, 10.5. In the same month last year, 1,163 deaths; rate, 11.5.

THE SOUTHERN SANITARY SECTION, population 686,443, reports 500 deaths; rate, 8.7. In the preceding month, 527 deaths; rate, 9.2. In the same month last year, 510 deaths; rate, 8.9.

REVIEW OF SECTIONS: The Central Sanitary Section presents the highest death rate, 9.9. which is .3 higher than that for the entire state. The Central Section also presents the highest death rate for pulmonary tuberculosis, typhoid fever, diphtheria, lobar and broncho pneumonia, cerebro-spinal fever and puerperal septicemia. The Northern Section presents the highest death rate for scarlet fever, measles, diarrhea and enteritis, influenza, cancer and external causes. The Southern Section presents the highest death rate for other forms of tuberculosis, whooping cough and poliomyelitis.

RURAL: Population, 1,701,179, reports 1,242 deaths; rate, 8.7. In the preceding month, 1, 232 deaths; rate, 8.7. In the same month last year, 1,373 deaths; rate, 9.7.

URBAN: Population 1,246,909, reports 1,122 deaths; rate, 10.8. In the preceding month, 1,156 deaths; rate, 11.4. In the same month last year, 1,241 deaths; rate, 12.3. The cities named present the following death rates: Indianapolis, 10.6; Fort Wayne, 9.6; Evansville, 10.8; Terre Haute, 10.5; South Bend, 8.6; Gary, 10.5; East Chicago, 7.9; Hammond, 16.4; Muncie, 13.4; Richmond, 10.8; Anderson, 10.3; Elkhart, 11.1; Michigan City, 6.9; Lafayette, 16.0; Kokomo, 14.9; New Albany, 9.6; Logansport, 8.9; Marion, 12.6.

## SUMMARY OF MORBIDITY AND MORTALITY FOR SEPTEMBER, 1919.

Typhoid fever was reported as the most prevalent infectious disease. The order of prevalence was as follows: Typhoid fever, diphtheria and croup, scarlet fever,

pulmonary tuberculosis, tonsillitis, diarrhea and enteritis, acute rheumatism, smallpox, dysentery, influenza, malaria fever, lobar pneumonia, bronchial pneumonia, other forms of tuberculosis, intermittent and remittent fever, measles, chickenpox, whooping cough, poliomyelitis, trachoma, cerebro-spinal fever, erysipelas, puerperal fever, rabies in animals, anthrax, ophthalmia neonatorum, rabies in human.

SMALLPOX: 88 cases in 21 counties with no deaths. The counties reporting smallpox present were: Allen County, 1; Cass, 5; Elkhart, 5; Grant, 1; Henry, 1; Howard, 9; Huntington, 5; Jasper, 1; Kosciusko, 1; Lake, 4; Laporte, 1; Madison, 2; Marion, 1; Pike, 2; Ripley, 5; Steuben, 4; St. Joseph, 1; Tippecanoe, 18; Vanderburg, 19; Vigo, 1; Warren, 1.

TUBERCULOSIS: 203 deaths, of which 172 were of the pulmonary form and 31 other forms. Male tuberculosis deaths numbered 100; females, 103. Of the males, 16 were married in the age period 18 to 40 and left 32 orphans under 12 years of age. Of the females, 32 were married in the same age period as above and left 64 orphans under 12 years of age. Total number of orphans made in one month by this preventable disease, 96. Number of homes infected, 189.

PNEUMONIA: 67 deaths, rate, 27.3 per 100,000. In the preceding month, 47 deaths; rate, 19.1. In the same month last year, 130 deaths; rate, 53.6.

INFLUENZA: 62 cases in 17 counties with 18 deaths. In the preceding month 41 cases in 10 counties with 17 deaths.

TYPHOID FEVER: 147 cases in 50 counties, with 48 deaths. In the preceding month, 134 cases in 43 counties, with 38 deaths. In the same month last year, 207 cases in 57 counties, with 44 deaths.

SCARLET FEVER: 257 cases in 44 counties, with 4 deaths. In the preceding month, 109 cases in 54 counties, with 3 deaths. In the same month last year, 156 cases in 38 counties, with 3 deaths.

DIPHTHERIA: 194 cases in 47 counties, with 17 deaths. In the preceding month, 88 cases in 33 counties, with 14 deaths. In the same month last year, 222 cases in 30 counties, with 31 deaths.

MEASLES: 30 cases in 8 counties, with 1 death. In the preceding month, 31 cases in 14 counties with no deaths. In the same month last year, 40 cases in 17 counties, with 1 death.

POLIOMYELITIS: 6 cases in 6 counties, with 3 deaths. In the preceding month, 4 cases in 4 counties, with 3 deaths. In the same month last year, 17 cases in 14 counties with 1 death.

EXTERNAL CAUSES, 185; males, 135; females, 50.

SUICIDES, 27; males, 18; females, 9.

Suicide by poison, 6; by asphyxia, 1; by hanging or strangulation, 7; by drowning, 4; by firearms, 9.

ACCIDENTAL OR UNDEFINED, 146; males, 105; females, 41.

Other acute poisonings, 6; burns, (conflagration excepted), 16; absorption of deleterious gases, (conflagration excepted), 3; accidental drowning, 9; traumatism by firearms, 2; traumatism by fall, 18; traumatism in mines, 8; traumatism by machines, 3; railroad accidents and injuries, 21; street car accidents and injuries, 5; automobile accidents and injuries, 19; injuries by other vehicles, 3; motorcycles, 1; injuries by animals, 7; starvation, 1; lightning, 1; electricity, (lightning excepted), 4; other external violence, 19.

HOMICIDE, 12; males, 12; females, 0.

Homicide by firearms, 9; by cutting or piercing instruments, 1; by other means, 2.

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## HEALTH OFFICERS ATTENTION.

### Delayed Birth and Death Returns.

Each month the statistical department receives certificates for births and deaths that have occurred during the preceding month, which are not sent to this department in time to be tabulated with the report for the current month. With the report for September the following counties named below were delinquent in this matter:

BIRTHS.

Allen, 2; Benton, 2; Boone, 3; Brown, 1; Cass, 2; Clark, 9; Clay, 3; Clinton, 2; Daviess, 8; Dearborn, 1; Dekalb, 9; Delaware, 3; Elkhart, 1; Floyd, 4; Fountain, 5; Gibson, 6; Grant, 5; Hancock, 1; Harrison, 4; Hendricks, 11; Henry, 7; Howard, 4; Huntington, 1; Jasper, 2; Knox, 4; Kosciusko, 4; Lagrange, 2; Lake, 20; Laporte, 26; Madison, 5; Marion, 2; Miami, 1; Monroe, 1; Morgan, 4; Newton, 3; Orange, 2; Owen, 1; Porter, 2; Posey, 4; Randolph, 2; Ripley, 11; Scott, 1; Shelby, 1; Spencer, 5; Steuben, 1; St. Joseph, 7; Sullivan, 7; Tippecanoe, 3; Union, 1; Vanderburgh, 8; Vigo, 15; Warren, 1; Warrick, 5; Wells, 9; Whitley, 3.

DEATHS.

Adams, 1; Allen, 2; Clark, 4; Clay, 5; Clinton, 1; Daviess, 8; Dekalb, 7; Delaware, 4; Elkhart, 1; Floyd, 1; Fountain, 3; Fulton, 1; Gibson, 3; Grant, 2; Greene, 4; Harrison, 1; Hendricks, 5; Henry, 3; Huntington, 1; Jasper, 1; Jay, 1; Jefferson, 2; Jennings, 1; Johnson, 1; Knox, 1; Lagrange, 1; Lake, 4; Laporte, 19; Madison, 6; Monroe, 3; Montgomery, 4; Morgan, 2; Noble, 2; Orange, 4; Parke, 3; Pike, 1; Porter, 1; Posey, 3; Putnam, 1; Randolph, 5; Ripley, 7; Spencer, 2; Steuben, 2; St. Joseph, 5; Sullivan, 6; Tippecanoe, 6; Vanderburgh, 1; Vermillion, 1; Vigo, 1; Warrick, 2; Washington, 1; Wayne, 2; Whitley, 6.

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## REPORT OF BACTERIOLIGICAL LABORATORY INDIANA STATE BOARD OF HEALTH FOR SEPTEMBER, 1919.

WILL SHIMER, M. D., Superintendent.

| | | |
|---|---|---|
| Sputum for tubercle bacilli— | | |
| Positive | 161 | |
| Negative | 465 | |
| | | 626 |
| Urine for tubercle bacilli— | | |
| Positive | 1 | |
| Negative | 2 | |
| | | 3 |

Feces for tubercle bacilli—
Negative ..... 1 — 1

Pleural effusion for tubercle bacilli—
Negative ..... 1 — 1

Cerebro spinal fluid for tubercle bacilli—
Negative ..... 2 — 2

Throat cultures for diphtheria bacilli—
Positive ..... 151
Suspicious ..... 8
Negative ..... 194
Unsatisfactory ..... 17 — 370

Epidemic cultures for diphtheria bacilli—
Suspicious ..... 3
Negative ..... 83
Unsatisfactory ..... 1 — 87

Widal tests for typhoid fever—
Positive ..... 11
Negative ..... 151 — 162

Widal tests for paratyphoid fever "A"
Negative ..... 162 — 162

Widal tests for paratyphoid fever "B"—
Positive ..... 1
Negative ..... 161 — 162

Wassermann tests for syphilis—
Positive ..... 351
Negative ..... 540
Anticomplementary ..... 34 — 925

Brains for rabies—
Dogs:
Positive ..... 2
Negative ..... 3
Rotten ..... 3

Cows:
Rotten ..... 1 — 5

Blood for counts ..... 8 — 8

Blood for malaria plasmodia—
Positive ..... 3
Negative ..... 15 — 18

Pus for gonococci—
Females:
Positive ..... 140
Suspicious ..... 29
Negative ..... 191

Males:
Positive ..... 123
Suspicious ..... 11
Negative ..... 164
Unsatisfactory ..... 3

Sex not given:
Positive ..... 3
Suspicious ..... 1
Negative ..... 5
Unsatisfactory ..... 1 — 671

Pus miscellaneous ..... 2 — 2

Pathological tissues—
Carcinoma:
Carcinoma of larynx ..... 1
Carcinoma of chest wall ..... 1
Carcinoma of breast ..... 2
Carcinoma of axilla ..... 1
Carcinoma of uterus ..... 6

Sarcoma:
Sarcoma of bone in finger ..... 1
Miscellaneous tissues ..... 25
Gasserian ganglions ..... 2 — 37

Urine for general analysis ..... 32 — 32

Feces for typhoid bacilli, negative ..... 1 — 1

Total number examinations ..... 3,274

Doses of antityphoid prepared and sent out..... 279

## OUTFITS PREPARED AND SENT OUT DURING SEPTEMBER, 1919.

| | |
|---|---|
| Tuberculosis | 861 |
| Diphtheria | 501 |
| Widal | 193 |
| Wassermann | 1,081 |
| Gonococci | 628 |
| Malaria | 12 |
| Blood counts | 13 |
| Diphtheria epidemics | 150 |
| Hook worm | 1 |
| Total number | 3,440 |

REPORT ON "NEOSALVARSAN" SENT DURING THE MONTH OF SEPTEMBER TO U. S. P. H. S. CLINICS.

| Clinics. | 0.15 gr. | 0.3 gr. | 0.45 gr. | 0.6 gr. | 0.75 gr. | 0.9 gr. | Total |
|---|---|---|---|---|---|---|---|
| Anderson | 0 | 12 | 12 | 17 | 0 | 5 | 46 |
| Columbus | 5 | 5 | 0 | 5 | 10 | 10 | 35 |
| East Chicago | 0 | 10 | 8 | 25 | 20 | 30 | 93 |
| Evansville | 10 | 10 | 10 | 40 | 5 | 50 | 125 |
| Hammond | 10 | 7 | 8 | 14 | 1 | 12 | 52 |
| Indianapolis, Clinic | 30 | 50 | 50 | 50 | 10 | 60 | 250 |
| Indianapolis, Hospital | 0 | 10 | 10 | 10 | 10 | 0 | 40 |
| Kokomo | 0 | 5 | 5 | 5 | 0 | 5 | 20 |
| Marion | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Michigan City | 0 | 0 | 0 | 10 | 2 | 8 | 20 |
| Muncie | 5 | 15 | 10 | 30 | 5 | 30 | 95 |
| New Castle | 10 | 0 | 0 | 0 | 0 | 0 | 10 |
| South Bend | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Terre Haute | 0 | 24 | 25 | 50 | 0 | 100 | 200 |
| Total amount sent to Clinic | 70 | 149 | 138 | 256 | 63 | 310 | 986 |
| Misc. sent | 1 | 2 | 0 | 0 | 0 | 2 | 5 |
| Total amount sent | 71 | 151 | 138 | 256 | 63 | 312 | 991 |

PATIENTS TAKING "PASTEUR" TREATMENT AUGUST, 1919.

| Name | Town | County | Age | Sex | Treatment Began | Treatment Finished |
|---|---|---|---|---|---|---|
| Elmer Apple | Youngscreek | Orange | 8 | M | 9-11-19 | 9-28-19 |
| Opal May Martin | Battleground | Tippecanoe | 5 | F | 9-11-19 | 9-28-19 |
| John F. Oak | Madison | Jefferson | 14 | M | 9-17-19 | 9-23-19 |
| Walter Oak | Madison | Jefferson | 8 | M | 9-17-19 | 9-23-19 |

## DISEASES PRESENT MONTH OF SEPTEMBER, 1919.

Reported from Counties Named.

DIPHTHERIA—

Boone, Kosciusko, Pike, Morgan, Lake, Grant, Rush, Monroe, Wayne, Washington, Jay, Madison, Posey, Hendricks, Tipton, Decatur, Vigo, Newton, Dekalb, Wells, Putnam, Lawrence, Montgomery, Tippecanoe, Delaware, Vanderburg, Vigo, Fountain, Howard, Knox and Randolph.

SCARLET FEVER—

Elkhart, Randolph, Porter, Orange, Clay, Hendricks, Clinton, Jay, Decatur, Shelby and Marion.

SMALLPOX—

Blackford, Parke, Elkhart, Randolph and Hamilton.

TYPHOID FEVER—

Jennings, Greene, Clay, Dearborn, Howard, Clark, Henry, Fayette, Marion, Laporte, Dekalb, Hamilton, Madison, Boone and Decatur.

RABIES—

Dogs: Orange, Tippecanoe, Jefferson and Vigo.

VENEREAL—

| | | |
|---|---|---|
| Syphilis: | | |
| Male | 227 | |
| Female | 140 | |
| Total | | 367 |
| Gonorrhea: | | |
| Male | 302 | |
| Female | 79 | |
| Total | | 381 |
| Chancroid: | | |
| Male | 18 | |
| Total | | 766 |

## INFLUENZA VACCINE.

It is difficult indeed to set forth the exact status of phophylactic vaccines against influenza. Many vaccines for prophylactic use against influenza have been developed and used but not one has so far received positive endorsement, like for instance, smallpox vaccine. This is owing to the lack of knowledge regarding the definite etiological factor. Carefully controlled experiments in Massachusetts, and at the Pelham Bay Training Station, and at Paris Island and other places, have shown that influenza occurred just as frequently among the vaccinated as among the unvaccinated, and that the deaths from influenza were about the same in both groups. Similar results were obtained by the use of commercial vaccines. This is the testimony of Dr. G. W. McCoy, Supt. U. S. Laboratory at Washington and he also says—"where vaccines have been tried under perfectly controlled conditions negative results have always been obtained."

## Things of Interest from the Laboratory—Tuberculosis Prevention Program in England.

INDIRECT MEASURES:—

1. Teaching laws of health (personal hygiene) in public schools:—
   - Didactic and
   - By example.
2. Things to combat:—
   - Ill—Nutrition
   - Fatigue—Industrial
     - Speed
     - Long hours
   - Industrial poisoning.
3. Measures necessary to combat poverty:—
   1. High wages.
   2. Education.
   3. Eugenics.
   4. Housing.
      - (a) Light.
      - (b) Ventilation.
      - (c) Heat.
      - (d) Water.
      - (e) Sewage disposal.
      - (f) Garbage disposal.
      - (g) Floor space.
        - (1) Number rooms.
        - (2) Sleeping quarters.
        - (3) Hospitalization of sick.
      - (h) Overcrowding.
      - (i) Ignorance.
      - (j) Low wages.
      - (k) Sickness, death.
      - (l) Pauperism, usually due to poor eugenic stock

Causes of Poverty

DIRECT MEASURES:—

1. Early recognition of the disease:—
   - Diagnosis.
   - Co-operation of
     - Physician.
     - Health Officer.
     - Visiting Nurse.
     - Charity Organizations.
     - T. B. Clinics.
     - T. B. Hospitals.
2. Reporting to health boards, who take measures to:—
   - Prevent spread of infection.
   - Find source of infection.
3. Treatment of patient:—
   - Acute cases
     - Rest in bed.
     - Work under favorable conditions.
     - Home supervision.
   - Chronic—Incurable
     - Permanent isolation in hospital.

## REPORT OF THE FOOD AND DRUG DEPARTMENT INDIANA STATE BOARD OF HEALTH.

H. E. BARNARD, State Food and Drug Commissioner.

Inspectors from the food and drug division condemned, during the month of September, 12 food handling establishments, as insanitary. The institutions that were ordered to discontinue business until they had made improvements, included 2 bakeries, 2 candy factories, 2 cream stations, 2 dairies, 2 ice cream factories, 1 restaurant and one kraut factory.

Food establishments inspected during the month totaled 156. Of these 7 were rated "excellent", 85 "good", 42 "fair", 16 "poor" and 6 "bad". Of the ice cream factories 10 were classed as "fair" and were given notice to make changes in plants.

In the food laboratories 41 samples were analyzed, 36 of which were found legal and 5 illegal. The illegal samples included one of cider, 2 of milk and 2 of ice cream. Of 11 samples of magnesium citrate analyzed in the drug laboratories 10 were found illegal.

Four prosecutions were instituted during the month, two for selling milk below the legal standard, one for selling tainted meat and the other for selling misbranded drugs. In the cases for selling tainted meats and misbranded drugs, convictions were secured and fines assessed.

The following tables show the activities of the Food and Drug Department for September.

REPORT OF STATE FOOD AND DRUG INSPECTORS FOR SEPTEMBER, 1919

| Inspected. | Number Inspected | Number Excellent | Number Good | Number Fair | Number Poor | Number Bad |
|---|---|---|---|---|---|---|
| Bakeries | 3 | | | 1 | 2 | |
| Canning Factories | 16 | | 3 | 9 | 2 | 3 |
| Confectioneries | 15 | | 13 | 1 | 1 | |
| Cream Stations | 5 | | 2 | 1 | | 2 |
| Drug Stores | 34 | 3 | 20 | 9 | 2 | |
| Fruit and Vegetables | 3 | | 3 | | | |
| Groceries | 21 | | 14 | 2 | 5 | |
| Hotels-Restaurants | 25 | 2 | 15 | 7 | 1 | |
| Ice Cream Factories | 15 | 2 | 3 | 10 | | |
| Ice Cream Parlors | 1 | | | | | 1 |
| Meat Markets | 10 | | 6 | 2 | 2 | |
| Milk Plants | 7 | | 5 | | 2 | |
| Slaughter Houses | 1 | | 1 | | | |
| | 156 | 7 | 85 | 42 | 16 | 6 |

NOTICE OF CONDEMNATION DURING THE MONTH OF SEPTEMBER, 1919

| Classification | Reasons for Condemnation | | Total |
|---|---|---|---|
| | Unsanitary Conditions | Improper Construction | |
| Bakeries | 2 | 2 | 4 |
| Candy factories | 2 | | 2 |
| Cream stations | 2 | | 2 |
| Dairies | 2 | | 2 |
| Ice Cream factories | 2 | 1 | 3 |
| Restaurants | 1 | | 1 |
| Kraut factory | 1 | | 1 |
| | 12 | 3 | 15 |

ANALYSIS OF FOODS AND DRUGS DURING THE MONTH OF SEPTEMBER, 191

| Classification | No. Legal | No. Illegal | Total |
|---|---|---|---|
| FOODS | | | |
| Beverages— | | | |
| Cider | | 1 | 1 |
| Confections— | | | |
| Candy | 2 | | 2 |
| Essences— | | | |
| Turpeneless Extract Lemon | 1 | | 1 |
| Milk Products— | | | |
| Milk | 18 | 2 | 18 |
| Ice Cream | 16 | 2 | 18 |
| Vinegar | 1 | | 1 |
| | 36 | 5 | 41 |
| DRUGS | | | |
| Solution for identification | 1 | | 1 |
| Solution of Magnesium Citrate | 1 | 10 | 11 |
| | 2 | 10 | 12 |

LIST OF PROSECUTIONS DURING THE MONTH OF SEPTEMBER, 1919

| Counties | Names and Addresses of Defendants | Why Prosecuted | Date of Trial | Final Disposition |
|---|---|---|---|---|
| Grant | Edw. Trook Marion, Ind. | Selling milk below standard. | | |
| Tipton | Ed. Riffe Tipton, Ind. | Selling tainted meat | Sept. 30 | Fined, $12.05. |
| Tipton | G. P. Bower and Jas. Wood | Selling misbranded drugs | Sept 30 | Fined, $36.15. |
| Wayne | Joe Fisher Richmond, Ind. | Selling milk below standard | | |

## KENTUCKY.

Dr. A. T. McCormack, Secretary of the State Board of Health of Kentucky, who is a strong man physically and mentally, a rare personality, with energy and enthusiastic in the cause of the public health, is pushing public health affairs in Kentucky in a way calculated to make ordinary people dizzy. His predecessor was his father, Dr. J. N. McCormack, who for a quarter of a century laid the foundations and prepared the way for the present laws concerning public health which the "Corn Cracker" state enacted. Dr. A. T. McCormack in a recent article in the American Medical Journal of Public Health says—"The State Board of Health of Kentucky was created in 1898. The disastrous epidemic of yellow fever, which rapidly spread over the entire South was the immediate cause of the passage of the law. The law was hurriedly drawn, was very imperfect and being practically without appropriation, did not meet with startling success in its efforts. However, a long and unbroken line of Appellate Court decisions steadily so extended the powers and duties of the board and its affiliated county and city boards that soon they had the entire police power of the commonwealth back of the comprehensive rules and regulations they were authorized to make." Continuing, Dr. McCormack says: "Later when medical education had fallen to such a low ebb and blatant quackery had gained such a foothold here and in the Union, as to be a reproach upon the profession, which condition must lead in all effective health reform, a strong medical law was passed." Further in his article Dr. McCormack states that—"the public health work suffered greatly from handicaps of an archaic state fiscal system and a resultant empty treasury, so that the annual appropriation was only $2,500, and that for county work was general equally small and in most of the counties nothing at all. The Secretary of the board lent his home to the board for its office, and the members of his family furnished clerical and stenographic assistance for 28 years, during which time he practiced medicine every day for his own and their support." This certainly was a public service which the citizens of Kentucky should appreciate. If they do not appreciate this service and if the appreciation is not somehow expressed, then it may be said that—something is lacking in Kentucky. Of course, Dr. McCormack and others who were interested in the public health had upon them the duty to educate the teachers, newspapers, the clergy, the medical profession, business man and all other classes. As a result of the unselfish interest of a small group of men, the Legislature of Kentucky in 1910 passed a law which provided for a Bureau of Sanitation, a Bureau of Bacteriology, a Bureau of Vital Statistics, and further provided an annual school for county and city health officers with attendance compulsory and all expenses paid. For all of this there was an annual appropriation of $85,000. This law marks a new health era in Kentucky. At the present time the State Board of Health of Kentucky is located at Louisville, headquarters in the building of the University of Louisville and the board has the following Divisions: Bureau of Vital Statistics, Bureau of Tuberculosis, Bureau of Epidemiology and Bacteriology, Bureau of Pure Foods and Drugs, Bureau of Venereal Diseases, Bureau for the Conservation of Vision, Bureau of Hotels and Restaurants, and lastly a Bureau of Sanitation. It also has the following Divisions: a Division of Sanitary Engineering, a Division of Housing and Industrial Hygiene, a Division of Child Welfare, and a Division of County and Visiting Nurses. Now, the

Kentucky State Board of Health will establish under the joint auspices of the university and board a school for Health Officers and a school for Visiting Nurses and Welfare Workers. The Secretary of the State Board of Health will be Dean of the school and the heads of the various bureaus and such others as may be selected will compose the faculty. The Kentucky health law also makes provision for County Departments of Health with full time health officers, public health nurses and other assistants and for emergency laboratories and other necessary equipment for real health work. All of these economic and humanitarian provisions have been obtained with the hearty co-operation of the state and county medical societies of Kentucky. Of course, there have been shirkers and of course, there were doctors who sneered at this good work and of course, there were those who predicted failure and all that but Kentucky has gone forward splendidly as is usual with all advancements in the face of spite, envy, ignorance and uncharitableness.

## ALL-TIME HEALTH OFFICERS NEEDED.

At an address before a large gathering of Indiana physicians Thursday, the speaker's plea for a law creating an all-time health officer met with an enthusiastic response from his audience. A number of women's organizations have been advocating this step for several years and various other state societies have indorsed the plan. Whenever a measure creating such an office comes up in the Legislature, however, it is promptly voted down. Petty politics or antagonism toward certain doctors administering our public health statutes usually accomplishes the downfall of this most progressive measure.

Without reflecting on the ability of those who are conscientiously endeavoring to give their best efforts to the various health offices, it is undeniable that the average incumbent can not afford to devote the time to his official work that the needs of the situation demand. The pittance he receives forces him to look to his private practice to supply the necessaries of life. As long as human nature continues in its present bounds, the public need not expect a doctor to sacrifice his real source of income for a job which brings only criticism and antagonism.

As an example of the present status of the health administration one county officer in addition to looking after his private practice owns a drug store, has a part interest in a garage and several other business ventures. With these affairs requiring his attention, it may readily be suspected that the doctor has little time left to devote to problems affecting the public health. It has been the general verdict that under present conditions delay and lack of co-operation mark responses from Indiana health officers and that problems are disposed of in hasty, careless fashion.

Indiana should have an all-time health officer law and the salary attached to the positions under the statute should be sufficiently attractive to the highest type of physician. The meager salary received at present could only appeal to the young practitioner, honest and fearless perhaps, but lacking the poise and judgment of an older man gained only through years of experience. If the office is filled by a physician who has not earned the respect of the community he can not be assured that co-operation or obedience essential to proper enforcement of his orders.

A thorough campaign of education is necessary to convince the public that the all-time health officer is necessary to the growth and efficiency of a given community. Until the pressure of this public opinion is brought to bear, the average legislator will vote against the increased appropriation which the law would require. Viewing the state budget only through political eyes, he may fear the effect on his party of any increased expense in the interests of public health. He may cheerfully vote thousands of dollars to obtain a better breed of swine or to eradicate tuberculosis in cattle and not spend a penny to improve the health of human beings. Meanwhile, the state is spending hundreds of thousands for the maintenance of various institutions crowded because of laxity in enforcing the necessary preventive measures.—Indianapolis Star, September 29, 1919.

## IMPORTANCE OF CONTROLLING VENEREAL DISEASES.

The malevolent characteristic of venereal diseases is that it poisons the stream of human life, it attacks the fountain, it pollutes the seed. Other diseases, notably tuberculosis, have a certain hereditary tendency, but this is a wholly different matter from the fundamental and essential malignity of venereal disease, which aims straight at the race's power to perpetuate itself, to reproduce and grow. It is responsible for more than 50 per cent of the race's incapacity to have children—I quote from the British Royal Commission. I have no hesitation in saying that its steady deadliness, continued year in and year out, is greater than the deadliness of wars that break out once every generation or so. Dr. Charles W. Eliot once said, speaking of this and a related disease: "These diseases have proved more destructive to the world since August, 1914, than all the artillery, rifles, hand grenades, and fire blasts." Surgeon General Gorgas, in urging the measures that later on were successfully adopted to control venereal disease within the American army for the period of the war, said that if it were possible to get rid of all the wounds or all the venereal diseases he would rather be rid of the venereal cases.

The mechanism for the suppression of this disease, the worst, from the standpoint of the race as a stream moving from generation to generation, is under way. Within a short time it is expected to have a clinic in every one of the 740 cities of the country with more than 8,000 population. There will be educational campaigns that will reach every school, every store, and every factory. Venereal disease will be handled as what it is, a dangerous, communicable disease, and in a short time it should be brought as completely under control as has been done with smallpox, hookworm, malaria and typhoid.

To state it quite simply, this is the most useful thing now being done in the world.—Mark Sullivan, Colliers, Aug. 2, 1919. (J. A. T.)

DOCTOR EVANS, a hygienist of high reputation and editor of the "Health Column" in the Chicago Tribune says: "The statistics show that influenza does not predispose to tuberculosis." Before arriving at this conclusion he examined and carefully studied all the available statistics. His article will be found in the Literary Digest of September 13, 1919.

## A CITY HOSPITAL SCHOOL.

A most unique development of social service work is now being demonstrated at the City Hospital at Indianapolis. A school has been established which is open to all children of school age who are patients at the institution and who are physically able to attend the school. The idea of such a school was first proposed by Mrs. Ruth H. Miller, Social Service Director at the City Hospital. Through the co-operation of the Indianapolis School Board a teacher has been provided and the school established in a corridor room on the top floor of the new hospital addition. Here the children go to school from 9:00 to 11:30 each morning. In the afternoon, when the weather permits, the children do their studying and school work on the roof porch or in the front yard of the institution. Children from the venereal disease wards are included in the school roster and crippled children are brought to the school on wheelchairs and hospital ambulances. Miss Mary Belle Haynes, the teacher, is most enthusiastic about her work and is proud of the progress the children are making in their school studies. One of the most interesting pupils is a Greek, who while recovering from a mashed foot is proving himself an apt pupil in the study of mathematics and the English language. It is believed that this is the first instance of a regularly conducted school in a city hospital, and yet nothing would seem to be more logical than that children who by reason of sickness, injury or deformity are required to spend a long time in a hospital should be given an opportunity to study school work at the same time. The course of study followed in this hospital school is the same as the course of study in the grades in the city schools of Indianapolis, so that children taking the school work at the City Hospital will receive full credit for this work in the city schools. The progress of this school, with the results accomplished, is being watched with very great interest by all social welfare workers.

## THE SANITARY CODE OF THE REPUBLIC HAITI GIVES THE FOLLOWING DEFINITION OF A NUISANCE.

Whatever is dangerous to human life or health; whatever building or part thereof is overcrowded or not provided with adequate means of ingress and egress or is not sufficiently ventilated, drained, lighted, or cleaned; and whatever renders soil, air, water, or food impure or unwholesome, are declared to be "nuisance" and illegal. Any nuisance must be promptly removed upon receipt of written notice from the sanitary officer by the person responsible therefor.

## SCHOOL LUNCHES AND FEEDING SCHOOL CHILDREN.

Few indeed are the schoolrooms, rural and urban, in which poorly or even very badly nourished children cannot be found. Many pupils are "slow" because of wrong feeding and even lack of food. Nutrition is fundamental for all lines of child development. The lunch hour in all too many Indiana schools is a wasted opportunity and the parent of disorder, indigestion and general discomfort. Luncheons are brought wrapped in newspaper and in tin buckets or cardboard boxes. The to-be-pitied child, sits down on the coal box, the school steps, at his desk or elsewhere, and hurriedly gulps his cold and frequently miserable food. He scatters fragments about, soils his clothing, and creates untidiness and insanitary conditions. Manners, health and morals are injured.

What shall be done? Obviously, parents, teachers and school authorities are to blame. The child is almost helpless. It is a pity that so few parents, school authorities and teachers do not know and understand the great importance of the proper feeding of children. *Eventually the child is what he eats, how much he eats and how he eats.*

## SIMON: "CARRIERS."

Dr. Chas. E. Simon, B. A., M. D., has written a work entitled "Human Infection Carriers: Their Significance, Recognition and Management." Price, $2.25. Every general practitioner should have this book and should study it long and hard. Dr. Simon has treated the subject most masterfully and he is truly behind the time who has not given some attention to the important subject of disease carriers. Dr. Simon presents a truth which comes somewhat in the nature of a shock to the effect that in institutions in which infectious diseases are treated which are apt to result in the development of the carrier state, no examination is made previous to the discharge of the patient to ascertain whether or not he is apt to prove a menace to others, and in this connection the question might be asked, How many general practitioners are looking carefully after this point? Our belief is that only a small proportion of science-learned and conscientious physicians are attending to this matter. Dr. Simon's book deals with a discussion of the problem under consideration only in connection with those diseases of bacterial origin or which are due to activity of a filtrable virus and in the dissemination of which healthy human carriers are now known to play a role.

We advise all physicians and especially all health officers to secure a copy of this book and study it hard.

OKLAHOMA has gone into the Infant Welfare Work with intelligence and energy. The Oklahoma Tuberculosis Association has been waging an unusual effective Infant Welfare Campaign this summer. The attack has been mostly in the rural regions. The workers spend one month in each county and mostly in places where modern health activities have never been conducted before. The mothers are searched out and visited and their friendship invited. Then comes information and instruction both oral and written in regard to the care of the babies. A constant publicity campaign in the newspapers is also conducted. The physicians in the community are enlisted in the work, also the teachers' and farmers' institutes. These good people should secure, if possible, the support of the business men, for it is true that—the most important busniess is the business of the public health. And it is also true that until the support of the business men is secured and they are made to understand the highest and noblest economy is public health work, there will not be much advancement.

DEMOGRAPHY: Broadly speaking, demography is the statistical study of human life, the Bookkeeping of Humanity. It deals with such important facts as birth, physical growth, marriage, sickness, death and political, social, educational and religious matters. It is sometimes

used as synonymous with vital statistics, but vital statistics do not include all of the above. The word is from the Greek: **demos**—people; **grapho**—to write. It will be remembered that the term "demography" was used in the title of the triennial gathering of physicians and sanitarians at Washington in 1912. The title referred to was the International Congress on Hygiene and Demography.

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## FOR HEALTHY BABIES.

No food is as good for the baby as mother's milk.

Bottle-fed babies have far less chance to live than breast-fed babies.

To properly raise a baby requires 20 per cent of good milk and 80 per cent of good mother.

To have a real good baby you must be real good parents.

Stock breeders are most careful in the selection of animals for breeding purposes; yet no one ever raises a protest against the breeding of scrubs in the human kingdom.

On the contrary, there are many people who never had children yet persist in telling those who have what to do.

At a recent conference of unmarried, ultra-scientific women, such advice was given as : "Bones for babies to gnaw at"; "Back to the Stone Age"; "Modern civilization is ruining the human structure." A lot of advice about food and dress was thrown in for good measure, but it was all of a nature indicating that the advisors had never handled babies at close range.—Buffalo Sanitary Bulletin.

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LOWELL LECTURES. The famous Lowell Lectures given at Harvard University every year are famous throughout the world of scholarship. This year the "Lowell Lectures" and also the Cutter lectures in preventive medicine will be given in the medical department of Harvard University by Dr. Thomas M. Legg, Chief Medical Inspector of Factories in Great Britain. He will deliver a series of six lectures in the Lowell series and three in the Cutter series. A few months ago a practicing physician in one of our flourishing cities said: "Preventive medicine and hygiene! nothing in them. I don't see why a county medical society should give one whole session to considering these vapid subjects." In view of the above action by Harvard University in having the Legg lectures delivered, one might truthfully conclude that the doctor who made the above quoted remark is lacking in intelligence, knowledge and tact.

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FROM A CHILD'S TOY. Just one hundred years ago Rene Theophile Hyacinthe Laennec, one of the pioneers of modern medicine, observing some children playing in the gardens of the Louvre, listening to the transmission of sounds along pieces of wood, conceived the idea of utilizing this method for listening to breath sounds in examining a patient's lungs. He went home, fashioned a tube by rolling up some glued paper and then experimented with this in his ward at the Neckar Hospital. From this incident in the garden dates the modern "stethoscope," an instrument well nigh indispensable in the modern practice of medicine.

The early stethoscopes contrived by Laennec were unlike those generally in use in this country at the present time, for they were constructed to be used by one ear only. Nevertheless, the original Laennec type is still widely used in European countries. To us, who are accustomed to the scrupulous cleanliness of everything about the modern hospital, it is curious indeed to learn that the filthy condition of the patients in the hospitals in Laennec's time made it repugnant to physicians to listen to the sounds in the lungs by placing the ear directly on the chest of the patient.

Laennec gave his invention the name by which the device is still known, deriving the word stethoscope from two Greek roots, one meaning the "chest" and the other "to observe" or "regard."

In using the stethoscope the instrument should be placed on the bare chest wall. For this reason a satisfactory examination of the lungs can only be made when the patient is stripped to the waist. Careless physicians sometimes attempt to examine a patient's chest through the clothing. Such an examination is worthless. If you want reliable information concerning the condition of your lungs, do not go to a doctor who attempts such careless work. It is time and money wasted.

Dr. Laennec was born at Quimper in Brittany on February 17, 1781, growing to manhood during some of the most troublous years in the history of France. He studied medicine at Paris, receiving his degree of doctor in 1804. He died on August 13, 1826, at the early age of 45, in the quaint old town in Brittany in which he first saw the light.—U. S. Public Health Service.

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BASED on the mortality statistics of the allied armies, a soldier's chances are as follows:

Twenty-nine chances of coming home to one chance of being killed.

Forty-nine chances of recovering from wounds to one chance of dying from them.

One chance in 500 of losing a limb.

Will live five years longer because of physical training, is freer from disease in the army than in civil life, and has better medical care at the front than at home.

In other wars from 10 to 15 men died from diseases to 1 from bullets; in this war 1 man dies from disease to every 10 from bullets.

For those of our fighting men who do not escape scathless, the government under the soldier and sailor insurance law gives protection to the wounded and their dependents, and to the families and dependents of those who make the supreme sacrifice for their country.

# CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM IMPORTANT CAUSES FOR SEPTEMBER, 1919.

### NORTHERN SANITARY SECTION.

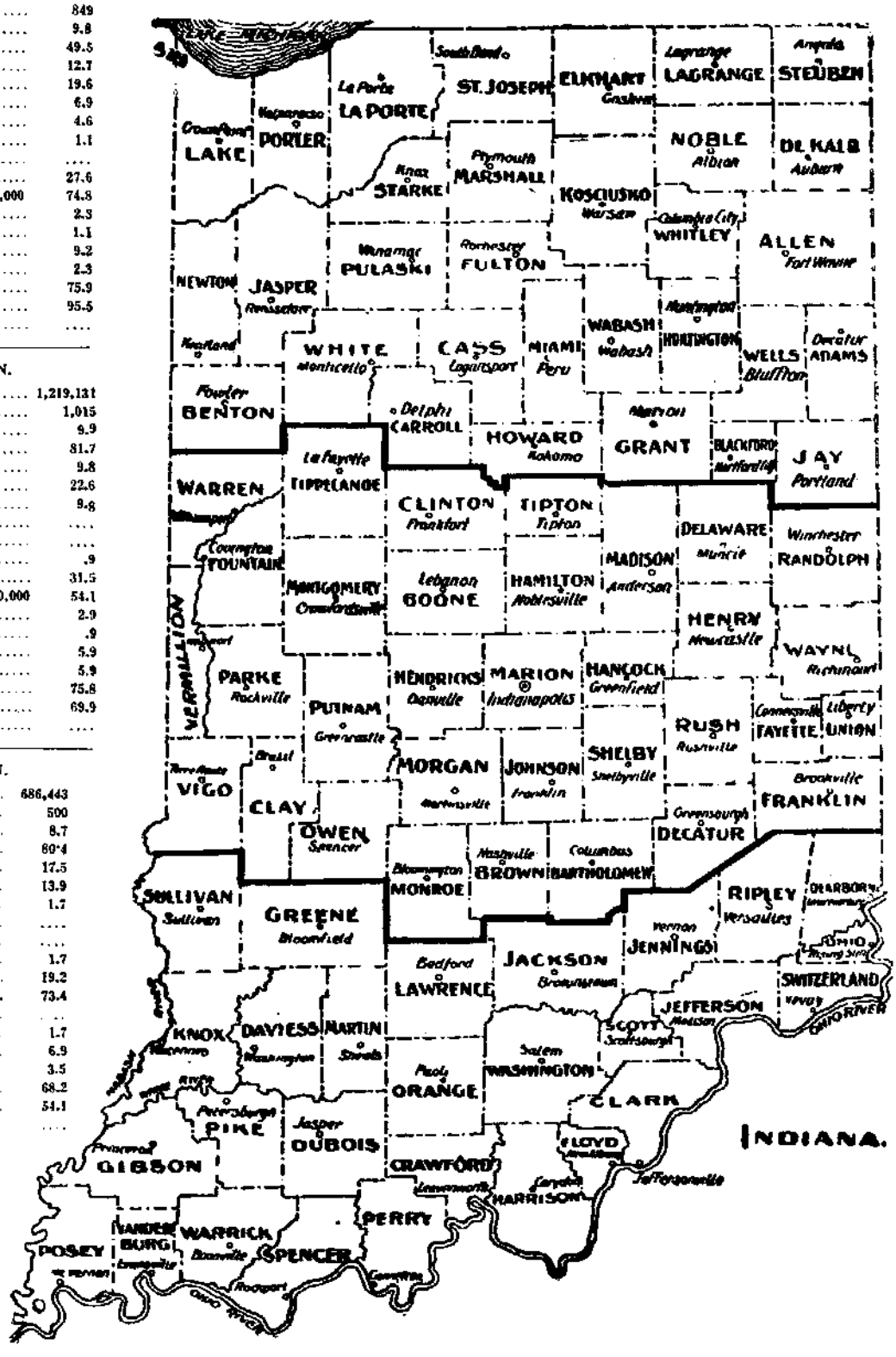
| | |
|---|---|
| Total population | 1,942,514 |
| Total deaths | 849 |
| Death rate per 1,000 | 9.8 |
| Pulmonary Tuberculosis, rate per 100,000 | 49.5 |
| Other forms of Tuberculosis, rate per 100,000 | 12.7 |
| Typhoid Fever, rate per 100,000 | 19.6 |
| Diphtheria and Croup, rate per 100,000 | 6.9 |
| Scarlet Fever, rate per 100,000 | 4.6 |
| Measles, rate per 100,000 | 1.1 |
| Whooping Cough, rate per 100,000 | .... |
| Lobar and Broncho-Pneumonia, rate per 100,000 | 27.6 |
| Diarrhoea and Enteritis (under 2 yrs.), rate per 100,000 | 74.8 |
| Cerebro-Spinal Fever, rate per 100,000 | 2.3 |
| Acute Anterior Poliomyelitis, rate per 100,000 | 1.1 |
| Influenza, rate per 100,000 | 9.2 |
| Puerperal Septicemia, rate per 100,000 | 2.3 |
| Cancer, rate per 100,000 | 75.9 |
| External causes, rate per 100,000 | 95.5 |
| Smallpox, rate per 100,000 | .... |

### CENTRAL SANITARY SECTION.

| | |
|---|---|
| Total population | 1,219,131 |
| Total deaths | 1,015 |
| Death rate per 1,000 | 9.9 |
| Pulmonary Tuberculosis, rate per 100,000 | 81.7 |
| Other forms of Tuberculosis, rate per 100,000 | 9.8 |
| Typhoid Fever, rate per 100,000 | 22.6 |
| Diphtheria and Croup, rate per 100,000 | 9.8 |
| Scarlet Fever, rate per 100,000 | .... |
| Measles, rate per 100,000 | .... |
| Whooping Cough, rate per 100,000 | .9 |
| Lobar and Broncho-Pneumonia, rate per 100,000 | 31.5 |
| Diarrhoea and Enteritis (under 2 yrs.), rate per 100,000 | 54.1 |
| Cerebro-Spinal Fever, rate per 100,000 | 2.9 |
| Acute Anterior Poliomyelitis, rate per 100,000 | .9 |
| Influenza, rate per 100,000 | 5.9 |
| Puerperal Septicemia, rate per 100,000 | 5.9 |
| Cancer, rate per 100,000 | 75.8 |
| External causes, rate per 100,000 | 69.9 |
| Smallpox, rate per 100,000 | .... |

### SOUTHERN SANITARY SECTION.

| | |
|---|---|
| Total population | 686,443 |
| Total deaths | 500 |
| Death rate per 1,000 | 8.7 |
| Pulmonary Tuberculosis, rate per 100,000 | 80.4 |
| Other forms of Tuberculosis, rate per 100,000 | 17.5 |
| Typhoid Fever, rate per 100,000 | 13.9 |
| Diphtheria and Croup, rate per 100,000 | 1.7 |
| Scarlet Fever, rate per 100,000 | .... |
| Measles, rate per 100,000 | .... |
| Whooping Cough, rate per 100,000 | 1.7 |
| Lobar and Broncho-Pneumonia, rate per 100,000 | 19.2 |
| Diarrhoea and Enteritis (under 2), rate per 100,000 | 73.4 |
| Cerebro-Spinal Fever, rate per 100,000 | .... |
| Acute Anterior Poliomyelitis, rate per 100,000 | 1.7 |
| Influenza, rate per 100,000 | 6.9 |
| Puerperal Septicemia, rate per 100,000 | 3.5 |
| Cancer, rate per 100,000 | 68.2 |
| External causes, rate per 100,000 | 54.1 |
| Smallpox, rate per 100,000 | .... |



## TABLE 1. Deaths and Births in Indiana by Counties and Sections During the Month of September, 1919. (Stillbirths Excluded.)

| STATE AND COUNTIES. | Estimated 1919 Population. | Total Deaths Reported for September, 1919. | Total Deaths Reported for September, 1918. | Total Deaths Reported for the Year 1919 to Date. | Total Deaths Reported for the Year 1918 to Same Date. | Annual Death Rate Per 1000: September, This Year. | Annual Death Rate Per 1000: September, Last Year. | Important Ages: Under 1 Year. | Important Ages: Age 1 to 10. | Important Ages: Age 10 to 20. | Important Ages: 65 Years and Over. | Pulmonary Tuberculosis. | Other Forms of Tuberculosis. | Typhoid Fever. | Diphtheria and Croup. | Scarlet Fever. | Measles. | Whooping Cough. | Lobar and Bronchio-Pneumonia. | Diarrhoea and Enteritis (under 2 years). | Cerebro-Spinal Fever. | Acute Anterior Poliomyelitis. | Influenza. | Puerperal Septicemia. | Cancer. | External Causes. | Smallpox. | Institution Deaths. | Births: Total Births. | Births: Rate per 1,000 Population. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **State of Indiana** | 2,948,089 | 2,364 | 2,614 | 28,597 | 29,218 | 9.6 | 10.6 | 332 | 192 | 87 | 851 | 172 | 31 | 48 | 17 | 4 | 1 | 2 | 67 | 162 | 5 | 3 | 18 | 10 | 182 | 185 | | 359 | 6,599 | 18.7 |
| **Northern Counties** | 1,042,514 | 849 | 941 | 9,874 | 10,303 | 9.3 | 11.1 | 129 | 80 | 32 | 283 | 43 | 11 | 16 | 6 | 4 | 1 | | 24 | 65 | 2 | 1 | 8 | 2 | 66 | 83 | | 141 | 1,779 | 20.6 |
| Adams | 21,840 | 15 | 12 | 173 | 165 | 8.2 | 6.6 | 1 | 1 | | 9 | 1 | 1 | | | | | | 1 | 1 | | | 2 | 1 | 3 | | | | 31 | 17.0 |
| Allen | 106,781 | 79 | 99 | 1,008 | 1,075 | 8.9 | 11.1 | 7 | 8 | 4 | 23 | 4 | | 1 | | 1 | | | 1 | 3 | | | | | 11 | 7 | | 30 | 172 | 19.3 |
| Benton | 12,688 | 3 | 10 | 80 | 96 | 2.8 | 9.4 | | | | 1 | | | | | | | | | | | | | | | 1 | | | 24 | 22.7 |
| Blackford | 15,820 | 9 | 15 | 119 | 134 | 6.8 | 11.4 | 3 | | | 4 | | | 1 | | | | | | 3 | | | | | | | | | 21 | 15.9 |
| Carroll | 17,970 | 12 | 19 | 171 | 153 | 8.0 | 12.7 | 4 | | | 6 | | | | | | | | | 2 | | | | | 2 | | | | 19 | 12.7 |
| Cass | 37,881 | 33 | 45 | 444 | 444 | 10.4 | 14.2 | 4 | 3 | 2 | 10 | 3 | | 1 | | 2 | | | | 2 | | | | | 1 | 2 | | 5 | 59 | 18.7 |
| Dekalb | 25,054 | 19 | 20 | 267 | 208 | 9.1 | 9.6 | 2 | 2 | | 9 | 2 | | | | | | | | | | | 1 | | 1 | 3 | | | 21 | 10.0 |
| Elkhart | 52,293 | 48 | 42 | 513 | 592 | 11.0 | 9.5 | 6 | 5 | 1 | 23 | 1 | | 1 | | | | | 1 | 1 | | 1 | | | 2 | 5 | | 8 | 106 | 24.3 |
| Fulton | 16,879 | 15 | 14 | 177 | 148 | 10.7 | 9.9 | | 1 | | 7 | | | | | | | | | | | | | | 1 | 2 | | | 29 | 20.6 |
| Grant | 51,428 | 57 | 53 | 591 | 656 | 13.3 | 12.4 | 3 | 6 | 3 | 28 | 2 | | | 2 | 1 | | | | 1 | | | 1 | | 6 | 1 | | 19 | 65 | 15.2 |
| Howard | 37,002 | 48 | 29 | 454 | 379 | 15.6 | 9.4 | 8 | 4 | 1 | 20 | 3 | 1 | | | | | | | 5 | | | | | 7 | 2 | | 6 | 84 | 27.2 |
| Huntington | 29,048 | 33 | 28 | 315 | 304 | 13.6 | 11.6 | 5 | 4 | 2 | 7 | 1 | | 4 | 2 | | | | 2 | 4 | | | | | 5 | 1 | | 2 | 60 | 24.8 |
| Jasper | 13,044 | 8 | 12 | 123 | 103 | 7.3 | 11.0 | | 2 | | 1 | | 1 | | | | | | 1 | 1 | | | 1 | | 2 | 1 | | 2 | 27 | 24.8 |
| Jay | 24,961 | 28 | 25 | 290 | 214 | 13.4 | 12.0 | 5 | 5 | 1 | 7 | | | 2 | | | | | 1 | 4 | | | | 1 | 1 | | | | 26 | 12.5 |
| Kosciusko | 27,936 | 23 | 20 | 261 | 259 | 9.9 | 12.4 | | 4 | | 14 | 2 | 1 | | | | | | 2 | 1 | | | | | | | | 1 | 31 | 13.3 |
| Lagrange | 15,148 | 10 | 10 | 117 | 132 | 7.9 | 7.9 | 1 | | | 5 | 1 | | | | | | | | | | | | | 3 | | | | 21 | 16.6 |
| Lake | 146,245 | 130 | 160 | 1,453 | 1,822 | 10.6 | 15.9 | 43 | 14 | 7 | 15 | 7 | 3 | 3 | 2 | | | | 7 | 22 | 1 | | 1 | | 3 | 33 | | 35 | 366 | 30.0 |
| Laporte | 51,958 | 45 | 51 | 474 | 491 | 10.4 | 11.8 | 6 | 2 | | 15 | 1 | 1 | 2 | | | 1 | | 3 | 4 | | | | | 2 | 5 | | 8 | 82 | 18.9 |
| Marshall | 24,175 | 15 | 19 | 213 | 208 | 7.4 | 9.4 | 2 | 1 | | 6 | 2 | 1 | | | | | | | | | | 1 | | | | | | 46 | 22.8 |
| Miami | 30,186 | 13 | 26 | 236 | 288 | 5.2 | 10.3 | | 1 | 1 | 9 | | | | | | | | 1 | 1 | | | | | 1 | 1 | | 1 | 29 | 11.5 |
| Newton | 10,549 | 6 | 6 | 85 | 63 | 6.8 | 6.8 | | 1 | | 2 | | | | | | | | | | | | | | 1 | | | | 12 | 13.7 |
| Noble | 24,403 | 20 | 14 | 223 | 244 | 9.8 | 6.9 | 1 | | 1 | 10 | 2 | | 1 | | | | | | | | | | | 1 | 1 | | | 30 | 14.8 |
| Porter | 21,673 | 10 | 19 | 184 | 179 | 5.5 | 10.5 | 2 | | | 4 | | | | | | | | | | | | | | 1 | 2 | | 1 | 26 | 14.4 |
| Pulaski | 13,312 | 10 | 7 | 99 | 94 | 9.0 | 6.3 | 2 | 1 | 1 | 3 | | 1 | | | | | | | 1 | | | | | | | | | 43 | 38.8 |
| Starke | 10,680 | 9 | 8 | 83 | 89 | 10.1 | 8.9 | | 1 | 1 | 4 | 1 | | | | | | | 1 | | | | | | | 1 | | | 19 | 21.3 |
| Steuben | 14,274 | 15 | 16 | 152 | 158 | 12.6 | 13.4 | | 2 | | 9 | | | | | | | | | | | | | | 3 | 1 | | | 24 | 20.2 |
| St. Joseph | 105,450 | 79 | 92 | 876 | 898 | 8.9 | 10.5 | 18 | 8 | 4 | 15 | 5 | 1 | 2 | | | | | 1 | 7 | 1 | | 1 | | 4 | 10 | | 23 | 188 | 21.4 |
| Wabash | 26,926 | 16 | 31 | 250 | 264 | 7.1 | 13.8 | 3 | | 1 | 9 | | | | | | | | 2 | | | | | | 3 | 1 | | | 33 | 14.7 |
| Wells | 22,418 | 13 | 12 | 191 | 161 | 6.9 | 6.4 | 2 | | | 5 | 3 | | | | | | | | 1 | | | | | | 1 | | | 41 | 21.9 |
| White | 17,602 | 15 | 7 | 181 | 146 | 10.2 | 4.8 | 1 | 2 | 1 | 8 | 2 | | | | | | | | | | | | | 1 | | | | 19 | 12.9 |
| Whitley | 16,862 | 13 | 11 | 161 | 138 | 9.2 | 7.8 | 2 | 2 | 1 | 5 | | | | | | | | | 1 | | | | | 1 | 2 | | | 25 | 17.7 |
| **Central Counties** | 1,219,131 | 1,015 | 1,183 | 12,364 | 12,672 | 9.9 | 11.6 | 130 | 78 | 32 | 375 | 83 | 10 | 23 | 10 | | | 1 | 32 | 55 | 3 | 1 | 6 | 6 | 77 | 71 | | 158 | 1,781 | 17.6 |
| Bartholomew | 24,993 | 21 | 17 | 241 | 272 | 10.1 | 8.2 | 2 | | | 10 | 4 | 1 | 1 | | | | | 1 | | | | | | 2 | 1 | | | 42 | 20.2 |
| Boone | 24,673 | 10 | 15 | 221 | 236 | 4.9 | 7.3 | 2 | | | 5 | | | | | | | | | 1 | | | | | 1 | | | | 32 | 15.6 |
| Brown | 7,975 | 4 | 4 | 77 | 65 | 6.0 | 6.0 | | 1 | | 2 | 1 | | | | | | | | | | | | | | 1 | | | 6 | 9.0 |
| Clay | 32,535 | 22 | 15 | 284 | 264 | 8.1 | 5.5 | 3 | 3 | 2 | 8 | 2 | | 2 | | | | | 1 | | | | | | | 1 | | 1 | 49 | 18.0 |
| Clinton | 26,674 | 24 | 30 | 319 | 291 | 10.8 | 13.5 | 3 | 3 | | 11 | 2 | | | | | | | | | | | 3 | | 2 | 3 | | 1 | 37 | 16.6 |
| Decatur | 18,793 | 17 | 23 | 207 | 176 | 10.8 | 14.7 | | 1 | 2 | 9 | 1 | | 2 | | | | | | | | | | | 1 | 1 | | 1 | 20 | 12.8 |
| Delaware | 52,901 | 46 | 53 | 533 | 549 | 10.4 | 12.0 | 3 | 2 | 1 | 18 | 2 | | 1 | | | | | | 4 | 1 | | 1 | | 2 | 1 | | 4 | 73 | 16.6 |
| Fayette | 15,178 | 16 | 2 | 156 | 131 | 12.6 | 1.6 | 2 | 1 | | 7 | 1 | | | | | | | | 2 | | | | | 1 | 2 | | 1 | 24 | 18.9 |
| Fountain | 20,439 | 21 | 18 | 174 | 187 | 12.3 | 10.6 | 2 | 3 | | 11 | 1 | | | | | | | 1 | 1 | | | | | 4 | 1 | | | 31 | 18.2 |
| Franklin | 15,335 | 11 | 4 | 127 | 108 | 8.6 | 3.1 | 1 | | | 6 | | | | | | | | | | | | | | | | | | 35 | 27.4 |
| Hamilton | 27,026 | 21 | 19 | 236 | 258 | 9.3 | 8.4 | 2 | | | 13 | 1 | | | | | | | 3 | 1 | | | | | | | | 1 | 28 | 12.4 |
| Hancock | 19,930 | 23 | 11 | 208 | 152 | 14.5 | 6.6 | 6 | 4 | | 8 | 2 | | 1 | | | | 1 | | 4 | | | | | 2 | 2 | | | 19 | 11.9 |
| Hendricks | 20,840 | 18 | 18 | 197 | 184 | 10.4 | 10.4 | 1 | 2 | | 7 | 1 | 1 | 1 | | | | | | 1 | | | | | 1 | 2 | | 2 | 26 | 14.9 |
| Henry | 33,640 | 31 | 34 | 334 | 295 | 11.0 | 12.1 | 2 | 3 | 1 | 11 | 3 | 2 | | | | | | 1 | 2 | | | | | 3 | 5 | | 2 | 34 | 12.1 |
| Johnson | 20,535 | 18 | 34 | 221 | 205 | 10.5 | 19.9 | | 6 | | 9 | 1 | | 3 | | | | | 3 | 1 | 1 | | | | 3 | 1 | | | 31 | 18.1 |
| Madison | 65,224 | 57 | 66 | 660 | 694 | 10.9 | 12.1 | 12 | 8 | 1 | 17 | 4 | | 1 | | | | | 2 | 6 | 1 | | | 1 | 2 | 3 | | 3 | 04 | 19.1 |
| Marion | 329,304 | 288 | 350 | 3,667 | 3,888 | 10.5 | 13.2 | 38 | 15 | 7 | 84 | 25 | 6 | 2 | 4 | | | | 13 | 16 | | | 2 | 1 | 24 | 16 | | 84 | 498 | 18.1 |
| Monroe | 25,547 | 14 | 25 | 234 | 226 | 6.6 | 11.7 | 3 | | 1 | 5 | 2 | | 1 | | | | | | 1 | | | | | 3 | 1 | | 1 | 40 | 18.8 |
| Montgomery | 29,296 | 28 | 29 | 288 | 255 | 11.5 | 11.9 | 4 | 1 | 1 | 12 | 4 | | | 1 | | | | 3 | 1 | | | | | 1 | 1 | | 1 | 37 | 15.1 |
| Morgan | 21,783 | 10 | 16 | 217 | 192 | 5.5 | 8.8 | 2 | 1 | | 5 | | | | | | | | | | | | | | 1 | 1 | | | 33 | 18.2 |
| Owen | 14,053 | 5 | 8 | 131 | 102 | 4.3 | 6.8 | | 1 | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | | | 20 | 17.1 |
| Parke | 22,214 | 22 | 14 | 205 | 208 | 11.4 | 7.6 | 4 | 1 | 1 | 9 | 4 | | | | | | | | 3 | | | | | 2 | 1 | | | 24 | 12.9 |
| Putnam | 20,520 | 13 | 18 | 248 | 199 | 7.6 | 10.5 | 1 | 2 | | 5 | 1 | | | 1 | | | | 1 | | | 1 | | | | | | | 21 | 12.3 |
| Randolph | 29,312 | 17 | 32 | 242 | 260 | 6.9 | 13.1 | 3 | | 1 | 7 | 2 | | 1 | | | | | | | | | | | 1 | | | | 44 | 18.0 |
| Rush | 19,349 | 13 | 14 | 173 | 207 | 8.0 | 8.7 | | | 1 | 9 | 2 | | 1 | | | | | 1 | | | | | | 3 | | | 1 | 18 | 11.0 |
| Shelby | 27,059 | 20 | 20 | 255 | 253 | 8.9 | 8.9 | 2 | 2 | | 8 | 4 | | 1 | | | | | | | | | | | 2 | 1 | | | 37 | 16.4 |
| Tippecanoe | 41,229 | 45 | 85 | 507 | 590 | 13.1 | 24.7 | 3 | 2 | 3 | 22 | 1 | | 1 | | | | | | 1 | | | | 1 | 4 | 5 | | 21 | 77 | 22.4 |
| Tipton | 17,459 | 18 | 10 | 160 | 144 | 12.4 | 6.9 | 2 | 2 | 3 | 6 | | | | | | | | | | | | | 1 | 1 | 6 | | 1 | 43 | 29.6 |
| Union | 6,260 | 3 | 5 | 39 | 61 | 5.7 | 9.6 | | 1 | | 1 | | | | | | | | | | | | | | 1 | | | | 8 | 15.3 |
| Vermillion | 21,868 | 21 | 37 | 229 | 273 | 11.5 | 10.0 | 7 | 1 | | 8 | | | | | | | | | 3 | | | | | 2 | 3 | | 1 | 46 | 25.2 |
| Vigo | 109,452 | 84 | 88 | 981 | 1,118 | 9.2 | 9.6 | 15 | 5 | 3 | 22 | 8 | | | | | | | 2 | 4 | | | | 2 | 2 | 8 | | 25 | 162 | 17.8 |
| Warren | 10,899 | 7 | 5 | 86 | 69 | 7.7 | 5.5 | | 2 | 1 | 2 | | | 1 | 1 | | | | | 1 | | | | | 1 | 1 | | | 16 | 17.6 |
| Wayne | 47,736 | 47 | 44 | 527 | 550 | 11.8 | 11.1 | 6 | 5 | 2 | 17 | 3 | | 2 | 3 | | | | | 2 | | | | | 5 | 2 | | 5 | 66 | 16.6 |
| **Southern Counties** | 686,443 | 500 | 510 | 6,339 | 6,243 | 8.7 | 8.9 | 73 | 34 | 23 | 183 | 48 | 10 | 8 | 1 | | | 1 | 11 | 42 | | 1 | 4 | 2 | 29 | 31 | | 62 | 1,039 | 18.0 |
| Clark | 30,260 | 25 | 17 | 303 | 307 | 9.9 | 6.7 | 1 | | | 14 | 4 | 1 | | | | | | | | | | | | 1 | | | | 30 | 11.9 |
| Crawford | 12,057 | 10 | 8 | 151 | 113 | 9.9 | 7.9 | 2 | 1 | | 5 | 1 | | | | | | | 1 | 2 | | | | | 1 | | | | 15 | 14.9 |
| Daviess | 27,747 | 22 | 20 | 227 | 217 | 9.5 | 8.6 | 4 | 2 | 1 | 9 | 3 | | | | | | | 1 | 3 | | | | | | 1 | | | 55 | 23.8 |
| Dearborn | 21,396 | 16 | 15 | 196 | 190 | 8.9 | 8.4 | 1 | 2 | 3 | 7 | 1 | 2 | | 1 | | | | | 1 | | | | | 2 | | | | 29 | 16.3 |
| Dubois | 19,843 | 9 | 18 | 159 | 172 | 5.4 | 10.9 | 2 | | | 4 | 1 | | | | | | | 1 | | | | | | | | | | 29 | 17.5 |
| Floyd | 30,439 | 21 | 18 | 343 | 316 | 8.3 | 7.1 | 1 | 4 | | 7 | 2 | | | | | | | | 2 | | | 1 | | 3 | 1 | | 4 | 40 | 15.8 |
| Gibson | 30,188 | 17 | 24 | 287 | 249 | 6.8 | 9.5 | 4 | 2 | | 6 | | | 1 | | | | | 1 | 3 | | | 1 | | | 2 | | | 54 | 21.5 |
| Greene | 43,808 | 30 | 35 | 338 | 320 | 8.2 | 9.6 | 9 | 4 | 1 | 10 | 2 | | 1 | | | | | | 4 | | | 1 | | 3 | | | | 70 | 19.2 |
| Harrison | 20,232 | 11 | 10 | 174 | 155 | 6.5 | 5.9 | 2 | | | 7 | | | | | | | | 1 | 1 | | | | | | | | | 38 | 22.5 |
| Jackson | 24,727 | 26 | 25 | 283 | 207 | 12.2 | 12.1 | 2 | 3 | | 13 | 2 | | 2 | | | | | | 1 | | | 1 | | 2 | 1 | | | 40 | 19.4 |
| Jefferson | 20,483 | 40 | 31 | 317 | 322 | 23.4 | 18.1 | 2 | 2 | 1 | 12 | 3 | 1 | | | | | | | 1 | | | | 1 | 1 | 5 | | 18 | 26 | 15.2 |
| Jennings | 14,203 | 12 | 14 | 112 | 128 | 10.1 | 11.8 | 1 | | 1 | 5 | 2 | | | | | | | | 1 | | | | | 1 | 2 | | | 14 | 11.8 |
| Knox | 44,533 | 28 | 23 | 413 | 453 | 7.5 | 6.2 | 9 | 2 | 5 | 7 | 3 | | 1 | | | | | | 3 | | | | | 2 | 2 | | 1 | 68 | 18.3 |
| Lawrence | 34,694 | 20 | 26 | 268 | 247 | 6.8 | 8.9 | 5 | 3 | | 8 | 3 | 1 | | | | | | | 6 | | | | | 2 | 1 | | 2 | 59 | 20.4 |
| Martin | 12,950 | 7 | 5 | 104 | 98 | 6.5 | 4.6 | 1 | 1 | | 3 | 1 | | | | | | | | 2 | | | | | 1 | 1 | | | 22 | 20.4 |
| Ohio | 4,329 | | 2 | 65 | 25 | | 5.5 | | | | | | | | | | | | | | | | | | | | | | 6 | 16.6 |
| Orange | 17,471 | 9 | 5 | 140 | 132 | 6.2 | 3.4 | 1 | | 1 | 3 | 1 | 2 | | | | | | | 1 | | | | | | 1 | | | 36 | 24.7 |
| Perry | 18,078 | 7 | 12 | 145 | 154 | 4.6 | 7.9 | | 3 | | 3 | | | | | | | | | | | | | | 2 | 1 | | | 34 | 22.6 |
| Pike | 19,684 | 12 | 15 | 166 | 195 | 7.3 | 9.1 | 1 | 1 | | 3 | 2 | | | | | | | | 2 | | | | | 1 | | | | 36 | 21.9 |
| Posey | 21,670 | 9 | 12 | 172 | 170 | 4.9 | 6.6 | 3 | | 1 | 2 | 1 | 1 | 1 | | | | | | 2 | | | | | 1 | | | | 28 | 15.5 |
| Ripley | 19,452 | 9 | 16 | 171 | 166 | 5.5 | 9.9 | | | | 4 | | | | | | | | | | | | | | | 1 | | | 14 | 8.6 |
| Scott | 8,336 | 8 | 7 | 73 | 66 | 11.5 | 10.1 | 1 | 1 | 1 | 3 | 1 | | | | | | | | 2 | | | | | 2 | | | | 16 | 23.0 |
| Spencer | 20,676 | 15 | 10 | 124 | 153 | 8.7 | 5.8 | 1 | 1 | | 9 | | | | | | | | 1 | | | | | | 5 | | | | 33 | 19.2 |
| Sullivan | 37,787 | 16 | 29 | 281 | 296 | 5.1 | 9.2 | 2 | | 1 | 7 | 1 | | | | | | | | 1 | | | | | 1 | 3 | | | 60 | 19.0 |
| Switzerland | 9,914 | 3 | 7 | 88 | 83 | 3.7 | 8.5 | 2 | | | | | 1 | | | | | | 1 | | | | | | | 1 | | | 20 | 24.2 |
| Vanderburgh | 82,150 | 92 | 89 | 947 | 1,001 | 13.4 | 13.0 | 11 | 3 | 6 | 21 | 13 | 1 | 1 | | | | 1 | 4 | 4 | | | | 1 | 8 | 4 | | 37 | 117 | 17.1 |
| Warrick | 21,911 | 13 | 4 | 158 | 173 | 7.1 | 2.3 | 3 | | | 6 | | | | | | | | | | | 1 | | | | 3 | | | 25 | 13.7 |
| Washington | 17,445 | 13 | 13 | 134 | 143 | 8.9 | 8.9 | 2 | | 1 | 5 | | | 1 | | | | | | | | | | | 1 | 1 | | | 25 | 17.2 |

## TABLE 2. Deaths and Births in Indiana by Cities and Groups During the Month of September, 1919. (Stillbirths Excluded.)

| Cities. | Estimated 1919 Population | Total Deaths Reported for September, 1919 | Total Deaths Reported, for September, 1918 | Total Deaths Reported for the Year 1919 to Date. | Total Deaths Reported for the Year 1918 to Same Date. | Annual Death Rate Per 1000: September, This Year | Annual Death Rate Per 1000: September, Last Year | Important Ages: Under 1 Year. | Age 1 to 10. | Age 10 to 20. | 65 Years and Over | Deaths from Important Causes: Pulmonary Tuberculosis. | Other Forms of Tuberculosis. | Typhoid Fever. | Diphtheria and Croup. | Scarlet Fever. | Measles | Whooping Cough. | Lobar and Broncho-Pneumonia. | Diarrhoea and Enteritis (under 2 years). | Cerebro-Spinal Fever. | Acute Anterior Poliomyelitis | Influenza. | Puerperal Septicemia | Cancer | External Causes. | Smallpox. | Institution Deaths. | Births: Total Births | Rate per 1,000 Population. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State of Indiana | 2,948,088 | 2,364 | 2,614 | 28,597 | 29,218 | 9.6 | 10.8 | 332 | 192 | 87 | 851 | 172 | 31 | 48 | 17 | 4 | 1 | 2 | 67 | 162 | 5 | 3 | 18 | 10 | 182 | 185 | | 359 | 4,599 | 18.7 |
| Rural | 1,701,179 | 1,242 | 1,373 | 15,653 | 15,535 | 8.7 | 9.7 | 193 | 103 | 49 | 540 | 92 | 14 | 29 | 5 | | | 1 | 30 | 77 | 2 | 3 | 9 | 7 | 101 | 85 | | 99 | 2,520 | 17.6 |
| Urban | 1,246,909 | 1,122 | 1,241 | 12,944 | 13,683 | 10.8 | 12.3 | 139 | 89 | 38 | 311 | 80 | 17 | 19 | 2 | 4 | | 1 | 37 | 85 | 3 | | 9 | 3 | 81 | 100 | | 260 | 2,079 | 20.0 |
| **Cities of the First Class Population 100,000** | 300,000 | 264 | 315 | 3,226 | 3,435 | 10.6 | 13.0 | 37 | 15 | 6 | 71 | 23 | 6 | 2 | 4 | | | | 13 | 15 | | | 2 | 1 | 21 | 14 | | 78 | 463 | 18.5 |
| Indianapolis | 300,000 | 264 | 315 | 3,226 | 3,435 | 10.6 | 13.0 | 37 | 15 | 6 | 71 | 23 | 6 | 2 | 4 | | | | 13 | 15 | | | 2 | 1 | 21 | 14 | | 78 | 463 | 18.5 |
| **Cities of the Second Class, Population 45,000 to 100,000** | 355,257 | 295 | 319 | 3,344 | 3,707 | 9.9 | 12.8 | 44 | 21 | 17 | 67 | 26 | 2 | 3 | 1 | 1 | | | 11 | 14 | 1 | | 2 | 2 | 23 | 33 | | 107 | 580 | 19.8 |
| Fort Wayne | 79,846 | 64 | 69 | 783 | 823 | 9.6 | 10.4 | 5 | 7 | 4 | 16 | 2 | | 1 | | 1 | | | 1 | 2 | | | | | 10 | 5 | | 27 | 136 | 20.4 |
| Evansville | 77,884 | 70 | 78 | 792 | 898 | 10.8 | 12.0 | 10 | 2 | 4 | 19 | 9 | 1 | | | | | 1 | 4 | 3 | | | | 1 | 7 | 4 | | 25 | 88 | 13.5 |
| South Bend | 72,888 | 52 | 57 | 564 | 607 | 8.6 | 9.4 | 11 | 4 | 3 | 10 | 3 | | 1 | | | | | 1 | 3 | 1 | | 1 | | 3 | 3 | | 16 | 138 | 22.7 |
| Terre Haute | 68,639 | 60 | 65 | 694 | 737 | 10.5 | 11.4 | 8 | 1 | 3 | 17 | 7 | | | | | | | 2 | 2 | | | | 1 | 1 | 7 | | 20 | 100 | 17.5 |
| Gary | 56,000 | 49 | 50 | 511 | 610 | 10.5 | 20.0 | 10 | 7 | 3 | 5 | 5 | 1 | 1 | 1 | | | | 3 | 4 | | | 1 | | 2 | 14 | | 19 | 118 | 25.2 |
| **Cities of the Third Class, Population 20,000 to 45,000** | 290,016 | 279 | 304 | 3,341 | 3,646 | 11.5 | 11.4 | 43 | 31 | 11 | 78 | 14 | 3 | 6 | 6 | 3 | | | 7 | 31 | 2 | | 2 | | 16 | 30 | | 52 | 594 | 24.6 |
| East Chicago | 31,829 | 21 | 35 | 292 | 413 | 7.9 | 13.2 | 11 | 5 | | 2 | | 2 | 1 | 1 | | | | 2 | 5 | | | | | | 4 | | | 93 | 35.1 |
| Hammond | 27,861 | 38 | 37 | 383 | 416 | 16.4 | 15.9 | 13 | 2 | 3 | 2 | 1 | | | | | | | 1 | 11 | 1 | | | | | 12 | | 12 | 85 | 36.6 |
| Muncie | 25,862 | 29 | 29 | 328 | 303 | 13.4 | 13.4 | 1 | 1 | 1 | 10 | 2 | | | | | | | | 2 | 1 | | 1 | | 1 | 1 | | 4 | 50 | 23.3 |
| Richmond | 25,463 | 23 | 20 | 240 | 263 | 10.8 | 9.4 | 2 | 4 | 1 | 7 | 2 | | 1 | 3 | | | | | | | | | | 3 | 1 | | | 38 | 17.9 |
| Anderson | 24,464 | 21 | 26 | 288 | 257 | 10.3 | 12.7 | 5 | 2 | | 7 | | | | | | | | 1 | 5 | | | | | 2 | 1 | | 2 | 44 | 21.6 |
| New Albany | 23,629 | 19 | 16 | 273 | 259 | 9.6 | 8.1 | 1 | 4 | | 6 | 2 | | | | | | | | 2 | | | 1 | | 3 | 1 | | 4 | 28 | 14.2 |
| Elkhart | 22,688 | 21 | 12 | 226 | 252 | 11.1 | 6.3 | 4 | 1 | 1 | 9 | 1 | | 1 | | | | | | 1 | | | | | 1 | 2 | | 6 | 37 | 19.6 |
| Kokomo | 22,569 | 28 | 14 | 294 | 248 | 14.9 | 7.4 | 3 | 3 | | 11 | 2 | | | | | | | | 3 | | | | | 2 | 2 | | 1 | 60 | 31.8 |
| Michigan City | 22,314 | 13 | 21 | 189 | 194 | 6.9 | 11.3 | 2 | | | 5 | | 1 | | | | | | 3 | | | | | | | 1 | | 17 | 37 | 19.9 |
| Lafayette | 21,676 | 29 | 52 | 353 | 343 | 16.0 | 28.8 | 2 | 2 | 2 | 10 | 1 | | 2 | | | | | | | | | | | 2 | 2 | | 3 | 57 | 30.9 |
| Logansport | 21,630 | 16 | 27 | 230 | 253 | 8.9 | 14.9 | 2 | 3 | | 5 | 2 | | | | 3 | | | | 1 | | | | | 1 | | | 1 | 34 | 18.8 |
| Marion | 20,013 | 21 | 15 | 254 | 240 | 12.6 | 8.9 | 2 | 4 | 3 | 4 | 1 | | | 2 | 1 | | | | 1 | | | | | 2 | 1 | | 2 | 37 | 18.6 |
| **Cities of Fourth Class Population 10,000 to 20,000** | 165,854 | 153 | 163 | 1,577 | 1,620 | 11.1 | 11.8 | 23 | 17 | 3 | 44 | 9 | 4 | 6 | 1 | | | | 2 | 15 | | | | | 12 | 11 | | 19 | 213 | 15.4 |
| Mishawaka | 17,781 | 18 | 21 | 124 | 131 | 12.1 | 14.2 | 4 | 4 | | 5 | 1 | 1 | | | | | | | 3 | | | | | 1 | 3 | | 5 | 23 | 15.5 |
| Vincennes | 17,679 | 13 | 12 | 178 | 215 | 8.8 | 8.1 | 4 | 2 | 2 | 4 | 1 | | | | | | | | 2 | | | | | | 1 | | 1 | 22 | 14.9 |
| New Castle | 14,801 | 10 | 11 | 121 | 100 | 8.1 | 8.9 | 2 | 1 | | 3 | | 2 | | | | | | | 1 | | | | | 1 | 3 | | 1 | 18 | 14.6 |
| Laporte | 13,942 | 19 | 19 | 164 | 147 | 16.3 | 16.3 | 2 | 1 | | 5 | 1 | | 2 | | | | | | 2 | | | | | 1 | 2 | | 6 | 23 | 19.3 |
| Peru | 12,572 | * | 14 | 107 | 139 | * | 13.4 | | | | | | | | | | | | | | | | | | | | | | * | * |
| Bloomington | 11,939 | 5 | 13 | 105 | 124 | 5.0 | 13.0 | 1 | | | 2 | 1 | | | | | | | | | | | | | 1 | 1 | | 1 | 22 | 22.1 |
| Crawfordsville | 11,722 | 14 | 12 | 126 | 102 | 14.3 | 12.3 | 1 | 3 | | 5 | 2 | | | | | | | 1 | 1 | | | | | 1 | 1 | | 1 | 13 | 13.3 |
| Shelbyville | 11,437 | 8 | 8 | 75 | 105 | 8.4 | 8.4 | 1 | 1 | | 3 | | | 1 | | | | | | | | | | | 2 | | | | 8 | 8.4 |
| Huntington | 11,034 | 33 | 14 | 159 | 127 | 35.9 | 15.2 | 3 | 1 | 1 | 3 | | | 3 | 1 | | | | 1 | 1 | | | | | 3 | | | 2 | 29 | 31.5 |
| Elwood | 11,028 | 6 | 17 | 103 | 120 | 6.5 | 18.5 | 1 | 1 | | 2 | | | | | | | | | 1 | | | | | | | | | 17 | 18.5 |
| Bedford | 10,877 | 7 | 5 | 82 | 85 | 7.7 | 5.5 | 2 | 2 | | 3 | | | | | | | | | 4 | | | | | 2 | | | 1 | 13 | 14.3 |
| Brazil | 10,630 | 10 | 5 | 111 | 90 | 11.3 | 5.6 | 2 | 1 | | 4 | | | | | | | | | | | | | | | | | 1 | 14 | 15.8 |
| Jeffersonville | 10,412 | 10 | 12 | 122 | 134 | 11.5 | 13.8 | | | | 5 | 3 | 1 | | | | | | | | | | | | | | | | 11 | 12.6 |
| **Cities of Fifth Class, Population 5,000 to 10,000** | 135,780 | 131 | 149 | 1,456 | 1,475 | 11.6 | 12.4 | 24 | 4 | 1 | 51 | 8 | 2 | 3 | | | | | 4 | 10 | | | 3 | | 9 | 12 | | 4 | 229 | 20.2 |
| Frankfort | 10,000 | 13 | 19 | 150 | 138 | 15.6 | 22.8 | 1 | 2 | | 6 | 2 | | | | | | | | | | | 1 | | 1 | 3 | | 1 | 16 | 19.2 |
| Columbus | 9,379 | 11 | 10 | 103 | 111 | 14.1 | 12.8 | | | | 4 | 2 | 1 | 1 | | | | | 1 | | | | | | 1 | 1 | | | 9 | 11.5 |
| Goshen | 9,098 | 9 | 11 | 98 | 117 | 11.9 | 14.5 | | | | 6 | | | | | | | | | | | | | | | 1 | | 1 | 20 | 26.4 |
| Wabash | 8,744 | 4 | 6 | 83 | 93 | 5.5 | 8.2 | 1 | | | | | | | | | | | 1 | | | | | | 1 | | | | 12 | 16.5 |
| Connersville | 8,278 | 12 | | 110 | 75 | 17.4 | | 2 | 1 | | 4 | 1 | | | | | | | | 2 | | | | | 1 | 1 | | 1 | 12 | 17.4 |
| Clinton | 8,215 | 5 | 13 | 71 | 92 | 7.3 | 18.9 | 3 | | | 1 | | | | | | | | | 1 | | | | | | | | | 12 | 17.5 |
| Whiting | 8,147 | 8 | 7 | 89 | 87 | 11.8 | 10.3 | 5 | | | 1 | | | | | | | | 1 | 2 | | | | | | 1 | | | 30 | 44.2 |
| Washington | 7,354 | 10 | 7 | 70 | 89 | 15.2 | 10.7 | 3 | 1 | 1 | 2 | 1 | | | | | | | 1 | 2 | | | | | | | | | 23 | 35.1 |
| Linton | 7,604 | 4 | 10 | 53 | 63 | 6.3 | 15.8 | 1 | | | 1 | | | | | | | | | | | | 1 | | 1 | | | | 11 | 17.3 |
| Valparaiso | 7,407 | 5 | 7 | 71 | 70 | 8.1 | 11.3 | | | | 3 | | | | | | | | | | | | | | 1 | 1 | | | 10 | 16.2 |
| Lebanon | 7,074 | 3 | 6 | 73 | 69 | 15.1 | 10.2 | 1 | | | 1 | | | | | | | | | | | | | | 1 | | | | 10 | 16.9 |
| Madison | 6,934 | 10 | 9 | 93 | 851 | 7.3 | 5.6 | 1 | | | 4 | 1 | | | | | | | | | | | | | | 3 | | 1 | 7 | 12.1 |
| Princeton | 6,688 | 4 | 3 | 72 | 65 | 7.2 | 5.4 | 1 | | | 2 | | | | | | | | | 1 | | | | | | | | | 15 | 26.9 |
| Hartford City | 6,637 | 3 | 8 | 45 | 64 | 5.4 | 14.5 | 1 | | | 2 | | | | | | | | | | | | | | | | | | 12 | 21.7 |
| Seymour | 6,309 | 9 | 11 | 72 | 80 | 17.1 | 20.9 | 1 | 1 | | 6 | | | | | | | | | | | | 1 | | 2 | | | | 13 | 24.7 |
| Kendallville | 5,943 | 7 | 2 | 56 | 57 | 11.1 | 4.0 | 1 | | | 3 | | | | | | | | | | | | | | | | | | 7 | 14.1 |
| Mt. Vernon | 5,821 | 3 | 5 | 63 | 54 | 6.2 | 10.3 | 1 | | | | | 1 | | | | | | | 1 | | | | | | | | | 5 | 10.3 |
| Greensburg | 5,648 | 11 | 6 | 84 | 65 | 23.4 | 12.7 | | | | 5 | 1 | | 2 | | | | | | | | | | | | 1 | | | 5 | 10.6 |

* —Reported too late

## Mortality of Indiana, September, 1919 (Stillbirths Excluded.)

Deaths and Annual Death Rates Per 100,000 Population from Important Causes.

| Population by Geographical Sections and as Urban and Rural. | Estimated Population 1919 | Pulmonary Tuberculosis. Number. | Death Rate. | Other Forms Tuberculosis. Number. | Death Rate. | Typhoid Fever. Number. | Death Rate. | Diphtheria and Croup. Number. | Death Rate. | Scarlet Fever. Number. | Death Rate. | Measles. Number. | Death Rate. | Whooping Cough. Number. | Death Rate. | Lobar and Broncho Pneumonia. Number. | Death Rate. | Diarrhoea and Enteritis (Under 2 Years.) Number. | Death Rate. | Cerebro-Spinal Fever. Number. | Death Rate. | Acute Anterior Poliomyelitis. Number. | Death Rate. | Influenza. Number. | Death Rate. | Puerperal Septicemia. Number. | Death Rate. | Cancer. Number. | Death Rate. | External Causes. Number. | Death Rate. | Smallpox. Number. | Death Rate. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| State | 2,948,088 | 172 | 70.0 | 31 | 12.6 | 48 | 19.5 | 17 | 6.9 | 4 | 1.6 | 1 | .4 | 2 | .8 | 67 | 2.73 | 162 | 65.9 | 5 | 2.0 | 3 | 1.2 | 18 | 7.3 | 10 | 4.1 | 182 | 74.1 | 185 | 75.3 | | |
| Northern Counties | 1,042,514 | 43 | 49.5 | 11 | 12.7 | 17 | 19.6 | 6 | 6.9 | 4 | 4.6 | 1 | 1.1 | | | 24 | 27.6 | 65 | 74.8 | 2 | 2.3 | 1 | 1.1 | 8 | 9.2 | 2 | 2.3 | 66 | 75.9 | 83 | 95.5 | | |
| Central Counties | 1,219,131 | 83 | 81.7 | 10 | 9.8 | 23 | 22.6 | 10 | 9.8 | | | | | 1 | .9 | 32 | 31.5 | 55 | 54.1 | 3 | 2.9 | 1 | .9 | 6 | 5.9 | 6 | 5.9 | 77 | 75.8 | 71 | 69.9 | | |
| Southern Counties | 686,443 | 46 | 80.4 | 10 | 17.5 | 8 | 13.9 | 1 | 1.7 | | | | | 1 | 1.7 | 11 | 19.2 | 42 | 73.4 | | | 1 | 1.7 | 4 | 6.9 | 2 | 3.5 | 39 | 68.2 | 31 | 54.1 | | |
| All Cities | 1,248,909 | 80 | 75.9 | 17 | 16.4 | 19 | 18.3 | 12 | 11.5 | 4 | 3.8 | | | 1 | .9 | 37 | 35.6 | 85 | 81.8 | 3 | 2.9 | | | 9 | 8.7 | 3 | 2.9 | 81 | 77.9 | 100 | 96.1 | | |
| Over 100,000 | 300,000 | 23 | 92.0 | 6 | 24.0 | 2 | 8.0 | 4 | 16.0 | | | | | | | 13 | 52.0 | 15 | 60.0 | | | | | 2 | 8.0 | 1 | 4.0 | 31 | 84.0 | 24 | 56.0 | | |
| 45,000 to 100,000 | 355,257 | 26 | 107.6 | 2 | 8.7 | 3 | 10.1 | 1 | 3.4 | 1 | 3.4 | | | | | 11 | 37.1 | 14 | 47.3 | 1 | 3.4 | | | 2 | 6.7 | 2 | 6.7 | 23 | 77.7 | 33 | 111.5 | | |
| 20,000 to 45,000 | 290,016 | 14 | 57.9 | 3 | 12.4 | 5 | 20.7 | 6 | 24.8 | 3 | 12.4 | | | | | 7 | 28.9 | 31 | 128.3 | 2 | 8.3 | | | 2 | 8.3 | | | 16 | 66.2 | 30 | 124.1 | | |
| 10,000 to 20,000 | 165,854 | 9 | 65.1 | 4 | 28.9 | 6 | 43.4 | 1 | 7.2 | | | | | | | 2 | 14.4 | 15 | 108.5 | | | | | | | | | 12 | 86.8 | 11 | 79.6 | | |
| Under 10,000 | 135,780 | 8 | 70.7 | 2 | 17.7 | 3 | 26.5 | | | | | | | | | 4 | 35.3 | 10 | 88.4 | | | | | 3 | 26.5 | | | 9 | 79.6 | 12 | 106.0 | | |
| Country | 1,701,179 | 92 | 64.9 | 14 | 9.9 | 29 | 20.4 | 5 | 3.5 | | | | | 1 | .7 | 30 | 21.2 | 77 | 54.3 | 2 | 1.4 | 3 | 2.1 | 9 | 6.3 | 7 | 4.9 | 101 | 71.2 | 85 | 59.9 | | |

**U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of September, 1919.**

J. H. ARMINGTON, SECTION DIRECTOR IN CLIMATOLOGICAL DIVISION.

TEMPERATURE—IN DEGREES FAHRENHEIT.

| Section Average. | Departure from the Normal. | Extremes. | | | | | |
|---|---|---|---|---|---|---|---|
| | | Station. | Highest. | Date. | Station. | Lowest. | Date. |
| 69.4 | +2.4 | 2 | 101 | 9 | Bluffton | 33 | 26 |

PRECIPITATION—IN INCHES AND HUNDREDTHS.

| Section Average. | Departure from the Normal. | Extremes. | | | |
|---|---|---|---|---|---|
| | | Station. | Greatest Monthly Amount. | Station. | Least Monthly Amount. |
| 2.41 | —0.62 | Marion | 4.79 | Farmland | 0.45 |

## A SOURCE OF STRENGTH

Lord Haldane after considering the economic, social and political conditions left by the war said: 'The burden is heavy and it is doubtful that it can be borne. If, however, we were freed from tuberculosis and venereal diseases, the nation would have strength and vitality to carry almost any burden.''