IT IS AN EXTENSION OF PERSONAL LIBERTY; IT IS TRUE HUMANITY TO PREVENT THE PROPAGATION OF MENTAL, MORAL AND PHYSICAL DEFECTIVES.

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 JUNE, 1912.

Total births, 4,114 (stillbirths excluded); State rate, 18.3.

Males, 2,118; females, 1,996.

White males, 2,087; white females, 1,984.

Colored births, 63; males, 31; females, 32.

Stillbirths, 181; white, 175; colored, 6.

Northern Sanitary Section, population 927,229; rate 18.4.

Central Sanitary Section, population 1,114,087; rate, 18.1.

Southern Sanitary Section, population 659,590; rate, 18.7.

Highest rate, Dubois County, 30.1.

Lowest rate, Dearborn County, 9.

ABSTRACT OF MORTALITY STATISTICS FOR JUNE, 1912.

Total number of deaths, 2,365; rate, 10.5. In the preceding month, 2,622 deaths; rate, 11.3. In the same month last year, 2,353 deaths; rate, 10.6. Deaths by important ages were: Under 1 year of age 179, or 7.5 per cent. of the total; 1 to 4, 93; 5 to 9, 43; 10 to 14, 38; 15 to 19, 53; 65 and over, 766, or 32.4 per cent. of the total.

SANITARY SECTIONS: THE NORTHERN SANITARY SECTION, population 939,532, reports 841 deaths; rate, 10.9. In the preceding month, 900 deaths; rate, 11.3. In the same month last year 742 deaths; rate, 9.7.

THE CENTRAL SANITARY SECTION, population 1,127,217, reports 988 deaths; rate, 10.7. In the preceding month, 1,160 deaths; rate, 12.1. In the same month last year, 984 deaths; rate, 10.7.

THE SOUTHERN SANITARY SECTION, population 663,757, reports 536 deaths; rate, 9.8. In the preceding month, 562 deaths; rate, 9.9. In the same month last year, 627 deaths; rate, 11.5.

REVIEW OF SECTIONS: The Northern Sanitary Section presents the highest death rate, being .4 per cent. higher than the rate for the State. The Southern Sanitary Section shows the lowest death rate, being .7 lower than the State rate. The Central Sanitary Section shows the highest death rate for tuberculosis, measles, influenza and external causes. The Northern Sanitary Section shows the highest death rate for diphtheria and croup, scarlet fever, whooping cough, pneumonia, diarrhea and enteritis under 2 years, cancer and smallpox. The Southern Sanitary Section shows the highest death rate for typhoid fever and infantile paralysis.

RURAL: Population 1,546,115, reports 1,193 deaths; rate, 9.4. In the preceding month, 1,257 deaths; rate, 9.5. In the same month last year, 1,363 deaths; rate, 10.6.

URBAN: Population 1,184,391, reports 1,172 deaths; rate, 12. In the preceding month, 1,365 deaths; rate, 13.5. In the same month last year, 1,170 deaths; rate, 12.4. The death rates of the following cities were: Indianapolis, 12; Evansville, 10.3; Fort Wayne, 11.1; Terre Haute, 11.1; South Bend, 12; Muncie, 14.5; Richmond, 9.6; Anderson, 9.6; Hammond, 10; New Albany, 15.3; Lafayette, 14.4; Elkhart, 4.3; East Chicago, 11.1; Marion, 8.7; Michigan City, 7.5; Logansport, 16.4; Gary, 26; Kokomo, 11; Vincennes, 10.3; Mishawaka, 12.6; Peru, 11.9; Elwood, 7.7; Laporte, 13.7; Jeffersonville, 14; Huntington, 15.2; New Castle, 13.3.

SUMMARY OF MORBIDITY AND MORTALITY FOR JUNE, 1912.

Rheumatism was the most prevalent disease. Following is the order of prevalence: Rheumatism, tonsilitis, pulmonary tuberculosis, typhoid fever, diarrhea, bronchitis, measles, scarlet fever, whooping cough, cholera morbus, diphtheria, malarial fever, smallpox, intermittent fever,

cholera infantum, influenza, lobar pneumonia, inflammation of bowels, dysentery, erysipelas, bronchial pneumonia, tuberculosis other forms, rabies in human, chickenpox, rabies in animals, puerperal fever, cerebro-spinal fever, and poliomyelitis.

SMALLPOX: 91 cases were reported from 17 counties, with three deaths. In the corresponding month last year, 90 cases from 16 counties, with 1 death. The following counties reported the disease present: Carroll, Cass, Delaware, Gibson, Grant, Howard, Johnson, Laporte, Madison, Marion, Pike, Ripley, Shelby, St. Joseph, Tipton, Vanderburg, Wabash, Warrick.

TUBERCULOSIS: 290 deaths, of which 236 were of the pulmonary form and 54 other forms. Male deaths numbered 136, female deaths, 154. In the corresponding month last year, 339 deaths; males, 161; females, 178. In the preceding month 368 deaths; males, 176; females, 192. A marked decrease is apparent as compared with the corresponding month of last year and with June, 1909, when 389 deaths occurred. Of the males, 43 were married and left 70 orphans under 12 years of age. Of the females, 70 were married and left 128 orphans. Total orphans left by consumption in one month, 198. Number of homes invaded, 284.

PNEUMONIA: Total deaths, 75; rate, 33.5. In the same month last year, 48 deaths. In the preceding month 160 deaths; rate, 69.1. Male deaths, 32; female deaths, 43. Pneumonia deaths under one year of age, 20; 50 years and over, 31.

TYPHOID FEVER: 153 cases in 49 counties with 29 deaths. In the preceding month, 191 cases in 37 counties, with 35 deaths. In the same month last year, 138 cases in 42 counties, with 29 deaths.

DIPHTHERIA: 93 cases reported in 27 counties, with 7 deaths. In the preceding month, 95 cases in 30 counties, with 18 deaths, and in the same month last year, 149 cases in 28 counties, with 18 deaths.

SCARLET FEVER: 146 cases in 33 counties, with 5 deaths.

RABIES: 12 cases in 6 counties, with no deaths. The counties reporting cases were: Cass, 1; Fountain, 1; Huntington, 1; Marion, 6; Switzerland, 1; Whitley, 2.

POLIOMYELITIS: 1 death in Posey County.

DEATHS FROM EXTERNAL CAUSES: 210; rate, 93.8. 109 of these occurred in the country and 101 in the cities. Murders, 8; 6 males and 2 females. Methods used were: gunshot, 3; automobile, 1; cutting and stabbing, 2; blow on head, 1; falling, 1. Suicides: 53; 41 males and 12 females. Methods used were: gunshot, 12; hanging, 6; drowning, 3; carbolic acid, 10; strychnia, 2; other poisons, 16; gas, 1; cutting throat, 1; jumping in front of train, 1; "setting herself on fire," 1. External deaths: 149; males, 114; females, 35. Steam railroads killed 34; interurbans, 2; street cars, 4; automobiles, 4; motorcycles, 3; machinery, 1; mining, 2; electricity, 3; crushing injuries, 9; burns and scalds, 7; drowning, 26; falls, 27; gunshot 3; poisons, 5; ptomaine poisoning, 4; lightning, 2; traumatism, 1; tetanus, 2; asphyxiation and suffocation, 4; horses and vehicles, 5; explosion, 1.

REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, INDIANA STATE BOARD OF HEALTH, FOR JUNE, 1912

H. E. BARNARD, STATE FOOD AND DRUG COMMISSIONER.

During the month of June 89 food samples were examined and of this number 20 were found to be illegal. Seven of the 19 ice creams contained less than 8 per cent. butter fat. These figures show negligence on the part of the ice cream manufacturers. Of the 37 milks examined, 3 were classed as illegal because of a low butter fat content.

Five of the 8 vinegars examined contained less than the required amount of acidity. These samples were submitted by producers and in four cases the product was not sufficiently matured

Of the 12 samples of drugs analyzed, 3 were illegal. Two of the four linseed oils contained foreign seed oils.

RESULTS OF ANALYSES OF FOODS AND DRUGS DURING THE MONTH OF JUNE, 1912.

CLASSIFICATION.	Legal.	Illegal.	Total.
FOODS.			
Beverages	2		2
Beer	1		1
Catsup	1		1
Flour	1		1
Fruit, canned	1		1
Horseradish	4		4
Lard		1	1
Milk Products—			
Ice cream	12	7	19
Milk	34	3	37
Mustard, prepared	5	1	6
Syrups		1	1
Vinegars	3	5	8
Miscellaneous foods	5	2	7
Total	69	20	89
DRUGS.			
Linseed oil	2	2	4
Olive oil	2		2
Miscellaneous drugs	5	1	6
Total	9	3	12

INSPECTORS' REPORT FOR THE MONTH OF JUNE, 1912.

During this month 1,533 sanitary inspections were made in 64 cities and towns. Twenty-two places were reported as in excellent condition, 804 in good condition, 539 as fair, 136 as poor and 32 bad. It is worthy of note that 50 per cent. of the bad inspections were of dairies. Of the 38 dairies visited, 1 was good, 10 fair, 11 poor and 16 in bad condition. As we have pointed out monthly for years, the dairy situation is extremely unsatisfactory and so long as the milk supply is produced under present conditions, it constitutes a menace to childhood and stands as a disgrace to the milk producer. There is but one reason for this condition: The total lack of appreciation of his responsibility to the consumer on the part of the dairyman.

Two hundred and ninety-five of the 524 grocery stores visited were reported as in good condition, 174 were fair, 39 poor and 5 bad. Eleven stores were classed as excellent.

Of the 233 meat markets visited, 135 were in good condition, 85 fair, 11 poor and 2 bad. One hundred and four of the 218 bakeries were reported as in good condition, 82 fair, 27 poor. As usual, more hotels and restaurants were in fair condition than in good shape. Three were reported as in bad condition. It is worthy of note that of the 18 saloons inspected, 14 were in good condition while the remaining four were reported as in fair shape.

SUMMARY OF INSPECTIONS MADE DURING THE MONTH OF JUNE, 1912.

INSPECTIONS.	No. Inspected.	No. Excellent.	No. Good.	No. Fair.	No. Poor.	No. Bad.
Dairies	38	0	1	10	11	16
Grocery stores	524	11	295	174	39	5
Meat markets	233	1	135	84	11	2
Drug stores	221	5	157	48	11	0
Bakeries and confectioneries	218	4	104	82	27	1
Hotels and restaurants	161	0	60	82	16	3
Poultry houses	10	0	1	6	2	1
Fish markets	20	0	7	8	5	0
Creameries	5	0	1	2	2	0
Ice cream parlors	31	1	12	14	4	0
Ice cream factories	8	0	4	4	0	0
Fruit stores	8	0	4	3	1	0
Wholesale groceries	3	0	1	2	0	0
Flour mills	4	0	4	0	0	0
Bottling works	4	0	0	4	0	0
Slaughterhouses	18	0	0	9	5	4
Produce companies	2	0	2	0	0	0
Cold storage plants	2	0	2	0	0	0
Canning factories	2	0	0	1	1	0
Lunch carts	2	0	0	1	1	0
Soft drinks parlor	1	0	0	1	0	0
Saloons	18	0	14	4	0	0
Total	1,533	22	804	539	136	32

NOTICES OF CONDEMNATIONS DURING THE MONTH OF JUNE, 1912.

One hundred and eighteen condemnation notices were issued during the month. In 96 cases unsanitary conditions were found to exist, while in 70 cases the buildings in use were improperly constructed. The method of securing improvements through the medium of the condemnation notice seems admirably adapted to its purpose. The inspectors' reports show that in almost every case the improvements ordered are promptly made and that the owner or proprietor of a food industry is quick to appreciate the necessity for complying with orders issued under the Sanitary Food Law.

NOTICES OF CONDEMNATIONS DURING THE MONTH OF JUNE, 1912.

CLASSIFICATION.	Reasons for Condemnation.		Total.
	Unsanitary Conditions.	Improper Construction.	
Bakeries	7	5	9
Confectioneries	8	7	14
Dairies	10	13	15
Drug stores	3	4	5
Fish markets	1	1	1
Fruit stores	1	1	1
Grocery stores	22	7	22
Grocery and meat markets	2	1	2
Hotels	2	2	3
Ice cream kitchens	2	1	2
Meat markets	5	4	7
Poultry houses	3	3	3
Restaurants	16	12	19
Slaughterhouses	14	9	15
Total	96	70	118

REPORT OF BACTERIOLOGICAL LABORATORY FOR JUNE, 1912.

J. P. SIMONDS, SUPERINTENDENT.

Sputum for tuberculosis, positive 114, negative 301, total 415; throat cultures for diphtheria, positive 13, negative 81, suspicious 3, total 97; blood for Widal, positive 1, negative 81, total 82; for malaria, negative 25; for rabies, dogs' heads, positive 11, negative 8, too rotten for examination 3; hog's head, positive 1; cats' heads, positive 1, negative 2; calves' heads, negative 2, total 28; pus for gonorrhea from males, positive 10, negative 19; from females, positive 9, negative 9, doubtful 9, total 56; feces, 25; urine, 30; pus, 14; blood smears, 28; ice cream, 1; cultures for identification, 2; carcinoma, 9; Gasserian ganglia, 30; miscellaneous pathological tissues, 24. Total, 875.

Outfits sent out: Sputum, 368; diphtheria, 70; Widal, 111; malaria, 29; special, 90; bile media, 55. Total, 723.

FIFTEENTH INTERNATIONAL CONGRESS ON HYGIENE AND DEMOGRAPHY.

From September 23 to 28 in Washington, will be held the XV International Congress on Hygiene and Demography. This International Congress comes to the United States upon invitation of the President and the Congress of the United States. The organization meets once every two years and never visits a country unless especially invited by the highest authorities. Twenty-seven governments and forty-two States of the Union have signified their intention of being represented at the Congress by official delegates.

The Congress will be divided into nine sections embracing the general field of hygiene as follows:

1. Hygienic Microbiology and Parasitology; under the presidency of Prof. Theobald Smith, M.D., Harvard Medical School, Boston.

2. Dietetic Hygiene; Hygienic Physiology; under the presidency of Prof. Russell Chittenden, Sheffield Scientific School, Yale University, New Haven.

3. Hygiene of Infancy and Childhood; School Hygiene; under the presidency of Dr. A. Jacobi, Emeritus Professor of Pediatrics, College of Physicians and Surgeons, New York City.

4. Industrial and Occupational Hygiene; under the presidency of Dr. Geo. M. Kober, Professor of Hygiene, Georgetown University, Washington.

5. Control of Infectious Diseases; under the presidency of Dr. Hermann M. Biggs, Medical Director, department of health, New York City.

6. State and Municipal Hygiene; under the presidency of Dr. Frank F. Wesbrook, Professor of Pathology and Bacteriology, University of Minnesota, Minneapolis.

7. Hygiene of Traffic and Transportation; under the presidency of Surgeon-General Rupert Blue, United States Public Health and Marine-Hospital Service, Washington.

8. Military, Naval and Tropical Hygiene; under the presidency of Medical Director Henry G. Beyer, United States Navy, Washington.

9. Demography; under the presidency of Prof. Walter F. Wilcox, Professor of Economics and Statistics, Cornell University, Ithaca.

WANTS HIS BIRTH RECORD: Mr. Harry Lane, 431 Wheelock avenue, Detroit, Michigan, writes the State Board of Health as follows: "In order for me to get work here (Detroit) it is necessary to supply my birth record. Please send me transcript of my birth certificate. My name is Harry Lewis Lane, and I am the son of Mr. John Bond Lane and Mrs. Minnie Lane. I was born July 13, 1897, at Ft. Wayne, Indiana." We were unable to furnish Mr. Lane a transcript of his birth certificate because the State Board of Health, under the law did not commence the collection of vital statistics until 1900. This request shows that more and more it is becoming necessary to keep accurate birth and death records. More and more the people are coming to understand that vital statistics are of great importance to them. Finally, the physician who refuses or neglects to make prompt reports of the births and deaths and contagious diseases he attends, will find that he is not popular with the people. Besides, he will find that he is a violator of law and refuses to fully serve the science of medicine.

OTHER STATES FOLLOW INDIANA'S LEAD.

At the annual meeting of the American Association of Food, Drug and Sanitary Officials held in July at Seattle, the convention unanimously went on record as favoring the physical inspection of all who come in contact with the food supply. This action is in line with the attitude of the Indiana State Board of Health and the enforcement of the Sanitary Food Law. The full text of the resolution is as follows:

"Recognizing the danger of the spread of disease by the medium of the food supply, and appreciating the fact that the passage of well designed sanitary laws has furnished adequate means by which to eliminate persons suffering from syphilis, gonorrhea, consumption, and other contagious diseases from the ranks of food handlers, this association urges the rigid enforcement of such legislation, and the development of a practice of physical inspection that will insure sound, healthy workers with the food supply."

The passage of this resolution places the food commissioners of the country on record in favor of stringent sanitary control.

INDIANA STATE BOARD OF HEALTH.

DEPARTMENT OF FOODS AND DRUGS.

Circular Letter No. 17. Subject: Use of Fly Traps.

To Canners and Food Manufacturers:

The attention of canners and other food manufacturers is called to the fact that the fly nuisance, which can only in part be controlled by screens at doors and windows, may be very materially abated by the use of fly traps. Experiments conducted at a model canning factory have shown the possibility of destroying all flies, and so stopping further breeding, by the use of inexpensive and simple fly traps. Their general use is advised, not as a substitute for screens, but as an efficient and practical method for destroying flies.

The traps should be placed outside the buildings wherever waste promotes breeding or furnishes food for flies, and a sufficient number should be used to attract all flies in the vicinity of the factory.

The rule requiring the screening of toilets and outhouses will not be suspended or modified by the fact that fly traps are installed, nor will the prompt disposal of waste products be less necessary.

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

July 26, 1912.

INDIANA STATE BOARD OF HEALTH.

DEPARTMENT OF FOODS AND DRUGS.

Circular Letter No. 18. Subject: Protection of Lunch Counters.

To Saloonkeepers and Bartenders:

The attention of this Department is frequently called to the fact that the display of the so-called free lunch at saloons is not in conformity with the provisions of the Sanitary Food Law, in that such food is frequently not covered, but is exposed to dust, dirt and flies, and that forks, knives, spoons, etc., are not properly cleaned after use.

The practice of providing a single fork for the use of all patrons is unclean, unsanitary, conducive to the spread of disease, and in violation of the Sanitary Food Law.

You are hereby instructed to provide suitable covers for all food stuffs placed on sale or provided for patrons, and to furnish individual forks, knives and spoons for each user.

County, City and Town Health Officers, State Food Inspectors and all officers whose duty it is to enforce the Pure Food and Sanitary Food Laws, will be governed by this notice in regulating the sanitary operation of saloons and free lunch counters.

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

July 25, 1912.

PROF. LANTZ'S ANTISEPTIC EMULSION.

Another dangerous preparation sold by the Antiseptic Remedy Company of South Bend is Prof. Lantz's Antiseptic Emulsion, the principal label of which states that it is "A Most Speedy and Safe Cure for Acute and Chronic Coughs, Bronchial, Catarrhal and Asthmatic Affections, Pneumonia and Consumption." On a small label on the reverse side appears "Each fluid dram contains 4/5 gr. Chloral Hydrate, and 3 per cent. of alcohol as a preservative." Safe? Well, yes, and so is dynamite if it is far enough away. Yet the circular around the bottle advises the parents "to take this precaution in their own cases as well as in that of their children."

Analysis shows the product to be a 20 per cent. emulsion of an oil which reacts very much like corn oil, with chloral hydrate, alcohol and oil of cinnamon.

The financial fraud in this case is not so great as in other patents, for the manufacturer makes only 900 per cent., but the lamentable fact is that parents are instructed to feed their children, *a habit-producing stupefying drug used by the lowest class of criminals in "knock-out drops."*

THE EXHIBITION.

Many of the 27 governments and many of the 42 states which will be represented by delegates will also make exhibits of such hygienic and sanitary features as will best represent their work in these lines. The exhibition will be open during the three weeks from September 16 to October 4. No exhibition covering all the phases of hygiene has ever been held in the United States and this will be the first one of this character. There is no more powerful instrument for the dissemination of knowledge than an exhibit, and it is expected that this exhibition in conjuction with this great Congress will be attended with most excellent results.

The American Public Health Association meets in Washington, D. C., September 18, 19 and 20. Those health officers and authorities who attend the Congress from the 23d to the 28th should also not fail to attend the American Public Health Association in the preceding week. The great exhibit will be open two days before the convening of the American Public Health Association and one week before the convening of the Congress itself. Those who attend either one or both of these meetings will have the opportunity of meeting with very many of the authors whose books are upon the shelves of all medical libraries. They will also have the opportunity of hearing papers upon almost all phases of hygiene and vital statistics (demography).

AREADNA BOYATT.

Dr. Henry Moore, corresponding secretary and State organizer for the Indiana Society for the Study and Prevention of Tuberculosis, tells the following story:

"Today I saw, no doubt for the last time, a sweet little girl who is dying of consumption, resulting from sleeping in a tightly closed room. She is fifteen years old and her name is Areadna Boyatt. There are four children in the family, and on account of poverty, two aunts took Areadna to live with them. These good women labor under the de-

lusion that drafts and night air and, indeed, outdoor air itself, are dangerous to health. In consequence of this delusion they kept all doors and windows tightly closed and the slender, anemic Areadna slept in unventilated apartments.

"In the winter of 1911 she scarcely had strength enough to attend school and was treated for liver and stomach trouble. Finally she fell under the observation of a competent physician, who immediately pronounced her ailment *pulmonary tuberculosis*. He ordered her taken out of school and told her friends that he was afraid the discovery was too late to save the child. On July 7, 1911, Areadna was admitted to the State Tuberculosis Hospital. She was a tall, slender, anemic child with a sweet face and with a friendly, cheerful, hopeful disposition. She always greeted me most cordially and I became much attached to her. She improved somewhat at first, but the improvement did not continue despite the fact that the best treatment was given her. Finally she was sent home as incurable.

"I visited her today at Brownstown. She was terribly emaciated, but reached out her skinny hand to me and, in a whisper, thanked me for coming to see her. She is still patient, cheerful and hopeful and asked me what I thought of her teaching music when she got better."

The most pathetic point in this most pathetic story is that the condition which produced it proceeded out of ignorance and every cause leading to the acquirement of the disease was entirely unnecessary. Had the two good old aunts but been instructed to the effect that an abundance of good air is essential to life, strength and happiness, little Areadna could have lived out a long and happy and useful life.

THE SUMMER CARE OF BABIES.

The State Board of Health has recently issued a booklet with the above title. The advice and suggestions contained in the booklet are intended, primarily, for mothers and deal directly with the essentials in the proper care of babies, not only during the summer months, but during all the months of the year.

More than 2,000 babies under two years of age died in Indiana in 1910 of diarrheal diseases alone. Most of these deaths occurred, of course, in the heated summer months. It is estimated that 95 per cent. of diarrheal diseases are preventable. In other words, the lives of 1,900 babies are needlessly sacrificed every year from this one cause. This is a terrible indictment against the people of Indiana.

Why not *save the babies?* The booklet, "Summer Care of Babies," tells how. It is free and will be sent to any person in the State for the asking.

DUTIES OF JANITORS.

Prof. J. C. Sanders, superintendent of schools, Columbia City, Indiana, sends the following rules governing the duties of janitors which have been adopted by the school board of that city. The rules are so good that we print them for the information of health and school officials generally. The duties of janitors are most important, and school boards should see to it first that none but competent and careful men are employed, and second, that their duties and responsibilities are clearly set forth as in the rules from Columbia City.

RULES.

Section 1. The Janitors shall act under the directions of the Superintendent and the School Board.

Sec. 2. Janitors of the east and south buildings shall procure such school supplies as may be needed in these buildings, as determined by the teachers therein, from the storeroom in the west ward; but they shall not be required to do so oftener than once each week for this purpose.

Sec. 3. Janitors shall ring the bells at such times and in such manner as the Superintendent may direct.

Sec. 4. All Janitors shall remain about their buildings during the noon hour, unless excused by the Superintendent, and have the care of the pupils left in the building or on the playground.

Sec. 5. Janitors shall not permit rubbish to accumulate in any part of their buildings, basement or school grounds. They shall promptly exclude all persons found loafing about the school grounds. They shall have the care of and be responsible for the proper condition of school buildings, outhouses, and grounds belonging thereto.

Sec. 6. Janitors shall have the rooms warm before the ringing of the first bell in the morning, and shall keep the rooms heated, as nearly as possible, to the temperature of 70 degrees Fahrenheit.

Sec. 7. The school yards shall be kept properly mowed during the year. The Janitor shall take care of the flowers and shade trees.

Sec. 8. Papers and other rubbish shall be collected each morning. Walks shall be swept daily—morning.

Sec. 9. The furniture shall be kept in good repair. The Janitors shall keep the windows, window-fastenings, door locks, in good repair. They shall change the desks as often as required by the Superintendent.

Sec. 10. The windows shall be washed inside and out once every month with bon ami or alcohol.

Sec. 11. Once a week door knobs, hand-rails, banisters, shall be washed with warm water, gold dust, and coal oil—Saturday. Once every six weeks wash all other woodwork—Friday.

Sec. 12. Drinking fountains shall be washed with water and soap every Wednesday and Saturday. Toilet floors shall be scrubbed with water and soap once per week. Urinals shall be scrubbed with water and soap twice per week. Seats shall be washed with warm water, gold dust, and coal oil—Wednesday and Saturday. Once every six weeks halls and schoolroom floors shall be scrubbed with water and soap.

Sec. 13. All schoolroom, hall, toilet, and basement floors shall be swept daily. Where floors are not oiled, dustdown shall be used in sweeping.

Sec. 14. Walls shall be brushed down every six weeks; downstairs third week, upstairs sixth week.

Sec. 15. Blackboards shall be cleaned each Saturday and the chalk troughs daily. Inkwells shall be filled as often as necessary.

Sec. 16. Dusting shall be done with a cloth dampened with water or coal oil. Desks, doors, window sills, and baseboards shall be dusted daily. Pictures, doors and window casings once a week. No dusting or sweeping to be done when school is in session.

Sec. 17. In addition, Janitors shall perform all duties not specified, but connected with the care and the use of the school property that the Board or Superintendent shall require.

PREVENTIVE MORE THAN CURATIVE.

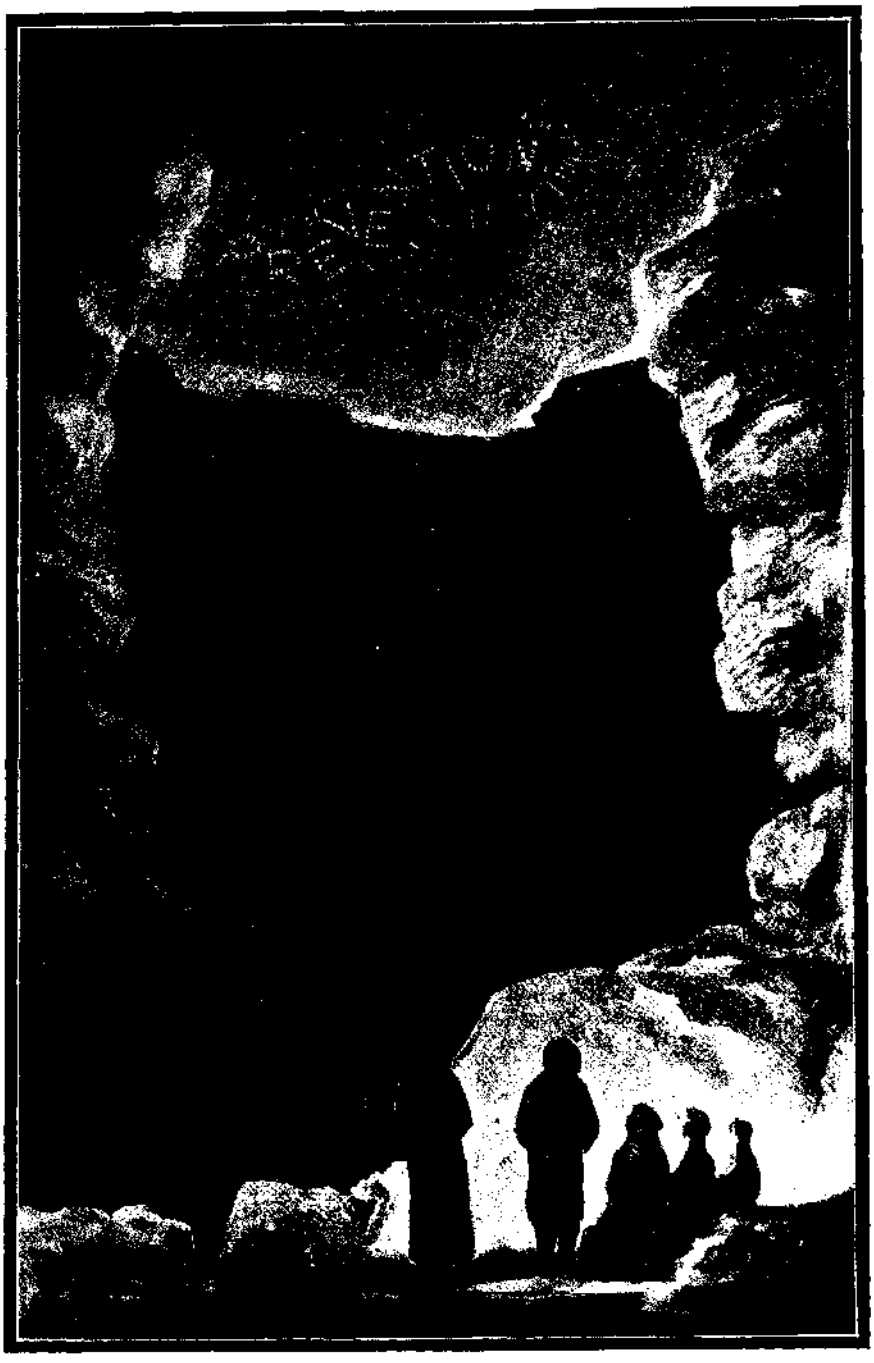
Dr. Hugo A. Pantzer, an eminent surgeon of Indianapolis, in discussing a paper entitled "Incomplete Abdominal Surgery" by Wetherill, which was read in the Section on Obstetrics and Gynecology of the American Medical Association at Atlantic City, says: "Patients come to us when they are very sick and our attention is drawn to the acute phase. The time must be when medicine is *preventive* more than *curative*. When our patients come to us we should make careful search for disease or for conditions leading to disease and thus avoid unnecessary operations." The trend of the times is surely toward prevention. The people are beginning at last to grow into prevention, although for a long time they have known that "an ounce of prevention is worth a pound of cure."

MANAGEMENT OF RABIES.

Mr. Otho Bronnenberg, residing near Anderson, had a dog which was "a little indisposed." It had acted queerly for several days, and accordingly it was tied in a corn crib. The dog chewed the rope, tore off some slats from the crib and got out. He bit his master, who was trying to catch him, also bit one hog and two other dogs. Finally the dog was killed about a mile from home, having by this time bitten two more dogs.

The head of the animal was sent to the State Board of Health and found to contain negri bodies, and was therefore adjudged to be afflicted with rabies.

In reviewing this incident, the question arises—Why did not Mr. Bronnenberg kill the dog in the beginning instead of tying him up in a corn crib? Had he done so, the damage recorded would not have occurred. The dog was a worthless cur, was simply an expense and probably was a sheep killer anyhow. How strange it is that people persistently manage their affairs in such way and manner as to spread disease and cause expense.



Having Fallen Into the Pit of Cure, They Now See the Starlight of Prevention.

RABIES OR HYDROPHOBIA.

BY J. P. SIMONDS, M. D., PATHOLOGIST TO STATE BOARD OF HEALTH.

INTRODUCTION.

In front of the Pasteur Institute in Paris is a bronze statue of a French shepherd boy engaged in a desperate struggle, with a large mad dog which had been worrying his sheep. With only his wooden "sabot" and his bare hands he succeeded in killing the dog, but was himself horribly bitten. The bronze boy is not a child of an artist's imagination. The event actually occurred in October, 1885, and this boy, Jupille, was the first person to take the antirabic treatment just then being perfected by the great Pasteur. "He remained perfectly healthy and his heroic deed and its consequences have become historic."

Rabies or hydrophobia is a definite, acute infectious disease transmitted only by the bite of some rabid animal or by some form of actual inoculation with infectious material.

There is perhaps no disease invested with such mysterious horror as hydrophobia. The horror is rendered more overpowering by the fact the effects of the poison inoculated into the (human) body by the bite of a rabid dog may not show themselves for months, and that when the symptoms of the disease have once developed, death is inevitable. The unfortunate victim is tormented for months by the most atrocious nerve-wracking dread, even if in the end he escapes the tortures of the disease itself.

HISTORY, DISTRIBUTION AND PREVALENCE.

Rabies has been known from ancient times. Democritus of Abdera, the "laughing philosopher," referred to it in the fifth century B. C. Aristotle, about a century later wrote that "Dogs suffer from a madness which puts them in a state of fury, and all animals that they bite when in this condition also become attacked by rabies." Epidemics of the disease have occurred in various countries from the earliest times.

The first recorded outbreak of rabies in the United States was in Boston in 1768. Since that time many extensive epizootics have occurred. "In Missouri and Ohio in 1860 so many cattle were destroyed by this disease that the owners sought reimbursement from the government."

In 1907, in a single county in Pennsylvania, 154 dogs, 25 cows, and 10 horses were known to have died of this disease. In the autumn and spring of 1905 in Jacksonville, Florida, 1,200 dogs had to be destroyed on account of rabies; 12 persons were bitten, 3 of whom died of hydrophobia. In 1908, a careful survey made by the United States Public Health and Marine Hospital Service showed that only ten States were free from the disease. These were Maine and the States of the extreme West. Since that time rabies has appeared west of the Rocky Mountains, and has become epidemic in California. During 1908, 111 deaths in humans were reported. This is an insignificant number when compared with the number of deaths from tuberculosis, but the horrible torture of the disease and the ease with which these deaths might have been prevented give them an unusual importance. During the same year about 1,500 persons took Pasteur treatment on account of bites by rabid or supposedly rabid animals. There are no accurate data showing the extent of loss of livestock. In many localities, however, it is known to have been very great. There is hope that the loss of livestock may be sufficient to stimulate rational preventive measures, "although the death of a few children in the same localities would not be sufficient to arouse it."

In spite of its wide-spread prevalence, little has been added to our knowledge of rabies until within the last thirty years. All sorts of crude ideas and superstitions concerning its cause and spread prevailed in ancient and mediæval times. Frederick the Great issued an edict requiring as a preventive measure, the removal of the so-called " mad worm," a normal cartilage in the tongue of a dog. He also paid a large sum for a secret cure for rabies, which turned out to be an emulsion of "May worms" in honey. In 1806 the Legislature of the State of New York bought from one John M. Crous a secret "cure for canine madness," which was found to contain the following remarkable ingredients: Pulverized jawbone of a dog, pulverized dried false tongue of a young colt and verdigris. As late as about 1825 the great Dr. Benjamin Rush gave a list of twenty-one different causes of rabies, ranging from bites by a rabid animal to the eating of beechnuts and an involuntary association of ideas.

Zinke, in 1804, was the first to prove that rabies is an infectious disease. He reproduced it in healthy animals by injecting into them the saliva of a rabid dog. All modern investigations furnish further proof of this.

Rabies has always been greatly feared and the report of a mad dog readily produces a panic. Until recently it was thought to be transmitted through the air. Even as late as 1840 those suspected of having hydrophobia in certain parts of Austria were shot by their neighbors; and half a century ago people were not infrequently smothered when afflicted with the disease, often with the consent of the government authorities.

No land or climate is immune from hydrophobia. In 1860 and again in 1863 the disease appeared in epizootic form in the extreme north of Greenland at a time when the temperature averaged 25 degrees below zero. In the Philippine Islands, with their tropical climate, it is quite common, and a native on being bitten by a rabid dog immediately arranges for the known fatal termination of the disease. Australia is the only large country in which no case of hydrophobia has ever occurred. This is due to its peculiar fauna and to a rigidly enforced quarantine. The disease is common in China, Japan, and in all the countries of Europe except England. In Germany and Holland the cases occur almost entirely on the frontier. In Russia the disease is very common among wolves. Constantinople, a city noted for the number of its worthless dogs, has remained remarkably free from the disease for the same reason that the United States has remained free from cholera, namely, because there has been no imported case to serve as the origin of an epidemic.

During the last five years an epizootic of rabies has existed in Indiana. Up to September 30, 1911, the heads of 664 animals had been examined at the Bacteriological Laboratory of the State Board of Health. Of these, 344, or 52 per cent., were proved to have rabies. This number probably does not represent one-fourth of the cases that have actually occurred in the State. For instance, in May, 1910, a dog appeared in Wayne County and bit 14 dairy cows. The dog was killed and examination of its brain at the State Laboratory showed that it was suffering from rabies in an advanced stage. One of these cows, which was terribly bitten, died on the following day. The other thirteen cows died of typical rabies, the first one on the 23d day and the last one on the 50th day after they were bitten. The heads of none of these thirteen cows were sent to the State Laboratory because the diagnosis was too clear to need verification. Hence these thirteen cases are not included in the 344 noted above.

All mammalia and birds are susceptible to rabies. Dogs are the most frequently affected. But all the domestic animals readily acquire the disease when bitten by rabid animals so that the financial losses from it are sometimes very great. "In England it has appeared among the deer in parks, and in 1889, out of 650 deer belonging to the Marquis of Bristol, 500 died in four months from rabies." In the southwestern part of the United States it is common among skunks, in which it has acquired the name hydrophobia nephitica. The disease is not now as common in man as formerly, on account of the introduction of Pasteur treatment. The United States census for 1890 gave 143 deaths, that for 1900, 123 deaths from hydrophobia.

POPULAR FALLACIES CONCERNING RABIES.

Numerous popular fallacies and ridiculous superstitions concerning rabies prevail even to this day, such as, that a rabid dog always has reddened eyes, a drooping tail, projecting tongue, and foams at the mouth. A dog may die of rabies without showing any one of the symptoms mentioned.

There are those, some of them doctors, who doubt the existence of such a disease as rabies. They do not doubt the existence of smallpox or yellow fever, although they may never have seen a case; nor do they doubt that a person coming in contact with a smallpox patient may catch that disease, or that a person bitten by an infected mosquito will contract yellow fever. Yet they defy equally

abundant historical and scientific evidence and claim to doubt that the bite of a rabid dog will transmit a definite disease, hydrophobia.

Contrary to the generally accepted opinion, the season of the year has very little influence on the number of cases of rabies. Of 14,066 cases of rabies in dogs collected by Salmon, 3,702 (27 per cent.) occurred during the summer, 3,043 (21.5 per cent.) during the autumn, and 3,125 (22.2 per cent.) in the winter. The disease is a little more common in the warmer months for the simple reason that dogs are more apt to run abroad in the warm season and are thus more exposed to the bites of rabid animals. If bitten by a rabid dog, the animal will take the disease just as readily when the temperature is 30 degrees below zero as when it is 110 in the shade.

A rabid dog is not afraid of water. He becomes intensely thirsty, but is unable to drink because the muscles of the throat with which he swallows are paralyzed. In attempting to drink he easily becomes strangled. This inability to swallow also accounts for the "foaming at the mouth" so often seen in rabid dogs.

The belief in the efficacy of the "mad-stone" still prevails in many communities. This belief is simply superstition. In 1805, a Mr. Micom of Virginia sold a mad-stone for $2,000 to the inhabitants of four or five adjacent counties in shares of $10 each. There are many of these stones in existence today, some of them very ancient. There is one belonging to a family in Virginia whose owner believes it to be the "talisman" sent by the Sultan to the Earl of Huntington on the occasion of his marriage to Edith Plantagenet, the legend of which is the basis of Scott's novel, "The Talisman."

Various porous stones have been used as mad stones, but the "mad-stone" of supposed efficacy is a very rare concretionary calculus found in the gullet of the male deer. As extracted it resembles a water-worn pebble and is oblong in form. A smooth, flat surface is given to one side by rasping. These stones consist chiefly of tri-calcic phosphate and their adherence to wounds depends on the mechanical character of the wound and the mode of application of the stone without regard to the venomous or non-venomous nature of the wound. These stones absorb blood and other fluids from wounds quite readily, and the drying around the edges causes them to stick. They have no more real efficiency than a piece of blotting paper, which will also stick to a moist wound. Numerous cases are on record of the deaths of animals and patients after a "successful" application of the stone. There is at least one case on record in which the disease itself was carried by a mad-stone.

Why, then, have made-stones had such reputation? First, because not every dog which is thought to be rabid and bites a person really has rabies, and secondly, because only a small percentage of persons bitten by dogs actually mad ever develop the disease. As long ago as 1771 Van Swieten recorded that of twenty persons bitten by the same dog on the same day, only one suffered hydrophobia. Very many similar observations have been made since then. Under such conditions any preventive remedy from mad-stones to "May worms" and "chickweed" is likely to be credited with marvelous powers by those financially interested in exploiting the remedy.

INCUBATION PERIOD OF RABIES.

The time intervening between the bite and the development of symptoms of rabies by the victim varies greatly and depends upon several factors. The incubation period in man is usually somewhat longer than in the lower animals. The disease begins earlier after bites about the head or neck than after bites on other parts of the body. The more severe the wound, the shorter the period of incubation. It also appears to be shorter in persons addicted to excessive use of alcohol.

The incubation period for the various animals is about as follows:

Man,	average 3 to 12 weeks.	Longest, 1 to 3 years.
Horse,	average 3 to 8 weeks.	Longest, 20 months.
Cow,	average 4 to 8 weeks.	Longest, 2 years.
Sheep,	average 3 to 4 weeks.	Longest, 2 years.
Pig,	average 2 to 4 weeks.	Longest, 6 months.
Cat,	average 2 to 6 weeks.	Longest, 1 year.

SYMPTOMS OF RABIES.*

"The symptoms of rabies are quite characteristic, and may be divided into two types—(1) the furious, violent, or irritable, and (2) the dumb or paralytic. They vary somewhat in each species."

Furious Rabies in the Dog.

"Following the period of incubation of the disease, which is usually between three weeks and three months, there is first noticed in the furious form of rabies a marked change in the disposition of the animal, which should at once arouse suspicion. An affectionate dog may become morose and depressed, while a snapping treacherous animal may become cowardly or affectionate. This is known as the stage of development, and in one or two days is followed by an irresistible tendency to roam. If prevented, the dog will fight or bite at the restraint or at anything that interferes with his freedom. This roving may occur for one to three days, during which he travels aimlessly in a nervous and irritable condition. His instinctive methods of defense are nearly always highly developed or exaggerated, but he seldom wilfully attacks persons or other animals without provocation. When he returns, if not destroyed in the meanwhile, he shows from his exhausted, dirty, sheepish, or depressed appearance evidences of wandering. Having returned home, he frequently seeks secluded places such as are found under the house or porch.

"During this period of roving he exhibits a disposition to eat or chew indigestible objects, as rags, leather, straw, feathers, sticks, and even pieces of coal, which are often swallowed. The secretion of saliva in some cases appears to be excessive, owing to the inability to swallow, and it sometimes becomes frothy from the champing of the jaws. However, foaming at the mouth is not a constant symptom of rabies, as is commonly believed by the layman; and furthermore, it is frequently misleading, owing to the fact that it may be observed in other diseases.

"A change in the voice of the animal is peculiar to this affection, and is due to the beginning paralysis of the throat, which usually sets in early. Instead of the normal bark the affected dog makes a long, resonant, peculiarly drawn-out bark, which has been likened to the yelp of a coyote. Later, as the paralysis gradually extends, barking and swallowing become impossible, although attempts may be made to swallow. At this stage the muscles of the jaw become paralyzed, causing the lower jaw to drop and the tongue to hang out, which makes it collect dirt and appear dry and darker in color. Owing to this latter symptom the disease has been termed "black tongue" in certain sections. Upon closer observation the pupil of the eye is frequently found to be dilated. The paralysis continues to extend,

* From Farmers' Bulletin 449, U. S. Dept. of Agriculture.

the hind legs become involved, and the dumb form of the disease results. Finally death follows in from four to eight days after the development of the first symptoms."

Dumb Rabies in the Dog.

"The dumb or paralytic form of rabies is much more infrequent than the furious type, and is characterized by the early appearance of paralysis without symptoms of frenzy or irritability which are observed in the early stages of the furious form. Therefore, the animal affected with this type of the disease is not capable of doing much damage. Indeed, the dog is much depressed from the beginning and seeks quiet spots or hides in some secluded place. Probably the first symptom noticed by the owner is the paralysis of the lower jaw, as a result of which the animal is often suspected of having a 'bone in its throat.' The paralysis quickly progresses until it involves the legs and trunk and results in death in from one to three days."

Rabies in Cattle.

"In cattle both furious and dumb rabies are met with as in dogs, the former being the more common. However, a sharp line of distinction can not always be drawn between these two forms of the disease, as the furious type usually merges into the dumb, due to the paralysis which always appears prior to death. The typical cases of dumb rabies are those in which the paralysis occurs at the beginning of the attack and remains until the death of the animal. The disease first manifests itself by loss of appetite, stopping of the secretion of milk, great restlessness, anxiety, manifestation of fear, and change in the disposition of the animal. This preliminary stage is followed in a day or two by the stage of excitation or madness, which is indicated by increasing restlessness, loud bellowing with a peculiar change in the sound of the voice, violent butting with the horns and pawing the ground with the feet, with an insane tendency to attack other animals, although the desire to bite is not so marked in cattle as in the canine race. About the fourth day the animal usually becomes exceedingly emaciated. The temperature is never elevated, but usually remains about normal or even subnormal. Finally there is complete paralysis of the hind quarters, the animal being unable to rise, and, but for irregular convulsive movements, lies in a comatose condition and dies usually in from four to six days after the appearance of the first symptom."

Rabies in Cats.

"When the disease attacks cats these animals generally hide themselves under the furniture or in some dark, hidden corner, and there they may die unobserved in the course of a day or two. As a rule, however, the disease implies danger for human beings. The rabid cat becomes very bellicose; from the dark corner where it has hidden itself it will suddenly attack animals or persons, and especially when children are involved it will jump up to the face and inflict severe wounds with its teeth and claws. In the violence of this attack it frequently bites itself. The rabid cat loses its voice, being able only to mew hoarsely. Later it loses its appetite, has difficulty in swallowing, becomes emaciated, and succumbs within several days with symptoms of paralysis."

What to Do When Bitten by a Dog Suspected of Having Rabies.

1. Do NOT kill the dog at once. If it can possibly be done, the animal should be shut up in a safe place for *ten days*. If it remains perfectly healthy during that period you may be absolutely sure that it has not rabies and the person bitten is in no greater danger than from any similar wound inflicted in some other way.

2. If, on account of the ferocity of the animal you are compelled to kill it, *do not shoot it in the head*. This may injure the brain so that microscopic examination is impossible.

3. After the animal dies, or is killed, sever the head from the body and send it packed in ice in a water-tight container to the nearest laboratory where such specimens are examined. (Citizens of Indiana should send heads from suspected animals to the Bacteriological Laboratory of the Indiana State Board of Health, Indianapolis, Ind.) Do not send the whole dog. Do not attempt to remove the brain from the head. Remember that during hot weather a dead animal's head will putrefy, and if not packed in ice will reach the laboratory as a horribly smelling putrid mass which can not be examined with accuracy.

4. If evidence of rabies is found in the brain of the animal, all persons bitten by it should take Pasteur treatment without further delay.

(This article will be continued in the July number of this Bulletin. The control of rabies and Pasteur treatment will be discussed.)

CURRENT REFERENCES ON PUBLIC HEALTH QUESTIONS.

Compiled by the Legislative Reference Department of the Indiana State Library.

(All of this material may be consulted at the State Library except those marked *, and may be loaned with the exception of the magazines. The reports and bulletins of State and city health departments may also, doubtless, be obtained from the board issuing them.)

Bakeries—Underground.

Iowa—Health, State Board of. Sanitation of bakeries and restaurant kitchens (illus.); by C. B. Ball. (In its Bulletin, v. 25, No. 1, July, August, September, 1911, pp. 9-17.)

Biologic Products.

Pennsylvania—Health, State Department of. Preparation of the biologic products distributed by the Pennsylvania Department of Health. 10 pp. (Health Bulletin, v. 28, October, 1911.)

Cerebro-Spinal Meningitis.

Texas—Health, State Board of. Epidemic cerebro-spinal meningitis; a review of its etiology, transmission and specific therapy, with reference to public measures for its control. (In its Bulletin, v. 6, No. 2, February, 1912, pp. 2-20.)

Cholera.

New York (city)—Health, Department of. Notes on the history, nature and prevention of Asiatic cholera, and an editorial. (In its Monthly Bulletin, v. 1, No. 8, August, 1911, pp. 177-190.)

Coca-Cola.

Canada—Inland Revenue Department—Laboratory. Coca-Cola (syrup). 11 pp. February, 1912. (Bulletin No. 232.) (Analysis of 68 samples.)

Contagious Diseases—Registration.

United States—Public health and marine-hospital service and annual conference of State and territorial health officers. Table showing status of existing laws and regulations for reporting of diseases in the United States. (In their Transactions, 1910, pp. 39-50.)

Disinfectants—Coal Tar.

Boston—Health Department. Comparison of the germicidal value of a few "commercial" coal tar disinfectants, by F. M. Slack and E. M. Wade. (In its Annual Report, 1910, pp. 59-64.)

Disinfection of Books.

Pedagogical Seminary, June, 1911. Disinfection of books, by L. B. Nice, pp.197-204.) (Contains a bibliography.)

Dust.

Texas—Health, State Board of. Prevention of disease by elimination of dust, by F. L. Hoffman, abstract of paper before the Mayors' Annual Conference of New York State. (In its Bulletin, v. 5, No. 5, May, 1911, pp. 16-20.)

Food—Exposed.

Ohio—Health, State Board of. Protection of exposed food products, by J. M. Denison. (In its Monthly Bulletin, v. 1, No. 5, May, 1911, pp. 155-164.)

Garbage.

New York (State)—Health, State Department of. Ten commandments for handling garbage without nuisance, by P. M. Hall; paper before the conference of the sanitary officers of the State of New York, Buffalo, November 16-18, 1910. (In its Report, 1910, pp. 817-824.)

Hookworm.

Kentucky—Health, State Board of. Anemia or hookworm in Kentucky—it can be cured and prevented—this bulletin tells how. Illustrated. 20 pp. (Bulletin, v. 1, No. 8, September, 1911.)

Hookworm.

South Atlantic Quarterly, April, 1912. North Carolina campaign against hookworm disease, by J. A. Ferrell, pp. 128-135.

Insane Persons.

New York (State)—Health, State Department of. Care and commitment of insane persons by health officers, by W. L. Russell, paper read before the conference of sanitary officers of the State of New York, Rochester, November 10-12, 1909. (In its Report, 1909, v. 1, pp. 592-598.)

(Demonstrates that the local health officer, rather than the poor authorities should have charge of mental diseases in the community.)

Insect Powders.

Massachusetts—Health, State Board of. Danger of fatal poisoning from roach and other insect powders containing sodium chloride. (In its Monthly Bulletin, new series, v. 6, No. 12, December, 1911, pp. 341-343.)

Isolation Hospitals.

Massachusetts—Health, State Board of. Maintenance of isolation hospitals by cities and towns in Massachusetts for the reception of persons ill with diseases dangerous to the public health (with a list of diseases declared such). (In its Monthly Bulletin, new series, v. 7, No. 2, February, 1912, pp. 45-80.)

Malaria.

Pennsylvania—Health, State Department of. Malaria; how it is caused and how to get rid of it. 18 pp. (Health Bulletin, No. 21, March, 1911.)

Meat Inspection.

Minnesota—Health, Board of. Meat inspection. (In its Report, 1911, pp. 165-174.)

(An article to arouse interest in obtaining a meat inspection law for Minnesota. Gives a model bill and describes conditions and needs in the State. "Our Slaughterhouse System," by C. Cash, is quoted extensively.)

Medical Inspection of Schools—Dental.

Virginia—Health, Department of. Good teeth and bad, the essentials of oral hygiene. 13 pp. (Health Bulletin, v. 3, No. 3, March, 1911.)

Midwives.

New York (city)—Health, Department of. Supervision of midwives in New York City. (In its Monthly Bulletin, v. 1, No. 11, November, 1911, pp. 259-262.)

(A municipal school for midwives has recently been established in New York City.)

Milk Supply.

Savage, William G. Milk and the public health. Illustrated. 459 pp. 1912.

Motherhood.

Pedagogical Seminary, March, 1912. Some European institutions for the protection of motherhood and the prevention of infant mortality, by T. L. Smith, pp. 101-111.

Pellagra.

United States—Public Health and Marine-Hospital service. Pellagra; a précis. Rev. ed., 37 pp. 1911. (Public Health Bulletin, No. 48.) (Contains a bibliography.)

Playgrounds.

Milwaukee (Wis.)—Bureau of Economy and Efficiency. Recreation survey, by Rowland Haynes; report made for the Board of School Directors and the Child Welfare Commission. 32 pp. March 31, 1912. (Bulletin No. 17.)

Rabies.

New York (State)—Agriculture, Department of Rabies, and its Control in New York State, by J. G. Wills. 24 pp. November, 1911. (Bulletin No. 29.)

Research Laboratories.

New York (city)—Health, Department of. Development of the Research Laboratory, by H. M. Biggs; The New Activities of the Research Laboratory of the Department of Health, by W. H. Park; and an editorial. (In its Monthly Bulletin, v. 1, No. 3, March, 1911, pp. 51-66.)

Sanitarians.

Ohio—Health, State Board of. Civil Engineer as a Sanitarian, by Paul Hansen. (In its Monthly Bulletin, July, 1911, pp. 212-222.)

School Janitors.

Educator-Journal, May, 1912. Standardization of Janitor Service, by G. M. Wilson, pp. 471-7.

Sewage Disposal.

Municipal Journal and Engineer, v. 32, No. 6, February 8, 1912. Electrolytic Sewage Treatment, by C. L. Edholm, illustrated, pp. 200-203.

Social Diseases.

California—Health, State Board of. Note on the new pioneer law requiring syphilis and gonococcus diseases to be registered. (In its Monthly Bulletin, v. 7, No. 3, September, 1911, p. 43.)

Social Evil.

Seligman, Edwin R. A. The social evil, with special reference to conditions existing in the city of New York, a report prepared (in 1902) under the direction of the committee of fifteen. Ed. 2 rev. and enl. 303 pp., 1912.

(Contains a bibliography, exclusive of the technical medical literature, of 40 pages.)

Stables—Disinfection.

United States—Agricultural, Department of. Practical Methods of Disinfecting Stables, by G. W. Pope. Illustrated; 16 pp. 1911. (Farmers' Bulletin 480.)

Street Car Inspection.

San Francisco (Cal.)—Public Health, Department of. Inspection of street cars. (In its Report, 1909, pp. 16-17.)

Tonsilitis.

Massachusetts—Health, State Board of. Epidemic of tonsilitis due to infected milk. (In its Monthly Bulletin, new series, v. 6, No. 11, November, 1911, pp. 310-312.)

Trachoma.

New York (city)—Health, Department of. Trachoma, three articles by H. W. Woolton, S. J. Baker and A. W. Williams, and an editorial. (In its Monthly Bulletin, v. 1, No. 4, April, 1911, pp. 75-76 and 79-86.)

Trained Nurses.

United States—Education, Bureau of. Educational Status of Nursing, by M. A. Nutting. 97 pp. 1912. (Bulletin, 1912, No. 7, whole number 475.)

(Contains tabular statement of important features of State laws for registration of nurses and other statistical tables.)

Tuberculosis—Municipal Nurse.

Los Angeles—Health Department. Report of tuberculosis nurse. (In its Annual Report for year ending June 30, 1911, pp. 65-6.)

Tuberculosis—Teachers.

Michigan—Health, State Board of. Tuberculosis among school teachers, with table showing proportionate mortality from tuberculosis among school teachers in Michigan, 1908-10. (In its Public Health, v. 6, No. 4, October, December, 1911, pp. 141-142.)

Vital Statistics.

Virginia—Health, Department of. Why vital statistics are to be registered in Virginia—the reasons for a law that records the life of every citizen—text of the new vital statistics law. (Health Bulletin, v. 4, No. 3, April, 1912, pp. 43-71.)

Vivisection.

Great Britain—Royal Commission on Vivisection. Final report. 139 pp. 1912.

(Contents: Existing Law, Progress of Science and Results of Experiments on Animals, Pain in Experiments on Animals, Moral Question, Suggestion Made to the Commission, Recommendations.)

Water Pollution.

Virginia—Health, Department of. Sanitary wells and springs and how to get them—good water is within the reach of every farmer. 8 pp. (Health Bulletin, v. 3, No. 4, April, 1911.)

NO BIRTH CERTIFICATE—NO JOB.

It is hard sometimes to influence people to comply with the provisions of the public health law because it is the right thing to do, but a concrete example of unfortunate results following an infraction of the law is often very salutary. Physicians and parents sometimes say that it does not make any real difference to any one if a birth is or is not reported. The following is a specific instance where failure to report a birth closed a means of livelihood to a man who was otherwise eligible and possibly deprived his community of the efficient services of an intelligent officer. The letter tells its own tale. The State Department had no record of the birth and could render no assistance in the matter.

NEW YORK, Jan. 15, 1912.

State Department of Health,
Albany, N. Y.

Gentlemen—I am an applicant for position of patrolman in this city and was informed to go and get my birth certificate. But upon inquiry no trace of my birth was found.

I was informed to write to this department. Name, William Lippoth, son of Frederick and Emma. Born Oct. 19, 1890, in the city of New York.

Your prompt attention in this matter will be greatly appreciated.

Thanking you in advance, I am,

Yours respectfully,

W—— L——.

P. S.—My parents are both dead and I can not find trace of my baptismal papers.

(Copy of what Dr. C. W. Stiles has to say about "The County Health Officer.")

"THE COUNTY HEALTH OFFICER: During the twenty years that I have been engaged upon a study of practical health problems in this country, the fact has been forced upon me that the County Health Officer is theoretically the most important and practically the weakest point in the entire public health situation of the United States. Some of our counties have excellent county health officers, but in the vast majority of cases the men are underpaid for the work, and they therefore do not perform their duties properly; for the support of their families, they are dependent upon their private practice among people over whom they are called to exercise police powers, and as a result these powers are not exercised; too often the position goes to the "lowest bidder," and too often it goes to a political appointee, technically totally unfitted for the work.

To use a comparison: the county health officer may be compared with the sheriff or the local police, while the federal health authorities may be compared with the United States Army. Today there is a tendency to demand that the federal public health service be increased. Much as I approve of strengthening the federal service, as a member of that service I feel convinced that the average citizen does not fully appreciate the fact that this service can not possibly make up for the present inefficiencies of the mass of our county health officers. We might just as logically expect that an increase in the standing army of the United States would obviate the necessity of having county sheriffs or local police as to expect the federal public health service to obviate the necessity of appointing and equipping proper local and county health officers.

Speaking from an experience of twenty years of work in federal service, with a considerable portion of this time spent in actual field work in many different States, I can not escape the conclusion that the most important single problem in public health organization in our country is at present centered in the question of the county and local health officer rather than in Washington, and I wish to add all the emphasis in my power to that part of the report of the administration secretary which deals with this point."

Let the good work go on.

—N. C. Bulletin.

POISONING FROM INFECTED MEAT.

Poisoning due to meat is generally spoken of as "ptomaine"-poisoning; but, as pointed out in a recent article quoted in these pages, this term is inaccurate, most of the trouble being due to germs which develop in tainted meat, or even sometimes in healthy tissue. Outbreaks of such poisoning occur from time to time, and statistics show them to be more common in rural neighborhoods than in cities, being chiefly found in the latter in hotels and boarding-houses, and in institutions such as hospitals, asylums, and orphanages. In Germany attention has been recently directed to epidemics of this kind, and to the organisms which cause them, by the occurrence of one in the Berlin municipal lodging-house, in which dozens of homeless vagrants lost their lives. There is no reason why a similar disaster may not occur in this country, and a study of the German case may prevent a like one here. There are three classes of poisoning from "spoiled" meat, fish, etc., and their characteristic symptoms are clearly described in an article by Dr. L. Bürger, of Berlin, written for the Illustrierte Zeitung of that city, just after the fatalities above mentioned. The first class is occasioned by bacteria similar to the typhus bacillus. These may have entered the tissues of the infected animal while living. They are very tiny, and the use of the microscope to determine their presence and number is absolutely essential. If the meat from an animal even very slightly infected is kept under improper conditions, these bacteria multiply with tremendous rapidity, especially in warm summer weather.

But even meat from a perfectly healthy animal may become infected with these bacteria. Some of the principal methods of such infection enumerated by Dr. Bürger are by unclean handling, by the excreta of the rats and mice which commonly haunt slaughter-houses, by contact with impure water or ice (in which the bacillus may retain its vitality for months), or by flies, which have been shown by the experiments of Dr. Ficker of Berlin to carry around with them living germs for weeks at a time. Fish offer an even more favorable breeding-ground than meat for such bacteria, and other foods, such as milk, cheese, bread, cake, vegetables, and preserves may be similarly infected. We read:

"The symptoms of this first group resemble at times those of a more or less severe intestinal catarrh, and at times those of typhus fever or cholera. An autopsy reveals little. The mucous membrane of stomach and intestines is usually somewhat swollen and shows tiny hemorrhages.

"A second group of poisonings comes from decayed foods, especially meat. These are comparatively rare, because the offensive odor acts as a warning. It is important to know that boiling does *not* destroy the active principle of the poison, either in these cases or those of the first group, a fact not generally known. Moreover, there may be a degree of decay injurious to health without the presence of a foul odor, especially in decaying meat sausages or salt meat. Also, the color of the meat may remain unaltered, though usually it takes on a greenish or yellowish-gray tone."

The third class of poisoning comes from meat infected by a specific organism, the *bacillus botulinus*, and it is to this that the lodging-house fatalities are ascribed. This is colloquially known as "sausage-poisoning," since the first cases observed were caused by infected sausage. It is now recognized that it may proceed from infected ham, smoked or salted fish, tinned meats and fish, etc. While cases of meat-poisoning have increased on the whole during the last decade, cases of this "botulismus" have decreased. The rod-shaped *botulinus* bacillus to which it is due was discovered by Van Ermingem. It has very slight power of motion, and grows only where oxygen is excluded. Under certain conditions it forms oval spores at the end of the rod. This bacillus is not in itself dangerous to the human organism, since it does not proliferate in the body, as is the case with the diphtheria, typhus, or cholera bacillus, and with most others which produce illness. The *botulinus* grows only on dead flesh, outside the human body, and it is in such conditions that it elaborates its extraordinarily fatal poison. Consequently, it is not contagious or infectious, but is capable of injuring only those who have taken the food in which it grows. Hence there is no need of isolating the sick, and "epidemics" disappear as suddenly as they arise. Further:

"The time elapsing between partaking of the food and the appearance of symptoms of illness varies according to the individual and to the amount of poison absorbed. Occasionally it has been observed that only a few minutes separated the swallowing of the poisoned food from disturbances of digestion, such as active nausea, a feeling of illness, and 'colicky' pains. In other cases the digestive disturbances were delayed for several hours, or were entirely absent.

"The most marked feature is usually the effect on the eye—the dilatation of the pupil, the inability to read, seeing double, paralysis of the upper eyelid, etc. To this is frequently added dryness of the throat, hoarseness, difficulty in swallowing, and hardness of hearing.

"Fever is usually lacking at the beginning, or, if present, is slight. It often increases as the disease progresses, when complications ensue, such as inflammation of the lungs, which is frequent. The gaze is apt to be very rigid, because of the immovability of the eyeball. The expression of the face is sometimes grotesque, and is mask-like because of the disturbance of the power of motion of the facial muscles.

"The attempt to drink may be accompanied by signs of suffocation. Sometimes there is a croup-like cough. . . . In severe cases convalescence is very slow, the invalid tires with little exertion, and is not fit to work for months.

"Death occurs in about 40 per cent. of all cases, and often in the course of twenty-four hours. . . . .

"The diagnosis of 'botulismus' is unfortunately rather difficult. Where it is suspected, tests of the food should be made as speedily as possible, since thus the tainted meat may be seized and the epidemic checked."

HAS NO BIRTH RECORD; BARRED.

An Associated Press dispatch from Manchester, N. H., Jan. 4, reads as follows: George A. Wagner of this city has struck a peculiar obstacle in the preliminaries necessary to his taking the office of probate judge, to which he was recently elected. He can not find any record of his birth, and the law requires that a certificate of birth must be filed with the secretary of state before a judge can be commissioned.

Mr. Wagner has always been led to believe that he was born in Manchester, May 28, 1873. His parents told him and he has seen it so stated in print many times, but when he called at the office of the city clerk he was told that there was no record of his birth on file there.

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM CERTAIN COMMUNICABLE DISEASES FOR JUNE, 1912.

NORTHERN SANITARY SECTION.

Total population	939,532
Total deaths	841
Death rate per 1,000	10.9
Pulmonary Tuberculosis, rate per 100,000	93.5
Typhoid, rate per 100,000	14.2
Diphtheria, rate per 100,000	3.8
Scarlet fever, rate per 100,000	2.5
Diarrheal diseases, rate per 100,000	33.7

CENTRAL SANITARY SECTION.

Total population	1,127,217
Total deaths	988
Death rate per 1,000	10.7
Pulmonary Tuberculosis, rate per 100,000	107.2
Typhoid, rate per 100,000	7.5
Diphtheria, rate per 100,000	3.2
Scarlet fever, rate per 100,000	2.1
Diarrheal diseases, rate per 100,000	15.1

SOUTHERN SANITARY SECTION.

Total population	663,757
Total deaths	536
Death rate per 1,000	9.8
Pulmonary Tuberculosis, rate per 100,000	119.4
Typhoid, rate per 100,000	20.2
Diphtheria, rate per 100,000	1.8
Scarlet fever, rate per 100,000	1.8
Diarrheal diseases, rate per 100,000	25.7

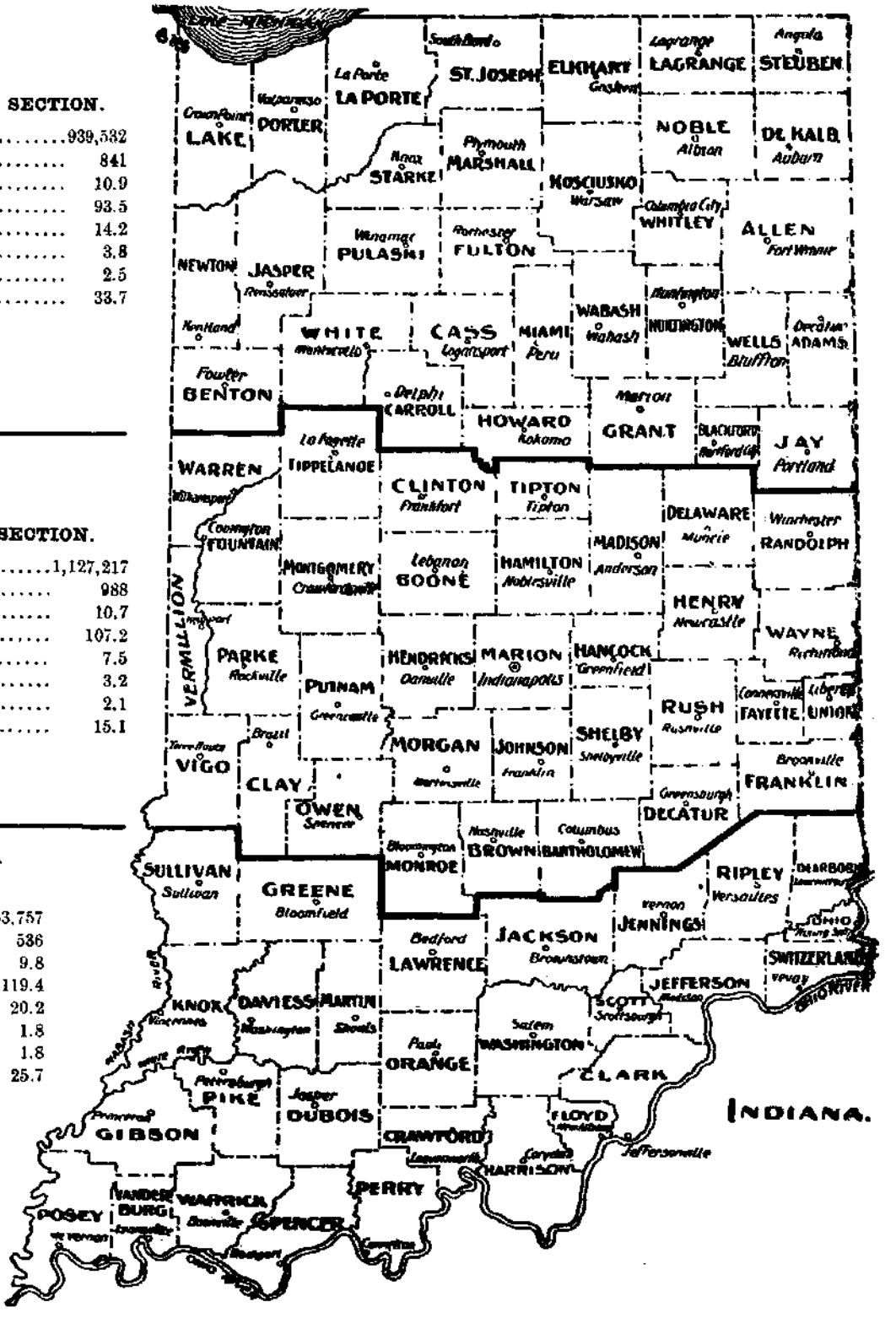


TABLE 1. Deaths in Indiana by Counties During the Month of June, 1912. (Stillbirths excluded.)

STATE AND COUNTIES.	Population, Estimated, 1912.	Total Deaths Reported for June, 1912.	Total Deaths Reported for May, 1912.	Total Deaths Reported for June, 1911.	Total Deaths Reported for 1912 to Date.	Total Deaths Reported for Year 1911 to Same Date.	Annual Death Rate Per 1,000 Population.					Important Ages.						Deaths from Important Causes.																
							June, 1912.	May, 1912.	June, 1911.	Rate for Year 1912 to Date.	Rate for Year 1911 to Same Date.	Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.	65 Years and Over.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria and Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Lobar and Broncho-Pneumonia.	Diarrhea and Enteritis (under 2 years).	Cerebro-Spinal Fever.	Acute Anterior Poliomyelitis.	Influenza.	Puerperal Septicemia.	Cancer.	External Causes.	Smallpox.	Deaths in Institutions.
State of Indiana	2,730,508	2,355	2,622	2,353	17,649	17,499	10.5	11.3	10.6	12.9	13.0	179	93	43	36	53	766	236	54	29	7	5	11	30	75	54	1	1	9	8	165	210	3	179
Northern Counties	839,532	841	900	742	5,989	5,820	10.9	11.3	9.7	12.9	12.1	82	33	8	13	16	284	72	11	11	3	2	3	12	30	26	1	...	3	4	65	62	3	68
Adams	21,972	11	12	13	101	91	6.1	6.4	7.2	9.2	8.3	...	...	...	...	...	4	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
Allen	95,267	84	100	58	589	576	10.7	12.3	11.4	12.4	12.3	7	3	...	...	2	20	9	1	...	...	...	...	...	3	...	1	...	1	...	10	...	...	19
Benton	12,688	2	13	6	50	66	1.9	12.0	5.7	7.9	10.4	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blackford	15,895	16	16	12	73	96	12.2	7.4	9.2	9.1	12.1	...	...	...	...	...	6	2	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...
Carroll	17,972	9	12	7	83	91	6.1	7.8	4.7	9.2	10.1	...	...	...	...	1	5	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cass	36,852	51	42	23	328	257	16.9	13.5	7.7	17.9	14.2	6	2	2	1	1	11	8	2	1	1	1	1	1	2	2	...	...	...	...	4	2	...	12
Dekalb	25,129	32	17	13	160	129	15.5	7.9	6.3	12.8	10.3	...	2	...	...	1	14	1	...	1	...	...	...	...	1	...	...	...	1	...	1	1	...	...
Elkhart	49,487	34	41	36	269	317	8.3	9.7	8.9	10.9	13.0	5	2	1	...	...	13	4	...	1	...	...	...	...	1	1	...	...	...	...	3	2	...	1
Fulton	16,879	9	14	23	102	110	6.4	9.7	16.5	12.1	13.0	...	...	...	...	...	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Grant	51,628	46	44	37	385	357	10.8	10.0	13.5	14.9	13.9	...	3	1	1	1	15	1	...	1	...	...	...	...	2	...	...	...	1	...	5	1	12
Howard	33,817	23	33	35	208	192	8.2	11.5	12.5	12.3	11.6	4	1	...	1	1	5	4	1	1	...	...	...	1	...	...	...	...	...	...	2	...	...	...
Huntington	29,080	28	25	20	176	160	11.7	10.1	8.4	12.1	11.1	4	...	1	...	...	17	1	...	...	...	...	...	1	...	...	...	...	...	...	5	1	...	...
Jasper	13,057	6	15	13	55	63	5.6	13.5	12.1	10.0	9.7	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Jay	24,994	20	19	12	154	141	9.7	8.9	5.8	12.3	11.3	...	1	...	...	...	7	1	...	...	...	...	...	...	4	...	...	...	...	...	2	1	...	...
Kosciusko	27,980	24	18	21	162	182	10.4	7.5	9.1	11.6	13.1	...	...	...	...	...	15	...	...	...	...	...	...	...	1	1	1	...	...	...	4	1	...	...
Lagrange	15,148	20	6	11	96	103	16.1	4.6	8.8	12.6	13.6	3	...	...	1	...	9	2	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...
Lake	87,361	109	98	70	660	526	13.9	13.2	10.2	15.1	12.7	30	7	2	1	2	11	9	...	2	...	...	...	1	7	16	...	...	...	...	2	17	...	9
Laporte	46,555	52	57	39	356	322	13.8	14.4	10.3	15.3	14.1	10	2	...	1	1	20	3	...	1	1	1	...	...	2	1	...	...	...	...	4	6	...	6
Marshall	24,193	11	23	18	144	154	5.5	11.2	9.0	11.9	12.8	...	1	...	...	...	3	2	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...
Miami	29,594	31	31	20	182	191	12.7	12.3	8.2	12.3	13.1	...	...	...	...	...	20	2	...	...	...	...	...	...	2	...	...	...	...	...	1	2	...	1
Newton	10,509	5	4	6	43	44	5.8	4.4	8.1	8.2	8.4	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Noble	24,171	22	32	15	176	123	11.0	15.6	7.6	14.1	10.3	...	...	...	...	1	12	1	1	...	...	...	...	...	2	1	...	...	...	...	2	...	...	...
Porter	20,610	15	20	18	122	93	8.8	11.4	10.6	11.8	9.1	...	1	...	...	...	7	1	...	...	...	...	...	...	...	1	...	...	...	...	2	3	...	...
Pulaski	13,312	9	15	7	81	65	8.2	13.3	6.3	12.2	9.8	...	1	1	2	...	2	2	...	1	...	...	...	...	...	...	...	...	...	...	2	1	...	...
Starke	10,580	9	4	9	62	72	10.3	4.4	10.3	11.7	13.6	...	1	...	1	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Steuben	14,320	13	23	13	111	87	11.0	18.9	11.0	15.5	12.2	...	...	...	...	1	3	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...
St. Joseph	86,855	82	87	89	581	566	11.4	11.7	12.8	13.4	13.5	12	3	...	1	5	24	9	3	1	...	...	1	...	4	2	...	...	...	2	9	4	2	8
Wabash	26,932	26	28	20	154	161	11.7	12.2	9.0	11.4	11.2	1	...	...	1	...	10	2	...	...	...	...	...	...	1	...	...	...	...	1	1	2	...	...
Wells	22,468	16	21	12	107	104	8.6	11.0	6.5	9.5	9.3	...	1	...	...	...	7	3	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...
White	17,608	13	23	8	108	90	10.3	15.4	5.5	12.3	10.2	...	...	...	...	...	6	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Whitley	16,939	19	13	8	107	83	13.6	9.0	5.7	12.6	9.8	...	2	...	...	...	7	1	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...
Central Counties	1,127,217	988	1,160	934	7,662	7,421	10.7	12.1	10.7	13.8	13.4	74	38	22	15	24	304	99	33	7	3	2	8	11	29	14	...	...	6	3	73	108	...	92
Bartholomew	24,881	23	25	19	162	159	11.2	11.8	9.3	13.0	12.9	...	1	1	...	...	10	1	...	...	...	...	...	...	2	2	...	...	...	...	4	4	...	...
Boone	24,773	30	23	12	161	128	14.7	10.9	5.9	13.0	10.4	...	...	...	2	...	11	2	2	...	...	...	2	...	...	...	...	...	...	...	2	4	...	...
Brown	7,975	2	2	3	34	27	3.0	2.9	4.5	8.5	6.8	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Clay	32,712	24	28	25	197	191	8.9	10.0	9.3	12.0	11.8	...	1	...	1	3	6	2	1	...	...	...	...	1	...	1	...	...	...	...	5	...	...	...
Clinton	26,827	27	25	16	154	149	12.2	11.0	7.2	11.5	11.2	...	...	...	1	5	6	3	1	...	...	...	...	1	1	...	...	...	1	3	7	...	...	...
Decatur	18,831	13	19	17	136	125	8.4	11.8	10.9	14.4	13.2	...	...	...	1	...	6	...	...	...	...	...	1	1	...	...	...	...	1	...	1	2	...	...
Delaware	51,720	47	48	43	328	299	11.0	10.9	10.1	12.7	11.7	7	1	1	2	5	11	4	2	...	...	...	1	...	1	...	...	...	...	...	6	3	...	1
Fayette	14,507	12	20	21	95	113	10.0	16.2	17.7	13.1	15.7	...	1	1	...	...	5	2	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...
Fountain	20,483	22	22	14	143	125	13.0	12.6	8.3	14.0	12.3	...	...	1	...	...	4	4	1	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...
Franklin	15,335	13	14	9	105	100	10.3	10.7	7.1	13.7	13.1	1	1	...	...	...	2	5	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...
Hamilton	27,054	16	30	26	174	184	7.2	13.0	11.7	12.9	13.7	...	...	...	...	...	3	3	...	...	...	...	...	...	1	...	...	...	...	...	2	1	...	...
Hancock	19,030	19	20	14	138	137	12.1	12.4	8.9	14.2	14.5	...	...	...	...	1	9	1	1	...	...	...	...	...	1	...	...	...	...	...	...	3	...	...
Hendricks	20,840	16	10	15	113	103	9.3	5.6	8.7	10.9	9.9	2	...	...	...	1	7	2	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Henry	30,362	20	21	28	162	193	8.0	8.1	11.4	10.7	13.0	5	1	1	...	...	8	1	1	...	...	...	...	1	1	1	...	...	...	...	1	3	...	1
Johnson	20,443	18	22	20	124	124	10.7	12.6	11.9	12.1	12.2	...	...	...	...	1	8	3	1	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...
Madison	65,454	52	56	44	358	414	9.6	10.0	8.1	10.9	12.7	4	1	1	1	2	17	6	3	1	...	...	...	...	3	...	...	...	2	...	4	5	...	1
Marion	270,261	269	352	290	1,068	2,005	12.1	15.3	13.3	7.9	15.3	31	18	6	3	6	63	26	9	3	3	...	2	1	9	5	...	...	...	...	16	23	...	58
Monroe	23,681	14	25	21	167	150	7.2	12.4	10.8	14.1	12.9	...	3	1	...	...	1	...	2	...	...	...	...	...	1	...	...	...	...	...	...	5	...	...
Montgomery	29,568	19	27	21	183	169	7.8	10.7	8.7	12.5	11.6	...	1	1	...	...	6	2	...	...	...	1	...	...	2	...	...	...	...	1	2	...	...	...
Morgan	21,254	18	28	12	153	132	10.3	15.5	6.6	14.4	12.5	...	...	...	...	...	8	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Owen	14,053	6	14	14	76	78	5.2	11.7	12.1	10.8	11.1	...	1	...	...	1	2	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Parke	22,214	22	18	20	157	135	12.0	9.5	10.0	14.2	12.2	1	2	...	1	2	10	1	...	1	...	...	...	2	1	...	...	...	...	...	4	...	...	...
Putnam	20,532	16	15	18	107	138	9.5	8.6	10.8	10.4	13.5	...	...	...	...	...	5	2	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...
Randolph	29,117	28	20	24	179	181	11.7	8.1	10.0	13.3	12.5	7	...	...	1	1	5	3	1	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...
Rush	19,387	15	16	14	147	106	9.4	9.7	8.7	15.1	11.0	...	2	1	1	1	3	3	2	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...
Shelby	27,035	24	26	29	186	167	10.8	11.3	13.1	13.8	12.5	...	...	...	...	...	13	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Tippecanoe	40,259	44	52	35	348	317	13.3	15.2	10.6	17.3	15.9	6	2	...	...	2	23	5	1	...	...	...	...	2	1	1	...	...	...	...	3	4	...	6
Tipton	17,490	23	9	7	98	92	16.0	6.0	4.8	11.2	10.5	...	1	...	...	...	10	3	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...
Union	6,280	4	9	7	43	42	7.7	16.9	13.5	13.7	13.5	...	...	...	...	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Vermillion	19,226	15	19	8	149	140	9.5	11.6	5.1	15.4	14.8	...	...	3	...	...	3	2	...	1	...	...	1	1	1	...	...	...	...	...	2	1	...	...
Vigo	90,519	73	83	89	651	632	9.7	10.7	12.2	14.4	14.4	7	1	2	1	2	23	6	2	...	...	...	...	1	1	2	...	...	...	1	9	7	...	19
Warren	10,899	5	6	10	59	64	5.6	6.4	11.2	10.8	11.8	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wayne	44,235	39	56	39	324	316	10.7	14.9	10.8	14.7	14.5	1	...	2	...	1	6	2	2	...	...	1	1	...	1	...	...	...	1	...	3	4	...	4
Southern Counties	863,757	536	562	627	3,988	4,500	9.8	9.9	11.5	12.1	13.7	23	22	13	10	13	176	65	10	11	1	1	...	7	16	14	...	1	...	1	27	40	...	19
Clark	30,280	26	27	27	186	214	10.4	10.5	10.8	12.3	14.2	2	...	...	...	...	16	2	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	1
Crawford	12,057	10	15	10	81	68	10.1	14.6	10.0	13.4	11.3	2	...	1	...	...	2	3	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Daviess	27,747	24	33	17	177	143	10.5	14.0	7.4	12.8	10.7	...	1	...	...	...	8	2	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...
Dearborn	21,472	13	18	16	132	143	7.3	9.8	9.1	12.3	13.4	...	...	...	...	...	6	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Dubois	19,843	10	14	25	87	125	6.1	8.3	15.3	8.7	12.6	...	...	1	...	...	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Floyd	30,310	36	19	29	215	223	14.4	7.3	11.6	14.2	14.8	4	2	...	2	2	12	5	1	...	...	...	...	1	...	3	...	...	...	...	2	1	...	1
Gibson	30,177	19	20	29	167	164	7.6	7.3	11.6	11.1	10.9	...	1	...	1	...	3	5	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Greene	37,707	29	15	28	208	188	9.3	4.6	9.2	11.0	10.2	...	2	1	1	...	9	2	...	...	...	...	...	1	...	...	...	...	...	...	3	3	...	...
Harrison	20,232	13	12	4	90	69	7.8	6.9	2.4	8.9	6.8	...	...	...	...	...	5	4	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Jackson	24,727	21	30	15	159	135	10.3	14.3	7.3	12.9	11.0	...	3	...	...	...	6	4	...	...	...	...	...	...	2	...	...	...	1	...	2	1	...	...
Jefferson	20,483	33	37	18	185	153	19.6	21.3	10.6	18.1	15.0	...	1	...	...	1	10	1	...	1	...	...	...	...	1	1	...	...	...	...	3	2	...	...
Jennings	14,212	11	10	10	71	88	9.4	6.3	8.5	10.0	12.4	...	...	...	...	1	5	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2	...	...
Knox	39,816	35	35	35	230	234	10.7	10.3	10.8	11.6	12.0	5	1	1	...	...	14	5	...	2	...	...	...	1	1	...	...	...	...	...	1	3	...	2
Lawrence	31,114	29	20	31	176	237	11.3	7.5	12.3	11.3	15.5	...	2	1	1	1	7	2	...	1	...	...	...	...	2	1	...	...	...	...	1	6	...	...
Martin	13,027	11	12	11	77	71	10.2	10.8	10.3	11.8	11.0	...	...	...	...	...	6	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ohio	4,329	*	5	4	30	34	*	13.6	11.2	13.9	15.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Orange	17,225	11	19	25	99	123	7.7	13.0	17.7	11.4	14.3	...	1	1	...	1	6	1	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Perry	18,146	14	14	21	121	131	9.4	9.1	14.1	13.3	14.5	...	2	1	...	...	6	3	...	...	...	...	...	1	...	1	...	...	...	...	2	...	...	...
Pike	19,684	17	14	14	127	126	10.5	8.3	6.6	12.9	12.8	...	2	1	2	2	4	3	2	...	...	1	...	1	...	...	...	...	...	...	1	1	...	...
Posey	21,713	12	16	14	110	120	6.7	8.5	7.8	10.1	11.1	...	1	...	...	...	5	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Ripley	19,528	11	11	21	97	128	6.8	6.6	13.1	9.9	13.1	...	1	...	...	2	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scott	8,324	3	8	6	49	60	4.3	11.2	8.7	11.8	14.5	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Spencer	20,676	20	17	24	135	129	11.7	9.6	14.4	13.1	12.5	...	...	...	1	1	7	6	1	...	...	...	...	1	...	...	...	...	...	...	3	...	...	...
Sullivan	33,082	24	20	32	164	180	8.8	7.1	12.0	9.9	11.1	...	...	...	...	...	9	2	...	1	...	...	...	3	...	...	...	...	...	...	2	...	...	...
Switzerland	9,914	7	6	6	58	65	8.6	7.1	7.3	11.7	13.1	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanderburgh	78,502	73	88	121	568	711	11.3	13.2	18.9	15.1	18.4	8	3	2	3	1	13	7	2	...	...	...	...	2	2	5	...	...	...	...	8	7	...	15
Warrick	22,005	13	11	27	105	140	7.2	5.8	14.9	9.5	12.8	...	...	1	...	...	4	2	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...
Washington	17,445	11	15	7	94	123	7.6	10.1	4.8	10.8	13.8	...	1	...	...	...	6	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Urban	1,184,381	1,172	1,365	1,170	8,649	8,354	12.0	13.5	12.4	14.8	14.6	120	54	17	18	25	333	118	30	11	3	3	4	13	40	39	1	...	3	3	82	109	...	128
Rural	1,546,115	1,193	1,257	1,363	9,000	9,145	9.4	9.5	10.6	9.3	11.7	59	39	26	20	28	433	118	24	18	4	2	7	17	35	15	...	1	6	5	83	101	3	83

*No deaths.

TABLE 2. Deaths in Indiana by Cities During the Month of June, 1912. (Stillbirths excluded.)

CITIES.	Population, Estimated, 1912.	Total Deaths Reported for June, 1912.	Total Deaths Reported for May, 1912.	Total Deaths Reported for June, 1911.	Total Deaths Reported for Year 1912 to Date.	Total Deaths Reported for Year 1911 to Same Date.	Annual Death Rate Per 1,000 Population. June, 1912.	May, 1912.	June, 1911.	Rate for Year 1912 to Date.	Rate for Year 1911 to Same Date.	Important Ages. Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.	55 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 Bronchopneumonia.	Diarrhœa and Enteritis (under 2 years).	Cerebro-Spinal Fever.	Acute Anterior Poliomyelitis.	Influenza.	Puerperal Septicemia.	Cancer.	External Causes.	Smallpox.	Deaths in Institutions.
Cities of the First Class. Population 100,000 and over	240,098	238	320	260	1,807	1,807	12.0	15.7	13.5	15.6	15.5	27	17	5	3	6	52	21	9	3	2	...	2	...	9	4	...	...	...	...	12	21	...	55
Indianapolis	240,098	238	320	260	1,870	1,807	12.0	15.7	13.5	15.6	15.5	27	17	5	3	6	52	21	9	3	2	...	2	...	9	4	...	...	...	...	12	21	...	55
Cities of the Second Class. Population 45,000 to 100,000	253,337	231	262	295	1,715	1,854	11.1	12.2	14.6	13.6	15.2	24	10	1	3	6	62	26	7	1	...	...	1	2	6	8	1	...	1	2	28	12	...	42
Evansville	70,711	60	72	97	453	588	10.3	12.0	16.9	12.8	16.9	4	3	1	2	1	13	6	2	...	...	...	...	...	2	3	...	...	...	...	8	4	...	11
Fort Wayne	65,814	60	72	68	442	432	11.1	12.8	12.9	13.4	13.6	6	3	...	...	...	17	7	1	...	...	...	...	...	...	...	1	...	1	...	8	3	...	14
Terre Haute	60,305	55	63	63	449	455	11.1	12.2	13.1	14.9	15.7	5	1	...	1	1	16	5	2	...	...	...	...	...	...	1	...	...	...	1	6	3	...	15
South Bend	56,507	56	55	67	371	379	12.0	11.4	15.2	13.2	14.2	9	3	...	...	4	16	8	2	1	...	...	1	...	4	2	...	...	...	1	6	2	...	2
Cities of the Third Class. Population 20,000 to 45,000	132,435	133	150	113	978	913	12.2	13.3	10.5	14.7	14.0	15	7	3	3	4	45	11	6	1	...	1	...	3	5	8	...	...	1	...	7	19	...	11
Muncie	24,311	29	28	22	164	150	14.5	13.5	11.1	13.5	12.6	3	1	...	2	...	11	3	1	...	...	...	...	...	1	...	...	...	...	...	3	7	...	...
Richmond	22,733	18	30	17	146	121	9.6	15.5	9.2	12.9	10.9	1	...	2	...	1	6	1	2	...	...	1	...	...	1	...	...	...	1	...	...	1	...	...
Anderson	22,706	18	20	10	136	157	9.6	10.4	5.4	12.0	14.0	...	1	1	...	1	7	1	1	...	...	...	...	...	1	...	...	...	...	...	2	4	...	1
Hammond	21,779	18	28	16	171	148	10.0	15.1	9.2	15.7	14.2	5	1	...	...	...	2	...	...	1	...	...	...	...	2	4	...	...	...	...	...	3	...	3
New Albany	20,629	26	14	24	157	159	15.3	8.0	14.1	15.2	15.5	3	2	...	1	1	9	3	1	...	...	...	...	1	...	3	...	...	...	...	1	...	...	1
Lafayette	20,277	24	31	24	204	181	14.4	16.0	14.5	20.2	18.1	3	3	...	...	1	10	3	1	...	...	...	...	2	...	1	...	...	...	...	1	4	...	6
Cities of the Fourth Class. Population 10,000 to 20,000	224,885	242	255	201	1,658	1,447	13.1	13.3	11.6	14.8	13.9	60	8	2	4	2	52	29	3	4	1	1	1	2	10	15	...	...	1	...	17	16	...	18
Elkhart	19,691	7	12	14	118	121	4.3	7.1	8.8	12.0	12.5	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
East Chicago	19,668	18	25	15	154	135	11.1	15.0	9.5	15.7	14.1	8	1	...	...	...	...	1	...	1	...	...	...	1	2	3	...	...	...	...	...	1	...	1
Marion	19,561	14	17	27	133	129	8.7	10.2	16.9	13.5	13.4	...	1	...	...	...	3	1	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...
Michigan City	19,444	12	26	22	141	131	7.5	15.7	14.0	14.6	13.8	4	...	...	...	...	4	...	...	...	...	...	...	...	...	1	...	...	...	...	2	1	...	...
Logansport	19,334	26	24	12	165	133	16.4	14.6	7.8	16.9	13.9	4	2	...	1	...	6	4	...	1	1	...	...	...	2	2	...	...	...	...	2	1	...	2
Gary	17,802	38	27	17	169	101	26.0	17.9	12.3	19.0	12.1	13	2	1	1	1	1	7	...	...	...	...	...	...	2	8	...	...	...	...	...	9	...	4
Kokomo	17,650	16	20	19	133	105	11.0	13.3	13.5	15.0	23.0	4	1	...	...	...	3	4	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Vincennes	15,359	13	16	17	104	143	10.3	12.2	13.8	13.6	19.3	2	...	...	...	...	4	4	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	2
Mishawaka	12,518	13	11	9	82	82	12.6	10.3	9.1	13.1	13.8	3	...	...	1	...	3	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2
Peru	11,154	11	11	9	69	81	11.9	11.5	9.9	12.4	14.9	...	...	...	...	...	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Elwood	11,028	7	13	8	64	50	7.7	13.9	8.8	11.6	9.1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Laporte	10,866	31	20	8	122	88	13.7	21.6	9.2	22.5	16.4	4	1	...	1	1	12	2	...	1	...	1	...	...	1	...	...	...	...	...	2	3	...	6
Jeffersonville	10,412	12	15	15	90	94	14.0	16.9	17.5	17.3	18.1	...	...	...	...	...	7	2	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	1
Huntington	10,350	13	12	9	72	65	15.2	13.6	10.6	13.9	12.7	3	...	...	...	...	7	1	...	...	...	...	...	1	...	...	...	...	...	...	3	...	...	...
New Castle	10,060	11	6	10	52	60	13.3	7.0	12.9	10.4	12.7	4	...	1	...	...	4	...	1	...	...	...	...	...	1	1	...	...	...	...	1	1	...	...
Cities of the Fifth Class. Population Under 10,000	333,836	329	376	301	2,427	2,330	11.8	13.3	11.1	14.6	14.3	4	12	8	5	7	112	31	5	2	...	1	...	6	10	6	...	...	...	1	18	41	...	...
Shelbyville	9,733	5	13	10	73	59	6.2	15.7	12.8	15.6	12.5	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Crawfordsville	9,643	6	10	9	70	62	7.5	12.2	11.7	14.5	13.3	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
Brazil	9,495	14	12	9	78	74	17.9	14.8	11.4	16.4	15.6	...	1	...	...	2	3	1	1	...	...	...	...	...	1	1	...	...	...	...	...	3	...	...
Bloomington	9,075	10	12	9	82	74	13.4	15.6	12.4	18.1	16.8	...	2	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	4	...	...
Bedford	8,976	7	6	8	54	56	9.4	7.8	11.1	13.7	12.9	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	...	...
Columbus	8,881	7	9	6	59	58	9.5	11.8	8.2	13.3	12.0	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
Frankfort	8,787	10	8	6	55	49	13.8	10.7	8.4	12.5	11.4	...	...	...	...	1	3	1	1	...	...	...	...	1	...	...	...	...	...	...	...	3	...	...
Wabash	8,693	8	13	9	54	55	11.2	17.5	12.6	12.4	12.7	...	...	...	...	1	3	1	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...
Goshen	8,584	6	8	6	49	53	8.5	10.9	8.5	11.4	12.5	2	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Washington	7,854	8	10	9	55	53	12.4	15.0	13.9	14.0	13.5	...	...	...	...	...	3	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Connersville	7,828	7	14	12	59	51	10.8	21.0	18.8	15.1	13.2	...	1	1	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
Valparaiso	7,057	6	5	7	40	42	10.3	8.3	12.1	11.4	12.0	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Madison	6,934	11	12	4	52	59	19.2	20.4	7.0	15.0	17.1	...	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...	...	...	3	1	...	...
Whiting	6,847	5	7	5	49	45	8.9	12.0	9.2	14.3	14.2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...
Clinton	6,560	4	4	3	41	45	7.4	7.2	5.8	12.5	14.5	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
Princeton	6,488	4	7	9	45	47	7.5	12.7	17.0	13.9	14.6	...	...	...	...	1	1	2	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Seymour	6,305	6	15	8	59	52	11.5	28.0	15.4	18.7	16.5	...	2	...	...	...	3	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Hartford City	6,282	6	2	7	34	53	11.6	3.7	13.7	10.9	17.2	...	...	...	...	...	2	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Linton	6,189	2	5	7	32	41	3.9	9.5	14.4	10.4	13.9	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mt. Vernon	5,606	4	3	4	29	33	8.6	6.3	8.7	10.3	11.9	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lebanon	5,574	6	9	4	44	35	13.0	16.9	8.8	15.8	12.8	...	...	...	...	...	2	2	...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...
Greensburg	5,458	6	7	11	61	51	13.3	15.1	24.6	22.4	18.9	...	...	...	...	...	2	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Portland	5,163	3	5	2	34	37	7.0	11.4	4.7	13.2	14.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Kendallville	5,143	4	8	2	37	25	9.4	18.3	4.8	14.4	10.1	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Noblesville	5,101	3	5	3	41	37	7.1	11.5	7.2	16.1	14.6	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alexandria	5,096	3	5	7	27	46	7.1	11.5	16.7	10.6	18.1	1	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bluffton	5,037	7	11	5	35	29	16.9	25.7	12.2	13.9	11.7	...	...	...	...	...	3	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Rushville	4,963	8	7	5	56	33	19.6	16.5	12.4	22.6	13.4	...	1	1	1	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
Martinsville	4,578	8	5	7	47	43	21.2	12.8	18.8	20.6	19.1	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	4,551	3	4	3	25	28	8.0	10.3	8.1	11.0	12.5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Decatur	4,503	2	2	4	28	22	18.9	5.2	10.8	12.4	9.9	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Aurora	4,486	2	6	6	34	37	5.4	15.7	16.5	15.2	17.3	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warsaw	4,474	4	2	2	23	25	10.8	5.2	5.5	17.3	11.3	...	...	...	...	...	4	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
Greenfield	4,446	6	10	3	35	36	16.4	26.5	8.2	15.8	16.3	...	...	...	...	...	3	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Winchester	4,322	4	4	2	30	25	11.2	10.9	5.7	13.9	11.8	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Sullivan	4,214	7	3	6	22	32	20.2	8.4	17.7	10.4	15.6	...	...	...	...	...	3	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Garrett	4,172	4	2	1	31	22	11.6	5.6	2.9	14.9	10.6	...	1	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Tipton	4,106	7	...	1	24	26	20.7	*	2.9	11.7	12.8	...	...	...	...	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Boonville	4,028	4	5	6	36	32	12.0	14.6	18.5	17.9	16.3	...	...	...	...	...	2	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Auburn	3,971	6	2	3	25	19	18.4	5.9	9.3	12.6	9.7	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Lawrenceburg	3,930	1	4	1	23	38	3.1	12.0	3.0	11.7	19.4	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plymouth	3,856	3	7	4	36	37	9.4	21.4	12.6	18.7	19.4	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Greencastle	3,802	5	4	4	26	31	16.0	12.4	12.8	13.7	16.4	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Mitchell	3,804	3	3	2	25	34	10.1	9.8	7.0	13.9	19.9	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Columbia City	3,945	6	4	3	27	20	20.9	13.4	10.5	15.5	11.6	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Tell City	3,437	3	3	3	31	34	10.6	10.2	10.8	18.1	20.3	...	1	...	...	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Attica	3,368	5	3	2	39	21	18.1	10.5	7.3	23.2	12.6	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rochester	3,364	7	1	5	32	43	25.3	3.5	18.1	19.1	25.7	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Jasonville	3,295	4	4	...	8	...	14.5	14.3	...	14.5	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Union City	3,257	3	4	1	33	23	11.2	14.4	3.7	20.3	14.4	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Gas City	3,234	1	2	2	19	19	3.7	7.3	7.3	8.2	11.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dunkirk	3,031	3	5	1	25	20	12.0	19.4	4.0	16.5	13.3	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
North Vernon	2,924	3	2	1	27	12	12.5	4.0	8.3	8.9	18.6	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Montpelier	2,786	5	2	1	15	10	21.6	8.4	4.3	10.8	7.2	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bicknell	2,749	5	2	...	25	...	22.1	8.5	...	18.2	...	1	...	1	...	...	3	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Rockport	2,736	2	6	3	24	21	8.9	25.8	13.3	17.6	15.4	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angola	2,656	3	1	2	22	20	13.7	4.4	9.3	16.6	13.4	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Crown Point	2,545	3	4	...	19	...	14.3	18.5	...	15.0	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Huntingburg	2,464	1	1	3	8	19	4.9	4.7	14.8	6.5	15.5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rensselaer	2,405	2	4	2	20	15	10.1	19.6	10.1	16.7	13.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Loogootee	2,231	3	6	4	20	20	16.3	31.7	22.6	18.0	18.7	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Batesville	2,227	1	4	...	15	...	5.4	21.2	...	13.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Monticello	2,174	3	2	1	10	15	16.5	10.5	5.6	14.8	13.9	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ligonier	2,173	5	4	3	18	11	28.0	21.7	16.8	16.6	10.2	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Delphi	2,163	...	3	1	13	14	*	16.3	5.6	12.0	13.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cannelton	2,130	2	2	4	18	17	11.4	11.0	22.8	16.9	16.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Covington	2,069	1	3	...	15	15	5.8	17.1	*	14.5	14.9	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Butler City	1,818	2	...	1	11	8	13.4	*	6.7	12.1	6.8	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Veedersburg	1,768	4	4	1	21	13	27.6	26.6	6.9	23.7	14.8	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
Rising Sun	1,513	2	4	4	22	29	16.1	31.2	32.1	29.0	38.5	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Vevay	1,256	...	2	1	9	9	*	18.7	9.6	14.4	14.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

*No deaths

Mortality of Indiana for June, 1912. (Stillbirths excluded.)

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Population Estimated 1912.	Total Deaths Reported for June, 1912.	Total Deaths Reported for May, 1912.	Total Deaths Reported for June, 1911.	Total Deaths Reported for Year 1912 to Date.	Total Deaths Reported for Year 1911 to Same Date.	Annual Death Rate Per 1,000 Population.					Important Ages.										
							June, 1912.	May, 1912.	June, 1911.	Rate for Year 1912 to Date.	Rate for Year 1911 to Same Date.	Under 1.		1 to 4.		5 to 9.		10 to 14.		15 to 19.		65 and Over.	
												Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
State	**2,730,506**	**2,365**	**2,622**	**2,353**	**17,649**	**17,499**	**10.5**	**11.3**	**10.6**	**12.9**	**13.0**	**179**	**7.5**	**93**	**3.9**	**43**	**1.8**	**38**	**1.6**	**53**	**2.2**	**786**	**32.4**
Northern Counties	930,532	841	900	742	5,989	5,620	10 9	11.3	9.7	12.8	12.1	82	9.7	33	3.9	8	.9	13	1.5	16	1.9	284	33.8
Central Counties	1,127,217	988	1,160	984	7,662	7,421	10.7	12.1	10.7	13.6	13.4	74	7.4	38	3.8	22	2.2	15	1.5	24	2.4	304	30.7
Southern Counties	663,757	536	562	627	3,998	4,500	9 8	9.9	11.5	12.1	13.7	23	4.2	22	4.1	13	2.4	10	1.8	13	2.4	178	32 8
All Cities	**1,184,391**	**1,172**	**1,365**	**1,170**	**8,649**	**8,354**	**12.0**	**13.5**	**12.4**	**14.8**	**14.6**	**120**	**10.2**	**54**	**4.6**	**17**	**1.4**	**18**	**1.5**	**25**	**2.1**	**333**	**28.4**
Over 100,000	240,098	238	320	260	1,870	1,877	12.0	15.7	13.5	15.6	15.5	27	11.3	17	7.1	5	2.1	3	1.2	6	2.5	52	21.8
45,000 to 100,000	253,337	231	262	295	1,715	1,864	11.1	12.2	14.6	13.6	15.2	24	10.3	10	4.3	1	.4	3	1.2	6	2.5	62	26.8
20,000 to 45,000	132,435	133	150	113	978	913	12.2	13.3	10.5	14.7	14.0	15	11.2	7	5.2	3	2.2	3	2.2	4	3.0	45	33.7
10,000 to 20,000	224,885	242	255	201	1,658	1,447	13.1	13.3	11.6	14.8	13.9	50	20.6	8	3.3	2	.8	4	1.6	2	.8	62	25.6
Under 10,000	333,636	329	376	301	2,427	2,330	11.8	13.3	11.1	14.6	14.3	4	1.2	12	3.6	6	1.8	5	1.5	7	2.1	112	34.0
Country	1,546,115	1,193	1,257	1,183	9,000	9,145	9.4	9.5	10.6	9.3	11.7	59	4.9	39	3.2	26	2.1	20	1.6	28	2.3	433	36.3

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Deaths and Annual Death Rates Per 100,000 Population From Important Causes.																									
	Pulmonary Tuberculosis.		Other Forms Tuberculosis.		Typhoid Fever.		Diphtheria and Croup.		Scarlet Fever.		Measles.		Whooping Cough.		Lobar and Broncho-Pneumonia.		Diarrhea and Enteritis (Under 2 Years.)		Cerebro-Spinal Fever.		Acute Anterior Poliomyelitis.		Influenza.		Puerperal Septicemia.		Cancer.		External Causes.		Small-pox.	
	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate
State	**236**	**105.4**	**54**	**24.1**	**29**	**12.9**	**7**	**3.1**	**5**	**2.2**	**11**	**4.9**	**30**	**13.4**	**75**	**33.5**	**54**	**24.1**	**1**	**.4**	**1**	**.4**	**9**	**4.0**	**8**	**3.5**	**165**	**73.7**	**210**	**93.8**	**3**	**1.3**
Northern Counties	72	93.5	11	14.2	11	14 2	3	3.8	2	2.5	3	3.8	12	15.5	30	38.9	26	33.7	1	1.2			3	3.8	4	5.1	65	84.4	62	80.5	3	3.8
Central Counties	99	107 2	33	35.7	7	7 5	3	3.2	2	2.1	8	8.6	11	11.9	29	31 4	14	15.1					6	6.4	3	3.2	73	79.0	108	116.9		
Southern Counties	65	119.4	10	18.3	11	20 2	1	1.8	1	1.8			7	12.8	16	29.4	14	25.7			1	1.8			1	1.8	27	49.6	40	73.5		
All Cities	**118**	**121.5**	**30**	**30.9**	**11**	**11.3**	**3**	**3.0**	**3**	**3.0**	**4**	**4.1**	**13**	**13.3**	**40**	**41.2**	**39**	**40.1**	**1**	**1.0**			**3**	**3.0**	**3**	**3.0**	**82**	**84.4**	**109**	**112.2**		
Over 100,000	21	106.7	9	45.7	3	15 2	2	10.1			2	10.1			9	45.7	4	20.3							1	4.8	12	60.9	21	106.7		
45,000 to 100,000	26	125.2	7	33.7	1	4.8					1	4.8	2	9.6	6	28.9	6	28.9	1	4.8			1	4.8	2	9.6	28	134.8	12	57.8		
20,000 to 45,000	11	101.3	6	55.2	1	9.2			1	9.2			3	27.6	5	46.0	8	73.7					1	9.2			7	64 5	19	175.0		
10,000 to 20,000	29	157.3	3	16 2	4	21.7	1	5.4	1	5.4	1	5.4	2	10.8	10	54.2	15	81.3					1	5.4			17	92 2	16	86.8		
Under 10,000	31	113.3	5	18 2	2	7.3			1	3.6			6	21.9	10	36.5	6	21.9							1	3.6	18	65.8	41	149.9		
Country	118	93.1	24	18.9	18	14 2	4	3.1	2	1 5	7	5.5	17	13.4	35	27.6	15	11 8			1	.7	6	4.7	5	3.9	83	65.5	101	79.7	3	2.3

U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of June, 1912.

V. H. CHURCH, SECTION DIRECTOR, INDIANAPOLIS, IND

TEMPERATURE—IN DEGREES FAHRENHEIT.

Section Average.	Departure from the normal.	Extremes				
		Station.	Highest.	Date.	Station	Lowest	Date.
68.2	—2.8	Logansport	90	25	Salamonia	33	8

PRECIPITATION—IN INCHES AND HUNDREDTHS.

Section Average.	Departure from the normal.	Extremes			
		Station.	Greatest monthly amount.	Station.	Least monthly amount.
2.77	—1.38	Monticello	5.19	Maury	1.01