

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

(Entered as second-class matter at the Indianapolis Postoffice.)

VOLUME XV.

INDIANAPOLIS, OCTOBER, 1912.

NUMBER 10
25 Cents a Year.

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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.

	Page
Births for October, 1912.....	117
Abstract of Mortality Statistics for October, 1912.....	117
Summary of Morbidity and Mortality for October, 1912.....	117
Report of the Department of Food and Drugs.....	118
Inspectors' Report for the Month of October, 1912.....	118
The Great Lakes International Pure Water Association.....	119
Diphtheria Epidemic at Hagerstown.....	120
Report of Bacteriological Laboratory for October, 1912.....	121
Current References on Public Health Questions.....	121
Another Supreme Court Decision Sustains Sanitary Legislation.....	122
The Stable Fly in Poliomyelitis.....	123
Stomach Trouble.....	123
Jessie.....	123
Keep a Clean Mouth.....	124
About Teeth.....	124
How it Happened.....	124
Chart Showing Geographical Distribution of Deaths from Certain Communicable Diseases.....	125
Table 1. Deaths in Indiana by Counties for October.....	126
Table 2. Deaths in Indiana by Cities for October.....	127
Deaths in Indiana by Geographical Sections.....	128
Weather Report.....	128

BIRTHS FOR OCTOBER, 1912.

Total births, 4,313 (stillbirths excluded); State rate, 18.6.
Males, 2,211; females, 2,102.
White males, 2,182; white females, 2,073.
Colored births, 58; males, 29; females, 29.
Stillbirths, 148; white, 146; colored, 2.
Northern Sanitary Section, population 927,229; rate, 18.6.
Central Sanitary Section, population 1,114,087; rate, 17.8.
Southern Sanitary Section, population 659,560; rate, 20.0.
Highest rate, Lagrange County, 34.2.
Lowest rate, Steuben County, 6.5.

ABSTRACT OF MORTALITY STATISTICS FOR OCTOBER, 1912.

Total deaths reported, 2,864; rate, 12.3. In the preceding month, 2,802 deaths; rate, 12.3. In the same month last year, 2,674 deaths; rate, 11.6. Deaths by important ages were: Under 1 year of age, 223, or 7.7 per cent. of the total; 1 to 4, 234; 5 to 9, 100; 10 to 14, 72; 15 to 19, 75; 65 and over, 892, or 31.1 per cent. of total.

SANITARY SECTIONS: THE NORTHERN SANITARY SECTION, population 939,532, reports 889 deaths; rate, 11.1. In the preceding month, 864 deaths; rate, 11.1. In the same month last year, 809 deaths; rate, 11.1.

THE CENTRAL SANITARY SECTION, population 1,127,217, reports 1,234 deaths; rate, 12.9. In the preceding month, 1,196 deaths; rate, 12.8. In the same month last year, 1,157 deaths; rate, 12.2.

THE SOUTHERN SANITARY SECTION, population 663,757, reports 741 deaths; rate, 13.1. In the preceding month, 742 deaths; rate, 13.6. In the same month last year, 648 deaths; rate, 11.5.

REVIEW OF SECTIONS: The Southern Sanitary Section presents the highest death rate. It is .8 higher than that for the whole State. The Southern Sanitary Section also presents the highest death rate from pulmonary tuberculosis, typhoid fever, diphtheria, whooping cough, pneumonia and diarrhea. The highest death rate from external causes occurred in the Northern Section. One smallpox death occurred in the Southern Section, Greene County.

RURAL: Population 1,546,115, reports 1,349 deaths; rate, 10.3. In the preceding months, 1,430 deaths; rate, 11.2. In the same month last year, 1,364 deaths; rate, 10.3.

URBAN: Population 1,184,391, reports 1,515 deaths; rate, 15. In the preceding month, 1,372 deaths; rate, 14.1. In the same month last year, 1,310 deaths; rate, 13.4. The death rates of the following cities were: Indianapolis, 15.3; Evansville, 12.1; Fort Wayne, 13.6; Terre Haute, 13.4; South Bend, 12.5; Muncie, 13; Richmond, 14.5; Anderson, 15; Hammond, 16.2; New Albany, 20.5; Lafayette, 19.2.

SUMMARY OF MORBIDITY AND MORTALITY FOR OCTOBER, 1912.

Typhoid fever, as in the previous month, was reported the most prevalent infectious disease. Seventy-five per cent. of observers reported the disease present as against 83 in the preceding month. The order of prevalence was as follows: Typhoid fever, diphtheria, tonsillitis, rheumatism, bronchitis, scarlet fever, pulmonary tuberculosis, diarrhea, influenza, lobar pneumonia, malaria fever, whooping cough, measles, chickenpox, poliomyelitis, dysentery, tuberculosis, other forms, erysipelas, smallpox, cholera infantum, puerperal fever, inflammation of bowels, cerebro-spinal fever, cholera morbus, rabies in human, rabies in animals, dukes disease.

SMALLPOX: Fifty-two cases, with 1 death, in 9 counties. The smallpox death occurred in Greene County, male 12 days old. In the preceding month, 4 cases in 4 counties, with no deaths. In the same month last year 13 cases in 5 counties, with no deaths.

TUBERCULOSIS: 255 deaths, of which 132 were males and 123 females. Of the males, 17 were married in the age period of 18 to 40 and left 34 orphans under 12 years of age. Of the females, 51 were married in the age period of 18 to 40 and left 102 orphans under 12 years of age. Total number of orphans 136, number of homes invaded, 261.

PNEUMONIA: Total deaths 163; rate, 70.4 per 100,000. In the preceding month 91 deaths; rate, 40.6. In the same month last year 113 deaths; rate, 49.2.

DIPHTHERIA: 1,098 cases, with 99 deaths, in 63 counties. The disease was epidemic in the following counties: Allen, Bartholomew, Blackford, Clark, Daviess, Dearborn, Greene, Harrison, Hendricks, Johnson, Knox, Lake, Lawrence, Madison, Martin, Monroe, Parke, Perry, Pike, Posey, St. Joseph, Sullivan, Vanderburgh, Vigo, and Wayne. In the preceding month 608 cases in 53 counties, with 64 deaths. In the same month last year, 2,437 cases in 69 counties, with 68 deaths.

SCARLET FEVER: 325 cases in 47 counties, with 10 deaths. In the preceding month 203 cases in 43 counties, with 5 deaths.

RABIES: 17 persons were bitten by rabid dogs and treated by the State Board of Health in October. There were no deaths.

POLIOMYELITIS: 7 cases in 4 counties, with 5 deaths. The deaths were: Fountain County 1 death, female 1 year; Hendricks County 1 death, male 2 years; Madison County 2 deaths, 1 female 6 months old and 1 male 6 years old; Marion County 1 death, male 2 years old; Tippecanoe County 1 death, male 7 months old.

PELLAGRA: 1 case and 1 death in Jefferson County; female 49 years old. This death occurred in the South-eastern Insane Hospital and is the second death from this cause occurring in that institution.

EXTERNAL CAUSES: Total deaths 215; males 163 and females 52. Suicides: 28; males 22, females 6. Of the suicides, 19 chose poisons, 1 asphyxia, 3 drowning, 2 fire arms, 2 cutting instruments, 1 jumping from high place. Of the remainder of deaths from external causes, 18 were from burns, 6 from deleterious gases, 5 from drowning, 4 from fire arms, 31 by falls, 4 from accidents in mines, 4 by machinery, 35 by railroad accidents, 8 by street car accidents, 13 by automobile injuries, 10 by injuries from vehicles other than automobiles, 7 by crushing injuries, 6 by injuries from animals, 2 by electricity.

There were 14 murders, 11 by fire arms, 10 males and 1 female; 2 by cutting instruments, both males, and 1 by other means.

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

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

During the month of October 86 samples of food were examined to determine their conformity to the Pure Food Law. Of this number 61 were legal and 25 were classed as illegal.

Two of the five sodas examined were illegal because of misbranding and the presence of sulphites.

Three of the ten temperance beers analyzed were illegal because of the high alcohol content.

The three samples of extracts analyzed were illegal because of misbranding and the absence of a sufficient amount of lemon oil.

Five samples of meat were examined and contained starch, thus making them illegal.

Two samples of butter sent in for analysis were illegal, one too high in moisture content and one misbranded.

Four of the 32 samples of butter analyzed were illegal, one being low in butter fat and three containing visible dirt.

The sample of vinegar sent in for analysis was found to be slightly below standard.

Of the 23 drug samples analyzed only two were found to be illegal.

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

CLASSIFICATION.	Number Legal.	Number Illegal.	Total.
FOODS.			
Beverages—			
Sodas.....	3	2	5
Ciders.....	3	0	3
Beers—Temperance.....	7	3	10
Candy.....	1	0	1
Extracts.....	0	3	3
Fish products.....	0	1	1
Horseradish.....	1	0	1
Meats—prepared.....	0	5	5
Milk products—			
Butter.....	0	2	2
Milk.....	28	4	32
Mothers' milk.....	1	0	1
Sugar.....	0	1	1
Syrups—			
Maple.....	1	0	1
Sorghum.....	2	0	2
Tomato products—			
Canned.....	4	0	4
Soup.....	2	1	3
Vegetables.....	1	0	1
Vinegar.....	0	1	1
Whiskey.....	0	1	1
Wines.....	4	1	5
Miscellaneous foods.....	3	0	3
Total.....	61	25	86
DRUGS.			
Cocaine hydrochloride.....	3	0	3
Patent medicines.....	3	0	3
Spirits of turpentine.....	1	0	1
T. belline.....	2	2	4
Zinc sulphate.....	1	0	1
Miscellaneous drugs.....	11	0	11
Total.....	21	2	23

INSPECTORS' REPORT FOR THE MONTH OF OCTOBER, 1912.

During the month of October the inspectors visited 1,411 places where food is manufactured or from which it is distributed. Forty-eight of the places visited were in excellent condition, 889 were good, 396 fair, 69 poor and 9 bad.

Of the 41 dairies inspected 1 was good, 10 fair, 22 poor and 8 bad.

Ten of the 499 grocery stores were found to be in excellent condition, 252 were good, 125 fair and 12 poor.

Of the 241 meat markets visited 2 were in excellent condition, 173 good, 64 fair and 2 bad.

Twenty-nine of the 116 drug stores inspected were excellent, 73 good, 13 fair and 1 poor.

Of the 213 bakeries and confectioneries visited 4 were rated excellent, 144 good, 52 fair, 12 poor and 1 bad.

Three of the 150 hotels and restaurants inspected were found to be in excellent condition, 71 good, 65 fair and 11 poor.

Other inspections made during the month included visits to creameries, slaughter houses, fish markets, ice cream parlors, canning factories, etc.

Of the 32 ice cream parlors inspected 8 were rated good, 21 fair and 3 poor.

Of the 22 slaughter houses visited 6 were found in good condition and 16 fair.

Ninety-four condemnation notices were issued during the month. Ninety-four establishments were condemned because of unsanitary conditions and 37 for improper construction.

During the month of October eight prosecutions were brought for violation of the Pure Food and Sanitary Food Law. One case involved the sale of ice cream containing less than 8 per cent. butter fat. One case was brought for the sale of dirty milk. In six cases dealers were prosecuted for selling temperance beer which was misbranded. The total fines and costs amounted to \$139.25.

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

INSPECTIONS.	No. Inspected.	No. Excellent.	No. Good.	No. Fair.	No. Poor.	No. Bad.
Dairies	41	0	1	10	22	8
Grocery stores	499	10	352	125	12	0
Meat markets	241	2	173	64	2	0
Drug stores	116	29	73	13	1	0
Bakeries and confectionaries	213	4	144	52	12	1
Hotels and restaurants	150	3	71	65	11	0
Creameries	7	0	2	3	2	0
Slaughter houses	22	0	6	16	0	0
Fish markets	11	0	7	3	1	0
Wholesale groceries	10	0	9	1	0	0
Bottling works	6	0	4	2	0	0
Ice cream parlors	32	0	8	21	3	0
Ice cream factories	3	0	1	1	1	0
Poultry houses	8	0	2	4	2	0
Canning factories	8	0	6	2	0	0
Milk depots	2	0	1	1	0	0
Flour mills	4	0	4	0	0	0
Produce companies	4	0	2	2	0	0
Ice and cold storage plants	4	0	4	0	0	0
Wholesale fruit and vegetable stores	2	0	2	0	0	0
Fruit stores	16	0	10	6	0	0
Brewing companies	5	0	4	1	0	0
Wholesale coffee and spice company	1	0	1	0	0	0
Oyster house	1	0	1	0	0	0
Soft drink parlors	3	0	1	2	0	0
Lunch cart	1	0	0	1	0	0
Horse radish plant	1	0	0	1	0	0
Total	1,411	48	889	396	69	9

NOTICES OF CONDEMNATIONS DURING THE MONTH OF OCTOBER, 1912

CLASSIFICATION.	Reasons for Condemnation.		Total.
	Unsanitary Conditions.	Improper Construction.	
Bakeries	11	2	11
Canning factories	5	4	5
Confectioneries	4	2	4
Creameries	1	1	1
Dairies	12	12	12
Fish markets	1	1	1
Fruit stands	1	1	1
Groceries	3	1	3
Grocery and meat markets	3	2	3
Hotels and restaurants	13	8	13
Meat markets	31	2	31
Poultry houses	2	0	2
Slaughter houses	2	1	2
Total	94	37	94

LIST OF PROSECUTIONS DURING THE MONTH OF OCTOBER, 1912.

COUNTY.	Lab. No.	Name and Address of Defendant.	Why Prosecuted.	Date of Trial.	Final Disposition.
Vigo	6014 D	Fell Bros., Terre Haute	Selling dirty milk		Forfeited bond, \$50.
Vigo	6026 D	James Georgeopolus, Terre Haute	Selling ice cream below standard	10-8-12	Fined \$15 and costs.
Washington		Wm. H. Norris, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.
Washington		Chas. Babbs, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.
Washington		Mrs. Adda Hahn, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.
Washington		Bert Schultz, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.
Washington		Wm. D. Leonard, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.
Washington		Ed. Curry, Salem	Misbranding temperance beer	10-2-12	Fined \$10 and costs.

THE GREAT LAKES INTERNATIONAL PURE WATER ASSOCIATION.

The Second Annual Conference of Health Officers and Engineers constituting the Great Lakes International Association met at Cleveland, Ohio, October 23d and 24th. The Indiana State Board of Health was represented by Jay Craven, chemist in charge of the water laboratory, who discussed before the conference "The Value of River Surveys," setting out the work of the State Board of Health in its survey of the Ohio River in 1911 and of the Wabash River in 1912.

The most important action of the conference was the adoption of the report of the committee on Standards of Purity for Rivers and Waterways, read by George C. Whipple, Consulting Engineer of New York City.

The report, signed by Mr. Geo. C. Whipple, Mr. George Wisner, Dr. A. J. McLaughlin, Dr. Edward Bartow and Mr. Harry W. Clark, was in part as follows:

"The committee finds that on account of the increasing population of the country it is and always will be physically impossible to maintain waterways in their original and natural condition of purity. A reasonable degree of cleanliness should nevertheless be demanded.

"The discharge of raw sewage into streams and harbors should not be universally prohibited by law. The method of disposal of sewage by dilution is recognized as sound in principle and safe in practice if carried on with proper restrictions.

"For each waterway at any given point there is a limit to the amount of permissible discharge of waste matter, depending upon the use that is made of the river and the character of the territory through which it flows. No universal standard of purity can be wisely established or maintained. When the extent of the pollution is such as to affect the public health in any way by any reasonable use of the river, the sanitary aspect of the situation should control and the degree of pollution should be regulated accordingly. The courts must decide what is 'reasonable' use. When the extent of the pollution is such as to cause sensible offense to public decency in the course of any reasonable use of the river, this aspect of the situation may properly control. When the extent of pollution is such as to cause material injury to fish or shell-fish industries, or to the ice industry, this element may control. When the extent of pollution is such as to cause the silting up of the channels of navigable streams, this element may control.

"Even when the demands of public health, offense to decency and interference with navigation are such as to place a limit to the pollution of the stream the economic aspects of the case should be considered in regulating the amount of permissible discharge of waste matter, the fundamental principle being that the results accomplished shall be reasonably commensurate with the cost of prevention of the pollution.

"While no universal standard of purity applicable to all rivers and waterways can be established, it is believed to be

feasible to establish and maintain appropriate standards of a general nature for waters that fall within certain particular groupings. The committee has this matter under advisement, but is not prepared to report upon it in detail at this time.

"DISCHARGE OF SEWAGE.

"Inasmuch as the safety of public water supplies is the most important element in the problem of stream pollution at the present time, the following general principles should govern the discharge of sewage and waste matters into rivers and waterways:

"Streams from which water supplies are taken without purification should not receive any fecal matter, sewage, sewage effluent or wastes that will render the water a menace to health or otherwise impair its natural quality.

"Streams from which water supplies are taken and used after purification should not receive fecal matter, sewage, sewage effluent or waste matters in such quantities that the contamination of the water at any water-works intake would put an unreasonable burden upon the purification works, or in quantities sufficient to produce the conditions referred to in the next paragraph.

"Streams not used for water supply may receive sewage wherever and in such quantities that its entrance will not sensibly offend decency in the reasonable public use of the stream, or cause interference with navigation or with valuable fish industries or the ice industry. Where this can not be done, the sewage or wastes should receive such treatment before discharge as to bring the effluent within this rule, due regard being given to the relative cost of the processes required and the benefits to be derived.

"Large lakes from which water is used for a public water supply without filtration should not receive any fecal matter, sewage or sewage effluent within a distance of several miles from the intake, depending upon local conditions as to currents, and suitable provision should be made for disinfecting the water supply.

"Large lakes from which water is used for public water supply after filtration should not receive fecal matter, sewage, sewage effluents or other waste matters in such amounts or at such places that the water reaching the intake would be contaminated to the extent that an unreasonable load would be placed upon the filter, or in quantities sufficient to produce the conditions referred to in the next paragraph.

"Lakes not used for water supply, harbors and tidal estuaries, may receive sewage if discharged in such a manner as to be quickly and thoroughly diluted, so that its entrance will not sensibly offend decency in the reasonable use of the water, or interfere with navigation. Where this can not be done, sewage should receive such treatment before discharge as to bring the effluent within this rule, due regard being given to the relative cost of the processes required and the benefits to be derived. The data for deciding what is a reasonable burden to place upon a water filtration plant have not yet been secured. It is recognized that water filtration plants are not infallible, and that for this reason the work that they are called upon to do must not be too great. Until this fundamental question is settled, it will not be possible to formulate reasonable standards of purity for streams necessarily used both for sewage disposal and water supply. Often greater economy can be secured by abandoning water supplies from polluted streams than by attempting to reduce the pollution to the required extent.

"While recognizing that the pollution of many rivers and waterways is inevitable and that absolute prevention of pol-

lution is impossible, it is deemed imperatively necessary that some control over the discharge of waste matter into rivers and waterways be maintained. The committee heartily endorses, therefore, the movement that is being made to keep the pollution of streams within reasonable bounds.

"The committee recommends the adoption by the association of these fundamental propositions, believing that they will serve as a basis for the establishment of more detailed standards later and will be helpful to those who at the present time are engaged in formulating policies in regard to this matter. The committee also requests that it be allowed to continue its work for another year."

DIPHTHERIA EPIDEMIC AT HAGERSTOWN.

C. I. STOTELMEYER, M. D.

After four days' illness Charles Maginske, age 6, of the Hagerstown school, died of diphtheria.

In the absence of the Health Officer, the School Board closed the entire school of five rooms for one week following the death of the Maginske boy. On the advice of the City Health Officer the school was opened the following week and a physician was employed to take throat cultures from every child in the primary room. Of the entire 44 throat cultures taken, 8 were found to be suspicious of diphtheria. Of these 8, cultures were again taken and four found to contain diphtheria bacilli.

These four children with their families were put under absolute quarantine. Their family physicians were advised to use some reliable antiseptic as a spray and gargle for the nose and throat. Cultures were taken every four or five days from the children until a negative report as to diphtheria bacilli was obtained. No family was released from quarantine until all members of the family were shown to be free of diphtheria bacilli.

Cultures were now taken from all of the pupils in the five rooms, including the teachers and janitors. Of the 148 swabs taken, 18 were found to contain diphtheria bacilli. One of these positive swabs was the superintendent of the Hagerstown schools. In taking cultures for release from quarantine five children were found positive who were negative on first culture. Five parents of infected children were infected, two mothers and three fathers.

October 21st a negative report was received of the last two families under quarantine. After ten days there are no more new cases of diphtheria.

DETAIL OF CULTURES.

Date.	Pos.	Neg.	Sus.	Total.
September 20.....	1	..	..	1
September 27.....	..	30	8	44
September 30.....	4	4	..	8
October 8.....	14	85	..	99
October 9.....	4	45	..	49
October 10.....	1	6	..	7
October 13.....	1	8	..	9
October 14.....	..	27	..	27
October 16.....	2	33	..	35
October 25.....	..	7	..	7
Totals	27	251	8	286

Of the total 27 positive cultures, 25 were carriers of whom a few complained of a slight sore throat but otherwise felt little or no inconvenience about the nose or throat.

Of the four physicians in Hagerstown, two ignored the orders of the Health Officer and expressed their doubts about

the veracity and ability of the Bacteriological Laboratory of the Indiana State Board of Health. Later one of the two changed his attitude and did efficient work in helping to stamp out the epidemic. The other physician, however, maintained an outward skeptical attitude to the end, but was guilty of the same untruthfulness that he was accusing the Health Board of by advising his patients to use a strong antiseptic just before the cultures were taken.

All churches, theaters and public places were closed except one nickel show, which kept open in defiance of the law and protest of the Health Officer. Two of the city council were skeptical as to the presence of diphtheria and the necessary precautions.

**REPORT OF BACTERIOLOGICAL LABORATORY
FOR OCTOBER, 1912.**

WILL SHIMER, M. D., SUPERINTENDENT.

Sputum for tubercle bacilli positive 97, negative 286, total 383; throat cultures for diphtheria bacilli, regular, positive 390, negative 600, suspicious 84, unsatisfactory 4, total 1,087; epidemic diphtheria positive 109, negative 1,333, total 1,447; blood for Widal reaction positive 33, negative 163, total 196; blood for paratyphoid agglutination tests negative 3; blood for malaria parasites positive 1, negative 15, total 16; blood for counts 14; for rabies, dogs' brains positive 5, negative 12, decomposed 1, total 18; pigs' brains negative 3; horses' brain negative 1; complete total of brains for rabies 40; Gasserian ganglions for rabies positive 9, negative 7, total 16; guinea pigs injected for rabies, positive 1, negative 3, total 4; pus for gonococci, males, positive 3, negative 20, females positive 7, negative 13, no sex given, positive 1, negative 2, total 46; urine for microscopical test 33; pus for microscopical test 5; feces for typhoid bacilli negative 20; spinal fluid 1; cystic fluid 1; pleural fluid 1; 1 sample of vinegar for vinegar eels; pathological tissues, carcinoma 9, sarcoma 1, tuberculous 3, miscellaneous 26, total 39.

Total number of specimens examined, 3,335.

Number of doses of antityphoid vaccine for the prevention of typhoid fever, 186.

Outfits sent out: Diphtheria 3,111; sputum 502; special 46; malaria 12; bile media 16.

Total number, 3,287.

During October five patients finished the Pasteur treatment for rabies, distributed by counties as follows: Huntington County 2, Vigo County 2, Marion County 1. The following is more detailed information concerning these patients:

Huntington County.—Male, age 27, farmer, bitten on leg by stray dog. Male, age 14, school boy, bite on hand by stray dog.

Vigo County.—Female, age 4 years, bitten on arm by stray dog. Male, age 57 years, painter, bitten on hand by stray dog.

Marion County.—Female, age 26 years, housewife, bitten on arm by her own dog.

Several towns in Indiana have had epidemics of diphtheria. In some of these places where one or more cases have appeared among the children in any school room, cultures have been taken from all of the children in those rooms. The following is a detailed account of the towns and the number of cultures taken, also the number of positive cultures from children who had no clinical symptoms of diphtheria:

Town.	Negative.	Positive.	Total Number Cultures.
Valparaiso	14	1	15
Lapel	19	0	19
Danville	183	7	190
Goshen	37	0	37
Aurora	247	18	265
Greenfield	29	1	30
Lawrenceburg	150	6	156
Bloomington	254	24	278
Cumberland	50	0	50
Washington	41	4	45
Shelbyville	5	2	7
Covington	45	4	49
Hagerstown	255	31	286
Totals	1,328	98	1,426

**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 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 boards issuing them.)

Anaphylaxis.

Popular science monthly, Nov., 1912. Some aspects of anaphylaxis, by Dr. John Auer. pp. 434-48.

Child Hygiene.

Pedagogical seminary, Sept., 1912. Problems of child hygiene, by W. H. Burnham. pp. 395-402.

Children—Conservation.

American academy of medicine. Conservation of school children, being the papers and discussions of a conference at Le High university, Apr. 3-4, 1912, under the auspices of the Amer. acad. of medicine, together with several papers (not presented to the Conference) prepared for this volume; reprinted from the Bulletin. 293 pp.

Children—Delinquent.

Breckinridge, S. P., and Abbott, Edith. Delinquent child and the home. 355 pp. N. Y., 1912. (Russell Sage foundation.)

Cholera.

U. S.—Public health and marine service. Bacteriological diagnosis of cholera; a report presented to the permanent committee of the International office of public hygiene. (In its Public health reports. Mch. 15, 1912. pp. 371-98.)

Cold Storage.

Massachusetts—Cold storage of food and food products kept in cold storage, Commission to investigate the subject of. Report, Jan., 1912. 308 pp.

Disinfectants.

American journal of public health, Oct., 1912. Report of the Committee of the Laboratory section of the American public health ass'n on standardization of disinfectants. pp. 802-11. (Contains a bibliography.)

Eugenics.

Popular science monthly, Nov., 1912. Relation of eugenics to eutherics, by L. J. Cole. pp. 475-82.

Farm Life—Bibliography.

Missouri—University. Books for farmers and farmers' wives, by H. O. Severance. 22 pp. Apr., 1912. (Bulletin, library ser. v. 1, No. 4.)

Floods—Austin, Pa.

Texas—Health, State dep't of. Report of the Austin disaster, by S. G. Dixon. 10 pp. (Pennsylvania health bulletin, July, 1912.)

Grasshoppers.

Popular science monthly, Nov., 1912. Modern warfare against grasshoppers, by F. L. Washburn. pp. 465-74.

Health Departments—Accounts.

U. S.—Census, Bureau of the. Uniform accounts as a basis for standard forms for reporting financial and other statistics of health departments; by LeGrand Powers. 16 pp. Wash., 1912.

Health Officers and Social Workers.

American journal of public health, Oct., 1912. Points of contact between the health officer and the social worker; by Homer Folks. pp. 776-81.

Health Ordinances.

Chicago women's club. City ordinances you ought to know. 46 pp. 1911.

"Ignorance of the law excuses no one."

Hook Worm.

Kentucky—Health, State board of. Hookworm. Illus. 42 pp. Bulletin, Aug., 1912.

(Whole no. devoted to a study of conditions in Kentucky.)

Infant Mortality.

American association for study and prevention of infant mortality. Transactions of the second annual meeting, Chicago, Nov. 16-18, 1911. 416 pp.

Insects.

Howard, Leland O. Insect book, a popular account of the bees, wasps, ants, grasshoppers, flies and other North American insects exclusive of the butterflies, moths and beetles, with full life histories, tables and bibliographies. Ills. 429 pp. N. Y., 1907.

Medical Inspection of Schools.

Michigan—Health, State board of. Some remarks about medical supervision of schools, by T. M. Koon and other articles on the hygiene of school children. 50 pp. (Public health, v. 6, no. 4, Oct.-Dec., 1911.)

Medical Schools.

Illinois—Health, State board of. Some thoughts on preliminary requirements; Advanced requirements of preliminary education. (In its Bulletin, v. 7, no. 10, Oct., 1911. pp. 545-548.)

Mycotic Stomatitis.

Florida—Health, State board of. Mycotic stomatitis—a disease in the mouth and feet, in cattle; by C. F. Dawson. (In its Florida health notes. Oct., 1912, pp. 158-60.)

Public Health—Federal Supervision.

Fisher, Irving and Robbins, Emily F. Memorial relating to the conservation of human life as contemplated by S. B. 1, providing for a U. S. public health service. 82 pp. 1912. (U. S. Congress, 62d, 2d ses. Sen. doc. no. 493.)

Recreation—Bibliography.

Russell Sage foundation of New York city—Recreation, Division of. Recreation bibliography. 37 pp. (no. 121.)

Rooming Houses.

Fretz, F. K. Furnished room problem in Philadelphia. 179 pp.

Sanitary Engineers.

Engineering news, Oct. 31, 1912. Training of sanitary engineers, by G. C. Whipple. pp. 804-5.

Sanitation.

North American review, Nov., 1912. Modern sanitation; by A. P. Doty. pp. 43-81.

Sewage Disposal.

Milwaukee (Wis.)—Sewerage commission. Summary of the report. 1911. 24 pp.

Social Centers.

Perry, C. A. Social center features in new elementary school architecture and the plans of sixteen socialized schools; pub. by the Division of recreation, Russell Sage foundation of New York city. 56 pp. (no. 120.)

Spotted Fever.

U. S.—Public health and marine hospital service. Rocky mountain spotted fever, by W. C. Rucker. (In its Public health reports, Sept. 6, 1912. pp. 1465-1479.)
(Contains a bibliography.)

Tuberculosis—Animal.

Iowa—Health, State board of. The unsuspected but dangerously tuberculosis cow. Ills. (In its Bulletin, v. 24, no. 2, pp. 38-52.)

Tuberculosis—Classes for Home Care.

Michigan—Health, State board of. Value of a tuberculosis class to the community. (In its Public health, v. 6, no. 2, Apr.-June, 1911. pp. 86-89.)

Typhoid Fever.

U. S.—Public health and marine hospital service—Hygienic laboratory. Origin and prevalence of typhoid in the District of Columbia. 196 pp. 1911. (Bull. no. 78.)

(Covers years 1909-10 and contains charts and tables of comparative data for this period and the periods of the earlier reports, the investigation having been authorized in 1906. Conclusion reached that not water supply but infection through milk, etc., is responsible.)

ANOTHER SUPREME COURT DECISION SUSTAINS SANITARY LEGISLATION.

The right of the city of Chicago to inspect and regulate places where food is manufactured, prepared, packed, distributed or stored was sustained by a decision handed down by the supreme court of the State of Illinois last week.

The case in point was to test the validity of the Chicago bakery ordinance which was passed in 1907 and amended in 1910, prohibiting underground bakeries. The campaign was directed against the underground bakeries where unsanitary conditions endangered the health of the community, and since the adoption of the ordinance 400 underground bakeries were forced out of existence.

An adverse decision in the municipal courts for a while halted the work, but in spite of that fact the number of

bakeries forced to abandon their underground location grew from 750 to the present number of 1,300, now sanitarily operated.

The decision of the Illinois Supreme Court not alone settles the validity of the bakery ordinance but gives the commissioner of health of the city of Chicago "the power to determine whether the license should be granted and the mayor power to revoke the license if the provisions of the ordinance are not complied with."

In addition to the above important decision the court specifically upheld the following contentions:

That the city has a right to regulate bakeries and other places maintained for the sale of food products and the sanitary conditions under which food products are produced, and has a right to do this as a sanitary measure and aside from the collection of revenue.

That the passage of the bakery ordinance was a proper exercise of the police power of the city of Chicago; the court holding "one of the most important of the police powers is the caring for the health of the community," and.

That the city had a right "to pass this or other ordinances with reference to the inspection of establishments where food is prepared, manufactured, packed, stored, distributed or sold, in spite of the fact that the State had already legislated on the subject to some extent."

This important decision, which again points out the far-reaching scope of sanitary food legislation, will not only give power to the arm of the Chicago Health Commissioner, but will act as a stimulus wherever similar work is being conducted.

THE STABLE FLY IN POLIOMYELITIS.

At the Fifteenth International Congress on Hygiene and Demography in Washington, D. C. Milton J. Rosenau, of the Harvard Medical School announced the result of an experiment which seemed to confirm the suspicion that the common stable fly (*Stomoxys Calcitrans*) played an important part in the spread of this disease. Since that time Dr. John F. Anderson and Wade H. Frost, of the U. S. Public Health Service, have conducted similar experiments upon monkeys and have further confirmed the results obtained by Dr. Rosenau. On October 3d, a monkey was inoculated with an emulsion of the cord of another monkey which had died of poliomyelitis. The inoculated animal was then exposed daily to the bites of a number of stable flies. This monkey developed characteristic complete paralysis on October 7th and died October 8th. A second monkey similarly inoculated on October 5th. was exposed daily to the bites of the same flies. This monkey developed paralysis and died October 9th. At the same time three healthy monkeys were exposed daily to bites from the same flies. All three of these animals developed symptoms of poliomyelitis and died in from seven to nine days from the date of first exposure.

In order to further confirm the results, an emulsion from the cord of one of the three monkeys which had contracted the disease experimentally, was injected into a healthy monkey, October 14th. This animal developed paralysis and died October 19th.

These results together with similar results as announced by Dr. Rosenau, demonstrate that poliomyelitis can be transmitted to monkeys through the agency of the stable fly. Whether this is the usual or only method of transmission in nature is of course not definitely proven. Further investigation will fix the status of this species of fly as a carrier, and will probably give us definite knowledge of the manner of spread and preventing of this dread disease.

STOMACH TROUBLE.

How often we hear this term "stomach trouble." Did you ever have it? If you have, you know what a humbler it is. How effectually it humbles one's pride, how thoroughly it dissipates one's egotism. Yet stomach trouble is not a wholesome discipline, for the longer it continues the grouchier and the more impossible we become. The stomach these days is a sort of garbage can. It is suspended by straps immediately south of the thoracic cavity, and being connected with that funnel called the mouth by a good strong tube, it readily catches chunks of dead animals, lumps of poorly baked bread, boluses of vegetables, ices, pickles, soggy pies, wieners, wurst, booze and muddy coffee. The tobacco eaters add that portion of tobacco juice which they don't use for flooding sidewalks.

There is no more patient and long-suffering organ in the human body than the stomach. It is amazing how long it will stand abuse, but once it kicks back, then look out, for something is coming to you sure. You may hit it with an unskilled railroad sandwich, scorch and burn it with pepper and mustard, irritate it with salt and vinegar, chill it with ice cream, ice water and mint julips, pour stinking mineral water into it, shrink it with rotgut whiskey, assault it any old way, and it will work uncomplainingly for a long time; until—alas! and alack! some day it will go on a strike, and then the doctor for you, or you run to the drug store and proceed to souse the poor thing with patent medicines. Of course, they do harm, although temporary relief may be secured. So the world becomes dark and life is a failure to you, but you quit bolting and gorging, that's sure; for that much sense will come finally to any kind of a fool. Oh, that we could have the good sense to know, when young, that the stomach should not be used for a garbage can. Then we would not load our tables with foods, some good, some bad, and then chase them half chewed down our gullets with black coffee or ice water.

Full many a man has lost his head
Through eating soggy, half-cooked bread.
And he who would his kidneys save
Had best avoid the whiskey wave.
Your heart and nervous system, too,
Are surely worth a heap to you,
Why prod them, then, with nicotine,
And make believe all is serene!
In tobacco heart there is no wealth,
And what is more, there's weakened health.
Oh! foolish man when thus you choose
Your soul and body to abuse;
You'll realize, some pleasant morn,
That you have raised an awful storm.

JESSIE: A death certificate from Vanderburgh County gives as the names of the deceased, the single word "Jessie." None of the personal and statistical particulars were supplied. The dead body of the girl was found in the river with a towel stuffed down her throat. The cause of death was reported as "strangulation at the hands of an unknown person." Of course it was essential to know something more about this death, and so letters of inquiry were sent out. Finally it was learned that the dead girl was Jessie McCune of Lima, Ohio, and all of the personal and statistical particulars were supplied. The cause of death is still a mystery, but the record is now complete, and if in the future the same is ever needed, a transcript can be supplied. In addition, it makes the death records of the State complete, which, of course, is something.

KEEP A CLEAN MOUTH.

Common observation will show that very few people think it necessary to keep the mouth (oral cavity) clean. The facts are that over 50 per cent. of human mouths are unclean and are more or less diseased. Decayed teeth, diseased gums, diseased tonsils and multitudes of bacteria and other conditions exist. Over 20 kinds of bacteria have been found in even ordinary clean mouths. When the mouth is dirty, and where the tooth brush is not used, there the bacteria multiply by the millions. Some of these bacteria are disease producing. Among them will be found the bacteria producing tuberculosis, typhoid, pneumonia, diphtheria, and eruptive fevers. How some people can carry these seeds of disease and not have the diseases which these seeds produce is not exactly understood, but is explained in various ways. However, it is known that people who carry these organisms in their mouths, are themselves a source of infection to others, and that eventually they are pretty likely to go down with one or the other of the diseases, the microbes of which they carry in their oral cavities.

Dr. Osler, the most famous physician in the world, says: "There is not anything more important to the public in the whole range as hygiene of the mouth. If I were asked to say whether more physical deterioration was produced by alcohol or defective teeth, I should unhesitatingly say defective teeth." It is true that a mouth containing bad teeth or diseased gums interferes very materially with the nutrition of the person that depends upon healthful nutrition for strength and efficiency. It is not strange, therefore, that the mouth, the orifice through which food is introduced to build up the body, should cause disease and weakness if it is not clean. Even poor eye sight and trouble with the eyes and ears often attend, and are caused by a dirty and uncared for mouth.

If you don't want germs to collect and grow in your mouth, then keep it clean. Go to a dentist, see that all old roots are extracted, that decayed teeth are filled, and then use a tooth brush and keep the mouth clean. This is one step which is necessary to prevent consumption, also to prevent infectious diseases. It has been said—"A clean mouth turneth away trouble."

The following rules for keeping the mouth and teeth clean are offered by the Society of Oral Hygiene:

Chew your food slowly and thoroughly, it helps to keep the teeth and gums clean and healthy. Try it.

Brush your teeth thoroughly and always before going to bed.

Brush your teeth from the gums toward the cutting edge. Brushing crosswise does not remove particles from between and causes unnecessary wear to the tooth and injures the gums.

Brush the inner sides of the teeth to prevent tartar from forming.

Use floss silk between the teeth to keep these surfaces clean.

Doing these things will help you to have pretty and sound teeth and sweet breath.

ABOUT TEETH.

GOOD TEETH, GOOD HEALTH

Without *Good Teeth* there can not be thorough

MASTICATION

Without thorough mastication there can not be perfect

DIGESTION

Without perfect digestion there can not be proper

ASSIMILATION

Without proper assimilation there can not be
NUTRITION

Without nutrition there can not be
HEALTH

Without health what is
LIFE?

NUMBER OF TEETH

There are twenty teeth in the first or temporary set—10 upper and 10 lower. In the permanent or second set there are 32 teeth—16 upper and 16 lower.

THEIR PURPOSE

The teeth are for ornamentation, for grinding the food, (thus preparing it for proper digestion), and assistance in talking. They should last to the end of life.

HOW LOST

By decay and loosening. Decay is caused by allowing food to remain about the teeth and by poor health. Teeth become loose by a deposit on them at the edge of the gum, called tartar.

HOW CAN DECAYED TEETH AND DISEASED GUMS BE PREVENTED?

By cleaning the teeth with a tooth brush and water on arising in the morning and before going to bed at night. A quill toothpick properly sharpened, should be used after each meal. A toothpowder used on the brush will assist in cleansing the teeth.

The essential ingredient in all good toothpowders is **PRECIPITATED** chalk. This may be flavored to suit the taste. The following formula is considered a good one:

- Precipitated Chalk 3½ ounces
- Pulverized Castile Soap..... ¼ ounce
- Garantos 1 grain
- Flavor with Oil of Peppermint, Sassafras,
Wintergreen or Cinnamon..... 5 drops

The slow and thorough chewing of the food helps to preserve the teeth and keep the mouth in a healthy condition.

Every person should have his teeth examined by a competent dentist several times a year.

Cleanliness is the best guard against disease.

HOW IT HAPPENED.

A fly and a flea,
A mosquito and a louse,
All lived together
In a very dirty house.
The louse spread the ague,
The 'skeeter spread the chills,
And they all worked together
For undertaker's bills.

The fly spread typhoid,
And the flea spread typhus, too,
And the people in the house
Were a mighty dirty crew.
Along came a man
And he cleaned up the house,
He screened out the 'skeeter
And swatted the louse;
The fly and the flea
He smacked on the wall,
And now the people in the house
Are never sick at all.

D. WHITE.

A Shortridge High School student, Indianapolis.

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

NORTHERN SANITARY SECTION.

Total population	939,532
Total deaths	889
Death rate per 1,000	11.1
Pulmonary Tuberculosis, rate per 100,000	66.6
Typhoid, rate per 100,000	40.2
Diphtheria, rate per 100,000	21.3
Scarlet fever, rate per 100,000	5.0
Diarrheal diseases, rate per 100,000	60.3

CENTRAL SANITARY SECTION.

Total population	1,127,217
Total deaths	1,234
Death rate per 1,000	12.9
Pulmonary Tuberculosis, rate per 100,000	110.0
Typhoid, rate per 100,000	44.0
Diphtheria, rate per 100,000	51.3
Scarlet fever, rate per 100,000	5.2
Diarrheal diseases, rate per 100,000	81.7

SOUTHERN SANITARY SECTION.

Total population	663,757
Total deaths	741
Death rate per 1,000	13.1
Pulmonary Tuberculosis, rate per 100,000	133.4
Typhoid, rate per 100,000	67.6
Diphtheria, rate per 100,000	58.7
Scarlet fever, rate per 100,000	1.7
Diarrheal diseases, rate per 100,000	112.0

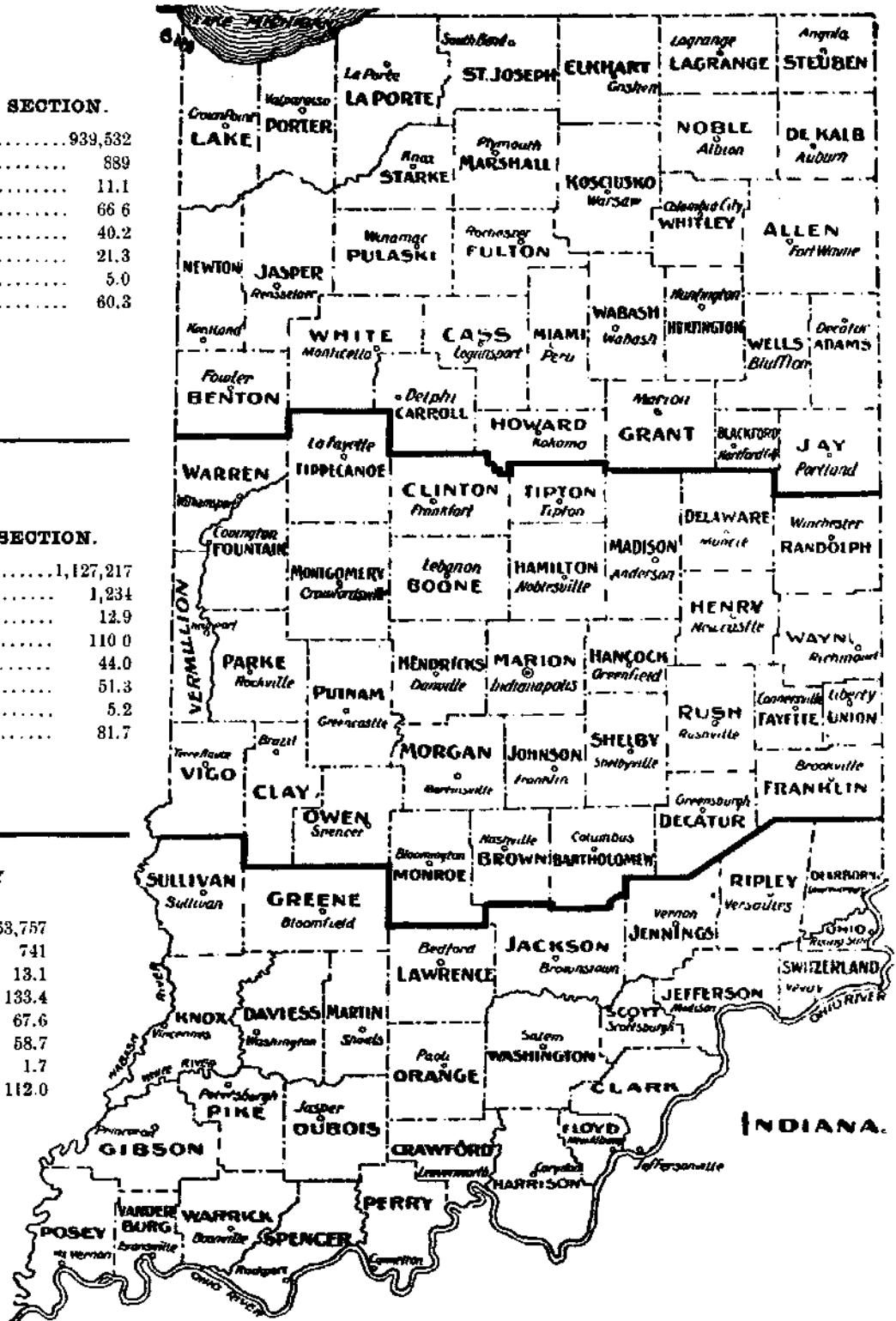


TABLE 1. Deaths in Indiana by Counties During the Month of October, 1912. (Stillbirths excluded.)

STATE AND COUNTIES.	Population, Estimated, 1912.	Total Deaths Reported for October, 1912.	Total Deaths Reported for September, 1912.	Total Deaths Reported for October, 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.																	
							October, 1912.	September, 1912.	October, 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.	Malaria.	Whooping Cough.	Lobar and Bronchopneumonias.	Diarrhea and Enteritis (under 2 years).	Cerebro-spinal Fever.	Acute Anterior Poliomyelitis.	Influenza.	Puerperal Septicemia.	Cancer.	External Causes.	Smallpox.	Deaths in Institutions.
							12.3	12.5	11.6	12.7	12.5	223	234	100	72	75	892	233	51	112	99	10	13	153	189	4	6	12	16	153	215	1	268	
State of Indiana.....	2,730,506	2,864	2,602	2,674	28,013	28,156	12.3	12.5	11.6	12.7	12.5	223	234	100	72	75	892	233	51	112	99	10	13	153	189	4	6	12	16	153	215	1	268	
Northern Counties.....	839,532	869	864	869	9,717	9,175	11.1	11.2	11.0	12.3	10.5	87	55	28	14	22	283	53	16	32	17	4	3	48	48	1	2	7	47	78	1	94		
Adams.....	21,872	16	18	6	167	147	8.6	10.6	4.3	8.1	8.0	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Allen.....	95,267	92	69	97	917	914	11.3	8.8	12.2	11.5	11.6	12	5	1	3	24	4	1	2	2	4	12	12	1	1	1	1	1	1	1	1	1	1	1
Beeson.....	12,688	2	11	12	75	91	1.8	10.5	21.1	7.0	8.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Blackford.....	15,896	13	12	14	122	159	9.6	9.2	8.6	9.2	12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Carroll.....	17,972	9	16	10	138	147	5.6	10.8	6.5	9.2	9.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Cass.....	36,652	41	37	35	484	398	13.2	12.2	11.3	15.8	13.0	6	1	1	1	15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
Dearborn.....	26,129	21	11	11	245	206	6.8	5.3	5.1	11.6	9.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Delaware.....	49,487	51	52	34	461	498	12.1	12.7	8.1	11.1	12.1	7	3	2	2	16	6	6	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Dubois.....	16,879	11	21	13	157	168	7.6	15.1	9.0	11.1	11.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Grant.....	51,625	65	62	75	638	608	14.8	14.6	17.1	14.8	14.1	1	3	3	3	29	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
Howard.....	33,617	31	26	30	338	320	10.8	9.3	7.1	11.9	11.5	6	3	2	2	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Huntington.....	20,060	27	28	33	267	279	10.9	11.7	12.9	11.6	11.5	5	1	1	1	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jasper.....	13,057	9	9	9	103	105	8.1	8.4	8.1	9.4	9.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jay.....	24,994	23	19	27	237	232	10.8	9.2	13.2	11.3	11.1	2	2	2	2	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Kosciusko.....	27,980	27	20	29	251	293	11.3	8.7	12.2	10.7	12.5	1	1	1	1	13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Lagrange.....	15,148	16	9	14	148	158	12.4	7.2	10.8	11.7	12.5	4	1	1	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Lake.....	87,361	167	112	101	1,146	950	14.4	15.5	14.3	15.7	13.6	28	17	2	2	11	7	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	
Laporte.....	46,555	49	48	44	541	510	12.3	12.5	11.3	13.9	13.3	9	5	5	2	13	4	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	5
Marshall.....	24,193	23	14	21	216	229	11.3	7.0	10.2	10.7	11.3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Miami.....	29,594	27	32	28	299	311	10.7	13.1	11.4	12.1	12.7	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Newton.....	10,509	8	13	6	79	68	8.9	15.0	6.7	8.8	7.7	3	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Noble.....	24,171	22	14	16	252	201	10.7	7.0	7.8	12.4	10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Porter.....	20,810	7	16	17	189	168	4.0	9.4	9.7	10.9	9.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Pulaski.....	13,312	10	15	12	121	112	8.8	13.7	10.6	10.9	10.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Starke.....	10,580	17	11	9	111	108	18.8	12.6	9.9	12.5	12.2	3	3	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Steuben.....	14,320	13	16	11	174	142	10.7	13.6	9.0	14.5	11.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
St. Joseph.....	86,855	85	80	103	944	965	11.4	11.2	14.4	13.0	13.5	14	9	3	5	21	3	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	11
Wabash.....	26,932	20	21	13	246	241	8.7	9.5	5.6	10.9	10.7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Wells.....	23,488	21	17	17	175	156	11.0	9.2	8.9	9.3	8.3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
White.....	17,608	11	18	16	178	159	7.3	12.4	10.6	11.7	10.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Whitley.....	16,939	15	16	14	145	120	10.4	11.5	9.7	10.2	8.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Central Counties.....	1,127,217	1,234	1,196	1,157	12,583	11,986	12.8	12.9	12.2	13.3	12.8	93	109	44	27	36	397	105	21	42	49	5	5	73	78	2	6	8	8	71	85	1	131	
Bartholomew.....	24,881	27	24	23	263	264	12.7	11.7	10.9	12.7	12.7	2	2	2	2	6	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boone.....	24,773	29	25	19	253	213	13.8	12.3	9.8	12.3	10.3	3	3	1	1	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brown.....	7,975	5	3	2	50	47	7.4	4.5	2.9	7.5	7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Clay.....	32,712	37	32	33	330	313	13.3	11.9	11.9	12.0	11.5	3	2	2	2	14	4	4	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2
Clinton.....	26,827	20	25	27	243	234	8.8	11.3	11.8	10.8	10.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decatur.....	18,831	19	20	22	218	201	11.8	12.8	13.7	13.8	12.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Delaware.....	51,720	46	49	49	519	498	10.8	11.5	11.2	12.0	11.6	12	14	1	1	1	1</																	

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

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Population Estimated 1912.	Total Deaths Reported for October, 1912.	Total Deaths Reported for September, 1912.	Total Deaths Reported for October, 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.																
							October, 1912.		September, 1912.		October, 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.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
State	2,730,506	2,864	2,802	2,674	28,013	28,158	12.3	12.5	11.6	12.7	12.5	223	7.7	234	8.1	100	3.4	72	2.5	75	2.8	892	31.1					
Northern Counties	939,532	889	864	869	9,717	9,173	11.1	11.2	11.6	12.3	10.5	97	10.9	55	6.1	29	3.1	14	1.5	23	2.4	283	31.5					
Central Counties	1,127,217	1,234	1,196	1,157	12,563	11,986	12.9	12.9	12.9	13.3	12.9	93	7.5	109	9.6	34	3.0	27	2.3	36	3.1	397	31.4					
Southern Counties	663,757	741	742	648	6,833	6,993	13.1	13.6	11.5	12.5	12.6	33	4.4	70	10.5	28	4.2	11	1.6	10	1.5	210	31.2					
All Cities	1,184,391	1,515	1,372	1,310	14,293	13,249	15.0	14.1	13.4	14.7	14.1	159	10.5	129	8.5	55	3.6	41	2.7	42	2.7	416	27.4					
Over 100,000	240,069	313	291	286	3,052	3,563	15.3	14.7	14.4	15.2	13.1	37	11.5	18	5.1	12	4.9	5	1.5	12	3.8	90	36.7					
45,000 to 100,000	243,337	275	225	312	2,736	3,025	12.9	10.8	14.9	13.0	14.5	36	12.9	22	9.1	13	5.4	11	4.5	11	4.5	62	22.8					
30,000 to 45,000	132,435	183	169	139	1,633	1,499	13.8	15.4	11.6	14.7	12.7	21	11.4	17	12.7	4	3.0	4	3.0	4	3.0	69	37.7					
10,000 to 30,000	224,855	287	250	238	2,422	2,422	15.0	13.5	13.3	14.7	13.8	35	20.5	29	10.7	12	5.1	6	2.7	6	2.7	55	26.9					
Under 10,000	333,836	454	421	345	4,093	3,738	16.0	15.4	12.3	14.6	13.6	55	1.3	45	1.3	14	3.0	16	4.8	15	4.5	137	30.1					
Country	1,546,115	1,349	1,430	1,364	14,730	14,907	10.3	11.2	10.3	11.2	11.3	64	4.7	105	7.7	45	3.3	31	2.0	33	2.1	476	35.2					

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.		
State	233	100.7	51	22.0	112	48.4	99	42.7	10	4.3	.....	.....	13	5.6	163	70.4	169	81.7	4	1.7	6	2.5	12	5.1	16	6.9	158	68.3	215	92.9	1	4
Northern Counties	53	66.6	16	20.1	32	40.2	17	21.3	4	5.0	.....	.....	3	3.7	46	57.8	48	60.3	1	1.2	2	2.5	2	2.5	7	8.7	47	59.0	78	95.0	.....	.....
Central Counties	105	110.0	21	22.0	42	44.0	49	51.3	5	5.2	.....	.....	5	5.2	73	76.5	78	81.7	2	2.0	6	6.2	8	8.3	8	8.3	71	74.4	85	89.0	.....	.....
Southern Counties	75	133.4	14	24.9	36	67.6	33	58.7	1	1.7	.....	.....	5	8.8	44	78.2	63	112.0	1	1.7	.....	.....	2	3.5	1	1.7	40	71.1	52	92.5	1	1.7
All Cities	110	169.5	30	29.8	49	48.8	63	62.7	6	5.9	.....	.....	7	6.9	90	89.6	99	98.8	2	1.9	3	2.9	9	8.9	10	9.9	82	87.6	126	125.5	.....	.....
Over 100,000	25	122.9	9	29.5	7	34.4	.....	.....	.....	.....	.....	.....	1	4.9	25	122.9	13	63.9	1	4.9	.....	.....	2	9.8	2	9.8	17	83.5	26	127.8	.....	.....
45,000 to 100,000	20	83.2	3	13.9	10	46.6	1	4.6	.....	.....	.....	.....	1	4.6	15	69.9	13	60.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30,000 to 45,000	15	133.7	4	35.6	5	44.5	8	71.3	3	26.7	.....	.....	.....	.....	10	89.1	9	80.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10,000 to 30,000	14	73.4	7	36.7	10	52.4	14	73.4	1	5.2	.....	.....	1	5.2	22	115.4	19	99.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Under 10,000	36	127.4	10	35.3	17	69.1	24	84.9	1	3.5	.....	.....	4	14.1	18	63.7	45	159.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Country	123	93.9	21	16.0	63	43.1	36	27.4	4	3.0	.....	.....	6	4.5	73	55.7	80	68.7	2	1.5	3	2.2	3	2.2	6	4.5	76	58.0	89	67.9	.....	.....

U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of October, 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.
55.7	+1.0	Rome	90	21	Auburn	21	26
					Huntingburgh	21	27

PRECIPITATION--IN INCHES AND HUNDRETHS.

Section Average.	Departure from the normal.	Extremes			
		Station.	Greatest monthly amount.	Station.	Least monthly amount.
2.13	-0.54	Hammond	4.26	Shoals	0.79