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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.

ABSTRACT OF MORTALITY STATISTICS FOR APRIL, 1905.

Total number of deaths, 2,639; rate 12.1. In the corresponding month last year, 3,322 deaths; rate 15.2. In the preceding month, 3,656 deaths; rate 16.2. Deaths by important ages were: Under one year, 309 deaths, or 12.6 per cent. of the total deaths; 1 to 5, 142; 5 to 10, 51; 10 to 15, 52; 15 to 20, 110; 65 and over, 730, or 29.8 per cent. Some important causes of death were: Pulmonary tuberculosis, 344; other forms of tuberculosis, 46; typhoid fever, 27; diphtheria, 13; scarlet fever, 23; whooping cough, 14; pneumonia, 223; diarrhoeal diseases, 18; cerebro-spinal meningitis, 46; influenza, 35; puerperal fever, 15; cancer, 86; violence, 132; smallpox, 4.

SANITARY SECTIONS: THE NORTHERN SANITARY SECTION, population 887,832, reports 789 deaths; rate 10.8. In the preceding month, 1,184 deaths; rate 15.7. In the corresponding month last year, 1,030 deaths; rate 14.1.

THE CENTRAL SANITARY SECTION, population 1,087,620, reports 1,140 deaths; rate 12.7. In the preceding month, 1,558 deaths; rate 16.9. In the corresponding month last year, 1,404 deaths; rate 15.6.

THE SOUTHERN SANITARY SECTION, population 673,097, reports 710 deaths; rate 12.8. In the preceding month, 914 deaths; rate 16. In the corresponding month last year, 888 deaths; rate 16.8.

REVIEW OF SECTIONS: The Southern Section shows the highest death rate and the Northern the lowest. This is the usual condition. In consumption, the Southern Section shows the highest death rate, and it also shows the highest death rate in typhoid fever, scarlet fever, pneumonia, cerebro spinal meningitis, and influenza. The Northern Section shows the highest cancer rate.

BY COUNTIES: The lowest death rate appears in Jasper County, 2.3; and the highest in Floyd County,

21.2. The counties showing death rates above the average for the whole State, which average was 12.1, were: Cass, 14.2; Fulton, 15.8; Huntington, 13.2; Jay, 12.5; Starke, 12.5; Steuben, 13.3; St. Joseph, 17.5; Boone, 13.4; Clinton, 15.3; Hamilton, 13.5; Hancock, 13.5; Henry, 12.8; Morgan, 13.2; Randolph, 13.9; Tippecanoe, 16.4; Tipton, 13.1; Union, 19.8; Vermillion, 15.9; Vigo, 14.6; Floyd, 21.2; Greene, 13.3; Harrison, 17; Jackson, 16.7; Knox, 15.1; Lawrence, 12.5; Pike, 17.2; Posey, 16.1; Spencer, 14; Sullivan, 17; Vanderburgh, 13.5; Warrick, 14.4; Marion, 16.5.

CITIES: All the cities of the State, total population 977,802, report 1,185 deaths; rate 14.7. In the preceding month, 1,483 deaths; rate 18. In the corresponding month last year, 1,450 deaths; rate 19. The cities present a rate 2.6 higher than the average rate for the whole State and 4.1 higher than the rate of the country, which rate is 10.6. The cities also show a higher death rate than the average for the whole State in the following diseases: Tuberculosis, typhoid fever, diphtheria, pneumonia, diarrhoeal diseases, cerebro spinal meningitis, influenza, cancer, violence and smallpox.

COUNTRY: Population 1,670,747, reports 1,554 deaths; rate 10.6. In the preceding month, 2,173 deaths; rate 15.2. In the corresponding month last year, 1,872 deaths; rate 13.1.

CITIES BY CLASSES: CLASS A, having 50,000 population and over, a total population of 256,046, reports 325 deaths; rate 16.9. In the corresponding month last year, 398 deaths; rate 19.2. This class includes Indianapolis, rate 15.6; and Evansville, 14.1.

CLASS B, having from 25,000 to 50,000 population, total population 133,029, reports 177 deaths; rate 16.2. In the preceding month, 372 deaths; rate 16.9. In the corresponding month last year, 207 deaths; rate 19.8. This class includes Ft. Wayne, rate 11.7; South Bend, 18.3; Terre Haute, rate 19.5.

CLASS C, having from 10,000 to 25,000 population, fifteen cities in all, reports 324 deaths; rate 15.3. In the preceding month, 366 deaths; rate 15.7. In the corresponding month last year, 375 deaths; rate 19.4.

CLASS D, having under 10,000 population, 326,710, reports 359 deaths; rate 13.4. In the preceding month, 524 deaths; rate 18.1. In the corresponding month last year, 470 deaths; rate 16.3.

Chart showing deaths by sanitary sections on page 45.

SUMMARY OF MORBIDITY AND MORTALITY FOR APRIL.

DISEASE PREVALENCE: The most prevalent malady during the month was rheumatism. Influenza occupied this position in the preceding month, and pneumonia in the corresponding month last year. Pneumonia stands fifth this year and influenza fourth. The following is the order of prevalence: Rheumatism, tonsillitis, bronchitis, influenza, pneumonia, pleuritis, diarrhea, erysipelas, intermittent and remittent fever, inflammation of bowels, scarlet fever, typhoid fever (enteric), smallpox, cholera morbus, whooping-cough, measles, puerperal fever, typho-malarial fever, dysentery, diphtheria and membranous croup, cerebro-spinal meningitis, cholera infantum.

SMALLPOX: One hundred and fifty-one cases of smallpox in 18 counties, with 4 deaths, were reported. In the preceding month there were 251 cases in 29 counties, with 1 death. In the corresponding month last year, 260 cases in 29 counties, with 6 deaths. The counties reporting the disease were: Allen 4, Clark 1 and 1 death, Delaware 2 and 1 death, Elkhart 2, Floyd 20, Gibson 1, Johnson 1, Kosciusko 1, Lawrence 10, Madison 25, Marion 1 and 1 death, Shelby 1, Spencer 13, Sullivan 5 and 1 death, Switzerland 1, Tipton 17, Vanderburgh 25, Washington 21. The one case and one death which occurred in Marion County acquired the infection in St. Louis. A Mrs. Akes, living in St. Louis, was attended by her mother, Mrs. Swails, from Indianapolis. The first-named lady died with what was reported to be "heart disease with pulmonary hemorrhage, complicated with bronchitis." The body of Mrs. Akes was embalmed, sent to Indianapolis for burial, and a public funeral held. In due time the mother, Mrs. Swails, was attacked with smallpox and died with the hemorrhagic form. This led to an investigation of the Akes death, and upon disinterment of the remains the diagnosis of hemorrhagic smallpox was evident.

It will be noted that smallpox was epidemic in Madison, Floyd, Vanderburgh and Washington counties. It also was almost certainly present in many of the counties which report it absent, for physicians still fail to diagnose this disease when in mild form.

TUBERCULOSIS: Three hundred and ninety deaths were reported from consumption, 344 being of the pulmonary form and 46 other than pulmonary. The April rate was 158.4 in each 100,000. In the preceding month the rate was 177.7. In the corresponding month last year it was 176.8. Of the total consumption deaths this month, 176 were males and 114 females; 118 were between the ages of 20 and 30, 88 in the age period of 30 to 40, 54 in the age period of 40 to 50. Of the total deaths, 42 were men in the prime of life, 18 to 40, and were married, with children. They left 84 orphans. Of the total number, 92 were women

in the same useful period of life, and they left 196 orphans. Over 300 homes were invaded and 280 orphans under 12 years of age made by the disease. How many of these orphans will find their way into the orphan asylums and how many will, because of lack of parental care, become charges upon the State, can not be told.

TYPHOID FEVER: This disease was reported in 25 counties, with 118 cases and 27 deaths. In the corresponding month last year there were reported 187 cases, with 56 deaths.

PNEUMONIA: Pneumonia caused 223 deaths. In the corresponding month last year, 557 deaths. There is an enormous improvement by this comparison. Of the total number of pneumonia deaths this month, 120 were males and 103 females. Forty-two were under 1 year; 27 in the age period of 1 to 5; 32 in the age period of 5 to 30; 29 from 30 to 50; 42 from 50 to 70; 53 from 70 to 90.

DEATHS BY VIOLENCE: There were 113 deaths by violence during the month—86 males and 27 females. In the corresponding month last year, 137 deaths—102 males and 35 females. Of the total deaths this month, 2 were murders, 27 suicides and the remainder accidents. The murders were caused by shooting. Of the suicides, 10 were by shooting, 5 by hanging, 3 by opium and morphine, 5 by carbolic acid, 3 by strychnine and 1 by method not named. Of the accidental deaths, 19 were by railroads, 2 by trolley cars, 20 by fractured bones and crushing injuries, 2 by gunshots, 10 by burns and scalds, 7 by horses and vehicles, 4 by falls, 3 by mining, 1 by lightning, 4 by drowning, 5 by poisons, and the remainder by various ways.

DIPHTHERIA AT ELWOOD: On March 13th the State health officer visited Elwood in order to inspect the public water supply, and investigate a diphtheria epidemic. While there, a visit to the schools was made and a short address delivered before the members of the high school in regard to State hygiene. The pupils were told that diphtheria could exist in mild as well as in severe form, that sometimes what were supposed to be and passed as simple colds, were cases of diphtheria. The process of taking cultures and making microscopical examinations were fully described and a culture outfit exhibited. After the lecture, a little girl from the primary room was brought into the superintendent's office and examined. She had a temperature of 101, flushed cheeks, tender glands and red throat, and fetid breath. A culture was taken and the following day the same proved to be diphtheria. Thereupon a supply of diphtheria outfits were sent to Dr. Runyon, health officer, and he was directed to take cultures from all the children who exhibited a high temperature. In all, five cultures were taken, and of the number, all but one showed diphtheria bacilli. The clinical findings of the cases were as follows:

George Cox, age six, had diphtheria six months ago, temperature 100, pulse 120, flushed face, red throat, breath of bad odor, enlarged tonsils, diphtheria bacilli found.

Marcy Duffet, age six years, temperature 100½, pulse 120, throat congested, face flushed, bad breath, diphtheria bacilli found.

Dorothy Small, age six, temperature 98½, pulse 80, bad breath, sub-maxillary glands swollen, tongue coated, diphtheria bacilli found.

Lawrence Bull, flushed face, temperature and pulse normal, throat slightly congested, diplococci and streptococci found, no diphtheria bacilli found.

There were thus discovered four cases of diphtheria in one room, all of which were passed simply as colds. These children were promptly removed and placed under treatment and not allowed to return to school again until perfectly well. It is possible that this inspection and discovery of these infected children, with their subsequent removal, prevented an outbreak of diphtheria.

* * *

REDUCTION OF INFANT DEATH RATE.

Modified and pasturized milk has reduced the infant death rate in Liverpool, as appears from the statistics. In 1903 the general infant death rate was 159 to the 1,000 born, while among those fed on *modified and pasturized milk*, the infant death rate was 78 to the 1,000 born. Since the scheme was initiated in 1901 the lives of 650 children were saved, besides giving health and vigor to thousands who otherwise would probably be ill nourished and puny. The milk is furnished by the city at a price slightly above cost. The milk is intended solely for the use of those infants whose mothers are unable to suckle them, or who can only partially suckle them. This fact is stamped upon every card of instructions. The Liverpool health officer remarks:

"The problem of finding a complete substitute for the milk of a healthy mother has not been solved, and probably never will be solved. As the infant grows there may, no doubt, be variation in the quality of the mother's milk which specially adapts it to the infant's need, niceties in nature which can not be approached artificially. The use of artificial food is unavoidable under the existing social conditions; the nearest approach to the natural food is derived from cow's milk, which can be so altered as to closely imitate human milk in its composition, and it can also be made to resemble it in another important particular, viz., it can be sterilized, and given while so sterilized."

As administered in Liverpool, I believe that medical men indorse the scheme with practical unanimity. Without going into the elaborate statistics available, it can be said that the results in Liverpool prove that the system has effected a great saving of infant life.

THE HYGIENIC CARE OF THE INDIVIDUAL.

BY F. W. FOXWORTHY, M. D.

Late Captain and Assistant Surgeon 160th Indiana Vol. Infantry and 34th Infantry U. S. V.

Military authorities have by process of evolution devised a paternal form of government which rivals that of the ancient Israelites. It is not necessary for me at this time to go into the details of the cause for this. Suffice it to say that the enlisted man of the army is cared for by his officer as the father looks after his child. This may be carried to the extreme, as is done in the German army today. In some cases the officer has lost his life in caring for his men, as noble Captain Lee of Indianapolis swimming ashore in a raging surf to get assistance for his drowning men, most of whom were better swimmers than he. But his duty to his men and his care of them was his uppermost thought. So in civil life physicians have a duty to the individual which can not be shirked.

In the care of the individual physically it is the attention to the details that keeps him up to the standard all the time. And a careful attention to these details will save lots of sickness, and reduce the size of the hospitals. I shall endeavor to bring before you some of the little things that are necessary but are quite often overlooked.

1. THE CARE OF THE PERSON: In the care of the person I will first discuss the care of the head and face. The hair of men engaged in out-of-door occupations should be kept closely clipped to the head. From one to one and one-half inches long is about the proper length. This renders the scalp easily cleaned, freed from dirt and vermin. The hat should not be too tight; in fact, a size too large is better than one too small—thereby avoiding headaches. If headaches do occur, a few leaves in the hat, or a handkerchief dipped in cold water and worn there, will often relieve the trouble. It is absolutely essential that every person have a tooth brush. The teeth should be cleansed after every meal; not with a motion parallel to the maxillary bone, but parallel to the direction of each tooth. The usual method increases the amount of food left between the teeth instead of decreasing it. Bacterial development in the teeth is favored by brushing the remnants of food into the interspaces, and then we have the resultant foul breath, sore mouth, caries of the teeth, pyorrhoea, and in some cases, stomach trouble.

In the care of the body, cleanliness is the first prerequisite, but the management of the bath should be carefully regulated. A bath at the wrong time is worse than no bath at all. The best time for a bath is before breakfast in the morning, or in the latter part of

the afternoon. If possible, it should be taken daily. This bath should be merely a dip in the water and then a brisk rub-down. Never should it be taken after a meal—especially a heavy meal. The individual should not stay in the water long enough to become chilled.

The underclothing should be changed at least once a week, and oftener if active work is in progress. Never should a person be allowed to sleep in his underclothing worn during the day, which should be thoroughly dried and aired at night. For the prevention of intestinal troubles there is nothing better than a band of flannel or a woven woolen belt, known as the cholera belt, worn about the abdomen. I believe this to be essential in every climate, as it prevents too rapid chilling of the abdomen after action of any kind, and also prevents too rapid chilling of the skin. After any hard work a person should not be allowed to cool off too rapidly. A sudden chilling of the surface of the body being the cause of colds. When much walking is contemplated suspensory bandages will often keep a man able to walk longer than if they were not worn. When the men are troubled with varicose veins in the leg, or with soreness of the muscles of the legs, the English puttee is the best covering for the legs. This is nothing more or less than a woolen bandage carefully applied from the ankle to the knee, and any bandage applied in this manner will answer the same purpose.

The clothing worn next to the body need not necessarily be woolen if the cholera belt is worn. While woolen underclothing is usually advised for warm climates, I found it very irritating to the skin, and with the cholera belt it is hardly necessary. The underclothing should be a trifle loose to prevent chaffing.

When a man's clothing has become wet through, he should not be allowed to rest until it dries on him. If he has a change of clothing with him a good rubbing with a crash towel will be found advantageous before putting on the dry clothes.

In the care of the feet water should be applied at least once per day. If a foot bath is not available, water can be poured on the feet and then briskly rubbed. This is necessary to keep the feet soft, elastic and prevent corns and blisters forming. If, however, corns are present, the shoes should be carefully examined. If too small they should be cut or changed; if too large, they should be padded. The toe of the shoe should be padded sufficiently to keep the foot from slipping inside the shoe. Soaking in hot water will also relieve corns. A circular pad of pasteboard or felt put over the corn—the center of the pad being cut to fit the corn—will also bring aid. When blisters occur, the person should be taught how to open them. If the blister is not opened it will probably get larger and break of its own accord, and we will then have an open sore to deal with. To open a blister the needle or pin should be heated in the flame of a match or candle,

carefully wiped with a clean rag, and should then be inserted almost parallel with and in the skin, about a tenth of an inch from the edge of the blister. By carefully inserting the needle in this fashion, the water in the blister can be drawn off in the channel formed and the skin need not be disturbed. The skin of the blister will flatten down on the surface and will soon heal without any sore forming. When the skin has been rubbed off or the feet are chaffed a little talcum powder and boric acid will relieve the trouble. An excellent method to keep the feet in good condition on long walks is the practice of soaping them before putting on the socks. Holes in the socks cause many sore feet. These holes can be temporarily relieved by stuffing with small pieces of rags. When the shoes are wet they should be kept on until thoroughly dried, otherwise the shoes become so stiff that they may cause sores the next time they are worn.

II. CARE OF THE CLOTHING. Neatness, cleanliness and a place for everything are as essential for the care of clothing whether in the army or in civil life. Bed clothing must be aired every day in good weather. Not spread on flat surface, but hung upon a line for at least half an hour, and then turned over to air on the other side. Outside clothing should be brushed each night to remove dust and bacteria collected during the day.

III. THE CARE OF THE FOOD. In the care of the food I consider the time of eating one of the most important points. People should not eat anything except at the regular time set for eating. They should never eat during hard physical exercise and never during nervous extremes or exhaustion. The blood of the body should not be sent to the stomach when there is a severe drain on the mental or physical faculties. The evil results of this I have often seen, especially in men eating a heavy meal just before engagements. Several men from Troop A of the Third Cavalry were taken violently sick with vomiting and pains in the stomach at the battle of Tagnadin Pass in December, 1899, which engagement took place just after a heavy breakfast. The nervous excitement was too much for their stomachs. This is often seen in private life in severe nervous strain—the stomach refusing food. During severe work a cup of coffee is probably the most agreeable food or stimulant for the stomach. Distilled liquor should never be taken, except on the advice of the attending physician.

The quality and quantity of the food should be carefully regulated. Great care must be taken that all the meats and perishable foods are not kept where the flies or ants can get to them. The bread especially should be kept wrapped and in a dry place and not used until one day old.

The preparation of the food is even more essential than the time of eating and the quality of it. Too much

cooking is better than too little. The meat should be thoroughly cooked through and through, especially pork, to avoid any trouble from trichina. Meats of one character should not be boiled in the same water of another. One of the companies of my regiment was attacked with severe cramps and diarrhoea after eating boiled beef which had been cooked in the same water which had been used to boil lambs. When soups or stews are to be made the meat should be cut up into fine pieces and put in cold water. When the meat is to be boiled it should be placed in hot water and not cut up, thereby searing the surface and retaining the juices. Roasts should be well basted to retain the nutriment. Never fry any meat except bacon. Beans should be well soaked over night and should be cooked until they are mushy. Evaporated fruits should be stewed until they are soft and pulpy. In the case of prunes they should be cooked until the fruit falls away from the stones. Rice should be cooked with plenty of water, preferably in earthen vessels, and cooked until it is dry. Biscuits, hot bread and pancakes should be discouraged.

In addition to carefulness regarding food great care should be taken about the water supply. If practical, always boil it. The best time to boil the water, is for the cooks to fill the boilers in the evening, so that the water may cool during the night. The best sterilizer that I have used is the Water-Forbes, which is at present in use in the United States army. One sterilizer of this kind will filter, boil and cool the water. Drinking at meal time is best, and never during hard work. When drinking, small sips of water are less apt to cause intestinal trouble than large quantities. The most refreshing drink during a hot dusty march is juice off a can of tomatoes.

IV. GENERAL CARE. Ventilation is very important, especially at night. The bedroom should never, even in the coldest weather, be entirely closed up. During the day the windows should be raised, thereby the room being well aired. The importance of the proper ventilation of a building is evident when we see portions of a palatial hotel unfit for use because the architect forgot that people require air to breathe instead of carbonic acid gas. So often the sick room is the worst ventilated room in the house: a board with small holes bored in it and fitted above the upper sash will not cause a draft, and give temporary ventilation. In building houses how rare it is for the plans of the architect to be examined by a sanitarian to see if the inhabitants will have sufficient air. A sound child tends to become a sound man or woman. Yet our school houses are usually worse, far worse, than private dwellings regarding ventilation. It has been a marvel to me that children could think at all in some of the school rooms in this city. The room known as the German room in many of the grade schools of this city often has the greatest number of children in the least space and the

worst ventilation. And when a stove is placed in the room, instead of furnace heating, the discomforts of extremes of heat and cold are added to that of bad ventilation. Every school should have some method of heating other than a stove in the room, and there should be an automatic thermometer to regulate the heating, as some school rooms are kept at a high degree of heat in order that the other rooms of the building may be comfortable.

The foregoing suggestions have been culled from my observations with the United States army in various parts of the United States, the Philippines and China, and in my work with the schools of this city, and while many more could be profitably added, I hope these few will bring physicians in closer relationship to their patients. I sincerely hope that these suggestions will be more apropos than those of a certain celebrated physician from this country who visited the United States army in the Philippines and later wrote out suggestions for the care of the troops in the tropics, and he finally ended his suggestions with the important one that "Ice baths should not be allowed after full meals." As the command with which I was serving had not had an opportunity to secure either ice baths or full meals for months, we decided that that suggestion was singularly out of place.

CITY OF BLUFFTON.

HEALTH ORDINANCE.

SECTION 1. Be it ordained by the Common Council of the City of Bluffton, Ind., That it shall be unlawful for any person, persons, company or corporation to erect, construct, cause, permit, keep or maintain within the limits of said city, or within one mile thereof, anything whatsoever which is injurious to health, indecent or offensive to the sense of any of the inhabitants of said city or an obstruction to the free use of property by any such inhabitants, and any person or persons, company or corporation maintaining any such nuisance above referred to is hereby declared to be the author and maintainer of a nuisance.

SEC. 2. It shall be unlawful for any person, persons, company or corporation to throw, deposit, or suffer or permit any child, servant, member of the family or any other person under his, their or its care or control, to throw, deposit or in any way place any manure, rubbish, slops, putrid or unsound vegetable matter or dead animal of any description or kind, or any filth, noisome or unwholesome liquid or slop or substances that are liable to become unwholesome or dangerous, in or into or upon any streets, lane, alley, sidewalk, gutter, crossing, lot, cellar, premises or common, and it shall also be unlawful for any rank weeds to be allowed to grow upon any of the private grounds or commons of said city.

SEC. 3. It shall be unlawful for any person to expectorate upon any of the sidewalks of said city, the same being hereby declared a nuisance.

SEC. 4. It shall be unlawful for any person, persons, firm, company or corporation to keep any pig or pigs within the corporate limit of said city.

SEC. 5. All garbage receptacles shall be tightly covered and emptied frequently to prevent fermentation and bad odors, and garbage receptacles and vaults shall be cleaned, emptied and disinfected at least once each month, and weeds shall be cut and hauled away at any time upon the written order of the health officer or street commissioner.

Such notice may be delivered at the premises and a reasonable time, not less than five days, given in which to move the same.

Such vaults shall be cleaned within twenty-four hours after the receipt of a notice from the board of health or street commissioner, and no privy vaults shall be constructed other than with a brick bottom and brick sides laid above the surface of the ground and lined with cement so that the same shall be water-tight, and if any owner or lessee, being duly ordered as herein provided, shall fail or refuse to obey said order, it shall be the duty of the street commissioner, upon notice from the board of health, to cause such garbage, receptacle or vault to be cleaned, emptied and disinfected, or the weeds to be cut and hauled away, and said commissioner shall keep an accurate account of the expenses thereof which shall be paid from the city treasury upon the sworn voucher of said commissioner, and said expense shall be a lien on the property and collected with the next tax assessment and the said city treasury reimbursed.

SEC. 6. The secretary of the board of health, who is also the city health officer, all deputy health officers and the city police shall have full power and authority to enter into or upon any street, public way or any premises within the said city or within one mile thereof for the purpose of making a sanitary inspection or survey, and, if a nuisance or any unsanitary conditions are found, it shall be the duty of said officer, when informed thereof to immediately notify such person in possession thereof, in writing, fixing a time for the abating of such nuisance not less than five days therefrom, excepting in the case of dead animals, which shall be not less than five hours.

If such person, persons or corporation or company shall fail or refuse to abate said nuisance within the stipulated time it shall be the duty of the street commissioner, upon notice from the health officer, countersigned by the mayor of the city, to cause the same to be abated, keeping an accurate account of the expenses thereof, which shall be paid out of the city treasury upon the sworn voucher of said commissioner, and said expenses shall be a lien on the property upon which said nuisance had existed, and shall be placed

on the tax duplicate and collected with the next installment of taxes.

SEC. 7. All cases of cholera, typhoid fever, measles, whooping cough, yellow fever, smallpox, diphtheria, membranous croup, scarlet fever, bubonic plague, leprosy and pulmonary tuberculosis shall be immediately reported to the city health officer by the attending physician, if any, otherwise by the household, and it shall be the duty of the city health officer to at once impose quarantine by placarding the house where such disease exists, excepting typhoid fever and pulmonary tuberculosis, for they shall only be reported and recorded, but not quarantined.

The card shall not be less than twelve inches square, with the name of the disease printed thereon in letters not less than two inches in length and having the following notice thereon:

"All persons are forbidden to enter or leave these premises without special permit from the health officer having jurisdiction, and all persons are forbidden from removing or mutilating this card, or to in any way interfere with this quarantine without orders from said health officer."

The card shall be posted in a conspicuous place, and shall remain there until removed by order of the health officer, and it shall be a misdemeanor to mutilate or remove such card without such consent.

All dwellers in the quarantined habitation or prescribed quarantine area shall not leave said habitation or area, or break the quarantine, and no one shall enter, except by permission of the health officer, and all persons shall obey the directions of the city health officer concerning the care they shall take against carrying infection to others.

SEC. 8. In case of smallpox it shall be the duty of the city board of health officer to isolate the patient in the house in which he or she is found, or in case this is not practicable, in an isolated hospital, established by the city council, and where the patient is unable to compensate the physician or nurse, or provide all necessary attendance and food the expense thereof shall be paid as other city expenses, and those who have been exposed to smallpox shall be vaccinated and disinfected in body and in apparel and given their freedom for ten days, provided they will faithfully promise to report to the health officer at the end of ten days from the first exposure, or failure to be vaccinated shall be confined in quarantine under same rules as govern patients under this section, not to exceed fifteen days from the first exposure.

SEC. 9. If at any time the work of preventing the spread of infectious or contagious diseases is more than can be reasonably expected of the city health officer, he may, with the consent of the mayor, employ one or more intelligent men to act as deputies to establish quarantine, remove patients to the special hospital and

conduct disinfection. All houses wherein infectious and contagious diseases may exist, or have existed, shall at the proper time be thoroughly disinfected with formaldehyde by the health officer or his deputies, at the expense of the city, as the work is obviously for the benefit of the people. A complete record of all disinfectants, all vaccinations, all quarantines and all other health work done shall be kept by the city health officer in the minute book of the city board of health.

SEC. 10. When visiting persons known to be infected with smallpox, diphtheria and scarlet fever all physicians and health officers shall protect their clothing and hair against infections and shall thoroughly disinfect their hands before coming in contact with the public. To accomplish this a linen or rubber coat, with skull cap, shall be carried in a bag or other approved receptacle and kept well disinfected with formaldehyde or other approved disinfectant. The hands shall be disinfected by washing with antiseptic soap and applying an effective liquid antiseptic.

It shall be the duty of the police at all times to aid the health officer in the work of enforcing this ordinance upon demand from such health officer.

SEC. 11. Any person, persons, firm, company or corporation violating any of the provisions of this ordinance, upon conviction thereof shall be fined for each offense in any sum not less than twenty-five dollars nor more than one hundred dollars, and each day shall constitute a different offense if time is a material element of such offense.

SEC. 12. That this ordinance shall be in full force and effect from and after its passage and publication as required by law.

JOHN MOCK, Mayor.

EDMOND G. ELLIOTT, City Clerk.

SANITARY PROGRESS AT BROOKVILLE: The Brookville Democrat says:

"The school trustees of the Brookville public schools have taken a big step toward civilized decency and comfort. Modern water closets and wash rooms are being installed in the building, and the half-century-old privy, with its reeking vaults, will be removed and the whole yard graded into a respectable campus.

"Now for another step. Our county court compels the attendance of our citizens, unsophisticated women and children as well as men, who do not like to go to a livery barn or saloon and ask the use of a closet.

"A flowing sewer is only one square from the court house, and a good pressure, with abundance of water, is furnished by our waterworks. The Democrat knows the county dads are willing to examine into the merits of this matter, and has reason to believe that the county council is willing to co-operate.

"Let us put our court house at least in sight of modern sanitary decency."

ABOUT CONSUMPTION.

HOW TO HELP CONSUMPTIVE PEOPLE.—If consumption is transmitted by the atmosphere, this is due to the consumptive himself. It is he who disseminates the illness around him. The hygienist, therefore, should take the patient into account in his fight against consumption. To teach consumptive people not to disseminate the sickness around them, is the first move to restrict the contamination of the atmosphere by the dry sputum, to restrict the dissemination of consumption. The fight against consumption, to be efficacious and complete, should not be confined to sterilizing suspect food or to purifying the atmosphere from dangerous dust, but should moreover take the necessary steps to locate consumptive people and, knowing them, to instruct them, help them and treat them.

HOW TO KNOW CONSUMPTIVE PEOPLE.—It is in the interest of the consumptive himself that his illness should be recognized at the earliest possible moment. Consumption in the first degree is curable, and curable by an hygienic treatment to which the patient or his family can have immediate recourse. Early diagnosis, in rendering possible the healing of the disease, in preventing the disease to go on, will prevent consumption from becoming contagious.

But when consumption is open, where the consumptive has begun to spit, immediately the danger appears and follows the patient, going around with him in the house, the school, the workshop, the public buildings, etc., in fact everywhere the consumptive may spit. And the danger is the greater when, the consumptive not being known, nobody is in a measure to take precautions against him.

For this reason, in many large cities, and especially New York, consumption has been placed on the list of contagious diseases that should be declared. The declaration of consumption has been made a social obligation, a duty towards the public. By this method, sanitary authorities have been able to discover veritable centers of consumption, well localized in certain wards of cities, or certain tenements, and entertained not only by contagion, but also by unsanitary conditions. These causes were removed, and the patients were taught what they should do to prevent contagion.

HOW TO INSTRUCT THE CONSUMPTIVE. To teach consumptive people is one of the best ways to limit consumption. Consumptive people, especially the poor, need to be taught. To teach them the way not to disseminate their illness, to take care of their sputum, it is to cut the wrong in its root.

Health boards have always taken care of this point. They have added, to the declaration of consumption, the sanitary inspection, the visit to the house. Their

aim was to teach the consumptive how they should sterilize or destroy their sputum, and to improve, if possible, the place where they were living. This is the way to render the healing of consumption possible sometimes, and to render its contagion impossible always. This teaching to consumptive people is completed by the free delivery of circulars and leaflets clearly and soberly written. On this point, the action of health boards is assisted by the action of anti-tubercular leagues, of which the first aim is to make known the danger of consumption and the way to prevent it.

HOW TO HELP CONSUMPTIVE PEOPLE. But the fight against consumption should not stop there. Consumption is more common amongst poor people, where the ground is prepared by overwork, misery, bad sanitary conditions and overcrowding. If the fight is to be complete, it is necessary not only to teach the consumptive, but also to help them.

Poor people should be helped, and especially poor consumptive people. Consumption is an expensive disease; this is the reason why the worst cases are found amongst the poor. To give consumptives pocket spit-boxes or circulars is not enough; give them also good food, good clothes and drugs when needed. This is why special dispensaries and boards of charity can do so much in the fight against consumption. By them the consumptives are at the same time taught and helped. Taught, consumptive people are less dangerous; helped, they have a chance to recover.

In Germany, mutual benefit associations, working associations, life assurance companies have so well understood these facts that they have created special funds for consumptive people. Their object was a double one: the social one was to help their members; the other one was to lessen consumption in order to lessen their losses. Those corporations have been the first to realize what the hygienists have been preaching for so long: the fight against consumption is not only a social fight, but also an economic one.—Bulletin of Quebec Board of Health.

SUNSTROKE.

There are two forms of sunstroke. The mildest is that known as heat exhaustion. This manifests itself in the case of people who are overcome by heat without being actually sunstruck. In this form the skin is pale, cold and clammy, and the pulse feeble. While death sometimes results, the patients under good treatment will usually recover. Persons affected in this way should be removed to a shady spot and have their heads and chests dashed with cold water. Spirits of ammonia (hartshorn) should be applied to the nostrils, and sometimes it is necessary to administer small quantities of stimulants.

Heat stroke or insolation is the serious form of this

trouble, and the one to be most closely guarded against. In cases of real insolation the face becomes purplish, eyes bloodshot, veins swollen and corded and the skin dry and burning hot to the touch. It is not always fatal, but many of those whose lives are saved are ever afterward invalids, with brain power more or less impaired. The effect of the sun's heat seems to be most marked on the brain and spinal marrow. When real insolation occurs the brain becomes so heated that the human "heat center," controlling the production of bodily heat, is affected and the temperature rises from the healthy mark of $98\frac{1}{2}$ as high as 110 or over, and often keeps on rising for some time after death. The "heat center" lies at the back of the head and should be protected from the direct rays of the sun.

Insolation is so dangerous that a physician should be called as soon as possible. While waiting the doctor's arrival much good can be done and life often saved by applications of ice to the head and spinal column. It is best broken in small pieces and placed in cloth or rubber bags, but when these are not to be had ice can be placed directly about the head and neck.

Workmen and others exposed to the direct rays of the sun should have their heads well protected and should wear woolen next to the skin. A very useful precaution is a pad of cotton batting or flannel sewed along the back of the undergarment so as to cover and protect the spine.

Chicago is an especially favored city, owing to its proximity to Lake Michigan, the breezes from which temper the sun's rays and tend to reduce excessive temperatures, but despite this we have at times conditions conducive to heat stroke. These are strongest in what is called "muggy" weather. As long as perspiration is free people can stand a high degree of heat, as the evaporation of the moisture on the body tends to cool it. But in "muggy" weather the excess of humidity in the atmosphere checks this evaporation. Then when the temperature exceeds or even nearly approaches the normal bodily heat of $98\frac{1}{2}$ degrees there is trouble.

People should be careful not to expose themselves unnecessarily in hot weather of any kind, but when the conditions are such as here named they should be extraordinarily careful. It is well to bear in mind the old rules: Keep cool as to temper and your body will not get so hot; avoid all alcoholic drinks; eat less than usual and more simply; walk on the shady side of the street; avoid over exertion; let the air circulate freely about the head, either by frequent removal of the hat or by wearing a perforated head covering.

Insolation is more far-reaching and dangerous in its effects than most people know of; therefore a doctor should be called at once to any one with the symptoms above described as indicating heat stroke or true insolation.—Bulletin of Chicago Health Department.

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM CERTAIN COMMUNICABLE DISEASES IN APRIL, 1905.

NORTHERN SANITARY SECTION.

Total population	887,832
Total deaths	789
Death rate per 1,000	10.8
Consumption, rate per 100,000	116.8
Typhoid, rate per 100,000	9.6
Diphtheria, rate per 100,000	6.8
Scarlet fever, rate per 100,000	6.8
Diarrheal diseases, rate per 100,000	6.8

CENTRAL SANITARY SECTION.

Total population	1,087,620
Total deaths	1,140
Death rate per 1,000	12.7
Consumption, rate per 100,000	151.4
Typhoid, rate per 100,000	13.4
Diphtheria, rate per 100,000	3.3
Scarlet fever, rate per 100,000	8.9
Diarrheal diseases, rate per 100,000	7.8

SOUTHERN SANITARY SECTION.

Total population	673,097
Total deaths	710
Death rate per 1,000	12.8
Consumption, rate per 100,000	224.7
Typhoid, rate per 100,000	14.5
Diphtheria, rate per 100,000	5.4
Scarlet fever, rate per 100,000	18.1
Diarrheal diseases, rate per 100,000	10.8

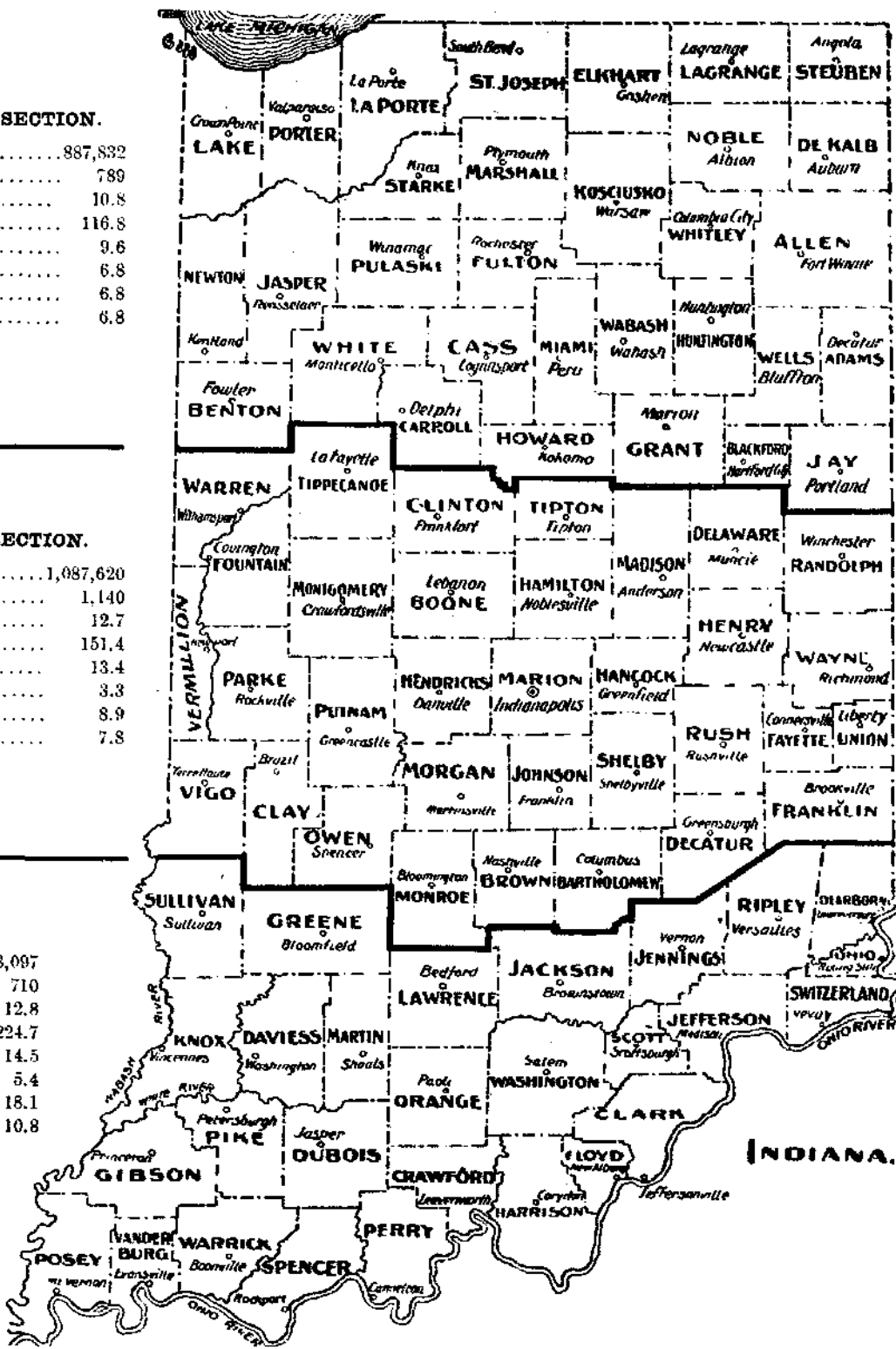


TABLE No. 1. Deaths in Indiana by Counties, During the Month of April, 1905.

STATE AND COUNTIES.	Population Estimated According to U. S. Bureau.	Total Deaths Reported for April, 1905.	Annual Death Rate per 1,000 Population.	Stillbirths.	IMPORTANT AGES.							DEATHS FROM IMPORTANT CAUSES.																
					Under 1 Year.	1 to 4, inclusive.	5 to 9, inclusive.	10 to 14, inclusive.	15 to 19, inclusive.	65 Years and Over.	Pulmonary Consumption.	Other Form of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping-Cough.	Pneumonia.	Diarrheal Dis- eases, under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.	Smallpox.	Deaths in Insti- tutions.	
																												309
State of Indiana	2,648,519	2,639	12.1	192	309	142	61	52	110	730	344	46	37	11	2	23	3	14	223	16	46	35	15	86	132	4	117	
Northern Co's	887,832	789	10.8	64	93	47	17	17	30	221	85	9	7	5	1	5	2	6	65	5	16	11	6	35	39	36		
Adams	23,052	22	11.6	3	4	4	2	1	2	2	4								2	7		2						
Allen	81,502	65	9.7	9	4	1	1	3	1	18	5								7	1	2	1		5	1		6	
Benton	13,611	7	6.2		1	2				2																		
Blackford	19,914	15	9.1	4	1	1				4	2		1						1		4							
Carroll	19,953	11	6.7		1	1				2	2																	
Cass	35,902	42	14.2	1	1	1			1	12	7								2	1	1		1				8	
Dekalb	26,272	21	9.7				1	1		10	2								1		1		1					
Elkhart	47,392	40	10.2	2	3	3	1		2	16	4		1						3	1	1		1				1	
Fulton	17,736	23	15.8	1	4	4				16	4								1	1	1		1					
Grant	63,973	38	11.0	9	7	3	3	3		13	5	2		2	1				3	3	3		1				7	
Howard	29,531	28	11.5	4	3	3			3	6	6								3	3	3		3					
Huntington	29,404	32	13.2	4	3	1			1	11	3			1					4	4	1		1					1
Jasper	15,535	3	2.3							2	2								1	1	1							
Jay	28,154	29	12.5	3	2	4	1			2	2								5									
Kosciusko	29,295	27	7.0	2	4	1				2	4								2	2	1		1					
Lagrange	15,284	14	11.1							5	5								1		2		2					
Lake	43,494	41	11.6		9	5	1	2	2	5	4		1						5	2	1						4	
Laporte	39,962	35	10.6	2	3	1	1	3	3	10	1	1							1	3								3
Marshall	25,639	33	10.9		3	3	1			5	4								3	1								
Miami	29,352	26	8.3	1	1				2	5	2		2															
Newton	11,106	7	7.6		3					2	5																	
Noble	23,603	21	10.8	1	1	1				9	9								3	2	1							
Porter	19,624	15	9.3		2	1				4	4		2						3	2	1							
Pulaski	15,153	11	8.6	1	1	2				4	4								1	1								
Starke	11,668	12	12.5		2	3		1	2	4	4								1	1	1							
Steuben	15,515	17	13.3		1					4	4								1	1	1							
St. Joseph	65,451	94	17.5	11	15	6	4	2	5	23	6		1						7	1	5	1		3		1	7	6
Wabash	28,679	13	5.5	1	1	1			2	2	2								1	1	1							
Wells	24,223	24	12.0	1	4	1			1	8	8								3	2	1							
White	20,525	15	8.9	1	1	1			1	4	4								1	1	1							
Whitley	17,328	14	9.8	1	2	1			1	9	9								1	1	1							
Central Co's	1,087,620	1,110	12.7	86	123	57	21	20	46	327	135	23	12	3		8	1	4	94	7	15	14	4	37	59	2	64	
Bartholomew	24,985	17	8.3		9	3			1	5	3								6		2							
Boone	26,321	29	13.4	2	4	1			1	10	1	1									1							
Brown	9,727	9	11.2	2	1	1				3	3																	
Clay	35,785	33	11.2		5	1			2	7	7		1						1									
Clinton	23,535	36	15.3		2	2			2	17	4																	
Decatur	19,614	19	11.8		3	2			1	8	4								1		1							
Delaware	57,421	57	12.1	3	7	4	2	1	6	11	12			1					3		1							
Fayette	13,841	11	9.6	1	1	1				4	4								2		1							
Fountain	22,201	20	10.9	2	4	4				10	10								2									
Franklin	16,388	12	8.9	1	1				1	6	6								1		1							
Hamilton	31,430	35	13.5	2	6				1	14	2								2									
Hancock	19,755	22	13.5	2	2		1		1	8	8		1						2		1							
Hendricks	21,292	15	8.5	3	3					3	3								1		1							
Henry	25,572	27	12.8	2	5	1	1	1	1	5	5								3		3							
Johnson	20,488	18	10.7	2	2					6	6								3		3							
Madison	54,063	61	8.8	4	10	4	1		5	14	2		1						2		1					1		
Marion	219,655	298	16.5	25	24	10	5	13	12	70	44	8	7						31		6					1	7	1
Monroe	22,153	14	7.7	2	4					3	3								2		1							
Montgomery	29,933	23	11.8	1	3				1	6	6								1		1							
Morgan	21,183	23	13.2	1	5				1	3	3								1		1							
Owen	15,193	7	5.6		2					2	2								1		1							
Parke	24,082	21	10.6	4	2	1				5	5								2		1							
Putnam	21,478	16	9.0	1	2				1	2	2								1		1							
Randolph	28,880	33	13.9	4	3				1	16	5								1		1							
Rush	20,594	18	10.6	1	1	1			1	6	6								2		1							
Shelby	26,906	26	11.7	3	4	4				10	10		1						1		1							
Tippecanoe	40,091	54	14.4	2	2	2			2	19	7																	

Mortality of Indiana for April, 1905.

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Population, Estimated by U. S. Method.	Total Deaths Reported for April, 1905.	Annual Death Rate per 1,000 Population.	Stillbirths.	Important Ages.												Deaths and Annual Death Rates per 100,000 Population from Important Causes.							
					Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		65 and Over.		Consumption.		Other Forms Tuberculosis.		Typhoid Fever.		Diphtheria.	
					Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.
State	2,618,549	2,639	12.1	192	309	12.6	142	5.8	51	2.0	52	2.1	110	4.4	730	29.8	344	158.4	16	21.1	27	12.4	11	5.0
Northern Co's	887,832	789	10.8	64	93	12.8	47	6.4	17	2.3	17	2.3	36	4.1	221	30.4	85	116.8	9	12.3	7	9.6	5	6.8
Central Co's	1,087,620	1,140	12.7	96	123	11.8	57	5.4	21	2.0	20	1.9	46	4.3	327	31.0	135	151.4	23	25.7	12	13.4	3	3.3
Southern Co's	673,097	710	12.5	42	93	13.9	38	5.6	13	1.9	15	2.2	34	5.0	182	27.2	124	224.7	14	25.3	8	14.5	3	5.4
All cities	977,802	1,185	14.7	91	124	11.3	62	5.6	28	2.5	25	2.2	62	5.6	275	25.1	151	188.4	26	32.4	16	18.9	6	7.4
Over 50,000	260,046	325	15.2	26	29	9.7	15	5.0	7	2.8	10	3.3	15	5.0	69	23.0	43	201.7	12	56.2	7	32.8	1	4.6
25,000 to 50,000	133,029	177	16.3	23	17	11.0	12	7.8	5	3.3	5	3.3	13	8.4	35	22.7	15	137.5	1	9.1	3	27.5	.....	.....
10,000 to 25,000	258,117	324	15.3	23	33	10.2	15	4.6	8	2.4	15	1.5	20	6.2	77	24.0	46	212.7	6	28.3	1	4.7	.....	9.4
5,000 to 10,000	196,779	208	12.8	11	35	17.7	16	8.1	3	1.5	4	2.0	9	4.5	47	23.8	20	123.9	5	30.9	4	24.7	1	6.1
Under 5,000	129,931	151	14.1	8	10	7.0	4	2.8	5	3.5	1	1.1	6	3.5	47	32.3	28	262.9	3	15.7	1	9.3	.....	18.7
Country	1,670,747	1,454	10.6	101	185	13.6	80	5.9	23	1.7	27	2.0	48	3.5	455	33.6	193	140.9	20	14.6	11	8.0	5	3.6

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Deaths and Annual Death Rates per 100,000 Population from Important Causes.																							
	Croup.		Scarlet Fever.		Measles.		Whooping-Cough.		Pneumonia.		Diarrheal Diseases, Under 5 Yrs.		Cerebro-Spinal Meningitis.		Influenza.		Puerperal Septicæmia.		Cancer.		Violence.		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.
State	2	.9	23	10.5	3	1.3	11	6.4	223	102.7	18	6.2	46	21.1	35	16.1	15	6.9	86	39.6	132	60.8	4	1.8
Northern Co's	1	1.3	5	6.8	2	2.7	5	6.8	65	89.3	5	6.8	16	21.9	11	15.1	6	8.2	35	48.0	39	53.5	.....	.....
Central Co's	.....	.....	8	8.9	1	1.1	4	4.4	94	105.4	7	7.8	15	16.8	14	15.7	4	4.4	37	41.5	59	66.1	2	2.3
Southern Co's	1	1.8	10	18.1	.....	.....	5	9.0	64	115.0	6	10.8	15	27.1	10	18.1	5	9.0	16	29.0	34	61.6	2	3.6
All cities	2	2.4	6	7.4	1	1.4	6	7.4	103	128.5	9	11.2	29	36.1	14	17.4	5	6.2	44	54.6	76	93.5	2	3.4
Over 50,000	.....	.....	2	9.3	.....	.....	1	4.6	31	145.4	2	9.3	10	46.9	3	14.0	1	4.6	10	46.9	23	107.9	1	4.6
25,000 to 50,000	.....	.....	.....	.....	.....	.....	2	13.3	15	137.5	1	9.1	7	64.1	3	27.5	.....	.....	10	91.7	14	123.3	.....	.....
10,000 to 25,000	1	4.7	2	9.4	.....	.....	3	18.5	23	108.7	1	9.4	6	28.3	2	9.4	1	4.7	11	52.0	21	99.2	1	4.7
5,000 to 10,000	1	6.1	2	12.3	.....	.....	3	18.5	21	130.1	4	24.7	6	37.1	2	12.3	2	12.3	5	37.1	11	68.1	.....	.....
Under 5,000	.....	.....	1	9.3	.....	.....	8	5.8	13	122.0	.....	.....	.....	.....	4	37.5	1	9.3	7	55.7	6	56.3	.....	.....
Country	.....	.....	17	12.4	2	1.4	.....	.....	120	87.8	9	6.5	17	12.4	21	15.3	10	7.3	42	30.6	57	41.6	2	1.4

Meteorological Summary for April, 1905. Furnished by the Central Office, Indiana Section, Climate and Crop Service, U. S. Weather Bureau, Indianapolis, Ind.

W. T. BLYTHE, SECTION DIRECTOR.

SECTIONS.	TEMPERATURE.										PRECIPITATION.				CONDITION OF SKY.			Wind.
	Mean.	Departure from Normal.	Highest.				Lowest.				In Inches.				Number of Days.			
			Degrees.	Date.	Place.	Degrees.	Date.	Place.	Average.	Departure from Normal.	Snowfall Un-melted.	Days with 3/16 inch or more.	Clear.	Partly Cloudy.	Cloudy.			
																Clear.	Partly Cloudy.	
Northern Section	45.5	-1.3	83	28	Ft. Wayne	20	8	Auburn	3.82	+1.08	2.4	10	13	7	10	NW.		
Central Section	51.5	-0.6	83	24	Hector	20	16	Hector	3.95	+0.86	0.5	9	10	10	10	NW.		
Southern Section	55.1	+0.4	87	28	Marengo	26	8	Butlerville, Columbus, Greensburg	3.47	-0.12	0.9	8	12	11	7	SW.		
State	51.7	-0.5	87	28	Marengo	20	15	Auburn, Hector	3.75	+0.60	1.1	9	12	9	9	NW.		