

# MONTHLY BULLETIN

# Indiana State Board of Health

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

## ABSTRACT OF MORTALITY STATISTICS FOR JULY, 1917.

Total deaths reported 2,919; rate 11.9. In the preceding month 2,781 deaths; rate 11.7. In the same month last year 3,118 deaths; rate 12.8. Deaths by important ages were: Under 1 year of age 422 or 14.4 per cent of total; 1 to 4, 175; 5 to 9, 57; 10 to 14, 56; 15 to 19, 74; 65 and over 1,004 or 34.4 per cent of total.

**SANITARY SECTIONS:** The Northern Sanitary Section, population 1,009,364 reports 951 deaths; rate 11.0. In the preceding month 1,024 deaths; rate 12.3. In the same month last year, 1,084 deaths; rate 12.8.

The Central Sanitary Section, population 1,191,458 reports 1,316 deaths; rate 13.0. In the preceding month 1,201 deaths, rate 12.2. In the same month last year 1,299 deaths; rate 13.0.

The Southern Sanitary Section, population 688,793 reports 652 deaths; rate 11.1. In the preceding month 556 deaths; rate 9.8. In the same month last year 735 deaths; rate 12.6.

**REVIEW OF SECTIONS:** The Central Sanitary Section presents the highest death rate, which is 1.1 higher than that for the entire state. The Northern Section presents the highest death rate for measles, lobar and broncho-pneumonia, cerebro-spinal fever, poliomyelitis, cancer and external causes. The Central Section presents the highest death rate for tuberculosis, diphtheria, influenza and puerperal septicemia. The Southern Section presents the highest death rate for typhoid fever, scarlet fever, whooping cough, diarrhea and enteritis and smallpox.

**RURAL:** Population 1,552,593 reports 1,366 deaths; rate 10.3. In the preceding month 1,285 deaths; rate 10.0. In the same month last year 1,426 deaths; rate 11.1.

**URBAN:** Population 1,357,022 reports 1,553 deaths; rate 13.6. In the preceding month 1,496 deaths; rate 13.6. In the same month last year 1,656 deaths; rate 14.9. The cities named present the following death rates: Indianapolis, 15.6; Evansville, 13.4; Fort Wayne, 14.6; Terre Haute, 9.0; South Bend, 9.4; Gary, 22.6; East Chicago, 16.5; Hammond, 14.0; Muncie, 14.5; Richmond, 19.9; Anderson, 18.7; Elkhart, 12.9; Michigan City, 9.8; Lafayette, 21.6; Kokomo, 11.2; Logansport, 16.9; New Albany, 11.4; Marion, 12.0.

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## BIRTHS FOR JULY, 1917.

Total births 5,362 (stillbirths excluded); State rate 21.9.  
 Males 2,811; females 2,551.  
 White males 2,766; white females 2,507.  
 Colored births 89; males 45, females 44.  
 Stillbirths 175; white 165, colored 10.  
 The Northern Sanitary Section, population 1,009,364 reports 2,115 births; rate 24.6.  
 The Central Sanitary Section, population 1,191,458 reports 2,122 births; rate 20.9.  
 The Southern Sanitary Section, population 688,793 reports 1,134 births; rate 19.3.  
 The highest rate, Lake County 38.5.  
 The lowest rate, Bartholomew County 8.8.  
 Total births to date for 1917, 36,405.

## SUMMARY OF MORBIDITY AND MORTALITY FOR JULY, 1917.

Pulmonary tuberculosis was reported as the most prevalent infectious disease. The order of prevalence was as follows: Pulmonary tuberculosis, diarrhea and enteritis, typhoid fever, tonsillitis, measles, diphtheria and croup, dysentery, rheumatism, smallpox, scarlet fever, malaria fever, whooping

cough, broncho-pneumonia, other forms of tuberculosis, intermittent and remittent fever, chickenpox, erysipelas, lobar pneumonia, influenza, puerperal septicemia, rabies in human, rabies in animals, cerebro-spinal fever, ophthalmia neonatorum, trachoma, poliomyelitis, pellagra.

**SMALLPOX:** 154 cases in 27 counties with 4 deaths. The following counties reported smallpox present: Bartholomew 1 case; Cass 1, Daviess 3, Delaware 1, Fountain 4, Fulton 1, Gibson 5, Grant 1 case and 1 death, male 72 years; Green 3 cases and 1 death, female 59 years; Hancock 2 cases, Howard 1, Johnson 1, Knox 5 cases and 1 death, female 42 years; Lake 22 cases, Laporte 13, Madison 2, Marion 26 cases and 1 death, male 68 years; Monroe 3 cases, Morgan 8, Orange 1, Posey 1, Shelby 5, St. Joseph 3, Sullivan 4, Tippecanoe 16, Vanderburg 9, Vermillion 3, Vigo 10.

**TUBERCULOSIS:** 264 deaths, of which 232 were of the pulmonary form and 32 other forms. Male tuberculosis deaths numbered 131, females 133. Of the males 32 were married in the age period 18 to 40 and left 64 orphans under 12 years of age. Of the females, 51 were married in the same age period as above and left 102 orphans under 12 years of age. Total number of orphans made in one month by this preventable disease, 166, number of homes invaded, 249.

**PNEUMONIA:** 91 deaths, rate 37.1 per 100,000. In the preceding month 127 deaths, rate 53.4. In the same month last year 65 deaths, rate 26.8. Males numbered 54, females 37.

**TYPHOID FEVER:** 131 cases in 40 counties with 32 deaths. In the preceding month 60 cases in 21 counties with 23 deaths. In the same month last year 223 cases in 53 counties with 37 deaths.

**DIPHTHERIA:** 153 cases in 30 counties with 23 deaths. In the preceding month 150 cases in 41 counties with 19 deaths. In the same month last year 81 cases reported in 28 counties with 5 deaths.

**SCARLET FEVER:** 129 cases reported in 27 counties with 5 deaths. In the preceding month 203 cases in 39 counties with 10 deaths. In the same month last year 114 cases in 27 counties with 1 death.

**MEASLES:** 249 cases in 33 counties with 12 deaths. In the preceding month 1,283 cases in 59 counties with 33 deaths. In the same month last year 781 cases reported in 48 counties with 13 deaths.

**POLIOMYELITIS:** 5 cases in 4 counties with 6 deaths. The deaths occurred in Grant county, male 2 years; Lake, female 1 year, male 10 months, female 6 months; Spencer County, female 1 year, Wayne County, female 10 years.

**PELLAGRA:** 2 deaths. Marion County, female 42 years; Perry County, female 44 years.

**RABIES:** 8 persons bitten by rabid animals, and treated by the State Board of Health during the month. There were no deaths.

**EXTERNAL CAUSE:** Total 298, males 239, female 59. *Suicide:* Total 43, males 33, females 10. Suicide by poison 13, by hanging or strangulation 6, by drowning 5, by firearms 14, by cutting or piercing instruments 3, other suicides 2. *Accidental or Undefined:* Total 237, males 191, females 46, Poisoning by food 1, other acute poisonings 2, burns (conflagration excepted) 13, absorption of deleterious gases (conflagration excepted) 3, accidental drowning

32, traumatism by firearms 4, traumatism by cutting or piercing instruments 1, traumatism by fall 32, traumatism in mines 16, traumatism by machines 9, railroad accidents and injuries 44, street-car accidents and injuries 15, automobile accidents and injuries 19, motorcycle accidents and injuries 6, injuries by other vehicles 3, injuries by animals 7, affects of health 10, lightning 4, electricity (lightning excepted) 7, fractures (cause not specified) 1, other external violence 8. *Homicide:* Total 18, males 15, females 3. Homicide by firearms 14, homicide by cutting or piercing instruments 2, homicide by other means 2.

## HEALTH OFFICERS, ATTENTION!

### Delayed Birth and Death Certificates.

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

### BIRTHS

Allen 8 (Ft. Wayne 4, New Haven 3); Benton 6 (Otterbein 1); Brown 2; Carroll 1 (Burlington); Cass 1; Clark 5 (Jeffersonville 2); Clay 5; Clinton 2; Crawford 2 (Leavenworth 1); Daviess 1; Dearborn 2 (Aurora); Decatur 2 (Greenburgs 1); Delaware 4 (Muncie 2—1 for 1912); Elkhart 2 (City 1); Fayette 2 (Connersville 1, East Connersville 1); Floyd 1 (New Albany); Fountain 10 (Attica 7); Franklin 2; Gibson 3 (Princeton 2); Grant 2 (Marion 1); Greene 2 (Lyons 1); Harrison 8; Hendricks 2 (Danville 1, Clayton 1); Henry 2 (Lewisville 1); Howard 5; Jackson 1 (Seymour); Jasper 1; Jay 1; Jennings 1; Knox 4 (Bicknell 1, Vincennes 3); Kosciusko 5 (Warsaw 4); Lake 9 (Hammond 4, Whiting 1, Miller 2); Laporte 3 (Michigan City); Madison 3 (Anderson 1, Alexandria 1); Marion 4 (Indianapolis 1—for January 1914); Martin 1; Monroe 1; Morgan 2 (Martinsville 1); Newton 1; Owen 1 (Spencer); Perry 1; Porter 1 (Hebron); Posey 3 (Mt. Vernon); Pulaski 2 (Kewanna); Randolph 1; Ripley 5; Spencer 3; Steuben 1 (Angola for 1907); St. Joseph 5 (South Bend 3); Sullivan 2; Switzerland 1; Tippecanoe 1; Tipton 1; Vanderburg 10 (Evansville 9); Vermillion 25 (Clinton 20—3 for 1916, Universal 1; Fairview Park 1); Vigo 6 (Terre Haute 5, W. Terre Haute 1); Wabash 1; Warren 1; Warrick 7 (Booneville 1); Washington 1; Wayne 3 (Richmond); Wells 3 (Bluffton 1); White 7 (Monticello 1); Whitley 1 for 1916. Total 212.

### DEATHS.

Allen 1 (New Haven); Benton 2; Clark 1 (Borden); Clay 1; Daviess 1; Decatur 2 (Newpoint 1); Dekalb 1; Fountain 1 (Mellott); Gibson 4; Hancock 1; Harrison 1 (Corydon); Jefferson 3; Knox 1; Lake 1 (Griffith); Laporte 1; Madison 1; Marion 2 (Indianapolis); Marshall 1 (Bremen); Miami 2; Morgan 1; Noble 1; Porter 1; Posey 4 (Mt. Vernon 2, New Harmony 1); Putnam 1 (Greencastle); Randolph 4 (Ridgeville 1); Ripley 6; Sullivan 1; Tippecanoe 1 (Lafayette); Tipton 1; Warren 2; Warrick 1; White 3; Whitley 1. Total 56.

**REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, INDIANA STATE BOARD OF HEALTH, FOR JULY, 1917.**

During the month of July 76 samples of foods were analyzed of which 52 were classed as legal and 24 illegal.

Of the 38 samples of milk analyzed, 27 were classed as legal and 11 illegal being below standard or containing visible dirt.

One of the 7 samples of vinegar analyzed was low in acidity and was classed as illegal.

Two of the 4 cream samples were below standard and was classed as illegal.

Three of the ten samples of ice cream analyzed were below standard and therefore illegal.

Seventeen samples of drugs were analyzed during the month.

**ANALYSES OF FOODS AND DRUGS DURING THE MONTH OF JULY, 1917.**

CLASSIFICATION.	Number Legal.	Number Illegal.	Total
<b>FOOD.</b>			
Beverages—			
Cider.....		5	5
Sodas.....	3		3
Temperance Beers.....	1		1
Hamburger.....		1	1
Maple Syrup.....	1		1
Milk Products—			
Cheese.....	2		2
Cream.....	2	2	4
Ice Cream.....	7	3	10
Milk.....	27	11	38
Milk, Mother's.....	2		2
Milk, Condensed.....	1		1
Vinegar.....	6	1	7
<b>Total.....</b>	<b>52</b>	<b>24</b>	<b>76</b>
<b>DRUGS.</b>			
Linseed Oil.....	2		2
Soap.....	4		4
Temperance Beers.....		1	1
Patent Medicines.....			3
Miscellaneous.....			7
<b>Total.....</b>	<b>6</b>	<b>1</b>	<b>17</b>

**INSPECTORS' REPORTS FOR THE MONTH OF JULY, 1917.**

Five hundred and ninety inspections of food producing and distributing establishments were reported during the month of July. This small number is due to the fact that only two of the seven inspectors reported inspection work. The entire time of the inspectors during the month has been given over to special work created by the enactment of the Hoover Food Bill.

Of the 590 establishments visited two were reported in excellent condition, 402 good, 168 fair, 17 poor and one bad.

Two hundred and eighteen grocery stores were visited. Of this number 166 were rated good, 48 fair and 4 poor.

Of the 57 meat markets inspected 42 were classed as good and 15 as fair.

Forty-five drug stores were visited. Of this number 39 were rated good, 5 fair and one poor.

Of the one hundred and nine bakeries and confectioneries visited 68 were classed as good, 36 fair, 4 poor and one bad.

Eighty-nine hotels and restaurants were inspected. One was found in excellent condition, 45 good, 40 fair and 3 poor.

Seventeen cream stations were visited during the month. Of this number 5 were rated good, 11 fair and one poor.

Five fish markets, 4 flour mills and one fruit store were visited and found to be in good condition.

One of the 23 ice cream parlors was rated excellent, 13 good, 8 fair and one poor.

Three wholesale groceries and three commission houses were visited and found in good condition.

Eight poultry houses were visited during the month. Of this number two were rated good, 3 fair and 3 poor.

During the month of July, 30 condemnation notices were issued either because of unsanitary conditions or improper construction of buildings.

Only one prosecution was filed during the month. One of the Five and Ten Cent stores was prosecuted for using drinking glasses at the soda fountain that were not properly cleaned. The proprietor was fined \$22.50.

**SUMMARY OF INSPECTIONS MADE DURING THE MONTH OF JULY, 1917.**

INSPECTIONS.	No. Inspected.	No. Excl-ent.	No. Good.	No. Fair.	No. Poor.	No. Bad.
Groceries.....	218	0	166	48	4	0
Meat Markets.....	57	0	42	15	0	0
Drug Stores.....	45	0	38	5	1	0
Bakeries and Confectioneries.....	109	0	68	36	4	1
Hotels and Restaurants.....	83	1	45	40	3	0
Bottling Works.....	5	0	4	1	0	0
Cream Stations.....	17	0	5	11	1	0
Fish Markets.....	5	0	3	0	0	0
Flour Mills.....	4	0	4	0	0	0
Fruit Stores.....	1	0	1	0	0	0
Ice Cream Factories.....	3	0	2	1	0	0
Ice Cream Parlors.....	23	1	13	8	1	0
Poultry Houses.....	8	0	2	3	3	0
Wholesale Groceries.....	3	0	3	0	0	0
Commission Houses.....	3	0	3	0	0	0
<b>Total.....</b>	<b>590</b>	<b>2</b>	<b>402</b>	<b>168</b>	<b>17</b>	<b>1</b>

**NOTICES OF CONDEMNATION DURING THE MONTH OF JULY, 1917.**

CLASSIFICATION.	Reasons For		Total.
	Unsanitary Conditions.	Improper Construction.	
Bakeries.....	2	1	2
Bottling Works.....	1	1	1
Confectioneries.....	8	3	8
Drug Stores.....	1	1	1
Groceries.....	7	3	7
Hotels.....	1	1	1
Ice Cream Factories.....	1	1	1
Meat Markets.....	2	1	2
Restaurants.....	7	4	7
<b>Total.....</b>	<b>30</b>	<b>16</b>	<b>30</b>

**REPORT OF THE BACTERIOLOGICAL LABORATORY INDIANA STATE BOARD OF HEALTH, FOR JULY, 1917.**

**Will Shimer, M. D., Superintendent.**

Sputum for tubercle bacilli—		
Positive.....	143	
Negative.....	369	
		512
Urine for tubercle bacilli—		
Positive.....	1	
Negative.....	10	
		11
Pus for tubercle bacilli—		
Negative.....		3
Feces for tubercle bacilli—		
Suspicious.....	1	
Negative.....	2	
		3

Widal tests for typhoid fever—		
Positive.....	14	
Negative.....	102	
	—	116
Widal tests for Paratyphoid fever "A"—		
Negative.....		115
Widal tests for paratyphoid fever "B"—		
Positive.....	1	
Negative.....	114	
	—	115
Throat cultures for diphtheria bacilli—		
Positive.....	46	
Negative.....	137	
Suspicious.....	14	
Unsatisfactory.....	5	
Brains for rabies—		202
Dogs—		
Positive.....	5	
Negative.....	10	
Rotten.....	2	
Cows—		
Negative.....	2	
	—	19
Blood for counts.....		22
Blood for malaria plasmodia—		
Positive.....	2	
Negative.....	21	
	—	23
Pus for gonococci—		
Females—		
Positive.....	4	
Suspicious.....	5	
Negative.....	27	
Males—		
Positive.....	8	
Suspicious.....	1	
Negative.....	16	
Sex not given—		
Negative.....	2	
	—	63
Pus miscellaneous.....		2
Pathological tissues—		
Carcinoma—		
Carcinoma of cheek.....	1	
Carcinoma of lip.....	1	
Carcinoma of chin.....	1	
Carcinoma of breast.....	4	
Carcinoma of right side.....	1	
Carcinoma of rectum.....	1	
Sarcoma—		
Sarcoma of liver.....	1	
Miscellaneous tissues.....	24	
Gasserian ganglions.....	12	
	—	46
Urine or chemical analysis.....		96
Feces for typhoid bacilli negative.....	1	
Feces miscellaneous.....	4	
Feces for tape worm, negative.....	1	
Cerebro-spinal fluid.....	2	
Stomach contents.....	1	
Court plaster for tetanus bacilli negative.....	2	
	—	48
Total number of examinations made.....	1,858	
Guinea pigs inoculated for rabies, negative.....	7	
Doses of antityphoid vaccine prepared and sent out.....	378	

OUTFITS PREPARED AND SENT OUT DURING  
JULY, 1917.

Tuberculosis.....	486
Diphtheria.....	145
Diphtheria epidemics.....	50
Widals.....	136
Gonococci.....	80
Blood counts.....	40
Malaria.....	22
	—
Total number of outfits prepared and sent out.....	959

PATIENTS TAKING "PASTEUR" TREATMENT JULY, 1917.

Name.	Town.	County.	Age.	Sex.	Treat- ment began.	Treat- ment finished.
H. C. Faries.....	Oakland City.....	Gibson.....	46	M	7- 1-17	7-14-17
John T. Mason.....	Oakland City.....	Gibson.....	20	M	7- 1-17	7-14-17
Ben. Travers.....	Indianapolis.....	Marion.....	2 1/2	yr. M	7- 3-17	7-20-17
Cecil Shourds.....	Rockport.....	Spencer.....	17	F	7- 7-17	7-24-17
Erma Shourds.....	Rockport.....	Spencer.....	9	F	7- 7-17	7-24-17
Francis Suber.....	Indianapolis.....	Marion.....	4	M	7-28-17	8- 2-17
Velma Simpson.....	Clinton.....	Vermillion.....	10	F	7-27-17	8- 9-17
Gladys Sare.....	Bloomington.....	Monroe.....	5	F	7-30-17	8-12-17

THINGS OF INTEREST FROM THE LABORATORY

From time to time various things arouse public apprehension concerning dangerous things about which they have no suspicion.

The present uneasiness concerning German spies has made people fear everything of uncertain origin. The sale of court plaster as a blind by crooked beggars has been common practice for years on the streets of many larger cities of the United States of America. Enormous quantities of this stuff has been sold without any suspicion by the buyers that putting the dirty cloth on a clean wound was dangerous practice.

In manufacturing court plaster no measures are taken to make it aseptic and no effort is made to keep it clean while it is on sale.

The tetanus bacillus is a normal inhabitant of the horses' digestive tract and it is therefore a common bacillus in horse manure and the dust blown about the city streets so that any exposure of an adhesive surface on a windy street will catch a large number of bacteria, some of which may be the tetanus bacilli.

Bacteriological examination of a large number of samples of court plaster show them to contain large numbers of bacteria mostly hay bacilli, also some molds and yeasts.

Now if this septic court plaster is applied to a clean wound, pus will form and, the plaster forming an impervious covering, the wound will tend to become anaerobic, thus favoring the growth of the tetanus bacillus which is an anaerobic, spore bearing bacillus.

Court plaster is a relic of the days of laudable pus and listerism, that believed that air and not dirty fingers or dirty dressings was the common source of infected wounds.

People should be taught that it is better to leave a wound exposed to air than to cover it with a dirty covering and more particularly an infected impervious material like court plaster.

## RELATION OF THE HEALTH OFFICER TO MILK SUPPLIES IN SMALL MUNICIPALITIES

B. R. Wakeman, M. D., Sanitary Supervisor, New York State Department of Health.

Possible improvement in the character of milk supplies in small municipalities is in direct ratio to the spirit with which the health officer undertakes his duties. There is a saying to the effect that, "He who never does any more than he gets paid for, never gets paid for any more than he does." If a health officer is not of that temperament which undertakes the work without regard to the possible remuneration, he will find his task irksome and not to his taste.

There is a certain community in New York State in which there are but four physicians. The health officer of this municipality has convinced his local board of health that his services are worth \$1,200 a year. He also has a contingent fund of \$1,000 a year at his disposal for use in the event of epidemics and for such other purposes as the health officer believes necessary. This instance is cited only to prove the contention that boards of health will pay good salaries when they are convinced that they are getting value received.

What may be called the first requirement for a health officer desiring to improve the milk supply of his community is, therefore, a disposition to heartily enter into his work without measuring the extent of his proposed activities by the salary he is at the moment receiving. The second requirement is a thorough knowledge of the milk problem, and the third is the successful undertaking of the campaign of education so that producer, dealer and consumer will appreciate the desirability and necessity of a better milk supply.

Some health officers may not have access to libraries containing the standard works on milk problems, but for a relatively small expenditure it is possible to secure such volumes as will enable him to acquire the special information needed under ordinary conditions. As of first importance I would select, "The Milk Question," by M. J. Rosenau. This volume comprises lectures delivered in 1912 at Northwestern University and is written in such lucid style that it can not fail to be of inestimable value to the man who has time only for hasty reading. A second publication is, "Milk and Its Relation to The Public Health." This is bulletin No. 56 of the Federal Hygienic Laboratory and is comprehensive in scope. Other publications which can be secured at little or no cost are Bulletin No. 82, "Bovine Tuberculosis," issued by the New York State Department of Agriculture; Circular No. 10, "Problems of the Milk Producer," issued by the New York State College of Agriculture; Farm Bulletin No. 602, "Production of Clean Milk," issued by the Federal Department of Agriculture; Farmers' Bulletin No. 363, "The Use of Milk as a Food," issued by the Federal Department of Agriculture; Farmers' Bulletin No. 684, "The Plan for a Smaller Dairy House," issued by the Federal Department of Agriculture, and the following four bulletins of the New York State Experiment Station at Geneva; No. 326, "Covered Milk Pails Mean Cleaner Milk," No. 337, "How a Small City Improved Its Milk Supply," No. 365, "Some Inessential Dairy Refinements," No. 398, "Do Low Scores Always Mean Pure Milk."

The most important part of the task is the interesting of the people of the community in a better milk supply. This is not so difficult as might seem at first thought. Almost every municipality has at least one club, made up of representative women of the community. It may be a Literary Club, a Parent-Teachers Club, a Civic Club or some other such organization. The health officer may interview the

president or secretary of the club and ask the members to study the milk question. He may supply copies of State Department of Health pamphlets or other publications regarding milk, ask the club to study the subject systematically, and offer to address them on the subject. Within a short time the club members will wish to get the viewpoint of the dairyman and distributor, and the way is then opened for a discussion of the subject from all sides.

The State Department of Health has a lantern slide lecture on the subject of "Clean and Safe Milk," and this may be secured, together with a stereopticon, and lecture given in the town hall or some other community center. If there is a motion picture theater in the community, the State Department of Health will loan a copy of its motion picture film on milk, "The Trump Card." The State Department of Health also will co-operate in sending out a traveling exhibit on the subject of milk, which may be displayed in the town hall, the village school, or some other advantageous place in connection with lectures and addresses on the subject.

In connection with the subject of exhibits, it may be noted that one of the most effective ways in which to convince a community of its poor milk supply is to make up a chart showing the good and bad dairies. This can be done at almost no expense. From the United States Geological Survey at Washington may be secured contour maps of practically all section of New York State. These are printed on a scale large enough so that pins can be placed showing the location of every farm. White pins for the good dairies and red pins for the poor dairies bring out a striking story which can not fail to attract attention and study.

It is the utmost importance that meetings or conferences be accompanied by full and frank discussion. It is of little value except in the first stage of the campaign to go before an organization and conduct a meeting in which there is nothing more than a statement of conditions. Nothing so stimulates discussion as to have someone disagree with the ideas expressed. Nothing is lost by possible adverse criticism on the part of dealers or producers for, knowing that your "cause is just," you can always provide a clinching argument to refute an untrue assertion.

At this time, with so much interest in conservation of food supplies, it is of value to introduce data regarding the food value of milk. Comparisons of the food value of a quart of milk as compared with beef, eggs, chicken or other food-stuffs is of importance. The fact that a milk supply is never completely safeguarded until it is pasteurized must not be lost sight of, for with the development of public sentiment in New York State in favor of pasteurization, it will not be long before even the small communities will have pasteurization plants. In one municipality of only slightly more than 2,500 population, for example, there are now two pasteurization plants, and fully ninety-five per cent of the milk sold in the community is pasteurized.

After the public has been stimulated to a certain desire for better milk and is so thoroughly convinced that it will not grudge the small increase of price necessary to guarantee safety, the task is to convince the producer and dealer that it is to their financial and moral interest to supply the same. It is, of course, possible to exercise police power by the passage of special ordinances and regulations, but the health officer should consider these only as a means to be used as the last resort. Education of an co-operation with the producers and dealers will accomplish far more than any set of ordinances ever passed. The health officer who feels that he has a concrete demand for pasteurized milk can encourage the forming of a co-operative company and installation of

pasteurization apparatus. In this, as in all matters, the State Department of Health is ready and willing to lend its advice and counsel. In some instances where the communities are too small to support a pasteurization plant, it may be possible to arrange so that the pasteurized product can be supplied from a nearby community.

The most important point in the whole scheme is that the public be taken fully into the confidence of the health officer. If the people do not know what the health officer is trying to do, or have to hazard a guess as to what he wishes to accomplish, his efforts will meet with failure. In many of the larger cities of the state bacterial counts are made a matter of public record and interest by publication in local newspapers. In the same way the local health officer can make interesting reading by publishing the scores of dairies in his community. From time to time he can compile averages and similar data showing the improvement or decline in the standards of the dairies. A health officer in a small village in Wyoming county has improved his local milk supply wholly through the publication of "Health Hints" in his weekly paper. If there is any one paper which is read from beginning to end it is the country newspaper, and if the health officer writes what the newspaperman calls "good live stuff," it will be read and discussed by every member of the community, the producer, dealer and consumer.

Some health officers have induced their boards to appropriate small sums, oftentimes not more than \$5, with which has been bought space in the local paper. This insures regular publication and removes from the mind of the editor any suspicion that he is being "used" in the campaign.

Improvement of the milk supply in a community can not be effected in a day or a week. It is the constant dropping of the water that wears away the stone, and not the spring flood, which merely moves the stone to another place. So it is in campaigns for better milk supply. The sporadic effort conducted upon "brass bank" methods merely excites a little unusual comment but has little lasting effect. The constant advocacy of simple methods, however, usually results in the action every health officer interested in better conditions hopes to secure.

**HOOK WORM AND MILITARY SERVICE:** Dr. Charles Wardell Stiles, the scientist who pointed out the prevalence of hook worm in the south, and on account of which discovery Mr. Rockefeller gave a million dollars for the abatement of the trouble, has found that hook worm frequently stands in the way of efficient war service. In a recent article he says: "A recruit was suspected of trying to shirk his duty and the commanding officer placed him in confinement for discipline. The man claimed he was not feeling well and the Lieutenant as a matter of justice to the recruit and protection to himself, requested me to pass upon the case medically. The diagnosis of light hook worm infection was made upon the basis of symptoms and was immediately confirmed microscopically. Treatment was given and the patient promptly gained about eight pounds in weight." Afterwards this young man who had shirked his duty, proved to be a good soldier. There are several other cases much like this reported by Dr. Stiles. And the lesson is that hygiene and medicine are great roads to better morals, greater strength and higher efficiency.

**THE GARY GARBAGE ORDINANCE** has been violated. In that city ordinances are passed to be enforced, and the result is that City Sanitary Inspector Porter filed 28 affidavits

in the city court against as many Gary householders, charging them with violation of the city garbage ordinance. The said householders had failed to provide themselves with metal garbage cans and were guilty of throwing garbage and other household refuse into alleys and backyards. Inspector Porter announced in the Gary Tribune he expected to file fifty other affidavits the following day.

**CHARLES G. SEFRIT** edited the following message on a motograph in Indianapolis: "Produce more. Buy, sell, build, spend more. Stinginess is not thrift. Keep things moving." Unless the people make money they cannot pay war taxes and buy liberty bonds. We think this is a message worth while.

**NORTH CAROLINA IS SURELY ALIVE.** We know the reason, and it is found in the highly intelligent, active secretary, Dr. William S. Rankin. Dr. Rankin and the North Carolina State Board of Health secured from the last legislature of their state, the following legislation: A state wide quarantine law; a medical inspection of schools law; a rural sanitation law; a law for the prevention of blindness; a hotel inspection law; and a law requiring inspection and hygienic care of prisons and prisoners. The law for the medical inspection of school children is state-wide in its application.

**WOUND DIPHTHERIA:** The weekly bulletin of the Department of Health of New York reports that cultures taken from a wound in the hand of a patient, and examined in the diagnostic laboratory, has been reported as showing the presence of Klebs-Loeffler bacilli. "Wound diphtheria," says the bulletin, is not common, but its occurrence should be kept in mind, since the toxic effects of the disease upon the individual are frequently quite as severe as when the infection is on the tonsil.

**PATRIOTISM:** It is the patriotic duty of all public officials, of all parents, or all workers, and of all teachers to keep themselves well and to make every effort to help others keep well.

**COTTAGE CHEESE** is a splendid protein food. It contains a larger percentage of proteid than most meats, and furnishes this important building material at a lower cost. Every pound of cottage cheese contains about one-fifth of a pound of protein, nearly all of which is digestible. Meats have much waste, such as bone, gristle, and other inedible material. Cottage cheese is an excellent source of energy and is cheaper than most meats at present prices.

**INACTIVE TUBERCULOSIS** is frequently rendered active by the physical and mental training and exposure of modern warfare. This fact is plainly set forth in the report of Dr. Herman Biggs, of his experiences with tuberculosis in France. It is reported that 150,000 French soldiers have been released from service on account of tuberculosis. The disease was inactive when they enlisted but quickly became active under physical and mental strain and exposure in trenches. The National Association for the Study and

Prevention of Tuberculosis, at its last meeting in May, passed special resolutions upon this subject. The suffering and loss from tuberculosis among the English soldiers is probably about one-fourth what it is with the French. What the loss is among German soldiers is unknown. France has never carried a campaign on against tuberculosis. In England the outdoor life is constantly preached and practiced. In Germany tuberculosis has been fought for many years. France is paying dearly for not having carried on a vigorous campaign against the great White Plague.

**VENEREAL DISEASES** must be reported in New Jersey. The last New Jersey legislature passed a law which requires physicians, superintendents of institutions, nurses and others who treat persons suffering from venereal diseases, to report all cases of this disease. The act contains some novel provisions, the principal one being the requirement that reports shall be made directly to the state department of health instead of to local boards. It is probable this requirement was made in order to secure secrecy and privacy in the matter, and not have venereal diseases recorded in localities. Of course, many physicians made strenuous objections to compulsory reporting of venereal diseases. Nevertheless, the law was passed and the New Jersey State Board of Health says it will enforce the same.

**ALL TIME HEALTH OFFICERS** are permitted by law in New Jersey. A municipality in that state, having a population of about 8,000 wishes to employ a full time health officer. The salary paid will not be less than \$1,500 per annum, depending upon the experience and qualifications of the appointee. The advertisement requests that "persons eligible to appointment and desiring to make application for the position, may forward their application to the Director of Health, Trenton, New Jersey.

### RECIPES FOR KILLING FLIES

The United State Government makes the following suggestion for the destruction of house flies: Formaldehyde and sodium salicylate are the two best fly poisons. Both are superior to arsenic. They have their advantages for household use. They are not a poison to children: they are convenient to handle, their dilutions are simple and they attract the flies.

*Preparation of Solutions.*—A formaldehyde solution of approximately the correct strength may be made by adding three teaspoonfuls of the concentrated formaldehyde solution, commercially known as formalin, to a pint of water. Similarly, the proper concentration of sodium salicylate may be obtained by dissolving 3 teaspoonfuls of the pure chemical (a powder) to a pint of water.

*Containers for Solutions.*—A fairly large sized drinking glass has been found convenient for automatically keeping the solution always available for flies to drink. This glass is filled or partially filled with the solution. A saucer, or small plate, in which is placed a piece of white blotting paper cut the size of the dish, is put bottom up over the

glass. The whole is then quickly inverted, a match placed under the edge of the glass, and the container is ready for use. As the solution dries out of the saucer the liquid seal at the edge of the glass is broken and more liquid flows into the lower receptacle. Thus the paper is always kept moist.

**A GOOD BREAKFAST FOOD.** A splendid breakfast food may be made out of stale bread, scraps of bread and any waste fragments which are found upon the table. Stale cake or cereal preparations of any kind may be made into breakfast food as follows: Place the fragments of bread, cake, corn bread, biscuits, etc., in the oven. Dry them thoroughly. Brown them to some degree. Grind in a kitchen grinder or roll with rolling pin. Cook the product the same as you would oat meal or any other cereal and serve with good rich milk and sugar. In this connection let us say that we make a mistake in eating cereal with cream. Cream is rich and pleases the sense of taste, but cream does not contain milk sugar, cheese, valuable mineral matters of the milk, nor does it contain the phospho-lipins. When, therefore, we eat the cream and throw away the skimmed milk or feed it to hogs, we are depriving ourselves of valuable food material. Cereals should always be eaten with rich milk, that is milk which contains at least  $3\frac{1}{2}$  or 4 per cent of cream.

### "CURED" SYPHILIS.

Warthin (Am. Jour. Med. Science, 1916, CLII, p. 508). Warthin believes that our notions regarding the curability of syphilis must be revised in the light of recent pathologic findings. Out of forty-one cases, in which he found the spirochetes at autopsy, eleven had been regarded clinically as adequately treated and cured. In twenty-five cases a diagnosis of syphilitic infection had been excluded clinically because of the absence of symptoms and denial of previous infection:

Warthin believes that the heart and aorta of every latent syphilitic are involved in the infection, and that from the standpoint of life insurance latent syphilis becomes a medical and sociological factor of the greatest importance. Our present-day treatment seems to succeed only in rendering the infection latent rather than curing it. Clinical cures may not be cures at all, as shown by his autopsies. The absence of all symptoms, of all history of infection, and of a Wassermann reaction do not suffice to exclude the presence of a latent syphilis.—Interstate Medical Journal.

**THE MEDICAL BULLETIN OF THE LAWRENCE COUNTY MEDICAL SOCIETY** ventures the following remarks:

The average man will give an attorney from three to five thousand dollars, together with a life-time of praise, to keep him out of the penitentiary for from two to ten years, yet at the same time will raise a phosphorescent glow and a kick that can be heard around the world if a doctor charges him fifty or a hundred dollars to keep him out of Hell for a life-time. We are the only people under God's ethereal tent today who keep open shop for twenty-four hours a day, for three hundred and sixty-five days each year. We are also the only laborers who keep on working for people who do not pay.



**FOURTEEN PERSONS ARRESTED** for failure to supply garbage cans is the record we have from Gary. The city council passed a garbage ordinance and required the citizens to keep their garbage in a sanitary manner. Fourteen persons were found in one day who had refused to obey the commands of the law. None were fined but Judge Dunn in his discretion warned them that if they did not obey the ordinance and appeared before him again they would be fined the full limit. The health board has issued 650 notices to property owners ordering garbage containers. Judge Dunn praised the work of the health department and pointed out that Gary has been free from disease epidemics although surrounded by serious outbreaks.

**THE HEALTH INSPECTORS' ASSOCIATION** of Lake County held a meeting in Valparaiso, recently. Representatives were present from all the cities and towns and the county. Reports of the work done in each health district were read and discussed. The subject of milk pasteurization was considered. Mr. Hedrich, the all time health officer of the East Chicago Health Department reported on the work of his Board in suppressing a milk-born diphtheria epidemic which originated from a bottler in a dairy who was a diphtheria carrier.

**TOBACCO vs. EFFICIENCY.** The following experiment conducted on twelve men, six were smokers and six were non-smokers, shows clearly how tobacco works against efficiency. The twelve men spoken of were all baseball players and the object of the experiment was to test the effect of smoking on the players accuracy in throwing at a target. Official league base balls were used. The target was a padded block five feet square, with a bulls eye one foot in diameter, surrounded by concentric circles six inches apart. This target was placed at such height that the bulls eye stood at the average height of a mans shoulder. The distance of the throw was sixty feet. Three tests were made on each player, and were named Test A, Test B, and Test C. Before Test A was made, one cigar was smoked. Before Test B, two were smoked. Before Test C, no smoking. All tests were made upon separate days. Here are the results. In Test A, before which one cigar was smoked, the regular smoker showed a loss of eleven percent in accuracy. In Test A, during which one cigar was smoked by the non-smokers, showed a loss of thirteen percent in accuracy. In Test B, during which two cigars were smoked, the regular smoker showed a loss of eleven percent in accuracy. In Test B, after smoking two cigars the non-smoker showed a loss of eighteen percent in accuracy. In Test C, in which the smokers did not smoke, they showed an increase in accuracy of nine percent. In test C, the non-smokers showed an increased efficiency of ten percent. Those who have minds that are open and who will stop to think seriously of the above facts, cannot help but arrive at the conclusion that the use of tobacco is one of the degenerating influences now at work upon the human race. That the human race is degenerating and getting weaker is amply proven by scientific evidence.

**DR. ALFRED HENRY,** President of the Indiana Society for the Prevention of Tuberculosis, in a recent address said:

We hear a great deal about incipient tuberculosis. The term carries with it the idea of the beginning of the disease. This should be better understood. No doctor can diagnose beginning tuberculosis, because there are no pronounced symptoms. For instance, there is no appreciable loss of weight, no persistent afternoon temperature, no characteristic tired feeling, no positive sputum, and perhaps no definite physical signs. The disease must be advanced before these

symptoms or any one of them is present. Many members of our profession congratulate themselves on having diagnosed a case of beginning tuberculosis by finding positive sputum. Little do they know that such a case has had active trouble for months and maybe for years. Any one can make such a diagnosis. But suppose the sputum is negative. Then the real work begins. The suspected case must not be said to be non-tuberculosis. It must be diagnosed by other factors and they are many. Here are some of them:

- Loss of weight in a definite time.
- Persistent afternoon temperature.
- Cough dating to some more or less definite time.
- Loss of appetite.
- Tired feeling of a more or less certain duration.
- History of a more or less recent attack of pneumonia, measles, grip, diphtheria, bronchitis, joint or bone disease, pleurisy, scrofula, syphilis, gastro-intestinal disease, serious injury or operation.
- Family history.
- Association with tuberculous persons.
- Suspicious previous or present dwelling.
- Occupation.
- Physical examination.
- Tuberculin reaction.
- X-ray.

**CHILD WELFARE WORK.** In New York City the Bureau of Child Hygiene employs more than 300 nurses, 187 medical inspectors, 10 dentists, 2 surgeons, 58 assistant nurses, and 100 men and women other ranks. It operates 59 infant health stations for the feeding and medical supervision of babies and instruction of mothers. It co-operates with several score of nurseries, clinics and hospitals. In recent years its work has been aided by the school lunch committee. With the aid of a municipal subsidy this committee sold over two million pennies' worth of food last year to 10,000 children. As a result of all this work the infant death rate fell from 200 per 1,000 in 1898 to 125 in 1910 and 93 in 1916. The death rate among children under 5 years has undergone a corresponding decrease. This certainly is good work. If Indiana ever rises to the importance of caring for her children in an adequate and practical way, then the state will begin to go forward as never before.

**VALSH STARCHVITCH,** was born in Indianapolis January 2, 1909. This is his statement. Now the State Board of Health has a letter from a truant officer of Farrel, Pennsylvania, asking for a transcript of the birth certificate of Valsch Starchvitch, so that the child may be legally admitted to school. The attending physician or midwife failed to make out a birth certificate, and now there is no way of giving legal proof of the date of the child's birth. Just why the attending doctor or midwife chose to strike the helpless child such a blow we are not able to tell. Physicians and midwives must learn that failure to make out a birth certificate may be a blow at the defenseless mother and child and failure is also a violation of law and a violation of obligation to medical science.

**ROXIE REESE,** was born in Henry County, September 21, 1901. Miss Reese lives at this time in North Carolina and now comes the Children's Bureau of the Department of Labor and asks for a transcript of the birth certificate of Miss Reese. This is necessary before she can accept a position which will yield her a good salary. The physician who was in attendance at her birth in Henry County did not report the birth, and therefore there is no legal record. How Miss Reese will get over this disadvantage forced upon her by the attending physician, we do not know.



CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM IMPORTANT CAUSES FOR JULY, 1917.

NORTHERN SANITARY SECTION

Total population	1,009,364
Total deaths	951
Death rate per 1,000	11.0
Pulmonary Tuberculosis, rate per 100,000	68.8
Other forms of Tuberculosis, rate per 100,000	8.1
Typhoid Fever, rate per 100,000	11.6
Diphtheria and Croup, rate per 100,000	7.0
Scarlet Fever, rate per 100,000	5.8
Measles, rate per 100,000	5.8
Whooping Cough, rate per 100,000	40.8
Lobar and Broncho-Pneumonia, rate per 100,000	67.6
Cerebro-Spinal Fever, rate per 100,000	3.5
Acute Anterior Poliomyelitis, rate per 100,000	4.6
Influenza, rate per 100,000	1.1
Puerperal Septicemia, rate per 100,000	92.1
Cancer, rate per 100,000	140.0
External causes, rate per 100,000	1.1
Smallpox, rate per 100,000	1.1

CENTRAL SANITARY SECTION

Total population	1,191,458
Total deaths	1,316
Death rate per 1,000	13.0
Pulmonary Tuberculosis, rate per 100,000	106.7
Other forms of Tuberculosis, rate per 100,000	16.8
Typhoid Fever, rate per 100,000	9.8
Diphtheria and Croup, rate per 100,000	14.8
Scarlet Fever, rate per 100,000	2.9
Measles, rate per 100,000	3.9
Whooping Cough, rate per 100,000	6.9
Lobar and Broncho-Pneumonia, rate per 100,000	36.5
Diarrhoea and Enteritis (under 2 years), rate per 100,000	66.2
Cerebro-Spinal Fever, rate per 100,000	.9
Acute Anterior Poliomyelitis, rate per 100,000	.9
Influenza, rate per 100,000	.9
Puerperal Septicemia, rate per 100,000	5.9
Cancer, rate per 100,000	85.9
External causes, rate per 100,000	132.4
Smallpox, rate per 100,000	.9

SOUTHERN SANITARY SECTION

Total population	688,793
Total deaths	652
Death rate per 1,000	11.1
Pulmonary Tuberculosis, rate per 100,000	111.1
Other forms of Tuberculosis, rate per 100,000	11.6
Typhoid Fever, rate per 100,000	20.5
Diphtheria and Croup, rate per 100,000	3.4
Scarlet Fever, rate per 100,000	3.4
Measles, rate per 100,000	5.1
Whooping Cough, rate per 100,000	20.5
Lobar and Broncho-Pneumonia, rate per 100,000	32.4
Diarrhoea and Enteritis (under 2) rate per 100,000	118.7
Cerebro-Spinal Fever, rate per 100,000	3.7
Acute Anterior Poliomyelitis, rate per 100,000	1.7
Influenza, rate per 100,000	1.7
Puerperal Septicemia, rate per 100,000	76.9
Cancer, rate per 100,000	75.2
External causes, rate per 100,000	1.4
Smallpox, rate per 100,000	1.4

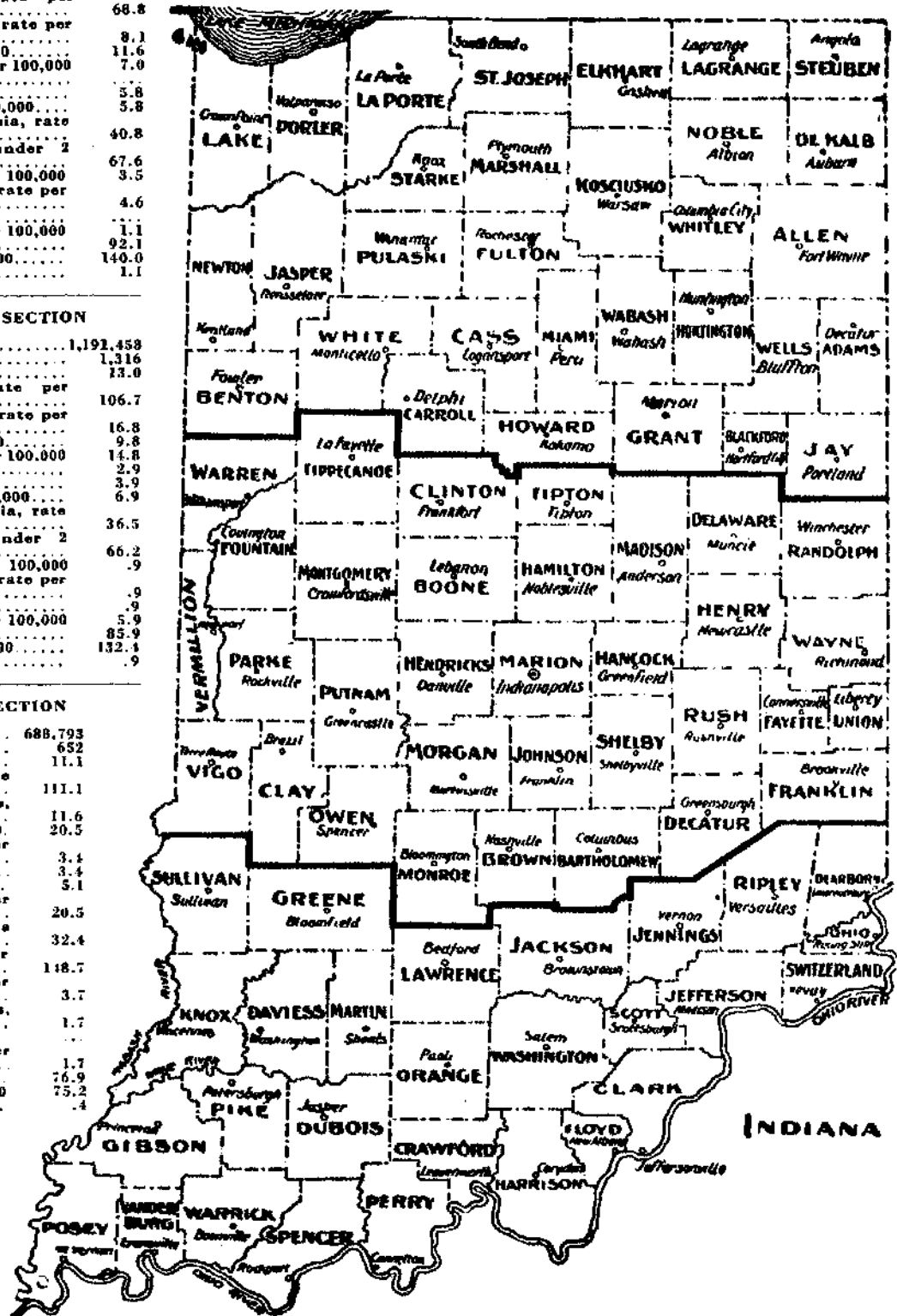


TABLE 1. Deaths in Indiana by Counties During the Month of July, 1917. (Stillbirths Excluded.)

STATE AND COUNTIES.	Population, Estimated 1917.	Total Deaths Reported for July, 1917.	Total Deaths Reported for June, 1917.	Total Deaths Reported for July, 1916.	Total Deaths Reported for the Year 1917 to Date.	Total Deaths Reported for the Year 1916 to Same Date.	Annual Death Rate per 1,000 Population.				Important Ages.					Death from Important Causes.																					
							July, 1917.	June, 1917.	July, 1916.	Rate for Year 1917 to Date.	Rate for Year 1916 to Same Date.	Under 1 Year.	1 to 4 Inclusive.	5 to 9 Inclusive.	10 to 14 Inclusive.	15 to 19 Inclusive.	20 Years and Over.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria and Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Lobar and Broncho-Pneumonia.	Diarrhea and Enteritis (under 2 years).	Cerebro-Spinal Fever.	Acute Anterior Poliomyelitis.	Influenza.	Puerperal Septicemia.	Cholera.	External Causes.	Smallpox.	Deaths in Institutions.	Deaths of Non-Residents.		
							11.9	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0
State of Indiana.	2,889,615	2,919,781	2,813,118	24,241	23,112	11.9	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	
Northern Counties.	1,009,364	951,024	1,084,836	8,178	11,012	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	
Adams.....	22,032	9	12	13	121	4.8	6.6	6.9	9.4	9.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Allen.....	104,672	4	6	8	769	12.4	10.9	10.1	12.6	12.6	12	3	3	3	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Benton.....	12,688	4	5	9	60	8.6	3.7	2.8	8.3	8.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Blackford.....	16,270	11	16	8	127	10.1	7.9	11.9	5.8	13.3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Carroll.....	17,982	19	24	7	146	13.2	4.1	16.2	4.5	13.9	3	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Cass.....	38,072	147	43	38	393	39.2	14.5	14.3	11.1	17.7	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
DeKalb.....	25,504	17	17	23	199	19.2	7.8	8.1	10.6	13.4	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Elkhart.....	51,882	53	54	44	439	40.4	11.7	12.6	10.0	14.5	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Fulton.....	16,879	18	20	25	134	15.1	12.5	14.4	17.4	13.6	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Grant.....	52,638	68	66	64	503	57.3	12.9	15.2	14.4	16.4	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Howard.....	37,017	28	23	38	317	28.5	8.9	7.5	12.3	14.7	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Huntington.....	29,450	21	39	33	227	23.2	8.3	16.1	13.2	21.3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jasper.....	13,122	5	11	10	89	10.1	4.4	10.1	9.0	11.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jay.....	25,159	23	21	27	200	19.6	10.7	10.1	12.6	13.4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Kosciusko.....	28,200	22	23	36	182	21.2	9.1	9.8	15.0	11.1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Lagrange.....	15,148	15	18	11	110	15.6	8.2	10.3	12.2	14.7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Lake.....	118,866	158	189	227	1,421	1,206	15.6	19.4	23.3	12.0	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Laporte.....	49,928	50	49	56	390	42.3	11.7	11.9	13.4	13.4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Marshall.....	24,283	19	30	22	202	18.3	9.2	15.0	10.6	14.4	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Miami.....	30,814	24	26	30	225	25.7	9.1	10.2	11.5	12.5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Newton.....	10,534	17	7	10	94	6.7	18.8	8.0	11.1	21.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Noble.....	24,981	28	22	28	231	20.9	13.1	10.7	13.3	15.9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Porter.....	20,960	14	21	26	170	15.0	7.8	12.1	14.6	13.9	1	1	1	1	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	5	10	11	83	9.7	4.4	9.1	9.9	10.7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Starke.....	10,645	10	9	8	104	11.1	11.1	10.2	8.8	8.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Steuben.....	14,550	21	10	11	123	12.7	16.9	8.3	8.9	14.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
St. Joseph.....	99,284	97	111	116	804	7.60	11.4	13.5	14.0	13.9	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Wabash.....	26,962	23	26	19	191	17.2	10.0	9.7	8.3	12.1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Wells.....	22,718	10	14	8	133	12.0	5.1	7.4	4.4	11.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
White.....	17,638	13	11	19	134	13.0	8.6	7.5	12.7	13.0	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Whitley.....	17,174	12	14	12	115	10.9	8.2	9.9	8.2	11.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Central Counties.	1,191,458	1,316,201	1,299,104	7,758	13,012	13.0	12.2	13.0	15.1	14.3	164	68	29	26	31	454	108	17	10	15	3	4	7	37	67	1	1	1	1	1	1	1	1	1	1		
Bartholomew.....	25,221	11	18	28	163	19.0	5.1	8.6	13.1	11.1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boone.....	25,273	27	26	20	196	19.4	12.5	12.5	9.3	13.3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Brown.....	7,975	9	9	10	59	5.8	13.2	13.6	14.8	12.6	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Clay.....	33,553	25	22	27	203	22.1	8.0	7.9	9.9	10.4	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Clinton.....	27,592	22	29	27	230	21.9	9.3	12.7	11.6	14.3	4	4																									

TABLE 2. Deaths in Indiana by Cities During the month of July, 1917. (Stillbirths Excluded.)

CITIES	Population, Estimated, 1917	Total Deaths Reported for July, 1917	Total Deaths Reported for June, 1917	Total Deaths Reported for July, 1916	Total Deaths Reported for the Year 1917 to date	Total Deaths Reported for the Year 1916 to same date	Annual Death Rate per 1,000 Population				Important Ages						Deaths from Important Causes																			
							July, 1917	June, 1917	July, 1916	Rate for Year 1917 to Date	Under 1 Year	1 to 4 inclusive	5 to 9 inclusive	10 to 14 inclusive	15 to 19 inclusive	25 Years and Over	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Typhoid Fever	Diphtheria and Croup	Scarlet Fever	Measles	Whooping Cough	Lobar and Bronchopneumonia	Diarrhea and Enteritis (under 2 years)	Cerebro-spinal Fever	Acute Anterior Polyomyelitis	Influenza	Psittacosis	Cancer	External Causes	Smallpox	Deaths in Institutions	Deaths of Non-Residents		
							July, 1917	June, 1917	July, 1916	Rate for Year 1917 to Date	Under 1 Year	1 to 4 inclusive	5 to 9 inclusive	10 to 14 inclusive	15 to 19 inclusive	25 Years and Over	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Typhoid Fever	Diphtheria and Croup	Scarlet Fever	Measles	Whooping Cough	Lobar and Bronchopneumonia	Diarrhea and Enteritis (under 2 years)	Cerebro-spinal Fever	Acute Anterior Polyomyelitis	Influenza	Psittacosis	Cancer	External Causes	Smallpox	Deaths in Institutions	Deaths of Non-Residents		
<b>Cities of the First Class, Population 100,000 and over.</b>	272,338	363	335	335	2,793	2,588	15.6	14.9	14.8	17.6	16.7	49	16	8	13	13	96	36	9	2	8	2	2	1	15	25										
Indianapolis.....	272,338	*363	335	335	2,793	2,588	15.6	14.9	14.8	17.6	16.7	49	16	8	13	13	96	36	9	2	8	2	2	1	15	25										
<b>Cities of the Second Class, Population 45,000 to 100,000.</b>	291,031	294	314	348	2,437	2,324	11.8	13.1	14.5	14.5	14.1	56	10	5	11	14	76	19	2	4	1	1	1	5	26	2										
Evansville.....	77,531	89	87	113	754	651	13.4	13.5	18.4	17.7	14.5	28	4	2	3	3	18	5	2	1	1	1	1	4	15	1										
Fort Wayne.....	77,107	88	70	62	595	564	14.6	11.2	9.9	9.1	6.3	10	3	2	3	3	26	2	1	1	1	1	1	5	5	1										
Terre Haute.....	71,045	55	82	93	553	586	9.0	14.0	15.9	13.3	14.5	9	2	2	3	3	12	2	2	2	2	2	2	1	1	1										
South Bend.....	65,348	62	75	80	535	519	9.4	11.7	14.8	14.0	14.0	10	1	1	5	1	14	5	5	2	2	2	2	1	1	1										
<b>Cities of the Third Class, Population 20,000 to 45,000.</b>	311,158	413	381	445	3,334	2,909	15.6	14.1	17.2	18.4	16.4	81	42	13	9	12	96	22	3	7	4	3	4	6	25	45	1	5	1	1	23	63	15	3		
Gary.....	34,802	67	70	82	477	337	22.6	24.4	28.6	23.5	17.1	21	12	3	3	3	3	6	1	2	2	1	3	3	17	17										
East Chicago.....	28,506	40	41	51	338	294	16.5	17.5	22.2	32.0	41.8	13	9	3	3	1	1	1	1	1	1	1	1	1	16	9										
Hammond.....	26,049	31	40	40	335	313	14.0	18.6	18.7	22.2	12.1	12	3	2	1	1	1	1	1	1	1	1	1	1	4	4										
Muncie.....	25,841	32	30	27	246	182	14.5	14.1	12.4	16.3	12.2	3	3	1	1	1	10	2	2	2	2	2	2	2	2	2										
Richmond.....	24,778	42	19	31	233	214	19.9	9.3	15.0	16.1	15.0	5	2	1	1	1	18	4	4	1	1	1	1	2	2	2										
Anderson.....	23,856	38	19	13	259	205	18.7	9.6	6.4	18.6	14.9	6	6	4	4	4	9	4	4	1	1	1	1	1	1	1										
Elkhart.....	21,736	24	19	19	200	170	12.9	10.6	10.5	15.8	13.7	4	4	1	1	1	9	1	1	1	1	1	1	1	1	1										
Michigan City.....	21,529	18	18	26	160	170	9.8	10.1	15.0	12.8	13.8	4	4	1	1	1	2	2	1	1	1	1	1	1	1	1										
Lafayette.....	21,257	39	24	41	254	238	21.6	13.7	22.2	22.0	19.3	5	2	2	2	1	16	3	1	1	1	1	1	1	1	1										
Kokomo.....	20,850	30	14	23	202	179	11.2	8.1	13.4	16.6	15.2	5	2	2	2	1	8	2	2	2	2	2	2	2	2	2										
Logansport.....	20,754	21	19	21	174	205	16.9	11.1	12.0	14.4	14.7	4	4	2	2	2	5	2	2	2	2	2	2	2	2	2										
New Albany.....	20,629	20	26	41	261	195	11.4	15.3	23.3	42.1	76.2	4	2	2	2	2	11	2	2	2	2	2	2	2	2	2										
Marion.....	20,571	21	22	30	194	208	12.0	13.0	17.7	31.6	21.7	2	2	1	1	1	8	2	2	2	2	2	2	2	2	2										
<b>Cities of the Fourth Class, Population 10,000 to 20,000.</b>	155,949	151	176	172	1,348	1,219	11.4	13.7	13.3	14.8	13.6	26	11	4	2	4	43	16	3	1	1	1	1	1	9	21										
Vincennes.....	17,679	17	26	28	175	159	11.3	17.8	19.2	21.7	15.8	2	3	1	1	1	1	2	2	2	2	2	2	2	3	3										
Mishawaka.....	15,678	13	12	15	98	99	9.7	9.3	11.7	10.6	11.1	5	1	1	1	1	2	1	1	1	1	1	1	1	1	1										
Peru.....	13,240	10	16	10	108	100	8.8	14.7	9.0	14.0	13.2	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1										
Laporte.....	12,607	14	18	13	124	108	13.0	17.3	12.5	16.8	15.1	1	1	1	1	1	9	1	1	1	1	1	1	1	1	1										
New Castle.....	11,862	18	8	19	135	85	17.8	8.1	19.7	19.5	12.9	3	3	1	1	1	6	1	1	1	1	1	1	1	1	1										
Elwood.....	11,028	15	13	10	93	79	15.9	14.3	10.7	14.5	12.2	4	4	1	1	1	4	1	1	1	1	1	1	1	1	1										
Crawfordsville.....	11,003	15	11	8	103	90	16.0	12.1	8.8	16.0	14.4	1	1	1	1	1	5	1	1	1	1	1	1	1	1											
Shelbyville.....	10,898	9	10	7	99	88	9.7	11.1	7.7	13.6	14.1	1	1	1	1	1	3	2	2	2	2	2	2	2	2											
Huntington.....	10,740	9	18	21	100	108	9.8	20.3	23.3	16.6	17.0	2	2	1	1	1	3	1	1	1	1	1	1	1	1											
Jeffersonville.....	10,412	9	11	12	74	86	10.1	12.7	13.5	12.2	14.1	1	1	1	1	1	3	2	2	2	2	2	2	2	2											
Bedford.....	10,276	7	8	9	76	76	7.9	9.4	10.5	12.4	12.9	2	2	1	1	1	2	1	1	1	1	1	1	1	1											
Brazil.....	10,270	7	10	9	75	75	7.9	11.8	10.4	12.5	12.6	2	2	2	2	2	1	1	1	1	1	1	1	1	1											
Bloomington.....	10,256	8	15	11	89	71	9.1	17.7	12.8	14.8	12.1	2	2	2	2	2	2	1	1	1	1	1	1	1	1											
<b>Cities of the Fifth Class, Population under 10,000.</b>	306,546	332	310	356	2,645	2,593	12.7	12.3	13.8	14.8	14.6	40	17	5	6	3	132	24	3	5	1	3	7	23	2	2	27	28	1							
Frankfort.....	9,552	12	13	11	90	95	14.7	16.5	13.7	16.2	17.2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	2										
Columbus.....	9,221	6	6	12	63	77	7.6	7.8	15.4	11.1	14.4	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1										
Goshen.....	8,934	10	10	4	88	77	13.1	13.6	5.3	16.8	14.4	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1										
Wabash.....	8,723	9	11	8	63	72	12.1	15.2	10.8	12.4	14.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										
Connersville.....	8,278	14	13	9	95	71	19.8	19.1	12.9	19.7	14.8	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2										
Clinton.....	8,215	10	9	11	56	65	14.3	13.3	16.3	13.1																										

Mortality of Indiana for July, 1917. (Stillbirths Excluded.)

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL	Population Estimated 1917	Total Deaths Reported for July, 1917	Total Deaths Reported for June, 1917	Total Deaths Reported for July, 1916	Total Deaths Reported for the year 1917 to date.	Total Deaths Reported for the Year 1916 to same date	Annual Death Rate per 1,000 Population					Important Ages											
							July, 1917	June, 1917	July, 1916	Rate for Year 1917 to date	Rate for Year 1916 to same date	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		65 and Over	
												Number	Per Cent.	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.
State	2,889,615	2,919	2,781	3,118	24,241	23,112	11.9	11.7	12.8	14.4	13.8	422	14.4	175	5.9	57	1.9	56	1.9	74	2.5	1004	34.4
Northern Counties	1,009,364	951	1,024	1,084	8,367	8,178	11.0	10.3	12.8	14.2	14.0	130	13.6	52	5.4	18	1.8	20	2.0	24	2.3	345	36.2
Central Counties	1,191,458	1,316	1,201	1,201	10,478	9,758	13.0	12.7	13.0	13.7	14.3	164	13.4	62	5.1	29	2.3	26	2.1	31	2.5	454	34.5
Southern Counties	688,793	652	556	735	5,398	5,176	11.1	9.7	12.6	13.4	12.9	128	18.6	55	6.4	10	1.3	16	1.9	19	2.8	205	31.4
All Cities	1,337,022	1,533	1,496	1,656	12,537	11,633	13.6	13.6	14.9	16.1	15.2	252	16.2	96	6.1	35	2.2	41	2.6	46	2.9	437	28.1
Over 100,000	272,338	363	335	331	2,793	2,588	15.6	14.9	14.8	17.6	16.7	40	13.5	16	4.4	3	2.2	13	3.5	13	3.5	96	26.4
45,000 to 100,000	291,031	294	314	345	2,437	2,324	11.2	11.2	11.8	14.1	14.1	56	19.0	10	3.4	1	1.1	11	3.5	14	4.7	70	23.8
20,000 to 45,000	311,158	413	361	345	3,334	3,006	15.6	14.1	13.8	16.4	16.4	81	19.0	42	10.1	12	3.1	11	3.1	12	2.9	96	23.2
10,000 to 20,000	155,949	151	170	175	1,348	1,211	12.4	13.7	13.8	14.4	13.6	26	17.2	11	7.1	5	3.6	5	3.6	5	3.6	43	28.4
Under 10,000	306,546	332	310	356	2,645	2,503	12.4	12.2	13.8	14.6	14.6	40	12.1	17	5.7	5	1.5	8	2.9	8	2.9	132	29.9
Country	1,552,593	1,366	1,285	1,462	11,481	11,479	10.3	10.0	11.1	12.8	12.6	170	12.4	79	5.7	22	1.6	15	1.0	28	2.0	566	41.4

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

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL	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	232	94	73	13.0	32	13.6	23	9.3	5	2.0	12	4.9	24	9.0	91	37.1	212	86.6	6	2.4	6	2.4	1	4	8	3.2	211	86	2	298	121.7
Northern Counties	59	68	8	8.1	10	11.6	6	7.0	2	2.3	5	5.8	5	5.8	35	40.8	58	67.6	3	3.5	4	4.6	1	1	1	79	92	1	120	140.0	11.1	
Central Counties	108	106	7	17.6	8	14.8	3	2.9	4	3.9	4	3.9	7	8.9	37	36.5	87	66.8	2	1.9	1	1.9	1	5.9	87	85.0	134	132.4	1	1.9		
Southern Counties	65	111	1	8.1	6	11.6	2	3.4	3	3.4	3	5.1	12	30.5	19	32.4	87	148.7	1	1.7	1	1.7	1	1.7	45	76.9	44	75.2	23	3.4		
All Cities	111	97	72	17.6	19	16.7	12	10.5	3	2.6	7	6.1	16	14.0	54	47.4	128	112.5	5	4.4	5	4.4	1	8	5	4.4	92	81	0	171	150.5	21.7
Over 100,000	36	155	7	938	9	2	8.6	834	8.6	2	8.6	2	9.6	1	4.3	15	64.8	25	108	1	8.0	1	1	1	14	60	5	28	121	1	14.3	
45,000 to 100,000	19	76	8	8.0	4	16.1	1	4.0	1	4.0	1	4.0	5	20.0	25	25.3	26	105	1	3.7	1	3.7	1	4	4	19	70	8	31	125.4	11.1	
20,000 to 45,000	22	23	2	31.1	3	7.26	4	4.15	1	4.15	1	4.15	1	22.0	7	25.9	45	170.2	1	3.7	5	18.0	1	3	7	23	87	0	63	238.3	11.1	
10,000 to 20,000	10	75	5	322	6	17.5	1	7.5	1	7.5	1	7.5	1	22.0	7	26.8	23	67.9	2	7.6	5	18.0	1	2	7	67	9	21	158	7	11.1	
Under 10,000	24	92	1	311	5	5.19	2	3.8	1	3.8	1	3.8	1	31.1	7	26.8	23	88.3	2	7.6	1	18.0	1	2	7	103	7	28	107	6	13.8	
Country	121	91	72	9.1	13	9.8	11	8.3	2	1.5	5	3.7	8	6.0	37	28.0	84	63.7	1	7.1	1	7.1	1	7.1	3	2.2	119	80	2	127	96.3	21.5

U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of July, 1917.

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

TEMPERATURE—IN DEGREES FAHRENHEIT

Section Average	Departure from the Normal	Extremes					
		Station			Station		
		Highest	Date	Lowest	Date		
73.7	-1.6	Bluffton	100	31	Goshen	42	4.11
		Howe	100	30, 31	Knox	42	3
					Valparaiso	42	4

PRECIPITATION—IN INCHES AND HUNDREDTHS

Section Average	Departure from the Normal	Extremes			
		Station		Station	
		Greatest Monthly Amount	Least Monthly Amount		
3.26	-0.28	Salamonia	7.23	Frankfort	1.06