

MONTHLY BULLETIN

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WILL H. McABEE.....	DRUG CHEMIST.
R. L. SACKETT, C. E.....	SANITARY ENGINEER.

ABSTRACT OF MORTALITY STATISTICS FOR FEBRUARY, 1914.

Total deaths reported, 2,989; rate, 13.7. In the preceding month, 3,080 deaths; rate, 12.9. In the same month last year, 3,008 deaths; rate, 14.1. Deaths by important ages were: Under 1 year of age 428 or 14.5 per cent of the total; 1 to 4, 154; 5 to 9, 52; 10 to 14, 33; 15 to 19, 57; 65 and over, 988 or 33.6 per cent of total.

**SANITARY SECTIONS:** The Northern Sanitary Section, population 972,129, reports 978 deaths; rate, 13.1. In the preceding month, 1,042 deaths; rate, 12.6. In the same month last year, 1,049 deaths; rate, 14.3.

THE CENTRAL SANITARY SECTION, population 1,152,277, reports 1,270 deaths; rate, 14.3. In the preceding month, 1,333 deaths; rate, 13.6. In the same month last year, 1,236 deaths; rate, 14.0.

THE SOUTHERN SANITARY SECTION, population 672,551 reports 601 deaths; rate, 13.3. In the preceding month, 705 deaths; rate, 12.3. In the same month last year, 723 deaths; rate, 14.0.

**REVIEW OF SECTIONS:** The highest death rate occurred in the Central Section and is 0.06 higher than the rate for the whole State. The Southern Section shows the highest death rate for pulmonary tuberculosis, measles, whooping cough, pneumonia, cerebro-spinal fever, influenza. The Northern Section shows the highest death rate for typhoid fever, scarlet fever, diarrhea and enteritis under 2 years, cancer and external causes. The Central Section presents the highest death rate for diphtheria and poliomyelitis.

**RURAL:** Population 1,550,642, reports 1,456 deaths; rate, 12.2. In the preceding month, 1,536 deaths; rate, 12.0. In the same month last year, 1,489 deaths; rate, 12.5.

**URBAN:** Population 1,240,315, reports 1,483 deaths; rate, 15.5. In the preceding month, 1,494 deaths; rate, 14.1. In the same month last year, 1,519 deaths; rate, 16.3. The cities named present the following death rates: Indianapolis, 17.5; Evansville, 14.8; Fort Wayne, 13.4; Terre Haute, 17.6; South Bend, 10.1; Gary, 11.8; Muncie, 15.6; Richmond, 18.8; Hammond, 15.5; Anderson, 16.8; East Chicago, 19.4; Lafayette, 24.6; New Albany, 16.4; Elkhart, 15.2; Michigan City, 20.5.

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.

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BIRTHS FOR FEBRUARY, 1914.

Total births, 4,796 (stillbirths excluded); State rate, 22.3. Males, 2,440; females, 2,356. White males, 2,403; white females, 2,331. Colored births, 62; males, 37; females, 25. Stillbirths, 162; white, 156; colored, 6. Northern Sanitary Section, population 972,129, reports 1,781 births; rate, 23.8. Central Sanitary Section, population 1,152,277, reports 1,921 births; rate, 21.7. Southern Sanitary Section, population 672,551, reports 1,094 births; rate, 21.2. Highest rate, Lake County, 33.6. Lowest rate, Ohio County, 9.0. Total births for 1914 to date, 9,950. Total births for 1913 to date, 50,496.

SUMMARY OF MORBIDITY AND MORTALITY FOR FEBRUARY, 1914.

Scarlet fever was reported as the most prevalent disease, 73 per cent of observers reporting it present. The order of prevalence is as follows: Scarlet fever, diphtheria and croup, tonsillitis, bronchitis, influenza, pulmonary tuberculosis, measles, pneumonia, rheumatism, smallpox, whooping cough, typhoid fever, chickenpox, diarrhea and enteritis, other forms of tuberculosis, malaria fever, ery-

sipelas, intermittent and remittent fever, dysentery, cerebrospinal fever, cholera morbus, puerperal fever, rabies in animals, rabies in human, poliomyelitis.

**SMALLPOX:** 458 cases in 38 counties with no deaths. The following counties reported smallpox present: Benton, 6; Blackford, 11; Boone, 4; Carroll, 4; Cass, 3; Clark, 13; Clinton, 2; Crawford, 10; Decatur, 1; Dekalb, 1; Delaware, 12; Floyd, 69; Gibson, 17; Grant, 5; Greene, 1; Hancock, 2; Huntington, 10; Jennings, 1; Johnson, 3; Knox, 3; Lake, 5; Lawrence, 13; Madison, 3; Marion, 110; Martin, 40; Montgomery, 1; Morgan, 1; Orange, 3; Owen, 7; Posey, 4; Shelby, 9; Spencer, 1; Steuben, 8; Sullivan, 1; Vanderburgh, 2; Vigo, 6; Warrick, 2; White, 4.

**TUBERCULOSIS:** 365 deaths, of which 322 were of the pulmonary form and 43 other forms. The male tuberculosis deaths numbered 182; females, 183. Of the males, 51 were married in the age period of 18 to 40, and left 102 orphans under 12 years of age. Of the females, 55 were in the same age period as above and left 110 orphans under 12 years of age. Total orphans under 12 years of age made in in one month by this preventable disease, 212. Number of homes invaded, 349.

**PNEUMONIA:** 356 deaths; rate, 165.9 per 100,000. In the preceding month, 405 deaths; rate, 170.5. In the same month last year, 389 deaths; rate, 183.0. Of the deaths reported this month, 88 were under one year of age; 59 in the age period 1 to 4; 8 in age period 5 to 9, and 81 in the age period 10 to 60. The remainder were in the age period of 60 and over.

**TYPHOID FEVER:** 127 cases in 32 counties with 38 deaths. In the preceding month, 142 cases in 40 counties with 37 deaths. In the same month last year 81 cases in 33 counties with 25 deaths.

**DIPHTHERIA:** 312 cases in 56 counties with 39 deaths. In the preceding month 409 cases in 65 counties with 42 deaths. In the same month last year 332 cases in 61 counties with 48 deaths.

**SCARLET FEVER:** 593 cases in 57 counties with 6 deaths. In the preceding month 602 cases in 68 counties with 16 deaths. In the same month last year 699 cases in 60 counties with 24 deaths.

**MEASLES:** 1,176 cases in 40 counties with 19 deaths. In the preceding month 645 cases in 48 counties with 9 deaths.

**RABIES:** 9 persons were bitten by rapid animals and given the Pasteur treatment. There were no deaths.

**POLIOMYELITIS:** 2 cases in 2 counties with 1 death. The death occurred in Vermillion County, male 20 years.

**EXTERNAL CAUSES:** Total deaths, 178; males, 128; females, 50. Suicide total, 29; males, 21; females, 8. Means of suicide, poisoning, 11; asphyxia, 2; hanging or strangulation, 4; drowning, 1; firearms, 9; cutting or piercing instruments, 2. Accidental or undefined total, 137; males, 96; females, 41. Poisoning by food, 2; other acute poisonings, 3; burns (conflagration excepted), 13; absorption of deleterious gases (conflagration excepted), 6; acci-

dental drowning, 3; traumatism by firearms, 2; traumatism by cutting or piercing instruments, 2; traumatism by fall, 39; traumatism in mines, 1; traumatism by machines, 4; railroad accidents and injuries, 29; street car accidents and injuries, 11; automobile accidents and injuries, 1; injuries by other vehicles, 1; other crushing, 8; excessive cold, 2; electricity (lightning excepted), 2; other external violence, 8. Homicide total, 12; males, 11; females, 1. Homicide by firearms, 11; homicide by cutting or piercing instruments, 1.

#### 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 February the following counties named below were delinquent in this matter.

#### BIRTHS.

Adams, 8; Allen, 39; Blackford, 1; Boone, 1; Brown, 1; Carroll, 2; Cass, 1; Clark, 3; Clay, 8; Clinton, 1; Crawford, 5; Daviess, 2; Decatur, 1; Delaware, 8; Fayette, 2; Floyd, 3; Gibson, 4; Grant, 31; Greene, 8; Hamilton, 2; Hancock, 1; Harrison, 5; Hendricks, 1; Henry, 4; Jackson, 1; Jasper, 6; Jay, 3; Jennings, 2; Johnson, 1; Knox, 15; Lake, 33; Laporte, 12; Lawrence, 2; Madison, 4; Marion, 1; Miami, 1; Monroe, 8; Montgomery, 3; Noble, 2; Orange, 2; Owen, 1; Parke, 3; Perry, 11; Pike, 5; Porter, 8; Posey, 1; Putnam, 2; Randolph, 1; Ripley, 4; Rush, 2; Shelby, 4; Spencer, 3; Starke, 1; Steuben, 2; St. Joseph, 70; Sullivan, 9; Tippecanoe, 1; Tipton, 2; Vanderburgh, 15; Vermillion, 8; Vigo, 20; Wabash, 1; Warrick, 11; Washington, 2; Wayne, 1; Wells, 1; White, 5; Whitley, 7. Total, 430.

#### DEATHS.

Adams, 1; Allen, 2; Benton, 1; Brown, 2; Cass, 2; Clay, 2; Crawford, 3; Daviess, 1; Dearborn, 2; Dekalb, 1; Delaware, 1; Grant, 2; Greene, 2; Harrison, 3; Henry, 3; Howard, 1; Jasper, 1; Jennings, 1; Knox, 5; Lake, 4; Laporte, 3; Madison, 1; Monroe, 4; Montgomery, 1; Morgan, 2; Newton, 1; Orange, 2; Owen, 1; Perry, 8; Pike, 2; Porter, 1; Posey, 2; Pulaski, 1; Ripley, 1; Rush, 1; Spencer, 5; Steuben, 2; Sullivan, 1; Switzerland, 1; Tippecanoe, 1; Vigo, 2; Wabash, 1; Warrick, 3; White, 2. Total, 89.

#### REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, INDIANA STATE BOARD OF HEALTH, FOR FEBRUARY, 1914.

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

During the month of February 73 samples of food were analyzed. Forty-two were reported legal and 31 illegal. Sixteen samples of cider were analyzed and all found to be illegal as they were sold as sweet cider and contained a high per cent of alcohol. The two temperance beers submitted for analysis were found to be ordinary beers and were classed as illegal. The three samples of temperance beer called "Clearo" upon analysis proved to be ordinary beer and were classed as illegal. Two of the three samples of cutsup analyzed contained benzoate of soda and were classed as illegal. The two illegal creams were low in butter fat. Of the 17 milk samples analyzed, 13 were classed legal and 4 illegal, being very dirty.

Fifteen samples of drugs were analyzed during the month.

**INSPECTORS' REPORTS FOR THE MONTH OF FEBRUARY, 1914.**

During the month of February the inspectors made 733 visits to food producing and distributing establishments. Of this number 10 were reported as in excellent condition, 452 good, 248 fair, 15 poor and 8 bad.

Of the 218 grocery stores inspected 7 were rated excellent, 164 good, 78 fair and 4 poor. One hundred and twenty meat markets were inspected. Of this number 3 were rated excellent, 84 good, 32 fair and 1 poor.

Sixty-two of the 75 drug stores visited were rated good and 13 fair. Of the 108 bakeries and confectioneries inspected 75 were rated good, 31 fair and 2 poor. Thirty-five of the 103 hotels and restaurants visited were found in good condition, 64 fair and 4 poor. The three creameries, one milk depot, and 6 flour mills visited were rated good. Ten of the 32 ice cream parlors were scored good, 21 fair and one poor. Inspections were also made of slaughter houses, bottling works, wholesale groceries, fruit stores, etc.

During the month 51 condemnation notices were issued, 18 because of unsanitary conditions and in addition, 41 because of improper construction.

Two prosecutions were brought during the month, one for the sale of milk to which water had been added and one for maintaining an unsanitary slaughterhouse.

The total fines and costs amounted to forty dollars.

**SUMMARY OF INSPECTIONS MADE DURING THE MONTH OF FEBRUARY, 1914.**

INSPECTIONS.	No. Inspected.	No. Excellent.	No. Good.	No. Fair.	No. Poor.	No. Bad.
Dairies	8					8
Grocery stores	248	7	164	73	4	
Meat markets	120	3	84	32	1	
Drug stores	75		62	13		
Bakeries and confectioneries	108		75	31	2	
Hotels and restaurants	103		35	64	4	
Creameries	3		3			
Milk depot	1		1			
Fish markets	4			2		
Slaughter houses	3		2	1		
Poultry houses	11		3	6	2	
Ice cream parlors	32		10	21	1	
Bottling works	4		3	1		
Wholesale groceries	2		2			
Flour mills	6		6			
Fruit stores	2		1	1		
Brewing company	1			1		
Ice plant	1			1		
Cold storage plant	1			1		
<b>Total</b>	<b>733</b>	<b>10</b>	<b>452</b>	<b>248</b>	<b>15</b>	<b>8</b>

**NOTICES OF CONDEMNATION DURING THE MONTH OF FEBRUARY, 1914.**

CLASSIFICATION.	Reasons for Condemnation.		Total.
	Unsanitary Conditions.	Improper Construction.	
Dairies	47	39	48
Grocery		1	1
Meat market		1	1
Poultry house	1		1
<b>Total</b>	<b>48</b>	<b>41</b>	<b>51</b>

**LIST OF PROSECUTIONS DURING THE MONTH OF FEBRUARY, 1914.**

COUNTY.	Laboratory Number.	Names and Addresses of Defendants.	Why Prosecuted.	Date of Trial.	Final Disposition.
Grant		A. M. Wayne, Marion	Selling milk to which water had been added	1-20-14	Fined \$20.00.
Madison		Peter Downs, Elwood	Unsanitary slaughterhouse	2-23-14	Fined \$20.00.

**WATER LABORATORY REPORT FOR FEBRUARY, 1914.**

During the month of February, 1914, a sanitary analysis was made of 104 samples of water. Eight of this number were taken from public supplies and were found to be in good condition. The public supplies examined were from Ft. Wayne, Greencastle, Huntington, Broad Ripple, Frankfort and Elkhart.

Ninety-six samples from private supplies came from various parts of the State. Of this number, fifty-six were classed as good, nine doubtful and thirty-one were judged to be unpotable.

In addition to this number of sanitary analyses, eighteen samples collected from the public supply of Aurora were studied as to bacterial content to determine the efficiency of the filter and hypochlorite plant of the water company supplying that city.

*Private Supplies*, 96; good, 56; bad, 31; doubtful, 9.

*Public Supplies*, Ft. Wayne 2; Greencastle; Huntington; Elkhart; Broad Ripple; Frankfort, 2.

**REPORT OF BACTERIOLOGICAL LABORATORY INDIANA STATE BOARD OF HEALTH, FOR FEBRUARY, 1914.**

WILL SHIMER, M. D., SUPERINTENDENT.

Sputum for tubercle bacilli--		
Positive	.....	88
Negative	.....	304
		392
Urine for tubercle bacilli--		
Negative	.....	5
Pus for tubercle bacilli--		
Negative	.....	7
Feces for tubercle bacilli--		
Negative	.....	3
Widal tests for typhoid fever--		
Positive	.....	15
Negative	.....	50
		65
Paratyphoid for typhoid fever--		
Negative	.....	4
Throat culture for diphtheria bacilli--		
Positive	.....	144
Negative	.....	261
Suspicious	.....	39
No growth	.....	5
		440
Epidemics for diphtheria bacilli--		
Positive	.....	114
Negative	.....	1441
Suspicious	.....	64
No growth	.....	3
		1622

Brains for Negri bodies—

Dogs:		
Positive .....	8	
Negative .....	1	
Cats:		
Positive .....	1	
Negative .....	2	
Cow:		
Positive .....	1	
Negative .....	1	
Hog:		
Negative .....	1	
Red Fox:		
Positive .....	1	16

Feces for typhoid bacilli—

Negative .....	2	
Pathological tissues—		
Carcinoma .....	10	
Miscellaneous .....	16	26

Guinea pigs inoculated for rabies.....	13	
Guinea pigs inoculated for T. B.....	1	
Blood counts .....	7	
Blood for malaria plasmodia—		
Negative .....	1	
Pus miscellaneous .....	5	
Feces miscellaneous .....	3	
Feces for hook worm—		
Negative .....	1	
Urine for chemical analysis.....	20	
Urine for gonococci—		
Negative .....	1	
Pus for gonococci—		
Females:		
Negative .....	20	
Suspicious .....	2	
Males:		
Positive .....	8	
Negative .....	12	
Suspicious .....	2	
Sex not given:		
Positive .....	2	
Negative .....	4	50

Cerebro spinal fluid.....	1	
Water for typhoid bacilli—		
Negative .....	1	
		2707
Doses of antityphoid sent out.....	300	

OUTFITS SENT OUT DURING FEBRUARY, 1914.

Tuberculosis .....	424	
Diphtheria .....	2123	
Widals .....	267	
Gonococci .....	171	
Blood counts .....	67	
Malaria .....	18	
Bile Media .....	13	
Total number .....	3083	

PATIENTS WHO HAVE TAKEN "PASTEUR" TREATMENT THIS MONTH.

NAME.	Town.	County.	Age.	Sex.	Began Treatment.	Finished Treatment.
Fred Hahn	Milan	Ripley	26	M	1-13-14	2- 2-14
H. Hollar	Peeries	Lawrence	33	M	1-14-14	2- 3-14
Everett Hollar	Peeries	Lawrence	11	M	1-14-14	2- 3-14
Leroy Hollar	Peeries	Lawrence	6	M	1-14-14	2- 3-14
Fred Masten	Greencastle	Putnam	44	M	1-23-14	2-12-14
Luther Pruitt	Clayton	Hendricks	20	M	1-26-14	2-15-14
Robert Thompson	Madison	Jefferson	9	M	1-29-14	2-18-14
Harvey Huff	Indianapolis	Marion	32	M	1-30-14	2-19-14
Otto Huff	Indianapolis	Marion	30	M	1-30-14	2-19-14
A. C. Brewer	Clayton	Hendricks	37	M	2- 3-14	2-23-14
W. C. Johnson	Indian Springs	Jackson	27	M	2- 7-14	2-27-14
Grey Johnson	Indian Springs	Jackson	15	M	2- 7-14	2-27-14

SMITH AND HIS TYPHOID.

His real name was S. R. Smith. He lived in Indiana. He was a farmer. His house was built flat upon the ground. No underneath ventilation. There was a small cellar. It was musty. Vegetables, rotten and unrotten were stored in it. The house was heated by an "air-tight" stove. All windows were fastened down. All window cracks were calked with rags. The barn was 328 feet from the kitchen door. There was a big pile of manure against the barn. There were maggots in the manure. Flies, thousands of flies, were born in the manure. In the barnyard were cows and pigs. They waded in barnyard pulp. Just 53 feet from the kitchen door was a privy. It was dilapidated. Its awful refuse spread out behind it. It was a nasty thing. It smelled horribly. Clouds of flies surrounded it. Under the back porch was a dug well. Smith didn't know its depth. An old sock was stretched over the pump spout. It was there to strain out worms and little water bugs. The water had a funny taste. A garbage tub stood just outside the kitchen door. There were maggots in it. Flies were born there by thousands.

One day Smith's daughter came down with typhoid fever. A doctor was employed. Medicines were purchased. Mrs. Smith did the nursing. Mrs. Smith also cooked for her husband, her son and a hired man. Mrs. Smith was worn out. She took typhoid. The daughter died. Mrs. Smith died. The son took typhoid. He survived. When Mrs. Smith took down a nurse was employed. She stayed after Mrs. Smith's death to nurse the son.

The cost: Doctor bills \$410.00. Nurse \$140.00. Medicines \$23.60. Two funerals \$416.00. Court value of the mother's life (average court judgment) \$4,600. Court value of the son's life \$5,000. Loss of time (estimated) \$300.00. Total \$10,889.60. Does it pay to be insanitary? Does induced sickness and early death tend to produce wealth and happiness?

GOATS: Switzerland and Bavaria are heavy producers of goats. On only 15,000 square miles of land Switzerland produces \$8,000,000 worth of goats annually. The goats produce much milk which is first soured and called Yoghurt. To this article of food is attributed the long virtuous and efficient life of the peasantry. The countries named have eight times as many centenarians as supposedly better countries where meats and rich foods are consumed in great quantities. These countries also have fewer insane, fewer public dependents and fewer orphans and criminals. We have millions of acres of mountains and fine brush land, and could produce millions of goats. With babies in our cities and country too (the baby death rate is almost as high in our rural as in our urban districts) sickening and dying for want of proper food, we could, if we would, start the milk goat industry and enjoy its pecuniary and health producing results.

**RATS AND PLAGUE.**

**RATS.** It costs fully \$2,000,000 a year to feed the rats in Indiana. It is poor business to endure this expense, yet Indiana business men permit it to go on year after year. Would it not be wise for those who oppose sanitary school houses on the score of economy, to turn their anti-school energy loose upon the rats? Figure 1 on the chart shows the black and brown rat. The latter is the fiercer and stronger and drives out the former. Catch a brown rat in a trap and you may confidently assert there are no black rats or very soon they will all disappear. Figure 2 shows the particular flea which carries the bacillus of bubonic plague, and near it in the circle is a picture of the bacillus. To prevent the awful bubonic plague we must kill the rats.

and keep them away by rat-proofing all buildings. Figure 3 shows rat-producing conditions. Why we build so as to foster rats it is hard to say, and certain it is rat-producing conditions are not monuments to our good business sense.

Figure 4 illustrates how houses, barns and all buildings should be built with cement to make them rat-proof. This being done we can kill off all rats and have them no more.

Anti-rat yell—

Rats, rats, rats,  
Swat the rats,  
Slug the rats,  
Kill the rats,  
Prevent the rats,  
Rats, rats, rats.

Fig. 1

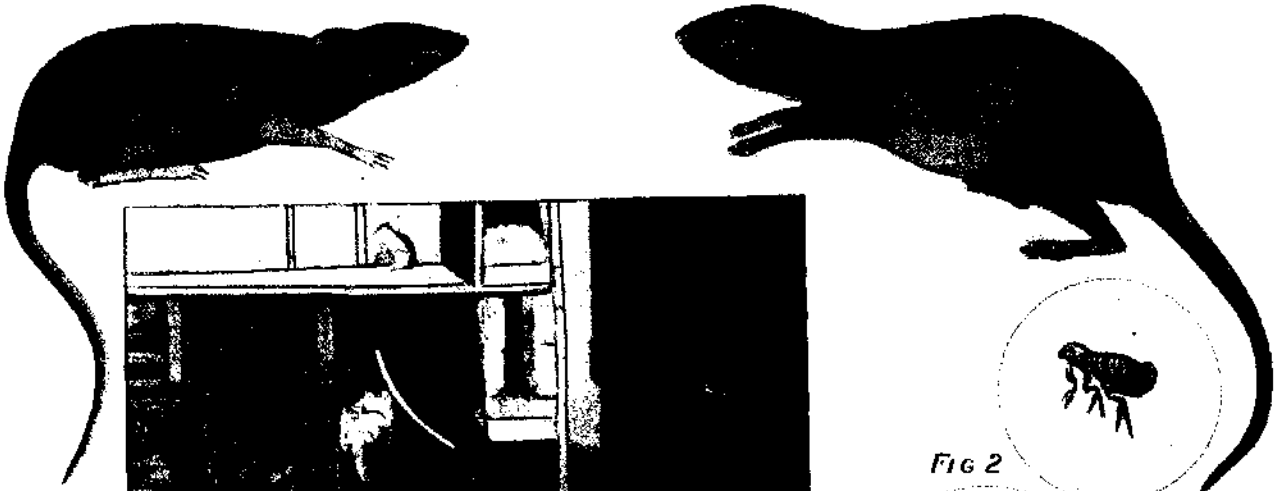


Fig. 3

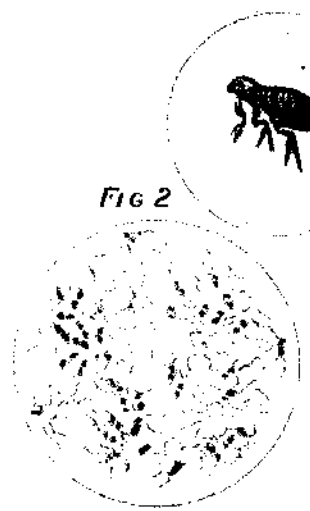


Fig 2



Fig. 4

## INVESTIGATION OF TYPHOID FEVER EPIDEMIC AT DECATUR, ADAMS COUNTY, INDIANA.

WILL McABEE—WILL SHIMER.

On March 3d the mayor and health officer of Decatur called the State Board of Health over the phone and asked assistance in finding out the cause of the peculiar fever epidemic in Decatur.

The following notice appeared in the Decatur Democrat on February 26, 1914, and gives some idea of the uncertainty of the physicians concerning the diagnosis of the disease:

**"PECULIAR EPIDEMIC  
RESEMBLING TYPHOID FEVER,  
BUT DIFFERENT IN MANY WAYS, PREVALENT HERE.**

CASES ARE REPORTED.

HEALTH OFFICERS DIAGNOSE IT AS AUTO-INFECTION  
AND TELL OF ITS CAUSES.

After a careful inquiry into conditions in and about Decatur which required several hours this morning, we believe we can safely make the statement that there is not an epidemic of typhoid fever in this locality. Each day, for a week or two past, there have been rumors that there are a number of these cases in this city. Naturally a number of people became more or less alarmed for if there were as reported fifteen or twenty cases there must necessarily be some cause therefor and it would be most important that the cause be discovered and eliminated as quickly as possible. With that purpose in view we began today to investigate the truth of the statements.

### HEALTH OFFICER'S REPORT.

Dr. H. F. Costello, city health officer, when asked concerning the report that there are sixteen cases of typhoid fever in the city said:

"The records in my office show that but two official reports of typhoid fever have been made. These are the cases of Elmo Smith and Bernard Parent. There are a number of cases which very much resemble typhoid fever, including that of my own son, but I am convinced and am upheld by several other physicians that the trouble is an auto-infection of the intestines which also affects other parts of the body. These cases are being treated precisely as typhoid and have many of the symptoms, but come usually from indigestion and not from any specific germ as in typhoid. I am convinced that there is not an epidemic of typhoid here, but intend to make every effort to ascertain the truth so long as these reports continue. I will insist on an examination of the milk sold in Decatur, of the water at the city plant and will do everything possible to give the public the exact conditions as I find them."

### ANOTHER PHYSICIAN'S STATEMENT.

We also interviewed another well-known physician who made the following statement:

"There is a misunderstanding as to there being an epidemic of typhoid fever in Decatur. There is a class of cases. I am informed by our health officers and know from some personal experience, that has some resemblance and symptoms of typhoid fever, but which upon careful inquiry, we find in the great majority of cases are from a toxemia or auto-infection, which is produced from eating too much food and such foods that poison the system, especially so at this time, owing to the extremes of weather, the cold and the lack of exercise and pure air.

"A part of this infection, we are led to believe is due from milk. Therefore before any milk is used, no difference from whence produced, it should be brought to the boiling point, before using.

"It may be well also to state that it is proper to be particular in the handling and care of all these patients. I would also state that this auto-infection has produced as much disturbance of the lungs, throat and air passages as it has of the bowels. We think that when better weather is upon us and the people get out and have more fresh air and better exercise that all this trouble will disappear.

"It might also be stated that all drinking water should be boiled before using and all food well and carefully cooked. These precautions may save some member of your family a very serious illness."

On the evening of the 3d of March Mr. McAbee and Dr. Shimer went to Decatur, arriving Wednesday, March 4th. They immediately got in touch with Dr. Costello, city health officer. After a general discussion of the situation they concluded it best to visit several of the persons then sick and find the age, sex, residence, place of employment, source of water and milk supply, and something concerning the personal habits of each one.

The following is a tabulation of the information obtained:

Several other cases were visited which did not present typical symptoms of typhoid. In every instance these persons had been using Lester Robinson's milk. Children, particularly had suffered from diarrhoea and loss of appetite. In no case during the last three or four weeks had infants at the breast had any intestinal disturbances.

On inquiry the inspectors were often led to believe that they were mistaken in the belief that Robinson's milk was at fault but on further investigation they always found it concerned. Several young men who were sick and whose family at home did not use Robinson's milk were in the habit of taking a bottle of milk and a sandwich at the restaurant that used Robinson's bottled milk. In practically every instance it was found that the persons sick were unusually fond of milk.

NAME.	Sex.	Age.	Business.	Water.	Milk.	Began.	Outcome.
Francis Costello.....	M	13	Catholic school.....	City driven well.....	Robinson.....	2-22-14	Positive Widal; nose bleed atypical.
Bernard Parent.....	M	18	Electrician.....	Driven well at home; city water at shop.....	Krill milk at home; Robinson at restaurant.....	2-20-14	Nose bleed; typical.
Barton Straska.....	M	20	Waiter at Smith & Co. restaurant.....	City water.....	Drank lots of milk at Smith restaurant; Robinson's.....	2-14-14	Typical.
Harry Stults.....	M	14	South ward school.....	City at school; driven well at home.....	Likes milk; Robinson's.....	3-20-14	Typical.
George Stults.....	M	10	South ward school.....	City at school; driven well at home.....	Likes milk; Robinson's.....	2-22-14	Typical.
Theodore Henderson.....	M	36	Manager Erie restaurant.....	City water.....	Robinson.....	2-24-14	Not very typical.
H. J. Conway.....	M	21	Electrician.....	City water.....	Robinson's; at Smith's restaurant.....	2-20-14	Not very typical; positive Widal.
Dorothy Enos.....	F	6	School.....	City.....	Robinson.....	2-21-14	Atypical.
Ruth Huffman.....	F	14	School.....	City.....	Robinson.....	2-14-14	Typical.
R. Vogelweid.....	M	5	.....	City.....	Robinson.....	2-10-14	Typical.
Manmie Brake.....	F	36	.....	City.....	Robinson.....	3- 4-14	Typical.
Cole Ramsey.....	M	23	Section hand.....	City.....	Robinson.....	2-17-14	Typical.
Lloyd Beel.....	M	6	.....	City.....	Robinson.....	2-17-14	Typical.

In the afternoon Mr. McAbee made a thorough investigation of the city water works and found the following conditions:

The Water Works of Decatur is owned and operated by the city and is located in a park of about ten acres in size near the corporation limit. The supply is obtained from ten 8-inch wells which vary in depth from 250 to 400 feet and are driven for the most part through limestone, as the sub-soil strata averages but forty feet in thickness. At the present time, the water from the wells is pumped into a covered brick cistern of 126,000 gallons capacity, but there has also been constructed, at the request of insurance companies, an additional, covered, concrete storage cistern of 226,000 gallons capacity. This second cistern is now complete and ready for use pending its acceptance by the City Council, but at the time of this investigation had not been connected.

On account of the hardness of the water from the wells, the boilers at the plant are supplied with soft water which is pumped to them from the river some 150 yards distant. There is no connection between the pipe feeding the boilers and the water mains.

The conclusions indicated by this general survey, that the water supply was a good one and that the epidemic could not be attributed to it was further substantiated by the following analyses of three samples taken from the entrance to the mains, the Court House and a residence on a dead end:

	Entrance to Mains	Court House	Dead End
Free Ammonia .....	.0240	.0180	.0010
Alb. Ammonia .....	.0160	.0040	.0030
Nitrates .....	.0000	.0000	.0300
Nitrites .....	.0006	.0006	.0000
Chlorine .....	2.6	2.4	2.4
Iron .....	.02	.01	.00
Hardness .....	28.2	28.0	29.8
Colon Bacilli .....	None	None	None
Gas Formers			

Drs. Costello, Grandstaff and McAfee visited the Lester Robinson dairy at the Dave Dally farm about six miles southeast of Decatur. The conditions at the dairy were very bad. The cow barns were crowded and dark and dirty and the milk house not well kept. The Robinson dairy produced about ten gallons of milk and besides this he bought milk as follows: 10 gallons daily of E. W. Dally; 12 gallons daily of Ed Abr; 5 gallons daily of Kerns; 10 gallons of Sam Cramer; 8 gallons of John Schurgen and 6 gallons of Davis Daily.

As the conditions of the dairy farm and milk house could not be immediately changed to meet the requirements, Dr. Costello canceled Robinson's license. Contrary to law Robinson was collecting the empty bottles from the cases of typhoid and filling them again without sterilization.

As we could not be certain where the original source of the infection was we concluded that it would be best to publish the names of the farmers from whom Robinson obtained his milk so that other dealers would not buy their milk and thus continue the source of the infection. Before Robinson can again sell milk he must convince the local health officer that he will sterilize his bottles and pasteurize his milk. The mayor and city council promised to make this requirement for all milk sellers in Decatur.

Owing to the seriousness of the situation and the immediate necessity of meeting the danger the following interviews were given:

"TYPICAL CASES TYPHOID FEVER IS THE REPORT.

STATE BOARD INVESTIGATES FIFTEEN CASES.

CANCELS LICENSE OF MR. ROBINSON.—WILL STAMP IT OUT.

HEALTH OFFICERS MAKE STATEMENTS AND ASK ASSISTANCE OF DECATUR PEOPLE.

(Decatur Democrat 3-4-14.)

Representatives of the State Board of Health arrived here this morning and assisted by Dr. H. F. Costello of the city board of health and Dr. J. C. Grandstaff of the county board of health, immediately began an investigation of the epidemic of fever which has been causing much worry here for some days past. Fifteen cases were examined and in each case it was found that the milk used in the family had been obtained from the Lester Robinson dairy. This afternoon an investigation of the dairy was conducted and the barnyard and milk house were found to be unsanitary. His license was immediately cancelled and this dairy cannot sell milk in the city of Decatur until the city ordinance has been complied with. He was also notified that before he could sell milk again he would have to arrange to pasteurize the milk which means that it must be heated to 145 degrees Fahrenheit for half an hour, and the bottles sterilized, requiring that they be covered by boiling water for twenty minutes. While the board members realized the seriousness of the declaration they feel that this should be given the greatest publicity because of the fact there are perhaps now in this city and vicinity more than fifty cases of typhoid fever. Many of these are of mild form while others are very severe.

Mr. Robinson has been buying his milk from six farmers. None of these are censured by the board, which believes that the milk became infected by careless handling at the dairy and not by any fault of these people.

The local health authorities will insist also that all other dairies comply with the same order made to Mr. Robinson and will ask the city council to immediately adopt an ordinance providing that all dairies pasteurize their milk and sterilize the bottles.

The state bacteriologist asked us to state that this epidemic would continue unabated for ten days or two weeks but after that time the number of cases should begin to reduce. He also stated that the State Board of Health will furnish free to physicians whatever vaccine is necessary for immunizing purposes.

To satisfy themselves and the people in general, the State Board has furnished local authorities with containers and will thoroughly test the city water to see whether or not there are any typhoid germs therein, though they feel certain there is not, they say. If there were, the number of cases would be much larger than at present. However, it is important that great care be used in handling the numerous cases here to prevent the further spread of the disease.

Dr. Costello's books show but ten cases reported, though the state men visited fifteen cases this morning and were informed of a number of others. It is believed that there is from fifty to one hundred cases here, though many are mild. One man was found at work, who had a typical case of the disease, though it was mild. The officers believe they have ascertained the cause and that they will be able to now stamp out the disease.

Those who sold milk to Robinson should not attempt to sell their milk to any other dairy until the investigation is complete and until it is known there is no typhoid carrier on their farm."

**"CAUSE IS DISCOVERED.**

**BOARD OF HEALTH FIXES BLAME ON ROBINSON DAIRY.  
IS TYPHOID FEVER.**

**LICENSE OF MILKMAN IS REVOKED BECAUSE OF UNSANITARY  
CONDITIONS.**

(Decatur Evening Herald 3-4-14.)

Dr. William Shimer, bacteriologist for the State Board of Health, and Dr. Will McAbee, chemist of the board, arrived in the city this morning to make an investigation of health conditions and unearth the causes leading up to the numerous cases of typhoid fever now in the city.

They began their investigations in the city, giving particular attention to the milk supply in the families where the sickness prevails, and after discovering that in every instance the sick had procured their milk from the Robinson milk route, they went out to the dairy to see what conditions prevailed there.

On their arrival the suspicion that this dairy had caused the trouble was confirmed. They found conditions unsanitary, the cows were in crowded quarters, and the barns were unclean. It was also found that the milk had not been pasteurized, nor the bottles sterilized, as is required by the rules of the State Board of Health. Quick action was taken and the license of the milkman was suspended until his business is reformed to conform to the rules of the State Board of Health.

The trip to the dairy was made by Dr. Shimer, Dr. Grandstaff, secretary of the county board of health, and Dr. Costello, secretary of the city board of health.

In addition to the milk produced from his cows, Robinson was selling milk purchased from farmers in the vicinity. He was getting twelve gallons of milk daily from Ed Ahr, ten gallons from E. W. Dally, five gallons from Wash Kern, ten gallons from Sam Kramer, eight gallons from John Schurger, and six gallons from Davis Daily.

The health officers stated positively that no blame is to be attached to those from whom the milk was purchased, but it was the manner in which the milk was handled after reaching the dairy that was responsible for the conditions, so far as they were able to discover.

The revocation of Robinson's license should be a lesson to all milkmen selling milk in the city. The city board of health will insist that all milk, before it is placed on the market, shall be pasteurized for half an hour, at a temperature of 145 degrees, and that all bottles in which it is delivered to customers shall be sterilized for at least twenty minutes. This is required by the rules of the State Board of Health and the rule will be enforced.

For the treatment of the disease Dr. Shimer announces that the State Board of Health will furnish typhoid vaccine to physicians free. There are now about twenty cases of serious sickness in the city and practically all of them are declared by the investigators to be typhoid fever.

Other cases are liable to follow the ones now developed as milk from this dairy has been sold up until today and the germs may have been implanted and may yet develop into the disease. For several days new cases are liable to occur from this source.

Notwithstanding, the source of the trouble seems to be satisfactorily settled, samples of the city water, as well as water from private wells, will be taken to Indianapolis for analysis.

**A BUSY HEALTH OFFICER:** One of the new health officers, and we assume he struggled hard to get the posi-

tion, writes us as follows in answer to a letter asking why he did not report promptly as the law commands:

"I treated Mr. N. K. H. and he was buried according to law. I thought I made a report. The books of the office were not turned over to me until a few days ago, March 10. I have not had time to look just what my duties are as I have been very busy. I may have overlooked one or two other reports. Shall I look them up and report, and to whom? What do you mean by reporting vital statistics?"

The reader of this quotation will probably be prompted to ask—why such a man as this would seek the position and be appointed health officer? He states in writing he has no time to perform the duties of the office which he undoubtedly sought. He also states a dead body was legally buried and yet although he attended the death, there is no certificate of death and no burial permit, but the climax is reached when this man asks—"What do you mean by reporting vital statistics?" Here is one of the beautiful results of our beautiful political system. The predecessor of this man had learned the ropes, had become very efficient, his reports were regular and accurate, and he was doing a good work, yet out the man must go because, forsooth, the politics of the town had changed. If private business were conducted in this way, there would not be a successful private business man on earth. They would all fail. Municipal government has failed in the United States as is well known, and is not this failure due almost entirely to the delightful, pleasant and persistent obsession of the people for politics? This man who asks—"What do you mean by reporting vital statistics? belongs in a past age. He does not even know what we mean by the term vital statistics and as for collecting vital statistics, keeping them in an orderly way and studying them, he is totally incompetent, yet the accurate and immediate collection of vital statistics are the foundation of all public health work.

**SCHOOL BREAKFASTS:** The following list gives the breakfasts enjoyed by thirty-seven pupils in grade one of a certain public school in Indiana:

Breakfast—(1) Meat, bread and pie. (2) Tea, biscuit, and gravy. (3) Oatmeal. (4) Meat, coffee, cornbread and lightbread. (5) Biscuit, molasses and potatoes. (6) Bacon, biscuit, butter, peach butter, and water. (7) Fried pickled pork, biscuit, butter, and hominy. (8) Light bread, milk, maple syrup, apples and cherries. (9) Bread, jelly, and water. (10) Bread, meat and gravy. (11) Cup of coffee, biscuit and butter. (12) Biscuit, molasses and milk. (13) Three fried eggs, four biscuits and molasses, two cups of cocoa. (14) Three plates of gravy, with biscuits, sassafras tea, two plates of sorghum with hot bread, one glass of separated milk and a dish of blackberries and cream and sugar. (15) Two fried eggs, light bread and gravy. (16) Eggs and bread. (17) Biscuits, gravy, ham, water. (18) Butter, biscuit, cold boiled back bone, coffee. (19) Bacon, bread, molasses, tea. (20) Coffee, apple butter, bread. (21) Biscuits, gravy, meat, oatmeal. (22) Ham, bread, gravy. (23) Ham sandwich, cup tea, water, gravy, bread, meat and coffee. (24) Molasses, bread, butter and coffee. (25) Bread, meat and peaches. (26) Meat, coffee, biscuits, and sweet-potatoes. (27) Ham, gravy, biscuits, milk. (28) Biscuits, gravy, egg, and water. (29) Egg, biscuit and coffee. (30) Bread, peas, and water. (31) Milk toast, chicken broth and water. (32) Bread, eggs, butter, coffee, milk. (33) Bread and milk. (34) Peach butter, bread and butter. (35) Meat, beans and water. (36) Fried potatoes. (37) One banana.

Some of these children will never arrive.

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM CERTAIN COMMUNICABLE DISEASES FOR FEBRUARY, 1914.

**NORTHERN SANITARY SECTION.**

Total population	972,129
Total deaths	978
Death rate per 1,000	13.1
Pulmonary Tuberculosis, rate per 100,000	100.5
Typhoid, rate per 100,000	25.4
Diphtheria, rate per 100,000	17.4
Scarlet fever, rate per 100,000	4.0
Diarrheal diseases, rate per 100,000	83.5

**CENTRAL SANITARY SECTION.**

Total population	1,152,277
Total deaths	1,270
Death rate per 1,000	14.8
Pulmonary Tuberculosis, rate per 100,000	169.6
Typhoid, rate per 100,000	14.7
Diphtheria, rate per 100,000	19.2
Scarlet fever, rate per 100,000	2.2
Diarrheal diseases, rate per 100,000	15.8

**SOUTHERN SANITARY SECTION.**

Total Population	872,551
Total deaths	691
Death rate per 1,000	13.3
Pulmonary Tuberculosis, rate per 100,000	187.9
Typhoid, rate per 100,000	11.8
Diphtheria, rate per 100,000	17.4
Scarlet fever, rate per 100,000	1.9
Diarrheal diseases, rate per 100,000	15.5

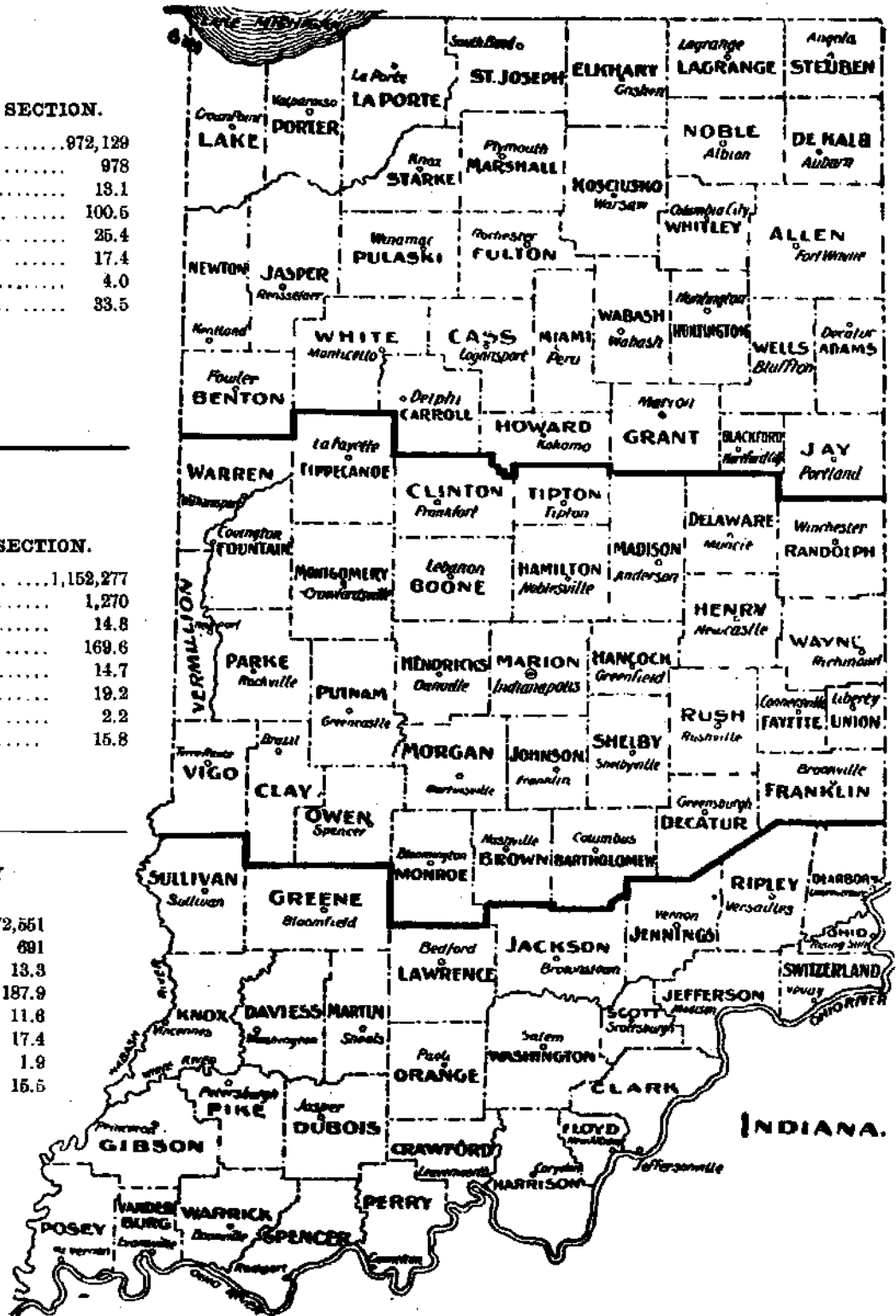




TABLE 2. Deaths in Indiana by Cities During the Month of February, 1914. (Stillbirths excluded.)

CITIES.	Population, Estimated, 1914.	Total Deaths Reported for February, 1914.	Total Deaths Reported for January, 1914.	Total Deaths Reported for February, 1913.	Total Deaths Reported for the Year 1914 to Date.	Total Deaths Reported for Year 1913 to Same Date.	Annual Death Rate Per 1,000 Population.					Important Acc.					Deaths from Important Causes.																		
							February, 1914.	January, 1914.	February, 1913.	Rate for Year 1914 to Date.	Rate for Year 1913 to Same 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 Bronchopneumonias.	Pleuritis and Enteritis (under 2 years).	Centro-Spinal Fever.	Acute Anterior Poliomyelitis.	Influenza.	Puerperal Septicemia.	Cancer.	External Causes.	Smallpox.	Deaths in Institutions.	Deaths of Non-Residents.
							1914.	1914.	1913.	1914 to Date.	1913 to Same Date.	Year.	Inclusive.	Inclusive.	Inclusive.	Inclusive.	Years.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.	Deaths.
Cities of the First Class, Population 100,000 and over.	252,994	340	347	298	647	618	17.5	18.1	15.7	15.4	49	26	6	3	6	78	33	10	5	2	2	1	47	4	3	1	13	28	87	17					
Indianapolis	252,994	340	347	298	647	618	17.5	18.1	15.7	15.4	49	26	6	3	6	78	33	10	5	2	2	1	47	4	3	1	13	28	87	17					
Cities of the Second Class, Population 45,000 to 100,000.	267,060	290	266	338	566	645	14.1	11.7	16.9	12.8	46	18	4	1	7	70	27	3	6	6	1	40	2	2	2	24	25	64	30						
Evansville	72,839	83	73	87	156	164	14.8	11.7	15.7	13.2	11	7	1	1	3	17	8	1	1	1	1	15	3	3	3	7	7	18	8						
Port Wayne	69,876	72	60	89	132	156	14.8	10.1	17.0	11.7	12	5	1	1	2	3	3	2	2	2	1	22	3	2	1	13	6	30	18						
Terre Haute	64,801	88	73	81	161	172	17.6	13.2	16.8	15.4	16	3	2	1	2	17	13	3	2	2	1	12	1	2	3	3	9	13	6						
South Bend	60,041	47	60	107	153	153	10.1	11.7	18.0	11.0	7	3	1	1	1	14	3	3	1	1	1	6	1	1	1	5	3	3	1						
Cities of the Third Class, Population 20,000 to 45,000.	229,816	303	291	166	594	347	17.1	14.9	16.1	15.9	72	21	6	5	5	66	26	3	7	2	2	38	18	6	3	14	27	40	13						
Gary	31,802	29	35	64	64	86	11.8	12.9	14.6	12.4	15	2	1	1	28.2	4	1	1	1	1	2	7	4	1	1	3	6	2	1						
Muncie	24,823	30	23	24	53	52	15.6	10.8	12.6	11.3	2	2	1	1	12	4	1	1	1	1	1	3	3	1	1	3	2	2	1						
Richmond	23,551	34	25	26	59	59	18.9	12.4	14.6	15.4	2	3	1	2	9	6	6	1	1	1	3	3	3	1	1	2	2	2	1						
Hammond	23,487	23	38	24	66	58	15.5	19.0	13.8	17.3	10	1	1	1	1	4	1	1	2	1	1	4	2	1	1	2	5	6	4						
East Chicago	23,166	30	34	26	64	53	16.8	17.2	14.7	17.0	6	1	1	1	1	4	1	1	1	1	1	3	3	1	1	1	2	3	4						
Anderson	20,802	31	31	35	62	68	19.4	17.5	22.5	18.4	17	6	3	1	3	3	1	1	1	1	1	7	7	1	1	1	1	1	1						
Lafayette	20,069	39	35	33	74	60	24.6	19.9	20.9	23.1	4	4	1	1	17	3	3	1	1	1	1	7	8	1	1	2	2	16	6						
New Albany	20,629	26	29	33	55	65	16.4	16.5	20.3	16.5	1	1	1	1	2	10	6	1	1	1	1	3	3	3	3	2	2	3	4						
Elkhart	20,599	24	24	22	48	48	15.2	13.7	14.3	14.4	4	1	1	1	3	4	1	1	1	1	1	3	3	3	3	3	3	3	3						
Michigan City	20,278	32	17	25	49	41	20.5	9.8	16.4	14.6	11	1	1	1	10	3	3	1	1	1	1	3	3	2	1	1	3	4	2						
Cities of the Fourth Class, Population 10,000 to 20,000.	174,438	196	217	321	413	618	14.6	14.6	18.1	14.6	27	5	5	3	6	65	22	4	9	2	1	21	3	4	3	12	9	23	7						
Marion	19,965	32	30	24	62	45	20.8	17.6	15.8	19.1	1	1	1	1	7	6	1	1	1	1	1	5	5	1	1	2	3	4	4						
Lagansport	19,902	21	33	21	54	53	13.7	19.5	13.9	16.7	2	2	1	1	7	2	1	1	1	1	1	2	1	1	1	1	1	4	4						
Kokomo	18,939	17	29	22	46	40	11.6	18.0	15.6	14.9	1	1	1	1	9	4	1	1	1	1	1	2	1	1	1	1	1	1	1						
Vincennes	16,257	23	20	25	45	48	19.9	14.4	20.6	17.7	5	2	1	1	5	1	2	1	1	1	1	2	2	1	1	1	1	3	3						
Mishawaka	13,782	18	10	11	28	21	17.0	8.5	10.9	12.5	5	1	1	1	6	2	1	1	1	1	1	3	1	1	1	1	1	5	1						
Peru	11,642	13	19	14	32	24	14.5	19.1	15.9	16.9	2	1	1	1	5	1	1	1	1	1	1	3	1	1	1	3	2	1	1						
Laporte	11,548	6	14	16	20	33	6.7	14.2	18.5	10.7	3	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	2	2						
Elwood	11,028	14	12	17	26	31	18.5	12.7	20.0	14.5	3	1	1	1	6	1	1	1	1	1	1	2	1	1	1	1	2	2	2						
Huntington	10,506	0	7	18	13	37	7.4	7.7	22.5	7.7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Jeffersonville	10,412	17	12	29	29	23	21.2	13.5	15.0	22.2	6	1	1	1	5	4	2	1	1	1	1	1	1	1	1	1	1	2	1						
Shelbyville	10,109	8	17	7	25	18	10.1	19.5	9.1	15.1	1	1	1	1	4	2	1	1	1	1	1	2	1	1	1	1	1	2	1						
Crawfordsville	10,187	12	7	8	10	22	15.3	8.0	10.4	11.5	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	2	1						
New Castle	10,050	7	9	14	14	20	9.0	8.1	11.6	8.6	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Cities of the Fifth Class, Population under 10,000.	322,007	354	373	396	727	841	14.3	13.8	15.2	13.9	44	16	8	4	6	127	44	4	2	4	1	3	34	2	1	9	14	26	7	5					
Brazil	9,805	10	11	10	21	19	13.2	13.2	13.5	13.2	2	2	1	1	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1						
Bloomington	9,549	13	13	9	26	21	17.6	15.9	12.6	16.8	2	2	1	1	5	2	1	1	1	1	1	1	1	1	1	1	1	2	2						
Hedford	9,490	14	9	11	23	17	19.1	11.1	15.5	14.9	2	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1						
Frankfort	9,093	13	10	11	23	18	15.5	12.9	14.0	15.6	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Columbus	9,017	5	6	0	11	22	7.2	7.5	13.0	7.5	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Goshen	8,724	8	15	7	23	17	11.9	20.2	19.0	16.3	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Watah	8,705	4	10	6	14	24	5.9	13.5	8.9	9.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Connersville	8,008	9	10	6	19	17	14.5	14.7	9.8	14.6	1	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1						
Washington	7,854	11	3	9	14	17	18.2	4.4	15.9	11.0	2	2	1	1	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1						
Whiting	7,367	11	4	5	15	11	19.3	6.3	9.1	12.5	1	2	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Clinton	7,222	7	14	9	21	23	12.6	22.9	17.0	17.9	3	3	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1						
Valparaiso	7,197	9	1	13	10	20	16.2	1.6	23.6	5.5	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2						
Madison	6,934	9	12	6	21	24	18.9	20.1	11.2	18.7	2	2	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Linton	6,755	6	9	4	15	10	11.5	15.6	8.0	13.7	2	2	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1						
Princeton	6,568	10	8	9	18	15</																													

Mortality of Indiana for February, 1914. (Stillbirths excluded.)

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Population Estimated 1914.	Total Deaths Reported for February, 1914.	Total Deaths Reported for January, 1914.	Total Deaths Reported for February, 1913.	Total Deaths Reported for Year 1914 to Date.	Total Deaths Reported for Year 1913 to Same Date.	Annual Death Rate Per 1,000 Population.					Important Ages.																
							February, 1914.		January, 1914.		February, 1913.		Rate for Year 1914 to Date.		Rate for Year 1913 to Same Date.		Under 1.		1 to 4.		5 to 9.		10 to 14.		15 to 19.		65 and Over.	
							Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
State	2,796,827	2,939	3,060	3,006	6,619	6,245	13.7	12.9	14.1	13.3	13.8	428	14.8	154	5.2	52	1.7	33	1.1	57	1.9	988	33.6					
Northern Counties	972,129	978	1,042	1,049	2,020	2,134	13.1	12.6	14.3	13.6	13.8	189	17.2	46	4.7	16	1.6	6	.6	19	1.9	337	34.4					
Central Counties	1,152,277	1,270	1,333	1,226	2,603	2,638	14.3	13.6	14.0	13.9	14.1	173	13.6	62	4.8	20	1.5	14	1.1	27	2.1	429	33.7					
Southern Counties	672,551	691	705	723	1,366	1,473	13.3	12.3	14.0	12.6	13.5	87	12.8	46	6.6	16	2.3	13	1.8	11	1.5	225	32.5					
All Cities	1,246,315	1,483	1,494	1,519	2,977	3,063	15.5	14.1	16.3	14.7	15.6	238	16.0	8.6	5.7	30	2.0	16	1.0	32	2.1	406	27.3					
Over 100,000	257,994	340	347	298	647	618	17.5	16.1	15.7	15.4	15.4	49	14.4	26	7.6	6	1.7	3	.8	8	2.3	78	22.9					
45,000 to 100,000	367,060	290	296	338	556	643	14.1	11.7	16.9	15.7	15.9	35	13.8	13	6.2	4	1.3	3	.8	7	2.4	70	24.1					
20,000 to 45,000	229,616	303	291	166	564	347	17.1	14.9	16.1	15.9	16.1	27	13.3	21	6.9	6	1.6	1	.6	5	1.6	66	21.7					
10,000 to 20,000	174,438	186	217	321	413	618	14.6	14.6	18.1	14.9	16.1	16	10.5	5	2.5	3	1.3	1	.3	3	3.0	65	33.1					
Under 10,000	322,007	354	373	398	723	841	14.3	13.8	13.2	13.3	13.3	44	12.3	16	4.5	9	1.1	1	.1	6	1.6	127	35.8					
Country	1,550,542	1,456	1,566	1,489	3,042	3,176	12.2	12.0	12.5	12.1	12.6	190	13.0	68	4.6	22	1.5	17	1.1	25	1.7	582	39.9					

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Deaths and Annual Death Rates Per 100,000 Population from Important Causes.																																	
	Pulmonary Tuberculosis.		Other Forms Tuberculosis.		Typhoid Fever.		Diphtheria and Croup.		Scarlet Fever.		Measles.		Whooping Cough.		Lobar and Broncho-Pneumonia.		Diarrhoea and Enteritis (Under 2 Years).		Cerebro-Spinal Fever.		Acute Anterior Poliomyelitis.		Influenza.		Puerperal Septicemia.		Cancer.		External Causes.		Small-pox.			
	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.		
State	322	150.7	43	20.0	38	17.7	39	18.1	6	2.7	19	8.8	21	9.7	358	163.9	47	21.9	4	1.8	1	.4	63	29.3	20	9.3	154	71.7	178	82.9				
Northern Counties	75	100.5	8	10.7	19	25.4	13	17.4	3	4.0	2	2.6	4	3.2	115	154.2	25	33.5	1	1.3			9	12.0	6	8.0	69	92.5	72	96.5				
Central Counties	159	169.6	24	27.1	13	14.7	17	19.2	1	1.2	12	13.5	7	7.9	148	167.3	14	15.8	1	1.1	1	1.1	26	29.4	8	9.0	61	68.9	71	80.3				
Southern Counties	97	187.9	11	21.3	6	11.6	9	17.4	1	1.9	13	25.1	10	19.3	93	169.2	8	15.6					23	54.2	6	11.6	24	46.5	35	67.8				
All Cities	155	162.1	24	25.1	22	29.2	16	16.7	4	4.1	6	6.2	8	8.3	180	188.2	29	30.3	2	2.0			24	25.1	10	10.4	77	80.5	115	120.2				
Over 100,000	33	170.1	10	51.5	5	25.7	2	10.3	2	10.3			1	5.1	47	242.2	20	20.6					3	15.4	1	5.1	13	67.0	26	134.0				
45,000 to 100,000	27	131.5	3	14.6	5	24.4	6	29.3					1	4.3	40	193.2							2	9.7	2	9.7	24	117.1	25	122.0				
20,000 to 45,000	29	164.4	3	17.0	7	30.6	3	11.3			2	11.3	3	3.3	35	213.4	19	102.0					6	34.0	3	17.0	14	79.3	27	153.1				
10,000 to 20,000	22	164.4	4	29.8	2	14.9	2	14.9			1	7.4	1	7.4	21	156.9							3	29.8	3	21.4	12	89.6	9	67.2				
Under 10,000	44	178.1	4	16.1	2	8.0	4	16.1			3	12.1	3	12.1	34	137.6							4	36.4	1	4.0	14	52.6	28	113.3				
Country	167	140.4	19	15.9	10	7.5	23	19.3			13	10.9	13	10.9	176	148.0	19	16.1	2	1.6			1	.8	39	32.7	10	8.4	77	64.7	63	52.9		

U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of February, 1914.

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

TEMPERATURE—IN DEGREES FAHRENHEIT.

Section average.	Departure from the normal.	Extremes.						
		Station.		Highest.	Date.	Station.	Lowest.	Date.
22.8	-3.9	Rome		60	22	Laporte	-16	9

PRECIPITATION—IN INCHES AND HUNDREDTHS.

Section average.	Departure from the normal.	Extremes.				
		Station.		Greatest monthly amount.	Least monthly amount.	
3.07	+0.12	Huntingburg		6.03	Cambridge City	0.53