

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.

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BIRTHS FOR NOVEMBER, 1915

Total births 4,743 (stillbirths excluded): State rate 20.4.  
Males, 2503; females 2240.  
White males, 2467; white females, 2204.  
Colored births, 72; males 36, females 36.  
Stillbirths, 174; white 167, colored 7.  
The Northern Sanitary Section, population 982,219, reports 1,787 births; rate 22.1.  
The Central Sanitary Section, population 1,165,270, reports 1807 births; rate 18.8.  
The Southern Sanitary Section, population 676,748, reports 1,149 births; rate 20.6.  
Highest rate, Lake County, 35.9.  
Lowest rate Hendricks County, 9.9.  
Total number of births to date for 1915, 56,523.

ABSTRACT OF MORTALITY STATISTICS  
FOR NOVEMBER, 1915

Total deaths reported 2,699; rate 11.6. In the preceding month 2,646 deaths; rate 11.0. In the same month last year 2,632 deaths; rate 11.4. Deaths by important ages were: Under 1 year of age 319 or 11.8 per cent of total; 1 to 4, 137; 5 to 9, 70; 10 to 14, 33; 15 to 19, 61; 65 and over, 936 or 34.6 per cent of total.

**SANITARY SECTIONS:** The Northern Sanitary Section, population 982,219 reports 868 deaths; rate 10.7. In the preceding month 907 deaths; rate 10.8. In the same month last year 897 deaths; rate 11.2.

The Central Sanitary Section, population 1,165,270 reports 1,187 deaths; rate 12.3. In the preceding month 1,148 deaths; rate 11.5. In the same month last year 1,133 deaths; rate 11.9.

The Southern Sanitary Section, population 676,748 reports 644 deaths; rate 11.5. In the preceding month 591 deaths; rate 10.2. In the same month last year, 602 deaths; rate 10.8.

**REVIEW OF SECTIONS:** The Central Sanitary Section reports the highest death rate which is 0.7 higher than that for the whole state. The Central Section presents the highest death rate also for scarlet fever, and whooping cough, influenza and cancer. The Northern Section presents the highest death rate for measles and external causes. The Southern Section presents the highest death rate for tuberculosis, typhoid fever, diphtheria, lobar and broncho-pneumonia, diarrhea and enteritis, cerebro-spinal fever, poliomyelitis, and puerperal septicemia.

**RURAL:** Population 1,549,714 reports 1,319 deaths; rate 10.3. In the preceding month 1,286 deaths; rate 9.7. In the same month last year, 1,312 deaths; rate 10.2.

**URBAN:** Population 1,274,523 reports 1,380 deaths; rate 13.1. In the preceding month, 1,360 deaths; rate 12.5. In the same month last year, 1,320 deaths; rate 12.8. The cities named present the following death rates: Indianapolis, 16.0; Evansville, 15.2; Ft. Wayne, 13.9; Terre Haute, 9.6; South Bend, 10.9; Gary, 8.5; Muncie, 13.0; Hammond, 10.4; Richmond, 12.1; Anderson, 10.4; East Chicago, 14.7; Elkhart, 11.0; Lafayette, 23.9; Michigan City, 10.5; New Albany, 12.3; Logansport, 15.6; Marion, 12.6.

SUMMARY OF MORBILITY AND MORTALITY  
FOR NOVEMBER, 1915

Scarlet fever was reported as the most prevalent infectious disease. The order of prevalence is as follows: Scarlet fever, diphtheria, tonsillitis, typhoid fever, acute bronchitis, pulmonary tuberculosis, influenza, acute rheumatism, chicken-pox, measles, lobar pneumonia, broncho-pneumonia, whooping cough, smallpox, malaria fever, diarrhea and enteritis, intermittent and remittent fever, other forms of tuberculosis, erysipelas, dysentery, puerperal fever, poliomyelitis, rabies in human, rabies in animals, cholera morbus, cerebro-spinal fever.

**SMALLPOX:** 127 cases in 16 counties with no deaths. The following counties reported smallpox present: Allen 1 case, Dearborn 1, Fountain 32, Gibson 16, Jennings 3, Johnson 1, Knox 2, Lake 14, Madison 5, Montgomery 3, Newton 1, Pike 15, Starke 1, Vanderburg 29, Vigo 2, Washington 1.

**TUBERCULOSIS:** 276 deaths, of which 241 were of the pulmonary form and 35 other forms. Of the males, 17 were married in the age period of 18 to 40 and left 34 orphans under 12 years of age. Of the females, 41 were married in the same age period as above and left 82 orphans under 12 years of age. Total number of orphans made in one month by this preventable disease, 116. Number of homes invaded, 263.

**TYPHOID FEVER:** 133 cases in 45 counties with 57 deaths. In the preceding month 249 cases in 53 counties with 55 deaths. In the same month last year 414 cases in 69 counties with 75 deaths.

**PNEUMONIA:** 204 deaths; rate 37.8 per 100,000. In the preceding month 104 deaths; rate 43.3. In the same month last year 84 deaths; rate 35.3. The male deaths numbered 107; females 97.

**DIPHTHERIA:** 553 cases in 61 counties with 43 deaths. In the preceding month 543 cases in 60 counties with 43 deaths. In the same month last year 581 cases in 54 counties with 39 deaths.

**SCARLET FEVER:** 501 cases in 68 counties with 10 deaths. In the preceding month 364 cases in 55 counties with 7 deaths. In the same month last year 346 cases in 56 counties with 8 deaths.

**MEASLES:** 543 cases in 29 counties with 6 deaths. In the preceding month 167 cases in 16 counties with 2 deaths. In the same month last year 122 cases in 23 counties with 4 deaths.

**POLIOMYELITIS:** 4 cases in 4 counties with 1 death. The death occurred in Martin county, female 14 years.

**PELLAGRA:** 2 deaths in 2 counties. Marion county, male 54 years; Washington County, female 49 years.

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

**EXTERNAL CAUSES:** Total deaths 191; males 132; females 59. *Suicide Total* 34; males 23; females 11. Means of suicide; poison 9; asphyxia 2; hanging or strangulation 7; drowning 2; firearms 9; cutting or piercing instruments 3; other suicides 2. *Accidental or undefined total* 146; males 101; females 45. Poisoning by food 2; other acute poisoning 3; conflagration 1; burns (conflagration excepted) 17; absorption of deleterious gases (conflagration excepted) 4; accidental drowning 1; traumatism by firearms 5; traumatism by cutting or piercing instruments 1; traumatism by fall 33; traumatism in mines 6; traumatism in quarries 1; traumatism by machines 3; railroad accidents and injuries 28; street-car accidents and injuries 7; automobile accidents and injuries 15; motorcycle accidents and injuries 1; injuries by other vehicles 5; other crushing 1; injuries by animals 4; electricity (lightning excepted) 1; fractures (cause not specified) 5; other external violence 2. *Homicide Total* 11; males 8; females 3. Homicide by firearms 10; by other means 1.

**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 month, which are not sent to this department in time to be

tabulated with the report for the current month. With the report for November the following counties named below are delinquent in this matter.

**BIRTHS**

Allen 4 (Ft. Wayne 1); Bartholomew 4; Benton 2 (Oxford); Boone 11 (Lebanon 4, Thorntown 1); Brown 3; Carroll 1 (Burlington); Clark 6 (Henryville 3); Davies 1; Dearborn 5 (Aurora 4—1 for July, 1 for August); Decatur 1; DeKalb 5—1 for April 1914, (Butler 1); Delaware 6 (Muncie); Elkhart 1 for October; Fayette 1; Floyd 7 (New Albany 4); Franklin 4; Gibson 2—1 for July; Grant 4 (Marion 1); Green 1 (Bloomfield); Harrison 13—1 for April, 2 for May, 1 for June, 1 for July, 2 for August; 5 for September, 1 for October; Hendricks 1; Henry 5 (New Castle 1, Dunreith 1 for July); Huntington 1; Jackson 1 (Seymour); Jefferson 3; Knox 4 (Vincennes); LaGrange 1; Lake 9 (Hammond 3, Gary 2, Crown Point 2, Griffith 1); Laporte 3 (Michigan City 1 for April, 1 for June); Madison 1 (Frankton); Marion 6 (Indianapolis 5—1 for January, 2 for March, 1 for June, 1 for July, 1914); Monroe 1; Montgomery 1; Noble 1; Perry 2; Pike 5; Posey 6 (Cynthiana 1, Griffith 1, Stewartsville 1); Pulaski 2; Putnam 2 (Cloverdale 1); Randolph 2 (Union City 1); Ripley 6; Rush 1; Spencer 12—2 for January, 1 for July, 2 for August, (Rockport 1); Starke 1; Steuben 2 (Fremont 1); St. Joseph 5 (Mishawaka 2); Sullivan 2 (Hymera 1); Tippecanoe 4 (Lafayette 2, West Lafayette 1); Union 1; Vanderburgh 7 (Evansville 6); Vermillion 7 (Newport 1, Universal 1, Hillsdale 2); Warren 1; Warrick 4 (Booneville 3, Chandler 1); Wells 6 (Bluffton 2, Ossian 1); Whitley 4 (Larwill 1); Total 202.

**DEATHS**

Allen 4 (1 for August); Blackford 1; Boone 1 (Lebanon); Brown 1; Clay 1 (Staunton); Daviess 2; Dearborn 1; DeKalb 1; Elkhart 1; Gibson 1—for September; Grant 1; Greene 2 (Jasonville 1); Harrison 2; Henry 2 (New Castle 1, Mooreland 1); Howard 3; Huntington 3—1 for August (Andrews 1, Roanoke 1); Jefferson 1 (Madison); Knox 1; Laporte 3 (Michigan City 1); Lawrence 2 (Bedford 1); Madison 2; Marion 2 (Indianapolis); Monroe 2; Newton 2—for September 1914; Owen 3; Parke 2 (Rockville 1); Pike 1; Posey 4 (Cynthiana 2, Stewartsville 1); Ripley 1 (Milan); Shelby 4 (Shelbyville); Spencer 2; Vermillion 6 (Newport 1); Wayne 3 (Spring Grove 2); Wells 1; Whitley 1; Total 70.

**REPORT OF BACTERIOLOGICAL LABORATORY  
INDIANA STATE BOARD OF HEALTH  
FOR NOVEMBER, 1915**

Will Shimer, M. D., Superintendent

Sputum for tubercle bacilli—		
Positive.....	148	
Negative.....	269	
		417
Urine for tubercle bacilli—		
Positive.....	1	
Suspicious.....	1	
Negative.....	1	
		3
Pus for tubercle bacilli—		
Positive.....	2	
Suspicious.....	1	
Negative.....	3	
		6

Feces for tubercle bacilli—		
Positive.....	1	
Negative.....	3	
	—	4
Widal tests for typhoid fever—		
Positive.....	24	
Negative.....	95	
	—	119
Paratyphoid tests for typhoid fever—		
Negative.....		2
Throat cultures for diphtheria bacilli—		
Positive.....	240	
Suspicious.....	64	
Negative.....	364	
Unsatisfactory.....	20	
No growth.....	1	
	—	689
Epidemic diphtherias—		
Positive.....	43	
Suspicious.....	33	
Negative.....	1,284	
Unsatisfactory.....	9	
No growth.....	3	
	—	1,372
Brains for rabies—		
Dogs:		
Positive.....	9	
Negative.....	3	
Cows:		
Positive.....	1	
Cats:		
Negative.....	1	
Horses:		
Positive.....	1	
	—	15
Feces for typhoid bacilli—		
Negative.....		3
Blood for counts.....		7
Blood for malaria plasmodia—		
Positive.....	1	
Negative.....	11	
	—	12
Pus for gonococci—		
Females:		
Positive.....	22	
Suspicious.....	4	
Negative.....	11	
Males:		
Positive.....	19	
Suspicious.....	13	
Negative.....	6	
Sex not given:		
Positive.....	6	
Negative.....	1	
	—	82
Pus miscellaneous.....		9
Pathological tissues—		
Carcinoma:		
Carcinoma of chest.....	1	
Carcinoma of spine.....	1	
Carcinoma of uterus.....	1	
Carcinoma of rectum.....	1	
Carcinoma of skin.....	2	
Sarcoma:		
Sarcoma of uterus and adnexa.....	1	

Miscellaneous tissues.....	25
Urine for chemical analysis.....	19
Total number specimens examined.....	2,791
Diphtheria examinations on potassium tellurate.....	254
Total number examinations made.....	3,045
Doses of antityphoid vaccine prepared and sent out... ..	204
Guinea pigs inoculated for rabies negative.....	1

OUTFITS PREPARED AND SENT OUT DURING NOVEMBER, 1915

Tuberculosis.....	482
Diphtheria.....	716
Widal.....	137
Blood counts.....	5
Gonococci.....	87
Malaria.....	31
Bile Media.....	8
Epidemic diphtherias.....	2,540
Total number.....	4,006

PATIENTS WHO HAVE FINISHED "PASTEUR" TREATMENT NOVEMBER, 1915

	Name	Town	County	Sex	Age	Treatment began	Treatment finished
1	Mr. J. R. Green.....	Lebanon	Boone	M	30	10-21-15	11- 3-15
2	Mr. J. R. Hughes.....	Peru	Miami	M	24	10-23-15	11- 5-15
3	Mrs. J. R. Hughes.....	Peru	Miami	F	24	10-23-15	11- 5-15
4	Mrs. Belle Mitchell.....	Peru	Miami	F	56	10-23-15	11- 5-15
5	Helen Webb.....	Peru	Miami	F	9	10-23-15	11- 5-15
6	Mrs. Mary Fahler.....	Indianapolis	Marion	F	38	10-18-15	11- 7-15
7	Mr. J. Lunaford.....	Terre Haute	Vigo	M	38	10-20-15	11- 8-15
8	Roy Lunsford.....	Terre Haute	Vigo	M	13	10-20-15	11- 8-15
9	Evelyn Delgrande.....	Terre Haute	Vigo	F	5	10-22-15	11- 8-15
10	Mildred Walden.....	Terre Haute	Vigo	F	6	10-22-15	11- 8-15
11	Mr. Wm Fulton.....	Richmond	Wayne	M	37	10-26-15	11-13-15
12	Mr. Leo Murphy.....	Peru	Miami	M	22	10-29-15	11-13-15
13	Mrs. Verne Murphy.....	Indianapolis	Marion	F	23	11- 8-15	11-23-15
14	Mr. Jesse Murphy.....	Indianapolis	Marion	M	25	11- 8-15	11-23-15
15	Loren C. Murray.....	Cannonsville	Fayette	M	5	11-13-15	11-30-15

THINGS OF INTEREST FROM THE LABORATORY

Sanitary School House Law, Section No. 2, commands medical inspections of schools in the presence of an epidemic. Many health officers do not seem to know how many cases of an infectious disease it takes to make an epidemic.

To prevent epidemics the first case must be considered an epidemic and everything possible done to prevent others from being infected.

Four weeks ago a case of diphtheria appeared in the Franklin, Indiana, school. The school authorities were advised to institute medical inspection at once. They waited three weeks to begin inspections, with the result that hundreds of cultures had to be made and many carriers were found, and the end is not yet in sight.

Health authorities can do nothing unless they get the cooperation of the people. A few weeks ago diphtheria appeared in the schools of Beech Grove. Medical inspections were instituted and everything done to stop the epidemic, yet a few cases continued to appear. Investigation showed the trouble to be due to one family, some of whose members were diphtheria carriers, refusing to remain isolated. This man has a brother who is a physician. This doctor told him that his cultures did not show diphtheria bacilli.

Recently there has appeared in the northeast section of Indianapolis a severe epidemic of gastro enteritis. Circum

stantial evidence indicated that the source of the trouble was city water. Every possible method of investigation was used without locating the source of the trouble, yet the health authorities have been severely criticised for not placing the blame on the water company. In contrast to this situation in the last twelve months the laboratory has found 85 Indianapolis dogs to have rabies and 142 persons were bitten by these dogs and treated by us. We know the cause of rabies and how it can be prevented; however, a muzzling ordinance would raise a tremendous rebellion among the owners of useless dogs.

There appeared recently in a Christian Science publication a severe criticism of a Chicago doctor for not interfering to save the life of a deformed baby, yet this man gave the strictly orthodox Christian Science treatment e. g., "Absent treatment."

In public health, as in other things, it all depends upon whose ox is being gored.

### REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, INDIANA STATE BOARD OF HEALTH, FOR NOVEMBER, 1915

H. E. Barnard, State Food and Drug Commissioner

One hundred and thirty-one samples of food were analyzed in the Food Laboratory during the month of November. Ninety-four of the samples were classed as legal, the samples being properly labeled and of good quality. Thirty-seven were illegal.

Of the 33 samples of hamburger and sausage submitted for analysis 14 were classed as illegal because of the presence of sulphites.

Ten of the 12 samples of oysters analyzed contained added water and were classed as illegal.

Five of the 40 milks examined were below standard and were classed as illegal.

The two illegal cream samples were low in butter-fat content.

Fifteen drug samples were analyzed during the month.

One of the 4 samples of linseed oil analyzed contained mineral oil and was classed as illegal. The sample of aspirin tablets was declared illegal because salicylic acid had been substituted for the principal ingredient.

#### RESULTS OF ANALYSES OF FOODS AND DRUGS DURING THE MONTH OF NOVEMBER, 1915

CLASSIFICATION	Number Legal	Number Illegal	Total
<b>FOODS</b>			
Beverages—			
Beers, Temperance.....	1	1	2
Cider.....	1	2	3
Grape Fruit.....	1		1
Flour.....	1		1
Meat Products—			
Hamburger.....	7	11	18
Lard.....	2		2
Oysters.....	2	10	12
Sausage.....	12	3	15
Salt Pork.....	1		1
Weinerwurst.....	1		1
Milk Products—			
Butter.....	5		5
Cream.....	4	2	6
Buttermilk.....	1		1
Ice Cream.....	3		3
Milk.....	35	5	40
Milk, Breast.....	2		2
Milk, Condensed.....	3		3
Cane Syrup.....		1	1
Sorghum Molasses.....		1	1
Tomato Pulp.....	10		10
Vinegar.....	2	1	3
<b>Total.....</b>	<b>94</b>	<b>37</b>	<b>131</b>
<b>DRUGS</b>			
Aspirin Tablets.....		1	1
Linseed Oil.....	3	1	4
Patent Medicines.....		4	4
Miscellaneous.....	4	2	6
<b>Total.....</b>	<b>7</b>	<b>4</b>	<b>15</b>

### INSPECTORS' REPORT FOR THE MONTH OF NOVEMBER, 1915

During the month of November the inspectors visited 69 cities and towns and made 1377 sanitary inspections of food-producing establishments. Of this number 9 places were rated excellent, 785 good, 494 fair, 49 poor and 40 bad.

Eighty-three dairies were visited. Of this number 19 were rated good, 19 fair, 12 poor and 33 bad.

Of the 453 grocery stores inspected 4 were rated excellent, 276 good, 261 fair and 12 poor.

One hundred and ninety-six meat markets were visited during the month. One hundred and twenty-eight of this number were classed as good, 61 fair and 7 poor.

Of the 148 drug stores visited 1 was rated excellent, 116 good, 30 fair and 1 poor.

One hundred and ninety-two bakeries and confectioneries were inspected. Three were rated excellent, 127 good, 95 fair, 1 poor and 2 bad.

Of the 141 hotels and restaurants visited 55 were rated good, 74 fair, 7 poor and 5 bad.

Of the 9 ice cream parlors visited 1 was rated good and 8 fair.

Six slaughter houses were visited. Three were rated good and 3 fair.

Other inspections were made of creameries, milk depots, ice cream factories, bottling works, produce houses, poultry houses, flour mills, saloons, etc.

Seventy condemnation notices were issued during the month because of improper construction of the buildings and for unsanitary conditions.

Five prosecutions were brought during the month for violation of the Pure Food and Sanitary Food Law. Two cases were filed for the sale of dirty milk, another for transferring milk in the dusty street. One dealer was fined for maintaining an unsanitary grocery and meat market. Another for maintaining an unsanitary restaurant. The total fines and costs amounted to \$106.

#### INSPECTORS' REPORT FOR THE MONTH OF NOVEMBER, 1915

INSPECTIONS	No. Inspected	No. Excellent	No. Good	No. Fair	No. Poor	No. Bad
Dairies.....	83	0	19	19	12	33
Grocery stores.....	453	4	276	261	12	0
Meat Markets.....	196	0	128	61	7	0
Drug Stores.....	148	1	116	30	1	0
Bakeries and Confectioneries.....	192	3	127	59	1	2
Hotels and Restaurants.....	141	0	55	74	7	5
Creameries.....	3	0	0	3	0	0
Milk Depots.....	9	0	5	4	0	0
Wholesale groceries.....	9	0	8	1	0	0
Ice cream parlors.....	9	0	1	8	0	0
Slaughter houses.....	6	0	3	3	0	0
Fish markets.....	15	0	11	3	1	0
Ice cream factories.....	2	0	1	1	0	0
Wholesale drug store.....	1	0	1	0	0	0
Lunch cart.....	1	0	0	1	0	0
Bottling works.....	10	0	5	4	1	0
Produce houses.....	13	0	4	8	1	0
Poultry houses.....	12	0	3	7	2	0
Flour mills.....	3	0	3	0	0	0
Fruit and vegetable stores.....	11	0	7	2	2	0
Ice and cold storage plants.....	2	0	2	0	0	0
Wholesale confectionery.....	1	0	1	0	0	0
Canning factory.....	1	0	1	0	0	0
Sanitary ice companies.....	2	1	1	0	0	0
Saloons.....	54	0	7	45	2	0
<b>Total.....</b>	<b>1,377</b>	<b>9</b>	<b>785</b>	<b>494</b>	<b>49</b>	<b>40</b>

## NOTICES OF CONDEMNATION DURING THE MONTH OF NOVEMBER, 1915

CLASSIFICATION	Reasons for Unsanitary Conditions	Condemnation Improper Construction	Total
Bakery.....	1	1	1
Creameries.....	2	2	2
Dairies.....	29	29	29
Fruit stores.....	2	2	2
Groceries.....	4	4	4
Grocery and lunch counter	1	1	1
Grocery and meat market	1	1	1
Grocery and restaurant..	1	0	1
Meat markets.....	3	3	3
Poultryhouse.....	1	1	1
Restaurants.....	18	18	18
Restaurant and bakeshop	1	1	1
Restaurant and confectionery.....	1	0	1
Saloons.....	5	5	5
Total.....	70	68	70

## LIST OF PROSECUTIONS DURING THE MONTH OF NOVEMBER, 1915

County	Names and Addresses of Defendants	Why Prosecuted	Date of Trial	Final Disposition
Knox.....	Lawrence Little, Vincennes	Selling Dirty Milk	11-19-15	Fined \$20.00
Lake.....	Jarabek & Szabo, Gary	Unsanitary Grocery and Meat Market	11-11-15	Fined \$23.00
Lake.....	Sam Peters, Gary..	Unsanitary Restaurant	11-10-15	Fined \$23.00
Vanderburg..	David Schlag, Evansville	Transferring Milk in Dusty Street	11- 5-15	Fined \$20.00
Vanderburg..	David Schlag, Evansville	Selling Dirty Milk	11- 5-15	Fined \$20.00

## SANITARY INSPECTIONS

The great importance of the work of the sanitary inspector is better realized each year the work is carried on. The early struggles against the unsanitary baker and the grocer, and the dirty dairyman, although they seemingly accomplished little, paved the way to the splendid comprehensive sanitary control now in force throughout the state. The work of the State Board of Health and of the food inspectors as herein recorded is of course but a fraction of the work being done in Indiana, as every conscientious health officer carries on from day to day an inspection service which gradually but surely improves sanitary conditions in his community. Nearly every city in the state is doing some form of inspection work. Many cities have a corps of sanitary officers who devote their entire time to the correction of unsanitary conditions. Other cities combine the work of the sanitary officer and meat and milk inspector, and in still others the police are very properly required to report unsanitary conditions and compel compliance with the sanitary laws and ordinances.

It is no longer possible for the conditions of filth and uncleanness that once prevailed to exist in the present-day grocery and bakeshop. Even the slaughterhouse business, whose owners thought impossible of improvement, is now usually conducted in compliance with the laws of sanitation and decency. The dairyman, as will elsewhere be shown, is interested in producing milk of quality as well as quantity, and scores of the dairies have recently been quoted for the production of high-grade milk under conditions which approach the ideal.

During the year passed a comprehensive survey has been made of canning factories. In his study of these factories Inspector Bruner visited every factory in the state, talked with the owners and operators, suggested improvements and gave orders which in spite of an unsatisfactory year for the

industry, were almost without exception cordially received and carefully followed. What has been done in the development of a better canning industry can be done equally as well in the development of other industries which have to do with the manufacture and distribution of the food supply. It is proposed in the coming year to investigate thoroughly the conditions under which cream is produced and butter manufactured.

Until recently it has not been possible to make headway in the enforcement of that Section of the Sanitary Food Law which prohibits the employment of diseased persons. To say that the consumptive shall not work in a food factory is good, but unless the physician and health officer determines the disease and report the case, too frequently the sufferer will continue to work even after he knows that he is diseased. Unfortunately but few of the communicable diseases are reportable, and the sickness of the patient is a secret held inviolate by his physician. The veil of secrecy protects the syphilitic from the judgment of his fellows. But more than that, it immunizes him against the operation of the law which would deny his employment. This is altogether wrong. The rights of the individual to suffer his disease in private are not to be considered as against the right of those with whom he comes in contact to know that he is a leper to be isolated until no longer a menace to his fellows.

Our charitable compassion for the invalid, cultivated for thousands of years until it has attained the attributes of a virtue, should, I believe, be supplanted by a feeling of contempt and scorn for the person whose uncleanness breeds disease within him and whose immorality earns its penalty. The bowels of compassion of the health officer should be replaced by righteous wrath whenever he finds a diseased person working with food. Those who accept the average man as a fairly able-bodied citizen, seldom realize how far below a condition of physical soundness and efficiency he really is.

I would not make the food inspector a pathological detective, but I would make it incumbent upon every physician who knows of a case of infectious or contagious disease to report that case, that the health of the community may be safeguarded, and I would make it the duty of the employer to require every person who labors for him to present a certificate of health at frequent intervals. The healthy man will raise no objection to declaring his condition. The unhealthy will be brought to realize that it is best to keep well if to become ill means loss of employment.

The biggest problem of the food official is that of protecting the food of the consumer—not against moulds, not against unsoundness, not against preservatives, but against contamination with the germs of disease which may be planted therein by the workmen.

By the side of such a problem the sight of grown men battling with the demon of albumen in baking powder, of ponderous committees working for weeks on a definition of egg noodles, of hordes of inspectors waging bitter war against the milkman's pump and of learned lawyers quibbling over the phraseology of a label, loom up as absurdities, ridiculous and laughable examples of an utter lack of sense of proportion.

When we realize how few years we have been regarding health as an essential to employment, and sum up the results of our crusade, we find we have really gone far. Several large industries recognize the necessity for employing healthy workmen and provide the means by which they can secure them. The largest corporation in the United States, The Pennsylvania Railroad, has for two years made frequent examinations into the condition of the health of all employees in the dining cars and Pullman car service. Progressive hotel managers everywhere are recognizing their responsibilities to the travel-

ing public they serve. But of greater moment even than this record of achievement is the fact that we are slowly but surely breaking down the practice of the medical profession to refuse the public information which it has a right to receive. Since ultimately the employe must pass under the inspection of the physician, we can only be fully successful in our crusade when the student in training for service in the field of medicine is taught more positively than now that, while his first duty may be to the patient upon whom he waits, his larger responsibility is to the public whom it is his duty to protect.

During the year the inspectors visited 482 different cities and towns for the purpose of making the inspections required under the sanitary food law. In these cities and towns live 1,372,892 people but since most of the cities are distributing centers through which the food supply passes to and from the country districts, it is probable that in their work the inspectors studied the conditions under which the food supply of 95 per cent of our population was produced and distributed. This of course applies only to the inspections of goods manufactured within the state. The conditions under which goods are manufactured outside the state cannot be regulated under our laws but fortunately is at the present time well cared for by the inspectors who are enforcing the Federal Food and Drugs Act.

Of the 10,809 inspections made during the year but 115 places were reported to be in excellent condition. This is a very small percentage but the requirements for a score of excellent are so high that it is only the unusual place backed both by money and intelligence and constant effort that can earn the score. The real story of our sanitary condition is told by the number of places reported as in good condition: 5,989 places were reported as good; 4,245 places were fair; but 386 poor and 74 bad. A study of conditions in the several industries is of interest. As has always been the case the dairies run the lowest score. Of the 445 dairies visited not one was scored excellent. One hundred and five only were even in good condition; 183 were reported as fair; 112 poor and 45 bad. It is interesting to note that although but 445 of the 10,809 inspections were dairies, 45 of the 74 bad scores were earned by dairymen, or in other words, four per cent of the inspections furnished sixty per cent of the bad scores.

Of the 3,783 grocery stores visited 46 were scored excellent; 2,151 good, 1,534 fair, 48 poor and but 4 bad. This is a splendid record and the grocer may well be proud of the way his business associates have responded to the call for more sanitary methods at the grocery store.

Seventeen of the 1,444 meat markets inspected were listed excellent. Eight hundred and six were in good condition; 588 were fair; 31 poor and but 2 bad. The meat market is rapidly improving. When but 31 of the markets visited could be listed as poor and but 2 as bad we may be reasonably sure that our meat comes from sanitary shops.

Of the 1,484 drug stores visited 12 were rated excellent, 1,158 were good, 308 were fair, but 6 were poor, and none were bad. The drug store as it is now operated merits little criticism. The places scored fair with a little extra care at the soda fountain will earn promotion into the better grade.

Of the 1,519 bakeries and confectioneries inspected 23 were rated excellent, 922 were good, 528 fair and 46 poor. No scores of bad were reported.

Nine of the 1,192 hotels and restaurants visited were in excellent condition, 464 were rated good, 670 fair, 45 poor and 4 bad. Hotels and restaurants vie with the dairy for a position at the foot of the line. The restaurant proprietor, especially in the smaller towns, knows little of the business of serving food and less of the practice of preparing it in a cleanly fashion.

One hundred and sixty-three ice cream parlors were visited. Two were rated excellent, 62 good, 97 fair and 2 poor.

Of the 33 ice cream factories inspected 1 was excellent, 14 good, and 18 fair. None were rated poor or bad.

Of the 63 flour mills visited 49 were in good condition, 12 were rated fair and 2 poor.

Two hundred and forty-one canning factories were inspected. Four were classed as excellent, 84 were rated good, 88 fair, 60 poor and 5 bad. A more complete analysis of these inspections will be found under the heading "Inspection of Canning Factories."

Of the 26 saloons visited for the purpose of inspection none were even good. Six were fair, 10 poor and 10 bad. As a food distributing establishment the saloon is entitled to severe criticism and will hereafter receive special attention. Under the Pure Food Law the saloon, the restaurant and the drug store occupy the same position, and we shall require of the saloon keeper as sanitary conditions back of his bar as we now insist upon at the soda fountain. We shall insist upon the same degree of health in employees and in fact the same complete requirement with every provision of the sanitary food law.

## DISINFECTANTS

Gail Miers Stapp

The State Board of Health has long felt it advisable, both in the interest of the public health and wise economy, to determine the actual value of the many brands of antiseptics and disinfectants sold within the State and largely used in school houses and public buildings. In order to determine the value of these preparations, a department of the drug laboratory has been devoted to the study of disinfectants and antiseptics and it is proposed to exercise over these preparations the same careful control that we have given the drug supplies. At our request, the superintendents of schools in the larger cities submitted samples of the solution used in school houses and school rooms as deodorants and disinfectants. Twenty-three samples of disinfectants were obtained from various sources and analyzed to determine their phenol co-efficient or actual value as compared with pure phenol. The method used in the analysis was that recommended by the Hygiene Laboratories, Bull. No. 82.

It will be observed that a number of preparations had a decidedly lower phenol co-efficient than that claimed for them. The lowest grade preparations claimed nothing and in some instances were worth nothing.

Sandol, labelled "King of Disinfectants" is recommended "to destroy all foul odors and disease germs instantly." According to the E. S. Hughes Co., Lt'd., Mt. Clemens, Michigan, it is absolutely non-poisonous. An analysis shows it to be a five percent solution of common salt. In other words, the preparation is a fraud and those who sell it are obtaining money under false pretenses just as truly as if they were selling gold-plated bricks.

The Peerless Germicide and Disinfectant has no germicidal action and is of no value whatever as a germ killer. The statement in the accompanying advertising literature, "that it will kill tuberculosis and other infectious disease germs which cause death among employees" is false.

From the data given below we must conclude that it is unwise to buy disinfectants of unknown composition and without definite information as to their actual value for the purpose for which they are to be used.

## DISINFECTANTS

NAME	Phenol Coefficient Found	Phenol Coefficient Claimed
Chloro Naphtholeum.....	4.3	5.0
Chloro Naphtholeum.....	4.7	5.0
Creolin.....	5.4	9 to 10*
International Chemical Co.....	1.6	
Pine Emulsion.....	3.45	
Pine Oil.....	3.6	
Pheneco.....	13.6	15.0
Creo Sul.....	2.9	
Pyxol.....	14.3	20.0*
Ka-De-Co.....	2.1	
Peerless.....		
Crezone.....	12.4	20.0
Car Sol.....	2.12	
Capitol.....	None	
Twenco.....	10.5	20.0
Sandol.....	None	
Kresodip.....	1.9	
Lysol.....	2.25	
Deodorine.....	1.5	
Kreso.....	4.12	
C. N.....	3.0	5 to 6
Kresano.....	4.05	5
Creolium.....	.60	

\* As obtained by the Rideal-Walker method.

uted. General Sternberg was ever modest, gentle and considerate and a most amiable man. He was a faithful soldier, fearless in battle or when facing yellow fever or cholera. He had absolute sincerity and scientific honesty which governed all his actions. He was buried in Arlington cemetery leaving his wife and thousands of friends to mourn his loss.

DR. EDWARD LIVINGSTON TRUDEAU was born October 5, 1848, and died November 15, 1915, in his home at Saranac Lake, New York. Every one interested in medicine and in the anti-tuberculosis cause is acquainted with Dr. Trudeau or know of his accomplishments and great and unselfish work. The story of his remarkable career has become very familiar. Early in his life he contracted tuberculosis from his brother while nursing him and who died from the disease in a room kept purposely over-heated with the windows closed, and with no precautions taken against the unknown conditions of infection. Reading the writings of Brehmer he learned of the out-door method of treating consumption, and when he found he was in the grip of the disease determined to try that method. He found his way to Saranac Lake when yet a young man and when that lake was forty miles from any railroad and when only one or two crude hunting lodges were on its shores.

The feeble beginning of the now famous Adirondack Cottage Sanitarium occurred in 1884. In 1894 he built the first laboratory exclusively devoted to the study of tuberculosis. The gradual development of Saranac Lake as a health center had begun but a short time before this and now is an institution of world wide fame.

Dr. Trudeau was a man of high ideals and was methodical in his efforts to reach them. In spite of his constant struggle with his own disease, his life represents a story well fitted to fire the imagination and to kindle the wonder and admiration of every ambitious young man. His autobiography is soon to be published. It was only upon the insistent urging of several of his nearest friends that Dr. Trudeau consented to write his life history.

He was a frail man but nevertheless his figure was virile. No one could help but love Dr. Trudeau. His kindly face and his gracious human heart appealed to all.

The writer of this sketch was present when the National Association for the Study and Prevention of Tuberculosis was organized in 1904 at Atlantic City. A goodly number of well known medical men of the United States were present, among them Osler, Janeway, Welsh, Knopf, Trudeau, Thayer, Jacobs, Jacoby and many others whose names are not now recalled. Dr. Trudeau was unanimously elected president. After the preliminary organization he arose and said—"I cannot accept this honor, I am unfit for it,"—when he was seized by one arm by Dr. Osler and by the other by Dr. Janeway, Dr. Welsh and three or four other coming behind and they fairly pushed him to the platform. The entire audience, fully five hundred, rose and cheered as this scene was enacted. Dr. Trudeau saw that it was indeed unanimous and that his refusal would not be accepted and thereupon took the gavel and presided.

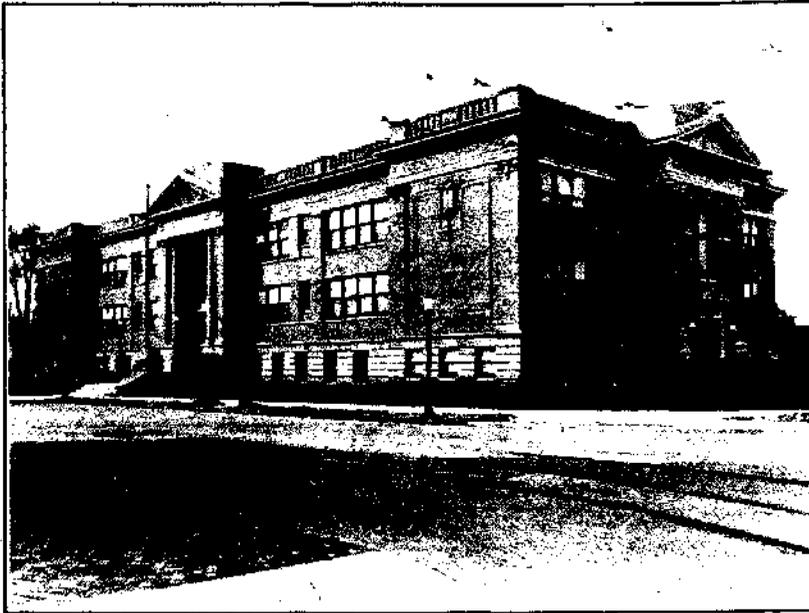
It seems fitting here to call attention to the fact that physicians, many of them who earned their living from trying to cure consumption, organized the American Association for the Study and Prevention of Tuberculosis, which is devoted to prevention. There were a few laymen of philanthropic tendency in the organizing body but they were few. The work was done by physicians practicing curative medicine who, at considerable loss, had left their practice to perform this philanthropic service.

EX-SURGEON GENERAL GEORGE M. STERNBERG who discovered the pneumococcus in his own sputum, died at his home in Washington, D. C., November 3, 1915. The story of his life was that of the usual young man who succeeds. He had a hard struggle. He supported himself by teaching school at the age of 16 in New Jersey, and was born in New York June 8, 1838. He entered the U. S. Army as Surgeon May 28, 1861 and became surgeon general May 28, 1893. He was at the battle of Bull Run, but was among those who did not run. He stayed at his post and for his gallantry and bravery, in looking after the business of his department, was rewarded with the appointment as Surgeon General. Within a month after his appointment he issued an order establishing the Army Medical School, which was his first permanent and great work. He was interested all his life in hygiene and preventive medicine. He established the tuberculosis hospital for the Army in Fort Bayard, New Mexico, in 1899.

When he retired from the army he still continued his interest in the science of medicine but particularly in hygiene and preventive medicine. He helped to organize the National Association for the Prevention and Study of Tuberculosis in 1904. At that time Dr. E. L. Trudeau was elected president, and Gen. Sternberg was elected treasurer. Dr. Sternberg was very active and bore much of the burden in raising funds for the general tuberculosis work in Washington. General Sternberg was a leader in whatever field he entered. He was a bacteriologist of note and wrote one of the very best and most exhaustive works upon bacteriology which ever appeared. It has already been shown that Dr. Sternberg first isolated the bacillus of pneumonia and it was a year or two later that Dr. Koch discovered the tuberculosis bacillus. The same year in which Dr. Koch made his discovery, General Sternberg, then stationed at Ft. Mason, California, demonstrated and photographed the organism, probably for the first time in America.

General Sternberg did good work for better housing in Washington. He organized the Washington Sanitary Improvement Company to build sanitary homes for the better class of wage earners. This company has now 97 houses with \$200,000 invested and never pays dividends above 5 per cent. Through this work, all due to General Sternberg's initiative, 818 families in Washington are able to live without undue expense in wholesome surroundings, free from any conditions to which tuberculosis in tenements is so often attrib-

## THE WORLD DO MOVE



The New Harmar Street School Building in Fort Wayne  
Griffith and Fair, Architects

Fort Wayne has the honor of being the first city in the state to have a public building in which the stairway is superseded by the incline. In the new Harmar Street building recently completed, two inclines lead from the first to the second floor. These inclines are of re-inforced concrete construction, overlaid with battle ship linoleum and have a gradient of one foot in six. On account of some opposition to the adoption of the incline, a wide stairway leads to the second floor of the building at one end of the main corridor. The principal of the school states that 95 percent of both teachers and pupils use the inclines, practically abandoning the stairway. The advantages of the incline over the stairway are:

1. It permits pupils at whatever age to take their natural step whether going up or down.
2. It makes it possible for crippled pupils to go easily and safely from one floor to another.
3. In case of panic from fire or other cause the incline is infinitely safer than the stairway.

In fact the only disadvantage of the incline is that it requires more room for construction than the stairway. Now that Ft. Wayne has led the way it is to be hoped that wherever possible in our larger school buildings throughout the state, the back-breaking, deformity producing, stairway will be superseded by the incline.

DR. CHARLES E. NORTH, the well known milk authority and Secretary for the New York Milk Committee, gives the following reasons why milk should be pasteurized:—

### A. Raw Milk Causes Infant Deaths

Twenty-five per cent of all deaths are of children under five years of age.

More children die from intestinal disease than from other causes. Children's food is chiefly milk.

Dirt bacteria, harmless to adults, irritate and inflame the intestines of children.

Pasteurization kills 99 per cent of the bacteria in milk.

### B. Raw Milk Causes Septic Sore Throat

Septic sore throat is a violent form of tonsillitis.

It is often followed by acute articular rheumatism, erysipelas, peritonitis, endocarditis and other serious inflammations.

#### From One Raw Milk Supply

Boston, Mass.....	1,043 cases
Boston, Mass.....	227 cases
Chicago, Ill.....	10,000 cases
Baltimore, Md.....	602 cases
Cortland-Homer, N. Y.....	669 cases

The disease attacks adults chiefly. There are often deaths. Bacteria in sore udders of cows closely resemble bacteria found in these sore throats.

Pasteurization kills the bacteria producing septic sore throat.

### C. Raw Milk Causes Typhoid Fever

Trask has collected records of 317 outbreaks of typhoid fever traced to raw milk. Here are a few:

#### From One Raw Milk Supply

Glasgow, Scotland.....	500 cases
Cologne, Germany.....	270 cases
Port Jervis, N. Y.....	59 cases
Springfield, Mass.....	182 cases
Oakland, Calif.....	262 cases
Montclair, N. J.....	107 cases
Stamford, Conn.....	307 cases

Pasteurization entirely destroys the germs of typhoid.

### D. Raw Milk Causes Tuberculosis

One hundred and ninety-one tuberculosis cows were taken out of the most celebrated certified dairy herd of 632 animals in November, 1914. In December, 72 tuberculosis cows were found in a herd of 86 in a model dairy where every expense and precaution had been taken.

Tuberculosis is very common and the majority of dairy herds contain tuberculous cows.

Authorities estimate that 75 to 90 per cent of human beings have tuberculosis at some time during their lives. Most of this is human, but some of it is bovine.

Tabulation by Park & Krumweide of 1,038 cases of tuberculosis showed the following:

	Cases	Bovine	P. C.
Adults over 16 years.....	686	9	1.3 %
Children 5 to 16 years.....	132	33	25 %
Children under 5 years.....	220	59	27 %
<b>Total.....</b>	<b>1,038</b>	<b>101</b>	<b>10 %</b>

Pasteurization kills the bacteria causing tuberculosis.

**E. Raw Milk Causes Scarlet Fever and Diphtheria**

One hundred and twenty-five epidemics of scarlet due to milk have been collected by Trask. A few examples are as follows:

**SCARLET FEVER**

*From One Raw Milk Supply*

Buffalo, N. Y.....	57 cases
Washington, D. C.....	33 cases
London, England.....	284 cases
Beverly, Mass.....	6 cases
Liverpool, England.....	59 cases
Mt. Vernon, N. Y.....	45 cases
Boston, Mass.....	195 cases

**DIPHThERIA**

Fifty-one epidemics collected by Trask. A few to illustrate:

*From One Raw Milk Supply*

Brookline, Mass.....	12 cases
Los Angeles, Cal.....	35 cases
Wellsville, N. Y.....	84 cases
Clifton, Ohio.....	36 cases
Hyde Park, Mass.....	69 cases
Warwick, R. I.....	64 cases

Pasteurization entirely destroys the infections of scarlet fever and diphtheria.

DR. L. D. ELEY, County Health Commissioner of Marshall County is doing things. He is one of the county health commissioners who is more than earning his money, and of course, his reward will be recognition by the people as

"IT IS A COMMERCIAL PROPOSITION," says the H. K. Mulford Company of Philadelphia, "for us to establish a department of sanitation and epidemiology." This is the same basis upon which the Metropolitan and other insurance companies have built their public health departments and it is right. In their announcement, the Mulford Company says—"The most important subjects before the American people at the present time relate to the public health." The firm also believes that work in the public health field is frequently beyond the reach of existing health and sanitary departments of the various municipalities and smaller towns on account of limited appropriations. This is certainly correct. We feel sure that all health authorities will welcome the coming of this great firm into the health field, introducing practical business methods. Thos. W. Jackson, M. D., is director of the Mulford Department of Sanitation and Epidemiology. He has had wide experience in the service of the United States Government and in civil life.

DRINKING WATER NOT SUPPLIED is the report from more than one schoolhouse in the State of Indiana. The last report of this character comes from Mr. Joseph Mahler, who reports that District No. 4, Aubbeenaubbee Township, Fulton County, has no well and no water supply. He further says the teacher must carry the water about 40 rods. She carries it in a bucket and it is given out to the children in ordinary tin cups. When she has carried one bucket full she thinks that is enough, and those children who did not get a drink out of the first bucket go without, or must go to the well, 40 rods away (probably to a farm house) to secure their drinking water. All this is contrary to statute. There is a penalty against trustees and other school authorities who refuse or neglect to supply drinking water, one of the first necessities of health, to the school children. It seems strange that certain officials and certain parents persist in forcing disease into their children and persist in doing those things which prevent their growth and development.

a useful servant and good citizen. Dr. Eley solicited a number of business men to buy an advertising page in the Plymouth Republican, their advertisements to occupy the border of the page and the health notice and health matter to appear in the center of the page. The statement appended is printed, and then follows an article on tuberculosis signed by Dr. Eley. This plan is admirable and may be successfully used in any city or town where live business men can be found, and surely these exist in every city and town. We commend this method of promoting the public health cause to all health officers.

December 2, 1915.

*To the Patrons of the Public Schools of Marshall County:*

I take this opportunity to tell you what I, as your Health Commissioner, am striving to do; and that is to make Marshall County the Healthiest county in Indiana. Now this can be done, but we need Your Help To Do It. Do you know that nine-tenths of all the sickness in the country is brought on the individuals by their own indiscretions and carelessness as to how they live? Now that not only includes their Eating and Drinking, but the Sanitary conditions of their Dwellings and Workshops, and personal Hygiene as well. I believe those things are simply matters of Education, therefore I have commenced with School Children, The Makers of Our Future Homes. Every school in the County gets a lesson once a month along the lines of Personal Hygiene, Sanitation, Contagious diseases, etc., etc.

The lesson below is on Tuberculosis; READ it and RE-READ it and see if there is anything in it that You or Your Children should not Know. If you endorse this work, you can help very materially by talking about it and by buying RED CROSS CHRISTMAS SEALS, and thus help stamp out Tuberculosis and all other contagious diseases. Seventy-five per cent of the money received from the sale of the Seals remains in the County. And that is how we pay for the printing and postage of the lessons. I am doing the preparing of the lessons without a cent of pay; simply for the GOOD of the CAUSE.

Buy CHRISTMAS SEALS AND PUT THEM ON THE BACKS OF YOUR LETTERS, AND SHOW TO YOUR FRIENDS THAT YOU ARE HELPING TO FIGHT TUBERCULOSIS.

L. D. ELEY,  
County Health Commissioner.

P. S. The Advertisers on this page are public spirited men, and deserve your patronage, as they are paying for this insertion.  
L. D. E.

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM IMPORTANT CAUSES FOR NOVEMBER, 1915.

NORTHERN SANITARY SECTION

Total population.....	982,219
Total deaths.....	868
Death rate per 1,000.....	10.7
Pulmonary Tuberculosis, rate per 100,000.....	86.7
Other forms of Tuberculosis, rate per 100,000.....	16.1
Typhoid Fever, rate per 100,000.....	19.8
Diphtheria and Croup, rate per 100,000.....	13.6
Scarlet Fever, rate per 100,000.....	1.2
Measles, rate per 100,000.....	7.4
Whooping Cough, rate per 100,000.....	1.2
Lobar and Broncho-Pneumonia, rate per 100,000.....	79.2
Diarrhoea and Enteritis (under 2 years), rate per 100,000.....	34.6
Cerebro-Spinal Fever, rate per 100,000.....	.....
Acute Anterior Poliomyelitis, rate per 100,000.....	.....
Influenza, rate per 100,000.....	4.9
Puerperal Septicemia, rate per 100,000.....	7.4
Cancer, rate per 100,000.....	74.3
External causes, rate per 100,000.....	90.4
Smallpox, rate per 100,000.....	.....

CENTRAL SANITARY SECTION

Total population.....	1,165,270
Total deaths.....	1,187
Death rate per 1,000.....	12.3
Pulmonary Tuberculosis, rate per 100,000.....	105.4
Other forms of Tuberculosis, rate per 100,000.....	11.4
Typhoid Fever, rate per 100,000.....	17.7
Diphtheria and Croup, rate per 100,000.....	17.7
Scarlet Fever, rate per 100,000.....	8.3
Measles, rate per 100,000.....	5.2
Whooping Cough, rate per 100,000.....	.....
Lobar and Broncho-Pneumonia, rate per 100,000.....	91.8
Diarrhoea and Enteritis (under 2 years), rate per 100,000.....	21.9
Cerebro-Spinal Fever, rate per 100,000.....	1.0
Acute Anterior Poliomyelitis, rate per 100,000.....	.....
Influenza, rate per 100,000.....	8.3
Puerperal Septicemia, rate per 100,000.....	6.2
Cancer, rate per 100,000.....	88.5
External causes, rate per 100,000.....	83.5
Smallpox, rate per 100,000.....	.....

SOUTHERN SANITARY SECTION

Total population.....	676,748
Total deaths.....	644
Death rate per 1,000.....	11.5
Pulmonary Tuberculosis, rate per 100,000.....	124.8
Other forms of Tuberculosis, rate per 100,000.....	19.7
Typhoid Fever, rate per 100,000.....	42.1
Diphtheria and Croup, rate per 100,000.....	26.9
Scarlet Fever, rate per 100,000.....	1.7
Measles, rate per 100,000.....	.....
Whooping Cough, rate per 100,000.....	3.5
Lobar and Broncho-Pneumonia, rate per 100,000.....	93.4
Diarrhoea and Enteritis (under 2) rate per 100,000.....	41.3
Cerebro-Spinal Fever, rate per 100,000.....	3.5
Acute Anterior Poliomyelitis, rate per 100,000.....	1.7
Influenza, rate per 100,000.....	3.5
Puerperal Septicemia, rate per 100,000.....	10.7
Cancer, rate per 100,000.....	77.3
External causes, rate per 100,000.....	78.3
Smallpox, rate per 100,000.....	.....

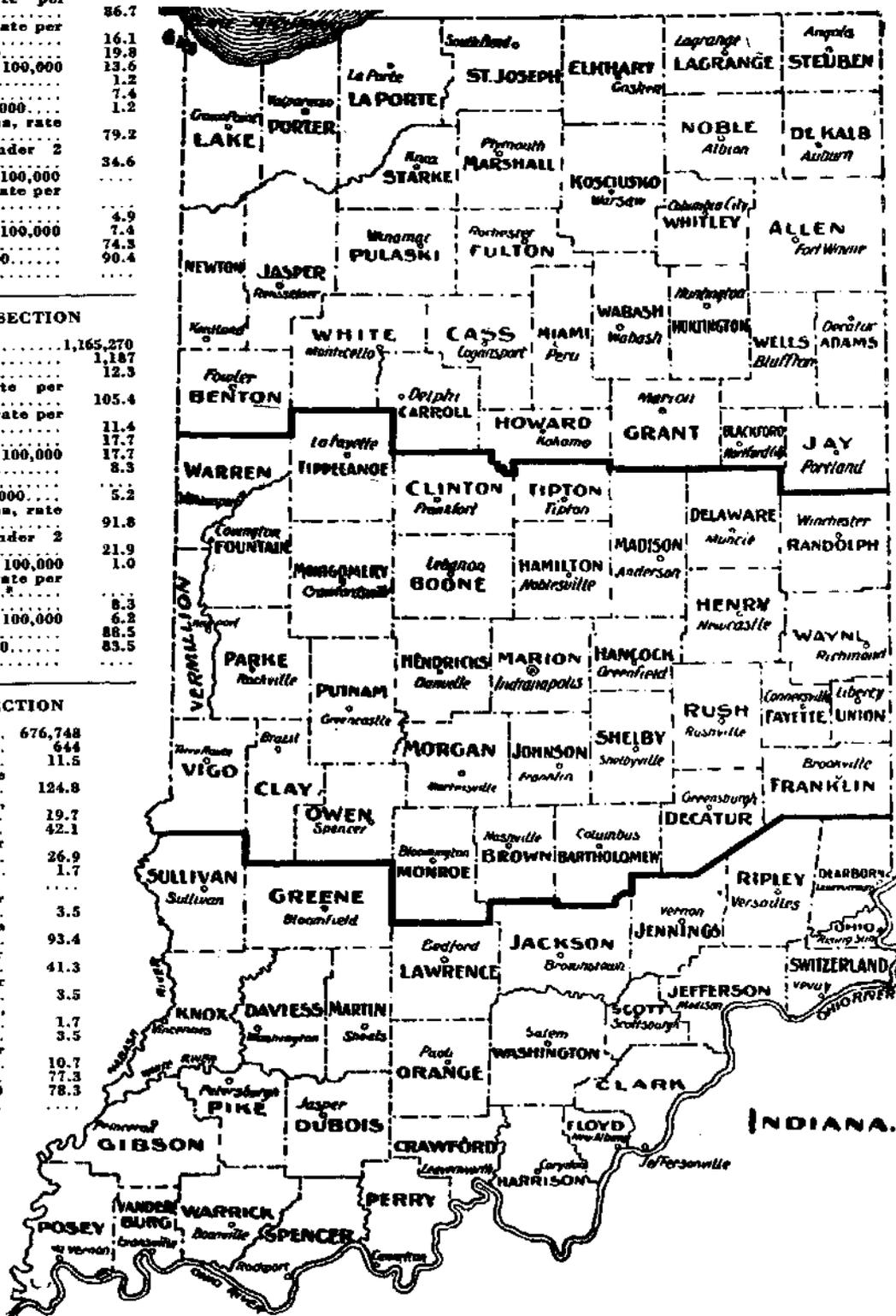




TABLE 2. Deaths in Indiana by Cities During the Month of November, 1915. (Judicial Districts.)

CITIES	Popu-lation, Es-ti-mated, 1915	Total Deaths Reported for November, 1915	Total Deaths Reported for October, 1915	Total Deaths Reported for November, 1914	Total Deaths Reported for the Year 1915 to date	Total Deaths Reported for the Year 1914 to same date	Annual Death Rate per 1,000 Population				Important Ages					Deaths from Important Causes																			
							November, 1915	October, 1915	November, 1914	Rate for Year 1915 to Date	Rate for Year 1914 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 Tubercu-lose	Other Forms of Tu-berculosis	Typhoid Fever	Diphtheria and Croup	Scarlet Fever	Meninge	Whooping Cough	Lobar and Bronch- pneumonia	Diarrhea and Enter-itis (under 2 years)	Cerebro-spinal Fever	Acute Anterior Polio-myelitis	Influenza	Poisoning	Cancer	External Causes	Smallpox	Death in Institutions	Deaths of Non-Resi-dents
							1915	1915	1914	1915	1914	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915	1915
<b>Cities of the First Class. Population 100,000 and over.</b>	<b>299,442</b>	<b>342</b>	<b>314</b>	<b>284</b>	<b>3,554</b>	<b>3,768</b>	<b>16.0</b>	<b>14.4</b>	<b>12.1</b>	<b>13.6</b>	<b>14.6</b>	<b>27</b>	<b>11</b>	<b>9</b>	<b>13</b>	<b>26</b>	<b>36</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>31</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>29</b>	<b>21</b>	<b>97</b>	<b>30</b>			
Indianapolis	259,442	342	314	284	3,554	3,768	16.0	14.4	12.1	13.6	14.6	27	11	9	13	26	36	4	5	3	2	2	31	6	1	1	2	29	21	97	30				
<b>Cities of the Second Class. Population 45,000 to 100,000.</b>	<b>273,921</b>	<b>284</b>	<b>290</b>	<b>258</b>	<b>3,136</b>	<b>3,139</b>	<b>12.6</b>	<b>12.1</b>	<b>11.4</b>	<b>11.2</b>	<b>11.2</b>	<b>45</b>	<b>17</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>29</b>	<b>11</b>	<b>12</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>39</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>20</b>	<b>58</b>	<b>18</b>				
Evansville	73,903	82	80	61	893	898	15.2	12.7	11.3	11.3	11.3	4	17	2	1	1	11	4	4	1	1	1	1	13	4	1	1	5	5	18	12				
Fort Wayne	71,457	93	86	68	804	754	15.9	10.8	8.3	12.1	11.8	10	10	1	1	2	7	1	1	1	1	1	13	7	2	1	4	10	2	10	12				
Terr Haute	60,749	53	77	64	618	825	9.6	13.5	12.0	13.3	13.9	6	6	2	1	18	5	2	2	1	1	1	7	1	2	1	4	2	10	2	10				
South Bend	61,812	56	66	65	619	662	10.9	12.5	11.0	11.8	12.0	12	5	3	2	1	6	1	3	1	1	1	4	6	1	1	1	1	3	2	1	1			
<b>Cities of the Third Class. Population 25,000 to 45,000.</b>	<b>274,558</b>	<b>287</b>	<b>292</b>	<b>243</b>	<b>3,444</b>	<b>2,953</b>	<b>12.7</b>	<b>12.5</b>	<b>11.2</b>	<b>11.3</b>	<b>11.4</b>	<b>58</b>	<b>17</b>	<b>9</b>	<b>3</b>	<b>4</b>	<b>21</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>22</b>	<b>15</b>	<b>3</b>	<b>3</b>	<b>22</b>	<b>27</b>	<b>38</b>	<b>1</b>				
Gary	32,802	33	33	23	343	312	8.5	11.8	8.7	11.4	10.7	9	5	1	1	1	1	3	1	1	1	1	6	6	1	1	1	1	3	1	1	1			
Muncie	25,229	23	18	23	262	298	13.0	7.3	12.2	11.3	13.0	1	2	3	1	1	3	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1			
Hammond	24,341	21	23	24	325	344	10.4	11.1	11.2	11.4	11.5	5	3	3	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1			
Richmond	23,960	24	22	17	277	265	12.1	11.0	8.8	7.7	12.6	5	5	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1			
Anderson	23,398	20	27	22	262	290	10.4	13.5	11.1	12.2	13.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
East Chicago	21,370	26	24	33	331	290	14.7	13.2	13.9	12.6	19.7	12	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Elkhart	20,918	19	20	23	242	327	11.0	11.1	11.4	12.6	13.0	4	4	2	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1		
Lafayette	20,863	41	27	32	365	371	23.9	15.2	21.8	19.9	19.6	6	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Michigan City	20,695	18	23	23	229	243	10.5	13.0	13.3	12.2	13.0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
New Albany	20,629	21	22	19	205	259	12.3	12.5	11.1	21.5	16.3	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Logansport	20,186	26	20	27	248	289	15.6	11.1	16.1	13.3	15.7	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Marion	20,167	21	33	19	269	286	12.6	16.0	2.1	15.4	15.6	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
<b>Cities of the Fourth Class. Population 10,000 to 20,000.</b>	<b>138,377</b>	<b>160</b>	<b>135</b>	<b>179</b>	<b>1,614</b>	<b>2,251</b>	<b>14.0</b>	<b>11.4</b>	<b>12.1</b>	<b>12.2</b>	<b>12.4</b>	<b>24</b>	<b>13</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>12</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>15</b>	<b>5</b>	<b>3</b>	<b>3</b>				
Kokomo	19,570	19	19	16	226	279	11.7	11.4	12.1	12.2	12.6	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Vincennes	16,751	14	20	14	193	221	10.1	14.0	10.4	12.7	14.8	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Minawabka	14,414	20	11	15	163	145	16.8	8.9	13.2	2.2	3.1	6	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Peru	12,752	12	5	10	131	143	11.4	4.6	10.4	11.1	13.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Laporte	11,925	11	12	14	134	137	11.2	11.4	13.4	12.2	12.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Elwood	11,028	16	13	10	117	100	17.6	13.7	11.1	11.5	9.9	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Huntington	10,584	15	9	13	119	122	17.2	9.9	14.4	12.2	12.6	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Crawfordsville	10,459	17	18	9	152	143	19.7	20.2	21.0	17.6	15.3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Shelbyville	10,432	11	6	12	111	117	12.7	6.7	14.4	23.3	12.2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Jeffersonville	10,412	11	9	9	114	142	12.7	10.1	11.0	11.1	14.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
New Castle	10,050	14	13	8	121	127	16.9	15.2	9.6	13.3	13.7	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
<b>Cities of the Fifth Class. Population under 10,000.</b>	<b>328,225</b>	<b>307</b>	<b>329</b>	<b>356</b>	<b>4,025</b>	<b>4,161</b>	<b>11.3</b>	<b>11.1</b>	<b>11.3</b>	<b>11.3</b>	<b>11.4</b>	<b>37</b>	<b>20</b>	<b>9</b>	<b>2</b>	<b>10</b>	<b>30</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>20</b>	<b>25</b>	<b>16</b>	<b>1</b>			
Brasil	9,960	10	12	11	113	135	12.2	14.4	11.4	12.2	13.4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Bloomington	9,782	7	18	10	126	150	8.6	21.6	12.2	13.3	17.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Bedford	9,759	11	6	13	102	159	13.6	7.2	20.6	6.1	13.2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Frankfort	9,246	10	11	9	131	119	13.1	13.9	11.1	15.4	14.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Columbus	9,085	8	5	13	109	118	10.6	6.4	16.0	13.0	14.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Goshen	8,794	10	12	15	119	128	13.8	15.9	20.8	14.4	17.6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Wabash	8,711	2	6	10	90	103	2.7	8.1	13.9	11.1	12.8																								

Mortality of Indiana for November, 1915. (Stillbirths excluded.)

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL	Population Estimated 1915	Total Deaths Reported for November, 1915	Total Deaths Reported for October, 1915	Total Deaths Reported for November, 1914	Total Deaths Reported for the Year 1915 to date	Total Deaths Reported for the Year 1914 to same date	Annual Death Rate per 1,000 Population					Important Ages																
							November, 1915		October, 1915		November, 1914		Rate for Year 1915 to date		Rate for Year 1914 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	2,824,237	2,699	2,646	2,632	31,471	32,355	11.6	11.0	11.4	12.1	12.6	319	11.8	137	5.0	70	2.5	33	1.2	61	2.2	936	34.6					
Northern Counties	982,219	808	907	897	10,846	10,671	10.7	10.8	11.2	11.8	11.9	109	12.5	40	4.6	22	2.5	9	1.0	21	2.4	312	35.0					
Central Counties	1,165,270	1,187	1,148	1,133	13,782	14,219	12.3	11.5	11.9	12.9	13.4	123	10.3	52	4.3	30	2.5	13	1.0	21	1.7	425	35.8					
Southern Counties	676,748	644	591	602	7,203	7,465	11.5	10.2	10.8	11.5	12.0	87	13.5	45	6.9	18	2.7	11	1.7	19	2.9	199	30.9					
All Cities	1,274,523	1,380	1,360	1,320	15,773	16,272	13.1	12.5	12.8	13.5	14.2	188	13.6	78	5.6	39	2.8	10	1.7	36	2.6	593	28.4					
Over 100,000	259,442	342	314	284	3,554	3,768	16.0	14.2	13.6	14.9	16.2	27	7.8	11	3.2	9	2.6	1	1.0	13	3.8	86	25.2					
45,000 to 100,000	273,921	284	290	258	3,136	3,139	12.6	12.4	11.7	12.5	12.8	45	15.9	17	5.0	6	2.1	1	1.0	4	1.4	82	28.8					
20,000 to 45,000	274,558	287	292	243	3,444	2,953	12.7	12.5	12.8	13.7	14.0	55	19.1	17	5.9	9	3.1	1	1.0	4	1.3	70	24.8					
10,000 to 20,000	138,377	160	135	179	1,614	2,251	14.0	11.4	12.4	12.7	14.0	24	15.0	13	8.1	6	3.7	2	1.9	5	3.1	53	34.8					
Under 10,000	328,225	307	329	356	4,025	4,161	11.3	11.7	12.4	13.4	14.1	37	12.0	30	8.5	9	2.9	2	1.0	10	3.2	102	33.2					
Country	1,549,714	1,319	1,286	1,312	15,698	16,083	10.3	9.7	10.2	11.0	11.3	131	9.9	59	4.4	31	2.3	23	1.7	25	1.8	543	41.1					

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 Bronchot Pneumonia		Diarrhea and Enteritis (Under 2 Years)		Cerebro-Spinal Fever		Acute Anterior Poliomyelitis		Influenza		Puerperal Septicemia		Cancer		External Causes		Small-pox	
	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate	Number	Death Rate
State	241	103.7	351	15.0	57	24.5	43	18.5	10	4.3	6	2.5	8	3.4	204	87.8	72	31.0	3	1.2	1	0.4	14	6.0	18	7.7	188	80.9	191	82.2	...	...
Northern Counties	70	86.7	131	16.1	16	19.8	11	13.6	1	1.2	6	7.4	1	1.2	64	79.2	28	34.8	...	...	...	...	4	4.9	6	7.4	60	74.3	73	90.4	...	...
Central Counties	101	105.4	111	14.1	17	17.7	17	17.7	2	2.3	...	...	...	...	88	91.8	21	21.9	1	1.0	...	...	4	3.3	6	6.9	85	88.5	80	83.5	...	...
Southern Counties	70	124.8	11	19.7	24	43.1	15	26.9	1	1.7	...	...	...	...	52	93.4	23	41.3	2	3.5	1	1.7	2	3.5	6	10.3	43	77.3	38	78.3	...	...
All Cities	128	122.2	16	15.2	23	21.9	22	21.0	7	6.6	4	3.8	4	3.8	119	113.6	53	50.6	1	0.9	1	0.9	6	5.7	9	8.5	90	85.9	108	103.1	...	...
Over 100,000	36	168.8	4	18.7	5	23.4	3	14.0	2	9.3	...	...	...	...	2	9.3	31	14.5	6	28.1	1	4.6	...	...	2	9.3	29	136.0	21	88.4	...	...
45,000 to 100,000	29	128.8	...	...	6	26.6	3	13.3	1	4.4	...	...	...	...	...	39	173.2	12	53.3	...	...	...	...	3	13.2	13	57.7	20	88.8	...	...	
20,000 to 45,000	21	93.0	5	22.1	5	22.1	6	26.5	1	4.4	...	...	...	...	...	22	97.5	15	66.4	...	...	...	...	3	13.2	22	97.5	27	119.0	...	...	
10,000 to 20,000	12	105.5	1	8.7	2	17.5	4	35.1	1	8.7	...	...	...	...	...	9	79.1	10	87.9	...	...	...	...	1	8.7	6	52.7	15	131.8	...	...	
Under 10,000	30	111.2	6	23.2	5	18.5	6	22.2	2	7.4	1	3.7	1	3.7	18	58.7	10	37.0	...	...	...	...	1	3.7	2	17.5	6	74.1	25	92.7	...	...
Country	113	88.7	19	14.9	34	26.7	21	16.4	3	2.3	2	1.5	4	3.1	85	66.7	19	14.9	2	1.5	...	...	8	6.2	9	7.6	98	76.9	83	65.1	...	...

U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of November, 1915  
 J. H. ARMINGTON, SECTION DIRECTOR, IN CLIMATOLOGICAL DIVISION

Section Average	Departure from the Normal	Extremes							
		Station		Highest	Date	Station		Lowest	Date
45.7	3.3	Hickory Hill		88	6	Whitestown		13	30

PRECIPITATION IN INCHES AND HUNDREDTHS

Section Average	Departure from the Normal	Extremes				
		Station		Greatest Monthly Amount	Least Monthly Amount	
2.85	0.28	Rome		6.04	Collegeville	0.88