



Scale 0 1/4 1/2 1 MILE



MAP
OF THE
CITY OF BOSTON, MASS.,
SHOWING
AVERAGE ANNUAL DEATH RATES
DUE TO
DIARRHEAL DISEASES
in different districts
DURING THE SIX YEARS
ENDING MAY 31ST
1890

LEGEND

□	Under 100 per 100,000
■	100 to 170 . . .
■	170 . 200 . . .
■	200 . 230 . . .
■	230 . 260 . . .
■	260 and over . . .

Scale
0 1/8 1/4 1/2 1 MILE

PHILADELPHIA.

Philadelphia, in latitude 39° 57' north, longitude 75° 9' west from Greenwich, is situated at the junction of the Delaware and Schuylkill rivers, in the extreme eastern part of the state of Pennsylvania. On June 1, 1890, it contained 129.38 square miles, or 82,807 acres. Of this area 108 square miles, or 69,120 acres, lay between the Delaware and Schuylkill rivers, north of their junction, and 21.38 square miles, or 13,687 acres, lay west of the Schuylkill. The United States navy yard was located on League island, at the junction of the two rivers.

About 4 square miles of the southern portion of the city, known as "The Neck", was partially below tide and was occupied principally by truck farms. North and west of The Neck the elevation increased, the summit between the two rivers lying near the Schuylkill river along Ridge avenue to Laurel Hill cemetery, and along Germantown avenue in the village of Germantown.

The surface slopes to the northwest, the elevations at some of the principal points being as follows: city hall, 49 feet; Frankford, 35 to 60 feet; Holmesburg, 80 feet; Bustleton, 126 feet; Nicetown, 130 feet; Olney, 135 feet; Volunteertown, 159 feet; Crescentville, 216 feet; Branchtown, 226 feet; Fox Chase, 240 feet; Pittsville, 263 feet; Germantown, 300 feet; Manayunk and Roxboro, 310 feet; Mount Airy, 370 feet; Chestnut Hill, 446 feet. The northwestern section was rolling, with many abrupt changes in level, and traversed by numerous creeks and small streams. The Wissahickon creek was in a narrow rocky gorge, and the banks of the Schuylkill above Fairmount were rocky bluffs.

Of the entire area, about 40 square miles, or some 26,000 acres, was strictly urban territory, about 50 square miles, or some 32,000 acres, was suburban land containing many villages and undergoing city improvements, and about 40 square miles, or some 25,000 acres, was farm land.

The city had, on June 1, 1890, a total area of 82,807 acres and a total population of 1,046,964, the number of persons to each acre of total area being 12.64.

The city records do not afford information as to the area of all open spaces in each ward from which the density of population to the acre of actual building area could be computed. The park and cemetery area has been furnished, and shows an aggregate of 4,230 acres within the city limits devoted to parks and cemeteries, leaving 78,577 acres occupied by streets and buildings; excluding the parks and cemeteries, the population density rises to 13.32 per acre.

The total number of dwellings in the city was 187,052, containing 205,135 families, and a total population of 1,046,964, giving an average of 5.10 persons to a family and 5.60 persons to a dwelling.

SANITARY DISTRICTS.

For the purpose of studying the local sanitary conditions the death rates in the city have been computed separately for wards, each ward being treated as a sanitary district. The ward boundaries are indicated upon the accompanying maps by lines of solid color.

In the small tables given for each ward the statement showing the death rates per 1,000 of population is exclusive of stillbirths, while the rates given according to birthplaces of persons include stillbirths. It is to be distinctly understood that in these descriptions the remarks about the character of the buildings and the inhabitants of the several districts apply to the period for which the deaths were returned and not to the present time. The statements are purely historical and are intended to furnish the means of estimating the relations of altitude, character of people, and the nature of the surroundings, and while no doubt many of the conditions referred to still exist, yet numerous changes have occurred which might modify the characteristics of the districts as given herein.

The descriptions of the districts referred to were furnished by Dr. William H. Ford, president of the board of health.

The statements concerning the highest and lowest rates according to birthplace refer only to those birthplaces given in the comparative tables in which the number of population and of deaths are of sufficient size to warrant comparison.

VITAL STATISTICS.

WARD 1.

This ward contained 3,526 acres, 10,455 dwellings, and a total population of 53,882. Excluding 13 acres of parks and cemeteries, there were 15.34 persons and 2.98 dwellings to each acre. There were 5.15 persons to each dwelling.

It was to a large extent farm land, and embraced what is known as "The Neck" or point of land bounded on the east and south by the Delaware river. This ward had a large and valuable river front, on which were located some of the most extensive manufacturing works, notably sugar refineries, fertilizing works, salt works, and coal shipping wharves of the railroads. The League Island navy yard was partially situated in this ward. The inhabitants may be divided into 3 classes. The farm lands (principally truck farms) were owned and tilled by families native to the place. The eastern section was peopled by foreigners engaged principally as laborers along the wharves. The northern and residential section was principally occupied by natives of this country. Building improvements were made rapidly, consisting generally of brick dwellings of medium size. The Woman's hospital was in this ward.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.									
	White.						Colored.			
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.		
			Total.	Under 5 years.	Total.	Under 5 years.				
The city	21.54	20.00	24.05	32.12	14.70	14.60	29.52	149.22		
Ward 1	22.08	23.33	23.54	34.35	14.91	17.44	33.07	123.11		

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Scotland.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	38.83	17.57	5.02	19.43	3.61	14.70	3.35	10.65	2.74	9.30
Ward 1	38.97	16.53	6.56	21.71	4.44	11.96	.....	10.93	2.60	9.84

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Scarlet fever.	Malarial fever.
The city	98.30	156.11	69.35	297.87	20.18	7.21
Ward 1	106.18	153.48	61.20	275.54	30.69	9.20

During the 6-year period the average annual death rate in this ward was about the same as the average for the whole city. It was above the average for the white children under 5 years of age and for the total colored, but was below the average for the colored children under 5 years of age. For those 15 years of age and upward it was above the average for those born in Ireland and below it for those born in the United States and in Germany.

Scarlet fever, malarial fever, diphtheria and croup, heart disease and dropsy, diseases of the liver, and diseases of the nervous system caused more than the average proportion of deaths.

WARD 2.

This ward contained 283 acres, 5,205 dwellings, and a total population of 31,563. Excluding 10 acres of parks and cemeteries, there were 115.62 persons and 19.07 dwellings to each acre. There were 6.06 persons to each dwelling.

This ward covered one of the oldest sections of the city. It was small and compact, the dwellings built of brick, generally old, but well kept. Numerous small streets, courts, and alleyways still existed. Many of the inhabitants were poor working people. A large section, probably one-fourth of the territory, was peopled by Italians of the lower class, principally engaged as musicians, fruit venders, and laborers. On the river front of this ward were extensive wharves of steamship lines, also an extensive freight yard and a grain elevator.

The death rates in this ward, compared with the average rates for the city, were as follows :

AREAS.	DEATH RATES PER 1,000 POPULATION.									
	White.						Colored.			
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.		
			Total.	Under 5 years.	Total.	Under 5 years.				
The city	21.54	81.66	24.05	82.12	14.70	14.60	29.52	140.22		
Ward 2	23.93	79.42	29.17	83.26	13.92	7.41	24.21	89.95		

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Italy.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	38.88	17.57	5.62	19.43	3.61	14.70	3.35	10.65	3.50	8.99
Ward 2	45.37	21.67	2.78	25.88	1.32	13.54	.....	5.11	3.31	10.05

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Pneumonia.	Scarlet fever.
The city	98.80	156.11	60.35	297.87	164.17	26.18
Ward 2	105.08	176.41	59.35	319.35	194.38	35.93

During the 6-year period the average annual death rate in this ward was above the city average, and especially so for the native white, being below the average for the foreign born and the colored. For those 15 years of age and upward it was highest among those born in Ireland, being 25.88 as against 21.67 for those born in the United States, 13.54 for those born in Germany, and 10.05 for those born in Italy.

Scarlet fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, measles, heart disease and dropsy, diseases of the liver, and diseases of the nervous system caused more than the average proportion of deaths. The proportion of stillbirths was decidedly above the average, being 151.37 per 100,000 of population as against an average of 117.68.

WARD 3.

This ward contained 122 acres, 3,221 dwellings, and a total population of 19,925. Excluding cemeteries, there were 164.67 persons and 26.62 dwellings to each acre. There were 6.19 persons to each dwelling.

It was compactly built upon; the buildings were principally dwellings of medium character. A number of old frame buildings still remained in this quarter, and, as in other of the older sections of the city, several courts, alleys, and small streets still existed. The population was a mixed one, in which Russian and Polish Jews and Italians predominated. The locality had ceased to be a desirable one for the middle or better class of people to reside in, although one of the finest public libraries was located at the western end of the ward. There were but few industrial works in this ward; the foreign population were engaged in clothing establishments, peddling, and manual labor.

The death rates in this ward, compared with the average rates for the city, were as follows :

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city	21.54	80.66	24.05	82.12	14.70	14.00	29.52	149.22
Ward 3	23.91	83.78	31.33	88.17	13.13	14.99	21.71	86.27

VITAL STATISTICS.

WARD 3—Continued.

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		Italy.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.02	19.43	3.01	14.70	3.50	8.99	1.01	4.89
Ward 3.....	50.31	21.24	14.62	28.44	0.78	11.42	4.83	8.30	0.94	1.71

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Pneumonia.	Scarlet fever.
The city.....	98.30	150.11	69.35	297.87	164.17	26.18
Ward 3.....	119.32	185.42	41.21	313.33	200.02	37.77

During the 6-year period the average annual death rate in this ward was above the city average, being almost the same as that in ward 2. It was below the average for the foreign born and the colored. For those 15 years of age and upward it was 28.44 among those born in Ireland, 21.24 among those born in the United States, 11.42 for those born in Germany, and 8.30 for those born in Italy.

Scarlet fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, measles, whooping cough, diseases of the liver, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths. The proportion of stillbirths per 100,000 of population was 164.82 as against the city average of 117.68.

WARD 4.

This ward contained 147 acres, 3,120 dwellings, and a total population of 20,384. Excluding cemeteries, there were 141.56 persons and 21.67 dwellings to each acre. There were 6.53 persons to each dwelling.

This was one of the oldest sections of the city. Perhaps more filth and squalor existed in this ward than in any other. Here was located a portion of the district formerly designated as the "slums", and at one time peopled by the lowest and vilest characters that congregate in a large city. Small streets, courts, and alleys extended throughout the ward. No fine residences were found in the ward; old style 2 and 3 story brick buildings predominated, with numerous dilapidated frame houses. On the river front were 2 extensive sugar refineries and a warehouse. Italians, Huns, Russians, and Polish Jews had gradually occupied this section until the original character of the population had almost entirely changed. The foreign element was principally laborers, peddlers, rag pickers, or engaged in other kindred pursuits. The Italians were generally thrifty and saving, investing mostly in real estate.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22
Ward 4.....	29.98	90.32	46.48	108.83	12.93	6.44	43.83	215.34

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		Italy.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.02	19.43	3.01	14.70	3.50	8.99	1.01	4.89
Ward 4.....	67.18	32.53	10.42	33.38	5.79	16.86	4.81	6.95	0.26	2.75

WARD J—Continued.

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Malarial fever.	Pneumonia.
The city	98.30	150.11	69.35	297.87	7.21	164.17
Ward 4	159.87	250.27	60.27	441.11	12.56	296.30

During the 6-year period the average annual death rate in this ward was higher than in any other ward in the city except ward 27, being 31.68 as against an average of 21.86, yet it was lower than the average among the foreign born. It was very high among the colored children under 5 years of age, being 215.34 per 1,000. For those 15 years of age and upward it was highest among those born in Ireland, being 33.33 as against 32.53 for the white born in the United States, 16.86 for those born in Germany, and 6.95 for those born in Italy.

Scarlet fever, malarial fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, measles, whooping cough, heart disease and dropsy, diseases of the liver, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths. The proportion of stillbirths was higher than in any other ward in the city, being 230.18 per 100,000 of population, or nearly double the city average of 117.68.

WARD 5.

This ward contained 205 acres, 2,271 dwellings, and a total population of 16,987. Excluding 14 acres of parks and cemeteries, there were 88.94 persons and 11.89 dwellings to each acre. There were 7.48 persons to each dwelling.

It was largely a business section, containing many wholesale mercantile and banking houses, insurance, law, and other business concerns. Some of the largest and most magnificent business structures were located in this ward, also the United States custom house, and 3 historical buildings, Independence hall, Carpenter's hall, and the old Pine Street church, and 2 public parks. A large freight depot was located on the river front, in which locality was conducted an extensive commission, fruit, and produce market. The "slums" referred to in ward 4 extended into this ward also, and into this section had drifted the worst surviving element of that once notorious locality. Blacks and whites of the lowest strata mingled, but the disorderly element was kept under the surveillance of the police force, and few disturbances occurred.

The death rates in this ward, compared with the average rates for the city, were as follows :

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city	21.54	80.66	24.05	82.12	14.70	14.00	20.52	140.22
Ward 5	25.07	91.71	33.31	97.72	14.09	12.08	48.40	272.06

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	38.83	17.57	5.62	10.43	3.61	14.70	3.35	10.65	1.01	4.89
Ward 5	33.07	25.18	.....	27.18	8.03	10.50	3.55	11.99	0.40	3.61

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Pneumonia.	Heart disease and dropsy.
The city	98.30	150.11	69.35	297.87	164.17	140.27
Ward 5	99.21	176.59	41.67	498.62	248.02	248.02

VITAL STATISTICS.

During the 6-year period the average annual death rate in this ward was much above the city average, being 28.85 per 1,000 of mean population. It was slightly below the average for the foreign born and very much above it for the colored, being 48.46 per 1,000 for the total and 272.06 per 1,000 for the colored children under 5 years of age. For those 15 years of age and upward it was highest among those born in Ireland, being 27.18, as against 25.18 for the white born in the United States, 16.80 for those born in Germany, and 11.99 for those born in England and Wales.

Scarlet fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, measles, cancer and tumor, heart disease and dropsy, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths. The proportion of stillbirths was also high, being 182.54 per 100,000 of population as against an average of 117.68.

WARD 6.

This ward contained 205 acres, 1,280 dwellings, and a total population of 8,712. Excluding 10 acres of parks and cemeteries, there were 44.68 persons and 6.56 dwellings to each acre. There were 6.81 persons to each dwelling.

This ward was compactly built and contained the great wholesale business center of the city, both mercantile and manufacturing. The principal ferry and steamboat landings were on the river front of this ward. More capital was invested here than in any other section of Philadelphia of like area. Market street, one of the principal business thoroughfares, runs a distance of three-quarters of a mile through this ward. The population was a mixed one, generally old residents.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city	21.54	80.66	24.05	92.12	14.70	14.60	29.52	140.22
Ward 6	24.30	93.61	30.34	99.00	14.91	15.72	49.77	400.00

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.65	1.61	4.89
Ward 6	51.04	21.35	23.28	11.11	14.22	20.00	12.93	1.92	2.86	

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Pneumonia.	Malarial fever.
The city	98.30	156.11	69.35	297.87	164.17	7.21
Ward 6	119.30	150.67	55.06	418.46	181.70	9.18

During the 6-year period the average annual death rate in this ward was above the city average, and especially so for the colored population. For those 15 years of age and upward it was highest among those born in Ireland, being 23.28 as against 21.35 for the white born in the United States, 14.22 for those born in Germany, and 12.93 for those born in England and Wales.

Scarlet fever, malarial fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, measles, whooping cough, heart disease and dropsy, diseases of the liver, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 7.

This ward contained 281 acres, 4,750 dwellings, and a total population of 30,179. Excluding 7 acres of parks and cemeteries, there were 110.14 persons and 17.34 dwellings to each acre. There were 6.35 persons to each dwelling.

It was almost exclusively a residential part of the city. There were a number of fine residences in this ward occupied by the owners. The buildings throughout the ward were principally of brick, varying from 3-story single room dwellings to large brownstone, containing from 14 to 20 rooms. Old frame buildings had been almost eradicated from this section of the city. A mixed class of the colored population resided in this section, many of them industrious and in good circumstances, and educating their children in the public schools. Here was located the old Pennsylvania hospital and the Deaf and Dumb asylum.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city	21.54	80.06	24.05	82.12	14.70	14.00	20.52	140.22
Ward 7	24.30	96.25	27.85	98.15	17.00	13.80	30.54	104.20

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN--									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	33.83	17.57	5.02	10.43	8.61	14.70	2.35	10.05	1.61	4.89
Ward 7	40.50	22.26	2.08	19.37	.....	15.99	6.00	13.07	2.73	5.73

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO--					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Pneumonia.	Cancer and tumor.
The city	98.30	156.11	60.35	297.87	104.17	54.73
Ward 7	77.18	184.47	66.24	408.91	203.09	74.45

During the 6-year period the average annual death rate in this ward was decidedly above the city average, and especially so for the native white. For those 15 years' of age and upward it was highest among the white born in the United States, being 22.26 as against 19.37 for those born in Ireland and 15.99 for those born in Germany.

Scarlet fever, diarrheal diseases, consumption, pneumonia, whooping cough, cancer and tumor, heart disease and dropsy, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 8.

This ward contained 278 acres, 2,646 dwellings, and a total population of 10,971. Excluding cemeteries, there were 61.27 persons and 9.55 dwellings to each acre. There were 6.41 persons to each dwelling.

Herein were the homes of the wealthy. Dwellings, substantial and of large dimensions, magnificent in architectural design, and hotels, theaters, clubhouses, and churches were the features of this district. A minor part of the ward was devoted to retail traffic, and an isolated part was given up to poor colored people, who resided in rickety brick or frame houses. Although one of the oldest localities, modern improvement was rapidly pushing out the poorer classes of buildings.

VITAL STATISTICS.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.									
	White.						Colored.			
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.		
			Total.	Under 5 years.	Total.	Under 5 years.				
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22		
Ward 8.....	24.26	96.43	28.86	97.66	14.57	37.04	29.25	164.31		

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.65	1.61	4.89
Ward 8.....	41.76	25.01	14.20	41.07	14.83	19.05	9.90	9.80	12.18	

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Cancer and tumor.	Heart disease and dropsy.
The city.....	98.30	156.11	69.35	297.87	54.73	146.27
Ward 8.....	64.01	121.43	53.65	332.28	71.54	225.01

During the 6-year period the average annual death rate in this ward was above the city average, and especially so for the foreign born children under 5 years of age. For those 15 years of age and upward it was highest among the white born in the United States, being 25.01 as against 14.83 for those born in Germany and 14.20 for those born in Ireland.

Consumption, pneumonia, cancer and tumor, heart disease and dropsy, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 9.

This ward contained 256 acres, 1,519 dwellings, and a total population of 9,791. There were 38.25 persons and 5.93 dwellings to each acre, with 6.45 persons to each dwelling.

This was formerly a residential section, but had been revolutionized into a center of traffic. In this small area were found the magnificent city hall (municipal buildings), two massive railroad passenger stations with elevated tracks, a market house, the United States post office, the United States mint, and many other buildings of importance. A branch of the city gas works was located in the western end of the ward, on the banks of the Schuylkill river.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22
Ward 9.....	25.40	101.44	28.75	102.71	17.02	30.30	22.32	147.62

BOSTON AND PHILADELPHIA.

WARD 9—Continued.

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Scotland.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.05	2.74	9.30
Ward 9.....	43.95	23.97	5.50	17.95	33.33	14.18	7.25	12.35	.....	4.17

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and group.	Diarrheal diseases.	Typhoid fever.	Consumption.	Malarial fever.	Cancer and tumor.
The city.....	98.30	156.11	69.35	297.87	7.21	54.73
Ward 9.....	79.14	150.36	39.57	364.01	11.08	83.89

During the 6-year period the average annual death rate in this ward was above the city average, but was below it for the colored. For those 15 years of age and upward it was highest for the white born in the United States, being 23.97 as against 17.95 for those born in Ireland and 14.18 for those born in Germany.

Malarial fever, consumption, cancer and tumor, heart disease and dropsy, childbirth and puerperal diseases, diseases of the liver, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 10.

This ward contained 230 acres, 3,398 dwellings, and a total population of 21,514. Excluding 12 acres of parks and cemeteries, there were 98.69 persons and 15.59 dwellings to each acre. There were 6.33 persons to each dwelling.

It was compactly built upon and was part of the old city proper, being largely a residential section, but becoming more of a business district. The dwellings proper were of brick, generally 3 and 4 stories in height. Of the manufacturing interests a paper mill, laboratory, and machine works were located herein. The buildings of note were the Academy of Fine Arts, Academy of Natural Sciences, Cathedral, and Blind asylum. The Chinese section, with a population of about 800, was located in this ward, in which the principal commercial business of the Chinese population was transacted.

In the eastern section of the ward the dwellings were to a large extent used as boarding and lodging houses.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	20.52	140.22
Ward 10.....	19.88	87.83	21.82	88.85	13.96	.....	14.51	166.07

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Scandinavia.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.05	3.49	4.08
Ward 10.....	38.60	17.07	3.88	16.68	.....	15.14	.....	9.50	11.90	3.24

VITAL STATISTICS.

WARD 10—Continued.

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Cancer and tumor.	Heart disease and dropsy.
The city	98.30	156.11	69.35	297.87	54.73	146.27
Ward 10	83.89	121.68	43.08	278.12	64.24	160.98

During the 6-year period the average annual death rate in this ward was below the city average, but was above it for the children under 5 years of age. For those 15 years of age and upward it was below the average for those born in the United States, Ireland, England and Wales, and Scandinavia and above it for those born in Germany.

Malarial fever, cancer and tumor, heart disease and dropsy, diseases of the liver, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 11.

This ward contained 135 acres, 1,931 dwellings, and a total population of 12,953. There were 95.95 persons and 14.30 dwellings to each acre, with 6.71 persons to each dwelling.

It consisted of a narrow strip extending along the Delaware river front, and was one of the oldest sections of the city, containing many small streets, alleys, and courts, the buildings generally of brick, small in size, and inhabited by the poorer working people, principally Germans.

The business interests along the river front were confined to wholesale lumber and to railroad freight depots, a cold storage house, and market. One of the liveliest business sections was the commission house district centered in the southeastern part of the ward, and devoted to the sale of truck farmers' products, poultry, etc.

Morocco and skin dressing establishments were a part of the industries of this ward.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.									
	White.						Colored.			
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.	Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.				
The city	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22		
Ward 11	28.31	96.94	36.82	101.23	15.57	7.81	500.00	2,416.67		

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city	38.83	17.57	5.62	10.43	3.61	14.70	3.35	10.65	1.61	4.89
Ward 11	51.02	27.94	.....	25.15	2.16	15.42	.....	11.53	.....	2.95

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Cancer and tumor.	Pneumonia.
The city	98.30	156.11	69.35	297.87	54.73	164.17
Ward 11	131.31	224.01	90.12	330.86	75.96	200.83

During the 6-year period the average annual death rate in this ward was much above the city average, being 29.11 as against an average of 21.86. The extremely high death rates among the colored were due to the fact that the average colored population in this ward was only 22; the number under 5 years of age but 2. For those 15 years of age and upward it was highest among the white born in the United States, being 27.94 as against 25.15 for those born in Ireland, 15.42 for those born in Germany, and 11.53 for those born in England and Wales.

Typhoid fever, diphtheria and croup, diarrheal diseases, consumption, pneumonia, cancer and tumor, heart disease and dropsy, diseases of the liver, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths. The proportion of stillbirths was higher than in any other ward in the city except wards 4 and 5, being 181.52 per 100,000 of population as against an average of 117.68.

WARD 12.

This ward contained 124 acres, 2,332 dwellings, and a total population of 14,170. There were 114.27 persons and 18.81 dwellings to each acre, with 6.08 persons to each dwelling.

Like ward 11, this was one of the oldest districts, known as Northern Liberties before consolidation with the city. It contained no large or important manufactories, excepting one of the most extensive breweries in the city. The population was principally German.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.*		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22
Ward 12.....	21.57	81.29	26.03	82.93	13.55	16.13	44.85	152.38

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
The city.....	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.05	1.61	4.89
Ward 12.....	42.08	20.02	.....	16.77	4.48	14.16	.....	13.95	.....	5.50

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Cancer and tumor.	Diseases of the nervous system.
The city.....	98.30	156.11	69.35	297.87	54.73	318.83
Ward 12.....	102.39	154.75	62.83	314.16	69.81	353.72

During the 6-year period the average annual death rate in this ward was slightly above the city average, the excess occurring in the children under 5 years of age. For those 15 years of age and upward it was above the average for those born in the United States and in England and Wales and below it for those born in Ireland and in Germany.

Diphtheria and croup, consumption, cancer and tumor, heart disease and dropsy, diseases of the nervous system, and diseases of the urinary organs caused more than the average proportion of deaths.

WARD 13.

This ward contained 163 acres, 3,038 dwellings, and a total population of 17,923. There were 109.96 persons and 18.64 dwellings to each acre, with 5.90 persons to each dwelling.

It was principally a residential section, the dwellings being principally of brick, many of them large and commodious. Large chemical works were located in this district, also engine houses and a railroad passenger station.

VITAL STATISTICS.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.									
	White.						Colored.			
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.		
			Total.	Under 5 years.	Total.	Under 5 years.				
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22		
Ward 13.....	20.67	110.20	24.25	112.24	11.07	13.89	28.76	177.54		

AREAS.	DEATH RATES PER 1,000 POPULATION BORN IN—									
	United States (white).		Ireland.		Germany.		England and Wales.		Other foreign countries.	
	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.	Under 15 years.	15 years and over.
	The city.....	38.83	17.57	5.62	19.43	3.61	14.70	3.35	10.65	1.61	4.89
Ward 13.....	48.91	17.31	14.49	14.78	.....	11.73	14.49	8.38	.....	9.30

AREAS.	DEATH RATES PER 100,000 POPULATION DUE TO—					
	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.	Whooping cough.	Cancer and tumor.
The city.....	98.30	156.11	69.35	297.87	11.39	54.73
Ward 13.....	74.43	136.92	51.46	260.98	17.46	70.76

During the 6-year period the average annual death rate in this ward was somewhat below the city average, but was decidedly above it for the children under 5 years of age. For those 15 years of age and upward it was highest among those born in the United States, being 17.31 as against 14.78 for those born in Ireland, 11.73 for those born in Germany, and 8.38 for those born in England and Wales.

Whooping cough, cancer and tumor, heart disease and dropsy, and diseases of the liver caused more than the average proportion of deaths.

WARD 14.

This ward contained 152 acres, 3,699 dwellings, and a total population of 20,737. There were 136.43 persons and 24.34 dwellings to each acre, with 5.61 persons to each dwelling.

The eastern section of the ward was residential in character, while in the western part manufacturing interests were located, among which were large smelting works, and a machine and bolt works, employing large numbers of skilled workmen. The district was completely built upon, and the dwellings were of brick, substantial and well built.

The death rates in this ward, compared with the average rates for the city, were as follows:

AREAS.	DEATH RATES PER 1,000 POPULATION.							
	White.						Colored.	
	Total.	Under 5 years.	Native.		Foreign.		Total.	Under 5 years.
			Total.	Under 5 years.	Total.	Under 5 years.		
The city.....	21.54	80.66	24.05	82.12	14.70	14.60	29.52	149.22
Ward 14.....	21.47	35.63	23.66	96.78	14.44	16.67	22.38	143.07