

A HALF CENTURY'S PROGRESS
AGAINST TUBERCULOSIS
IN NEW YORK CITY
1900-1950



By
GODIAS J. DROLET
and
ANTHONY M. LOWELL



NEW YORK TUBERCULOSIS
AND HEALTH ASSOCIATION
1952

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A review of historical developments in the campaign against tuberculosis in New York City, including selected information dealing with health conditions beginning in 1804 and covering the era prior to the consolidation in 1898 of the five boroughs into the City of Greater New York. Secondly, a summary of the statistics relating to the prevalence of tuberculosis between 1900 and 1950 with reference section of the annual records of registration of tuberculosis cases and deaths.

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NEW YORK TUBERCULOSIS
AND HEALTH ASSOCIATION

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TO

Physicians, nurses, social workers,
public and private officials who labor
daily in the vineyard succoring the sick,
and relieving the anxiety of the needy,
this compendium which attempts
to measure their life-saving
work is humbly offered.

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FOREWORD

THE Statistical Division of the New York Tuberculosis and Health Association receives throughout the year numerous calls for statistics dealing with tuberculosis and other health conditions in New York City. These enquiries come from physicians, health and social workers, educators, representatives of the press, students, as well as from the general public. It is obvious that in a large community like New York sources of information of this type are scattered and not always known to many. The detailed data in the present monograph have therefore been assembled to assist all interested in precise information on the subject.

This reference handbook has been prepared to make readily available the important record of tuberculosis in New York City during the first half of the present century. There have been added selected reports dealing briefly with general health conditions now and prior to the Twentieth Century, also a few recent statistics concerning the United States, the larger cities and the various states. These comparative data we hope will help the reader to appreciate better the significance and the relative importance of New York City's health conditions between 1900 and 1950.

The authors wish to express their sincere thanks first of all for the cordial and helpful assistance given them by the Department of Health of the City of New York, particularly the officials of the Bureau of Tuberculosis and of the Bureau of Records and Statistics, likewise the Population Division of the United States Bureau of the Census in making available basic reports.

Within the Association we are indebted to Mr. Thomas H. Darling and Mr. Julius F. Koch for their skillful assistance in the preparation of charts and maps included in this handbook, likewise to Mrs. Claire Turtz for the expert care taken in the difficult reproduction of the many statistical tables. The authors have also had the benefit of the long experience in social and health work of Mrs. K. Z. Whipple, who reviewed the entire manuscript.

The constant encouragement and support of Dr. Herbert R. Edwards, former Director of the Bureau of Tuberculosis of the Department of Health of the City of New York and now the Executive Director of the New York Tuberculosis and Health Association, has contributed greatly to the completion of this task.

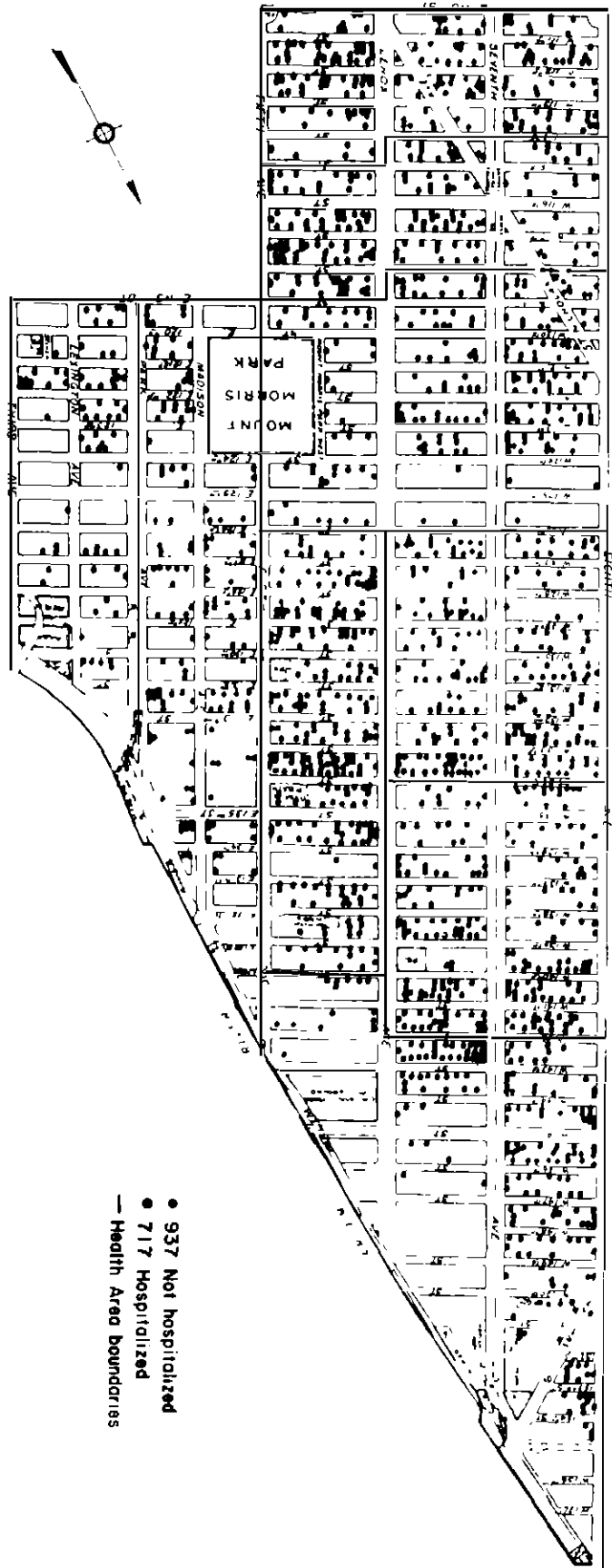
November, 1952

GODIAS J. DROLET

ANTHONY M. LOWELL

There are still "LUNG BLOCKS" riddled with tuberculosis in New York City.

TUBERCULOSIS CASES* - CENTRAL HARLEM



- 937 Not hospitalized
- 717 Hospitalized
- - - Health Area boundaries

*1654 Known cases of tuberculosis registered with the Department of Health on June 1, 1951

Map prepared by the Bureau of Statistics, Department of Health, City of New York, under the direction of Dr. W. C. Cline, Jr., Director of the Bureau of Statistics, Department of Health, City of New York.

"OLD NEW YORK", 1800-1900

OLD New York, it must be remembered, prior to 1898 included only the territory now described as the boroughs of Manhattan and of the Bronx. At the beginning of the previous century, namely in 1800, it had barely sixty-two thousand inhabitants. As a matter of fact, even in 1810 the population totalled 96,373 only; but by 1830 it had doubled, being then 202,589. Twenty years later, in 1850, the population was two and a half times as great, being well over a half a million (515,394).

From 1850 to 1870 New York's population multiplied again two and a half times; the city had then a million and a third (1,340,704) inhabitants. The next twenty years saw another million added; the Federal Census of 1890 accounted for 2,368,671 inhabitants.

Finally, at the close of the nineteenth century, New York City could boast of a population of three million and a half. But at that time there had been added onto the original territory the spacious boroughs of Brooklyn, Queens and Richmond.

A brief review of health conditions during the nineteenth century is needed if we are to appreciate the remarkably favorable conditions prevailing subsequently. As against a general death rate in New York of only 10 per thousand population nowadays, death rates two and three times as much were the rule formerly; during certain epidemics they rose almost to 50, particularly when cholera struck.

Sanitary knowledge in those days was exceedingly indefinite. Such diseases of childhood as diphtheria and scarlet fever were thought to be due "to climatic conditions, to fear, or to the will of God". Superstitious beliefs were prevalent, the germ theory of disease was unknown or those who did believe in germs held to the doctrine of spontaneous generation. While vaccination for smallpox was known, its popularity was hampered by defective and often contaminated application. Furthermore, the extremely rapid growth of population, especially in Manhattan, led to extreme over-crowding and an excessive spread of communicable diseases.

As quoted by Armstrong(1), from Stephen Smith's book, "The City that Was", it was said of conditions about 1860 that "New York gradually became the natural home of every variety of contagious disease, and the favorite resort of foreign pestilences. Smallpox, scarlet fever, measles, diphtheria were domestic pestilences with which the people were so familiar that they regarded them as necessary features of childhood. Malarial fevers...were regularly announced in the autumnal months as having appeared with their 'usual severity'. The 'White Plague' or consumption was the common inheritance of the poor and the rich alike.

"With the immigrant came typhus and typhoid fevers which resistlessly swept through the tenement houses decimating the poverty-stricken tenants. At intervals, the great oriental plague, Asiatic cholera, swooped down upon the city with fatal energy and gathered its enormous harvest of dead...Very few tenements had waterclosets in the houses; they had privies in the yard, which as a rule were insufficient for the accommodation of the numbers of people crowded into the houses; many were not connected with the sewers; they were seldom cleaned and often allowed to overflow...rendering the neighborhood offensive..."

Unique reports tabulated by Dowling of the City Inspector's Department for the fifty years from 1804 to 1853, give a precise evaluation of mortality rates at the beginning of the nineteenth century. During the five-year period 1804-1808, when the city's population was slightly over 80,000, the general death rate was nearly 28 per thousand. Almost twenty-five percent of all the deaths was assigned to "consumption". The second leading cause of death in the terms of the day was "convulsions"; this was followed by cholera infantum, marasmus and atrophica. Some deaths were listed as due to odd causes. It is related for instance in 1805 that there had been 11 deaths due to "drinking cold water". In reports of a few years later only, there were listed deaths due "to furor of the womb"; others, as caused by rattlesnake bites; even "fright" was listed as cause of death. In the 1830's, many deaths were charged to "salivation". In those unsanitary days, it is not surprising likewise that many deaths were due to "worms".

An interesting and precise measurement of the mortality at that time was made by Mary Dalton(2), in 1934 from "The Returns of Death in the City of New York for the years, 1804, 1805, 1806, 1807 and 1808." Going carefully over the records she worked out that the expectancy of life at that time for those who had survived to age twenty was 29.8 years. The significance of that figure can be better understood when we see that nowadays the expectancy of life over and above that age for men is close to fifty years and for women exceeds even fifty-four years.

Child life in those days was exposed to extreme dangers; the infant mortality rate often reached from 240 to 250 per thousand births; in other words one child out of every four born was dead by the end of the first year.

Fifty years later, namely during the five-year period 1849-1853, the general death rate averaged even fifty percent higher, namely 39.7 per thousand population. Just at that time an epidemic of cholera along with smallpox and dysentery had smitten the population and caused an extreme loss of life. Even then, "consumption" still headed the death list, striking at a rate of 431 per hundred thousand population. Once more, the second leading cause of death was said to be due to "convulsions", followed this time by "cholera".

For the first time among the leading causes of death in 1850 mention of "heart disease" is made; but above it was "dropsy", whatever may have been its causes. Deaths due to "apoplexy" also exceeded

LEADING CAUSES OF DEATH, OLD NEW YORK (Manhattan, Bronx)

Five-Year Period 1804-1808

Five-Year Period 1849-1853

Cause of Death	Annual Average	
	Deaths	Rate*
Consumption	438	550
Convulsions	188	236
Cholera infantum	129	162
Marasmus, atrophia	124	156
Inflam. chest, lungs	101	127
Croup	88	110
Dropsy	86	108
Casualties, violence	79	99
Smallpox	74	93
Typhus, typhoid	73	92
Yellow fever	54	68
Dysentery	43	54
Worms	42	53
Whooping cough	36	45
Teething	36	45
Inflam. bowels	34	43
Sprue	26	33
Dropsy in head	23	29
Apoplexy	21	26
Palsy	19	24
Other causes	490	614
All causes	2204	2767

Cause of Death	Annual Average	
	Deaths	Rate*
Consumption	2322	431
Convulsions	1576	292
Cholera	1107	205
Inflam. chest, lungs	1077	200
Marasmus, atrophia	1029	191
Dysentery	956	177
Cholera infantum	839	156
Dropsy in head	801	149
Diarrhea	651	121
Apoplexy	552	102
Croup	476	88
Inflam. bowels, stomach	470	87
Smallpox	454	84
Scarlet fever	454	84
Debility	432	80
Inflam. brain	405	75
Dropsy	321	60
Heart disease	258	48
Measles	230	43
Congest. lungs	219	41
Other causes	6787	1258
All causes	21416	3972

Population 1806 = 79,653.

Population 1851 = 539,107.

*Per 100,000. Based upon records of City Inspector's Department.

LEADING CAUSES OF DEATH, NEW YORK CITY
(Manhattan, Bronx, Brooklyn, Queens, Richmond)

Five-Year Period 1900-1904

Five-Year Period 1945-1949

Cause of Death	Annual Average	
	Deaths	Rate*
Pneumonias	10222	279
Tuberculosis	9396	256
Diarrhea, enteritis	6204	169
Nephritis, Bright's dis.	5634	154
Heart diseases	4664	127
Violence	4312	118
Apoplexy	2521	69
Cancer	2504	68
Diphtheria, croup	2120	58
Bronchitis	1768	48
Senile debility	1029	28
Scarlet fever	830	23
Cirrhosis of liver	787	21
Typhoid fever	705	19
Measles	676	18
Puerperal dis.	673	18
Convulsions	644	18
Influenza	509	14
Cer. spi. mening.	502	14
Alcoholism	474	13
Other causes	14952	411
All causes	71126	1940

Cause of Death	Annual Average	
	Deaths†	Rate*
Heart diseases	31034	399
Cancer	14560	187
Accidents	3836	49
Cerebral hemorrhage	3665	47
Dis. early infancy	3402	44
Diabetes	3398	44
Tuberculosis	3130	40
Pneumonias	2889	37
Nephritis	2541	33
Dis. liver, gallbladder	1842	24
Dis. arteries	1213	16
Suicide	910	12
Ulcer, stomach, duodenum	663	9
Syphilis	606	8
Hernia, intest. obst.	571	7
Leukemias, aleukemias	551	7
Disease, prostate	418	5
Nonmalignant tumors	346	4
Homicide	345	4
Alcoholism	288	4
Other causes	3629	47
All causes	79837	1027

Population 1902 = 3,665,825.

Population 1947 = 7,771,792.

*Per 100,000. †Classified according to 5th rev. Inter. List Causes of Death. Based upon reports, Bureau of Records and Statistics, Department of Health, City of New York.

those assigned to "heart disease".

We have to study the comparative mortality figures for the five-year period 1900-1904 to appreciate the changes that had occurred during the nineteenth century. During the five years just mentioned, the general death rate was now below 20, namely 19.4 per thousand population. For the first time we find tuberculosis stepping down to second place, being preceded by the pneumonias which were said to be responsible on an average annually for some 10,000 deaths, the mortality rate of the latter being 279 per hundred thousand population. We still find, however, as third leading cause of death, diarrhea and enteritis; then, nephritis and heart diseases.

Epidemics of a Former Day: Nineteenth Century Plagues

First it should be recalled that between 1800 and 1850 the general death rate, except in epidemic years, ranged usually between twenty and thirty per thousand population. Occasionally, with the lack of control of communicable diseases, the nature or cause of which was unknown in those days, the death rate would suddenly rise to even greater levels. Back in 1832 a cholera epidemic was responsible for 3,513 deaths and the death rate that year rose to 49.9 per thousand -- five times our present rate. Another cholera epidemic in 1849, with 5,071 deaths, sent the death rate again to 48.9 (see Fig. 1).

Between 1850 and 1900 the general death rate usually ranged about the same high level as during the first half of that century. Once more cholera struck heavily in 1854, being responsible for 2,509 deaths, while at the same time an epidemic of smallpox came along causing 611 deaths; consequently the death rate was 47.1 that year. It was not until 1897 that the general death rate in New York City fell below 20; that year it was 19.8.

During the nineteenth century under discussion, the population of New York City was repeatedly scourged by a variety of epidemics, smallpox for instance appearing repeatedly. In 1804, it caused 169 deaths in the comparatively small population of those days; in 1824, 394 deaths; in 1851, 562; then in 1865, 664 more; in 1872, 1,666; in 1875, 1,899; in 1881, 503 and, in 1893, 302. The last epidemic of this type occurred in 1901 and 1902 when altogether 720 deaths occurred. Thereafter smallpox was conquered by vaccination.

Cholera, when it came along dealt heavy blows. As already mentioned, in 1832 there were 3,513 deaths, and again in 1849, 5,071. Within another five years, namely in 1854, it caused 2,509 more deaths; then in 1866, 1,137. Fortunately, in 1892 when nine deaths of cholera occurred this was the last visitation of an epidemic of that type.

Of children's diseases, it is to be noted that in 1836 and 1837, measles were responsible for 443 deaths; scarlet fever, for 579 more. In 1887, diphtheria struck most terribly when it caused 4,509 deaths. Mention

Fig. 1

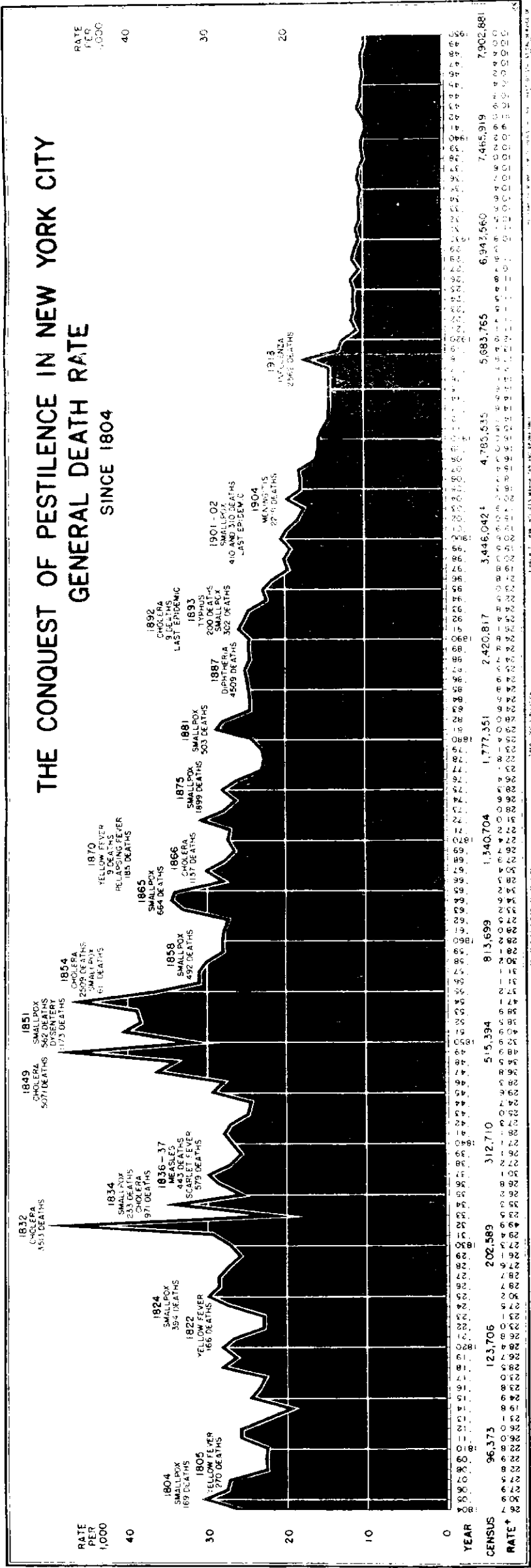
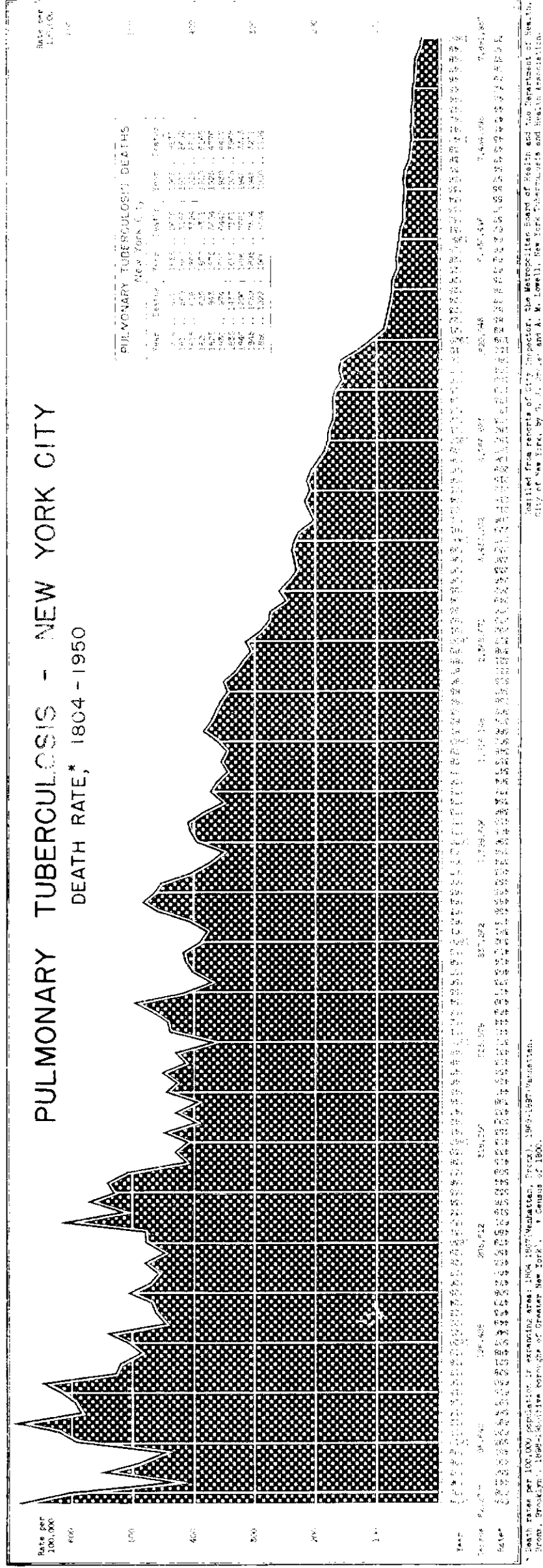


Fig. 2



Obtained from records of City Inspector, the Metropolitan Board of Health and the Department of Health, City of New York, by Dr. J. S. Jones and A. M. Lowell, New York Tuberculosis and Health Association.

is also made in the records of an epidemic of dysentery in 1851 which was responsible for 1,173 deaths. The mortality records of those days do not single out typhoid as being notably responsible and yet deaths from this cause were taking place continuously.

Tuberculosis

In the case of tuberculosis the most dependable records in those days refer to "consumption". For much of that period the specific cause of what we now label as the non-pulmonary forms of tuberculosis was not known and therefore the reports available do not measure the total mortality due to the tubercle bacillus. Without the control we now enjoy of bovine tuberculosis, it is likely that the mortality from this disease in children was excessive.

However, if one looks over the record for "consumption" or pulmonary tuberculosis from 1804, for instance, until the end of that century, it is seen that its rate up to 1840 often rose to 600 or more per hundred thousand population (see Fig. 2).

In 1804, the death rate from pulmonary tuberculosis in New York City was as high as 688 per hundred thousand; in 1812, it even went to 697. It was not until 1838 that the rate came down below 500 per hundred thousand population. Between that year and 1872, it oscillated around 400, often above it. Then, beginning in 1882, started the continuous decline in mortality which has been taking place since that time. However in 1900 the death rate from pulmonary tuberculosis in New York City was 237, which at least was only one-third of what it had been at the beginning of the nineteenth century.

* * *

THE TWENTIETH CENTURY

New York City Grows, 1900 to 1950

IN 1900 the population of New York City totalled nearly three and a half million inhabitants (Federal Census 3,437,202). Only two years previously the annexation of Brooklyn, the various small communities of Queens and Staten Island had added onto the older central section--Manhattan and the Bronx--one million three hundred thousand additional inhabitants. More than one million of them were residents of the up-to-then separate city of Brooklyn.

In Greater New York at that time more than one-half of the total population was then concentrated in the Borough of Manhattan (1,850,093). The 420,000 residents of Staten Island, Bronx, and Queens comprised only twelve percent of the city's population; Brooklyn contained one-third.

Greater New York has an area of 359 square miles. If, however, reference is made only to the land area, it totals 314.2 square miles. Taking Manhattan's 22.3 square miles as a unit, it is seen that the area of the Bronx, 43.4 square miles, is practically double. That of Staten Island, 60.3 square miles, is 2.7 times the size of Manhattan. Brooklyn's 76 square miles reveal that borough to be three and a half times the size of the central borough. Queens overshadows in size all of the other four boroughs; its land area of 112 square miles is five times that of Manhattan.

With nearly 88 percent of New York's population in 1900 concentrated in Manhattan and in Brooklyn, the congestion was greatest in these two boroughs. On an average, in Brooklyn the density of population was 15,300 per square mile; in Manhattan it was more than five times as great, namely 83,000 residents per square mile. In the Bronx the density of population averaged 4,600 per square mile. But in the large and still comparatively undeveloped sections of Queens and of Staten Island the population coverage per mile was only 1,360 and 1,110 respectively. Furthermore, in all these five boroughs the population was far from being evenly distributed. In Manhattan it was then concentrated mostly below Fifty-ninth Street; in the Bronx, mainly in the Mott Haven, Melrose and Morrisania sections; in Brooklyn, in Williamsburg, Fort Greene, Red Hook-Gowanus and the Bedford sections. In Queens, isolated, individual communities prevailed, the larger ones being Long Island City, Astoria, Flushing and Jamaica.

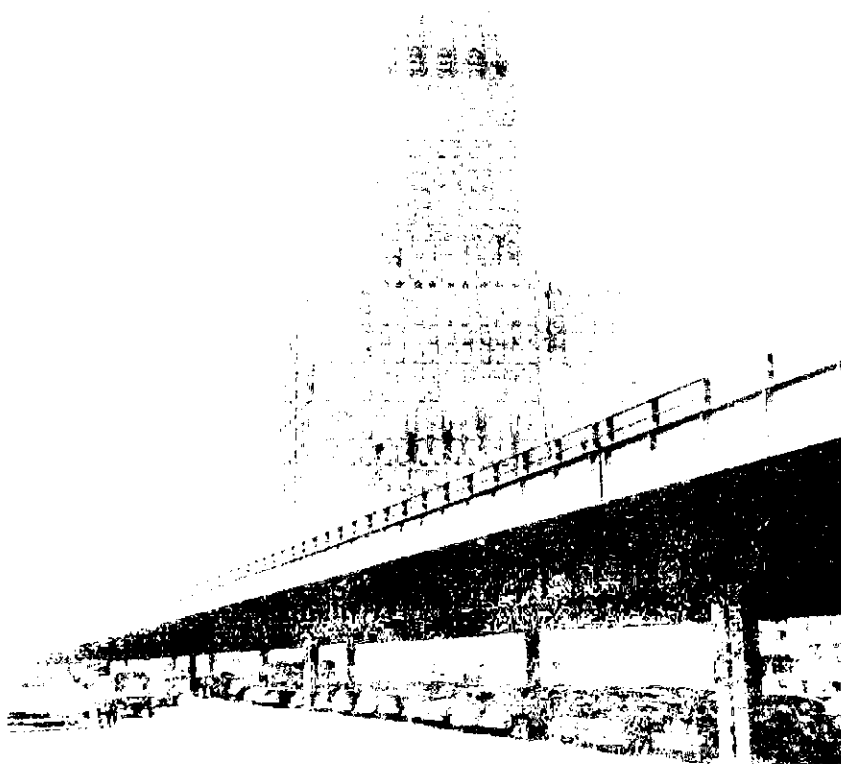
Racial Composition

Of the three and a half million residents of New York City, at the time of the 1900 Federal Census, 60,666 were Negroes. The other colored, mostly Orientals, numbered only 6,638. The white population besides the 2,108,980 native-born included 1,260,918 foreign-born, the latter comprising more than a third of the entire population of the city. The largest number of the foreign-born white, namely 322,343, were from Germany, followed by 275,102 born in Ireland. Some 317,000 had been born in Russia, Poland, Austria-Hungary and Roumania; the majority of them were Jews.



New York's Changing Scene*

WEST STREET: (upper) About 1887, looking north at Vesey Street; (lower) today, elevated highway and New York Telephone Company building cuts space and crowds sky. *Reproduction by courtesy, Seidman Photo and New York Daily News.



Other foreign-born whites then residing in New York City also included 145,433 born in Italy; 80,000 from either England, Wales or Scotland. Lesser numbers had come from Sweden, France, or from Canada.

In 1900, the age composition of the population was quite different from what it is now (see p. 4). At that time nearly a third or 30.7 percent was made up of children under fifteen years of age; old folks, sixty-five and over, comprised only 2.8 percent of the population. Nowadays the proportion of the child population has been reduced by a third from what it was previously, and that of the aged is two and a half times as great. The latter now comprises 7.7 percent of the entire population.

During the first half of the twentieth century the great metropolis of the New World, New York City, continued to grow at a varying pace. The greatest gain in population was made during the first decade when its inhabitants increased in number from some 3,400,000 to 4,800,000, actually by 1,329,681, an increase of no less than thirty-nine percent. Between 1910 and 1920 growth was at a lesser rate; the population increased by 853,165 or by eighteen percent. The decade of 1920 to 1930 saw again an increased rate of gain, the population growing by no less than 1,310,000 or by twenty-three percent. The effect of Federal legislation restricting immigration soon began to be felt and between 1930 and 1940 the gain in population totalled only 524,549, an increase of but 7.6 percent. It was even less in the last decade of that first half of the century; between 1940 and 1950, the population increased by 436,962 or by slightly less than six percent.

As a result of the great gain in population during the first decade, the proportion of the foreign-born residing here in 1910 reached forty percent of the entire population; they then numbered almost two million. The composition of the foreign-born group at that time began to show different proportions. There was a comparative reduction in the number of those born in Ireland or Germany. Those from Italy were now two and a half times more numerous than ten years previously. There were now 340,770 foreign-born Italians here. Those from Russia were almost three times the number they were ten years before; those from Austria-Hungary doubled; likewise those from Poland. Negroes numbered 91,709 in 1910.

In 1920 those residents of New York born in Russia, 487,275, represented the largest number of the foreign-born. In addition there were 157,000 from Austria; 146,000 from Poland; and 65,000 from Hungary. That year Negroes in New York City numbered 152,467.

In 1920, the proportion of the population which was foreign-born was reduced to 35.6 percent of the total; in 1930, it represented 33 percent; in 1940, 28 percent; and, by 1950, it was now down to 23 percent. In 1950, New York's foreign-born white numbered 1,784,089, and the native-white 5,332,027. There were now 747,780 Negroes and 28,028 "other colored", mostly Orientals.

The first half of the twentieth century had seen the population of New York grow to more than double, namely, from some 3,500,000 inhabitants to nearly 8,000,000, not to mention the extreme growth which the surrounding suburban areas of Long Island, New York State and New Jersey have also witnessed.

NEW YORK'S CHANGING SCENE*

HURSTER STREET: (left) About 1900, in heart of lower East Side; (right) today, automobiles have displaced pushcarts. *Reproduction by courtesy, New York Historical Society and New York Daily News.



During those fifty years a remarkable development in transportation facilities had perforce taken place. The barriers created by the surrounding waters of the East River, the Hudson and the Harlem River, around Manhattan had been bridged over or had seen a series of tunnels dug under them. Between 1900 and 1910 alone in addition to the already existing Brooklyn Bridge there were erected the Williamsburg, the Queensboro, and the Manhattan bridges across the East River. Over to New Jersey was opened in 1927 the Holland Tunnel; in 1931 was erected the George Washington Bridge; finally, in 1937, the Lincoln Tunnel. More recently, the Triboro Bridge linked Manhattan, Bronx and Queens. Tunnels over to Queens have also been dug under the East River; likewise in 1950 between the Battery and Brooklyn. At the same time a number of important lines for rapid transit were built, not to mention already existing "elevated" lines.

During the fifty years under consideration, the internal growth of the city was not at an even rate. Manhattan, at the turn of the century, was already crowded. As a result between 1900 and 1950 its population increased from 1,854,052 to 1,961,856 or by 107,804, the least of any of the five boroughs of New York City. Numerically the next important increase was on Staten Island where the population, increasing by 125,000, trebled. Brooklyn came along with an increase of 1,570,000 in population; in 1950 the number of its inhabitants, 2,739,000 was 1.7 times what it was in 1900.

It is particularly in the boroughs of the Bronx and of Queens that the major growth of New York City took place, especially when rapid transit lines made these areas more accessible. In the Bronx the population increased by 1,250,000, namely, from 201,646 to 1,452,691--seven times as large in 1950 as it was in 1900. Finally there has been the unusual and remarkable growth in the Borough of Queens, said to be the fastest growing section of the United States. Between 1900 and 1950 it registered an increase of no less than 1,403,000, so that lately its total population, 1,557,179, is ten times what it was originally when it was scattered mostly in small disconnected communities.

In relation to the land area of the great city, the density of the population per square mile in 1950 averaged 25,120; it was least on Staten Island, 3,180 per square mile only. Queens, even with its very great growth, but because of its larger size, had a density of population of 13,850 per square mile in 1950. In the Bronx, the density was 33,440; in Brooklyn, it was 36,030. Finally, in Manhattan, the density of population per square mile was 87,900, barely five thousand more than fifty years previously.

Changes in Racial Composition

Great and significant changes in the white and non-white composition of the city have taken place particularly during the last decade.

Between 1940 and 1950, the white population of the city as a whole increased by 2.0 percent only; in the boroughs of Manhattan, the Bronx and Brooklyn it actually decreased. The non-white population

during the decade just mentioned rose from 477,494 to a total of 775,753, an increase of nearly three hundred thousand or of 62 percent. In Manhattan the non-white population increased by 29 percent; on Staten Island, by 54 percent; in Brooklyn, by 93 percent; in Queens, by 99.7 percent; and, in the Bronx, by no less than 310 percent. The colored population was now distributed as follows: 5,492 resided on Staten Island, 53,723 in the Borough of Queens; 100,048 in the Bronx; 212,989 in Brooklyn; finally 403,501 in Manhattan (see p.5).

With regard to concentration, the last Census enumeration indicates that in the Borough of Queens some 30,000 resided in the Jamaica-East Section and 11,757 in the Corona Section. In the Bronx there were 18,145 in the Mott Haven District and 68,220 now in Morrisania. Relatively small numbers resided in the other Bronx districts; however, there were 7,106 in Tremont. In Brooklyn, first of all the non-white population was largest in the Bedford District with 124,501 residents, followed by 41,081 in the Fort Greene District. In Brownsville there were 18,435 and both in Bushwick and Red Hook-Gowanus about 7,500 each. In the Borough of Manhattan, both in the Lower East Side and the Lower West Side there were nearly equal numbers, around 13,000 in each. The non-white population in East Harlem numbered 38,199; in the Riverside District, 52,545; in the Washington Heights section 77,801; and, in Central Harlem, 205,442.

During the last decade there has also been a large influx of Puerto Ricans into New York City. Official figures of their number have not been published, but studies of the Federal Census records by the Welfare and Health Council of New York City show in 1950 that there were here approximately some 246,000 people who were born in Puerto Rico or of Puerto Rican parentage; their number has greatly increased since.

The vast horde and streams of population which have gone through and into New York during the fifty years under consideration, the type and composition of these groups, the limited space available to them for dwelling purposes have all combined to make extremely difficult the control of a communicable disease like tuberculosis.

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New York's Changing Scene*
 MADISON SQUARE AREA: (upper) Early 1900s, Madison Square Garden, statue of Diana tops edifice; (lower) today, massive buildings of Metropolitan and New York Life insurance companies overshadow New York Court of Appeals.*Reproduction by courtesy, New York Daily News.



HEALTH CONDITIONS AND CHANGES, 1900-1950

DURING the first half of the twentieth century New York City reflected sharply the dramatic gains in health which have been made in recent times. The reports to be quoted are all the more striking when it is recalled, first, that it is especially in large and dense centers of population that opportunities for the spread of communicable diseases are greatest. Secondly, the competition for space and a living is here likewise of the most intensive character. Finally, since food unlike in rural areas must all be purchased and come from afar, the maintenance of good nutrition and health under these conditions is of greater difficulty than elsewhere.

Mahoney(3), the Commissioner of Health of the City of New York, in his report "New York City's Health in 1950", has well summarized the changes and the tremendous advances which have been made. "An indication", says he, "of some of the achievements of preventive medicine and public health in New York City during the past half century can be obtained by contrasting the vital statistics of 1900 and 1950. Among the most dramatic accomplishments were tremendous reductions in infant and maternal mortality; the conquest of such communicable diseases as smallpox, typhoid fever, diphtheria, malaria and scarlet fever. Rapid strides were made toward the conquest of venereal diseases. Significant also was the reduction of mortality from tuberculosis, pneumonia, and appendicitis.

"In 1900, the general death rate was 20.6 per thousand population. At the same time the birth rate was 35.7 and the infant mortality rate, 135 per thousand births."

In 1950, the general death rate of ten was only one-half of what it was formerly. And whereas the average age at death at the beginning of the century was 30.2 years for both sexes, it has risen, in fact, doubled to 60.2 in 1950, the gain having been continuous during that period.

Since 1900 the birth rate has fallen gradually until by 1950 it averaged 19.7 per thousand. It varies sharply in the two largest racial groups now residing in New York City: the whites and the Negroes. The birth rate of the white population in 1950 was only 18.7 and that of the Negroes 28.6. In 1910 the white population had a natural rate of increase of 14 per thousand population since at that time its birth rate was 30 and its death rate 15.9, but in 1950 the natural increase, even with the much lower general death rate of the white population, had been reduced to 8.7.

In 1910 the Negro birth rate in New York City was 24.1 per thousand but its death rate was almost as high, 24.7. Living conditions were particularly hard for them in this already congested city. But in 1950, when the Negro birth rate was 28.6, their general death rate had come all the way down to 9.63, which meant that their natural rate of increase was now 18.9, or more than double that of the white population. These reports testify to the fact that the capacity for improvement in health

LEADING CAUSES OF DEATH, NEW YORK CITY
1900, 1910, 1920, 1930, 1940 AND 1950

Year 1900				Year 1910			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Pneumonias	10,482	304	1	Pneumonias	10,519	220
2	Tuberculosis	9,630	280	2	Tuberculosis	10,074	211
3	Diarrhea, enteritis	6,830	198	3	Heart diseases	8,350	174
4	Bright's, nephritis	5,362	156	4	Diarrhea, enteritis	6,370	133
5	Pre.-birth, debility	4,801	139	5	Bright's, nephritis	5,638	118
6	Heart diseases	4,069	118	6	Pre.-birth, debility	4,655	97
7	Accidents	3,012	87	7	Cancer	3,710	78
8	Cer. hem., arter'l dis.†	2,482	72	8	Accidents	3,527	74
9	Cancer	2,291	66	9	Cer. hem., arter'l dis.†	2,852	60
10	Diphtheria, croup	2,277	66	10	Diphtheria, croup	1,715	36
-	Other causes	19,636	571	-	Other causes	19,332	403
	Deaths, all causes	70,872	2057		Deaths, all causes	76,742	1604
	population:				population:		
	(3,446,042)				(4,785,535)		
	Live births	123,000	35.7‡		Live births	143,000	29.9‡
	Infant mortality	16,640	135.3+		Infant mortality	16,215	113.4+
Year 1920				Year 1930			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Heart diseases	12,117	213	1	Heart diseases	17,786	256
2	Pneumonias	10,058	177	2	Cancer	8,125	117
3	Tuberculosis	7,135	126	3	Pneumonias	8,058	116
4	Cancer	5,317	94	4	Cer. hem., arter'l dis.†	5,231	75
5	Bright's, nephritis	4,833	85	5	Tuberculosis	5,089	73
6	Pre.-birth, debility	3,631	64	6	Accidents	4,868	70
7	Accidents	3,619	64	7	Pre.-birth, debility	3,173	46
8	Cer. hem., arter'l dis.†	3,542	62	8	Nephritis	2,905	42
9	Influenza	3,492	61	9	Diabetes	1,784	26
10	Diarrhea, enteritis	2,926	51	10	Suicide	1,403	20
-	Other causes	16,579	292	-	Other causes	16,466	238
	Deaths, all causes	73,249	1289		Deaths, all causes	74,888	1079
	population:				population:		
	(5,683,765)				(6,943,560)		
	Live births	132,856	23.4‡		Live births	122,811	17.7‡
	Infant mortality	11,340	85.4+		Infant mortality	7,030	57.2+
Year 1940				Year 1950			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Heart diseases†	26,529	355	1	Heart diseases†	34,652	438
2	Cancer	12,310	165	2	Malignant neoplasm(cancer)	14,632	185
3	Cer. hem., arter'l dis..	4,771	64	3	Cer. hem., (vasc.les.C.N.S.)	5,168	65
4	Accidents	3,885	52	4	Pre.-birth, dis.infancy.	3,369	43
5	Tuberculosis	3,627	49	5	Accidents	3,252	41
6	Nephritis	3,545	47	6	Pneumonias	2,394	30
7	Pneumonias	3,410	46	7	Tuberculosis	2,321	29
8	Diabetes	3,106	42	8	Liver, gallbladder, pancreas	1,789	23
9	Pre.-birth, debility	2,651	36	9	Diabetes	1,584	20
10	Suicide	1,263	17	10	Dis. arteries	1,216	15
-	Other causes	10,911	145	-	Other causes	8,705	112
	Deaths, all causes	76,008	1,018		Deaths, all causes	79,082	1001
	population:				population:		
	(7,465,919)				(7,902,881)		
	Live births	107,287	14.4‡		Live births	155,818	19.7‡
	Infant mortality	3,746	34.9+		Infant mortality	3,858	24.8+

*Per 100,000 population. †Inclusive of diseases of coronary arteries. ‡Per 1,000 population. +Per 1,000 live births. Note: Deaths in 1950 classified according to 6th rev. Inter. List Causes of Death. Based on reports, Bureau of Records and Statistics, Department of Health, City of New York.

It is especially in the field of communicable diseases that some of the greatest advances in saving lives have been made. Smallpox which still accounted for 410 deaths in 1901 and 310 in 1902 has since been wiped out. Typhoid fever which killed 718 persons in 1900 took only one life in 1950. Malaria and erysipelas which took only one person recently, killed 532 in 1900. Ravages from pneumonia and the reduction lately have been mentioned above.

Specific factors mentioned by Mahoney "which have brought about these remarkable changes can be classified under (1) environmental sanitation, (2) specific immunization, and (3) specific therapy.

"Improvements in environmental sanitation included purification of the city's water and milk supplies. In 1910 chlorination of water was introduced and in 1912 pasteurization of milk. In addition has been the attention given to the protection of the purity of foods and drugs."

With regard to specific immunization mention must be made particularly of the conquest of diphtheria; likewise the widespread vaccination which during the past fifty years has wiped out smallpox.

"The specific drugs, ranging from salvarsan to the most recent antibiotics, are the latest means for the control of communicable diseases. The introduction of the sulfonamides in 1934 and of penicillin a decade later opened a new era in medication."

In 1950 the degenerative conditions peculiar naturally and more to the older section of the population head the mortality returns. Heart diseases, cancer, cerebral hemorrhage are responsible now for more than half of all the mortality.

The gains in lives saved can be measured in a way from the previous statement that the average age at death in New York City has doubled. A few comparative figures for the United States frame the picture interestingly. Whereas at the beginning of the century the expectation of life at birth averaged 49 years it has now risen to practically 69 years-- a gain for all, of twenty years; the improvement has even been slightly greater in the female sex.

While as previously mentioned it is particularly children who have benefited most by having the opportunity to live their lives through, it is worth noting that even at the older periods of life there has been an improvement in the expectation of life. For those aged twenty, in the United States in the white population, the expectation of life has risen from 42 years to 49 years; for those forty years of age, a rise from 27.7 more years to 30.7. Even for those over sixty-five, a slight gain of one year in life expectancy has been recorded, the expectation being approximately some twelve years to be added onto their present age.

During the half century under review while the customary epidemics among children have occurred their severity as previously mentioned, has been greatly reduced. However, during those fifty years there have been other epidemics due to virus infections. Poliomyelitis struck severely in 1916 when among some nine thousand reported cases there were 2,448

LEADING CAUSES OF DEATH AMONG WHITE POPULATION, NEW YORK CITY
1910, 1920, 1930, 1940 AND 1950

Year 1910				Year 1920			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Pneumonias	10,128	216	1	Heart diseases	11,738	213
2	Tuberculosis	9,507	203	2	Pneumonias	9,374	170
3	Heart diseases	8,144	174	3	Tuberculosis	6,488	118
4	Diarrhea, enteritis	6,207	132	4	Cancer	5,210	94
5	Bright's, nephritis	5,456	116	5	Bright's, nephritis	4,688	85
6	Pre.-birth, debility ...	4,502	96	6	Accidents	3,498	63
7	Cancer	3,650	78	7	Pre.-birth, debility ...	3,433	62
8	Accidents	3,450	74	8	Cer.hem.,arter'1 dis.†..	3,426	62
9	Cer.hem.,arter'1 dis.†..	2,793	60	9	Influenza	3,379	61
10	Diphtheria, croup	1,698	36	10	Diarrhea, enteritis	2,803	51
-	Other causes	18,795	401	-	Other causes	15,833	288
	Deaths, all causes	74,330	1586		Deaths, all causes	69,870	1267
	Population, 4,686,439				Population, 5,514,404		
	Live births	140,736	30.0‡		Live births	128,646	23.3‡
	Infant mortality	15,680	111.4+		Infant mortality	10,667	82.9+

Year 1930				Year 1940			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Heart diseases	16,926	257	1	Heart diseases†	25,154	360
2	Cancer	7,866	119	2	Cancer	11,721	168
3	Pneumonias	7,283	110	3	Cer.hem., arter'1 dis..	4,487	64
4	Cer.hem., arter'1 dis.†	5,000	76	4	Accidents	3,602	52
5	Accidents	4,516	68	5	Nephritis	3,234	46
6	Tuberculosis	4,072	62	6	Pneumonias	3,100	44
7	Pre.-birth, debility ..	2,891	44	7	Diabetes	2,972	43
8	Nephritis	2,695	41	8	Tuberculosis	2,640	38
9	Diabetes	1,713	26	9	Pre.-birth, debility ..	2,350	34
10	Suicide	1,351	20	10	Suicide	1,229	18
-	Other causes	15,117	229	-	Other causes	10,591	151
	Deaths, all causes	69,430	1052		Deaths, all causes	71,080	1018
	Population, 6,596,982				Population, 6,980,974		
	Live births	115,114	17.4‡		Live births	99,005	14.2‡
	Infant mortality	6,299	54.7+		Infant mortality	3,293	33.3+

Year 1950			
Rank	Cause of Death	Deaths	Rate*
1	Heart diseases†	32,364	455
2	Malignant neoplasm(cancer)	13,574	191
3	Cer.hem.(vasc.les.C.N.S.)	4,771	67
4	Accidents	2,852	40
5	Pre.-birth,dis.infancy..	2,647	37
6	Pneumonias	2,036	29
7	Tuberculosis	1,604	23
8	Liver,gallbladder,pancreas	1,638	23
9	Diabetes	1,465	21
10	Dis. arteries	1,121	16
-	Other causes	8,483	103
	Deaths, all causes	71,555	1005
	Population, 7,119,901		
	Live births	133,340	18.7‡
	Infant mortality	2,992	22.4+

*Per 100,000 White population as of July 1st.

†Inclusive of diseases of coronary arteries.

‡Live births per 1,000 White population.

#Includes a few "other colored".

+Infant deaths per 1,000 live births.

Note: Death in 1950 classified according to 6th rev. Inter. List Causes of Death. Based on reports, Bureau of Records and Statistics, Department of Health, City of New York.

LEADING CAUSES OF DEATH AMONG NEGRO POPULATION, NEW YORK CITY
1910, 1920, 1930, 1940 AND 1950

Year 1910				Year 1920			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Tuberculosis	522	561	1	Pneumonias	663	412
2	Pneumonias	384	413	2	Tuberculosis	596	370
3	Heart diseases	198	213	3	Heart diseases	355	221
4	Bright's, nephritis	174	187	4	Pre.-birth, debility ...	189	117
5	Diarrhea, enteritis	162	174	5	Diarrhea, enteritis	120	75
6	Pre.-birth, debility ...	153	164	6	Accidents	115	71
7	Accidents	72	77	7	Cer.hem.,arter'l dis.†..	112	70
8	Cancer	59	63	8	Influenza	102	63
9	Cer.hem.,arter'l dis.†..	57	63	9	Cancer	100	62
10	Bronchitis	51	55	10	Whooping cough	46	29
-	Other causes	469	505	-	Other causes	816	506
	Deaths, all causes	2303	2475		Deaths, all causes	3214	1996
	Population, 93,038				Population, 160,988		
	Live births	2245	24.1‡		Live births	4129	25.6‡
	Infant mortality	535#	238.3+		Infant mortality	677	164.0+

Year 1930				Year 1940			
Rank	Cause of Death	Deaths	Rate*	Rank	Cause of Death	Deaths	Rate*
1	Tuberculosis	971	293	1	Heart diseases†	1342	288
2	Heart diseases	839	253	2	Tuberculosis	929	199
3	Pneumonias	756	228	3	Cancer	569	122
4	Accidents	335	101	4	Syphilis	350	75
5	Pre.-birth, debility ...	279	84	5	Nephritis	305	65
6	Cancer	245	74	6	Pneumonias	300	64
7	Cer.hem.,arter'l dis.†..	220	66	7	Pre.-birth,dis.infancy..	292	63
8	Nephritis	206	62	8	Accidents	272	58
9	Syphilis	204	62	9	Cer.hem.,arter'l dis. ...	268	58
10	Homicide	104	31	10	Diabetes	129	26
-	Other causes	1542	468	-	Other causes	860	188
	Deaths, all causes	5265	1591		Deaths, all causes	5616	1206
	Population, 330,975				Population, 465,673		
	Live births	7537	22.8‡		Live births	8081	17.4‡
	Infant mortality	722	95.8+		Infant mortality	441	54.6+

Year 1950			
Rank	Cause of Death	Deaths	Rate*
1	Heart diseases†	2224	295
2	Malignant neoplasm(cancer)	1007	133
3	Pre.-birth,dis. infancy..	709	94
4	Tuberculosis	683	90
5	Cer.hem.(vasc.les.C.N.S.)..	389	52
6	Accidents	385	51
7	Pneumonias	348	46
8	Homicide	163	22
9	Diabetes	114	15
10	Syphilis	104	14
-	Other causes	1146	151
	Deaths, all causes	7272	963
	Population, 754,849		
	Live births	21,568	28.6‡
	Infant mortality	866	40.2+

*Per 100,000 Negro population as of July 1st.

†Inclusive of diseases of coronary arteries.

‡Live births per 1,000 Negro population.

#Included are few "other colored".

+Infant deaths per 1,000 live births

Note: Deaths in 1950 classified according to 6th rev. Inter. List Causes of Death. Based on reports, Bureau of Records and Statistics, Department of Health, City of New York.

deaths. In 1931 another "polio" epidemic also caused 504 deaths. There seems to have been a slight recurrence lately when in 1949 among some twenty-four hundred cases, 186 deaths occurred. There was, we must remember, in 1918 the pandemic influenza which struck with particular severity here and was responsible for 12,562 deaths.

Reference has been made previously to differences in the natural increase of population among the white and Negro residents of New York City. Records are available separately for each of the two groups as to leading causes of mortality beginning in 1910. At that time the Negro community already numbered 93,038. By 1950 it had risen to more than 750,000, undoubtedly the largest urban concentration of Negroes in any place. It is therefore of special interest to see the changes in the health records of the two groups during that period, when as previously mentioned the Negroes have made great health gains.

White, Negro, Principal Causes of Death

In 1910, the general death rate of the white population was 15.86 per thousand population and in 1950 it was down to 10.05. Formerly, the principal causes of death were in this order; first, pneumonia; second, tuberculosis; third, heart diseases; fourth, diarrhea and enteritis. It is worth noting that even at that time the death rate from accidents was 74 or almost twice what it is even these days. The infant mortality rate in the white population was 111 per thousand births, whereas in 1950 it was down to 22. Leading causes of death in 1950 in the white population were first heart diseases; second, cancer; third, cerebral hemorrhage; and, fourth, accidents. Tuberculosis from second place in 1910 has come down to seventh place.

In the Negro community in 1910, the general death rate was 24.75 per thousand and the infant mortality rate 238 per thousand births, whereas in 1950 the death rate was down to 9.63 and the infant mortality to 40. The slightly lower general death rate of the Negro population recently as compared with that of the white is due to the difference in the age composition of the two, the first being still a comparatively younger group and the other including a large proportion of the aged.

Among Negroes in 1910, the leading causes of death were first, tuberculosis; second, the pneumonias; third, heart diseases. In 1950 the order was changed and the list was headed by heart diseases followed by cancer and then, among children, pre-maturity and diseases of early infancy. Tuberculosis is now down to fourth place. The death rate from tuberculosis which in 1910 was no less than 561 per hundred thousand population, has now been brought down to 90.

* * *

LEADING CAUSES OF DEATH, BY RACE AND SEX, NEW YORK CITY, 1950

Cause of Death*	Deaths										Death rate per 100,000						Rate per 100,000
	Total		White		Nonwhite		White		Nonwhite		All Races	Both Sexes	White		Nonwhite		
	Deaths	Sexes	Deaths	Sexes	Deaths	Sexes	Deaths	Sexes	Deaths	Sexes			Male	Female	Male	Female	
1 Heart diseases	34,652	32,364	18,532	13,832	2,288	1,112	1,176	438	455	534	379	292	315	273	1		
2 Malign. neoplasm (cancer) ..	14,632	13,574	7,129	6,445	1,058	521	537	185	191	205	177	135	148	125	2		
3 Cerebral hemorrhage ...	5,168	4,771	2,212	2,559	397	161	236	65	67	64	70	51	46	55	3		
4 Pre-birth, dis. infancy ..	3,369	2,647	1,516	1,131	722	415	307	43	37	44	31	29	23	27	4		
5 Accidents	3,252	2,852	1,810	1,042	400	282	118	41	40	52	29	46	80	71	5		
6 Pneumonia	2,394	2,036	1,181	855	358	211	147	30	29	34	9	92	60	34	6		
7 Tuberculosis	2,321	1,604	1,262	342	400	456	261	29	23	29	17	19	26	13	7		
8 Liver, gallbladder, panc.	1,789	1,638	1,000	638	151	93	58	20	23	16	25	15	12	18	8		
9 Diabetes	1,584	1,465	551	914	119	42	77	15	16	16	16	12	12	12	9		
10 Dis. arteries	1,216	1,121	549	572	95	44	51	12	12	17	8	7	10	4	10		
11 Suicide	938	885	602	283	53	37	16	15	16	16	8	7	9	8	11		
12 Hernia, intest., perit. .	665	601	315	286	64	34	34	8	8	9	8	5	10	1	12		
13 Dis. stomach, duodenum ..	626	586	478	108	40	34	6	8	8	14	3	8	10	1	13		
14 Hypertension	583	493	247	246	90	42	48	7	7	7	7	11	12	11	14		
15 Nephritis	555	475	263	212	80	37	43	4	4	4	6	10	10	10	15		
16 Homicide	329	163	130	33	166	131	35	4	2	4	1	21	37	8	16		
17 Benign neoplasm	322	278	119	159	44	10	34	4	4	3	4	6	3	3	17		
18 Alcoholism	295	218	174	44	77	62	15	4	3	5	1	10	18	3	18		
19 Prostate, hyperplasia ..	274	256	256	...	18	18	...	7	7	7	...	5	5	...	19		
20 Syphilis	264	156	135	21	108	77	31	3	2	3	1	14	22	7	20		
21 Appendicitis	190	163	101	62	27	11	16	2	2	1	2	3	3	4	21		
22 Poliomyelitis	73	71	43	28	2	1	1	1	1	1	1	0.3	0.3	0.2	22		
-- Other (remaining) causes	3,591	3,138	1,778	1,360	453	218	235	45	40	67	37	56	62	56	--		
All causes	79,082	71,555	40,383	31,172	7,527	4,045	3,482	1001	1005	1163	855	961	1147	809	All		

*Classified according to 6th rev. (1948) Inter-list Causes of Death: (1) Diseases of the heart 410-443; (2) malignant neoplasms, neoplasms of lymphatic and hematopoietic tissues 140-205; (3) vascular lesions affecting central nervous system 330-334; (4) congenital malformations 750-759; certain diseases of early infancy 760-776; (5) accidents 800-962; (6) pneumonia, all forms 490-493; (7) tuberculosis, all forms 1-19; (8) diseases of liver, gallbladder and pancreas 580-587; (9) diabetes mellitus 260; (10) diseases of arteries 450-456; (11) suicides 963, 970-979; (12) hernia and other diseases of intestines and peritoneum 560-578; (13) diseases of stomach and duodenum 540-545; (14) hypertension without mention of heart 444-447; (15) nephritis and nephrosis 590-594; (16) homicides 964, 980-985; (17) benign neoplasms 210-229, neoplasm of unspecified nature 230-239; (18) alcoholism 322; (19) hyperplasia of prostate 610; (20) syphilis and its sequelae 20-29; (21) appendicitis 550-553; (22) acute poliomyelitis 80, late effects of acute polio. 81. †Rate based on male population.

MILESTONES IN THE PROGRESS AGAINST TUBERCULOSIS

BECAUSE of the widespread incidence of tuberculosis, its communicable character, and the influence upon infection and disease of both personal and environmental conditions, the fight against it has had to be led from a variety of approaches, specific and general.

Following the identification of the cause of tuberculosis by Koch through his discovery of the tubercle bacillus in 1882, it became obvious that the first approach towards its control would be the identification and location of cases of tuberculosis, the possible foci of new infections. These characteristics and aspects of the situation were keenly realized in New York City by Biggs who led in securing the adoption in 1894 of the resolution by the Board of Health providing for the reporting of cases, the free examination of sputum, and the home visiting of consumptives. By 1897 the Sanitary Code required the universal reporting of tuberculosis cases including those under the care of medical practitioners.

In 1901 the Board of Health adopted a regulation to permit the compulsory segregation of recalcitrant cases of tuberculosis; the effectiveness of this measure was limited greatly by the lack of special wards or buildings where such cases could be isolated. Ultimately it was realized that educational methods were more effective in securing the consent of patients to go to institutions than police measures.

An important step at that time was the enactment of the Tenement House Law of 1901 which had a wide influence on the type of construction where large numbers of people were being housed. In crowded sections there were numerous habitations used where some of the rooms had no access to air or light. In these dark ill-ventilated places where there were cases of tuberculosis the chances for spread were greatly heightened. The Tenement House Law just mentioned marked a new epoch in tenement house reform. Conditions under which new tenement houses could be built were prescribed; in existing buildings alterations were required to make them habitable and decent. The character of official inspections of old and new houses was defined; the following conditions were declared illegal: inadequate lighting, ventilation or water supply; insufficient facilities for escape in case of fire and improper sanitary equipment. A new Municipal Department responsible for the enforcement of the Tenement House laws was created.

Beginning in 1902 inspectors of the country staff of the Department of Health were assigned to posts in the city's milkshed to ascertain sanitary condition of dairies, methods of handling and transporting milk to the city. These steps, along with those already in effect within the city to assure purity and cleanliness of the milk supply, had an important influence especially on child health.

Tuberculosis Hospital Facilities

For some time prior to the beginning of the twentieth century, especially following the opening of the Adirondack Cottage Sanitarium



New York's Changing Scene*

SAN JUAN HILL AREA: (upper) Old law tenements, West 62nd Street;
(lower) Amsterdam Houses, West Sixties. *Reproduction by courtesy,
New York City Housing Authority.



by Trudeau, there had been recognition of the importance of hospital or sanatorium treatment of tuberculosis especially where opportunities for rest and enjoyment of fresh air were provided. Already by that time there existed in New York City important institutions such as the Brooklyn Home for Consumptives, St. Joseph's Hospital in the Bronx for the same type of patients, Seton Hospital, the Montefiore Country Sanatorium at Bedford Hills, and other well-known out-of-town sanatoria such as the Loomis Sanatorium in the Catskills, and Gabriels in the Adirondacks. Then, within the city, in some of the municipal institutions, a number of beds, or a few wards, were already being reserved for consumptive patients, as, for instance, at Kings County Hospital, at St. Luke's Hospital, at the Montefiore Home, at the Home for Incurables, at the Lincoln Hospital and Home of the City of New York.

Shortly thereafter a number of important institutions began to be made available for tuberculosis patients. In 1902, the first Tuberculosis Division in a city institution was opened at the Metropolitan Hospital. In 1903, the Department of Health opened the Riverside Hospital for the Tuberculous on North Brother Island; it was designed primarily for wilfully careless consumptives under forcible detention. The same year saw the opening in the Adirondacks of the private sanatorium, Stony Wold, particularly for girls and women patients. Likewise, in the "North Woods", was opened the important State Hospital for Incipient Tuberculosis at Ray Brook. While the latter took patients primarily from other parts of the State, at the same time a number were taken from New York City. The same year saw the interesting provision made by the Association for Improving the Condition of the Poor at Sea Breeze Hospital on Coney Island for the care of children with non-pulmonary forms of tuberculosis: bones and glands. In 1906, the Municipal Sanatorium at Otisville was opened. In 1909 a novel type of institution was opened at Farmingdale, New Jersey: the Tuberculosis Preventorium for Children which also took in cases from New York City. Those admitted were children without open disease who were members of tuberculous families.

Other important institutions, which added much to New York's facilities for the isolation and care of tuberculosis patients, were the large Sea View Hospital on Staten Island which opened in 1913 and provided 763 beds at that time; St. Anthony's Hospital in Queens, opened in 1914; Neponsit Beach Hospital for Children, in 1916; Triboro Hospital, in 1941 and the tuberculosis sections of Manhattan General Hospital in 1949. In several of the institutions mentioned the original bed capacity was enlarged, especially at Sea View.

Voluntary institutions which also added tuberculosis services to their facilities were Lenox Hill and New York hospitals; among public hospitals should be mentioned Bellevue, City Hospital, Harlem, Kingston Avenue, Morrisania and Willard Parker.

The opening of hospitals and sanatoria for the tuberculous had three very important effects: first, by isolating sufferers from a communicable disease they immediately lent protection to the families of these patients and to the community; second, they provided care

for victims of a long-lasting, serious disease; third, particularly for the large numbers of patients ultimately discharged from these institutions with disease arrested or at least quiescent, they had been responsible for the most practical type of health education teaching them the dangers of their infection and instructing them in many ways to take better care of their condition and general health.

One of the important administrative measures which followed from the registration of cases of tuberculosis was the establishment of a tuberculosis roster in New York City which could be kept up to date continuously. On December 31, 1910, for instance, when there were 27,477 cases of pulmonary tuberculosis registered we are able to see that on that day some 3,648 patients already were in institutions within the city. That figure alone gives an idea of the number of beds which had then become available for their care. At the time, particularly by such as could bear the expense, it was deemed important to seek "the cure" in the country. In December of 1910, 2,445 patients were registered as being either in sanatoria out of town or in health resorts. Altogether we see here therefore that, of the total 27,500 cases in New York City, slightly over 6,000 patients were segregated in institutions or isolated from immediate contact with their family.

Tuberculosis Clinics

Another and very important measure for the control of tuberculosis which began to be developed in the early days of the twentieth century was the care of patients in specialized clinics or dispensaries. In 1903, the first municipally operated tuberculosis clinic in New York City was opened at Gouverneur Hospital, to be followed a few months later by a similar clinic at Bellevue Hospital and the next year by a third clinic operated this time by the Department of Health, the very first in a department of health of any city in the United States. Shortly thereafter a number of similar clinics were opened in private or voluntary hospitals and especially by the Department of Health, until ultimately, such specialized services became available to patients still remaining at home in every section of New York City.

The tuberculosis clinics and dispensary services not only provided places for the examination of tuberculosis suspects by specialists and assured a degree of care to the active cases until they could be placed in institutions but at the same time, through the examination of contacts and especially the visiting of their homes, were responsible for striking at the very source of tuberculosis and permitting a degree of control and prevention that had never been possible previously.

In 1907, the authorities operating the various clinics throughout New York City, whether municipal or under private auspices, formally organized the Association of Tuberculosis Clinics of Greater New York. As a result this type of service was closely coordinated and the experience gained in one or the other was passed on to the entire group. Ultimately special sections for children were opened, likewise evening clinics for working men. There was an avoidance of duplication in the home visiting work of the public health nurses and a systematic transfer



(Upper): MONTEFIORE HOSPITAL Country Sanatorium, Bedford Hills, N.Y.
(Lower): TRIBORO HOSPITAL, Department of Hospitals, City of New York.



of patients so that they could be treated at the clinics nearest to their home. By 1910 no less than 30,406 individuals, active cases of tuberculosis, or members of their families, were under treatment by or under observation at these clinics. From the roster of the Department of Health we are able to see that at the beginning of the year 1910 there were no less than 5,476 cases of tuberculosis under clinic care.

It is worthwhile for a moment to revert to important other developments during that first decade of the half century under consideration. In 1902 was organized the Committee on Prevention of Tuberculosis of the Charity Organization Society of the City of New York which subsequently developed into the New York Tuberculosis and Health Association. In 1904, with headquarters in New York City, was organized the National Association for the Study and Prevention of Tuberculosis. In 1905 the Committee on the Prevention of Tuberculosis of the Brooklyn Bureau of Charities was also formed. It is unnecessary to stress here the importance of the organization of these special voluntary agencies which have now become of such prime importance throughout the United States, their distinctive health education services, their active participation in community case-finding, their support of all worthwhile measures against tuberculosis or for the strengthening of public health facilities.

From the very start the anti-tuberculosis associations realized that public understanding was fundamental for progress and they stressed the importance of popular health education. At the same time they appreciated that facilities had to be at hand and innumerable have been the instances where they organized public sentiment for the provision of adequate hospital facilities and the support of public health departments.

In 1905 a special Tuberculosis Division was opened at Bellevue Hospital. In 1908 was begun the employment of a special social worker in the tuberculosis wards of that institution. Shortly before that time a general Social Service Department had been opened at Bellevue Hospital. Ultimately in all the municipal hospitals it became axiomatic that there should be organized social services in connection with the treatment of patients.

In 1907 the diagnostic tuberculin skin-test was introduced by von Pirquet. Wide-spread use of the tuberculin test demonstrated that one may be infected by the germ and yet not have the disease.

In 1908 took place at the Museum of Natural History the remarkable exhibit of those displays which had been prepared for the International Tuberculosis Congress in Washington. The exhibit had strong popular appeal and did much in those days to familiarize the general population with the character and seriousness of tuberculosis.

The same year, at Bellevue Hospital, was opened the Day Camp for Tuberculosis Patients on the old ferry boat Southfield. Within a few years around that time no less than six similar Day Camps were set up in New York City to provide a measure of care for patients remaining at home. These new facilities included the Middletown Day Camp and

the Rutherford of the Department of Health; the two Day Camps of the Department of Hospitals, the Southfield and the other on the ferry boat at Gouverneur Hospital; likewise, under voluntary auspices, the Vanderbilt Day Camp. Altogether these day camps provided care and opportunities for fresh air and rest to almost 600 patients; they were invaluable to fathers or mothers of families anxious to be home evenings with their children. The cost of their maintenance was also quite low. At the same time they had open-air classes for children from families where there was tuberculosis; in effect they were preventoria.

In 1909 the appropriation of the city to the Division of Communicable Diseases of the Department of Health was increased by some \$230,000, enabling it to extend its tuberculosis control measures. It was therefore possible the next year to increase the public health nursing staff from 23 to 159 and to extend more adequate home visiting service for the tuberculous. It resulted in a tenfold increase of these important visits to the homes of these patients and for the control of tuberculosis in the community. A most important step, by the Board of Health in 1912, resulting in much life-saving among children was the requirement which made compulsory the pasteurization of milk. This had an immediate effect in the reduction of infection and mortality especially from the non-pulmonary form of tuberculosis as well as from other infectious diseases.

Other events of interest in the tuberculosis field during the second decade of the present century was the opening in 1912 of the Victoria Apartments of the Home Hospital conducted by the Association for the Improvement of the Condition of the Poor. There, some twenty families with cases of tuberculosis among their members were provided with unusually salubrious quarters and were under medical and social supervision. It demonstrated that where such facilities are available home treatment of tuberculosis could be successful.

In 1915 the Neponsit Beach Hospital for children suffering from non-pulmonary tuberculosis was taken over by the City of New York. The same year saw the opening of the Altro Workshop, so valuable in the rehabilitation of former sanatorium patients; this distinctive service was rendered by the Committee for the Care of the Jewish Tuberculous.

Anti-Tuberculosis Organizations

In 1919 the former Committee on Prevention of Tuberculosis of the Charity Organization Society became an independent organization, namely, the New York Tuberculosis Association; subsequently when its activities were widened, it became the New York Tuberculosis and Health Association. In 1920 was formed the then Queens Anti-Tuberculosis Association; it became later the Queensboro Tuberculosis and Health Association. In the same year the Richmond County (Staten Island) Tuberculosis Committee became affiliated with the New York Tuberculosis Association. In 1920 also, the latter Association organized a similar Committee for the Bronx; and, in 1922, the important Harlem

Tuberculosis Committee of the New York Tuberculosis Association was formed for special work in that area of the city.

In 1921 the Queens Association was responsible for the organization of the first consultation service in New York City for private physicians' cases. Later this valuable type of service was also provided by the Department of Health at the Bellevue-Yorkville Health Demonstration in 1928. It was only a matter of time afterwards when a score of such valuable services for private physicians' cases were available throughout the city, the great majority of them conducted by the Department of Health.

In 1924, under the leadership of the New York Tuberculosis Association, the Tuberculosis Sanatorium Conference of Metropolitan New York was organized. The Conference membership included two-score institutions with a total bed capacity of nearly ten thousand, wherein more than twenty-three thousand patients are treated annually. Linking the authorities of these key services for the sick, especially at the periodic clinical sessions wherein medical and surgical advances are shared, has had a far-reaching educational value in this area.

In 1931 was organized the Committed on Neighborhood Health Development under the aegis of the Department of Health to consider the possibility of district health centers throughout New York. The practical advantages of such decentralization and of neighborhood service had already been demonstrated at the East Harlem Health Center; likewise, in an experimental brief similar effort by the Department of Health in 1915. Therefore, in 1934, the Department of Health formally organized the Bureau of District Health Administration to bring public health service closer to the people in every part of the city.

In 1932 a relatively economical development in the X-ray examination of large numbers of people marked the opening of the new epoch in tuberculosis case-finding. That year the Queensboro Tuberculosis and Health Association, aided financially in this endeavor by the Metropolitan Life Insurance Company, undertook the periodic X-ray examination of some 10,000 school children. For the first time machinery became available permitting a rapid, less costly method of taking X-ray pictures on a roll of sensitized paper. It was also the first time here that such a large, apparently healthy, group of the population was being examined in that manner. From this time on there have developed these numerous community mass surveys which have rendered such far-reaching service not only in tuberculosis case-finding, but also in the discovery of other abnormal chest conditions. In this city alone the various surveys made possible by these rapid-type of comparatively economical examinations reach more than 600,000 individuals annually.

In 1934 the Department of Health created a separate Bureau of Tuberculosis, thus placing tuberculosis as a major part of its activities. In 1936 all the clinics of the Department of Health were provided with radiographic and fluoroscopic equipment; as a result it became possible to X-ray each new admission to the various chest clinics throughout the city.

In 1939 a requirement was added to the Sanitary Code that a public health nurse should visit all new cases reported including those under the care of private physicians. In 1942 another requirement of the Sanitary Code made it compulsory for all teachers and personnel in elementary schools to have an X-ray examination of the chest upon their appointment and each two years thereafter. In 1949 a B.C.G. vaccination clinic was established by the Department of Health at the Central Harlem Health Center, the first in New York City for the general public.

From an economic standpoint, one of the most important contributions assuring care of the tuberculosis patients in hospitals was the abolition recently by the State Legislature of the so-called "means test" whenever such a case was receiving care in a public institution. This law took effect as of April 1, 1947. It recognized the devastating economic effect of tuberculosis upon the lives of its victims and their families; it assured that he or she could receive the proper care in an institution regardless of ability to pay.

Besides specific anti-tuberculosis measures which were developed for the control of tuberculosis during the first half of the present century, it must be acknowledged that there were a number of improvements of a social character and in working and living conditions of that period that had at the same time an undoubted material influence in curbing the ravages of tuberculosis. We have already mentioned improved housing conditions through the amendment of tenement house laws. To this we should also add the recent and increasing provision of model housing construction to displace particularly dilapidated buildings in slum areas.

During the fifty years under consideration there was also a decisive betterment of working conditions not only with regard to the regulation of measures for hygiene, but especially through shortening of hours of labor, the higher rate of remuneration given nowadays, and the passage of laws providing for the protection of women or minors at work. Also in the fields of public welfare should be mentioned provision of so-called mothers' and widows' pensions in homes where were left dependent children. Finally must be included the wide increase lately in relief provision through the Department of Welfare for financial assistance to the needy.

Eradication of Bovine Tuberculosis

The record of specific measures against tuberculosis would not be complete without mention of the many and, one might even add, successful steps taken over the years by the State of New York, with support of the Federal authorities, towards the eradication of bovine tuberculosis in this area.

As long ago as 1894 claims were accepted by the State of New York for indemnity to owners whose cattle had been killed because of their being diseased. That year the State of New York appropriated \$30,000 for this purpose. It should be recalled that in 1896 Theobald Smith

made his preliminary announcement wherein he pointed out that there were morphological and other differences between the human and bovine tubercle bacillus. He thus proved that the latter causes tuberculosis in cows. It was shown later that it also could cause tuberculosis in man.

Between 1902 and 1906 tuberculin tests by the State Department of Agriculture included 262 herds with a total of 3,088 animals, of which 673 reacted. Animals infected with tuberculosis were found in 121 herds or almost one-half of all tested. Tests for bovine tuberculosis were carried on in a modest way up to 1917, New York State appropriating for tuberculosis indemnity purposes during that period a total of \$1,286,573. In May, 1919, an intensive program under joint State and Federal plans was launched to eradicate the disease.

In 1937, New York State was finally declared as a "modified, accredited state" practically free from bovine tuberculosis. The average infection was reduced from approximately 40 percent in 1919 to less than one-half of one percent when the test was completed on October 1, 1937. During that period no less than 17,798,839 individual tuberculin tests were administered, as a result of which nearly one million (967,624) reacting cattle were eliminated. This testing and re-testing was done among 153,000 herds representing some two million cattle at a cost for indemnity alone of \$57,000,000, of which \$46,000,000 was paid by New York State and \$11,000,000 by the Federal government. This successful accomplishment demanded a sound organization with real teamwork on the part of a legion of workers plus cooperation of Federal officers, County Boards of Supervisors, health agencies and last, but not least, the great army of cattle owners.

Since 1937 the problem has been one of maintaining the freedom of the herds from tuberculosis and the cost has been materially reduced, the State repaying for indemnity purposes up to 1950 a total of slightly over \$3,000,000. In December, 1950, there were under supervision in New York State 116,165 herds containing 1,983,068 head of cattle.

It is particularly childhood which, along with pasteurization of milk as a complementary step, gained the most from this vast program. A reviewer, discussing the decline of tuberculosis in children, well remarked that "tuberculous, crippled, hunchbacks and children with necks scarred from adenitis have become a relative rarity in New York City".

* * *

PREVALENCE OF TUBERCULOSIS, 1900-1950

DURING the fifty years from 1900 to 1949 inclusive, the Department of Health in the City of New York has a record that a grand total of 686,810 new cases of pulmonary tuberculosis were registered by various physicians and institutions (see p.7). It would even be conservative to say that during the first half of the twentieth century at least three-quarters of a million people were attacked by tuberculosis, for the figure just quoted does not include cases of the non-pulmonary type which have never been too carefully reported. Also when notification of tuberculosis in New York City began it took a few years before the importance of registering these cases of a serious communicable disease was generally understood.

The number of new cases of pulmonary tuberculosis registered during each decade were as follows: between 1900 and 1909, a total of 182,184; during the second decade, 211,546; between 1920 and 1930 a total of 119,475. From 1930 to 1940, 98,121 cases were reported; finally, between 1940 and 1950, the number of new cases registered totalled 75,481. It must be observed here that the drop in the new cases has not been at as great a rate as the mortality (see Fig.3).

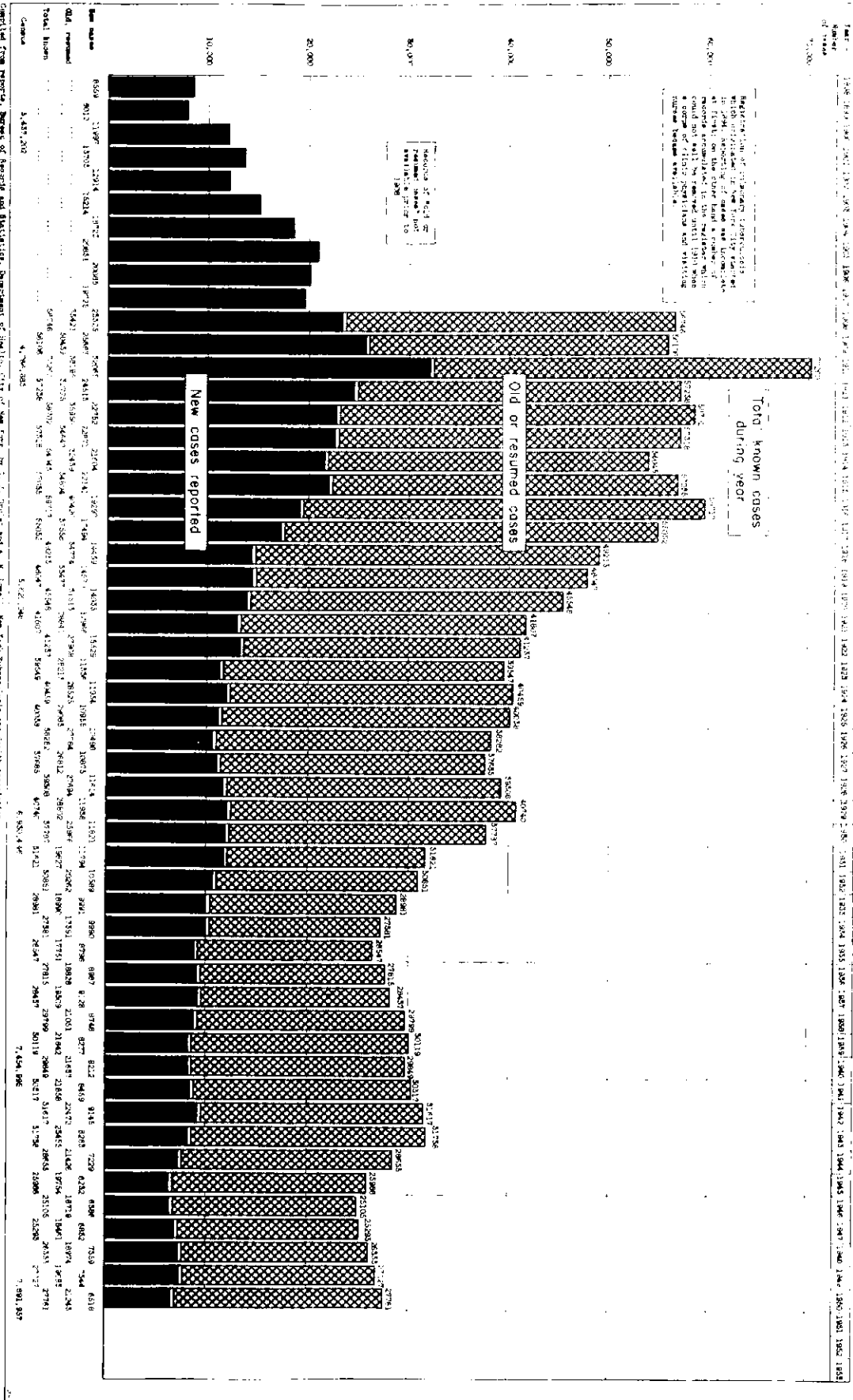
There are apt to be misunderstandings as to the prevalence of tuberculosis when one pays attention to the death rate only. If we look over a period when tuberculosis registration was better established, let us say for the thirty years between 1920 and 1950, a closer study of the roster of cases, and of the incidence therefore of tuberculosis in general, brings out the inadequacy of the death rate alone as an index. For instance, while between 1920 and 1950 the tuberculosis death rate fell from 126 to 29 per hundred thousand population, or by 77 percent, the registration of new cases of pulmonary tuberculosis totalling 14,035 in 1920 came down to 6,518 in 1950, a reduction of 54 percent, which is much less than that of the death rate alone. The reason is simply this, a mere increase of population necessarily sends down the rate whereas quantitatively the tuberculosis cases of those occurring in the new population add themselves to the cases of the other part of the population. Official authorities concerned with the control of tuberculosis, or the physicians giving care to private patients, or clinics to the supervision of their cases, and finally, hospitals providing beds are not fighting merely the death rate but must face the actual numbers of the patients requiring care.

Manhattan, the "hot bed" of Tuberculosis

The concentration of tuberculosis cases in Manhattan has always been extreme, as one can readily understand, with its high density of population. In 1900 Manhattan had 54 percent of the city's population and 56 percent of the new cases reported that year. During the fifty years under consideration, the proportion of the cases of tuberculosis in that borough has ranged anywhere from 46 percent to 65 percent of the city's cases. In 1950, though its population was now only one-fourth that of the city, it still had 49 percent of the total cases.

Fig. 3

CASES OF PULMONARY TUBERCULOSIS IN NEW YORK CITY REGISTERED ANNUALLY SINCE 1898



Reprinted from reports, Bureau of Records and Statistics, Department of Health, City of New York, Dr. J. J. Croft and A. R. Lewell, New York, Commissioner of Health, 1954.

Source of Reporting

A limited amount of information with regard to the source of reporting of tuberculosis cases in New York City is available for the eight-year period, 1943-1950 (see p. 17). It is illustrative therefore of present conditions. Of 63,297 tuberculosis cases registered during that period, almost half, namely 46 percent, were brought to attention by institutional authorities. Many of the cases had been found in various hospital services, others were registered for the first time by tuberculosis institutions where doubtful cases had come in for observation or even for treatment. Twenty-nine percent of the total cases were reported by clinic authorities, where so many "suspects" or "contacts" come for examination. Only one report out of every seven, or 15 percent, was received directly from medical practitioners. Out-of-town sanatoria, where patients had gone directly for care, reported six percent of the new cases. In other words over half of the cases were reported by institutional authorities. This tends to indicate that it is primarily among the sick that most of the active cases of tuberculosis come to light.

At the moment no exact figures are available with regard to new cases found and reported in the various mass surveys. However, it is important to recall that these mass X-ray surveys are conducted among the apparently healthy population and therefore obviously should not be expected to reveal as much tuberculosis as among people who, for some cause or other, have decided to visit a physician or go to a clinic or are in hospitals for various ailments. As a matter of fact, despite the fact that in New York City in recent years between 500,000 and 600,000 apparently healthy people are X-rayed annually in mass surveys, the observation has been made by competent authorities of the Bureau of Tuberculosis that it is still mostly from the older standard places that the tuberculosis cases are reported.

We must always bear in mind that the assumption that there is a material number of unknown cases in the community is debatable. Such persons as do develop active disease are apt, in most instances, to become aware of pretty definite symptoms; it is only natural to expect that of their own accord, particularly nowadays when health education has been so widespread, diagnostic facilities so readily available, they will seek treatment somewhere and therefore become known and reported.

Unreported Cases

However, there are still a number of cases of active tuberculosis who are in the community and do not come to the attention of the public health authorities for some time. This is particularly illustrated by the fact that, for instance in 1950, an additional 558 cases were identified as existing through death certificates where it was stated that they had died from pulmonary tuberculosis; and, yet, upon checking their names against the tuberculosis rosters they were not found to have been previously registered (see p. 17). This is a serious matter when one considers that these victims of a pro-

gressive communicable disease may have in the meantime been spreading infection particularly among their household or family contacts. During the eight-year period, 1943-1950, the proportion of such unreported cases identified only as existing at the time of their death has varied; it was as high as 14 percent in 1947. Experience shows that the proportion remains consistently higher in certain parts of the city.

Stage of Disease

During the eight-year period 1943 to 1950 inclusive, the annual number of new cases of pulmonary tuberculosis coming to the attention of the Health Department, including both those originally registered or those identified through death certificates, has ranged annually between 6,200 and 8,300. The stage of disease at the time of reporting is available for the great majority of cases (see p. 18). There is a rather striking similarity in the extent of involvement or stage of disease found in cases running through all these years. This is unexpected in view of the fact that most of the campaigns of the day, either through health education or mass X-rays, were directed mainly at securing an early diagnosis so that of course results of treatment would be more favorable.

In 1943 one-third, or 34 percent, of the reported pulmonary cases were said to be in the minimal stage. During the following eight years the proportion of these comparatively early cases rather than increasing has actually decreased until in 1950 the minimal cases comprised only 21 percent of the entire group.

Cases of moderately advanced pulmonary tuberculosis have hardly varied in their proportion of all cases during that time. In 1943, 37 percent of the cases reported were in the second stage; the only variation was in 1950 when their proportion rose to 43 percent.

Accordingly it is not surprising to find no very great improvement in the proportion of cases of pulmonary tuberculosis already found far-advanced at the time of their registration or reporting. Outside of the year 1943, when they made up 29 percent of the total, their proportion has varied only between 35 and 37 percent.

This constancy, of the distribution of the stages of disease among pulmonary cases, one of the authors of the present review (G.J.D.) has observed over a long period of years in his contact with tuberculosis work in this city. At the same time he also found a similar prevalence reported in imperial Germany among cases before World War I that were under the care or observation of various insurance groups at that time.

The belief that somewhat arbitrary special measures to discover cases of tuberculosis in an earlier stage should be successful runs counter to an important point, especially if we recall that in many instances, when active tuberculosis flares up, it is apt to develop progressively rather rapidly, more so than is usually thought of.

The inherent difficulty is that we are always facing the more or less natural evolution of the development of pulmonary tuberculosis. True, the course may be modified in exceptional cases by individual resistance or susceptibility; but in the main there is quite a normal course to this infection, as in many others, which social measures are not apt to modify easily.

The constancy in the development or spread of disease as manifested or visualized by a classification of cases according to their stage is also illustrated when one looks over tuberculosis hospital reports. For instance, in the available records of the Tuberculosis Sanatorium Conference of Metropolitan New York, which cover annually between 23,000 and 26,000 patients, it has been reported almost continuously over the years that the condition on admission as brought out by stage of disease has remained similar. For instance, in the year 1940, only ten percent of the cases admitted to these institutions were in the minimal stage and 55 percent far advanced. Nine years later the proportion of minimal was eleven percent and that of the far-advanced 50 percent.

It is true of course that these proportions as to stage of disease of patients hospitalized are different from those in the reports of cases when first registered with the health authorities. On the other hand, it is obvious likewise that it is those with active disease that are brought or sent to institutions for treatment. But it still remains a most serious matter however to realize that even nowadays -- when there are many social service organizations, expert clinic staffs, and consultation services for private physicians' cases all eager to assist in the placement of active cases -- to find that even then, on the first day of admission to the hospitals or sanatoria, one-half of all the patients are already far-advanced cases of pulmonary tuberculosis.

Tuberculosis in Different Racial Groups

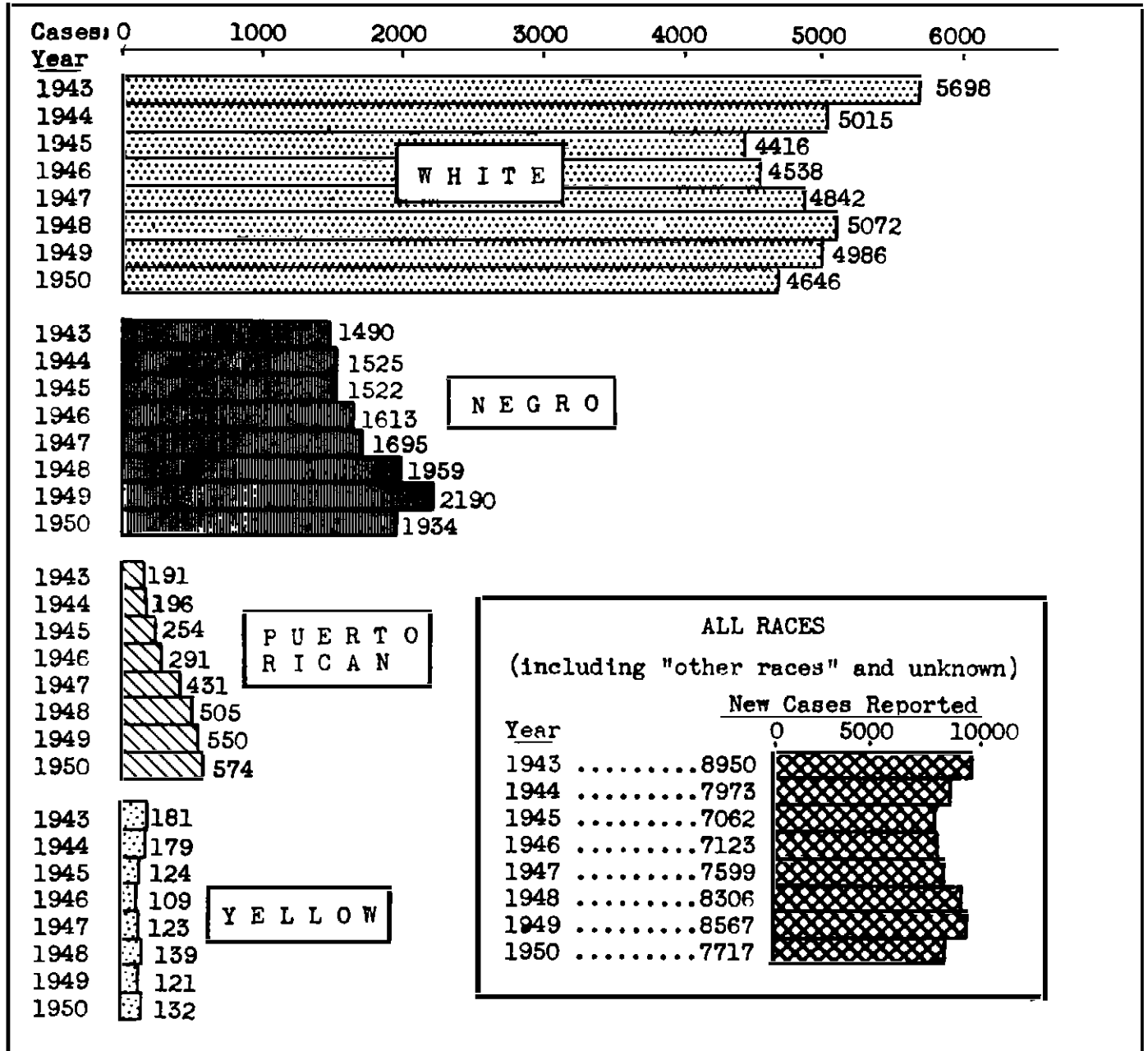
The problem of tuberculosis in New York City has always been complicated by the presence of large blocks of the population of different racial origins. Among these have been immigrant groups with different standards of living, limited economic resources, and as yet unaccustomed to the daily life and competition in this great center of population. Many in such groups came from rural areas rather than urban centers, and they always display at first a low degree of resistance to the conditions which favor the development of tuberculosis in such a congested center like New York City.

We shall refer again later to mortality rates, during the first half of the present century, among the foreign-born of different nationalities. But at the moment it is worthwhile, when we are considering the morbidity from tuberculosis rather than mortality records, to see what reports are available for certain racial groups now living in New York City (see Fig. 4).

With regard, first, to three large groups now in the community, namely, the whites, the Negroes and the Puerto Ricans who have been coming here in increasing numbers lately, and second, the small

Fig. 4

New Cases of Tuberculosis According to Race New York City, 1943-1950



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by G.J. Drolet and A.M. Lowell, New York Tuberculosis and Health Association.

number of the Yellow race, there are interesting detailed records of the trend of tuberculosis among them during the eight-year period 1943-1950. May it be recalled for a moment that at the time of the Federal Census in 1950 the white population in New York City was said to number approximately 7,120,000; the Negro population, 748,000; and the "other colored", mostly Indians, Chinese, Japanese, 28,000.

In 1943 the number of new cases of tuberculosis reported in the white population was 5,698. In 1950, their number had declined by nearly one thousand, namely to 4,646, indicating at that time a registration rate of 65 per hundred thousand while the city average for all groups was 98.

Among Negroes 1,490 new cases of tuberculosis were reported in the year 1943, and in 1950 with their population larger they numbered 1,934. The report for the last year mentioned would indicate a prevalence or registration rate of new cases of tuberculosis of 259 per hundred thousand or slightly under four times that of the white population.

As previously stated there has been lately a very large and rapid immigration of Puerto Ricans into New York City. The special report of the Welfare and Health Council of New York City already mentioned estimated that in 1950 there were a quarter of a million persons here, born in Puerto Rico or of Puerto Rican parentage. The proportion listing themselves as Negroes is not necessarily high, around nine or ten percent; this however, does not take into account those with partial colored inheritance. A number are also of Indian stock. The reports of new cases of tuberculosis among Puerto Ricans have grown naturally with the increase of their numbers here. In 1943, for instance, 191 new cases of tuberculosis were registered among Puerto Ricans; in 1950, 574. This last number in relation to the population then classified as Puerto Ricans would indicate a tuberculosis registration rate for new cases of 233 per hundred thousand. This is a rate slightly under that for the exclusively Negro population; however, it is still three-and-a-half times that recorded for the white population.

Among those of the Yellow race, a more or less even number of new cases has been reported between the years 1943 and 1950, ranging between 123 in 1947 and 181 in 1943. In 1950, tuberculosis cases among people of the Yellow race numbered 132 and, in relation to the comparatively small part of the population they represented, this would indicate the extremely high rate of 473 per hundred thousand, or twice as high as for instance among Puerto Ricans. However, it is to be noted that this group includes an unusually high proportion of men in the period of life when tuberculosis is more prevalent. As a matter of fact, in 1950, of the 132 cases in members of the Yellow race, there were only 20 in the female sex and 112 were among men, mostly past the age of thirty.

These reports of tuberculosis in various groups in New York City illustrate one of the constant problems in the control of tuberculosis here, namely that, apart from the attention which has to be given to it among the permanent and long established part of the population, that which must be intensified to face the continued and large immigra-

tion coming here or passing through all the time. Years ago the tuberculosis problem was extreme particularly among immigrant groups such as the Irish, the Germans, the Italians and the Jews.

Immigration of this type, particularly of the first three groups, is now practically at an ebb; on the other hand there have now come here from other parts of the United States and its territories the very large numbers of Negroes and, lately, of Puerto Ricans. It is to be noted however with regard to this aspect that as the years go by, with the benefit of public health services and hospital facilities along with betterment of their social condition, in practically each of these groups it is but a short time before a marked lowering of the incidence of tuberculosis among them also occurs. The subject will again be referred to when we pass on from morbidity records to additional details in the mortality records of the past fifty years among different nationalities.

Sex Differences

Certain characteristics as to age and sex with regard to cases of tuberculosis among the various racial groups now present in New York City are worth noting, for they have an impact on preventive programs or facilities for the care of the victims of the disease among them. First of all, in the white population there is now a greater occurrence of tuberculosis in the male sex than in the female sex. In 1950, among the new cases reported, 3,212 were white males and 1,434 white females (see p. 21). Then again in the first group the age concentration, as far as numbers of cases are concerned, was greatest among men 45 to 55 years old. Among white women reported as suffering from tuberculosis the largest number was among those 35 to 45 years of age.

In the Negro population there was not such a disparity between the two sexes. For instance in 1950, among the new cases, there were 1,017 of the male sex and 917 of the female sex. The largest number of cases among men was among those 35 to 45 years of age, but among the Negro women, the concentration of cases was at an earlier age, namely, between the ages of 25 and 30.

Among cases of tuberculosis registered these days among Puerto Ricans, an entirely different ratio exists; there is an excessive amount of tuberculosis among Puerto Rican women. In 1950, of the total 574 new cases reported among Puerto Ricans, 244 were in the male sex, with the age concentration being in the very young group, 20 to 25 years of age (see p. 22). In the female sex where there were 330 new cases reported, which is almost fifty percent more than in the male sex, the concentration of cases was highest in the young group also of 20 to 25 years of age. Cases of tuberculosis in the Yellow race group of the population occur, as mentioned previously, mostly among men and they are spread fairly evenly in the age groups between 35 and 55 years of age. The few cases among the women of the Yellow race are generally in the younger age groups between 15 and 30.

"SPREAD OF TUBERCULOSIS"

IN a community like New York, covering such a large area and including a vast population, effective control of a serious communicable disease like tuberculosis demands definite knowledge as far as possible of its distribution and concentration among various groups of people and particularly in different neighborhoods.

For a closer appreciation of the trend, spread and distribution of tuberculosis during the fifty-year period 1900-1950, there have been available over the years segregated data classified along borough lines. But even these five divisions of New York City are in themselves too large to give precise knowledge of the local incidence of tuberculosis. The rates for each borough in great measure represent averages, some times theoretical midpoints between extremes of high or low rates of prevalence locally and therefore may lack reality, though for broad administrative plans they are still useful.

During the first quarter of the present century the Department of Health's vital statistics were classified and reported upon along local older political boundary lines that had fast become impractical. The shifts, spread, and increase of population nullified the possible comparative value of these rigid records. The divisions referred to were the old wards of the city: twenty-two of them, for instance, in the Borough of Manhattan, only two in the Bronx, thirty-two in Brooklyn, only five in the largest borough of the city, Queens, and five in Richmond. The disparity as to the populations involved in these wards is well illustrated, for example, by referring to the Federal enumeration of 1920: in the Twelfth Ward of Manhattan there were 951,904 residents. On the other hand, in the Second Ward there were only 372. Another ward, the Third, had 1,227 residents. Or again, the Nineteenth Ward had a total population at that time of 285,396. In Brooklyn almost as great non-comparable divisions existed; while the Twenty-sixth Ward had a population of 246,591 in 1920, the Second Ward had only 5,642.

Mention should be made however that in those years already there was being evolved by an independent group working with the Census authorities -- the population section of the Federation of Churches and subsequently the Cities Census Committee both of them guided by that remarkable pioneering spirit, the Reverend Dr. Walter Laidlaw -- a so-called census tract system for New York City based on a standard small unit generally of 40 acres in size against which population enumerations and other statistics could be classified. Outside of occasional minor studies along these new lines, and one very valuable analysis of the mortality returns of the sanitary areas in the Borough of Manhattan for the year 1915 by Guilfoy and Wynne (4), practically no use or connection of this important population background had been made with the Department of Health records.

In 1927 fortunately, representatives of the New York Tuberculosis and Health Association, the Department of Health, and the Welfare Council working together under a committee headed by Drolet, the statistician of the first-named organization, formally evolved

the important and now widely-used Health Area System of New York City(5).

In 1928 the Department of Health approved the plan for the classification of its vital statistics by Health Areas in New York City. Reports were published along these lines beginning in 1929 and they have had a very wide practical application since.

Health Center Movement

At this point it is important in the record of accomplishments of those days to refer to the District Health Center Plan(6) of New York City which is now playing so vital a part in bringing the facilities for public health service and protection on a neighborhood basis close to the homes of the people. An appreciation of the vital statistics during the last twenty years of the first half of the present century demands reference to the district health center movement.

In 1915 New York City's first District Health Center was established in the Lower East Side on an experimental basis to test the value of local administration of the functions of the Health Department and to develop a community spirit with respect to health conditions in that district. It was the first independent step based upon the fact that the work of the Department of Health and of private agencies could be so coordinated that efficiency would be improved and the volume and quality of service be increased. The area which it covered had about 30,000 local residents. The system was also tried in a limited way in the Borough of Queens; these first steps were not developed further at the time.

In 1921, following World War I and the keener realization of cooperation among all citizen groups and authorities, the New York Chapter of the American Red Cross opened the East Harlem Health Center. There, the Department of Health and a group of twenty-one voluntary agencies joined hands in facing the many health problems in that section of Manhattan. A great deal of practical experience in the coordination of public and private agencies and the rendering of service on a larger neighborhood basis was obtained which had a profound influence upon the health movement in succeeding years. Subsequently, the East Harlem Health Center was brought into the municipal group of these local institutions.

Then in 1926, with the support of the Milbank Memorial Fund, the Bellevue-Yorkville Health Demonstration was formally inaugurated in the area extending from East 14th to East 64th Street which included some 200,000 people. The remarkable achievements of that undertaking in public health and social service have been interestingly described by Winslow and Zimand(7). Thereafter there was no more questioning of the value and practicability of public health service on a neighborhood basis.

It is worthwhile digressing for a moment to refer to the practical part played by the organization of the vital statistics

records of New York in the development of plans for health center districts all over the city. Under the aegis of the Committee on Neighborhood Health Development, Drolet and Potter(8) prepared a formal report in 1930 entitled "Proposed Health Districts, New York City" -- wherein aggregating a certain number of health areas into definite neighborhoods, they led to the adoption of an official division of the City of New York into thirty health center districts. The constructive use of the new data becoming available in those days was reported upon by Drolet and Weiner(9) at the meeting in 1931 of the American Public Health Association in Montreal.

In 1930, in rented quarters, a Department of Health Center was opened in Central Harlem to serve a population of nearly 200,000, predominantly Negro. The economic depression of these days delayed for a while the erection of new District Health Centers. However, the plans for the organization of the work of the Department of Health on this basis developed apace and in 1934 the Department formally decentralized its services and reorganized them under a neighborhood district plan.

Local Trend of Tuberculosis, 1930-1950

Between 1930 and 1950 the annual number of new cases of tuberculosis reported in New York City was, as previously mentioned, materially reduced, namely from 12,506 during the first year quoted to 7,717 during the last year, a decline of 38 per cent (see p. 14). In Manhattan the reduction in new cases was at a slightly lesser rate, their number falling from 5,847 to 3,847, or by 34 per cent. In the Bronx the reduction was greater, namely by 43 per cent; and, in Brooklyn it was still more, the number being almost cut in half, from 3,546 to 1,948 or by 45 per cent. In the Borough of Queens the reduction in the number of new cases was least, 32 per cent, not necessarily because of a higher incidence of tuberculosis but owing to the extreme increase of population.

Within the various parts of the city, the change as to the local incidence of tuberculosis has naturally varied. In Central Harlem the number of new cases during that twenty-year period of 1930-1950 fell from some 1,100 to 800, or by 29 per cent, as against a city average reduction of 38 per cent. On the Lower East Side the rate of decline was still less, 21 per cent.

In the Bronx there has been a rather marked deterioration of the dwelling sections in Mott Haven and Morrisania, which, along with overcrowding, has materially reduced the rate of progress there against tuberculosis. As against an average decline of 44 per cent in that borough, in Mott Haven the number of new cases reported during the past twenty years has fallen by only 14 per cent; in Morrisania by 25 per cent.

In Brooklyn the tuberculosis problem in the Bedford Section has remained almost as great as it was years ago. The number of new cases reported there between 1930 and 1950 came down by 5 per cent only. In the Fort Greene area of that borough the reduction in cases likewise has not been at as great a rate either as in the remainder of Brooklyn.

Districts just mentioned -- Central Harlem, in Manhattan; Morrisania and Mott Haven, in the Bronx; Bedford and Fort Greene, in Brooklyn -- have become predominantly Negro or Puerto Rican areas. Care must be taken in the reading of the reports of new cases to bear in mind that they refer to their absolute number and not to the rate with due regard to changes or increase of population.

It is therefore worthwhile to quote now a few figures with regard to the registration rates for new cases (see p. 15). Between 1930 and 1950, the rate for New York City as a whole changed from 180 per hundred thousand population to 98. During the first year of the period mentioned, against an average rate for the city of 180, that of Queens was 116, of the Bronx 132, of Brooklyn 138 and of Manhattan 313.

In 1950 there was still a wide variation in the tuberculosis registration rates in the various districts of the city. As against an average for the city of 98 per hundred thousand population for new cases reported during the year, a low rate of 45 prevailed in the Flushing section of Queens. In Brooklyn the lowest rate was in Flatbush, 35, and the highest in Fort Greene, 130. In the Bronx there were differences all the way from the rate of 34 in the Westchester District to a rate of 125 in Mott Haven. In Manhattan, in six of the health center districts of that borough the rate exceeded 100. It was 79 per hundred thousand population for new cases alone in Kips Bay-Yorkville, in upper midtown; 263 in the Lower East Side; 276 in the Lower West Side; and, 364 in Central Harlem, a rate more than ten times the rate in the Flatbush area of Brooklyn.

Reference has been made previously to the registration rates in the two important racial groups of the City of New York, the white and non-whites, with regard to the reporting of new cases only. The real prevalence of tuberculosis however is not to be fully appreciated unless we look in various years at the register of both the old and the new cases. For instance, on the last day of 1930 there were in the tuberculosis register of New York City a total of 18,866 cases of pulmonary tuberculosis, and on the same day of 1950 there were still 17,985. The last two figures are urgent reminders that, though the case fatality rate of tuberculosis has been reduced because of improvements in the treatment of the disease, as far as the volume of cases of tuberculosis requiring care is concerned it is almost as great in size as it was some twenty years ago.

On the last day of 1950, considering cases of all forms of tuberculosis, pulmonary and non-pulmonary, the Department of Health records contained the names of 19,059 persons, residents of New York City. Of these 7,411 were of the female sex and 11,648 of the male sex. On the basis of race, 12,472 were whites, and 5,725 were non-whites. Among the colored the cases of tuberculosis in each sex were not materially different in number. However, in the white population 4,396 of the tuberculosis cases were of the female sex as compared with 8,076 being of the male sex.

Present Prevalence of Tuberculosis in New York City

It is customary nowadays when referring to the results of case findings in mass surveys of the apparently healthy population to speak of the number found per each one thousand persons X-rayed. More recently the average number so found has been around one or two cases of tuberculosis for each 1,000 persons. Similarly it is worth studying the present prevalence of known cases of tuberculosis in New York City. The 19,059 cases of tuberculosis on the Department of Health register on December 31, 1950, would indicate in relation to the population a prevalence rate of 2.41 for each 1,000 persons. Wide differences of this rate are found in different sections of the city. First must be noted in the Gravesend District of Brooklyn, with a population of nearly 300,000 people, that the 256 known cases there represent a prevalence rate of 0.91 or slightly less than one per thousand. This is the lowest rate in any section of New York City. In the same borough of Brooklyn, there is a rate in the Bedford District of 2.4 per thousand population, a similar rate in Williamsburg-Greenpoint and, finally, one of three per thousand persons in the Red Hook-Gowanus District.

In Queens, the range in the prevalence rate for all known cases on a given day is from 1.37 in the Flushing area to 2.01 in the Astoria-Long Island City section, the borough averaging 1.67. Among residents on Staten Island the prevalence rate is 1.49. In the Bronx the borough has an average prevalence rate of 1.82, the lowest being in the Westchester District, 1.13, and the highest being three times as high or 3.01 in the Mott Haven area. It is 2.52 in Morrisania.

In Manhattan the figures again indicate a very high prevalence rate of tuberculosis. First, there is the high average for the borough as a whole of 4.35 per thousand population. The rate is lowest in the Riverside District, west of Central Park, where the prevalence rate is 2.18, followed by a rate of 2.26 in Kips Bay-Yorkville and of 2.3 in Washington Heights, of 4.96 in East Harlem -- in other words, twice the average -- and finally a rate of 9.71 in Central Harlem. The latter is ten times the rate in the Gravesend District and indicates a known prevalence of tuberculosis in one percent of the entire population of Harlem.

Tuberculosis Morbidity Rates

In dealing with statistical aspects of known cases of tuberculosis there are a variety of indices that need clarification or restatement to understand their limitation or their significance. The most common figure deals with only the new cases reported during the year. The second and more practical index is the one which considers at least the total known problem on a given date, generally the last day of the year. But even then we have not before us the total tuberculosis problem as known during an entire twelve-month or one-year period. To illustrate the last mentioned point and its weight, it is worthwhile referring for a moment --

where the records are available -- to all additions and removals for a given year as well as to those cases already under supervision at the beginning of the year. For instance, in 1908, the Department of Health records permit such a presentation at least for the known cases at that time. First, at the beginning of the year, namely on January first, the Department of Health roster already included or had knowledge of 33,421 cases of pulmonary tuberculosis. That year in addition, 23,325 new cases were reported so that in reality there were known to the authorities for just a twelve-month period no less than 56,746 cases of pulmonary tuberculosis in New York City (see p.23). This grand total of all known cases during certain years has varied from the 56,746 just mentioned in 1908 to 45,548 in 1920, 37,787 in 1930, 29,849 in 1940, and to still 30,017 taking tuberculosis cases of all forms for the year 1950. Even though during the ten-year period 1940 to 1950 the mortality rate has declined materially, it is surprising to find the maintenance of a practically level number of known cases during those years.

Type of Care

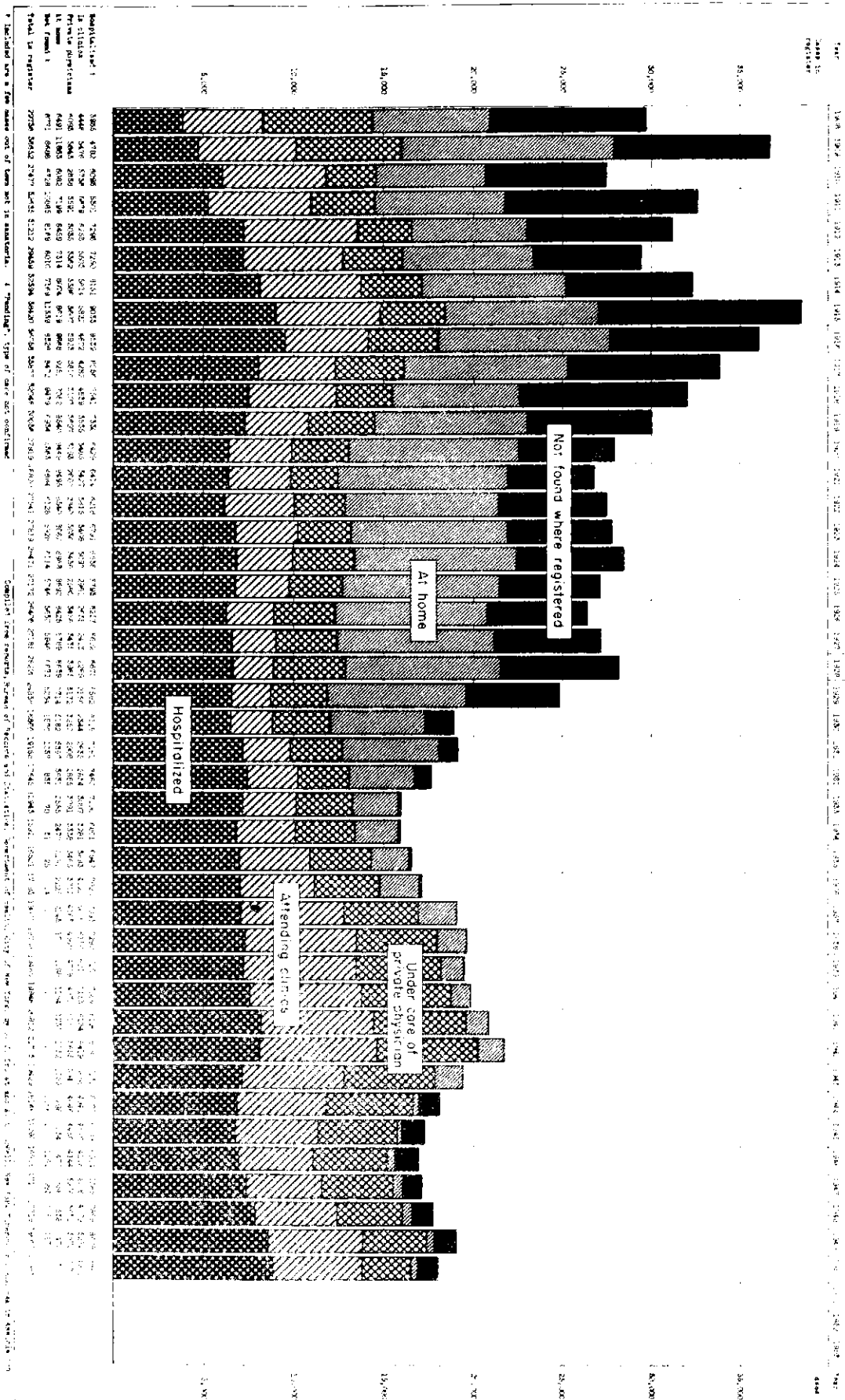
New York City being the original home of the registration of tuberculosis has a continuous record that provides an interesting opportunity to see how over the years, generally speaking, the tuberculosis cases have been cared for -- at least as to the type of institution where they were treated or whether they went to clinics or private physicians. The classified register is best available for these details during the forty years from 1910 to 1950 (see p.27). In the first year just mentioned, on December 31, there was a total of 27,477 cases of pulmonary tuberculosis. Of these twenty-seven thousand cases, only 2,838 or ten percent, were reported as being under the care of private physicians. The largest number, 5,736, were attending tuberculosis clinics; this group included twenty-one percent of the known cases (see Fig. 5).

In institutions, namely hospitals within the city, there were said to be, on the last day of 1910, 3,648 tuberculosis cases. At that time there were already quite a number of patients in country sanatoria or in out-of-town health resorts, namely 2,445; they comprised about nine percent of the entire group of known cases. Remaining at home, not attending at the time either a clinic or going to a private physician, were no less than 6,082 cases. They were of course under a certain degree of supervision by the Department of Health though it was the very first year when the worthwhile calls of public health nurses became possible. Finally, 6,728 cases had been lost track of or rather had probably moved and could not be located at the address where they had been registered at first.

Over the years the number of tuberculosis patients under the care of private physicians has ranged from the low number of 2,600 at the end of 1921 to a total of 5,655 at the end of 1942. The group of cases of pulmonary tuberculosis under the care of private physicians has again dwindled down in recent years to 2,770 in 1950.

TYPE OF CARE, PULMONARY TUBERCULOSIS CASES IN NEW YORK CITY ON DECEMBER 31ST OF EACH YEAR SINCE 1908

Fig. 5



† Included are a few cases not in statistics. † "Hospitalized" type of care not included. Complete line represents number of patients with diagnostic department of health city of New York. See also A. J. Campbell, New York, 1938, p. 100.

Throughout the years the tuberculosis clinics in the various districts of New York City have played an important part in keeping under their care or observation a large number of tuberculosis cases. Of course, frequently after they had been diagnosed as having active tuberculosis, the patients were referred to institutions for treatment but again after their discharge they returned for follow-up to these same neighborhood clinics. On the last day of the year 1910, there was a total of 5,736 cases of pulmonary tuberculosis under the care or observation of the tuberculosis clinics. The number attending these clinics has varied materially at times; at the end of 1929 -- "times" were still good that year-- it was as low as 2,136. On the other hand the number again became large, especially between 1937 and 1942; in that last year it rose to 6,419. By 1950 there were still almost some 5,000 tuberculosis cases under the care or observation of the clinics.

Now as to the all-important group of patients hospitalized; their number has varied of course with the facilities available. In 1910, at the end of the last day of that year, there were said to be 3,648 patients in institutions within the city; another 2,445 in sanatoria or in health resorts. The number of patients hospitalized within the city alone reached a peak first in 1916 when they numbered 6,651. Sea View Hospital had been opened in 1913 and it met a very great need. The numbers hospitalized dwindled down to a low of 3,041 in 1922, and then started to rise again. The increase in hospitalization between 1940 and 1950 has been rather important and must be acknowledged to have played a material part in the corresponding decline in new cases during this period.

The number of patients out of town in sanatoria -- mostly private institutions originally has not varied materially throughout the years, ranging between 2,000 and 3,000 at the most. It has tended if anything to decrease slightly lately now that the "means test" in public institutions has been abolished. On the other hand a limited number of cases, residents of New York City, are now being cared for in upstate public institutions.

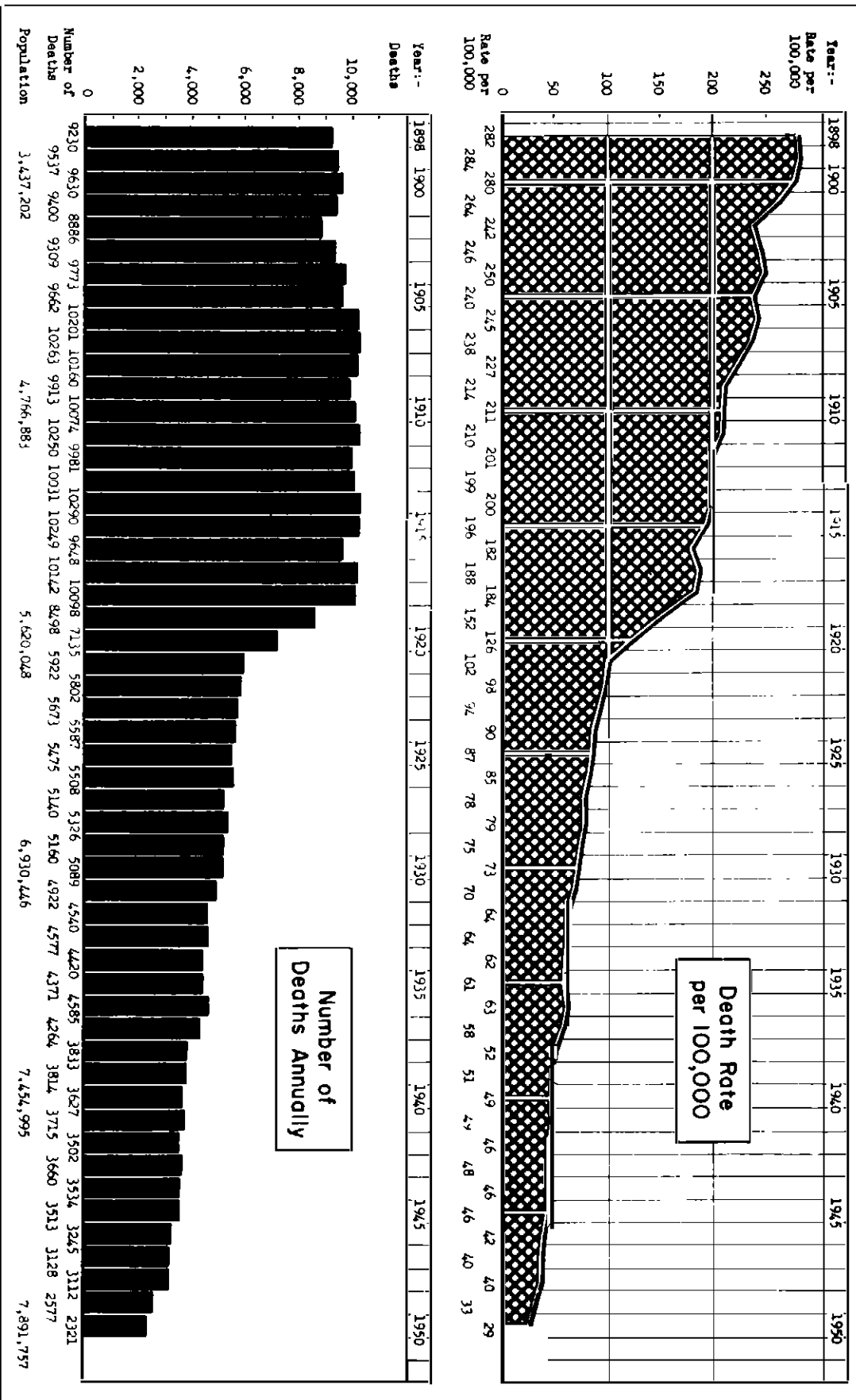
As noted, a large part of the tuberculosis roster formerly consisted of "at home" cases -- patients not attending clinics or who had failed to return to their doctor for some time. From numbering 6,082 in 1910 the "at home" cases rose to 9,495 in 1921. Nowadays, fortunately, that number of delinquents has been practically wiped out. Similarly there is not the same material number in the register of so-called not found cases.

The changes in the classified register just described shed light on a unique picture of the ebb and flow of the tuberculous members of a great city.

* * *

Fig. 6

TUBERCULOSIS, NEW YORK CITY - SINCE 1898



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by G. J. Drolet and A. W. Lowell, New York Tuberculosis and Health Association.

TUBERCULOSIS MORTALITY, NEW YORK CITY

OVER the years and in different places records of mortality from tuberculosis have remained the more definite comparable index of the ravages of the disease. Registration of new cases is apt to be more incomplete and for that matter it is more difficult in the early stage to say whether a case is truly one of active disease or not. Then too the general requirement of filing reports of all deaths assures a higher degree of reporting; finally tuberculosis in its terminal stage particularly the pulmonary form is a matter of common knowledge. It is therefore of importance to study more closely the various aspects of the tuberculosis mortality in New York City during the first half of the present century.

During the fifty years between 1900 and the end of 1949, there were recorded in New York City almost three hundred thousand deaths from pulmonary tuberculosis (290,267). At the same time nearly forty-one thousand other deaths (40,947) were reported as due to the non-pulmonary forms, such as tuberculous meningitis, military tuberculosis, and other tuberculous conditions more common among children (see p. 38). The total number of these premature deaths (331,214) caused by tuberculosis is greater, for instance, than the entire present population of cities like Rochester, New York, or of Atlanta, Georgia.

During the twenty years beginning in 1900 the non-pulmonary type of deaths from tuberculosis was proportionately greater than at present; opportunities for infection from bovine sources were widespread at that time. It was only towards the end of the second decade of the present century that control measures against this source of infection came into effect. Of the 97,197 deaths from all forms of tuberculosis, from 1900 to 1909 inclusive, 13 percent were due to the non-pulmonary forms. Again, between 1910 and 1920, when tuberculosis deaths totalled 99,261, those of the non-pulmonary type numbered 13,434 representing therefore nearly 14 percent of the total. The proportion of this type of mortality gradually came down until it was reduced to 8 percent during the decade of 1940 to 1949.

As against almost one hundred thousand deaths from tuberculosis being recorded during each of the first two decades of the present century, during the ten years from 1940 to 1949 the number fell to 33,613, or by two-thirds.

Declining Death Rate

The tuberculosis death rate declined continuously during the first half of the present century. Whereas in 1900 it was still 280 per hundred thousand population; in 1910 it was 211; in 1920, 126; in 1930, 73; in 1940, 49; and by 1950 it was down to 29, a decline during that period of 90 percent. Progress was not at an equal rate during the several decades. During the first decade,

from 1900 to 1910, the rate declined by only 25 percent; between 1910 and 1920, there was a greater drop, 40 percent. It will be remembered that during that period occurred the most serious influenza epidemic which took thousands of lives in New York City. For some still unexplained reason it seems to have wiped out somehow a reservoir of infection or of cases for within two or three years thereafter the death rate from tuberculosis came down precipitously, in a manner which has not been repeated since.

Between 1920 and 1930, the tuberculosis death rate dropped from 126 to 73, namely by 53 points or by 42 percent. The decade which followed included, it will be recalled, during the early 30's, a serious economic depression resulting in wide unemployment and want. While it ultimately led to the widespread development of public relief, still its effects were felt broadly and the tuberculosis death rate declined during that decade at a lesser rate, namely by 33 percent. Between 1940 and 1950 the rate of decline, as is well known, was accelerated by the developments in specific therapy and a further drop of 41 percent took place, most of it after the year 1947 when streptomycin came into use.

It is rather striking when looking closely at the annual number of deaths, for instance between 1900 and 1918 inclusive, to see the constancy despite the obvious growth of population during those years in the number of victims each year; in 1900 there was a total of 9,630 deaths from tuberculosis; in 1908, 10,160; and in 1918, 10,098; the small increase noted between the first and last year being hardly commensurate with the growth of the city. It almost seems to suggest that there were certain groups of the population or certain types of habitations wherefrom there arose each year an almost identical number of tuberculosis cases and of deaths (see Fig. 6).

Then after the visitation of the influenza epidemic in 1918 there was the sheer drop in the tuberculosis mortality which took place almost immediately. For instance, the deaths in 1921 were already under six thousand, whereas only three years previously they had numbered over ten thousand. In the succeeding years the mortality declined rather slowly, not levelling down to 5,000 or less until 1930; then it hovered around four thousand until 1937. Up to 1948, tuberculosis deaths in New York City still numbered three thousand or more, but in 1949 and 1950 they came down sharply to twenty-five hundred and to 2,321 in the last year mentioned.

Differences in the Mortality of Each Sex

During the fifty years under consideration a sharp difference arose between the two sexes as regards their tuberculosis mortality. In 1900, for instance, when the deaths totaled 9,630, those in the male sex, 5,783, comprised 60 percent of the total mortality, the 3,847 in the female sex being the remaining 40 percent. In 1910 the proportion of the mortality of the male sex had already risen to 63 percent. It stayed around that level until 1940 when the deaths

in the male group were responsible for 66 percent of the total mortality. Finally, in 1950, almost three-fourths, namely 74 percent, of the mortality was suffered by the male sex while only 28 percent occurred in the female sex.

If one relates these numbers to the group of the population exposed we first find that in 1900, when the city rate averaged 280 per hundred thousand population, the tuberculosis mortality rate of the male sex was 338 and that of the female sex 222. At that time the ratio of the mortality of the male sex to that of the female was therefore 1.5 to 1.0. By 1950 the death rate in the male sex had fallen to 45 per hundred thousand population and that in the female sex was down to 15, or only one-third of that of the male sex.

Non-pulmonary Forms of Tuberculosis

Mention has previously been made that formerly the non-pulmonary forms of tuberculosis were far more prevalent than nowadays. From a rate of 43 in 1900 it was reduced to 29 in 1910 and to only 2 by 1950, a mere fraction of what it was previously. As is well known, it is children who have benefited most from this practical eradication of active tuberculosis among them, the principal factors being, first, the increasing isolation of open cases of tuberculosis in hospitals; second, the development of steps for the control and eradication of bovine tuberculosis, including the general pasteurization of milk. These measures had a most marked and almost immediate effect on the situation.

As against 1,476 deaths from the non-pulmonary form of tuberculosis at all ages in 1900, there were only 167 in 1950. In 1900, 875 deaths from tuberculous meningitis were reported, whereas in 1950 there were only 67. For many years deaths from tuberculosis of the intestinal tract or of the peritoneum ranged between 100 and 200 annually, but by 1950 there were only 6 such deaths (see subsequent section, p. Lxxi, Tuberculosis among Children).

"Consumption" in the 1880's

A rather remarkable record of health conditions in New York City and in Brooklyn in the late 1880's is to be found in a special report by Dr. John S. Billings(10) of the United States Army, an expert special agent of the Census Office at that time. (See Fig.7).

Billings made a detailed study of the population, of general living conditions and of the vital statistics of different parts of both New York -- then including the Boroughs of Manhattan and the Bronx -- and of Brooklyn, which at that time was not yet incorporated into the Greater City of New York. Some of the data relate to mortality from "consumption" in those days. He remarks that during the six-year period ending June 1, 1890, the death rate from consumption, namely, pulmonary tuberculosis, in New York City averaged

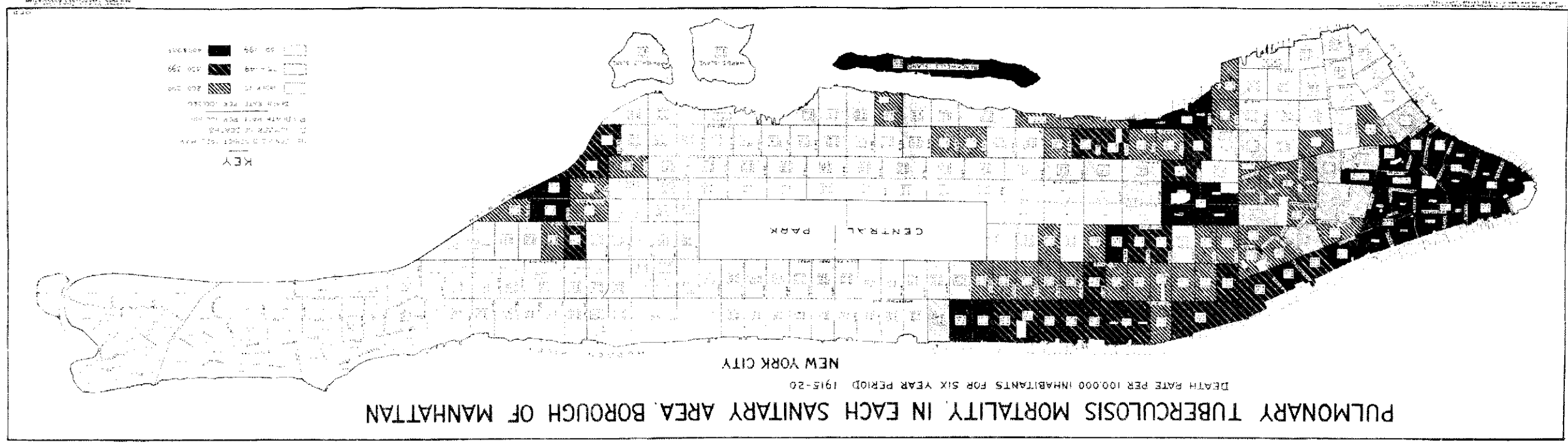


Fig. 8

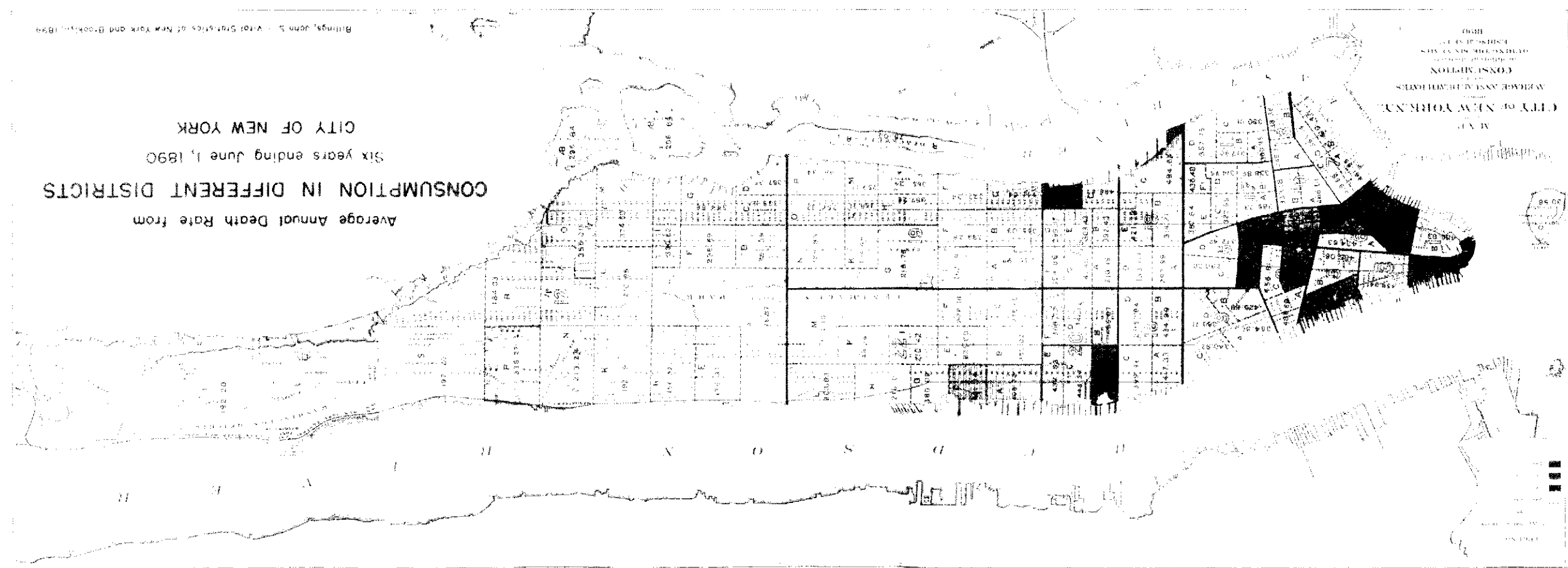


Fig. 7

392 per hundred thousand population. In Brooklyn it was much lower, but still high as compared with standards of today; the rate was 303. In different Sanitary Districts, as Billings then called certain sections, he found very great differences and sometimes unusually high rates. In the Second Ward of New York, in downtown Manhattan, slightly above Maiden Lane, there prevailed during those years a mortality rate from consumption of no less than 776 per hundred population. Billings remarks that people residing there suffered the highest mortality rates for most of all the common causes of death.

On the other hand, during the same years of 1884 to 1890, in the upper section of the West Side of New York City in Sanitary District K of Ward Twenty-two, located between West 68th and West 77th Street, the death rate, even at that time for consumption, was only 49 per hundred thousand population, or only one-fourteenth of that in Ward Two. Billings adds that the West Side area was "a beautiful residential section".

In Brooklyn, though the rate for that city as a whole was less than that of New York, still there was one section around Newtown Creek in Greenpoint where the pulmonary tuberculosis death rate during the six years under consideration had been no less than 1,046 per hundred thousand population. The lowest rate in Brooklyn, namely 96, was toward the Evergreen Section. Billings describes that area as one of "a suburban character, residential, with small individual dwellings".

Tuberculosis in the 1900's

To understand better the changes in the prevalence of tuberculosis during the first half of the present century, it is worthwhile establishing a more definite picture of conditions during the earlier years. We are told in the extremely interesting first annual report (11) of the newly organized Committee on the Prevention of Tuberculosis of the Charity Organization Society of New York, now the New York Tuberculosis and Health Association, that in 1901 there were quite varied death rates from consumption in the different wards especially of Manhattan. In the section of the report on the Social Aspects of Tuberculosis by Miss Lillian Brandt, then the statistician of the Committee, we are reminded that, whereas in 1901 the death rate from consumption in Manhattan and Bronx averaged 250 per hundred thousand population, only eleven years previously, namely in 1890, the rate was 341 (see Fig. 9).

In other words during that period the rate had come down by 91 points, or by more than 26 percent. Referring to this again the writer in the same report expresses her satisfaction in this manner: "Since 1890 there has been a decided improvement in the general sanitary condition of the city: the streets now are actually cleaned; several small parks have been introduced in the most crowded districts, displacing some of the worst tenement blocks;

recreation piers have been built; the milk supply has been brought under supervision; medical inspection has been established in the public schools; a corps of physicians under the direction of the Board of Health visits the tenements systematically every summer... Besides the municipal activities there has been an enormous development of private organizations which concern themselves, directly or indirectly, with the health of the poor..."

But a close study of the detailed reports given for different sections of the Borough at that time reveal that in parts of the city conditions were not all too favorable. First, recalling that the tuberculosis death rate from consumption averaged 250 per hundred thousand, the same report gives the rate for each of the twenty-two wards into which the central borough was then divided. Of these wards ten had tuberculosis death rates of 300 or more per hundred thousand population. Manhattan at that time had 1,850,093 inhabitants. In the Fourth Ward were residing some 19,000 people; the consumption death rate there in 1901 was no less than 506 per hundred thousand. The Fourth Ward was located between the East River and Park Row about Chambers Street; this district, originally marsh-land, was still known as "The Swamp". It is said that sailors' boarding houses were quite numerous.

Even worse was the death rate from consumption in the Sixth Ward, 518 per hundred thousand. This was the section between Park Row and Broadway, Canal and Centre Streets. In that area were large manufacturing and business houses with tenements mixed in. The city prison, "The Tombs", was located there.

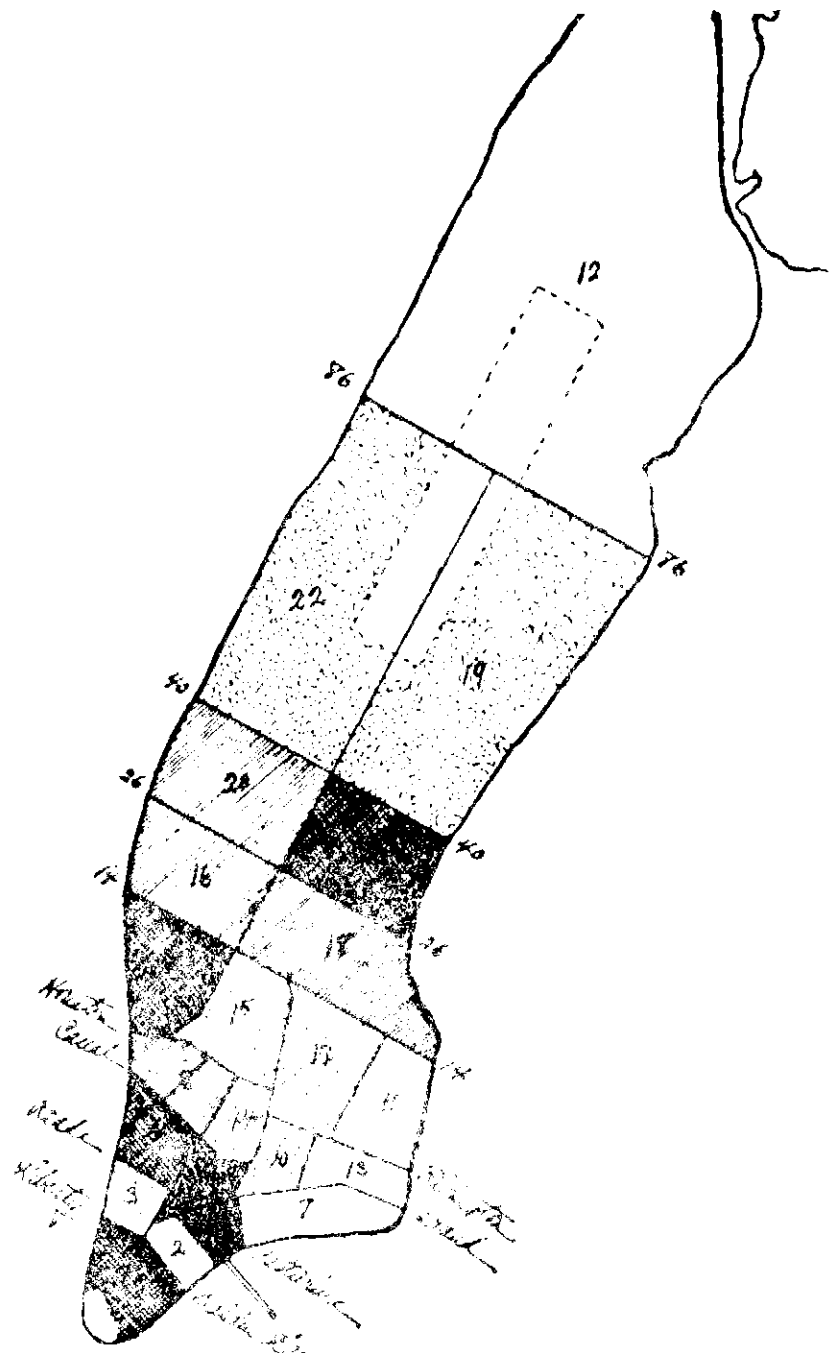
The lowest consumption death rate in 1901 in Manhattan was in the Thirteenth Ward, the area between Rivington and Grand Streets, from the East River to Division, the rate being 102 per hundred thousand people. Of that district, it is remarked, "it was well elevated and the houses built on good land. There was a large German population residing in that area."

In the report, previously mentioned, by Miss Brandt, some satisfaction seems to have been expressed also with regard to conditions in the Tenth Ward. And yet the consumption death rate at that time was 201 per hundred thousand. She remarks: "It is the large Hebrew element in the Tenth Ward which gives this notoriously congested spot a comparatively low rate of tuberculosis."

Pulmonary Tuberculosis, Manhattan 1915-1920

In 1922 Drolet (12), unaware at the time of the map showing the incidence of consumption in different districts of Manhattan in the 1880's previously prepared by Billings, published an almost identical presentation of the pulmonary tuberculosis mortality in each sanitary area of the Borough of Manhattan, also for a six-year period, but this time from 1915 to 1920 inclusive (see Fig. 8). The rates prevailing in the 1910's were, of course, much lower than those in the 1880's.

Fig. 9



2. Birth rate per 1000 living, 1901.

[White box]	Less than 20 per 1000 living
[Horizontal lines]	20 - 29 - 15000
[Vertical lines]	30 - 39 - 10000
[Diagonal lines]	40 - 49 - 10500
[Solid black]	50 - 59 - 10000

Manhattan by Wards

During the six-year period 1915-20, the death rate from pulmonary tuberculosis in New York City averaged 148 per 100,000 population. In the more recent Manhattan map, just mentioned, the tuberculosis rates were shown separately for almost 300 different sub-divisions of that borough. It is rather striking, when looking at both the Drolet and Billings maps, to notice much similarity, namely, some of the very highest tuberculosis death rates in the extreme lower sections of Manhattan, then a comparatively low prevalence in part of the East Side, again high rates in what might be called the Bellevue Mid-town section, likewise on the edge of the Lower West Side sections. However, for the first time, in the more recent map, appear new areas of high mortality rates mostly in East Harlem but spearing into Central Harlem itself.

Even during the recent six-year period just mentioned some thirty sanitary districts of Manhattan had death rates from pulmonary tuberculosis exceeding 400 per each 100,000 inhabitants. Areas of high tuberculosis rates were found along all of the Lower West Side and in every district south of Canal and Catherine Streets; in Harlem, north of 126th Street and east of Eighth Avenue towards the Harlem River; then in the central East Side between Fourteenth and Forty-fourth Streets. Some of the sections just mentioned were referred to at the time as the colored section in the "San Juan Hill" of the West 50's, the poor and rough district of "Hell's Kitchen", that of the longshoremen along the lower North River, also the very dense and poor district of "Little Italy" around Mulberry Bend and Chinatown.

On the other hand, comparatively low death rates from pulmonary tuberculosis were found in the Lower East Side, east of the Bowery and below Fourteenth Street, the district being mainly inhabited by a Jewish population. In the Lower East Side sanitary areas bounded by Avenues B and D and East Third and Ninth Streets, which is included in the East Side section just referred to, the death rate was only 69 or less than half of that of the city at the same time -- although it is also added that the last Federal Census had indicated a density of 650 people per acre in this district.

The lowest tuberculosis mortality during the 1915-1920 period occurred in the district alongside Central Park, between East 63rd and 70th Streets and Fifth and Park Avenues. There, the rate was only 21 per 100,000 or but one-seventh that prevailing in the entire city.

The same study indicated that in two districts located downtown in the old sections around Mulberry Park, or in the very old houses still utilized below Liberty Street, tuberculosis was taking victims at a rate fifty times as great as in the Fifth Avenue district. Six persons out of every one hundred living there died from pulmonary tuberculosis between 1915 and 1920.

All along Riverside Drive, north of West 70th Street, a low tuberculosis mortality prevailed, some districts having as low a rate as 32 per 100,000.

* * *

TUBERCULOSIS MORTALITY IN DIFFERENT NEIGHBORHOODS
DURING LAST TWENTY YEARS

THE tuberculosis death rate in New York City in 1930 averaged 73 per hundred thousand population and in 1950, it may be recalled, was down to 29. One is apt to think of the mortality rates from tuberculosis in recent years as comparatively low especially as against those mentioned for the earlier part of the present century. On the other hand, we must still be reminded that the number of deaths from 1930 to 1949 inclusive recorded in this city -- and quite a few additional ones occurred out of town -- totalled no less than 75,030. One doesn't generally think of tuberculosis as an epidemic, at least to be compared with the former dreaded acute scourges of the previous century, such as cholera, smallpox, yellow fever, and yet the largest number of deaths, for instance, from cholera in New York City in 1849 was responsible for but 5,071 deaths. Even though the influenza epidemic of 1918 was responsible for 12,562 deaths, it did not begin to equal the tuberculosis deaths during the recent five-year period 1945-1949, which totalled 15,575. It must be emphasized that tuberculosis is an epidemic, even if it evolves, as compared with more acute conditions, relatively slowly. There are records available of several communities, as for instance, in Norway, where can be seen quite clearly the comparative beginning of the tuberculosis epidemic arising in certain areas progressing northward and then falling back. Furthermore, the case fatality rate of tuberculosis, namely, the ratio between the new cases reported and the deaths annually as in 1950 in this country or in several others is still as high as 30 percent, almost one death in every third case.

In Each Borough

If one considers the mortality trend between 1930 and 1950 in the different boroughs of New York City this picture is presented. First, for the city as a whole, the rate was 73 and then 29 lately, a decline during that twenty-year period of sixty percent. In 1930, the tuberculosis death rate in the Borough of Manhattan was 126 and therefore 73 percent in excess of that of the city average. By 1950 in Manhattan the rate had come down to 55, or by 56 percent; that year, as compared with the city rate of 29, it was now 90 percent in excess of the city average. Between 1930 and 1950, the tuberculosis death rate in the Bronx dropped from 55 to 19, or by 65 percent; in Brooklyn, from 56 to 23, or by 59 percent; in Queens, from 46 to 19, also by 59 percent; and in Richmond, from 60 to 29, or by 52 percent.

In Each Health Center District

Reference has been made previously to the development of neighborhood health services during the early 1930's and the division of the city into thirty Health Center Districts for more effective public health administration. It is therefore worthwhile to review the trend of tuberculosis during that period in these different sections of the city (see p. 70).

In 1930, speaking from a quantitative standpoint, the largest number of deaths from tuberculosis in the Borough of Manhattan was first in Central Harlem; second, in the Lower West Side District; and third, in the Lower East Side. In the Bronx the largest number occurred in Mott Haven, next in the Morrisania District. In Brooklyn the largest number of deaths was in the Fort Greene District; followed by Red Hook-Gowanus District, and by Williamsburg-Greenpoint. In Queens during that period the largest number of tuberculosis deaths occurred in the Astoria-Long Island City District; on Staten Island, in the so-called St. George Division.

Relatively, with respect to the population in each of those districts, the tuberculosis death rate in 1930 in Manhattan was highest in Central Harlem where it was 251 per hundred thousand population while the city rate averaged 73 (see p.71). The second highest rate was among residents of the Lower West Side, 154; the third, in East Harlem, 136. In the Bronx at that time the tuberculosis death rate was highest in the lower section of the borough, the Mott Haven District, where the rate was 68. In Brooklyn the highest rate was in the Red Hook-Gowanus District, 110; followed by a rate of 98 in the Fort Greene section. Twenty years ago, the death rate in the Bedford District was still comparatively low, 55. In Queens the Astoria-Long Island City District had the highest death rate, 57.

During the three-year period 1929-1931, in seven of the thirty Health Center Districts of New York City the tuberculosis mortality rate was above 75 per hundred thousand population (see Fig. 10). Five of them were in Manhattan: the Kips Bay-Yorkville District, the Lower East Side, East Harlem, Lower West Side District, and Central Harlem. The rate for the city averaged 73 and those of the districts just mentioned were respectively as follows: 75, 118, 131, 163 and 244. In the remaining two Health Center Districts of Manhattan, Riverside and Washington Heights, the rates were respectively 70 and 71.

Only two districts in Brooklyn had higher rates than 75 during the three-year period 1929-1931: the Fort Greene section, 94 and, Red Hook-Gowanus, 101. It is to be noted that at the time the lowest death rate in the city for any Health Center District was in the Gravesend area of Brooklyn where the rate averaged 31.

Twenty years later, namely during the three-year period 1949-1951, the death rate for the entire city averaged 30 and in only one district, Central Harlem, was it higher than the 75 average of the previous years. There it was now half of what it was formerly, namely, 119.

In 1950 there was a slight shifting of the relative position of districts with high rates; whereas, formerly, East Harlem was included among those above the average, now, with a rate of 38 per hundred thousand, it was no longer in that group. The three districts of Manhattan with the highest rates in 1950 were the Lower East and

West Side sections and Central Harlem. In the Bronx the Morrisania District had now to be included with Mott Haven as having a death rate above the borough average; likewise, in Brooklyn, the Bedford District which now had the highest tuberculosis death rate of the borough rather than the Red Hook-Gowanus. In Queens there was hardly any difference in the death rates of the various districts. In Flushing it was as low as 12 whereas in the Jamaica West section, which includes a certain number of the colored, the rate was only 19.

The problem posed with regard to tuberculosis by newer arrivals, especially the colored and Puerto Ricans, is indicated partly by the shift in the mortality from tuberculosis in certain Health Center Districts. For instance, in the Morrisania District of the Bronx, where formerly there were few deaths in the non-white population of late there has been a continuous increase of them until their number is four and five times what it was twenty years ago.

In Brooklyn, in the Bedford District especially, the growth of the problem of tuberculosis among the colored is indicated by the fact that the deaths from tuberculosis in 1950, numbering 99, were three times as numerous as what they were in the same district during 1929. It must be added that this increase in mortality has occurred in a larger population group now than formerly. Similarly, in the Fort Greene District there has been continuously a large number of deaths from tuberculosis of non-whites. In Queens this group is located particularly in the South Jamaica section of the Borough.

* * *

TUBERCULOSIS MORTALITY AMONG THE WHITE AND THE COLORED

BETWEEN 1900 and 1950 the white population of New York City increased from 3,378,000 to 7,120,000. The non-white population in 1950 was eleven times as great as it was at the beginning of the century, having risen from 67,500 to 783,000. The great majority of the non-white population is made up of Negroes; at the last census, the "other colored" numbered but 28,000. It is therefore natural that the number of deaths from tuberculosis in the non-white population has increased materially during the past fifty years (see p. 45).

In 1900 only 362 tuberculosis deaths among the colored were noted in the mortality of that year which totalled 9,630 for all racial groups (see Fig. 11). In 1919 the deaths of the colored were twice as numerous as formerly, namely 757 in the total mortality of that year, 8,498. By 1930 the deaths of the colored had risen to a thousand, 1,017 as against some four thousand deaths in the white population. The city's total was then 5,089. The largest number of tuberculosis deaths in the colored population, during the half century under consideration, occurred in the year 1936 when it reached a total of 1,146. More recently the deaths have again fallen below a thousand, and in 1950 they numbered 717 only; that year the tuberculosis deaths among the colored were practically one-third of the total mortality in the city.

In the first decade of the present century the tuberculosis death rate among the colored ranged from 511 per hundred thousand population to as high as 606. During the second decade it ranged between 422 and 594. During the third decade, namely from 1920 to 1929 inclusive, it was dropping materially but it still ranged between 257 and 383. During the fourth decade it remained serious but at a lower level, namely, between 209 and 298. Finally, between 1940 and 1950 though starting at 204, the rate went down to 92 in the last year mentioned.

It is of interest to note that in 1900, while the tuberculosis death rate among the colored was 536, it was slightly under twice the white rate, which was 274 in that year. In fact, for a few years prior to and around 1900, the ratio was even less; it was not until 1910 that it began to rise when at that time it was 2.8 times that of the white population. It seems to suggest that in those earlier days a material proportion of the colored were probably domestics or resided in the homes of families of white people sharing to a relative extent their food supply and their probably less crowded homes. Later with the great increase in the Negro population which took place and its concentration in congested areas they became fully exposed to all the dangers that a communicable disease like tuberculosis holds under such conditions. By 1925 when the colored tuberculosis death rate was 309, it had become four times as high as the white rate which was 77. In 1950 this same ratio is found since the rate, already mentioned, of 92 is to be compared with the rate of 23 in the white population.

Between 1900 and 1950 the tuberculosis death rate of the colored fell from 536 per hundred thousand to 92 being therefore 83 percent lower now. At the same time, that of the white population was dropping down from 274 to 23, or by 92 percent. In the light of today, the tuberculosis death rate of 92 per hundred thousand population among the colored in 1950 is considered indeed unduly high. And yet it is very interesting to see how it compares with that of other racial groups when they were first caught in the maelstrom of life in a great city like New York. During the four-year period 1918-21, among residents of New York City born in Finland the death rate from tuberculosis of the pulmonary type only was 342 per hundred thousand, and among the 203,450 Irish enumerated at the census of 1920 the rate was 306, or more than three times the present rate of the colored. Even among 21,000 Scotch residents, the rate at that time was 181 or twice that of the colored now. And among the then native-born Americans, 3,620,000 in New York City, the rate was still 108 per hundred thousand population.

It is also worth noting that when tuberculosis among Negroes alone is considered, that is exclusive of the rate in other colored people, it is slightly lower than that of the second group. In 1950, for instance, the tuberculosis death rate of Negroes was 90, whereas that of the "other colored" was 121 per hundred thousand. It has however been previously remarked that the latter include an unusually higher proportion of men in the upper age brackets where tuberculosis is more rampant these days.

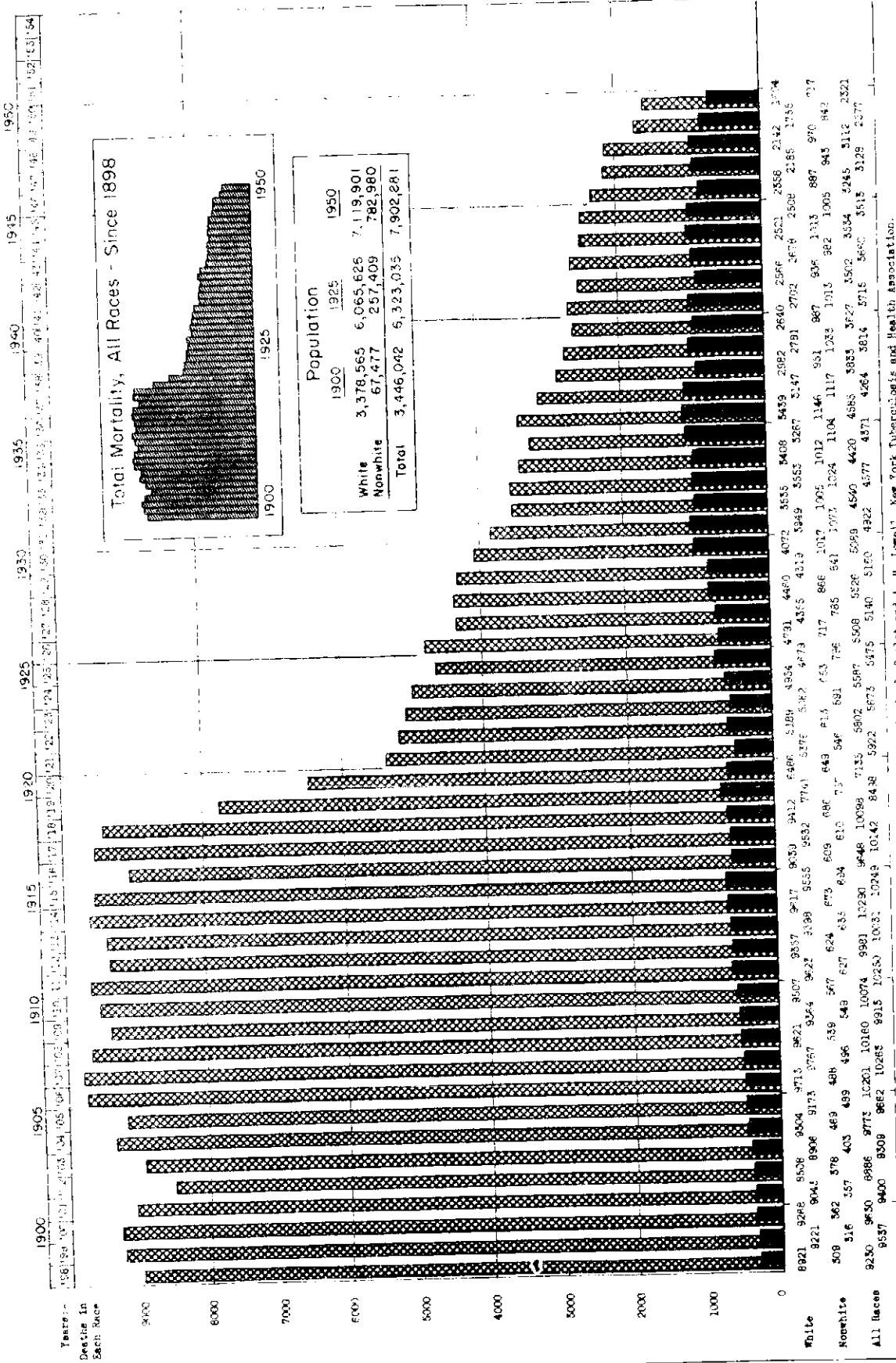
Separate information with regard to mortality from all forms of tuberculosis among Negroes only is available within each borough for the twenty-five year period between 1925 and 1950 (see p. 47). As well known there are marked differences in the tuberculosis rate in the different sections of the city for all groups of the population. In 1925 when the tuberculosis death rate among Negroes averaged 301 per hundred thousand in the city as a whole, it was 316 among those residing in Manhattan and 255 in Brooklyn. In Queens it was 146 or only half of the city average rate.

By 1950 the Negro tuberculosis rate in Manhattan had fallen by two-thirds, being now 100. In Brooklyn it was 93; and, in Queens, 77. The rates for the Negro residents of the Bronx are not altogether significant because of the small number of deaths involved at times and the relatively great changes that have taken place recently with the spread of the Negro population into the lower part of the Borough. However, when we look over the five-year period 1945-49 it would seem to suggest that at the present time the tuberculosis death rate among the Negroes in the Bronx is higher than in Brooklyn, though less than in Manhattan.

* * *

Fig. 11

TUBERCULOSIS DEATHS, WHITE AND NONWHITE NEW YORK CITY, SINCE 1898



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by G. J. Drolet and A. M. Lowell, New York Tuberculosis and Health Association.

TUBERCULOSIS IN DIFFERENT NATIONALITIES

NEW York City has been a unique stage whereupon to see the reaction of different nationalities to tuberculosis. We have already referred to the rates of the two principal racial groups, the white and the colored. While in recent years there are only limited records available as to the composition of the different national origins of the people living in the city now, and especially of the tuberculosis mortality of these various groups, there are still some significant reports at hand of some time ago which shed much light particularly on what should be called the death toll from tuberculosis among immigrants.

Of conditions and rates in former days, the study of the vital statistics of New York City by Billings during the six-year period 1884-1890 is one of the most valuable. It is worth summarizing the main points of his findings with regard to tuberculosis mortality, or rather of consumption, at that time. In 1890, what we must call "Old New York" had a population of 1,515,000 of which 1,490,000 were of the white race and 25,674 were colored; more than forty percent of the entire population was foreign-born. The then "City of Brooklyn" had a population of 806,000; the colored there numbered only 10,946; the proportion of the foreign-born was less than in New York, about one-third; 260,725 were foreign-born. The death rate from consumption in New York averaged annually, during the six-year period 1884-1890, no less than 392 per 100,000 population; in Brooklyn, it was lower but still 303.

Billings makes this comment: "Race distinctions have a very definite relation to death rates from consumption". After first recording that the death rate from consumption in the native-born whites of New York at that time was 205 per 100,000, he also adds that the rate among the colored was extremely high, 774. Then he relates the specific rates for those whose mothers were born in different countries as follows: among those born in Ireland, the death rate from consumption was 646; those born in Bohemia, 499; in Scotland, 384; in Scandinavia, 357; in Canada, 352; in Germany, 329; in France, 325; in England and Wales, 323; in Italy, 234; in Hungary, 155; in Russia and Poland, 98. Billings concluded: "From these figures it appears that consumption was most fatal among the colored, the Irish and the Bohemians, and least fatal among the Hungarians and Russians, that is to say, among the Jews".

In Brooklyn, these are the rates Billings reported: In the native-white population, 181 per 100,000; among the colored, 531. The death rates from consumption among various nationalities were somewhat lower than those, at the time, in New York, but were almost in the same order of importance, namely, among those whose mother was born in Ireland, the death rate was 453 per 100,000; those from Bohemia, 347; in Germany, 296; in Scotland, 269; in Canada, 266; in France, 253; in England and Wales, 234; in Scandinavia, 219; in Italy, 123; in Hungary, 121; and in Russia and Poland, 77.

Pulmonary Tuberculosis, 1919-1921

Some thirty years later Drolet(13) made an almost similar study and the results cover the annual death rates from pulmonary tuberculosis during the four-year period 1918-1921. Of course, at that time, they extended over the entire area of Greater New York.

During the above four years the death rate from pulmonary tuberculosis averaged 122 per 100,000 population annually for the city as a whole. The tuberculosis records were classified according to the country of birth of the deceased. First, it is stated that among the native-born white population the death rate from pulmonary tuberculosis was 108, whereas for the entire group of the foreign-born it was 149; for Negroes alone, 398.

In the total population of 5,620,000 in New York City in 1920, there were 152,500 Negroes. The foreign-born whites made up a full third of the city's population; they numbered close on to two millions (1,991,547).

One small group, namely, the Chinese, mostly adults, had the excessive death rate from pulmonary tuberculosis at that time of 825 per 100,000 population. The different rates for the foreign-born were as follows: Among those from Finland, a rate of 342; in Ireland, 306; in Norway, 249; in Greece, 228; in Switzerland, 217; in Sweden, 202; in Scotland, 181; in Austria-Hungary, 165; in England, 136; in Germany, 133; in France, 130; in Italy, 122; in Denmark, 110; in Roumania, 92; and in Russia, 86. Obviously the highest rates were among the Irish and the Scandinavians; the lowest among those from Russia, mostly Jews.

Drolet then noted "the general phenomenon and coincidence that the higher rates of tuberculosis appeared in those stocks still, or only recently, coming from parts of the world where agriculture was the main occupation and open-air life the daily enjoyment; and that the lower tuberculosis mortality, or rather better resistance to the White Plague, was found in those groups whose members had been undergoing tubercularization for longer periods of time, especially in cities or towns". He concluded: "we must acknowledge that there are tremendous racial differences in tuberculosis, that they are being inherited, but that the inheritance of today was the environment of yesterday, that much of it lies under our own control, and that the educational betterment and preventive campaigns against disease not only should raise hopes of and belief in final success, but that they have already accomplished under our very eyes measurable and most marked progress".

Tuberculosis According to Nativity, 1930-1931

Ten years later, namely, during the two-year period 1930-1931, a third study of tuberculosis rates in various nationalities was made, this time again, by Drolet(13). The rates refer to mortality from all forms of tuberculosis; that, for the city as a whole, was 72. In the white population, native or foreign-born, it was only 60, but among the colored it was 306.

In 1930, there were almost 7,000,000 people living in New York City; the colored numbered 343,000; the foreign-born comprised a full third of the entire population and they numbered 2,293,400.

During the two-year period 1930-31, the death rate from tuberculosis among those born in China headed the list; it was then 626 per 100,000. It was followed immediately by those born in Puerto Rico, who had a death rate of 434. It is worth noting that already, namely, some twenty years ago, there were 45,000 Puerto Ricans living in New York City.

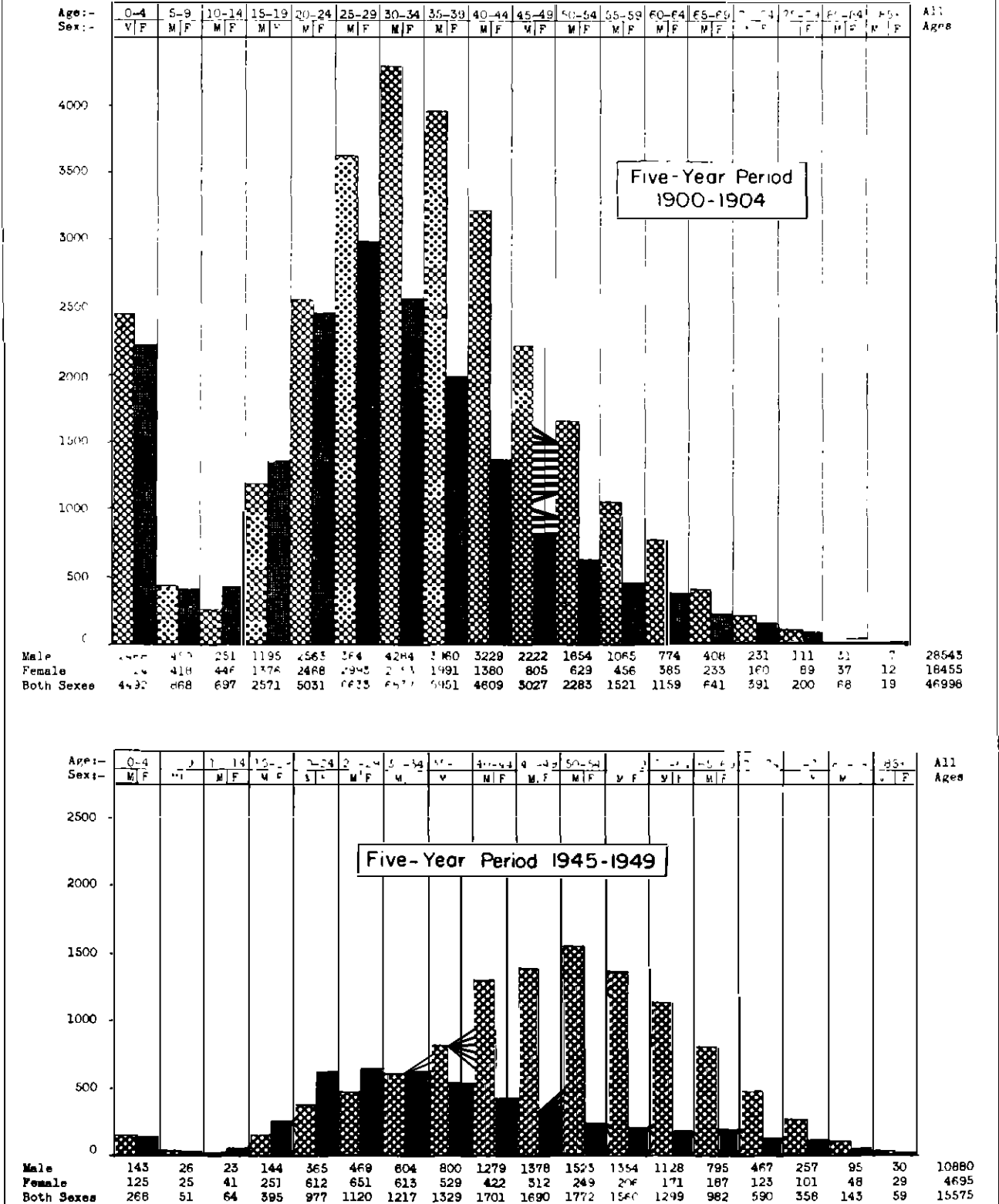
The next highest tuberculosis death rate was among those born in Japan, the rate being 401. The death rates of the next groups were much lower than formerly. The list was headed by those born in Ireland, whose tuberculosis death rate was 138; those born in Cuba, 115; in Scandinavia, 90; in Austria-Hungary, 83; in England, 63; in Italy, 59; in Russia, 53; and in Poland, 46. Among the native-born white population the tuberculosis death rate was 51.

Speaking of tuberculosis at that time, Drolet remarked: "The extent to which racial origin influences tuberculosis mortality nowadays is not as great for those of certain parts of Europe as was common but a few years ago. This has largely taken place because, first, immigration has been more limited and, secondly, because of the extensive public health measures and the increase of institutional beds for the sick which are gradually bringing the disease under control.... Among foreign stocks, especially those from Europe, what is striking to notice is that while their tuberculosis death rate does not seem excessive compared with that which they suffered only a decade ago, their ratios still range themselves in a somewhat similar order."

* * *

Fig. 12

Tuberculosis Deaths, New York City By Age and Sex



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by G. J. Drolet and A. M. Lowell, New York Tuberculosis and Health Association.

TUBERCULOSIS MORTALITY BY AGE AND SEX

DURING the five-year period 1900-1904, a total of 46,998 deaths from tuberculosis were recorded in New York City, of which 28,543 occurred in the male sex and 18,455 in the female sex (see Fig. 12). During the five-year period 1945-49, when New York City's population had more than doubled, the tuberculosis deaths numbered only one-third of what they had been during the five-year period first mentioned, namely 15,575; and of these deaths, 10,880 occurred in the male sex and 4,695 in the female sex.

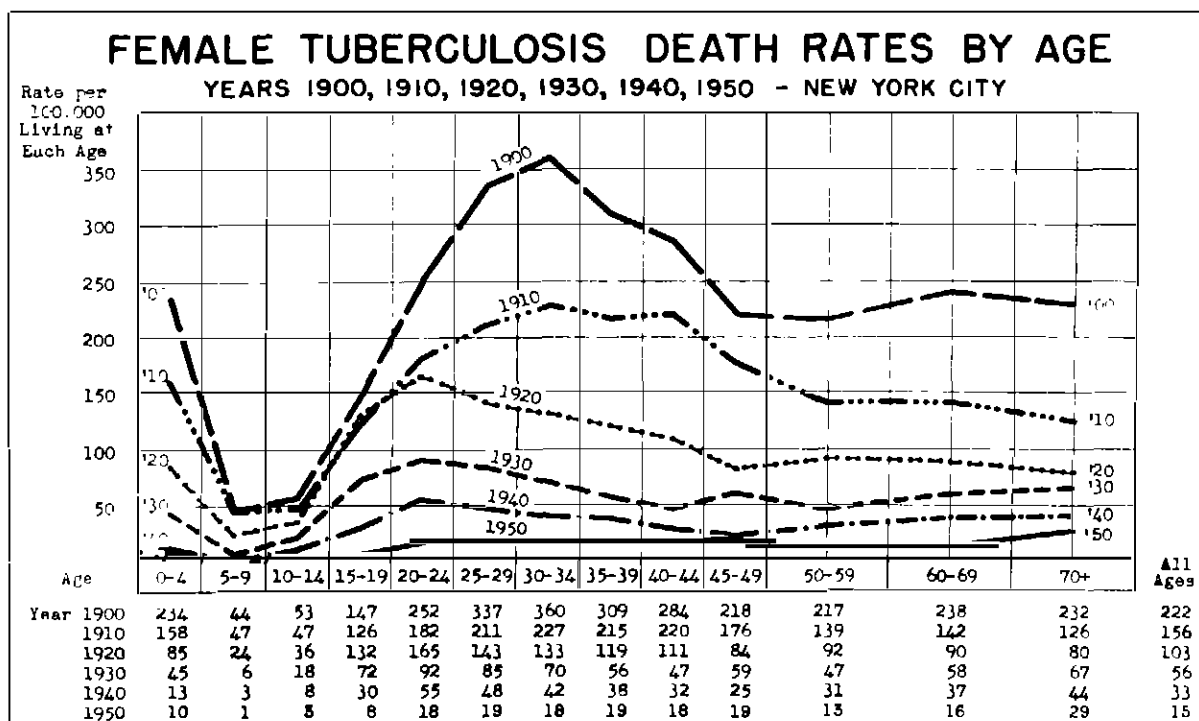
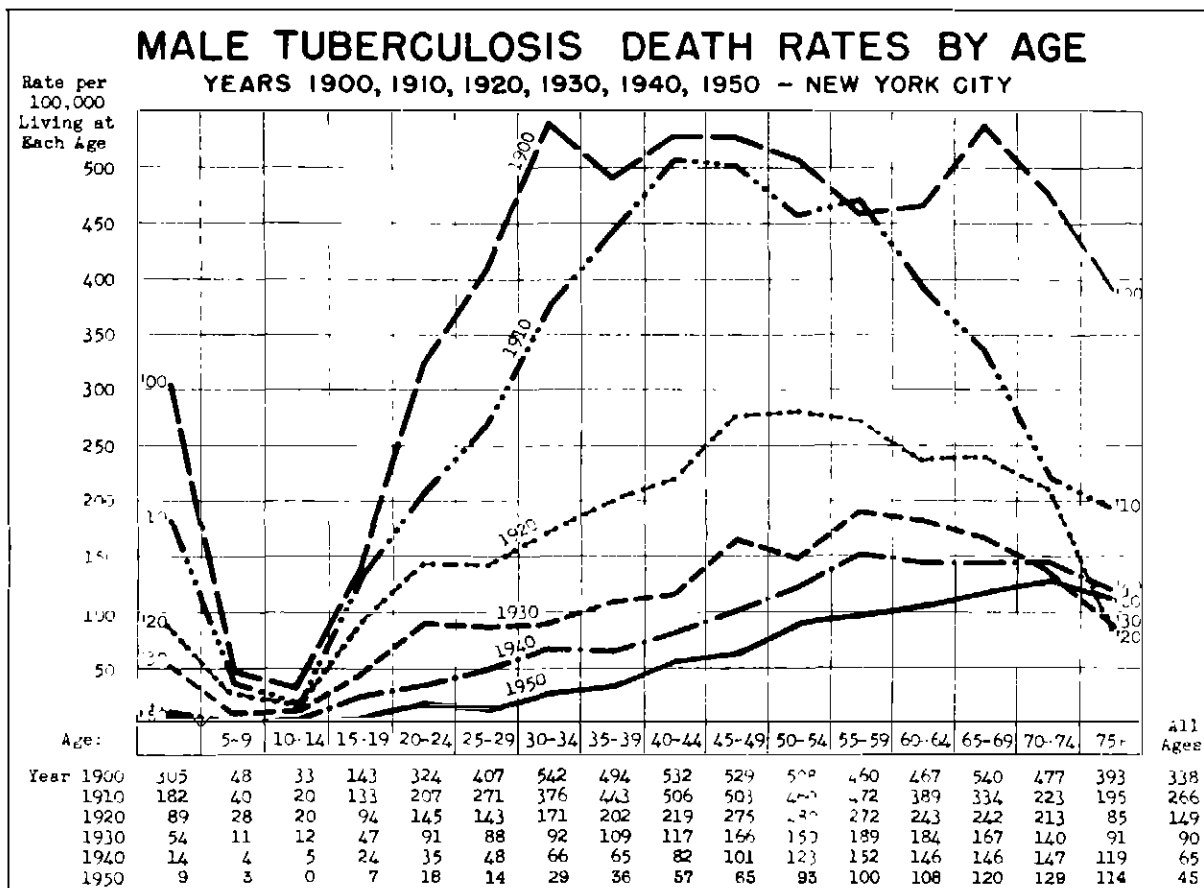
A very interesting difference is to be noted in the mortality, especially of the children during these two different quinquennia. In the 1900-1904 period, among children of both sexes under five years of age, 4,492 tuberculosis deaths occurred, whereas in the 1945-1949 period, there were only 268 deaths in that group. Also, during the first period mentioned, there were 868 deaths in the group of children between the ages of five and ten, whereas more recently, during five years, there were only 51 such deaths. As great a decline is noted among those ten to fifteen years of age.

During the first five-year period of the beginning of the century the greatest number of lives taken prematurely by tuberculosis was among men in the age group thirty to thirty-four years of age, when 4,284 deaths occurred. During the recent five-year period 1945-1949, the greatest number is instead to be found in the age group fifty to fifty-four when the deaths numbered 1,525, or only 35 percent of those previously mentioned.

The largest number of deaths among women during the first five years of the present century occurred in the age group twenty-five to twenty-nine years of age, when they numbered 2,993. During the last five years, the greatest number among women was still in the age group twenty-five to twenty-nine, but their deaths numbered only 651, or less than one-fourth what they were formerly.

Between 1900 and 1950 the tuberculosis death rate in the male sex fell from 338 per hundred thousand population to 45, or by 87 percent (see Fig. 13). In the female sex the rate declined from 222 to 15, or by 93 percent. The growing disparity in the mortality rate from tuberculosis in the two sexes is worth noting. Whereas in 1900 the male rate was one and one-half times that of the female rate it is now three times as great. Primarily, what this means is not necessarily an increase of the burdens carried by the male sex, but rather, a greater reduction of that borne by the female sex. First among the latter is the marked reduction in childbearing; second, there is no doubt that technology and industry of the day have provided any number of appliances that lessen the drudgery of home work. On the other hand, men have kept at work probably as busily as ever and therefore the differences in their day's labor now as compared with formerly is not as great as in the other sex. Furthermore, exposures in crowded workshops and offices are more frequent for man than for the woman in the home.

Fig. 13



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by G.J. Drolet and A.M. Lowell, New York Tuberculosis and Health Association.

As previously mentioned, the largest number of deaths from tuberculosis in the male sex in 1900 occurred in the age group thirty to thirty-five years old. However, in relation to the total population of that age, the death rate among men was highest among those forty to forty-four. Twenty-five years later, namely in 1925, the largest number of victims falling a prey to tuberculosis among men had shifted to the age group thirty-five to thirty-nine, but at that time, because of the lesser number of people in the older age group, the rate was then at its peak in the age group fifty-five to fifty-nine. By 1950 a very distinctive change had taken place as to the incidence and mortality from tuberculosis among men. The largest number of deaths was now in the age group fifty to fifty-five but the peak for the tuberculosis rate was postponed to the age group seventy to seventy-four.

The extremely high tuberculosis death rate among men nowadays in the older periods of life seems an oddity, and yet it is rather striking to find that almost a hundred years ago, namely in 1868, the pattern in New York City at that time was almost the same. Guilfoyl⁽¹⁴⁾ reported at the International Tuberculosis Congress in 1908 upon this unusual situation. In 1868 the tuberculosis death rate, while true that it was also exceedingly high among children under five years of age, was as far as adults were concerned, highest in the age group sixty-five and over, the rate being no less than 1,165 per hundred thousand population. This meant that more than one percent of the total number of men and women of that age died from tuberculosis each year.

In the year 1900, when there were 5,783 deaths from tuberculosis in the male sex, 3,835 or 66 percent of the total occurred in the group under forty years of age (see p. 50). The remainder, 1,948, occurred among those forty years or over. By 1925, the proportion of the deaths in the male sex occurring before forty years of age had been reduced to 53 percent and by 1950 to 20 percent only, so that now 80 percent of all the deaths from tuberculosis occur among men past forty years of age. This shifting of the tuberculosis mortality among men began to take place at the time of the influenza epidemic of 1918, though for a few years thereafter the larger group was still among those thirty-five to forty years of age. But in 1923 it concentrated into a five-year older group and in 1930 to still another higher group, namely those forty-five to fifty years of age. Then, in the beginning of 1940, the largest number of deaths began to occur in the group fifty to fifty-five years of age.

Tuberculosis Mortality in the Female Sex

A different trend has taken place among women or rather the concentration of the mortality has remained static. In 1900, in the total of 3,847 deaths from tuberculosis in the female sex, 2,926 or 76 percent of the total occurred before forty years of age (see p. 54). In 1925 again 74 percent of the deaths in the female sex occurred before the same age. In 1950 the proportion of the female mortality under

the age of forty had come down to 52 percent. Until 1915 the largest number of deaths among women had occurred in the age group twenty-five to thirty years of age. It then shifted to the younger group, twenty to twenty-five years of age.

Decline in Various Age Groups

Between 1900 and 1950 the tuberculosis death rate in the male sex, as previously mentioned, has declined from 338 per hundred thousand to 45, or by 87 percent; in the female sex, from 222 to 15, or by 93 percent. If one compares closely the reductions during that period in each sex in the various age groups it is striking to see that the reduction has been practically at similar rates. But the death rate in each sex has been at different levels, that of the male sex remaining always higher.

During the half century under consideration the tuberculosis death rate in the male sex has been reduced by more than 90 percent in each group up to forty years of age; thereafter the reduction has been slightly less. For instance, among men fifty to fifty-five years of age, it amounted to 82 percent; in the next age group, by 78 percent; and among those seventy to seventy-five the reduction was 73 percent.

Both in the male and female sex the greatest decline of tuberculosis has taken place in the younger age group, particularly the children. Between 1900 and 1950 reductions in the rate of more than 90 percent are also to be found in each age group of the female sex until one reaches the group fifty-five to sixty-five years of age where the decline amounted to 71 percent.

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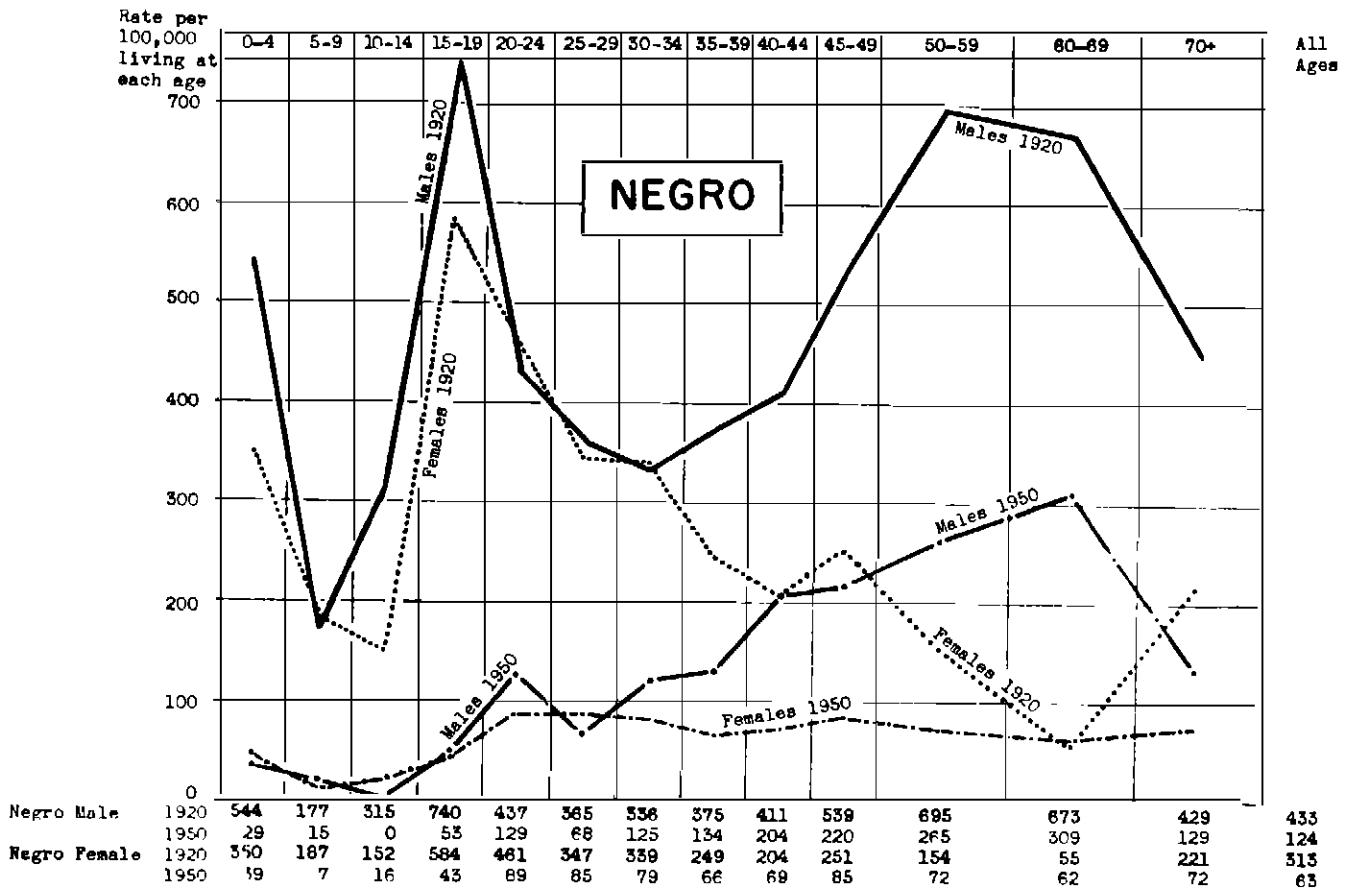
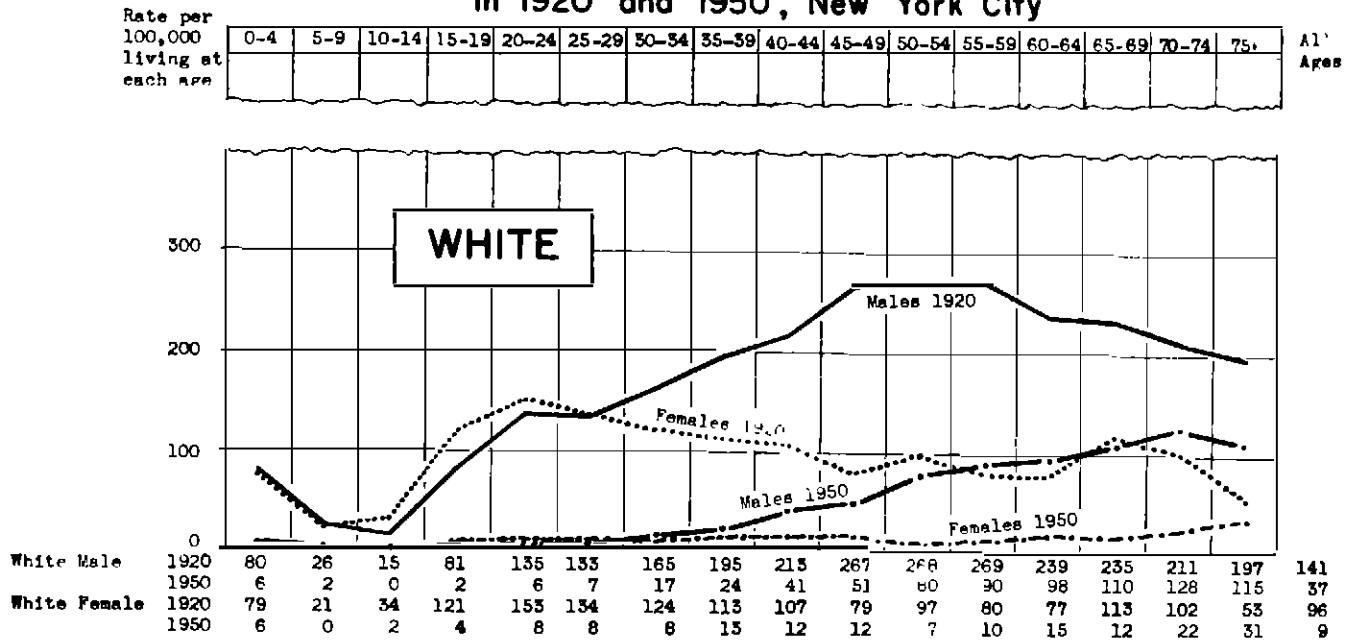
TUBERCULOSIS AMONG CHILDREN

There are striking gains with regard to tuberculosis mortality, especially of children, whether white or Negro, when one studies the available record of the past thirty years for each race (see Fig. 14). For instance, in 1920, among white boys between the ages of ten and fifteen, 38 died from tuberculosis; but both in 1948 and in 1950 not a single death occurred in this group of white boys (see p. 58). Among white girls, five to ten years of age in 1920, there were 56 deaths from tuberculosis, but in the years 1948, 1949 and 1950 there wasn't a single death in that group of children (see p. 60). Interestingly too, is to be noted, at least among Negro boys ten to fifteen years of age, the fact that whereas in 1920 they suffered 12 deaths they, too, in 1948, 1949 and 1950, didn't have a single death from tuberculosis (see p. 62).

Care must be taken to remark however that nowadays there are wide disparities in the tuberculosis death rates between white and Negro children. For instance, among children under five years of age,

Fig. 14

Tuberculosis Death Rates by Color, Age and Sex in 1920 and 1950, New York City



Based on reports, Bureau of Records and Statistics, Department of Health, City of New York. Compiled by G.J. Drolet and A.M. Lowell, New York Tuberculosis and Health Association.

In 1900, three-fifths of the deaths among the infants were of the meningeal type. That same year 66 of the deaths were of respiratory forms of tuberculosis; 31, of the abdominal type and 80 of other forms of non-pulmonary tuberculosis. Undoubtedly one of the most important factors which led to the rapid decline of mortality from tuberculosis among infants was the steady expansion of hospital beds for the advanced cases of tuberculosis thereby removing the most serious possible source of infection. As a matter of fact the writer just quoted observed in those days the close inverse correlation between deaths from tuberculous meningitis among children and the number of advanced cases of tuberculosis segregated in institutions. Whenever more adult patients were hospitalized the meningeal type of deaths among infants decreased and vice versa their number rose when hospitalization facilities were reduced.

There is particular interest in the trend of the mortality from the abdominal type of tuberculosis among infants in former days. Prior to 1912 when pasteurization of milk was first started in New York City, the abdominal death rate from this cause among infants ranged between 20 and 58 per hundred thousand. Pasteurization -- except for certified milk from tuberculin-tested cows -- was made compulsory in 1914. Immediately the death rate of the abdominal type fell off: 7 in 1915. Subsequently, even though the number of young children or rather of births in New York City had materially increased, this type of the disease practically disappeared; only one such death occurred between 1935 and 1950.

Differences in Mortality between Boys and Girls

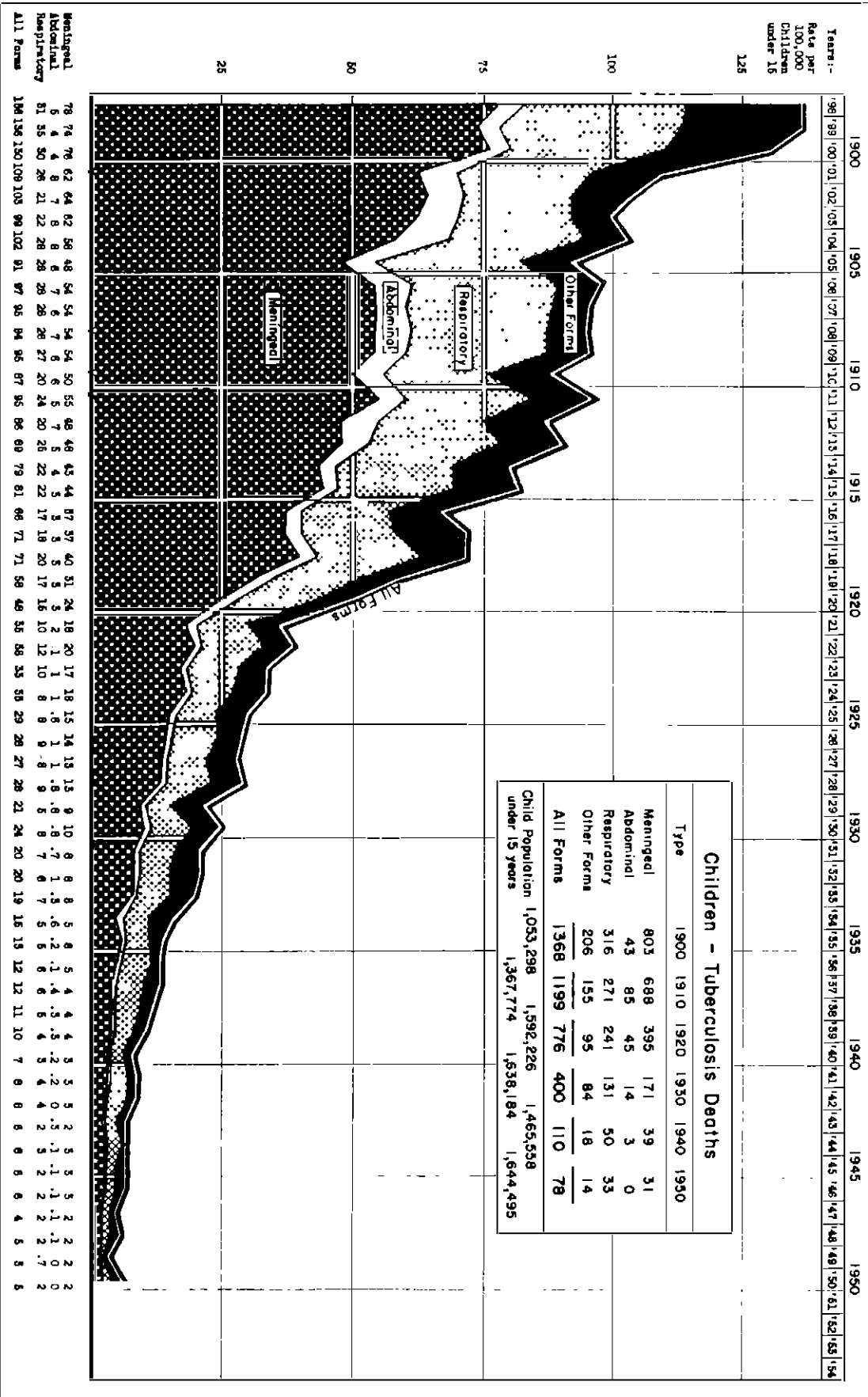
Certain differences between boys and girls with regard to tuberculosis mortality should be noted. In young children under five, the tuberculosis death rate each year in New York City is practically always higher among boys than among girls. This was true throughout the period from 1900 until 1945 when the situation seemed to change, the death rate of the two groups becoming equal recently. Originally, the tuberculosis death rate of boys under five was 233 per hundred thousand of that age group and 194 among girls. On the other hand during the quinquennium 1945-1949 the death rate of each of the two became equal, namely, nine per hundred thousand.

Little difference in the mortality between the two sexes has been noted among children five to ten years of age. During the first quinquennium of the present century the annual average number of deaths from tuberculosis among boys five to ten years old was 90 whereas among girls it was 84.

However, among girls between ten and fifteen years of age tuberculosis is steadily a more frequent cause of death than among boys. The greater strain attendant to the development at puberty must of course be responsible among the girls approaching adult life. The well-known picture of tuberculosis hatching out whenever too great a strain is put upon certain individuals' resistance appears once more here. Preventive work against tuberculosis should therefore concentrate to a greater degree among girls of that age than among

Fig. 15

TUBERCULOSIS DEATH RATE, CHILDREN UNDER FIFTEEN NEW YORK CITY, SINCE 1898



Compiled from reports, Bureau of Records and Statistics, Department of Health, City of New York, by O. J. Broder and A. M. Caswell, New York Tuberculosis and Health Association.

boys. During the first quinquennium of the present century the tuberculosis death rate among boys ten to fifteen years old was 31 per hundred thousand of that age group, whereas among girls of the same age it was 55 or 77 percent higher. During the five-year period 1925-1929, the death rate among boys was 10 and among girls it was still twice as high, namely 20. In more recent years, though the same trend is noticed of more tuberculosis among young girls, the difference between the two sexes has been reduced slightly. Most satisfactory of all is the fact that their death rate has been reduced to 2 for boys and 3 for girls.

Children Under Fifteen

The record of tuberculosis among children under fifteen in New York City reveals a unique measure of control and almost eradication at least as far as the disease being a cause of death (see Fig. 15). In 1900, when the children under fifteen years of age numbered 1,053,298, there were recorded no less than 1,368 deaths from tuberculosis among them. Twenty years later, when the child population had increased by nearly six hundred thousand and then totalled 1,592,226, the tuberculosis deaths numbered only a little over half of what they were previously, namely, 776. In 1950, with a child population of 1,644,495, the deaths for tuberculosis numbered only 78 and, as previously mentioned, not one of them was of the abdominal type. Let us also recall that as of now there is an enormous colored population in New York City with several hundred thousand of its children in that age group.

Between 1900 and 1950 the tuberculosis death rate in New York City among children under fifteen dropped from 130 per hundred thousand population to 4.7 only; as a matter of fact in 1949 it was only 3.2. This is a reduction of almost 98 percent.

* * *

May a reviewer of health conditions at the end
of the next fifty years be able to write
for men and women, as, we have recorded
for children, that tuberculosis
is nearing its

END

*

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POPULATION
NEW YORK CITY
1898-1950

POPULATION OF BOROUGHES, NEW YORK CITY

Year †	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1898	1,809,550	167,252	1,094,800	137,051	63,765	3,272,418
1899	1,830,446	183,918	1,131,732	145,190	65,436	3,356,722
1900	1,854,052	201,646	1,169,523	153,718	67,103	3,446,042
1901	1,904,284	214,332	1,205,179	162,024	68,260	3,554,079
1902	1,955,603	227,770	1,242,383	170,653	69,416	3,665,825
1903	2,008,101	242,012	1,281,064	179,684	70,562	3,781,423
1904	2,061,999	257,169	1,320,839	189,277	71,739	3,901,023
1905	2,115,687	274,256	1,363,117	199,638	73,044	4,025,742
1906	2,158,672	301,554	1,415,784	214,967	75,579	4,166,556
1907	2,202,504	331,525	1,470,669	231,347	78,192	4,314,237
1908	2,247,264	364,482	1,527,500	249,118	80,884	4,469,248
1909	2,293,142	400,651	1,586,406	268,200	83,679	4,632,078
1910	2,330,504	437,562	1,642,746	288,086	86,637	4,785,535
1911	2,325,619	468,557	1,682,284	307,134	89,784	4,873,378
1912	2,320,735	499,552	1,721,822	326,182	92,931	4,961,222
1913	2,315,850	530,547	1,761,360	345,230	96,078	5,049,065
1914	2,310,967	561,542	1,800,898	364,278	99,224	5,136,909
1915	2,306,081	592,538	1,840,436	383,326	102,371	5,224,752
1916	2,301,198	623,533	1,879,973	402,374	105,518	5,312,596
1917	2,296,314	654,528	1,919,511	421,422	108,664	5,400,439
1918	2,291,430	685,523	1,959,049	440,470	111,811	5,488,283
1919	2,286,545	716,518	1,998,587	459,518	114,958	5,576,126
1920	2,263,837	757,945	2,044,712	498,707	118,564	5,683,765
1921	2,223,193	809,944	2,097,570	558,200	122,642	5,811,549
1922	2,182,549	861,943	2,150,428	617,693	126,720	5,939,333
1923	2,141,905	913,942	2,203,286	677,186	130,798	6,067,117
1924	2,101,150	966,084	2,256,288	736,842	134,887	6,195,251
1925	2,060,506	1,018,083	2,309,146	796,335	138,965	6,323,035
1926	2,019,862	1,070,082	2,362,004	855,828	143,043	6,450,819
1927	1,979,218	1,122,081	2,414,862	915,321	147,121	6,578,603
1928	1,938,463	1,174,223	2,467,864	974,977	151,210	6,706,737
1929	1,897,819	1,226,222	2,520,722	1,034,470	155,288	6,834,521
1930	1,867,877	1,268,494	2,563,848	1,084,592	158,749	6,943,560
1931	1,870,138	1,281,440	2,577,637	1,106,442	160,358	6,996,015
1932	1,872,400	1,294,385	2,591,425	1,128,293	161,967	7,048,470
1933	1,874,661	1,307,330	2,605,213	1,150,143	163,577	7,100,924
1934	1,876,922	1,320,275	2,619,002	1,171,994	165,186	7,153,379
1935	1,879,183	1,333,221	2,632,790	1,193,844	166,796	7,205,834
1936	1,881,444	1,346,166	2,646,579	1,215,695	168,405	7,258,289
1937	1,883,706	1,359,111	2,660,367	1,237,545	170,015	7,310,744
1938	1,885,967	1,372,057	2,674,155	1,259,396	171,624	7,363,199
1939	1,888,228	1,385,002	2,687,944	1,281,246	173,234	7,415,654

the small Negro boys in that group have a tuberculosis death rate of 29 as against one of 6 only in the white children, in other words almost five times as high. Similarly, among the little girls under five years of age, whereas the tuberculosis death rate in the white children is 6, that of the Negro children of the same age is more than six times that rate, namely 39.

Serious, particularly, are the differences in the group of adolescents between fifteen and twenty years of age. Among white boys of that age group the tuberculosis death rate in 1950 was only two, whereas among Negro boys it was 53, or 25 times as great.

Among young white girls fifteen to twenty years of age, in 1950 their death rate from tuberculosis was 4 and that of the young Negro girls of the same age was 43, or 10 times as high. Differences in death rates between the two racial groups are not as great in older age groups. For all ages the tuberculosis death rate of the white males in 1950 was 37 and that of the Negro males 124, but still more than three times as high. Among females the disparity is greater; for all ages, in the year 1950, the tuberculosis death rate of white females in New York City was only 9 per hundred thousand whereas that of the Negro females was 63 or seven times as great.

In 1925 one of the authors(15) of the present monograph (G.J.D.), reviewing the mortality from tuberculosis in children in New York City during the first quarter of the present century, commenting upon the fact that children had been the greatest gainers from the anti-tuberculosis campaigns in the United States added "nowhere is this reflected more strongly than in New York City, where, with a tremendous crowding of population, a definitely limited amount of space, fresh air and sunlight, and the numberless daily contacts of children with persons and premises frequently infected, there exists the widest opportunity for the tubercle bacillus to infect thousands in homes and tenements teeming with children". The record of the succeeding twenty-five years up to 1950 only emphasizes the accuracy of the observation at that time.

Infants

It is worthwhile first to see what has happened particularly among infants who are the ones most intimately exposed in home contacts. In 1898, the first year of the consolidation of the five boroughs into Greater New York, when there were 119,000 children born, a total of 502 deaths from tuberculosis were recorded among infants under one year of age (see p. 66). In other words, the disease was striking at that time fatally at the rate of 422 per one hundred thousand children not a year old. In 1925 when the number of children born was 128,790, the death rate from tuberculosis during the first year of life was reduced by 81 percent of what it was formerly. The deaths numbered 105 that year, indicating a rate of 82 per one hundred thousand. In 1950, when more than 150,000 births were reported, the deaths from tuberculosis among infants numbered only 15; this meant practically the eradication of tuberculosis as a cause of death among infants in New York City.

POPULATION OF BOROUGHES, NEW YORK CITY

Year†	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1940	1,891,679	1,396,125	2,699,282	1,303,964	174,869	7,465,919
1941	1,898,696	1,401,782	2,703,271	1,329,286	176,580	7,509,615
1942	1,905,714	1,407,438	2,707,260	1,354,607	178,292	7,553,311
1943	1,912,732	1,413,095	2,711,249	1,379,929	180,003	7,597,008
1944	1,919,749	1,418,752	2,715,238	1,405,250	181,715	7,640,704
1945	1,926,767	1,424,408	2,719,227	1,430,572	183,426	7,684,400
1946	1,933,785	1,430,065	2,723,216	1,455,893	185,137	7,728,096
1947	1,940,802	1,435,721	2,727,205	1,481,215	186,849	7,771,792
1948	1,947,820	1,441,378	2,731,194	1,506,537	188,560	7,815,489
1949	1,954,838	1,447,035	2,735,183	1,531,858	190,271	7,859,185
1950	1,961,856	1,452,691	2,739,172	1,557,179	191,983	7,902,881
1951						
1952						
1953						
1954						

Note: Federal Census, June 1, 1900 = 3,437,202; April 15, 1910 = 4,766,883; January 1, 1920 = 5,620,048; April 1, 1930 = 6,930,446; April 1, 1940 = 7,454,995; April 1, 1950 = 7,891,957. †As of July first.

POPULATION ACCORDING TO SEX, NEW YORK CITY
Federal Censuses* 1900, 1910, 1920, 1930, 1940, 1950

Federal Census	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1900:						
Male	918,259	101,756	573,733	77,547	34,410	1,705,705
Female	931,834	98,751	592,849	75,452	32,611	1,731,497
Total	1,850,093	200,507	1,166,582	152,999	67,021	3,437,202
1910:						
Male	1,166,659	217,120	809,791	144,205	44,707	2,382,482
Female	1,164,883	213,860	824,560	139,836	41,262	2,384,401
Total	2,331,542	430,980	1,634,351	284,041	85,969	4,766,883
1920:						
Male	1,135,708	364,208	1,007,859	233,440	61,423	2,802,638
Female	1,148,395	367,808	1,010,497	235,602	55,108	2,817,410
Total	2,284,103	732,016	2,018,356	469,042	116,531	5,620,048
1930:						
Male	939,352	630,513	1,283,577	537,417	82,097	3,472,956
Female	927,960	634,745	1,276,824	541,712	76,249	3,457,490
Total	1,867,312	1,265,258	2,560,401	1,079,129	158,346	6,930,446
1940:						
Male	926,133	689,327	1,332,545	638,605	89,683	3,676,293
Female	963,791	705,384	1,365,740	659,029	84,758	3,778,702
Total	1,889,924	1,394,711	2,698,285	1,297,634	174,441	7,454,995
1950:						
Male‡	937,838	703,587	1,334,030	750,151	96,182	3,821,788
Female‡	1,022,263	747,690	1,404,145	800,698	95,373	4,070,169
Total	1,960,101	1,451,277	2,738,175	1,550,849	191,555	7,891,957

*June 1, 1900; April 15, 1910; January 1, 1920; April 1, 1930; April 1, 1940; April 1, 1950. ‡Provisional.

POPULATION* BY COLOR, NEW YORK CITY, SINCE 1898

Year	Negro	Other Colored	Total Colored	White	White & Colored	Year	Negro	Other Colored	Total Colored	White	White & Colored
1898	56,718	6,757	63,475	3,208,943	3,272,418	1925	246,479	10,930	257,409	6,065,626	6,323,035
1899	58,712	6,707	65,419	3,291,303	3,356,722	1926	263,568	11,441	275,009	6,175,810	6,450,819
1900	60,823	6,654	67,477	3,378,565	3,446,042	1927	280,657	11,952	292,609	6,285,994	6,578,603
1901	63,294	6,625	69,919	3,484,160	3,554,079	1928	297,792	12,465	310,257	6,396,480	6,706,737
1902	65,868	6,587	72,455	3,593,370	3,665,825	1929	314,881	12,976	327,857	6,506,664	6,834,521
1903	68,546	6,542	75,088	3,706,335	3,781,423	1930	330,975	15,603	346,578	6,596,982	6,943,560
1904	71,334	6,487	77,821	3,823,202	3,901,023	1931	344,048	15,957	360,005	6,636,010	6,996,015
1905	74,251	6,425	80,676	3,945,066	4,025,742	1932	357,122	16,310	373,432	6,675,038	7,048,470
1906	77,510	6,371	83,881	4,082,675	4,166,556	1933	370,196	16,674	386,870	6,714,054	7,100,924
1907	80,944	6,307	87,251	4,226,986	4,314,237	1934	383,269	17,018	400,287	6,753,092	7,153,379
1908	84,563	6,234	90,797	4,378,451	4,469,248	1935	396,343	17,371	413,714	6,792,120	7,205,834
1909	88,380	6,151	94,531	4,537,547	4,632,078	1936	409,417	17,725	427,142	6,831,147	7,258,289
1910	93,038	6,058	99,096	4,686,439	4,785,535	1937	422,491	18,078	440,569	6,876,175	7,310,744
1911	99,294	6,275	105,569	4,767,809	4,873,378	1938	435,565	18,431	453,996	6,909,203	7,363,199
1912	105,549	6,492	112,041	4,849,181	4,961,222	1939	448,639	18,785	467,424	6,948,230	7,415,654
1913	111,805	6,709	118,514	4,930,551	5,049,065	1940	465,673	19,272	484,945	6,980,974	7,465,919
1914	118,061	6,925	124,986	5,011,923	5,136,909	1941	494,591	20,157	514,748	6,994,867	7,509,615
1915	124,316	7,143	131,459	5,093,293	5,224,752	1942	523,509	21,043	544,552	7,008,759	7,553,311
1916	130,572	7,359	137,931	5,174,665	5,312,596	1943	552,426	21,929	574,355	7,022,653	7,597,008
1917	136,828	7,576	144,404	5,256,035	5,400,439	1944	581,344	22,815	604,159	7,036,545	7,640,704
1918	143,083	7,793	150,876	5,337,407	5,488,283	1945	610,261	23,701	633,962	7,050,438	7,684,400
1919	149,339	8,010	157,349	5,418,777	5,576,126	1946	639,179	24,587	663,766	7,064,330	7,728,096
1920	160,988	8,373	169,361	5,514,404	5,683,765	1947	668,096	25,473	693,569	7,078,223	7,771,792
1921	178,077	8,884	186,961	5,624,588	5,811,549	1948	697,014	26,359	723,373	7,092,116	7,815,489
1922	195,166	9,395	204,561	5,734,772	5,939,333	1949	725,932	27,245	753,177	7,106,008	7,859,185
1923	212,255	9,906	222,161	5,844,956	6,067,117	1950	754,849	28,131	782,980	7,119,901	7,902,881
1924	229,390	10,419	239,809	5,955,442	6,195,251	1951					

*As of July 1st of each year.

†Including Indians, Chinese, Japanese, etc.

TOTAL POPULATION, WHITE, NEGRO AND OTHER COLORED, ACCORDING TO AGE AND SEX, NEW YORK CITY

Federal Censuses* 1900, 1910, 1920, 1930, 1940, 1950

Age -	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	All Ages†	Age
MALES																		MALES
1900	199,683	177,591	149,906	140,670	161,988	178,390	164,788	146,737	114,358	80,264	66,231	44,878	33,814	19,854	12,981	9,799	1,705,705	1900
1910	255,729	219,110	210,598	216,071	251,216	253,533	219,820	196,577	161,324	127,547	98,515	61,061	45,003	29,569	17,784	13,829	2,382,482	1910
1920	283,873	269,451	248,289	219,532	249,761	280,340	263,065	247,263	195,778	167,078	135,986	90,152	67,768	38,841	22,658	18,861	2,802,638	1920
1930	272,438	291,782	290,263	293,740	327,734	341,448	327,685	319,859	272,868	219,800	175,346	123,128	92,494	60,451	35,866	25,243	3,472,956	1930
1940	221,415	238,798	283,453	300,717	304,862	322,558	331,782	330,950	317,471	282,769	243,321	178,162	132,668	89,275	54,474	43,618	3,676,293	1940
1950†	339,635	272,145	225,311	226,864	278,865	313,408	296,316	309,794	309,301	290,320	275,464	226,272	182,700	129,964	78,287	67,142	3,821,788	1950

FEMALES

1900	197,604	177,156	151,358	162,081	192,853	185,003	153,172	133,055	99,895	77,157	64,680	45,450	37,141	23,577	15,737	13,835	1,731,497	1900
1910	251,351	219,153	211,833	241,545	280,652	245,616	202,630	185,648	148,567	118,556	92,576	61,145	49,384	32,875	21,501	19,763	2,384,401	1910
1920	276,996	267,039	246,578	234,426	295,899	295,575	250,139	227,007	183,588	151,855	130,764	89,057	68,953	42,402	27,549	26,420	2,817,410	1920
1930	263,162	285,502	285,037	305,546	359,683	354,536	321,891	301,389	245,720	202,463	165,461	123,149	98,033	66,905	41,461	34,576	3,457,490	1930
1940	212,479	231,758	277,655	306,225	344,291	374,595	359,245	338,471	311,243	267,974	223,699	168,709	135,306	101,164	66,201	59,687	3,778,702	1940
1950†	326,265	262,884	218,255	240,214	319,795	351,839	341,934	359,051	332,764	300,302	280,924	224,243	181,781	144,379	92,392	93,147	4,070,169	1950

BOTH SEXES

1900	397,287	354,747	301,264	302,751	354,841	363,393	317,960	279,792	214,253	157,421	130,911	90,328	70,955	43,511	28,718	23,634	3,437,202	1900
1910	507,080	438,263	422,431	457,616	531,868	499,149	422,450	382,225	309,891	246,103	191,091	122,206	94,387	62,444	39,285	33,592	4,766,883	1910
1920	560,869	536,490	494,867	453,758	545,660	575,915	513,204	474,270	379,366	318,933	266,750	179,209	136,721	80,743	50,207	45,281	5,620,048	1920
1930	535,600	527,284	575,300	599,286	687,417	695,984	649,576	621,248	518,588	422,063	340,807	246,277	190,527	127,356	77,327	59,819	6,930,446	1930
1940	433,894	470,556	561,108	606,942	649,153	697,153	691,027	669,421	628,714	550,743	467,020	346,871	267,974	190,439	120,675	103,305	7,454,995	1940
1950†	665,900	535,029	443,566	467,078	598,660	665,247	638,250	668,845	642,065	590,622	556,388	450,515	364,481	274,343	170,679	160,289	7,891,957	1950

*Federal Censuses: June 1, 1900; April 15, 1910; January 1, 1920; April 1, 1930; April 1, 1940; April 1, 1950. †Totals include persons of unknown age. ‡Provisional.

WHITE* POPULATION ACCORDING TO AGE AND SEX, NEW YORK CITY, FEDERAL CENSUSES† 1920, 1930, 1940, 1950

Age -	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	All Ages†	Age
WHITE MALES																		MALES
1920	278,238	265,031	244,567	215,034	240,623	268,596	252,786	236,810	188,458	161,596	132,741	88,628	66,755	37,847	22,402	18,639	2,723,217	1920
1930	258,572	279,553	281,072	284,228	309,930	316,465	305,225	299,348	258,370	209,049	168,712	119,644	90,610	59,480	35,587	24,828	3,303,198	1930
1940	206,210	221,887	265,679	284,588	289,049	301,328	308,050	304,806	294,594	266,165	231,787	170,782	127,865	86,370	55,153	42,690	3,455,003	1940
1950†	300,284	245,009	201,457	205,181	250,423	274,981	262,010	275,347	278,752	264,550	254,833	213,279	173,725	123,694	75,069	64,743	3,463,347	1950
WHITE FEMALES																		FEMALES
1920	271,164	262,361	242,115	228,840	284,690	283,191	239,987	217,446	177,516	147,703	127,980	87,526	67,874	41,749	27,105	26,004	2,736,246	1920
1930	249,274	272,708	275,190	293,406	337,368	328,244	301,162	282,781	232,974	192,939	159,503	119,907	95,953	65,448	40,667	33,788	3,284,027	1930
1940	197,029	214,597	258,741	286,824	318,135	343,262	329,637	309,413	289,524	252,262	212,583	161,083	130,296	97,299	64,217	57,796	3,522,498	1940
1950†	287,375	235,034	193,666	214,520	277,881	301,974	297,286	316,091	299,126	272,978	260,479	211,083	171,811	136,458	88,092	89,003	3,652,857	1950

WHITE, BOTH SEXES

1920	549,402	527,392	486,682	443,874	525,313	551,787	492,773	454,256	365,974	309,299	260,721	176,154	134,629	79,596	49,507	44,643	5,459,463	1920
1930	507,846	552,261	556,262	577,634	647,298	644,709	606,387	582,129	491,344	401,988	328,215	239,551	186,563	124,928	76,054	58,616	6,587,225	1930
1940	403,239	436,484	524,420	571,412	607,184	644,590	637,687	614,219	584,118	518,427	444,170	331,865	258,161	183,669	117,370	100,486	6,977,501	1940
1950†	587,659	480,045	395,123	419,711	528,304	576,955	559,296	591,438	577,878	537,528	515,512	424,362	345,536	260,152	163,161	155,746	7,116,204	1950

*Relates to white population exclusively. †Federal Censuses: January 1, 1920; April 1, 1930; April 1, 1940; April 1, 1950. ‡Totals include persons of unknown age. †Provisional.

NEGRO POPULATION ACCORDING TO AGE AND SEX, NEW YORK CITY, FEDERAL CENSUSES† 1920, 1930, 1940, 1950

Age -	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	All Ages†	Age
NEGRO MALES																		MALES
1920	5,466	4,271	3,602	4,089	8,427	10,615	9,273	9,316	6,437	4,902	2,779	1,307	800	462	241	212	72,351	1920
1930	13,431	11,894	8,987	9,169	16,664	22,779	20,121	18,539	12,909	9,607	6,032	3,155	1,708	891	448	400	156,968	1930
1940	14,706	16,442	17,294	15,574	15,251	20,008	21,924	23,418	20,299	14,802	10,251	6,675	4,311	2,676	1,219	877	205,727	1940
1950†	37,169	25,639	22,552	20,450	26,893	36,321	32,421	32,557	29,166	24,350	19,500	12,311	8,512	5,955	5,053	2,306	339,135	1950
NEGRO FEMALES																		FEMALES
1920	5,681	4,562	4,359	5,503	11,072	12,255	10,029	9,479	6,010	4,127	2,770	1,521	1,073	652	441	415	80,116	1920
1930	13,489	12,471	9,675	11,951	25,882	20,412	18,385	12,385	12,606	9,450	5,690	3,210	2,059	1,440	788	784	170,738	1930
1940	14,985	16,692	18,554	19,104	21,848	30,970	29,256	28,768	21,490	15,579	11,217	7,576	4,974	3,845	1,978	1,881	252,717	1940
1950†	38,086	27,297	24,110	23,173	41,069	46,833	43,725	42,090	32,937	26,766	20,024	12,831	9,726	7,723	4,209	4,046	408,645	1950

NEGRO, BOTH SEXES

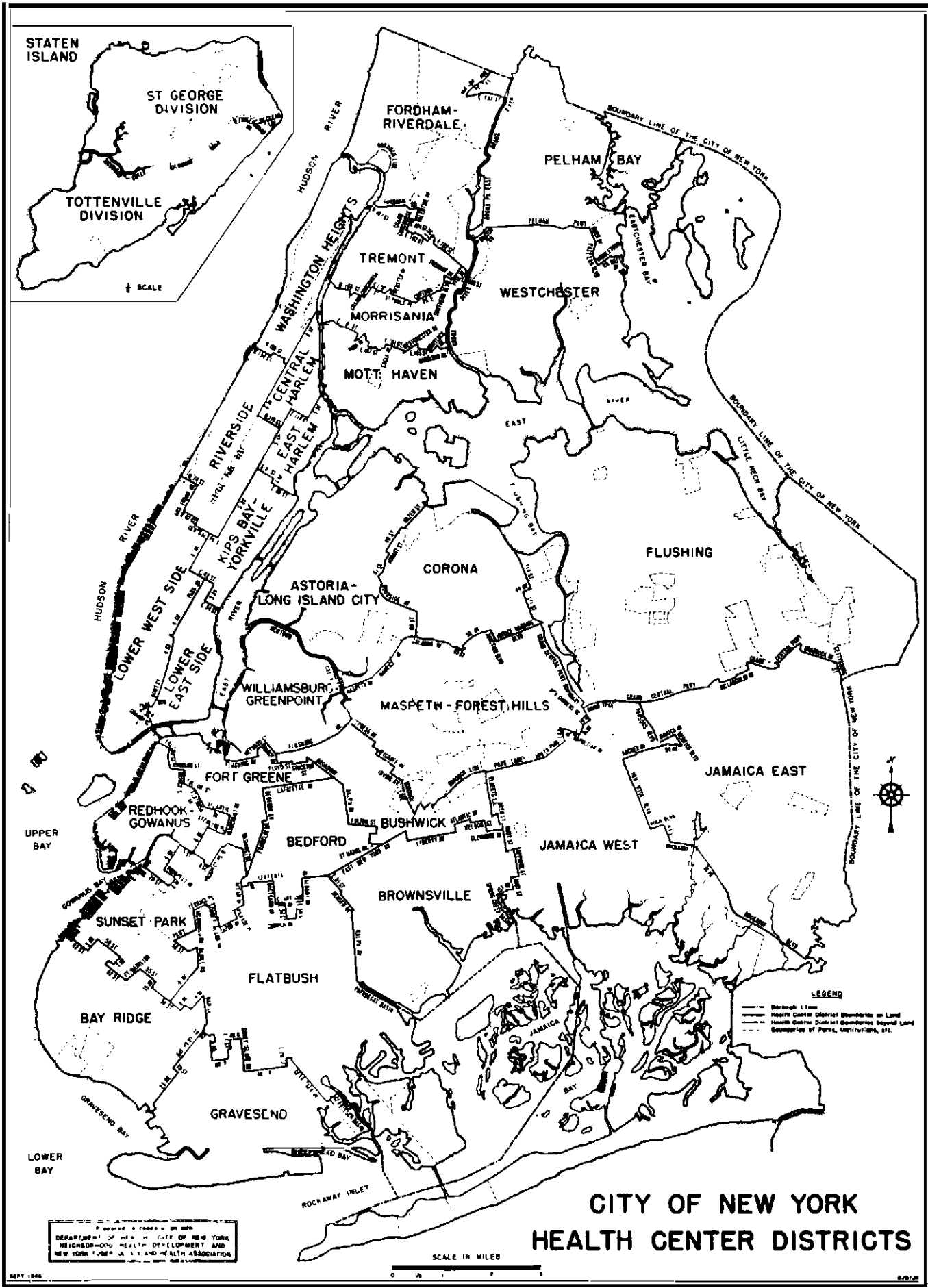
1920	11,147	8,833	7,961	9,592	19,499	22,870	19,302	18,795	12,447	9,029	5,549	2,828	1,873	1,114	682	627	152,467	1920
1930	26,920	24,365	18,662	21,120	38,658	48,661	40,533	36,924	25,515	19,057	11,922	6,365	3,767	2,331	1,236	1,184	327,706	1930
1940	29,691	33,134	35,848	34,678	41,099	50,978	51,180	52,186	41,789	30,381	21,468	14,251	9,285	6,521	3,197	2,758	458,444	1940
1950†	75,255	52,936	46,662	45,623	67,962	85,154	76,146	74,647	62,103	51,116	39,524	25,142	18,238	13,658	7,262	6,352	747,780	1950

*Federal Censuses: January 1, 1920; April 1, 1930; April 1, 1940; April 1, 1950.

POPULATION BY RACE, HEALTH CENTER DISTRICTS, NEW YORK CITY, FEDERAL CENSUSES 1930, 1940 AND 1950

Health Center DISTRICT	Federal Census, April 1, 1950			Federal Census, April 1, 1940			Federal Census, April 1, 1950			Health Center DISTRICT		
	White	Negro	Other Col'd	All Races	White	Negro	Other Col'd	All Races	White		Negro	Other Col'd	All Races
MANHATTAN:												
Central Harlem . . .	62,871	142,206	752	205,829	21,277	188,028	394	209,699	12,214	205,065	377	217,656
East Harlem	204,450	22,360	560	227,370	180,501	26,954	573	208,028	179,867	37,130	1,069	218,066
Kips Bay-Yorkville . .	240,050	1,600	564	242,214	248,051	2,042	577	250,670	254,262	1,986	849	257,097
Lower East Side . . .	324,649	1,280	1,852	327,781	285,490	2,278	3,300	291,068	294,777	7,474	6,227	308,478
Lower West Side . . .	285,511	12,087	4,392	301,990	275,679	7,621	6,550	289,850	274,322	7,522	5,456	287,300
Riverside	265,267	15,883	1,479	282,629	299,837	30,632	1,655	332,124	305,955	48,890	3,655	358,500
Washington Hgts. . . .	250,578	27,745	1,228	259,551	266,790	40,810	885	308,485	235,203	76,414	1,387	313,004
Miscellaneous*	18,380	1,509	59	19,948	---	---	---	---	---	---	---	---
Manhattan	1,631,756	224,670	10,886	1,867,312	1,577,625	298,365	13,934	1,889,924	1,556,600	384,481	19,020	1,960,101
BRONX:												
Ford'm-Riverdale . .	186,471	869	106	187,446	215,414	959	131	216,504	226,593	981	284	227,858
Morrisania	285,636	4,594	141	290,371	291,331	11,247	194	302,772	227,056	67,679	541	295,276
Mott Haven	228,789	3,106	137	232,032	226,993	6,017	291	233,301	210,609	17,574	571	228,754
Pelham Bay	102,115	1,342	31	103,488	127,870	2,153	44	130,067	140,250	3,223	114	143,587
Tremont	282,875	2,197	117	285,189	311,416	2,690	145	314,251	296,955	6,780	326	304,061
Westchester	165,171	528	47	165,746	197,295	463	58	197,816	249,766	1,820	155	251,741
Miscellaneous*	690	294	2	986	---	---	---	---	---	---	---	---
Bronx	1,251,747	12,930	581	1,265,258	1,370,319	23,529	863	1,394,711	1,351,229	98,057	1,991	1,451,277
BROOKLYN:												
Bay Ridge	289,296	651	133	290,080	310,918	940	118	311,976	318,907	740	183	319,830
Bedford	256,509	27,661	201	284,371	241,879	59,026	213	301,118	185,936	124,122	379	310,437
Brownsville	290,535	7,478	109	298,122	286,430	10,297	203	296,930	261,409	18,114	321	279,844
Bushwick	239,576	1,189	144	240,909	238,291	1,824	105	240,220	224,878	7,563	505	232,746
Flatbush	354,181	1,638	277	356,096	434,776	3,023	274	438,073	477,809	2,659	495	480,963
Fort Greene	196,276	19,955	773	217,004	184,807	22,314	746	207,867	180,837	40,200	881	221,918
Gravesend	210,720	1,353	123	212,196	259,688	2,482	126	262,286	279,382	2,176	300	281,858
Red Hook-Gowanus . .	178,721	5,929	824	185,474	171,906	3,552	771	176,229	164,986	6,503	902	172,391
Sunset Park	224,516	277	204	224,997	231,018	228	167	231,413	221,461	364	286	222,111
Wmsbrg.-Greenpt. . . .	246,118	2,790	244	251,152	228,238	3,577	348	232,163	209,581	6,031	465	216,077
Brooklyn	2,488,448	68,921	3,032	2,560,401	2,587,951	107,263	3,071	2,698,285	2,525,186	208,472	4,517	2,738,175
QUEENS:												
Astoria-L.I.City . . .	208,611	477	190	209,278	245,256	644	175	246,075	260,526	1,805	339	262,670
Corona	142,767	3,051	138	145,956	172,930	4,490	154	177,574	196,903	11,460	297	208,660
Flushing	120,179	2,883	186	123,248	170,949	3,351	253	174,553	283,802	4,077	765	288,644
Jamaica, East	166,349	9,612	112	176,073	210,285	14,543	126	224,954	229,391	29,801	335	259,527
Jamaica, West	236,483	2,285	157	238,925	253,184	2,452	160	255,796	270,195	3,782	192	274,169
Maspeth-For.Hills. . .	185,291	301	57	185,649	218,127	410	145	218,682	256,309	599	271	257,179
Queens	1,059,680	18,609	840	1,079,129	1,270,731	25,890	1,013	1,297,634	1,497,126	51,524	2,199	1,550,849
RICHMOND:												
St. George	118,232	2,197	146	120,575	126,084	3,120	148	129,352	186,063	5,246	246	191,555
Tottenville	37,362	379	30	37,771	44,791	277	21	45,089	---	---	---	---
Richmond	155,594	2,576	176	158,346	170,875	3,397	169	174,441	186,063	5,246	246	191,555
NEW YORK CITY	6,587,225	327,706	15,515	6,930,446	6,977,501	458,444	19,050	7,454,995	7,116,204	747,780	27,973	7,891,957

Health center districts based upon 1940 health area map. *Miscellaneous (1930) population covered on islands, boats and parks; in 1940 and 1950 it was assigned to adjoining health center districts. Note: 1950 figures by color are compiled from preliminary reports. Based upon reports of U.S. Bureau of the Census, Welfare and Health Council of New York City and Department of Health, City of New York.



TUBERCULOSIS MORBIDITY, NEW YORK CITY
REGISTRATION OF NEW CASES
1898-1950

REGISTRATION OF NEW CASES OF PULMONARY TUBERCULOSIS BY BOROUGHES, NEW YORK CITY
SINCE 1898

Year	Number of New Cases					Rate per 100,000*						
	Man- hat- tan	Bronx	Brook- lyn	Queens	Rich- mond	New York City	Man- hat- tan	Bronx	Brook- lyn	Queens	Rich- mond	New York City
1898	(8,559)		†	†	†	†	(433)		†	†	†	†
1899	(8,012)		†	†	†	†	(398)		†	†	†	†
1900	6,726	477	4,650	86	58	11,997	363	237	397	56	86	348
1901	8,692	744	4,079	124	64	13,703	457	347	339	77	94	385
1902	9,130	592	2,838	254	100	12,914	467	260	229	149	144	352
1903	10,334	869	3,426	388	197	15,214	515	359	267	216	279	402
1904	12,579	943	4,539	444	218	18,723	610	367	344	235	304	480
1905	14,081	955	4,897	504	394	20,831	665	348	359	252	539	517
1906	12,693	1,198	5,324	603	267	20,085	588	397	376	280	353	482
1907	12,412	1,327	5,157	645	184	19,725	563	400	351	279	235	457
1908	14,734	1,486	6,233	598	274	23,325	655	408	408	240	339	522
1909	16,877	1,601	6,407	625	157	25,667	736	399	404	233	188	554
1910	21,380	2,087	7,592	800	206	32,065	917	477	462	278	238	670
1911	15,501	1,859	6,066	851	236	24,513	666	397	361	277	263	503
1912	13,929	2,000	5,828	749	246	22,752	600	400	338	230	265	459
1913	12,971	2,315	6,168	976	241	22,671	560	436	350	283	251	449
1914	12,328	2,131	5,976	959	210	21,604	533	379	332	263	212	421
1915	12,648	1,870	6,140	1,306	177	22,141	548	316	334	341	173	424
1916	11,113	1,660	5,493	828	203	19,297	483	266	292	206	192	363
1917	9,476	1,633	5,398	717	170	17,494	413	249	281	170	156	324
1918	7,885	1,501	4,228	680	145	14,439	344	219	216	154	130	263
1919	7,713	1,760	4,363	542	192	14,570	337	246	218	118	167	261
1920	7,452	1,396	4,095	882	210	14,035	329	184	200	177	177	247
1921	7,010	1,476	3,704	613	163	12,966	315	182	177	110	133	223
1922	7,069	1,405	3,958	733	164	13,329	324	163	184	119	129	224
1923	5,490	1,290	3,598	797	161	11,336	256	141	163	118	123	187
1924	5,901	1,222	3,744	862	205	11,934	281	126	166	117	152	193
1925	5,378	1,417	3,102	903	155	10,955	261	139	134	113	112	173
1926	4,957	1,490	3,067	803	181	10,498	245	139	130	94	127	163
1927	4,856	1,779	3,101	912	225	10,873	245	159	128	100	153	165
1928	4,912	1,968	3,437	1,045	252	11,614	253	168	139	107	167	173
1929	4,949	1,853	3,704	1,199	233	11,938	261	151	147	116	150	175
1930	5,458	1,591	3,362	1,228	182	11,821	292	125	131	113	115	170
1931	5,553	1,590	3,357	1,099	195	11,794	297	124	130	99	122	169
1932	5,000	1,424	2,970	1,024	171	10,589	267	110	115	91	106	150
1933	4,611	1,293	2,942	989	156	9,991	246	99	113	86	95	141
1934	4,712	1,324	2,711	1,068	174	9,990	251	100	104	91	105	140
1935	4,095	1,229	2,408	942	122	8,796	218	92	91	79	73	122
1936	4,142	1,123	2,623	958	141	8,987	220	83	99	79	84	124
1937	4,571	1,170	2,300	978	109	9,128	243	86	86	79	64	125
1938	4,335	1,045	2,168	1,086	114	8,748	230	76	81	86	66	119
1939	3,901	1,073	2,222	954	127	8,277	207	77	83	74	73	112

NEW CASES OF ALL FORMS OF TUBERCULOSIS BY BOROUGH, NEW YORK CITY, SINCE 1921

Year	Number of New Cases					Case Rate per 100,000						
	Man-hat-tan	Bronx	Brook-lyn	Queens	Rich-mond	New York City	Man-hat-tan	Bronx	Brook-lyn	Queens	Rich-mond	New York City
1921 ...	7364	1503	3802	623	163	13455	331	186	181	112	133	231
1922 ...	7418	1425	4122	754	164	13883	340	165	192	122	129	234
1923 ...	5707	1324	3743	815	161	11750	266	145	170	120	123	194
1924 ...	6166	1255	3890	878	209	12398	293	130	172	119	155	200
1925 ...	5589	1442	3203	917	155	11306	271	142	139	115	112	179
1926 ...	5185	1520	3186	825	186	10902	257	142	135	96	130	169
1927 ...	5031	1826	3202	933	230	11222	254	163	133	102	156	171
1928 ...	5114	2037	3553	1080	261	12045	264	173	144	111	173	180
1929 ...	5125	1924	3802	1226	236	12313	270	157	151	119	152	180
1930 ...	5847	1672	3546	1257	184	12506	313	132	138	116	116	180
1931 ...	5879	1651	3548	1141	199	12418	314	129	138	103	124	178
1932 ...	5451	1525	3178	1089	184	11427	291	118	123	97	114	162
1933 ...	5053	1396	3112	1042	168	10771	270	107	119	91	103	152
1934 ...	5144	1409	2892	1099	178	10722	274	107	110	94	108	150
1935 ...	4473	1303	2570	995	125	9466	238	98	98	83	75	131
1936 ...	4508	1216	2843	1057	145	9769	240	90	107	87	86	135
1937 ...	4940	1252	2451	1081	116	9840	262	92	92	87	68	135
1938 ...	4823	1136	2387	1275	121	9742	256	83	89	101	71	132
1939 ...	4488	1158	2415	1046	138	9245	238	84	90	82	80	125
1940 ...	4230	1062	2490	1084	139	9005	224	76	92	83	79	121
1941 ...	4265	1156	2498	1176	127	9222	225	82	92	88	72	123
1942 ...	4373	1203	2762	1364	132	9834	229	85	102	101	74	130
1943 ...	3697	1241	2642	1238	132	8950	193	88	97	90	73	118
1944 ...	3462	1074	2249	1027	161	7973	180	76	83	73	89	104
1945 ...	3221	939	1922	857	123	7062	167	66	71	60	67	92
1946 ...	3255	945	1905	915	103	7123	168	66	70	63	56	92
1947 ...	3596	1018	1939	942	104	7599	185	71	71	64	56	98
1948 ...	3988	1104	2129	976	109	8306	205	77	78	65	58	106
1949 ...	4280	1111	2166	917	93	8567	219	77	79	60	49	109
1950 ...	3847	944	1948	859	119	7717	196	65	71	55	62	98
1951 ...												
1952 ...												
1953 ...												
1954 ...												

NEW CASES REGISTERED, TUBERCULOSIS ALL FORMS, NEW YORK CITY
Annual Average During Five-Year Periods Since 1921

Period	Number of New Cases					Case Rate per 100,000						
	Man-hat-tan	Bronx	Brook-lyn	Queens	Rich-mond	New York City	Man-hat-tan	Bronx	Brook-lyn	Queens	Rich-mond	New York City
1921-24	6664	1377	3889	768	174	12872	308	155	179	119	135	214
1925-29	5209	1750	3389	996	214	11558	263	156	140	109	145	176
1930-34	5475	1531	3255	1126	182	11569	292	118	126	100	113	164
1935-39	4646	1213	2533	1091	129	9612	247	89	95	88	76	131
1940-44	4005	1148	2528	1178	138	8997	210	82	93	87	77	119
1945-49	3668	1024	2012	921	106	7731	189	71	74	62	57	99
1950-54												

†Four year period.

NEW CASES OF TUBERCULOSIS (All Forms) REGISTERED MONTHLY
New York City, Since 1921

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1921	988	896	1251	1408	1117	1254	1149	1074	1105	1160	955	1098	13455
1922	999	1095	1190	1261	1517	1267	1193	1090	1205	1089	896	1081	13883
1923	950	1003	1209	1036	1249	1024	965	1013	773	949	882	697	11750
1924	1203	777	1248	1203	1040	1108	1114	884	840	972	1034	975	12398
1925	953	891	1089	1057	1049	1003	968	867	921	924	723	861	11306
1926	853	841	1032	1027	1020	959	924	722	1013	917	751	843	10902
1927	870	936	1081	892	1057	699	790	895	858	789	1162	1193	11222
1928	997	915	1354	1104	1000	1110	660	737	1123	1109	945	991	12045
1929	1293	1099	1117	1124	1302	914	898	838	995	1000	864	869	12313
1930	1082	855	1226	1079	1270	1069	1047	1025	980	1081	888	904	12506
1931	1063	976	1264	1117	1077	1139	973	947	1090	1037	886	849	12418
1932	943	935	1122	1010	1085	1074	990	940	832	889	759	848	11427
1933	885	872	1007	986	964	1059	731	1010	782	828	796	851	10771
1934	897	735	892	947	1070	952	974	918	757	977	822	781	10722
1935	860	611	884	815	781	775	781	694	746	954	639	926	9466
1936	831	804	1113	944	892	835	844	733	744	677	676	676	9769
1937	738	749	1009	894	784	1033	752	864	757	735	840	685	9840
1938	875	657	786	852	856	1001	827	851	821	776	679	761	9742
1939	829	613	984	772	854	967	770	845	693	699	627	592	9245
1940	779	611	846	861	859	720	879	815	681	737	561	656	9005
1941	921	526	944	793	929	875	935	732	707	739	565	556	9222
1942	744	625	876	955	910	1014	849	775	709	864	820	693	9834
1943	705	683	832	913	800	688	898	754	639	711	579	748	8950
1944	635	632	741	607	834	830	620	705	568	645	617	539	7973
1945	647	489	642	650	627	552	744	623	534	595	531	428	7062
1946	601	528	636	532	722	662	587	596	635	573	518	533	7123
1947	725	530	629	543	866	615	689	599	636	729	394	644	7599
1948	664	518	682	781	731	762	672	799	575	771	674	677	8306
1949	622	776	935	693	770	801	734	717	647	627	505	740	8567
1950	593	541	827	654	385	877	500	938	473	559	722	648	7717
1951													
1952													
1953													
1954													

Note: Data by months not available prior to 1921.

NEW CASES OF TUBERCULOSIS (All Forms), NEW YORK CITY
Average Monthly During Five-Year Periods Since 1921

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Period:													
1921-24†	1035	943	1225	1227	1231	1163	1105	1015	981	1042	942	963	12872
1925-29	993	936	1135	1041	1086	937	848	812	982	948	889	951	11558
1930-34	974	875	1102	1028	1093	1059	943	968	888	962	830	847	11569
1935-39	827	687	955	856	833	922	795	797	752	768	692	728	9612
1940-44	757	615	848	826	867	826	836	756	661	739	628	638	8997
1945-49	652	568	705	640	743	679	685	667	605	659	524	604	7731
1950-54													

†Annual average for four-year period.

AVERAGE MONTHLY REGISTRATION RATE*, NEW CASES OF TUBERCULOSIS
New York City, Since 1921

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year†
Period:													
1921-24‡	200	202	237	245	238	233	214	196	196	202	188	186	214
1925-29	175	183	200	190	192	171	150	143	179	167	162	168	176
1930-34	160	160	182	175	180	180	155	159	151	159	141	139	164
1935-39	131	121	152	140	132	151	126	127	123	122	114	116	131
1940-44	116	105	130	131	136	131	129	116	105	114	100	98	119
1945-49	97	94	105	99	111	105	102	100	93	98	81	90	99
1950-54													

*Rates per 100,000 population for 30-day month. †Full year.
‡Four-year period.

REGISTRATION OF NEW CASES OF TUBERCULOSIS BY FORM, NEW YORK CITY, SINCE 1921

Year	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
MANHATTAN:																	
Respiratory ...	7010	7069	5490	5901	5378	4957	4856	4912	4949	5458	5553	5000	4611	4713	4095	4142	4571
Meningitis	150	220	122	165	125	151	134	150	105	144	98	110	111	86	82	43	45
Other forms ...	204	129	95	100	86	77	41	52	71	245	228	341	331	345	296	323	324
All forms ...	7364	7418	5707	6166	5589	5185	5031	5114	5125	5847	5879	5451	5053	5144	4473	4508	4940
BRONX:																	
Respiratory ...	1476	1405	1290	1222	1417	1490	1779	1968	1853	1591	1590	1424	1293	1324	1229	1123	1170
Meningitis	15	20	34	33	23	30	47	47	34	37	32	45	40	34	22	19	12
Other forms ...	12	0	0	0	2	0	0	22	37	44	29	56	63	51	52	74	70
All forms ...	1503	1425	1324	1255	1442	1520	1825	2037	1924	1672	1651	1525	1396	1409	1303	1216	1252
BROOKLYN:																	
Respiratory ...	3704	3958	3598	3744	3102	3067	3101	3437	3704	3362	3357	2970	2942	2711	2408	2623	2300
Meningitis	98	164	130	137	99	117	101	116	98	103	74	71	68	70	45	41	26
Other forms ...	0	0	15	9	2	2	0	0	0	81	117	137	102	111	117	179	125
All forms ...	3802	4122	3743	3890	3203	3186	3202	3553	3802	3546	3548	3178	3112	2892	2570	2843	2451
QUEENS:																	
Respiratory ...	613	733	797	862	903	803	912	1045	1199	1228	1099	1024	989	1068	942	958	978
Meningitis	10	21	18	16	14	22	21	35	27	29	29	26	25	15	21	23	9
Other forms ...	0	0	0	0	0	0	0	0	0	0	13	39	28	16	32	76	94
All forms ...	623	754	815	878	917	825	933	1080	1226	1257	1141	1089	1042	1099	995	1057	1081
RICHMOND:																	
Respiratory ...	163	164	161	205	155	181	225	252	233	182	195	171	156	174	122	141	109
Meningitis	0	0	0	0	0	0	0	1	3	2	3	10	12	1	1	2	0
Other forms ...	0	0	0	4	0	5	5	8	0	0	1	3	0	3	2	2	7
All forms ...	163	164	161	209	155	186	230	261	236	184	199	184	168	178	125	145	116
NEW YORK CITY:																	
Respiratory ...	12966	13329	11336	11934	10955	10498	10873	11614	11938	11821	11794	10589	9991	9990	8796	8987	9128
Meningitis	273	425	304	355	261	325	308	356	267	315	236	262	256	206	171	128	92
Other forms ...	216	129	110	109	90	79	41	75	108	370	388	576	524	526	499	654	620
All forms ...	13455	13883	11750	12398	11306	10902	11222	12045	12313	12506	12418	11427	10771	10722	9466	9769	9840

REGISTRATION OF NEW CASES OF TUBERCULOSIS BY FORM, NEW YORK CITY, SINCE 1921

Year	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
MANHATTAN:																	
Respiratory	4335	3901	3825	3859	4000	3426	3090	2813	2888	3167	3477	3528	3168				
Meningitis	56	58	32	33	36	26	38	38	24	34	38	33	41				
Other forms	432	529	373	373	337	245	334	370	343	395	473	659	638				
All forms	4823	4488	4230	4265	4373	3697	3462	3221	3255	3596	3988	4280	3847				
BRONX:																	
Respiratory	1045	1073	979	1082	1124	1141	953	805	840	903	975	936	773				
Meningitis	11	19	11	12	15	6	22	12	13	8	15	17	20				
Other forms	80	66	72	62	64	94	99	122	92	107	114	158	151				
All forms	1136	1158	1062	1156	1203	1241	1074	939	945	1018	1104	1111	944				
BROOKLYN:																	
Respiratory	2168	2222	2284	2301	2603	2460	2080	1713	1724	1779	1917	1900	1700				
Meningitis	40	44	35	40	25	33	14	18	12	14	23	14	26				
Other forms	179	149	171	157	134	149	155	191	169	146	189	252	222				
All forms	2387	2415	2490	2498	2762	2642	2249	1922	1905	1939	2129	2166	1948				
QUEENS:																	
Respiratory	1086	954	997	1105	1292	1132	965	786	838	894	892	833	774				
Meningitis	12	18	10	11	11	12	12	11	6	2	11	4	7				
Other forms	117	74	77	60	61	94	50	60	71	46	73	80	78				
All forms	1275	1046	1084	1176	1364	1238	1027	857	915	942	976	917	859				
RICHMOND:																	
Respiratory	114	127	127	112	126	124	141	115	96	89	98	87	103				
Meningitis	2	5	2	5	0	0	8	0	0	1	2	1	2				
Other forms	5	6	10	10	6	8	12	8	7	14	9	5	14				
All forms	121	138	139	127	132	132	161	123	103	104	109	93	119				
NEW YORK CITY:																	
Respiratory	8748	8277	8212	8459	9145	8283	7229	6232	6386	6832	7359	7344	6518				
Meningitis	121	144	90	101	87	77	94	79	55	59	89	69	96				
Other forms	873	824	703	662	602	590	650	751	682	708	858	1154	1103				
All forms	9742	9245	9005	9222	9834	8950	7973	7062	7123	7599	8306	8567	7717				

NEW CASES OF TUBERCULOSIS BY HEALTH CENTER DISTRICTS, NEW YORK CITY, SINCE 1930

New Cases Registered During Year

HEALTH CENTER DISTRICT	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	HEALTH CENTER DISTRICT
MANHATTAN:																										MANHATTAN:
Central Harlem	1119	1222	1102	1066	1021	949	1097	1477	1384	1192	955	1047	1057	737	778	701	739	783	853	918	794					Central Harlem
East Harlem	776	688	697	701	609	588	583	667	668	514	453	501	523	382	322	310	372	428	521	544	485					East Harlem
Kips Bay-Yorkville ...	468	441	455	420	387	422	342	327	322	319	325	315	343	327	308	272	217	273	250	237	202					Kips Bay-Yorkville ...
Lower East Side	1033	1101	980	921	1110	830	725	749	749	726	845	728	757	622	597	539	546	690	819	892	811					Lower East Side
Lower West Side	1185	1136	971	878	966	715	745	704	744	707	780	755	767	695	616	596	553	554	706	744	792					Lower West Side
Riverside	570	562	564	461	513	492	521	572	536	577	477	489	521	509	445	458	454	515	451	547	421					Riverside
Washington Hgts.	564	567	515	454	468	428	441	403	403	412	369	415	405	425	396	345	374	353	388	398	342					Washington Hgts.
Miscellaneous*	132	162	167	152	70	49	54	41	17	41	26	15	...	...	...	...	...	...	...	...	...					Miscellaneous*
Manhattan	5847	5879	5451	5053	5144	4473	4508	4940	4823	4488	4230	4265	4373	3697	3452	3221	3255	3596	3988	4280	3847					Manhattan
BRONX:																										BRONX:
Fordham-Riverdale	236	228	201	195	208	162	173	161	159	169	151	182	169	156	136	121	120	124	146	112	84					Fordham-Riverdale
Morrisania	421	378	353	332	307	311	288	284	302	286	258	253	227	311	274	251	261	289	335	351	316					Morrisania
Mott Haven	332	387	347	291	277	258	256	304	240	252	217	266	284	290	240	232	255	293	277	299	285					Mott Haven
Pelham Bay	155	120	95	114	115	125	81	98	86	49	90	91	103	91	92	73	59	49	70	58	48					Pelham Bay
Tremont	337	307	326	297	322	310	255	260	227	247	219	219	251	237	207	134	141	149	170	180	125					Tremont
Westchester	179	181	169	141	153	134	157	139	120	149	128	142	169	156	125	128	109	114	106	111	86					Westchester
Miscellaneous*	10	50	34	26	27	3	6	6	2	6	4	3	...	...	...	...	...	...	...	...	...					Miscellaneous*
Bronx	1672	1651	1525	1396	1409	1303	1216	1252	1136	1158	1062	1156	1203	1241	1074	939	945	1018	1104	1111	944					Bronx
BROOKLYN:																										BROOKLYN:
Bay Ridge	295	305	314	293	289	255	287	202	223	219	243	222	235	251	201	170	160	148	166	140	120					Bay Ridge
Bedford	406	409	351	354	387	312	359	328	331	339	361	386	448	398	360	364	330	311	372	447	385					Bedford
Brownsville	324	307	272	300	288	210	258	203	237	241	211	208	182	212	189	145	129	153	158	176	168					Brownsville
Bushwick	329	338	295	305	222	237	226	218	238	215	211	203	240	229	170	152	187	152	166	197	175					Bushwick
Flatbush	360	384	326	311	289	263	265	253	227	254	273	263	300	328	252	214	188	187	205	170	169					Flatbush
Fort Greene	463	459	379	392	341	299	389	308	302	305	268	288	324	318	262	230	201	267	290	324	289					Fort Greene
Gravesend	198	233	249	180	228	170	183	161	146	140	168	176	195	164	122	87	101	107	87	89	96					Gravesend
Red Hook-Gowanus	451	420	358	349	336	269	308	302	238	239	259	277	306	279	248	224	228	242	262	268	206					Red Hook-Gowanus
Sunset Park	334	303	283	272	238	235	241	225	185	176	213	216	249	225	227	163	182	146	188	154	156					Sunset Park
Wmsbrg.-Greenpoint ...	386	390	351	356	294	313	316	248	260	288	261	259	283	238	218	173	199	226	235	201	186					Wmsbrg.-Greenpoint ...
Brooklyn	3546	3548	3178	3112	2892	2570	2843	2451	2387	2415	2490	2498	2762	2642	2249	1922	1905	1939	2129	2166	1948					Brooklyn
QUEENS:																										QUEENS:
Astoria-L.I.City	232	206	207	189	207	209	227	264	243	225	233	236	215	256	209	159	170	172	183	165	166					Astoria-L.I.City
Corona	201	198	200	198	165	142	139	134	170	142	148	150	180	199	155	136	126	162	149	138	110					Corona
Flushing	159	124	98	96	121	119	122	127	150	160	123	170	146	167	137	120	146	146	141	130	132					Flushing
Jamaica East	253	185	216	215	232	176	203	212	271	170	200	221	372	199	190	168	203	179	174	184	174					Jamaica East
Jamaica West	231	258	236	197	245	214	216	210	295	182	217	232	256	223	174	146	153	157	202	151	147					Jamaica West
Maspeth-Forest Hills..	181	170	132	147	129	135	149	134	146	166	163	167	195	194	162	128	117	126	127	149	130					Maspeth-Forest Hills..
Queens	1257	1141	1089	1042	1099	995	1057	1081	1275	1046	1084	1176	1364	1238	1027	857	915	942	976	917	859					Queens
RICHMOND:																										RICHMOND:
St. George	146	165	146	141	153	97	106	88	92	110	110	104	108	132	161	123	105	104	109	93	119					St. George
Tottenville	38	34	38	27	25	27	39	28	29	27	29	23	24	...	...	...	...	...	...	...	...					Tottenville
Richmond	184	199	184	168	178	125	145	116	121	138	139	127	132	132	161	123	103	104	109	93	119					Richmond
New York City Residents	...	12257	11325	10687	10697	9426	9755	9815	9737	9226	8988	9218	9834	8950	7973	7062	7123	7599	8306	8567	7717					New York City Residents
Unknown Address .....	...	161	102	84	25	40	34	25	5	19	17	4	...	...	...	...	...	...	...	...	...					Unknown Address
NEW YORK CITY TOTAL ..	12506	12418	11427	10771	10722	9466	9769	9840	9742	9245	9005	9222	9854	8950	7973	7062	7123	7599	8306	8567	7717					NEW YORK CITY TOTAL ..

*New cases undistributed (1930-1941) because they occurred among residents of islands or other special areas not covered by local health center arrangements. †Borough of residence but not health center district known therefore included in borough totals.

RATE OF NEW CASE REGISTRATION, TUBERCULOSIS, BY HEALTH CENTER DISTRICTS, NEW YORK CITY, SINCE 1930

HEALTH CENTER DISTRICT	New Cases Registered per 100,000 Population																HEALTH CENTER DISTRICT									
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945		1946	1947	1948	1949	1950	1951	1952	1953	1954
MANHATTAN:																										
Central Harlem	543	592	533	515	492	457	527	708	662	569	455	497	500	347	365	328	344	363	594	423	364					
East Harlem	342	306	314	319	280	273	274	317	321	250	217	239	248	181	152	145	174	198	241	250	222					
Kips Bay-Yorkville ...	193	182	187	173	159	173	140	134	132	130	130	125	136	129	122	107	85	107	98	92	79					
Lower East Side	317	341	307	292	356	269	238	249	252	247	290	248	257	210	200	180	181	227	268	290	263					
Lower West Side	405	389	334	303	335	249	261	247	262	250	269	261	265	240	215	207	192	192	245	259	276					
Riverside	201	195	192	154	169	159	166	180	166	176	143	146	154	149	130	152	130	147	127	155	117					
Washington Heights ...	216	213	190	165	167	150	152	137	134	135	120	134	151	137	128	111	120	113	124	127	109					
Manhattan	313	314	291	270	274	238	240	262	256	238	224	225	229	193	180	167	168	165	205	219	196					
BRONX:																										
Fordham-Riverdale	126	119	104	99	104	80	84	77	75	79	70	84	77	71	61	54	54	55	65	49	37					
Morrisania	145	129	120	113	104	105	97	95	100	95	85	84	75	104	91	84	88	97	113	119	107					
Mott Haven	143	167	150	126	120	112	111	132	104	109	93	114	122	125	104	100	111	127	121	131	125					
Pelham Bay	149	112	87	102	100	106	67	80	69	38	69	69	77	68	68	53	43	35	50	41	33					
Tremont	118	106	112	101	108	103	84	85	73	79	70	70	80	76	67	43	46	49	56	59	41					
Westchester	107	107	98	80	85	73	85	74	62	76	62	69	80	72	57	57	47	48	44	45	34					
Bronx	132	129	118	107	107	88	90	92	83	84	76	82	85	88	76	66	66	71	77	77	65					
BROOKLYN:																										
Bay Ridge	102	104	106	99	97	85	94	66	72	71	78	71	75	80	64	54	50	47	52	44	37					
Bedford	143	143	122	122	133	106	122	111	111	113	120	128	148	131	118	119	108	101	120	144	124					
Brownsville	109	103	91	101	90	71	87	68	80	81	71	71	62	73	65	50	45	54	56	63	60					
Bushwick	137	140	123	127	92	99	94	91	99	89	88	85	101	96	72	64	79	65	71	84	74					
Flatbush	101	105	87	81	74	66	65	61	54	59	62	59	67	73	55	46	40	40	43	36	35					
Fort Greene	214	213	176	183	160	141	184	146	144	146	129	137	154	150	123	107	93	122	132	147	130					
Gravesend	93	107	111	79	98	71	75	65	58	54	64	66	73	61	45	52	37	39	51	52	34					
Red Hook-Gowanus	243	228	195	191	185	149	171	169	134	135	147	158	174	159	142	129	131	140	151	155	120					
Sunset Park	148	134	125	120	105	103	105	98	80	76	92	94	109	99	100	72	81	65	84	69	70					
Wmsbrg.-Greenpoint ...	154	157	142	145	121	130	132	104	110	123	121	113	124	105	97	77	90	102	107	92	86					
Brooklyn	138	138	123	119	110	98	107	92	89	90	92	92	102	97	83	71	70	71	78	79	71					
QUEENS:																										
Astoria-L.I.City	110	96	95	85	92	91	98	112	101	92	95	95	86	101	83	62	66	67	70	65	63					
Corona	137	132	131	127	104	87	84	79	99	81	85	83	98	106	81	70	64	81	73	67	53					
Flushing	128	96	73	69	83	79	79	79	91	94	69	90	73	79	61	51	59	57	52	46	45					
Jamaica East	143	102	115	112	118	87	98	100	125	77	89	96	160	84	79	69	82	72	69	72	67					
Jamaica West	97	107	97	81	100	86	87	84	117	72	85	90	98	85	66	55	95	58	75	55	54					
Maspeth-Forest Hills..	97	90	68	75	65	67	72	64	69	77	74	75	86	84	69	54	48	51	51	59	50					
Queens	116	103	97	91	94	83	87	87	101	82	85	88	101	90	73	60	63	64	65	60	55					
RICHMOND	116	124	114	103	108	74	86	68	71	79	79	72	74	73	89	67	56	56	58	49	62					
Richmond	116	124	114	103	108	75	86	68	71	80	79	72	74	73	89	67	56	56	58	49	62					
NEW YORK CITY	180	178	162	152	150	131	135	135	132	125	121	123	130	118	104	92	92	96	106	109	98					

NEW CASES OF TUBERCULOSIS BY HEALTH CENTER DISTRICTS
Annual Average During Five-Year Periods Since 1930

Health Center DISTRICT	Annual Average†					Case Rate per 100,000				
	1930	1935	1940	1945	1950	1930	1935	1940	1945	1950
	1934	1939	1944	1949	1954	1934	1939	1944	1949	1954
MANHATTAN:										
Central Harlem	1106	1220	915	799		487	585	433	371	
East Harlem	694	604	436	435		312	287	207	202	
Kips Bay-Yorkville	434	346	324	250		179	142	128	98	
Lower East Side	1029	756	706	697		322	251	239	230	
Lower West Side	1027	723	723	631		353	254	250	219	
Riverside	534	540	488	485		182	169	144	138	
Washington Heights	514	417	402	371		190	141	130	119	
Manhattan	5475	4646	4005	3668		292	247	210	189	
BRONX:										
Ford'm-Riverdale	214	165	159	125		110	79	72	55	
Morrisania	358	294	265	297		122	98	88	100	
Mott Haven	327	262	260	271		141	114	112	118	
Pelham Bay	120	88	93	62		109	72	70	44	
Tremont	318	260	227	155		184	85	73	50	
Westchester	165	140	143	114		95	74	68	48	
Bronx	1531	1213	1147	1024		118	89	82	71	
BROOKLYN:										
Bay Ridge	299	237	230	157		101	78	73	49	
Bedford	381	334	391	365		132	113	129	118	
Brownsville	294	230	200	152		99	77	68	53	
Bushwick	298	226	211	171		124	94	88	73	
Flatbush	334	252	283	193		89	61	63	41	
Fort Greene	407	321	292	262		189	152	138	120	
Gravesend	218	160	165	94		97	64	62	34	
Red Hook-Gowanus	383	271	274	245		209	152	156	141	
Sunset Park	286	212	226	166		126	92	99	74	
Wmsbrg.-Greenpoint	355	285	256	207		144	120	112	94	
Brooklyn	3255	2533	2528	2012		126	95	93	74	
QUEENS:										
Astoria-L.I.-City	208	234	230	170		96	99	92	66	
Corona	192	145	166	142		126	86	90	71	
Flushing	120	136	149	136		89	85	74	53	
Jamaica East	220	206	237	182		118	98	102	73	
Jamaica West	233	223	220	162		96	89	85	60	
Maspeth-Forest Hills ...	151	146	176	129		79	70	78	52	
Queens	1126	1091	1178	921		100	88	87	62	
RICHMOND:										
Richmond	182	129	138	106		113	76	78	57	
NEW YORK CITY	11569	9612	8997	7731		164	131	119	99	

†Borough and city totals include miscellaneous population.

SOURCE OF REPORT, NEW CASES OF TUBERCULOSIS*, NEW YORK CITY, SINCE 1943

Year	Hospitals in City		Clinics		Private physicians		Sanatoria out-of-town		Other Sources		Total Cases	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
1943...	3726	42%	2632	29%	1659	19%	441	5%	492	5%	8950	100%
1944...	3430	43%	2143	27%	1533	19%	414	5%	453	6%	7973	100%
1945...	3100	44%	1701	19%	1343	19%	480	7%	438	6%	7062	100%
1946...	3160	44%	1936	27%	1137	16%	529	8%	361	5%	7123	100%
1947...	3547	47%	2253	29%	978	13%	471	6%	350	5%	7599	100%
1948...	4090	49%	2456	29%	999	12%	463	6%	298	4%	8308	100%
1949...	4210	49%	2755	32%	905	11%	440	5%	257	3%	8567	100%
1950...	3910	51%	2485	32%	779	10%	362	5%	181	2%	7717	100%
1951...												

*Tuberculosis all forms. Note: Included are cases identified through death certificates.

EIGHT-YEAR PERIOD 1943-1950, NEW CASES REPORTED

Source of report	New Cases	Number of Cases			
		0	10,000	20,000	30,000
Hospitals in city†	29,173				46%
Clinics	18,361				29%
Private physicians	9,333				15%
Sanatoria out-of-town .	3,000				6%
Other sources	2,830				4%
All sources	63,297				

† Refers to in-patients only.

UNREPORTED CASES‡ OF PULMONARY TUBERCULOSIS
Till Time of Death, New York City, Since 1943

Year	Manhattan		Bronx		Brooklyn		Queens		Richmond		N.Y. City	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
1943...	364	10.6%	119	10.4%	206	8.4%	84	7.4%	14	11.3%	787	9.5%
1944...	366	11.8%	85	8.9%	243	11.7%	83	8.6%	15	10.6%	792	11.0%
1945...	398	14.1%	64	8.0%	229	13.4%	73	9.3%	8	7.0%	772	12.4%
1946...	387	13.4%	94	11.2%	226	13.1%	72	8.6%	11	11.4%	790	12.4%
1947...	484	15.3%	114	12.6%	296	16.7%	82	9.2%	5	5.6%	981	14.4%
1948...	523	15.0%	95	9.7%	278	14.5%	92	10.3%	9	9.2%	997	13.5%
1949...	367	10.2%	66	7.1%	161	8.4%	68	8.2%	8	9.2%	670	9.1%
1950...	300	9.4%	55	7.1%	138	8.1%	59	7.6%	6	5.8%	558	8.6%
1951...												

‡First identified through death certificates.

STAGE OF DISEASE, NEW CASES OF PULMONARY TUBERCULOSIS
New York City, Since 1943

Borough Year	Stage of Disease						Un- known †	Dead ‡	Total New Cases
	Minimal		Mod. Adv.		Far Adv.				
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent			
MANHATTAN									
1943	586	30%	707	36%	670	34%	1099	364	3426
1944	447	23%	674	36%	771	41%	832	366	3090
1945	421	26%	567	34%	657	40%	770	398	2813
1946	448	23%	721	37%	768	40%	564	387	2888
1947	462	21%	801	36%	934	43%	486	484	3167
1948	488	20%	916	39%	964	41%	586	523	3477
1949	559	22%	1010	40%	976	38%	676	367	3588
1950	481	19%	997	40%	1029	41%	361	300	3168
BRONX									
1943	256	36%	280	40%	165	24%	321	119	1141
1944	184	30%	240	40%	178	30%	266	85	953
1945	134	28%	171	36%	172	36%	264	64	805
1946	156	32%	187	38%	148	30%	255	94	840
1947	174	29%	242	41%	178	30%	195	114	903
1948	196	31%	272	42%	175	27%	237	95	975
1949	204	30%	283	42%	192	28%	191	66	936
1950	132	23%	258	44%	194	33%	134	55	773
BROOKLYN									
1943	512	36%	546	38%	375	26%	821	206	2460
1944	342	27%	497	39%	434	34%	564	243	2080
1945	290	28%	406	39%	352	33%	436	229	1713
1946	315	28%	422	38%	379	34%	382	226	1724
1947	281	24%	471	41%	406	35%	325	296	1779
1948	324	24%	496	38%	496	38%	323	278	1917
1949	319	22%	564	38%	592	40%	264	161	1900
1950	279	20%	645	47%	457	33%	181	138	1700
QUEENS									
1943	266	37%	272	38%	176	25%	334	84	1132
1944	182	28%	315	49%	149	23%	236	83	965
1945	143	27%	232	44%	147	29%	191	73	786
1946	166	28%	263	45%	159	27%	178	72	838
1947	205	31%	285	43%	178	26%	144	82	894
1948	175	27%	309	48%	161	25%	155	92	892
1949	205	31%	333	50%	131	19%	96	68	833
1950	170	27%	302	47%	169	26%	74	59	774
RICHMOND									
1943	26	40%	20	30%	20	30%	44	14	124
1944	32	39%	36	44%	14	17%	44	15	141
1945	19	26%	41	56%	13	18%	34	8	115
1946	12	19%	33	53%	17	28%	23	11	96
1947	19	27%	27	38%	25	35%	13	5	89
1948	17	26%	23	35%	26	39%	23	9	98
1949	20	31%	27	42%	17	27%	15	8	87
1950	13	18%	40	56%	18	26%	26	6	103
NEW YORK CITY									
1943	1646	34%	1825	37%	1406	29%	2619	787	8283
1944	1187	27%	1762	39%	1546	34%	1942	792	7229
1945	1007	27%	1417	38%	1341	35%	1695	772	6232
1946	1097	26%	1626	39%	1471	35%	1402	790	6386
1947	1141	24%	1826	39%	1721	37%	1163	981	6832
1948	1200	24%	2016	40%	1822	36%	1324	997	7359
1949	1307	24%	2217	41%	1908	35%	1242	670	7344
1950	1075	21%	2242	43%	1867	36%	776	558	6518

†Stage of disease unknown. ‡Cases identified through death certificate or reported at time of death only.

NEW CASES OF TUBERCULOSIS*, WHITE, NEGRO, PUERTO RICAN AND YELLOW, BY HEALTH CENTER DISTRICT, NEW YORK CITY, SINCE 1943†

Health Center DISTRICT	WHITE					NEGRO					PUERTO RICAN					YELLOW					Health Center DISTRICT											
	1943	1944	1945	1946	1947	1948	1949	1950	1943	1944	1945	1946	1947	1948	1949	1950	1943	1944	1945	1946		1947	1948	1949	1950							
MANHATTAN:																								MANHATTAN:								
Central Harlem ...	52	43	38	43	46	35	56	49	641	682	640	655	661	727	771	705	6	8	6	7	16	20	19	20	7	4	2	1	2	3	0	Central Harlem...
East Harlem	183	135	113	136	162	200	233	202	66	62	64	77	86	120	119	102	111	114	130	130	145	173	172	172	0	2	2	4	2	2	2	East Harlem.....
Kips Bay-Yorkville	310	294	250	191	241	232	204	191	1	3	4	1	3	2	1	2	1	0	1	1	0	1	2	0	4	3	5	1	3	4	4	Kips Bay-Yorkville...
Lower East Side ..	324	363	345	421	535	566	588	561	27	16	20	20	30	59	48	65	4	4	5	8	29	23	40	68	44	49	29	31	38	39	39	Lower East Side ..
Lower West Side ..	361	389	423	452	474	563	579	589	25	23	25	25	20	29	40	57	7	2	5	4	15	27	25	43	94	65	52	41	36	40	47	Lower W. Side ..
Riverside	290	289	259	232	254	209	240	213	137	110	136	128	133	116	166	103	4	4	15	18	38	42	38	56	9	15	14	7	15	10	18	Riverside
Washington Hgts. .	237	189	184	140	148	151	155	124	143	142	117	186	156	177	179	155	4	8	14	12	16	14	23	23	3	4	1	4	5	4	4	Washington Hgts.
Manhattan	1777	1702	1612	1615	1860	1956	2013	1929	1040	1038	1006	1092	1089	1210	1324	1187	137	140	176	180	259	300	319	362	161	142	105	89	104	116	114	Manhattan
BRONX:																								BRONX:								
Ford'm-Riverdale .	146	124	117	115	123	142	110	78	3	0	2	1	0	1	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	Ford'm-Riverdale
Morrisania	191	127	104	113	128	125	131	141	49	69	82	98	113	138	159	124	6	8	12	14	27	46	33	38	0	0	1	2	1	1	1	Morrisania
Mott Haven	171	144	121	151	145	156	161	141	13	24	17	32	35	35	31	24	21	22	35	39	80	61	84	101	1	1	1	1	0	1	1	Mott Haven
Pelham Bay	53	66	43	38	37	54	46	40	0	1	6	3	0	3	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	Pelham Bay
Tremont	215	178	126	124	134	147	159	105	9	13	4	9	11	12	12	10	3	0	1	4	1	5	6	6	1	2	0	0	0	2	0	Tremont
Westchester	104	84	99	82	98	93	94	78	0	2	1	0	2	1	2	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0	Westchester
BRONX	880	723	610	623	665	715	701	583	74	109	112	143	161	190	206	162	30	30	48	57	109	113	124	145	4	3	2	3	1	5	6	BRONX
BROOKLYN:																								BROOKLYN:								
Bay Ridge	245	196	164	158	145	165	138	119	1	2	3	1	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	1	0	0	Bay Ridge
Bedford	142	114	109	105	91	98	110	94	145	157	197	187	195	242	305	250	0	0	0	0	0	2	2	3	0	0	0	0	0	1	1	Bedford
Brownsville	157	129	113	101	112	106	109	104	29	27	24	23	36	48	57	59	0	0	1	0	0	0	1	0	0	5	2	0	0	0	0	Brownsville
Bushwick	169	137	122	163	130	134	156	149	7	8	11	13	7	10	16	13	3	0	1	1	2	6	11	6	0	0	0	0	1	1	1	Bushwick
Flatbush	316	197	181	170	167	186	155	150	5	4	4	3	8	4	5	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	Flatbush
Fort Greene	152	136	137	117	166	154	153	153	83	75	71	54	77	100	122	115	3	2	4	13	12	16	31	10	1	1	1	1	1	5	4	Fort Greene
Gravesend	159	87	71	92	94	70	80	87	2	2	5	0	4	9	7	4	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	Gravesend
Red Hook-Gowanus .	218	192	181	179	169	194	192	161	18	10	9	10	23	21	24	14	8	17	18	25	36	39	44	26	6	13	9	10	5	4	6	Red Hook-Gowanus
Sunset Park	217	223	161	180	144	184	154	154	0	0	0	1	0	2	0	0	0	2	1	0	0	0	0	0	2	1	0	0	2	0	0	Sunset Park
Wmsbrg.-Greenpt. .	189	169	159	164	199	180	165	155	13	13	5	14	12	25	17	10	9	4	3	11	12	27	15	17	2	5	1	3	0	1	2	Wmsbrg.-Greenpt.
Brooklyn	1964	1580	1398	1429	1417	1471	1412	1328	303	298	329	306	362	461	554	472	23	25	29	51	63	90	104	63	11	28	14	14	12	13	15	Brooklyn
QUEENS:																								QUEENS:								
Astoria-L.I.City .	231	196	140	163	166	173	160	160	1	3	1	0	1	3	3	2	1	0	0	2	0	1	1	1	0	1	0	3	1	1	1	Astoria-L.I.City
Corona	137	127	98	107	139	125	110	82	17	14	18	12	15	21	24	21	0	0	0	0	0	0	2	0	0	1	1	1	1	0	0	Corona
Flushing	115	97	90	130	131	121	123	123	4	23	7	8	11	4	6	4	0	1	0	1	0	0	0	0	2	0	0	1	2	0	2	Flushing
Jamaica East	115	128	111	134	128	116	125	108	30	29	34	43	33	47	49	60	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	Jamaica East
Jamaica West	191	153	120	134	124	172	131	123	6	3	4	4	16	18	13	16	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	Jamaica West
Maspeth-For.Hills.	186	160	127	105	117	113	133	109	1	0	1	0	0	0	4	2	0	0	0	0	0	0	1	0	2	0	0	0	0	1	2	Maspeth-For.Hills
Queens	975	863	686	773	805	830	780	705	59	72	65	67	76	93	99	105	1	1	1	3	0	2	3	1	4	3	1	3	6	5	2	Queens
RICHMOND:																								RICHMOND:								
Richmond	102	147	110	98	95	100	80	103	14	8	10	5	7	5	7	8	0	0	0	0	0	0	0	3	1	3	2	0	0	1	2	Richmond
NEW YORK CITY	5698	5015	4416	4538	4842	5072	4986	4646	1490	1525	1522	1613	1695	1959	2190	1934	191	196	254	291	431	505	550	574	181	179	124	109	123	139	121	NEW YORK CITY ..

*Tuberculosis all forms.
 †Data by race and health center district not available prior to 1943.

Borough	Other races					Race unknown					Total all races†														
	1943	1944	1945	1946	1947	1948	1949	1950	1943	1944	1945	1946	1947	1948	1949	1950	1943	1944	1945	1946	1947	1948	1949	1950	
Manhattan	4	3	2	6	6	7	8	4	578	437	320	273	278	399	519	251	3697	3462	3221	3255	3596	3988	4280	3847	Borough
Bronx	2	0	0	1	1	1	0	1	251	209	167	118	81	80	74	50	1241	1074	939	945	1018	1104	1111	944	Manhattan
Brooklyn	6	9	4	5	5	3	5	3	335	309	148	100	80	91	76	78	2642	2249	1922	1905	1939	2129	2166	1948	Bronx
Queens	0	0	2	0	1	1	1	0	199	88	102	69	54	45	32	41	1238	1027	857	915	942	976	917	859	Brooklyn
Richmond	0	0	0	0	0	0	0	0	15	3	1	0	2	4	5	3	132	161	123	103	104	109	93	119	Queens
New York City.	12	12	8	12	13	12	14	8	1378	1046	738	560	495	619	706	423	8950	7973	7062	7123	7599	8306	8567	7717	Richmond
New York City.																								New York City.	

†White, Negro, Puerto Rican, Yellow, other and unknown.

NEW CASES OF TUBERCULOSIS, ALL RACES†, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	Un- known	All Ages
MALE													
1944	101	60	58	234	328	416	484	1024	973	766	421	284	5149
1945	111	67	56	189	233	309	335	731	925	715	415	236	4322
1946	144	69	41	162	315	316	286	788	960	684	424	222	4411
1947	147	60	42	136	401	338	313	814	1018	806	441	194	4710
1948	179	80	45	171	383	392	343	842	1154	844	578	168	5179
1949	154	105	52	167	396	450	390	909	1116	818	602	148	5307
1950	188	86	36	130	394	383	319	794	1034	788	578	124	4854
FEMALE													
1944	63	53	66	268	436	379	352	456	230	158	157	115	2733
1945	121	58	67	253	414	408	293	393	215	136	150	143	2651
1946	95	56	51	262	480	406	329	414	217	146	121	122	2699
1947	120	63	65	228	489	482	330	408	246	158	165	135	2889
1948	166	70	57	253	546	493	369	466	260	153	178	116	3127
1949	191	100	79	223	512	494	378	571	254	159	191	108	3260
1950	165	84	80	224	459	412	338	464	256	155	162	64	2863
TOTAL BOTH SEXES													
1944	165	113	124	505	769	802	844	1495	1208	936	585	427	7973
1945	234	125	123	444	655	720	635	1129	1152	862	570	413	7062
1946	240	125	92	425	796	722	615	1203	1181	831	545	348	7123
1947	267	123	107	364	890	820	643	1222	1264	964	606	329	7599
1948	345	150	102	424	929	885	712	1308	1414	997	756	284	8306
1949	345	205	131	390	908	944	768	1480	1370	977	793	256	8567
1950	353	170	116	354	853	795	657	1258	1290	943	740	188	7717

NOTE: Totals include new cases whose age or sex was not known. †White, Negro, Puerto Rican, Yellow, Other and unknown.

RATE* OF NEW CASE REGISTRATION, TUBERCULOSIS, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	All Ages
MALE												
1944	38	24	22	86	111	130	152	161	180	219	190	138
1945	40	26	22	71	80	98	107	115	169	199	180	115
1946	50	27	16	63	109	100	92	125	175	185	177	117
1947	49	23	17	54	140	107	102	130	184	213	178	125
1948	57	30	19	71	135	124	113	135	207	217	225	136
1949	47	39	22	71	141	143	130	146	199	205	227	139
1950	55	32	16	57	141	122	108	128	183	193	210	127
FEMALE												
1944	25	22	26	95	130	103	99	68	44	46	59	70
1945	45	23	27	92	124	112	83	58	40	38	54	67
1946	34	22	21	98	145	112	94	61	40	40	42	68
1947	41	25	27	87	149	134	95	60	44	42	55	72
1948	55	27	25	99	168	138	107	68	46	40	58	78
1949	61	38	35	90	158	139	110	83	44	40	60	81
1950	50	32	37	93	143	117	99	67	44	38	49	70
TOTAL BOTH SEXES												
1944	31	23	24	91	122	117	126	115	113	135	120	104
1945	43	25	24	82	105	106	95	86	106	122	112	92
1946	42	25	19	81	128	106	93	92	108	113	103	92
1947	45	24	22	71	145	121	98	93	114	128	111	98
1948	56	29	22	85	152	132	110	100	126	129	133	106
1949	54	39	29	81	150	141	119	113	121	123	135	109
1950	53	32	26	76	142	120	103	96	112	116	122	98

*Per 100,000 population in each age group.

NEW CASES OF TUBERCULOSIS AMONG WHITE POPULATION, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	Un-known	All Ages
WHITE MALE													
1944	40	21	18	135	186	274	319	661	712	588	352	120	3426
1945	47	28	24	100	131	168	211	489	670	581	349	108	2906
1946	63	28	12	80	192	196	155	517	735	569	368	100	3015
1947	60	20	16	72	218	182	191	521	768	661	374	121	3204
1948	77	20	12	93	196	195	184	524	830	668	490	94	3383
1949	70	34	18	85	191	227	189	515	784	625	483	75	3296
1950	83	43	12	77	210	195	150	463	779	639	495	66	3212
WHITE FEMALE													
1944	30	22	16	131	218	213	208	276	149	124	131	60	1578
1945	58	16	26	122	202	216	162	254	147	101	123	62	1489
1946	43	17	15	139	238	227	188	242	144	110	107	52	1522
1947	47	20	23	118	239	250	182	261	169	122	136	71	1638
1948	61	19	26	134	274	237	196	276	163	105	147	51	1689
1949	78	28	32	94	224	240	192	336	153	114	147	52	1690
1950	65	27	26	97	213	169	164	243	162	112	128	28	1434
WHITE BOTH SEXES													
1944	70	43	34	267	405	488	529	938	864	712	483	182	5015
1945	105	44	50	223	334	385	375	746	821	684	475	174	4416
1946	106	45	27	219	430	423	343	759	880	679	475	152	4538
1947	107	40	39	190	457	432	373	782	937	783	510	192	4842
1948	138	39	38	227	470	432	380	800	993	773	637	145	5072
1949	148	62	50	179	415	467	381	851	937	739	630	127	4986
1950	148	70	38	174	423	364	314	706	941	751	623	94	4646

NEW CASES OF TUBERCULOSIS AMONG NEGRO POPULATION, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	Un-known	All Ages
NEGRO MALE													
1944	41	20	28	70	89	81	91	177	109	56	26	26	814
1945	39	20	27	66	69	85	76	133	136	54	27	34	766
1946	48	31	23	62	79	73	85	171	132	56	30	27	817
1947	43	28	17	33	112	109	81	196	168	73	27	19	906
1948	57	34	22	48	112	126	94	193	197	98	45	18	1044
1949	52	39	15	51	121	148	144	256	181	118	51	17	1193
1950	62	26	14	33	102	118	109	237	168	82	58	8	1017
NEGRO FEMALE													
1944	23	22	33	92	141	104	91	105	49	17	17	16	710
1945	34	26	28	96	141	128	83	103	46	22	21	28	756
1946	34	26	26	84	179	138	97	119	50	20	4	19	796
1947	42	32	30	85	147	154	103	107	44	17	19	9	789
1948	62	32	24	81	171	169	114	133	65	34	18	12	915
1949	81	43	34	85	180	159	133	155	72	21	26	8	997
1950	63	34	31	79	155	163	125	142	64	32	22	7	917
NEGRO BOTH SEXES													
1944	64	42	61	162	230	185	182	283	158	73	43	42	1525
1945	73	46	55	162	210	213	159	236	182	76	48	62	1522
1946	82	57	49	146	258	211	182	290	182	76	34	46	1613
1947	85	60	47	118	259	263	184	303	212	90	46	28	1695
1948	119	66	46	129	283	295	208	326	262	132	63	30	1959
1949	133	82	49	136	301	307	277	411	253	139	77	25	2190
1950	125	60	45	112	257	281	234	379	232	114	80	15	1934

NOTE: Totals include new cases whose age or sex was not known.

NEW CASES OF TUBERCULOSIS AMONG PUERTO RICAN POPULATION, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	Un-known	All Ages
PUERTO RICAN MALE													
1944	6	4	1	5	12	12	11	24	12	2	2	7	98
1945	15	6	0	11	16	26	11	16	13	4	2	3	123
1946	14	4	4	12	18	16	10	22	11	5	4	4	124
1947	23	9	8	19	36	23	19	28	12	6	5	3	191
1948	26	18	5	18	36	27	24	37	12	8	3	2	216
1949	21	28	9	20	39	36	21	30	17	10	3	2	236
1950	38	13	7	15	58	30	25	34	9	12	2	1	244
PUERTO RICAN FEMALE													
1944	6	3	5	11	22	17	11	15	5	1	1	1	98
1945	20	9	5	14	22	20	17	10	7	4	0	3	131
1946	9	10	5	22	28	18	25	30	7	9	2	2	167
1947	21	7	9	11	55	49	33	21	16	10	2	6	240
1948	27	14	4	29	57	51	41	30	16	11	6	3	289
1949	26	26	10	28	63	56	29	48	10	8	6	4	314
1950	33	20	17	36	63	56	31	48	13	6	4	3	330
PUERTO RICAN BOTH SEXES													
1944	12	7	6	16	34	29	22	39	17	3	3	8	196
1945	35	15	5	25	38	46	28	26	20	8	2	6	254
1946	23	14	9	34	46	34	35	52	18	14	6	6	291
1947	44	16	17	30	91	72	52	49	28	16	7	9	431
1948	53	32	9	47	93	78	65	67	28	19	9	5	505
1949	47	54	19	48	102	92	50	78	27	18	9	6	550
1950	71	33	24	51	121	86	56	82	22	18	6	4	574

NEW CASES OF TUBERCULOSIS AMONG YELLOW POPULATION, BY AGE AND SEX
NEW YORK CITY, SINCE 1944

Age	0-4	5-	10-	15-	20-	25-	30-	35-	45-	55-	65+	Un-known	All Ages
YELLOW MALE													
1944	0	0	0	8	11	21	20	45	30	27	6	2	170
1945	0	0	0	3	2	9	13	25	24	19	16	1	112
1946	1	1	0	2	4	11	6	24	27	16	6	4	102
1947	0	1	0	1	4	9	10	23	24	26	11	2	111
1948	0	1	1	0	3	8	11	28	37	22	12	2	125
1949	2	0	1	3	4	2	8	16	31	17	14	4	102
1950	1	0	0	1	7	13	10	22	22	24	9	3	112
YELLOW FEMALE													
1944	0	0	2	1	0	2	0	1	2	0	0	1	9
1945	0	0	2	3	1	1	1	1	0	0	0	0	9
1946	0	0	1	1	1	2	1	0	1	0	0	0	7
1947	0	1	1	1	5	4	0	0	0	0	0	0	12
1948	1	1	1	2	2	3	2	2	0	0	0	0	14
1949	0	0	0	3	7	2	3	2	2	0	0	0	19
1950	4	0	1	2	2	6	1	1	3	0	0	0	20
YELLOW BOTH SEXES													
1944	0	0	2	9	11	23	20	46	32	27	6	3	179
1945	0	0	2	6	4	10	14	27	24	19	16	2	124
1946	1	1	1	3	5	13	7	24	28	16	6	4	109
1947	0	2	1	2	9	13	10	23	24	26	11	2	123
1948	1	2	2	2	5	11	13	30	37	22	12	2	139
1949	2	0	1	6	11	4	11	18	33	17	14	4	121
1950	5	0	1	3	9	18	11	23	25	24	9	3	132

NOTE: Totals include new cases whose age or sex was not known.

TUBERCULOSIS MORBIDITY. NEW YORK CITY

CLASSIFIED REGISTER

1908-1950

TUBERCULOSIS REGISTER, NEW YORK CITY, SINCE 1908

Year	Cases in Register Jan. 1	New Cases during Year #	Old Cases Re-sumed	Total Cases during Year ‡	Cases Removed during Year ¶	Remaining in Register Dec. 31
Pulmonary*						
1908+	33,421	23,325	0	56,746	27,010	29,736
1909	29,736	25,667	703	56,106	19,454	36,652
1910	36,652	32,065	1,543	70,260	42,783	27,477
1911	27,477	24,513	5,248	57,238	24,603	32,635
1912	32,635	22,752	3,315	58,702	27,490	31,212
1913	31,212	22,671	3,435	57,318	27,879	29,439
1914	29,439	21,604	+3,000	54,043	21,649	32,394
1915	32,394	22,141	+2,500	57,035	18,615	38,420
1916	38,420	19,297	+2,000	59,717	23,659	36,058
1917	36,058	17,494	+1,500	55,052	21,175	33,877
1918	33,877	14,439	897	49,213	17,165	32,048
1919	32,048	14,570	1,429	48,047	18,011	30,036
1920	30,036	14,035	1,477	45,548	17,629	27,919
1921	27,919	12,966	922	41,807	14,987	26,820
1922	26,820	13,329	1,088	41,237	13,696	27,541
1923	27,541	11,336	672	39,549	11,730	27,819
1924	27,819	11,934	706	40,459	11,988	28,471
1925	28,471	10,955	612	40,038	12,866	27,172
1926	27,172	10,498	612	38,282	11,876	26,406
1927	26,406	10,873	406	37,685	10,500	27,185
1928	27,185	11,614	509	39,308	11,088	28,220
1929	28,220	11,938	582	40,740	15,902	24,838
1930	24,838	11,821	1,128	37,787	18,921	††18,866
1931	18,866	11,794	961	31,621	12,463	19,158
1932	19,158	10,589	1,104	30,851	13,206	17,645
1933	17,645	9,991	1,345	28,981	13,038	15,943
1934	15,943	9,990	1,448	27,381	11,460	15,921
1935	15,921	8,796	1,830	26,547	10,026	16,521
1936	16,521	8,987	2,307	27,815	10,722	17,093
1937	17,093	9,128	2,216	28,437	9,362	19,075
1938	19,075	8,748	1,976	29,799	10,041	19,758
1939	19,758	8,277	2,084	30,119	30,119	19,485
1940	19,485	8,212	2,152	29,849	10,003	19,846
1941	19,846	8,459	2,012	30,317	9,505	20,812
1942	20,812	9,145	1,660	31,617	9,914	21,703
1943	21,703	8,283	1,752	31,738	12,504	x19,234
1944	19,429	7,229	1,997	28,655	10,509	18,146
1945	18,146	6,232	1,608	25,986	8,696	17,290
Tuberculosis all forms						
1946	17,614	7,123	1,441	26,178	8,727	17,451
1947	17,451	7,599	1,560	26,610	8,821	17,789
1948	17,789	8,306	1,874	27,969	9,449	18,520
1949	18,520	8,567	2,081	29,168	9,092	20,076
1950	20,076	7,717	2,224	30,017	10,958	19,059

*For "phthisis" or pulmonary cases, 1908-1945, thereafter tuberculosis all forms. †Complete data not available prior to 1908. ‡Reports by physicians, "sputum", clinics, institutions, or from death certificates. ††Figures not available from 1914 to 1917; estimated on basis of known range. ‡‡Exclusive of duplicating transfers between districts. ¶Deaths, removals from city, "not found" held temporarily, recovered. †††In 1930 a change of procedure was inaugurated whereby the register of "at home" and "not found" cases was reduced. x195 transfers included.

TOTAL REGISTER OF TUBERCULOSIS CASES BY BOROUGH, NEW YORK CITY, SINCE 1934

Year	Cases in Register Jan. 1	New Cases during Year	Old Cases Re-sumed	Total Cases during Year	Cases Removed during Year	Remaining in Register Dec. 31
MANHATTAN (Pulmonary cases)						
1934	5,903	4,713	689	11,305	5,339	5,966
1935	5,966	4,095	881	10,942	4,598	6,344
1936	6,344	4,142	1,150	11,636	5,008	6,628
1937	6,628	4,571	1,078	12,277	4,456	7,821
1938	7,821	4,335	972	13,128	4,884	8,244
1939	8,244	3,901	1,022	13,167	5,144	8,023
1940	8,023	3,825	1,061	12,909	4,709	8,200
1941	8,200	3,859	941	13,000	4,495	8,505
1942	8,505	4,000	799	13,304	4,593	8,711
1943	8,711	3,426	725	12,862	5,089	7,773†
1944	7,633	3,090	923	11,646	4,887	6,759
1945	6,759	2,813	689	10,261	3,695	6,566
MANHATTAN (Cases, all forms)						
1946	6,721	3,255	589	10,565	3,676	6,889
1947	6,889	3,596	707	11,192	3,999	7,193
1948	7,193	3,988	790	11,971	4,359	7,612
1949	7,612	4,280	938	12,830	4,312	8,518
1950	8,518	3,847	1,052	13,417	4,883	8,534
1951						
1952						
1953						
1954						
BRONX (Pulmonary cases)						
1934	2,716	1,324	267	4,307	1,645	2,662
1935	2,662	1,229	300	4,191	1,318	2,873
1936	2,873	1,123	368	4,364	1,564	2,800
1937	2,800	1,170	398	4,368	1,167	3,201
1938	3,201	1,045	296	4,542	1,431	3,111
1939	3,111	1,073	312	4,496	1,429	3,067
1940	3,067	979	315	4,361	1,305	3,056
1941	3,056	1,082	304	4,442	1,276	3,166
1942	3,166	1,124	231	4,521	1,209	3,312
1943	3,312	1,141	284	4,737	1,933	2,804†
1944	2,938	953	286	4,177	1,271	2,906
1945	2,906	805	245	3,956	1,219	2,737
BRONX (Cases, all forms)						
1946	2,786	945	211	3,942	1,239	2,703
1947	2,703	1,018	199	3,920	1,126	2,794
1948	2,794	1,104	268	4,166	1,185	2,981
1949	2,981	1,111	278	4,370	1,309	3,061
1950	3,061	944	279	4,284	1,638	2,646
1951						
1952						
1953						
1954						

† See note on page 26.

TOTAL REGISTER OF TUBERCULOSIS CASES BY BOROUGHES, NEW YORK CITY, SINCE 1934

Year	Cases in Register Jan. 1	New Cases during Year	Old Cases Re- sumed	Total Cases during Year	Cases Removed during Year	Remaining in Register Dec. 31
BROOKLYN (Pulmonary cases)						
1934	5,057	2,711	344	8,112	3,139	4,973
1935	4,973	2,408	474	7,855	2,924	4,931
1936	4,931	2,623	567	8,121	2,947	5,174
1937	5,174	2,300	460	7,934	2,611	5,323
1938	5,323	2,168	501	7,992	2,556	5,436
1939	5,436	2,222	542	8,200	2,735	5,465
1940	5,465	2,284	535	8,284	2,743	5,541
1941	5,541	2,301	509	8,351	2,478	5,873
1942	5,873	2,603	403	8,879	2,768	6,111
1943	6,111	2,460	487	9,058	3,640	5,418†
1944	5,540	2,080	517	8,137	2,849	5,288
1945	5,288	1,713	415	7,416	2,449	4,967
BROOKLYN (Cases, all forms)						
1946	5,060	1,905	383	7,348	2,436	4,912
1947	4,912	1,939	420	7,271	2,493	4,778
1948	4,778	2,129	508	7,415	2,543	4,872
1949	4,872	2,166	569	7,607	2,296	5,311
1950	5,311	1,948	559	7,818	2,820	4,998
1951						
1952						
1953						
1954						
QUEENS (Pulmonary cases)						
1934	1,992	1,068	130	3,190	1,164	2,026
1935	2,026	942	154	3,122	1,031	2,091
1936	2,091	958	199	3,248	1,030	2,218
1937	2,218	978	243	3,439	1,007	2,432
1938	2,432	1,086	181	3,699	1,036	2,663
1939	2,663	954	180	3,797	1,177	2,620
1940	2,620	997	207	3,824	1,095	2,729
1941	2,729	1,105	236	4,070	1,100	2,970
1942	2,970	1,292	202	4,464	1,223	3,241
1943	3,241	1,132	229	4,602	1,655	2,947†
1944	3,036	965	241	4,242	1,367	2,875
1945	2,875	786	236	3,897	1,162	2,735
QUEENS (Cases, all forms)						
1946	2,757	915	223	3,895	1,257	2,638
1947	2,638	942	199	3,779	1,079	2,700
1948	2,700	976	265	3,941	1,174	2,767
1949	2,767	917	255	3,939	1,032	2,907
1950	2,907	859	304	4,070	1,475	2,595
1951						
1952						
1953						
1954						

† See note on page 26.

TOTAL REGISTER OF TUBERCULOSIS CASES BY BOROUGH, NEW YORK CITY, SINCE 1934

Year	Cases in Register Jan. 1	New Cases during Year	Old Cases Re-sumed	Total Cases during Year	Cases Removed during Year	Remaining in Register Dec. 31
RICHMOND (Pulmonary cases)						
1934	275	174	18	467	173	294
1935	294	122	21	437	155	282
1936	282	141	23	446	173	273
1937	273	109	37	419	121	298
1938	298	114	26	438	134	304
1939	304	127	28	459	149	310
1940	310	127	34	471	151	320
1941	320	112	22	454	156	298
1942	298	126	25	449	121	328
1943	328	124	27	479	187	292†
1944	282	141	30	453	135	318
1945	318	115	23	456	171	285
RICHMOND (Cases, all forms)						
1946	290	103	35	428	119	309
1947	309	104	35	448	124	324
1948	324	109	43	476	188	288
1949	288	93	41	422	143	279
1950	279	119	30	428	142	286
1951						
1952						
1953						
1954						
NEW YORK CITY (Pulmonary cases)						
1934	15,943	9,990	1,448	27,381	11,460	15,921
1935	15,921	8,796	1,830	26,547	10,026	16,521
1936	16,521	8,987	2,307	27,815	10,722	17,093
1937	17,093	9,128	2,216	28,437	9,362	19,075
1938	19,075	8,748	1,976	29,799	10,041	19,758
1939	19,758	8,277	2,084	30,119	10,634	19,485
1940	19,485	8,212	2,152	29,849	10,003	19,846
1941	19,846	8,459	2,012	30,317	9,505	20,812
1942	20,812	9,145	1,660	31,617	9,914	21,703
1943	21,703	8,283	1,752	31,738	12,504	19,234†
1944	19,429	7,229	1,997	28,655	10,509	18,146
1945	18,146	6,232	1,608	25,986	8,696	17,290
NEW YORK CITY (Cases, all forms)						
1946	17,614	7,123	1,441	26,178	8,727	17,451
1947	17,451	7,599	1,560	26,610	8,821	17,789
1948	17,789	8,306	1,874	27,969	9,449	18,520
1949	18,520	8,567	2,081	29,168	9,092	20,076
1950	20,076	7,717	2,224	30,017	10,958	19,059
1951						
1952						
1953						
1954						

†City total lacks 195 (1%) cases which were not included due to difficulty of classification.

CLASSIFICATION OF PULMONARY TUBERCULOSIS* REGISTER AT THE END OF EACH YEAR
NEW YORK CITY, SINCE 1908

Year	Under Care of Private Physicians	Under Care of Clinics†	In Institutions With- in City	Out-of-Town or in Sana- toria	"At Home" Cases ‡	Not Found where Regis- tered	Remaining in Register, Dec. 31
**							
1908	6,093	4,446	3,401	534	6,491	8,771	29,736
1909	5,843	5,476	3,980	802	11,863	8,688	36,652
1910	2,838	5,736	3,648	2,445	6,082	6,728	27,477
1911	3,591	5,679	3,300	2,001	7,199	10,865	32,635
1912	3,035	6,253	4,716	2,580	6,459	8,169	31,212
1913	3,362	5,503	4,873	2,377	7,314	6,010	29,439
1914	3,386	5,614	5,671	2,480	8,074	7,169	32,394
1915	3,607	5,822	6,268	2,765	8,619	11,339	38,420
1916	3,923	4,602	6,651	2,888	9,668	8,326	36,058
1917	3,816	4,282	5,272	2,784	9,251	8,472	33,877
1918	3,107	4,839	4,775	2,766	7,082	9,479	32,048
1919	3,697	3,535	4,556	2,774	8,540	6,934	30,036
1920	3,193	3,485	3,394	3,035	9,449	5,363	27,919
1921	2,600	3,427	3,235	3,179	9,495	4,884	26,820
1922	2,840	3,815	3,041	3,177	8,540	6,128	27,541
1923	3,030	3,408	3,559	3,232	8,662	5,928	27,819
1924	3,436	3,097	3,753	3,083	8,988	6,114	28,471
1925	2,980	2,961	3,715	3,078	8,692	5,746	27,172
1926	3,456	2,635	3,303	2,954	8,428	5,630	26,406
1927	3,435	2,413	3,562	3,040	8,789	5,946	27,185
1928	3,965	2,269	3,596	3,079	8,639	6,672	28,220
1929	3,172	2,136	3,483	3,099	7,714	5,234	24,838
1930	3,252	2,344	3,497	3,021	‡5,182	‡1,570	‡18,866
1931	2,908	2,635	3,962	3,219	5,397	1,037	19,158
1932	2,885	2,834	4,513	2,947	3,631	835	17,645
1933	3,091	3,007	4,520	2,670	2,585	70	15,943
1934	3,338	3,281	4,446	2,355	2,470	31	15,921
1935	3,465	3,893	4,612	2,335	2,191	25	16,521
1936	3,712	4,122	4,655	2,365	2,225	14	17,093
1937	4,163	5,676	4,662	2,431	2,143	...	19,075
1938	4,540	6,156	4,961	2,331	1,770	...	19,758
1939	4,718	6,210	4,916	2,343	1,298	...	19,485
1940	4,975	6,133	5,255	2,329	1,154	...	19,846
1941	5,151	6,234	5,763	2,433	1,231	...	20,812
1942	5,655	6,419	5,627	2,470	1,532	...	21,703
1943	5,040	5,698	4,753	2,379	1,559	...	‡19,429
1944	4,846	4,941	4,501	2,374	298	+1,186	18,146
1945	4,456	4,576	4,420	2,379	234	+1,225	17,290
1946	4,144	4,118	4,465	2,449	477	+1,262	16,915
1947	3,976	4,206	4,940	2,445	556	+ 993	17,116
1948	3,631	4,579	5,393	2,475	558	+1,082	17,718
1949	3,572	5,232	6,097	2,511	472	+1,177	19,061
1950	2,770	4,951	6,338	2,503	352	+1,071	17,985

*For "phthisis" or pulmonary cases only. **Complete data not available prior to 1908. †Previously registered cases, who, on day of classification, were not under medical care either at clinics or institutions, or by private physicians. ‡Includes both Health Department clinic cases and those of other clinics. †Beginning in 1930 a change of procedure was inaugurated whereby the register of "at home" and "not found" cases was reduced. ‡Difference of 195 (1%) in total remaining on register due to difficulty of identifying and adjusting transfers. +"Pending", type of care not confirmed.

TOTAL TUBERCULOSIS CASES, ALL FORMS

According to the Department of Health Register on the last day of the year for each Health Center District, New York City, since 1941

Health Center DISTRICT	Total Tuberculosis Cases in Register									
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:										
Central Harlem...	2145	2186	1973	1521	1432	1633	1769	1902	2076	2114
East Harlem	896	929	706	653	666	680	765	959	1053	1081
Kips Bay-York....	747	743	615	677	702	662	646	579	603	581
Lower East Side..	1883	1717	1362	1210	1182	1175	1223	1342	1715	1741
Lower West Side..	1101	1200	1110	1049	1124	1105	1125	1220	1460	1518
Riverside	922	1022	990	892	855	850	910	851	797	780
Washington Hgts..	816	920	885	793	760	784	755	759	814	719
Manhattan	8510	8717	7641	6795	6721	6889	7193	7612	8514	8534
BRONX:										
Ford'm-Riverdale.	475	476	392	376	383	356	351	371	336	297
Morrisania	686	730	622	618	593	616	672	769	833	744
Mott Haven	608	625	612	628	630	628	708	752	793	689
Pelham Bay	247	278	247	242	234	213	191	203	200	168
Tremont	720	732	664	666	570	532	492	503	521	464
Westchester	430	472	401	390	376	358	380	383	378	284
Bronx	3166	3313	2938	2920	2786	2703	2794	2981	3061	2646
BROOKLYN:										
Bay Ridge	673	703	695	613	555	500	473	477	513	410
Bedford	786	851	758	717	748	697	648	653	753	728
Brownsville	566	527	451	418	365	364	391	408	491	477
Bushwick	541	539	507	468	461	500	497	468	476	481
Flatbush	728	786	717	714	717	658	609	591	578	509
Fort Greene	534	543	509	491	509	533	521	532	616	654
Gravesend	449	463	386	385	331	316	281	257	270	256
Red Hook-Gowanus.	547	539	511	482	463	421	456	510	595	526
Sunset Park	522	611	537	525	461	472	418	463	510	447
Wmsbrg.-Greenpt..	533	549	470	493	450	451	484	513	509	510
Brooklyn	5879	6111	5541	5306	5060	4912	4778	4872	5311	4998
QUEENS:										
Astoria-L. I. City.	648	687	672	675	623	540	503	503	543	527
Corona	416	465	410	388	378	375	402	404	431	387
Flushing	411	406	377	338	323	316	357	389	412	396
Jamaica East	500	581	496	478	498	525	526	559	552	438
Jamaica West	522	587	587	527	497	464	502	497	505	419
Maspeth-For. Hills	474	519	494	476	438	418	410	415	464	428
Queens	2971	3245	3036	2882	2757	2638	2700	2767	2907	2595
RICHMOND:										
Richmond	298	328	282	322	290	309	324	288	279	286
NEW YORK CITY ...	20824	21714	19438	18225	17614	17451	17789	18520	20076	19059

Note: Classification of tuberculosis register (cases all forms) by health center districts not available prior to 1941.

TUBERCULOSIS REGISTER, BY AGE, SEX AND COLOR, NEW YORK CITY
December 31st of Each Year, Since 1948

Color Year	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+	Unk.	All Ages
WHITE MALE													
1948	86	51	14	139	509	673	673	1633	1878	1479	724	136	7995
1949	91	64	25	117	506	688	691	1655	2041	1582	858	141	8459
1950	93	68	15	99	456	604	577	1468	1972	1673	913	138	8076
1951													
WHITE FEMALE													
1948	79	34	34	239	670	827	765	1095	535	293	242	82	4895
1949	100	53	40	212	571	812	785	1202	542	307	277	94	4995
1950	84	58	31	182	534	655	640	1043	544	271	289	65	4396
1951													
WHITE BOTH SEXES													
1948	165	85	48	378	1179	1500	1438	2728	2413	1772	966	218	12890
1949	191	117	65	329	1077	1500	1476	2857	2583	1889	1135	235	13454
1950	177	126	46	281	990	1259	1217	2511	2516	1944	1202	203	12472
1951													
NONWHITE MALE													
1948	108	110	55	104	278	316	301	532	411	185	63	28	2491
1949	125	137	62	111	310	379	379	597	463	249	82	32	2926
1950	154	137	52	87	305	399	367	642	479	218	90	71	3001
1951													
NONWHITE FEMALE													
1948	99	87	56	185	411	472	367	392	145	66	35	21	2336
1949	128	127	58	211	495	489	387	474	172	63	42	12	2658
1950	143	138	72	208	454	525	409	484	166	72	40	13	2724
1951													
NONWHITE BOTH SEXES													
1948	207	197	111	289	689	788	668	924	556	251	98	49	4827
1949	253	264	120	322	805	868	766	1071	635	312	124	44	5584
1950	297	275	124	295	759	924	776	1126	645	290	130	84	5725
1951													
MALES ALL RACES													
1948†	224	170	72	258	839	1037	1012	2229	2381	1711	814	238	10985
1949†	237	211	93	245	878	1120	1119	2357	2639	1922	999	248	12068
1950†	262	220	70	194	811	1054	999	2192	2553	1962	1042	289	11648
1951													
FEMALES ALL RACES													
1948†	197	126	96	434	1138	1341	1156	1526	707	369	285	160	7535
1949†	238	190	103	435	1128	1356	1205	1723	745	389	330	166	8008
1950†	233	205	106	405	1036	1229	1083	1563	736	358	341	116	7411
1951													
TOTAL ALL RACES													
1948	421	296	168	692	1977	2378	2168	3755	3088	2080	1099	398	18520
1949	475	401	196	680	2006	2476	2324	4080	3384	2311	1329	414	20076
1950	495	425	176	599	1847	2283	2082	3755	3289	2320	1383	405	19059
1951													

†Included are following number of cases, color not stated: 1948=M.499, F.304; 1949=M.683, F.355; 1950=M.571, F.291.

TUBERCULOSIS REGISTER, ACCORDING TO RACE AND SEX, HEALTH CENTER DISTRICTS, NEW YORK CITY, ON DECEMBER 31ST, 1948, 1949 AND 1950

Health Center DISTRICT	WHITE						NONWHITE						ALL RACES*						Health Center DISTRICT									
	Male			Female			Both Sexes			Male			Female			Both Sexes												
	1948	1949	1950	1948	1949	1950	1948	1949	1950	1948	1949	1950	1948	1949	1950	1948	1949	1950										
MANHATTAN:																												
Central Harlem ...	69	76	75	30	33	32	99	109	107	873	966	1019	828	888	897	1701	1854	1916	1008	1114	1158	894	962	956	1902	2076	2114	MANHATTAN: Central Harlem ...
East Harlem	218	247	252	185	183	177	403	430	429	238	290	297	286	309	333	523	599	630	472	549	557	487	504	524	959	1053	1081	East Harlem
Kips Bay-Yorkville ..	340	344	341	199	213	207	539	557	548	7	10	10	3	4	8	10	14	18	363	374	360	216	229	221	579	603	581	Kips Bay-Yorkville ..
Lower East Side ..	730	941	954	296	284	281	1026	1225	1235	138	171	213	46	69	113	184	240	326	974	1315	1305	368	400	436	1342	1715	1741	Lower East Side ..
Lower West Side ..	764	868	924	258	271	274	1022	1139	1198	131	155	170	41	62	70	172	217	240	913	1094	1148	307	366	370	1220	1460	1518	Lower West Side ..
Riverside	332	300	286	215	182	177	547	482	463	109	105	119	100	121	127	209	226	246	493	455	452	358	342	328	851	797	780	Riverside
Washington Hgts. .	252	243	215	174	191	140	426	434	355	134	170	155	161	162	150	295	332	305	411	447	400	348	367	319	759	814	719	Washington Hgts. .
Manhattan	2705	3019	3047	1357	1357	1288	4062	4376	4335	1630	1867	1983	1464	1615	1698	3094	3482	3681	4634	5348	5380	2978	3170	3154	7612	8518	8534	Manhattan
BRONX:																												
Ford'm-Riverdale .	213	176	153	149	150	131	362	326	284	1	0	1	5	4	3	6	4	4	216	180	160	155	156	137	371	336	297	Ford'm-Riverdale .
Morrisania	208	221	215	144	141	120	352	362	335	187	212	179	196	220	209	383	432	388	415	453	408	354	380	336	769	833	744	Morrisania
Mott Haven	283	270	243	160	181	129	443	451	372	119	135	129	146	157	151	265	292	280	425	429	391	327	364	298	752	793	689	Mott Haven
Pelham Bay	93	100	84	80	74	58	173	174	142	4	2	3	3	2	8	7	4	11	109	119	98	94	81	70	203	200	168	Pelham Bay
Tremont	269	266	240	189	210	173	458	476	413	20	19	20	20	20	20	40	39	40	291	289	268	212	232	196	503	521	464	Tremont
Westchester	199	204	153	161	146	107	360	350	260	2	3	5	2	3	2	4	6	7	214	220	166	169	158	118	383	378	284	Westchester
Bronx	1265	1237	1088	883	902	718	2148	2139	1806	333	371	337	372	406	393	705	777	730	1670	1690	1491	1311	1371	1155	2981	3061	2646	Bronx
BROOKLYN:																												
Bay Ridge	289	317	253	179	186	148	468	503	401	2	2	2	1	2	2	3	4	4	295	322	258	182	191	152	477	513	410	Bay Ridge
Bedford	146	154	155	111	99	83	257	253	238	190	243	228	164	208	212	354	451	440	359	425	414	294	328	314	653	753	728	Bedford
Brownsville	189	210	213	138	157	135	327	367	348	32	55	62	43	58	56	75	113	118	223	269	279	185	222	198	408	491	477	Brownsville
Bushwick	258	255	265	160	151	144	418	406	409	9	13	22	18	29	28	27	42	50	278	288	305	190	188	176	468	476	481	Bushwick
Flatbush	341	330	306	219	216	172	560	546	478	8	7	4	5	6	6	13	13	10	360	347	323	231	231	186	591	578	509	Flatbush
Fort Greene	229	242	257	130	136	135	359	378	392	84	115	122	71	99	118	155	214	240	325	371	395	207	245	259	532	616	654	Fort Greene
Gravesend	145	153	144	93	99	100	238	252	244	6	5	3	5	8	6	11	13	9	155	161	149	102	109	107	257	270	256	Gravesend
Red Hook-Gowanus .	267	299	275	128	151	121	395	450	396	54	75	68	56	68	60	110	143	128	325	376	345	185	219	181	510	595	526	Red Hook-Gowanus .
Sunset Park	279	293	282	181	213	162	460	506	444	2	2	1	1	2	1	3	4	2	281	295	283	182	215	164	463	510	447	Sunset Park
Wmsbrg.-Greenpt. .	239	246	244	200	187	193	439	433	437	34	43	37	34	28	31	68	71	68	277	292	285	236	217	225	513	509	510	Wmsbrg.-Greenpt. .
Brooklyn	2362	2499	2394	1539	1595	1393	3921	4094	3787	421	560	549	398	508	520	819	1068	1069	2878	3146	3036	1994	2165	1962	4872	5311	4998	Brooklyn
QUEENS:																												
Astoria-L.I.City..	289	300	287	198	226	213	487	526	500	5	6	13	5	7	8	10	13	21	295	307	303	208	236	224	503	543	527	Astoria-L.I.City..
Corona	208	223	200	144	148	135	352	371	335	22	28	24	26	31	20	48	59	44	234	252	230	170	179	157	404	431	387	Corona
Flushing	204	208	203	160	180	170	364	388	373	14	9	12	7	10	8	21	19	20	222	221	218	167	191	178	389	412	396	Flushing
Jamaica East	242	245	196	193	165	117	435	410	313	44	57	57	49	58	48	93	115	105	302	317	268	257	235	170	559	552	438	Jamaica East
Jamaica West	294	288	240	166	174	135	460	462	375	8	11	12	10	13	15	18	24	27	319	315	264	178	190	155	497	505	419	Jamaica West
Maspeth-For.Hills.	236	274	243	158	164	151	394	438	394	1	2	3	1	2	3	2	4	6	245	286	260	170	178	168	415	464	428	Maspeth-For.Hills.
Queens	1473	1538	1369	1019	1057	921	2492	2595	2290	94	113	121	98	121	102	192	234	223	1617	1698	1543	1150	1209	1052	2767	2907	2595	Queens
RICHMOND:																												
Richmond	170	166	178	97	84	76	267	250	254	13	15	11	4	8	11	17	23	22	186	186	198	102	93	88	288	279	286	Richmond
NEW YORK CITY	7995	8459	8076	4895	4995	4396	12890	13454	12472	2491	2926	3001	2336	2658	2724	4627	5584	5725	10985	12068	11648	7535	8008	7411	18520	20076	19059	NEW YORK CITY

*Included are following number of cases, color not stated: 1948=Male 499, Female 304; 1949=Male 683, Female 355; 1950=Male 571, Female 291.

TOTAL PULMONARY TUBERCULOSIS CASES

According to the Department of Health Register on the last day of the year for each health center district, New York City, since 1938

Health Center DISTRICT	Total Pulmonary Cases in Register												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem..	2127	1947	2109	2142	2184	1969	1506	1374	1545	1634	1752	1889	1934
East Harlem	958	844	796	896	929	706	637	616	612	681	844	902	883
Kips Bay-York...	681	667	673	747	743	615	675	694	653	627	564	585	567
Lower East Side.	1438	1533	1784	1883	1717	1362	1210	1164	1149	1175	1287	1650	1656
Lower West Side.	1311	1090	1040	1101	1199	1110	1049	1116	1089	1111	1199	1423	1481
Riverside	875	1038	959	921	1021	990	890	846	827	875	804	739	716
Washington Hgts. Manhattan	854	904	839	815	918	881	792	756	763	731	726	780	678
	8244	8023	8200	8505	8711	7633	6759	6566	6638	6834	7176	7968	7915
BRONX:													
Ford'm-Riverdale	507	471	468	475	476	392	376	383	351	347	365	330	293
Morrisania	811	818	809	791	730	622	614	574	584	632	724	771	679
Mott Haven	550	548	555	608	625	612	624	609	586	644	688	715	610
Pelham Bay	267	240	254	247	278	247	242	234	206	186	196	196	163
Tremont	635	628	598	615	732	664	663	563	523	487	495	511	453
Westchester	341	362	372	430	471	401	387	374	356	378	379	373	282
Bronx	3111	3067	3056	3166	3312	2938	2906	2737	2606	2674	2847	2896	2480
BROOKLYN:													
Bay Ridge	609	624	692	673	703	695	613	551	498	467	465	503	402
Bedford	614	635	650	786	851	758	711	721	659	612	614	716	683
Brownsville	536	591	559	564	527	451	417	357	357	383	396	462	448
Bushwick	459	484	514	540	539	507	468	459	492	489	461	465	469
Flatbush	603	590	653	728	786	717	712	709	642	598	581	572	505
Fort Greene	605	556	484	533	543	508	490	489	503	495	506	571	614
Gravesend	470	423	414	449	463	386	385	329	310	274	249	263	251
Red Hook-Gowanus	541	534	524	545	539	511	478	455	405	441	490	564	504
Sunset Park	499	492	517	522	611	537	523	457	467	415	458	503	439
Wmsbrg.-Greenpt. Brooklyn	500	536	534	533	549	470	491	440	438	469	490	485	483
	5436	5465	5541	5873	6111	5540	5288	4967	4771	4643	4710	5104	4798
QUEENS:													
Astoria-L.I.City	570	580	607	648	687	672	674	618	532	496	495	530	516
Corona	401	383	386	416	464	410	387	375	373	394	388	410	369
Flushing	292	314	326	411	406	377	334	318	308	348	381	400	382
Jamaica East ...	504	470	476	499	580	496	477	491	513	516	541	534	422
Jamaica West ...	533	485	493	522	587	587	527	495	456	492	488	493	408
Maspeth-Fox Hills Queens	363	388	441	474	517	494	476	438	418	408	413	459	421
	2663	2620	2729	2970	3241	3036	2875	2735	2600	2654	2706	2826	2518
RICHMOND:													
Richmond	304	310	320	298	328	282	318	285	300	311	279	267	274
NEW YORK CITY ..	19758	19485	19846	20812	21703	19429	18146	17290	16915	17116	17718	19061	17985

Note: Classification of register by health center districts not available for years prior to 1938.

PULMONARY TUBERCULOSIS CASES UNDER CARE OF PRIVATE PHYSICIANS
 According to the Department of Health Register on the last day of the year
 for each health center district, New York City, since 1938

Health Center DISTRICT	Under Care of Private Physicians												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem ..	146	122	123	116	145	155	131	105	126	147	135	105	86
East Harlem	93	67	74	80	83	72	62	58	61	56	63	56	50
Kips Bay-York....	146	152	141	145	184	143	163	147	118	116	77	90	77
Lower East Side .	143	143	153	141	180	132	160	128	118	96	97	96	87
Lower West Side .	160	139	142	160	197	178	168	164	146	141	137	157	139
Riverside	114	166	174	196	249	223	264	233	178	176	145	109	72
Washington Hgts..	21	211	229	210	270	249	230	207	183	167	145	144	104
Manhattan	1018	1000	1036	1048	1308	1152	1178	1042	930	899	799	757	615
BRONX:													
Ford 'm-Riverdale.	157	160	164	165	171	149	143	137	108	120	117	108	82
Morrisania	231	266	261	248	237	149	119	122	114	118	118	113	69
Mott Haven	111	119	124	144	148	105	111	98	82	99	85	88	73
Felham Bay	114	111	112	97	129	109	106	95	89	77	67	70	44
Tremont	232	219	210	218	251	199	214	180	172	160	150	136	98
Westchester	126	154	157	180	211	200	178	154	143	138	129	118	89
Bronx	971	1029	1028	1052	1147	911	871	786	708	712	666	633	455
BROOKLYN:													
Bay Ridge	247	237	287	262	306	293	242	184	189	174	175	198	134
Bedford	151	163	184	183	205	195	183	190	190	177	125	116	84
Brownsville	142	150	151	162	157	98	104	90	109	113	105	122	104
Bushwick	117	131	145	162	143	139	140	150	132	127	127	121	119
Flatbush	234	258	300	344	307	303	319	312	283	259	228	213	162
Fort Greene	110	128	133	136	129	114	106	128	125	111	95	83	74
Gravesend	145	161	168	183	170	153	150	143	133	99	90	96	81
Red Hook-Gowanus.	95	100	94	112	116	106	96	95	81	77	78	68	52
Sunset Park	153	150	150	163	217	214	175	113	152	127	123	138	97
Wmsbrg.-Greenpt..	118	127	138	132	144	112	138	112	109	110	103	100	91
Brooklyn	1512	1605	1750	1839	1894	1727	1653	1517	1503	1374	1249	1255	998
QUEENS:													
Astoria-L. I. City.	178	192	213	221	209	236	230	226	175	173	150	158	148
Corona	147	161	151	154	170	146	146	140	132	123	108	97	83
Flushing	100	110	134	148	156	154	111	125	105	116	130	132	110
Jamaica East	171	159	171	172	209	175	155	165	165	160	152	144	72
Jamaica West	204	188	185	199	212	232	198	203	177	183	154	135	73
Maspeth-For.Hills	139	177	199	208	218	204	202	180	165	157	153	182	136
Queens	939	987	1053	1102	1174	1147	1042	1039	919	912	847	848	622
RICHMOND:													
Richmond	100	97	108	110	132	103	102	72	84	79	70	79	80
NEW YORK CITY ...	4540	4718	4975	5151	5655	5040	4846	4456	4144	3976	3631	3572	2770

PULMONARY TUBERCULOSIS CASES ATTENDING CLINICS

According to the Department of Health Register on the last day of the year for each health center district, New York City, since 1938

Health Center DISTRICT	Attending Clinics												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem..	1060	920	979	972	950	848	607	525	537	532	601	691	686
East Harlem	447	453	333	346	394	292	282	259	228	239	281	338	369
Kips Bay-York...	227	217	207	250	226	199	217	183	154	150	138	132	132
Lower East Side.	599	671	832	857	738	571	357	327	292	283	295	370	404
Lower West Side.	416	358	299	257	269	245	200	212	214	229	237	297	315
Riverside	278	372	306	297	314	272	206	185	157	157	165	193	206
Washington Hgts.	251	251	251	230	267	257	183	176	149	164	160	191	171
Manhattan	3278	3242	3207	3209	3158	2684	2052	1867	1731	1754	1877	2212	2283
BRONX:													
Ford'm-Riverdale	103	98	92	100	80	76	68	56	51	48	56	49	59
Morrisania	210	201	215	226	194	193	223	207	174	194	207	233	199
Mott Haven	169	171	195	188	206	198	210	229	210	205	221	243	180
Pelham Bay	59	41	48	57	67	44	49	39	33	37	48	45	38
Tremont	142	173	152	153	168	172	159	124	100	94	110	121	123
Westchester	68	68	81	97	95	70	74	70	52	70	73	80	69
Bronx	751	752	783	821	810	753	783	725	620	648	715	771	668
BROOKLYN:													
Bay Ridge	110	131	139	141	137	152	125	132	96	93	93	122	104
Bedford	169	160	186	225	242	215	202	182	148	159	168	185	157
Brownsville	168	204	159	156	146	147	126	101	89	93	116	148	137
Bushwick	113	174	192	160	190	165	161	142	144	140	155	157	150
Flatbush	124	118	107	115	161	132	143	125	116	93	89	106	109
Fort Greene	176	175	114	151	169	166	153	155	140	135	140	184	192
Gravesend	116	117	82	102	121	87	87	69	71	59	51	44	61
Red Hook-Gowanus	168	195	163	150	163	149	113	106	95	105	114	153	109
Sunset Park	130	152	152	117	131	115	104	116	118	102	123	145	124
Wmsbrg.-Greenpt.	133	116	130	125	169	120	122	134	130	137	148	136	141
Brooklyn	1407	1542	1424	1442	1629	1448	1336	1262	1147	1116	1197	1380	1284
QUEENS:													
Astoria-L. I. City	166	177	179	184	192	204	212	174	138	130	148	188	171
Corona	88	73	87	93	114	98	77	83	78	93	109	128	100
Flushing	66	53	66	94	104	84	87	68	62	68	83	87	86
Jamaica East ...	116	90	104	106	119	122	120	117	98	138	168	169	109
Jamaica West ...	122	98	96	100	116	131	107	114	104	116	132	147	103
Maspeth-Fox Hills	98	107	111	116	115	101	90	98	86	88	96	94	94
Queens	656	598	643	693	760	740	693	654	566	633	736	813	663
RICHMOND:													
Richmond	64	76	76	69	62	73	77	68	54	55	54	56	53
NEW YORK CITY ..	6156	6210	6133	6234	6419	5698	4941	4576	4118	4206	4579	5232	4951

PULMONARY TUBERCULOSIS CASES IN INSTITUTIONS WITHIN CITY
 According to the Department of Health Register on the last day of the year
 for each health center district, New York City, since 1938

Health Center DISTRICT	In Institutions Within City												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem..	658	662	730	741	686	588	466	427	511	512	546	623	653
East Harlem	277	227	283	329	276	214	181	174	208	264	345	341	318
Kips Bay-York...	180	183	223	227	215	179	172	202	191	193	185	189	196
Lower East Side.	471	496	579	640	554	382	436	406	433	485	512	736	750
Lower West Side.	409	369	396	461	456	377	406	393	393	463	557	659	704
Riverside	240	270	238	207	229	196	207	198	212	249	242	212	240
Washington Hgts. Manhattan	171	199	188	201	218	194	194	188	188	188	180	215	214
	2406	2406	2637	2806	2634	2130	2062	1988	2136	2354	2567	2975	3075
BRONX:													
Ford'm-Riverdale	117	100	109	110	88	79	64	81	77	100	93	86	71
Morrisania	155	161	164	177	170	141	127	134	144	164	216	224	240
Mott Haven	166	156	155	169	155	173	156	149	142	185	187	212	218
Pelham Bay	46	37	37	41	34	43	35	38	27	30	30	34	43
Tremont	106	97	110	110	119	112	102	84	95	101	108	127	107
Westchester	63	57	59	75	77	63	67	62	59	80	72	81	75
Bronx	653	608	634	682	643	611	551	548	544	660	706	764	754
BROOKLYN:													
Bay Ridge	104	119	129	136	131	101	101	104	106	98	113	104	99
Bedford	161	178	175	247	265	201	198	223	169	158	195	257	278
Brownsville	107	128	128	130	117	85	94	96	77	91	94	112	126
Bushwick	127	81	81	130	106	118	98	102	117	129	99	119	136
Flatbush	93	96	110	117	141	133	114	126	108	92	110	107	101
Fort Greene	171	181	153	147	161	148	130	124	120	141	163	212	235
Gravesend	102	73	86	82	79	68	60	44	38	51	40	54	53
Red Hook-Gowanus	174	160	189	195	182	170	178	163	149	194	226	259	261
Sunset Park	123	125	133	151	162	121	120	118	100	109	130	138	153
Wmsbrg.-Greenpt. Brooklyn	157	181	160	168	144	151	131	108	107	129	142	152	156
	1319	1322	1344	1503	1488	1296	1224	1208	1091	1192	1312	1514	1598
QUEENS:													
Astoria-L.I.City	106	116	126	165	179	138	124	127	131	111	133	127	141
Corona	69	62	76	88	95	83	83	79	67	92	94	105	114
Flushing	58	62	62	92	85	77	66	69	74	86	104	109	114
Jamaica East ...	105	112	107	133	164	111	107	125	138	129	132	147	153
Jamaica West ...	99	91	120	127	149	138	104	98	99	106	129	143	150
Maspeth-Fox Hills Queens	53	59	65	94	98	103	86	91	88	92	99	120	131
	490	502	556	699	770	650	570	589	597	616	691	751	803
RICHMOND:													
Richmond	93	78	84	73	92	66	94	87	97	118	117	93	108
NEW YORK CITY ..	4961	4916	5255	5763	5627	4753	4501	4420	4465	4940	5393	6097	6338

PULMONARY TUBERCULOSIS CASES IN SANATORIA, OUT-OF-TOWN
 According to the Department of Health Register on the last day of the year
 for each health center district, New York City, since 1938

Health Center DISTRICT	In Sanatoria, Out-of-town												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem..	89	83	101	109	111	104	73	97	111	142	179	191	215
East Harlem	63	35	49	68	74	54	55	67	55	62	74	88	84
Kips Bay-York...	83	80	72	99	91	82	117	148	128	91	92	120	117
Lower East Side.	116	120	142	159	145	121	145	134	149	147	159	159	196
Lower West Side.	146	130	114	121	135	149	151	161	148	133	141	166	193
Riverside	80	96	108	114	136	108	93	102	130	141	128	117	116
Washington Hgts.	74	87	66	91	89	97	99	92	122	111	124	121	116
Manhattan	651	631	652	761	781	715	733	801	843	827	897	962	1037
BRONX:													
Ford'm-Riverdale	68	72	72	68	69	51	55	65	75	63	74	67	59
Morrisania	103	103	102	92	88	71	62	61	75	79	96	99	90
Mott Haven	57	58	51	61	77	76	62	59	71	72	79	84	76
Pelham Bay	12	25	29	26	24	40	31	34	29	22	22	29	25
Tremont	71	69	80	84	101	134	111	100	97	98	93	99	79
Westchester	38	39	34	34	46	41	32	46	52	52	54	49	35
Bronx	349	366	368	365	405	413	353	365	399	386	418	427	364
BROOKLYN:													
Bay Ridge	56	61	69	59	54	76	74	72	55	59	50	51	48
Bedford	46	37	51	61	54	44	59	55	102	74	68	81	78
Brownsville	60	73	80	65	69	57	73	53	68	72	64	61	72
Bushwick	41	37	44	38	33	26	27	24	56	46	49	44	55
Flatbush	67	62	82	97	85	87	74	76	86	99	88	71	83
Fort Greene	53	36	40	47	38	35	43	32	54	63	60	57	78
Gravesend	32	41	43	50	50	48	38	42	43	29	39	38	38
Red Hook-Gowanus	37	46	36	34	42	52	48	40	47	49	61	75	73
Sunset Park	49	28	42	47	50	36	56	56	55	50	59	57	47
Wmsbrg.-Greenpt.	49	62	56	60	36	43	65	56	58	68	64	58	59
Brooklyn	490	483	543	558	511	504	557	506	624	609	602	593	631
QUEENS:													
Astoria-L.I.City	68	69	58	45	49	60	63	69	72	72	60	54	53
Corona	41	41	43	48	44	51	37	50	61	64	61	65	57
Flushing	32	44	34	43	32	30	32	35	37	51	50	57	58
Jamaica East ...	52	55	46	44	47	42	45	39	55	50	58	46	45
Jamaica West ...	46	57	55	70	63	45	54	46	33	46	49	42	32
Maspeth-Fox.Hills	42	36	42	32	39	47	50	41	38	40	35	38	34
Queens	281	302	278	282	274	275	281	280	296	323	313	302	279
RICHMOND:													
Richmond	23	22	22	16	24	24	34	40	47	47	25	23	22
NEW YORK CITY ..	1794	1804	1863	1982	1995	1931	1958	1992	2209	2192	2255	2307	2333

PULMONARY TUBERCULOSIS CASES NOT IN SANATORIA, OUT-OF-TOWN
 According to the Department of Health Register on the last day of the year
 for each health center district, New York City, since 1938

Health Center DISTRICT	Not in Sanatoria, Out-of-town												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem..	22	42	34	34	32	56	29	29	14	10	5	2	4
East Harlem	8	7	8	6	16	6	4	6	4	10	7	13	7
Kips Bay-York...	16	13	9	5	9	3	1	2	4	17	14	13	8
Lower East Side.	37	29	21	20	19	16	13	11	6	6	8	14	32
Lower West Side.	30	29	33	24	21	32	28	25	18	20	14	22	12
Riverside	36	36	39	43	49	61	68	65	38	41	49	41	26
Washington Hgts.	31	40	30	34	43	35	35	35	16	21	25	18	18
Manhattan	180	196	174	166	189	209	178	173	100	125	122	123	107
BRONX:													
Ford 'm-Riverdale	22	16	11	12	14	13	15	13	11	6	5	7	5
Morrisania	33	27	16	11	7	17	10	6	10	8	11	9	7
Mott Haven	2	7	8	5	13	17	13	18	11	13	16	10	5
Pelham Bay	11	8	7	4	5	0	9	8	4	5	4	1	1
Tremont	34	33	26	19	24	24	25	21	20	11	8	5	9
Westchester	13	16	12	11	14	1	5	11	2	4	2	1	0
Bronx	115	107	80	62	77	72	77	77	58	47	46	33	27
BROOKLYN:													
Bay Ridge	31	24	25	22	17	15	20	13	16	13	7	7	4
Bedford	26	32	28	29	18	14	11	14	4	4	4	5	1
Brownsville	19	17	13	19	4	3	1	3	2	2	0	2	0
Bushwick	13	21	13	7	13	15	8	4	0	2	1	2	2
Flatbush	26	28	23	13	20	13	15	15	8	12	8	6	7
Fort Greene	9	6	7	6	10	13	15	7	3	3	0	2	1
Gravesend	15	7	6	5	13	8	15	8	5	5	1	0	1
Red Hook-Gowanus	6	8	12	12	8	8	13	12	2	2	2	2	0
Sunset Park	17	9	11	14	12	12	5	7	1	2	2	5	3
Wmsbrg-Greenpt..	7	11	9	14	11	9	4	5	4	2	3	3	2
Brooklyn	169	163	147	141	126	110	107	88	45	47	28	34	21
QUEENS:													
Astoria-L. I. City	13	16	17	17	9	10	6	2	4	4	1	2	2
Corona	15	11	8	11	10	1	2	1	4	2	3	2	4
Flushing	7	10	7	10	8	1	1	0	2	2	3	3	3
Jamaica East ...	19	12	12	17	17	13	16	22	18	14	8	5	1
Jamaica West ...	12	17	16	13	15	18	14	12	7	8	6	2	2
Maspeth-Fox Hills	4	4	5	12	17	11	15	11	2	4	3	0	1
Queens	70	70	65	80	76	54	54	48	37	34	24	14	13
RICHMOND:													
Richmond	3	3	0	2	7	3	0	1	0	0	0	0	2
NEW YORK CITY ..	537	539	466	451	475	448	416	387	240	253	220	204	170

PULMONARY TUBERCULOSIS CASES RECEIVING NO MEDICAL OR CLINIC CARE
 According to the Department of Health Register on the last day of the year
 for each health center district, New York City, since 1938

Health Center DISTRICT	No Medical or Clinic Care†												
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MANHATTAN:													
Central Harlem ..	152	118	142	170	260	218	200	191	246	291	286	277	290
East Harlem	70	55	49	67	86	68	53	52	56	50	74	66	55
Kips Bay-York. ..	29	22	21	21	18	9	5	12	58	60	58	41	37
Lower East Side .	72	74	57	66	81	140	99	158	151	158	216	275	187
Lower West Side .	150	65	56	78	121	129	96	161	170	125	113	122	118
Riverside	127	98	94	64	44	130	52	63	112	111	75	67	56
Washington Hgts..	111	116	75	49	31	49	51	58	105	80	92	91	55
Manhattan	711	548	494	515	641	743	556	695	898	875	914	939	798
BRONX:													
Ford'm-Riverdale.	40	25	20	20	54	24	31	31	29	10	20	13	17
Morrisania	79	60	51	37	34	51	73	44	67	69	76	93	74
Mott Haven	45	37	22	41	26	43	72	56	70	70	100	78	58
Pelham Bay	25	18	21	22	19	11	12	20	24	15	25	17	12
Tremont	50	37	20	31	69	23	52	54	39	23	26	23	37
Westchester	33	28	29	33	28	26	31	31	48	34	49	44	14
Bronx	272	205	163	184	230	178	271	236	277	221	296	268	212
BROOKLYN:													
Bay Ridge	61	52	43	53	58	58	51	46	36	30	27	21	13
Bedford	61	65	26	41	67	89	58	57	46	40	54	72	85
Brownsville	40	19	28	32	34	61	19	14	12	12	17	17	9
Bushwick	48	40	39	43	54	44	34	37	43	45	30	22	7
Flatbush	59	28	31	42	72	49	47	55	41	43	58	69	43
Fort Greene	86	30	37	46	36	32	43	43	61	42	48	33	34
Gravesend	60	24	29	27	30	22	35	23	20	31	28	31	17
Red Hook-Gowanus.	61	25	30	42	28	26	30	39	31	14	9	7	9
Sunset Park	27	28	29	30	39	39	63	47	41	25	21	20	15
Wmsbrg.-Greenpt..	36	39	41	34	45	35	31	25	30	23	30	36	34
Brooklyn	539	350	333	390	463	455	411	386	361	305	322	328	266
QUEENS:													
Astoria-L. I. City.	39	10	14	16	49	24	39	20	12	6	3	1	1
Corona	41	35	21	22	31	31	42	22	31	20	13	13	11
Flushing	29	35	23	24	21	31	37	21	28	25	11	12	11
Jamaica East	41	42	36	27	24	33	34	23	39	25	23	23	42
Jamaica West	50	34	21	13	32	23	50	22	36	33	18	24	48
Maspeth-Fox Hills	27	5	19	12	30	28	33	17	39	27	27	25	25
Queens	227	161	134	114	187	170	235	125	185	136	95	98	138
RICHMOND:													
Richmond	21	34	30	28	11	13	11	17	18	12	13	16	9
NEW YORK CITY ...	1770	1298	1154	1231	1532	1559	1484	1459	1739	1549	1640	1649	1423

†Remaining "at home" not under clinic, institutional or medical care.

TUBERCULOSIS MORTALITY

NEW YORK CITY

1898-1950

TUBERCULOSIS MORTALITY, NEW YORK CITY, SINCE 1898*

Year	Male		Female		Persons					
	Deaths	Rate	Deaths	Rate	Respiratory		Other Forms		All Forms	
		†		†	Deaths	Rate	Deaths	Rate	Deaths	Rate
1898	5,445	335	3,785	230	7,724	236	1,506	46	9,230	282
1899	5,720	343	3,817	226	8,015	239	1,522	45	9,537	284
1900	5,783	338	3,847	222	8,154	237	1,476	43	9,630	280
1901	5,780	328	3,620	202	8,135	229	1,265	35	9,400	264
1902	5,355	294	3,531	191	7,569	206	1,317	36	8,886	242
1903	5,602	299	3,707	195	8,020	212	1,289	34	9,309	246
1904	6,023	310	3,750	192	8,512	218	1,261	32	9,773	250
1905	5,944	297	3,718	184	8,535	212	1,127	28	9,662	240
1906	6,337	305	3,864	185	8,955	215	1,246	30	10,201	245
1907	6,476	300	3,787	176	8,999	209	1,264	29	10,263	238
1908	6,367	285	3,793	170	8,869	198	1,291	29	10,160	227
1909	6,297	272	3,616	156	8,643	187	1,270	27	9,913	214
1910	6,352	266	3,722	156	8,692	182	1,382	29	10,074	211
1911	6,548	269	3,702	152	8,790	180	1,460	30	10,250	210
1912	6,465	261	3,516	142	8,591	173	1,390	28	9,981	201
1913	6,362	252	3,669	145	8,601	171	1,430	28	10,031	199
1914	6,716	262	3,574	139	8,918	173	1,372	27	10,290	200
1915	6,638	254	3,611	138	8,825	169	1,424	27	10,249	196
1916	6,185	233	3,463	130	8,411	159	1,237	23	9,648	182
1917	6,607	245	3,535	131	8,825	164	1,317	24	10,142	188
1918	6,318	231	3,780	137	8,779	160	1,319	24	10,098	184
1919	5,346	192	3,152	113	7,395	132	1,103	20	8,498	152
1920	4,211	149	2,924	103	6,165	109	970	17	7,135	126
1921	3,523	122	2,399	82	5,143	89	779	13	5,922	102
1922	3,515	119	2,287	77	5,033	85	769	13	5,802	98
1923	3,377	111	2,296	76	4,951	82	722	12	5,673	94
1924	3,300	107	2,287	74	4,780	77	807	13	5,587	90
1925	3,274	104	2,201	70	4,776	76	699	11	5,475	87
1926	3,305	102	2,203	68	4,828	75	680	10	5,508	85
1927	3,043	92	2,097	64	4,444	67	696	11	5,140	78
1928	3,239	96	2,087	62	4,636	69	690	10	5,326	79
1929	3,131	91	2,029	59	4,507	66	653	9	5,160	75
1930	3,131	90	1,958	56	4,457	64	632	9	5,089	73
1931	3,044	87	1,878	54	4,370	62	552	8	4,922	70
1932	2,849	81	1,691	48	3,997	57	543	7	4,540	64
1933	2,891	82	1,686	47	4,056	57	521	7	4,577	64
1934	2,825	79	1,595	44	3,950	55	470	7	4,420	62
1935	2,777	78	1,594	44	3,968	55	403	6	4,371	61
1936	2,951	82	1,634	45	4,170	57	415	6	4,585	63
1937	2,815	78	1,449	39	3,931	54	333	4	4,264	58
1938	2,526	69	1,307	35	3,481	47	352	5	3,833	52
1939	2,537	69	1,277	34	3,494	47	320	4	3,814	51

TUBERCULOSIS MORTALITY, NEW YORK CITY, SINCE 1898*

Year	Male		Female		Persons					
	Deaths	Rate †	Deaths	Rate †	Respiratory		Other Forms		All Forms	
					Deaths	Rate †	Deaths	Rate †	Deaths	Rate †
1940	2,394	65	1,233	33	3,323	45	304	4	3,627	49
1941	2,459	67	1,256	33	3,372	45	343	5	3,715	49
1942	2,359	64	1,143	30	3,228	43	274	3	3,502	46
1943	2,465	66	1,195	31	3,343	44	317	4	3,660	48
1944	2,367	63	1,167	30	3,250	42	284	4	3,534	46
1945	2,448	65	1,065	27	3,211	42	302	4	3,513	46
1946	2,230	59	1,015	26	2,997	39	248	3	3,245	42
1947	2,186	58	942	24	2,920	38	208	2	3,128	40
1948	2,202	58	910	23	2,880	37	232	3	3,112	40
1949	1,814	48	763	19	2,388	30	189	3	2,577	33
1950	1,718	45	603	15	2,154	27	167	2	2,321	29
1951										
1952										
1953										
1954										

*Date of consolidation of Manhattan, Bronx, Brooklyn, Queens and Richmond into City of New York. †Per 100,000 population.

TUBERCULOSIS MORTALITY, NEW YORK CITY
Annual Average During Five-Year Periods Since 1900

Year	Male		Female		Persons					
	Deaths	Rate †	Deaths	Rate †	Respiratory		Other Forms		All Forms	
					Deaths	Rate †	Deaths	Rate †	Deaths	Rate †
1900-04....	5,709	314	3,691	200	8,078	220	1,322	36	9,400	256
1905-09....	6,284	291	3,756	174	8,800	204	1,240	29	10,040	233
1910-14....	6,489	262	3,637	146	8,718	176	1,407	28	10,125	204
1915-19....	6,219	231	3,508	130	8,447	156	1,280	24	9,727	180
1920-24....	3,585	121	2,439	82	5,214	88	810	13	6,024	101
1925-29....	3,198	97	2,124	65	4,638	71	684	10	5,322	81
1930-34....	2,948	84	1,762	50	4,166	59	544	8	4,710	67
1935-39....	2,721	75	1,452	39	3,809	52	364	5	4,173	57
1940-44....	2,409	65	1,199	31	3,303	44	305	4	3,608	48
1945-49....	2,176	58	939	24	2,879	37	236	3	3,115	40
1950-54....										

†Per 100,000 population.

TUBERCULOSIS DEATHS, NEW YORK CITY, 1898-1950

Year	Respiratory syst.	Meninges, nerv. system	Intestines, peritoneum	Vertebral column	Bones, joints	Lymphatic syst.	Genitourinary system	Skin, subcutaneous cell. tis.	Other organs	Disseminated, military unspec.	All forms of Tuberculosis	
											Deaths	Rate+
1898	7724	864	62†				-- 580 --				9230	282
1899	8015	864	45†				-- 613 --				9537	284
1900	8154	875	50†				-- 551 --				9630	280
1901	8135	750	165¶	29	21*		- 145 -			155	9400	264
1902	7569	794	178	46	27		- 157 -			115	8886	242
1903	8020	812	192	60	36		- 111 -			78	9309	246
1904	8512	742	183	70	40		- 145 -			81	9773	250
1905	8535	644	185	58	43		- 141 -			56	9662	240
1906	8955	765	196	58	51		- 120 -			56	10201	245
1907	8999	755	179	74	56		- 134 -			66	10263	238
1908	8869	815	177	78	46		- 131 -			44	10160	227
1909	8643	806	171	58	45		- 129 -			71	9913	214
1910	8692	801	173	85	32**		- 97 -			194	10074	211
1911	8790	870	161	71	35		- 94 -			229	10250	210
1912	8591	789	195	75	37		- 80 -			214	9981	201
1913	8601	797	187	71	35		- 98 -			242	10031	199
1914	8918	726	163	63	30		- 83 -			307	10290	200
1915	8825	780	134	62	34		- 79 -			335	10249	196
1916	8411	683	128	48	34		- 68 -			276	9648	182
1917	8825	680	134	48	41		- 95 -			319	10142	188
1918	8779	762	154	66	30		- 78 -			233	10098	184
1919	7395	581	138	45	30		- 106 -			203	8498	152
1920	6165	509	130¶	57	35		- 73 -			166	7135	126
1921	5143	383	124	49	27		- 65 -			131	5922	102
1922	5033	405	100	37	14		- 68 -			145	5802	98
1923	4951	351	99	37	10		- 60 -			165	5673	94
1924	4780	366	114	49	25		- 50 -			203	5587	90
1925	4776	320	90	44	14		- 67 -			164	5475	87
1926	4828	308	71	49	23		- 60 -			169	5508	85
1927	4444	292	101	38	20		- 66 -			179	5140	78
1928	4636	294	98	35	18		- 59 -			186	5326	79
1929	4507	218	83	41	15		- 67 -			129	5160	75
1930	4457	240	88	43	15		- 75 -			171	5089	73
1931	4370	206	79	50	34	12	36	3	10	122	4922	70
1932	3997	187	71	42	8	6	43	4	14	168	4540	64
1933	4056	188	71	43	22	9	45	2	10	131	4577	64
1934	3950	144	72	43	19	8	42	0	6	136	4420	62
1935	3968	163	45	49	16	9	34	3	7	77	4371	61
1936	4170	139	71	45	22	10	52	0	6	70	4585	63
1937	3931	111	63	36	16	6	39	1	14	47	4264	58
1938	3481	119	40	41	20	10	42	1	5	74	3833	52
1939	3494	127	34	39	8	4	39	1	4	64	3814	51
1940	3323	87	49	41	11	5	39	1	14	57	3627	49
1941	3372	114	41	41	11	17	44	0	12	63	3715	49
1942	3228	95	36	37	8	9	30	2	7	50	3502	46
1943	3343	95	48	33	19	4	43	1	17	57	3660	48
1944	3250	88	38	40	8	4	35	1	9	61	3534	46
1945	3211	95	41	38	9	7	26	1	11	74	3513	46
1946	2997	78	27	25	3	7	23	0	15	70	3245	42
1947	2920	69	23	26	1	4	26	1	14	44	3128	40
1948	2880	93	16	26	1	6	27	0	9	54	3112	40
1949	2388	80	14	12	3	3	18	0	4	51	2577	33
1950	2154	67	6	8	1	5	18	0	4	58	2321	29

*Prior to 1910, tuberculosis of larynx included with "other organs". †Tuberculosis mesenterica (mesenteric glands), 1898-1900. ¶Abdominal tuberculosis, 1901-1920. *Cold abscess (bones), white swelling (joints) 1901-1909. **White swelling, 1910-1920. +Per 100,000 population. Note: Since 1898 several changes in medical classification and terminology have taken place.

Based on reports of Bureau of Records and Statistics, Department of Health, N.Y. City.

TUBERCULOSIS MORTALITY BY BOROUGHES, NEW YORK CITY, SINCE 1898

Year	Number of Deaths*						Death Rate per 100,000					
	Man- hat- tan (a)	Bronx (b)	Brook- lyn	Queens	Rich- mond	New York City	Man- hat- tan (a)	Bronx (b)	Brook- lyn	Queens	Rich- mond	New York City
1898†	4946	955	2930	279	155	9230	273	571	268	204	243	282
1899†	5204	1005	2980	237	151	9537	284	546	263	163	231	284
1900	5108	1051	2993	318	160	9630	275	521	256	207	238	280
1901‡	4860	1189	2860	332	148	9400	255	555	237	205	217	264
1902‡	4508	1236	2725	269	145	8886	231	543	219	158	209	242
1903	4725	1381	2802	253	148	9309	235	571	219	141	210	246
1904	4808	1490	3049	299	127	9773	233	579	231	158	177	250
1905	4835	1514	2812	321	180	9662	228	552	206	161	246	240
1906	5162	1536	2951	349	203	10201	239	509	208	162	269	245
1907	5254	1556	2929	356	168	10263	239	469	199	154	215	238
1908	5164	1603	2879	321	193	10160	230	440	188	129	239	227
1909‡	4943	1711	2729	352	176	9913	215	427	172	131	210	214
1910	4789	1896	2814	406	169	10074	205	433	171	141	195	211
1911	5080	1680	2883	414	193	10250	218	359	171	135	215	210
1912*	4875	1693	2830	413	170	9981	210	339	164	127	183	201
1913	5302	1005	3052	503	169	10031	229	189	173	146	176	199
1914	5351	1062	3111	584	182	10290	232	189	173	160	183	200
1915	5246	1052	3148	630	173	10249	227	178	171	164	169	196
1916	4881	1003	2948	618	198	9648	212	161	157	154	188	182
1917	4917	1179	3195	656	195	10142	214	180	166	156	179	188
1918	4987	1117	3078	705	211	10098	218	163	157	160	189	184
1919	4188	1017	2562	553	178	8498	183	142	128	120	155	152
1920	3411	796	2253	545	130	7135	151	105	110	109	110	126
1921	2886	664	1830	393	149	5922	130	82	87	70	121	102
1922	2785	673	1768	426	150	5802	128	78	82	69	118	98
1923	2720	656	1751	435	111	5673	127	72	79	64	85	94
1924	2695	604	1696	476	116	5587	128	63	75	65	86	90
1925	2513	721	1614	508	119	5475	122	71	70	64	86	87
1926	2575	721	1608	476	128	5508	127	67	68	56	89	85
1927	2332	717	1477	507	107	5140	118	64	61	55	73	78
1928	2498	690	1499	514	125	5326	129	59	61	53	83	79
1929	2324	695	1487	545	109	5160	122	57	59	53	70	75
1930	2345	702	1442	504	96	5089	126	55	56	46	60	73
1931	2312	645	1344	539	82	4922	124	50	52	49	51	70
1932	2147	578	1245	498	72	4540	115	45	48	44	44	64
1933	2105	652	1248	488	84	4577	112	50	48	42	51	64
1934	2028	599	1205	500	88	4420	108	45	46	43	53	62
1935	1983	557	1246	522	63	4371	106	42	47	44	38	61
1936	2100	642	1269	491	83	4585	112	48	48	40	49	63
1937	1979	569	1170	486	60	4264	105	42	44	39	35	58
1938	1741	522	1074	440	56	3833	92	38	40	35	33	52
1939	1734	524	1054	421	81	3814	92	38	39	33	47	51

DEATHS FROM TUBERCULOSIS BY CALENDAR MONTHS, NEW YORK CITY
Average Monthly During Five-Year Periods, Since 1920

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Period:													
1920-24	549	557	610	581	566	512	466	448	416	423	429	467	6024
1925-29	487	461	526	514	507	449	423	388	376	383	389	419	5322
1930-34	432	380	450	433	447	399	388	365	349	359	336	372	4710
1935-39	380	351	400	378	385	347	329	328	303	321	311	340	4173
1940-44	321	296	331	327	329	308	314	284	251	272	274	301	3608
1945-49	273	257	297	276	290	259	243	256	224	247	241	252	3115
1950-54													

AVERAGE MONTHLY TUBERCULOSIS DEATH RATES*, NEW YORK CITY
Five-Year Periods, Since 1920

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year†
Period:													
1920-24	107	121	119	117	111	103	91	88	84	83	87	91	101
1925-29	86	90	93	94	90	82	75	68	69	68	71	74	81
1930-34	71	69	74	74	74	68	64	60	60	59	57	61	67
1935-39	60	62	63	62	61	57	52	52	50	51	51	54	57
1940-44	49	50	51	52	51	49	48	44	40	42	43	46	48
1945-49	41	42	44	43	43	40	36	38	35	37	37	38	40
1950-54													

*Rates per 100,000 population for 30-day month.

†Full year.

COLORED AND WHITE TUBERCULOSIS MORTALITY, NEW YORK CITY, SINCE 1898

Year	Number of Deaths					Death Rate per 100,000				
	Negro*	Other* Colored	Total Colored	White	White and Colored	Negro*	Other* Colored	Total Colored	White	White and Colored
1898	...	...	309	8,921	9,230	...	...	487	278	282
1899	...	...	316	9,221	9,537	...	...	483	280	284
1900	...	...	362	9,268	9,630	...	...	536	274	280
1901	...	...	357	9,043	9,400	...	...	511	260	264
1902	...	...	378	8,508	8,886	...	...	522	237	242
1903	...	...	403	8,906	9,309	...	...	537	240	246
1904	...	...	469	9,304	9,773	...	...	603	243	250
1905	450	39	489	9,173	9,662	606	607	606	233	240
1906	447	41	488	9,713	10,201	577	644	582	238	245
1907	460	36	496	9,767	10,263	568	571	568	231	238
1908	508	31	539	9,621	10,160	601	497	594	220	227
1909	517	32	549	9,364	9,913	585	520	581	206	214
1910	522	45	567	9,507	10,074	561	743	572	203	211
1911	594	33	627	9,623	10,250	598	526	594	202	210
1912	588	36	624	9,357	9,981	557	555	557	193	201
1913	595	38	633	9,398	10,031	532	566	534	191	199
1914	645	28	673	9,617	10,290	546	404	538	192	200
1915	653	41	694	9,555	10,249	525	574	528	188	196
1916	578	31	609	9,039	9,648	443	421	442	175	182
1917	580	30	610	9,532	10,142	424	396	422	181	188
1918	642	44	686	9,412	10,098	449	563	455	176	184
1919	706	51	757	7,741	8,498	473	637	481	143	152
1920	596	53	649	6,486	7,135	370	633	383	118	126
1921	484	62	546	5,376	5,922	272	698	292	96	102
1922	556	57	613	5,189	5,802	285	607	300	90	98
1923	533	58	591	5,082	5,673	251	586	266	87	94
1924	600	53	653	4,934	5,587	262	509	272	83	90
1925	743	53	796	4,679	5,475	301	485	309	77	87
1926	657	60	717	4,791	5,508	249	524	261	78	85
1927	736	49	785	4,355	5,140	262	410	268	69	78
1928	823	43	866	4,460	5,326	276	345	279	70	79
1929	789	52	841	4,319	5,160	251	401	257	66	75
1930	971	46	1,017	4,072	5,089	293	295	293	62	73
1931	999	74	1,073	3,849	4,922	290	464	298	58	70
1932	952	53	1,005	3,535	4,540	267	325	269	53	64
1933	967	57	1,024	3,553	4,577	261	342	265	53	64
1934	955	57	1,012	3,408	4,420	249	335	253	50	62
1935	1,034	70	1,104	3,267	4,371	261	403	267	48	61
1936	1,076	70	1,146	3,439	4,585	263	395	268	50	63
1937	1,055	62	1,117	3,147	4,264	250	343	254	46	58
1938	904	47	951	2,882	3,833	208	255	209	42	52
1939	982	51	1,033	2,781	3,814	219	271	221	40	51

COLORED AND WHITE TUBERCULOSIS MORTALITY, NEW YORK CITY, SINCE 1898

Year	Number of Deaths					Death Rate per 100,000				
	Negro*	Other* Colored	Total Colored	White	White and Colored	Negro*	Other* Colored	Total Colored	White	White and Colored
1940 ..	929	58	987	2,640	3.627	199	301	204	38	49
1941 ..	939	74	1,013	2,702	3.715	190	367	197	39	49
1942 ..	877	59	936	2,566	3.502	168	280	172	37	46
1943 ..	917	65	982	2,678	3.660	166	296	171	38	48
1944 ..	952	61	1,013	2,521	3.534	164	267	168	36	46
1945 ..	939	66	1,005	2,508	3.513	154	278	159	36	46
1946 ..	829	58	887	2,358	3.245	130	236	134	33	42
1947 ..	899	44	943	2,185	3.128	135	173	136	31	40
1948 ..	914	56	970	2,142	3.112	131	212	134	30	40
1949 ..	798	44	842	1,735	2.577	110	161	112	24	33
1950 ..	683	34	717	1,604	2.321	90	121	92	23	29
1951 ..										
1952 ..										
1953 ..										
1954 ..										

*Negro and other colored not available separately, 1898-1904.

COLORED AND WHITE TUBERCULOSIS MORTALITY, NEW YORK CITY
Annual Average Five-Year Periods Since 1900

Year	Number of Deaths					Death Rate per 100,000				
	Negro*	Other* Colored	Total Colored	White	White and Colored	Negro*	Other* Colored	Total Colored	White	White and Colored
1900-04	*	*	394	9,006	9.400	*	*	544	251	256
1905-09	476	36	512	9,528	10.040	589	568	587	225	233
1910-14	589	36	625	9,500	10.125	558	555	558	196	204
1915-19	632	39	671	9,056	9.727	462	520	465	172	180
1920-24	554	56	610	5,414	6.024	284	598	298	94	101
1925-29	750	51	801	4,521	5.322	267	432	274	72	81
1930-34	969	57	1,026	3,684	4.710	271	392	276	55	67
1935-39	1010	60	1,070	3,103	4.173	239	332	243	45	57
1940-44	923	63	986	2,622	3.608	176	299	181	37	48
1945-49	876	53	929	2,186	3.115	131	208	134	31	40
1950-54										

*Negro and other colored not available separately, 1898-1904.

NEGRO TUBERCULOSIS DEATHS AND DEATH RATES BY BOROUGHES
New York City, Since 1925

Year	Manhattan		Bronx		Brooklyn		Queens		Richmond†		New York City	
	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1925	540	316	48	524	132	255	18	146	5	241	743	301
1926	499	274	24	241	112	202	18	132	4	183	657	249
1927	554	286	30	279	120	203	31	207	1	44	736	262
1928	622	303	36	312	130	208	28	172	7	293	823	276
1929	600	278	25	203	122	184	33	187	9	361	789	251
1930	700	309	47	356	184	263	35	186	5	193	971	293
1931	730	312	47	330	180	244	36	184	6	224	999	290
1932	713	296	38	248	156	201	39	193	6	217	952	267
1933	709	285	46	281	174	214	29	138	9	317	967	261
1934	670	262	41	235	181	212	54	249	9	308	955	249
1935	749	284	44	238	204	229	35	156	2	67	1034	261
1936	758	280	35	179	226	243	52	225	5	162	1076	263
1937	752	270	29	141	214	221	52	218	8	252	1055	250
1938	647	227	26	120	184	183	42	171	5	154	904	208
1939	692	236	26	114	217	208	40	158	7	210	982	219
1940	630	210	25	98	232	211	37	139	5	145	929	199
1941	654	212	29	88	214	178	35	120	7	192	939	190
1942	576	181	45	112	207	159	41	130	8	208	877	168
1943	602	184	61	128	201	143	41	120	12	297	917	166
1944	580	173	85	154	223	148	49	133	15	354	952	164
1945	597	174	85	136	189	118	51	130	17	383	939	154
1946	519	147	76	109	184	108	39	93	11	237	829	130
1947	537	149	97	125	208	115	46	103	11	228	899	135
1948	558	151	91	107	220	115	37	79	8	159	914	131
1949	504	133	77	84	173	86	38	77	6	115	798	110
1950	387	100	55	55	197	93	40	77	4	74	683	90
1951												
1952												
1953												
1954												

*Per 100,000 Negro population. †Wide fluctuation in rates due to small numbers.

NEGRO TUBERCULOSIS DEATHS AND DEATH RATES, BY BOROUGHES, NEW YORK CITY
Annual Average During Five-Year Periods Since 1925

Period	Manhattan		Bronx		Brooklyn		Queens		Richmond		New York City	
	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1925-29	563	291	33	303	123	209	26	171	5	227	750	267
1930-34	704	292	44	286	175	226	39	191	7	254	969	271
1935-39	720	259	32	155	209	216	44	185	5	170	1010	239
1940-44	609	192	49	122	215	165	41	130	9	234	923	176
1945-49	543	150	85	110	195	108	42	94	11	228	876	131
1950-54												

*Per 100,000 Negro population.

NONWHITE* TUBERCULOSIS DEATHS BY BOROUGHS, NEW YORK CITY, SINCE 1898

Year	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1898	198	19	70	18	4	309
1899	180	51	71	11	3	316
1900	195	57	94	9	7	362
1901	204	71	76	4	2	357
1902	191	76	92	11	8	378
1903	232	77	84	6	4	403
1904	283	66	102	12	6	469
1905	262	107	100	16	4	489
1906	313	68	93	9	5	488
1907	316	57	105	14	4	496
1908	344	71	106	11	7	539
1909	350	75	101	17	6	549
1910	363	80	104	16	4	567
1911	417	53	128	22	7	627
1912	427	66	111	14	6	624
1913†	466	31	112	17	7	633
1914	491	29	132	17	4	673
1915	475	36	154	29	0	694
1916	440	22	122	23	2	609
1917	413	16	149	25	7	610
1918	511	23	131	12	9	686
1919	565	34	121	27	10	757
1920	470	29	129	14	7	649
1921	416	18	95	9	8	546
1922	469	22	94	18	10	613
1923	454	18	101	9	9	591
1924	503	18	112	16	4	653
1925	590	49	133	19	5	796
1926	545	26	122	20	4	717
1927	596	31	126	31	1	785
1928	659	38	133	29	7	866
1929	648	25	124	35	9	841
1930	739	47	190	35	6	1,017
1931	798	48	185	36	6	1,073
1932	759	39	158	43	6	1,005
1933	757	47	182	29	9	1,024
1934	719	43	186	55	9	1,012
1935	807	47	213	35	2	1,104
1936	819	36	233	52	6	1,146
1937	807	30	219	53	8	1,117
1938	686	28	189	43	5	951
1939	736	29	220	41	7	1,033

NONWHITE* TUBERCULOSIS DEATHS BY BOROUGHES, NEW YORK CITY, SINCE 1898

Year	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1940	683	26	236	37	5	987
1941	721	31	218	36	7	1,013
1942	623	48	213	44	8	936
1943	657	63	205	43	14	982
1944	636	85	226	51	15	1,013
1945	657	86	194	51	17	1,005
1946	566	79	191	40	11	887
1947	575	97	212	47	12	943
1948	609	93	222	38	8	970
1949	543	79	176	38	6	842
1950	420	55	197	41	4	717
1951						
1952						
1953						
1954						

*Negro and other colored. †Beginning with 1913 deaths corrected for place of residence.

NONWHITE* TUBERCULOSIS DEATHS BY BOROUGHES, NEW YORK CITY
Annual Average During Five-Year Periods Since 1900

Year	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
1900-04	221	70	90	8	5	394
1905-09	317	76	101	13	5	512
1910-14	433	52	117	17	6	625
1915-19	481	26	135	23	6	671
1920-24	462	21	106	13	8	610
1925-29	607	34	128	27	5	801
1930-34	754	45	180	40	7	1,026
1935-39	771	34	215	45	5	1,070
1940-44	664	50	220	42	10	986
1945-49	590	86	199	43	11	929
1950-54						

*Negro and other colored.

TUBERCULOSIS MORTALITY, NEW YORK CITY

AGE, SEX, COLOR

1898-1950

MALE TUBERCULOSIS DEATHS, NEW YORK CITY, SINCE 1898

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All
Year:																			Ages
1898	598	80	41	198	560	(1,462)	(1,187)	(709)	(391)	(169)	(144)							6	5,445
1899	588	78	48	222	513	(1,628)	(1,336)	(737)	(356)	(170)	(41)							3	5,720
1900	610	86	50	201	527	(1,628)	(1,340)	(767)	(365)	(170)	(38)							1	5,783
1901	504	89	43	230	528	723	869	812	663	415	341	227	162	92	45	30	7	0	5,780
1902	463	83	45	236	465	651	822	748	643	405	309	191	158	63	44	20	6	3	5,355
1903	441	97	50	263	500	765	819	794	614	468	302	210	148	66	43	17	2	3	5,602
1904	450	95	63	265	543	771	876	877	698	506	363	230	148	79	37	13	9	0	6,023
1905	407	83	49	259	545	715	850	880	711	542	375	227	152	97	34	14	4	0	5,944
1906	483	78	65	267	522	724	920	939	696	612	416	269	169	106	47	17	3	4	6,337
1907	450	98	53	286	549	748	887	913	765	654	467	267	170	101	46	18	3	1	6,476
1908	463	93	65	276	575	718	869	926	775	575	439	258	175	96	39	15	5	5	6,367
1909	533	80	63	274	574	727	815	880	776	588	420	237	154	99	44	25	4	4	6,297
1910	466	89	43	289	523	690	830	874	819	644	454	289	176	99	40	18	5	4	6,352
1911	486	105	86	259	532	676	817	918	792	648	491	327	198	114	60	28	8	3	6,548
1912	469	106	59	271	546	683	776	937	828	644	481	276	202	108	48	23	6	2	6,465
1913	452	100	61	270	549	701	667	844	818	660	515	337	191	101	55	28	7	6	6,362
1914	430	106	72	281	541	658	834	903	873	713	529	353	226	120	47	19	8	3	6,716
1915	442	94	51	295	542	680	808	895	826	733	532	340	195	107	62	24	10	2	6,638
1916	371	84	57	251	494	630	760	859	714	689	512	356	220	117	43	25	2	1	6,185
1917	403	92	62	248	541	688	770	877	832	694	611	358	217	125	58	24	6	1	6,607
1918	387	76	67	296	576	670	718	753	756	688	521	369	234	116	62	21	6	2	6,318
1919	331	90	65	219	492	571	609	658	570	570	454	285	222	112	60	23	11	4	5,346
1920	256	77	50	209	368	405	456	506	436	466	386	248	167	94	49	29	7	2	4,211
1921	190	36	37	160	340	401	383	390	382	371	285	223	166	87	45	21	6	0	3,523
1922	258	45	38	174	343	384	394	408	333	325	305	206	145	92	36	16	10	3	3,515
1923	197	37	32	130	301	336	341	370	380	372	316	229	168	83	52	22	10	1	3,377
1924	182	44	34	146	339	338	369	380	364	335	275	219	147	77	28	17	4	2	3,300
1925	171	27	36	148	300	327	311	408	365	359	307	231	143	87	35	10	7	2	3,274
1926	176	45	26	139	293	325	324	348	381	369	308	244	157	113	27	21	7	2	3,305
1927	143	37	31	159	279	298	275	327	341	333	272	227	162	92	45	15	5	2	3,043
1928	160	34	34	154	294	342	297	331	378	353	300	202	186	105	44	19	6	0	3,239
1929	134	31	20	131	275	314	286	324	371	328	303	251	171	98	62	23	4	5	3,131
1930	146	32	36	138	298	302	304	348	321	365	264	233	170	101	50	16	7	0	3,131
1931	124	30	28	103	236	303	300	333	361	355	301	234	171	93	44	20	6	2	3,044
1932	112	36	17	95	235	252	322	277	280	324	287	257	167	97	64	21	5	1	2,849
1933	94	30	26	101	209	264	330	274	355	330	298	207	178	107	62	17	8	1	2,891
1934	92	19	21	74	200	257	290	304	313	358	296	235	170	106	63	18	8	1	2,825
1935	71	17	13	75	160	274	258	330	318	339	311	262	142	115	56	28	2	6	2,777
1936	57	22	27	74	196	262	303	348	329	358	320	237	177	125	72	32	8	4	2,951
1937	61	20	12	59	136	209	272	344	355	332	327	264	185	132	58	38	10	1	2,815
1938	50	13	19	67	134	180	208	295	276	323	296	255	183	126	62	30	9	0	2,526
1939	53	17	12	70	136	171	238	259	290	297	329	239	173	136	68	33	10	6	2,537

MALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY, SINCE 1898

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All
Year:																			Ages
1898	315	47	29	148	363	(448)	(477)	(508)	(522)	(554)	(502)	462	335						
1899	301	45	33	162	324	(486)	(524)	(515)	(464)	(543)	(456)	225	343						
1900	305	48	33	143	324	(473)	(512)	(522)	(463)	(529)	(412)	73	338						
1901	244	49	28	158	315	392	510	531	566	502	496	499	453	462	340	448	248	0	328
1902	217	44	28	157	269	342	468	474	532	475	436	407	428	307	323	289	206	206	294
1903	201	50	30	170	281	390	452	488	493	532	413	434	389	311	306	238	67	200	299
1904	206	50	37	158	279	376	478	534	535	519	465	461	389	342	254	181	290	0	310
1905	181	42	28	149	271	338	449	519	529	539	465	441	387	407	226	189	125	0	297
1906	208	38	36	149	251	331	470	535	500	588	499	504	416	429	302	221	90	276	305
1907	195	49	28	146	241	326	446	513	524	567	524	484	417	378	284	232	87	77	300
1908	193	45	33	136	244	302	422	503	513	481	476	451	415	347	233	187	140	373	285
1909	215	38	31	131	235	295	381	461	495	475	439	400	352	345	253	300	108	288	272
1910	182	40	20	133	207	271	376	443	506	503	460	472	389	334	223	209	131	279	266
1911	186	47	40	117	207	261	363	457	480	497	488	525	430	378	329	319	205	205	269
1912	176	47	27	121	209	259	339	458	493	486	470	435	431	351	258	258	151	134	261
1913	167	43	27	118	206	261	286	405	479	489	494	522	401	323	291	308	173	396	252
1914	161	44	32	130	217	249	349	412	495	491	459	476	408	360	235	190	195	195	262
1915	162	38	22	134	214	253	333	402	460	497	454	451	346	316	305	236	240	128	254
1916	134	34	24	112	191	230	308	379	391	459	430	465	384	339	208	242	47	63	233
1917	148	36	26	118	226	256	305	369	442	432	468	413	333	339	266	207	131	53	245
1918	140	29	28	138	236	245	279	312	395	422	393	419	353	309	280	178	129	104	231
1919	118	34	26	101	199	205	233	268	293	344	337	318	330	294	266	192	233	205	192
1920	89	28	20	94	145	143	171	202	219	275	280	272	243	242	213	238	145	101	149
1921	66	13	14	70	131	138	140	151	186	213	201	236	235	213	187	169	122	0	122
1922	90	16	15	74	128	130	141	153	158	181	209	211	198	215	143	123	198	145	119
1923	69	13	12	53	109	111	119	135	175	202	211	228	223	185	195	165	194	47	111
1924	64	16	13	58	120	110	126	135	163	177	179	211	188	164	100	122	76	92	107
1925	60	9	13	57	103	104	104	141	159	185	195	216	178	176	120	70	123	79	104
1926	62	16	9	52	98	102	107	116	161	186	191	221	190	220	89	145	121	77	102
1927	51	13	11	58	91	92	88	107	140	163	164	200	190	171	142	99	84	76	92
1928	57	12	12	55	94	103	94	105	151	169	177	173	212	187	132	123	99	0	96
1929	49	11	7	46	85	93	88	100	144	153	174	209	189	168	179	143	65	183	91
1930	54	11	12	47	91	88	92	109	117	166	150	189	184	167	140	(91)			90
1931	46	10	10	35	72	89	91	103	130	157	165	182	178	147	118	(103)			87
1932	43	13	6	32	72	74	98	86	99	140	152	192	167	147	162	(94)			81
1933	36	11	9	34	65	78	100	85	124	138	152	148	170	155	151	(84)			82
1934	36	7	7	25	63	77	88	94	108	146	146	162	157	147	146	(83)			79
1935	29	6	5	25	50	82	78	101	108	135	149	174	126	154	125	(105)			78
1936	23	8	9	25	62	79	92	106	110	139	148	152	152	161	154	(121)			82
1937	26	8	4	20	43	64	82	105	117	126	147	163	153	164	120	(129)			78
1938	22	5	7	22	43	55	63	90	89	120	129	153	147	151	123	(97)			69
1939	23	7	4	23	44	53	72	78	93	107	139	138	134	157	129	(117)			69

MALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY, SINCE 1898

Age	0-4	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85+	All Ages
Year:																			
1940 ..	24	4	5	24	35	48	66	65	82	101	124	152	146	146	147	(119)			65
1941 ..	15	6	9	21	34	53	60	72	81	106	130	139	155	139	141	(132)			67
1942 ..	17	2	4	17	28	39	56	78	82	96	113	136	152	151	178	(137)			64
1943 ..	11	3	4	20	42	43	50	69	87	104	132	156	141	139	140	(142)			66
1944 ..	12	3	3	18	39	37	49	72	87	101	120	139	141	138	132	(117)			63
1945 ..	13	2	3	16	32	40	53	61	96	111	125	139	144	146	133	(135)			65
1946 ..	12	2	4	16	27	30	38	56	87	87	118	141	145	136	140	(104)			59
1947 ..	10	2	1	11	26	27	36	46	84	95	119	130	144	137	129	(141)			58
1948 ..	9	2	0	8	23	30	39	46	78	106	114	125	130	142	150	(152)			58
1949 ..	4	2	0.4	6	19	21	29	44	65	80	98	108	113	119	109	(103)			48
1950 ..	9	3	0	7	18	14	29	36	57	65	93	100	108	120	129	(114)			45
1951 ..																			
1952 ..																			
1953 ..																			
1954 ..																			

*Per 100,000 male population living in each age group.

MALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods, Since 1900

Age:	0-4	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85+	All Ages
Period:																			
1900-04	233	48	31	157	293	383	487	505	531	516	458	456	419	393	337	317	226	99	314
1905-09	198	42	31	142	248	318	432	505	512	527	480	455	397	379	260	227	110	204	291
1910-14	174	44	29	124	209	260	342	435	491	493	474	486	412	349	267	256	171	242	262
1915-19	140	34	25	120	213	237	291	344	395	429	415	410	348	319	265	210	156	112	231
1920-24	76	17	15	69	126	126	139	154	179	209	215	231	217	202	166	162	147	77	121
1925-29	56	12	10	54	94	99	96	113	151	171	180	203	192	184	134	117	98	84	97
1930-34	43	10	9	35	73	81	94	95	116	149	153	174	171	152	144	(91)			84
1935-39	25	7	6	23	49	67	77	96	103	125	142	156	143	158	130	(114)			75
1940-44	14	3	5	20	36	44	56	71	84	101	124	144	147	143	148	(130)			65
1945-49	9	2	2	12	25	30	39	51	82	96	115	128	135	136	132	(127)			58
1950-54																			

*Per 100,000 male population living in each age group.

FEMALE TUBERCULOSIS DEATHS, NEW YORK CITY, SINCE 1898

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All Ages
Year:																			
1898	499	72	80	248	476	(1,074)	(612)	(347)	(204)	(122)	(43)	8							3785
1899	523	81	83	248	530	(1,072)	(642)	(293)	(191)	(109)	(34)	11							3817
1900	463	78	81	238	487	(1,179)	(698)	(307)	(193)	(89)	(33)	1							3847
1901	386	69	101	246	461	532	492	432	287	161	145	87	93	67	33	19	7	2	3620
1902	408	93	72	258	496	571	481	373	270	146	107	94	67	33	31	17	9	5	3531
1903	395	78	94	288	487	641	528	389	253	158	117	106	66	44	35	20	5	3	3707
1904	372	100	98	346	537	623	499	384	285	171	122	67	68	35	26	11	5	1	3750
1905	359	91	91	296	530	585	477	435	277	168	132	101	81	59	22	7	3	4	3718
1906	373	87	111	317	533	599	510	434	293	191	135	117	73	44	29	13	1	4	3864
1907	381	82	109	330	499	562	487	435	310	193	128	92	71	54	33	13	5	3	3787
1908	354	106	119	333	475	549	481	429	326	220	137	86	70	52	29	17	8	2	3793
1909	383	94	104	298	457	495	453	425	288	212	134	100	69	52	31	15	6	0	3616
1910	398	104	99	306	514	520	461	400	328	209	134	80	62	55	26	21	3	2	3722
1911	450	95	107	301	475	501	444	448	299	204	138	89	57	44	27	16	6	1	3702
1912	396	95	97	290	468	468	430	393	276	190	142	105	69	51	26	14	3	3	3516
1913	454	104	117	295	468	472	414	412	289	197	165	98	77	49	26	21	8	3	3669
1914	326	133	99	318	454	460	395	404	339	215	150	116	71	48	28	6	11	1	3574
1915	392	104	117	305	519	485	383	382	272	205	143	102	102	40	39	14	4	3	3611
1916	308	78	105	328	475	486	404	356	298	221	130	89	80	53	31	15	3	3	3463
1917	338	88	100	338	502	476	421	350	286	201	159	108	68	42	36	12	7	3	3535
1918	335	89	152	378	611	511	451	321	277	219	157	105	91	37	29	12	4	1	3780
1919	254	72	102	328	510	471	360	267	231	164	162	74	62	47	31	11	3	3	3152
1920	238	65	90	313	494	428	338	273	206	129	128	76	54	48	28	11	4	1	2924
1921	189	46	76	251	376	338	280	217	179	146	93	78	58	31	22	14	5	0	2399
1922	166	46	67	287	409	323	250	186	172	117	79	66	58	36	17	5	3	0	2287
1923	171	39	71	241	359	310	232	231	170	122	138	75	53	41	27	13	2	1	2296
1924	175	54	61	259	376	334	237	190	158	122	115	75	49	42	27	8	4	1	2287
1925	152	37	60	237	370	332	241	208	158	121	85	72	60	28	26	10	3	1	2201
1926	142	29	56	257	368	331	234	196	141	128	103	64	53	53	26	15	5	2	2203
1927	140	31	64	256	351	272	260	164	133	118	92	64	68	28	31	14	8	3	2097
1928	149	37	51	239	337	313	219	177	133	128	98	61	56	38	35	9	3	4	2087
1929	115	23	40	252	393	306	247	164	121	89	64	75	60	35	30	7	7	1	2029
1930	118	17	51	220	334	303	227	169	117	119	83	53	59	37	24	19	5	3	1958
1931	89	29	33	202	349	285	223	146	114	101	86	74	62	47	19	11	5	3	1878
1932	100	29	34	154	318	254	172	177	102	89	73	66	38	45	29	5	5	1	1691
1933	89	29	38	139	281	283	189	135	114	86	78	52	69	54	29	14	5	2	1686
1934	67	15	24	124	272	251	190	141	122	89	91	67	54	40	18	19	8	3	1595
1935	58	22	33	133	262	208	186	160	122	93	90	75	53	42	26	20	9	2	1594
1936	39	15	33	124	281	283	199	157	123	84	82	58	56	44	31	11	9	5	1634
1937	48	14	31	126	231	258	167	123	93	80	81	62	39	48	23	18	5	2	1449
1938	49	15	24	115	226	203	146	123	93	59	62	45	50	43	26	18	5	5	1307
1939	40	8	24	89	198	216	139	104	99	65	79	54	57	45	38	11	8	3	1277

FEMALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY, SINCE 1898

Age Year:	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All Ages
1898	265	43	56	161	259	(333)	(276)	(257)	(259)	(319)	(389)	607	230						
1899	271	47	56	157	281	(324)	(282)	(212)	(237)	(278)	(300)	813	226						
1900	234	44	53	147	252	(348)	(299)	(216)	(233)	(221)	(284)	72	222						
1901	189	38	65	147	231	278	311	317	275	201	218	182	247	267	200	226	196	140	202
1902	194	49	45	149	241	289	294	265	251	177	156	191	173	128	183	196	244	339	191
1903	182	40	57	162	230	315	313	268	228	186	165	208	165	165	200	223	131	197	195
1904	173	53	57	181	240	303	294	254	241	185	164	131	166	129	146	117	116	51	192
1905	162	46	51	150	229	276	272	279	227	176	172	191	192	210	120	72	68	198	184
1906	162	43	60	156	223	273	281	269	232	194	170	214	167	151	152	130	22	191	185
1907	168	41	57	151	197	253	266	259	231	180	153	166	159	181	170	123	101	126	176
1908	150	52	60	147	181	238	253	246	234	198	158	150	151	169	144	155	156	81	170
1909	157	44	51	127	168	207	230	236	200	184	149	168	144	163	149	132	113	0	156
1910	158	47	47	126	182	211	227	215	220	176	144	130	125	167	121	179	54	76	156
1911	175	42	49	122	166	200	214	236	197	168	146	142	113	131	123	134	107	37	152
1912	151	42	44	115	160	183	204	203	179	154	148	165	134	149	116	115	53	110	142
1913	171	45	52	115	158	181	193	209	184	157	168	151	147	141	114	170	138	108	145
1914	124	55	44	134	158	172	177	198	207	161	137	158	122	130	116	45	178	32	139
1915	147	43	51	126	178	178	168	184	163	151	128	136	173	106	159	103	64	96	138
1916	114	31	45	134	160	176	175	169	176	160	115	117	133	138	124	108	47	94	130
1917	127	34	42	150	177	168	175	160	162	138	127	126	103	103	136	81	99	85	131
1918	124	34	63	165	212	177	185	145	155	148	123	121	135	89	108	79	56	28	137
1919	92	27	42	141	174	161	145	119	127	109	125	84	91	111	113	72	41	83	113
1920	85	24	36	132	165	143	133	119	111	84	97	84	77	112	100	70	54	27	103
1921	68	17	30	103	123	111	108	91	93	93	68	83	80	69	75	87	66	0	82
1922	59	17	26	114	131	104	94	76	87	72	57	68	77	76	55	30	39	0	77
1923	61	14	27	93	113	98	85	92	84	73	96	75	68	83	84	76	25	25	76
1924	63	19	23	98	116	104	84	73	76	71	78	72	61	81	81	45	50	25	74
1925	55	13	22	87	112	101	84	78	73	69	56	67	72	52	74	55	35	23	70
1926	52	10	21	92	109	99	79	72	64	71	66	58	62	94	71	82	57	44	68
1927	51	11	23	90	102	80	86	58	59	64	58	56	77	48	81	73	90	65	64
1928	55	13	18	82	96	91	71	61	57	68	60	52	61	62	89	46	33	85	62
1929	43	8	14	84	110	87	78	55	51	46	38	62	64	55	73	35	76	21	59
1930	45	6	18	72	92	85	70	56	47	59	50	43	60	55	58	(78)			56
1931	34	10	12	66	97	80	68	48	45	48	50	58	61	67	43	(51)			54
1932	39	10	12	50	89	71	52	57	39	41	41	50	36	61	63	(28)			48
1933	36	11	13	45	79	78	57	43	43	39	43	38	63	70	59	(50)			47
1934	27	6	8	40	76	69	56	44	45	39	48	48	48	50	35	(68)			44
1935	24	8	12	43	74	57	55	50	44	40	46	52	46	50	49	(66)			44
1936	17	6	12	40	80	77	58	48	43	35	41	39	47	51	55	(51)			45
1937	21	6	11	41	66	70	48	37	32	32	39	40	31	53	39	(48)			39
1938	22	6	9	37	65	55	41	37	31	23	29	28	39	46	43	(52)			35
1939	18	3	9	29	57	58	39	31	32	25	36	33	43	46	60	(39)			34

FEMALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY, SINCE 1898

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All Ages
Year:																			
1940 ..	13	3	8	30	55	48	42	38	32	25	35	26	35	39	41	(48)			33
1941 ..	15	3	7	31	44	52	45	36	37	27	32	29	36	32	42	(70)			33
1942 ..	15	5	7	25	51	39	39	31	26	24	24	33	36	47	38	(64)			30
1943 ..	10	2	5	31	51	39	48	41	30	25	24	27	36	41	45	(45)			31
1944 ..	12	5	4	33	44	44	46	33	29	25	24	30	31	35	47	(44)			30
1945 ..	10	3	3	22	45	44	41	33	32	21	22	23	22	28	22	(54)			27
1946 ..	8	3	6	20	42	33	41	36	27	22	19	23	26	33	26	(45)			26
1947 ..	6	3	3	23	38	38	30	30	22	23	21	23	18	30	37	(40)			24
1948 ..	12	0	2	18	37	40	31	26	26	18	17	17	17	30	34	(46)			23
1949 ..	8	1	3	12	24	26	32	25	22	23	16	14	18	22	27	(31)			19
1950 ..	10	1	3	8	18	19	18	19	18	19	13	13	19	13	25	(32)			15
1951 ..																			
1952 ..																			
1953 ..																			
1954 ..																			

*Per 100,000 female population living in each age group.

FEMALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods, Since 1900

Age:	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All Ages
Period:																			
1900-04	194	45	55	158	238	305	312	282	255	193	181	187	197	180	190	209	186	154	200
1905-09	160	45	56	146	198	249	260	257	224	187	160	177	162	174	147	124	94	113	174
1910-14	156	46	47	122	165	189	202	212	197	163	148	150	128	143	118	127	108	72	147
1915-19	121	34	49	143	180	172	169	155	156	141	124	116	125	109	127	88	62	76	130
1920-24	67	18	28	108	129	111	100	90	90	78	79	76	73	84	79	61	47	16	82
1925-29	51	11	20	87	106	91	79	65	60	63	56	59	67	62	78	58	59	48	65
1930-34	36	9	13	55	87	76	61	50	44	45	47	47	53	60	51	(55)			50
1935-39	20	6	10	38	68	63	48	41	36	31	38	38	41	49	49	(51)			39
1940-44	13	4	6	30	49	44	44	36	31	25	28	29	35	39	43	(54)			31
1945-49	9	2	3	19	37	36	35	30	26	21	19	20	20	28	29	(43)			24
1950-54																			

*Per 100,000 female population living in each age group.

WHITE MALE TUBERCULOSIS DEATH RATE*, BY AGE, NEW YORK CITY, SINCE 1920

Age	0-4	5-10	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All	
Year:																		Ages	
1920	80	26	15	81	135	133	165	195	213	267	268	269	239	235	211	232	147	103	141
1921	61	12	14	64	119	126	131	143	179	209	196	235	231	203	185	170	123	0	115
1922	82	14	12	68	116	118	133	148	149	179	208	209	191	214	133	124	201	148	112
1923	63	11	11	50	96	99	113	130	166	198	208	221	218	185	182	167	157	48	105
1924	59	15	10	53	102	100	116	129	153	174	178	210	187	160	98	124	77	94	99
1925	50	8	11	49	84	90	90	130	146	180	189	214	171	171	122	71	125	81	94
1926	50	13	7	45	87	91	96	112	149	171	187	219	186	220	90	140	122	40	95
1927	44	11	9	50	78	75	77	98	124	152	157	195	185	165	141	100	68	39	83
1928	47	9	9	44	76	86	80	100	136	160	163	171	211	185	122	125	101	0	87
1929	42	7	4	35	68	78	76	96	131	144	170	201	180	167	182	145	66	186	83
1930	42	8	9	33	74	70	75	89	103	154	145	186	176	164	141	(84)			78
1931	35	7	6	25	54	68	73	87	115	150	153	176	171	146	116	(97)			75
1932	30	8	3	20	53	56	77	70	86	130	143	186	163	143	152	(92)			69
1933	26	8	5	24	47	59	80	67	110	122	147	141	167	151	139	(83)			70
1934	24	5	3	18	50	57	67	73	93	133	134	152	153	144	146	(85)			67
1935	18	3	3	17	35	62	59	81	90	120	137	164	119	145	121	(104)			65
1936	16	5	5	13	42	55	69	81	99	121	132	144	149	155	152	(118)			68
1937	17	3	0.4	12	29	47	60	74	99	108	132	154	143	156	120	(121)			64
1938	14	3	3	14	27	40	48	70	76	107	120	140	142	155	115	(94)			59
1939	18	5	2	11	28	36	46	59	78	97	130	126	129	148	120	(117)			57
1940	10	3	3	15	18	32	46	52	72	85	114	146	137	144	141	(119)			55
1941	9	4	4	9	21	34	44	54	67	92	115	133	153	136	144	(131)			56
1942	11	1	2	12	17	25	37	64	69	86	100	129	149	149	165	(134)			55
1943	7	2	2	9	24	25	38	54	76	92	123	142	133	130	141	(142)			56
1944	7	2	1	7	19	26	31	54	69	89	110	135	137	129	130	(118)			54
1945	9	2	2	7	18	25	38	49	78	88	112	134	138	138	128	(131)			55
1946	8	2	1	5	14	17	24	40	74	77	107	136	141	130	137	(104)			51
1947	7	1	1	4	11	16	22	33	61	82	105	117	137	128	127	(135)			48
1948	7	1	0	3	11	15	22	30	59	85	104	113	124	136	142	(142)			48
1949	2	1	0.4	2	8	8	17	28	49	59	86	94	105	111	107	(99)			39
1950	6	2	0	2	6	7	17	24	41	51	80	90	98	110	128	(115)			37
1951																			
1952																			
1953																			
1954																			

*Per 100,000 white male population including colored other than Negroes living in each age group.

WHITE MALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods Since 1920

Age	0-4	5-10	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	All	
Period:																Ages	
1920-24	69	15	12	63	113	115	131	148	171	205	211	228	212	199	161	148	114
1925-29	46	10	8	44	79	84	84	107	137	161	173	200	187	181	133	106	88
1930-34	32	7	5	24	56	62	74	77	101	138	144	168	166	149	139	88	72
1935-39	17	4	3	13	32	48	56	73	88	110	130	145	136	152	126	111	63
1940-44	9	2	2	11	20	28	39	56	71	89	113	137	142	138	144	129	55
1945-49	6	1	1	4	13	16	25	36	64	78	103	118	129	129	128	122	48
1950-54																	

*Per 100,000 white male population including colored other than Negroes living in each age group.

WHITE FEMALE TUBERCULOSIS DEATH RATE*, BY AGE, NEW YORK CITY, SINCE 1920

Age Year:	0-4	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85+	All Ages
1920	79	21	34	121	153	134	124	113	107	79	97	80	77	113	102	58	55	28	96
1921	64	15	26	93	117	104	101	93	89	89	67	83	79	68	77	83	67	0	78
1922	56	13	23	106	122	95	86	68	82	65	55	66	70	75	57	31	39	0	71
1923	56	14	24	88	106	86	80	88	76	68	94	72	65	78	83	72	26	26	70
1924	56	20	19	82	106	94	77	68	72	64	78	72	62	76	80	40	51	26	67
1925	45	12	17	74	96	90	75	73	66	59	57	65	67	50	77	57	36	23	61
1926	44	9	17	83	97	92	72	64	60	64	64	59	60	91	74	83	47	46	62
1927	39	9	20	79	90	69	78	52	52	57	53	56	74	48	82	75	92	67	56
1928	46	10	14	68	81	80	64	52	49	54	57	50	59	63	89	42	34	88	54
1929	37	4	9	71	96	72	69	50	42	39	35	61	63	55	76	36	67	22	51
1930	34	4	12	58	75	68	60	41	44	47	44	33	60	52	56	(77)			46
1931	25	8	7	47	74	59	52	41	38	42	45	53	59	66	42	(47)			43
1932	26	6	8	35	71	56	40	45	34	35	37	44	36	60	64	(26)			38
1933	25	7	7	33	59	61	45	34	36	31	40	36	61	68	57	(47)			38
1934	21	3	5	28	57	50	45	37	36	33	41	42	43	49	34	(70)			35
1935	20	5	6	30	54	39	38	35	36	30	40	49	40	47	46	(62)			33
1936	13	3	3	27	57	60	43	37	36	28	32	36	46	51	57	(48)			35
1937	14	3	6	23	46	51	37	29	26	25	33	35	29	51	35	(44)			29
1938	13	3	4	20	41	38	32	28	28	21	27	22	36	41	37	(51)			26
1939	12	2	4	14	37	34	26	23	26	19	28	30	42	43	57	(40)			24
1940	9	3	3	12	32	31	26	26	25	19	27	22	31	35	42	(50)			22
1941	12	2	3	12	23	37	31	25	31	22	24	24	33	33	42	(67)			24
1942	9	3	2	12	25	24	27	21	18	18	20	29	37	44	35	(61)			20
1943	6	1	1	14	26	27	32	33	22	20	21	23	32	38	43	(45)			22
1944	6	3	1	16	20	26	31	22	20	18	19	28	29	29	49	(41)			20
1945	7	2	1	7	22	25	30	26	25	15	16	19	18	26	20	(47)			18
1946	6	1	4	8	23	17	26	27	21	15	15	19	25	32	26	(47)			18
1947	3	1	1	8	17	19	20	21	15	16	16	20	17	23	35	(36)			15
1948	6	0	0.4	4	15	19	20	17	19	13	12	13	15	26	36	(47)			14
1949	5	0	2	4	10	14	18	15	14	16	14	12	13	19	26	(29)			12
1950	6	0	2	4	8	8	8	13	12	12	7	10	15	12	22	(31)			9
1951																			
1952																			
1953																			
1954																			

*Per 100,000 white female population including colored other than Negroes living in each age group.

WHITE FEMALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods Since 1920

Age Period:	0-4	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75+	All Ages
1920-24	62	16	25	98	120	102	93	85	85	73	78	74	70	81	80	48	76
1925-29	42	9	15	75	92	80	71	58	53	54	53	58	65	61	80	56	57
1930-34	26	5	8	40	67	59	49	40	38	37	41	42	52	59	50	53	40
1935-39	15	3	5	23	47	45	35	30	30	24	32	34	39	46	47	48	29
1940-44	8	3	2	13	25	29	29	26	23	20	22	25	32	36	42	53	22
1945-49	6	1	2	6	17	19	23	21	19	15	15	17	17	25	29	41	16
1950-54																	

*Per 100,000 white female population including colored other than Negroes living in each age group.

NEGRO MALES, TUBERCULOSIS DEATH RATE*, BY AGE, NEW YORK CITY, SINCE 1920

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All
Year																			Ages
1920	554	177	315	740	437	365	336	375	411	539	818	434	590	818	397	769	0	0	433
1921	293	78	47	354	419	410	368	342	347	316	400	323	532	938	358	0	0	0	336
1922	403	121	147	340	423	375	319	297	331	242	281	350	680	342	1010	0	0	0	323
1923	290	108	76	208	418	344	247	259	318	300	335	582	540	160	1238	0	3279	0	292
1924	230	42	156	271	520	294	342	286	328	238	238	291	250	450	295	0	0	0	291
1925	370	76	111	355	503	349	371	378	357	290	399	312	619	558	0	0	0	0	344
1926	380	103	117	331	338	278	297	240	327	509	331	330	434	265	0	498	0	2000	297
1927	217	74	95	348	347	353	290	301	398	401	427	421	474	632	249	0	1250	1852	307
1928	294	78	113	423	427	356	317	245	361	347	640	250	258	363	937	0	0	0	319
1929	188	89	105	387	414	314	284	228	312	332	328	500	670	229	0	0	0	0	283
1930	281	83	110	465	392	335	364	417	407	423	296	283	580	333	0		(506)		336
1931	262	80	122	336	410	379	360	359	417	295	481	403	515	192	192		(455)		329
1932	259	109	76	356	429	329	403	335	341	329	395	395	323	331	850		(205)		319
1933	220	60	115	300	401	345	399	351	378	466	291	389	333	366	913		(193)		319
1934	239	51	107	189	289	348	395	396	367	421	446	473	340	327	137		(0)		307
1935	195	63	31	220	340	365	359	392	412	436	435	502	414	530	374		(161)		312
1936	138	68	102	279	430	422	421	471	283	481	555	388	282	423	227		(296)		338
1937	165	79	75	184	310	298	395	533	399	469	504	435	491	481	104		(547)		325
1938	137	32	77	196	340	280	274	358	292	349	331	492	320	0	478		(260)		254
1939	95	31	43	254	352	301	428	333	311	301	346	476	297	483	530		(121)		273
1940	74	18	40	196	342	285	341	231	218	386	327	295	410	221	406		(111)		230
1941	84	34	77	212	259	311	269	297	282	338	445	274	231	233	0		(200)		235
1942	86	11	32	88	192	218	297	243	260	254	373	307	234	214	654		(265)		197
1943	58	20	31	175	319	253	195	241	216	280	301	455	344	391	118		(161)		203
1944	66	10	25	170	316	158	243	233	298	260	296	236	253	361	215		(72)		193
1945	52	5	19	134	213	199	216	180	299	424	338	254	284	335	295		(264)		193
1946	51	4	33	146	184	151	170	208	228	217	293	240	251	265	222		(119)		159
1947	44	9	5	87	192	121	167	170	328	258	324	377	305	350	163		(331)		168
1948	28	8	0	70	150	160	185	188	265	353	266	348	261	267	377		(453)		166
1949	17	12	0	54	123	129	132	180	219	309	268	356	283	284	140		(234)		144
1950	29	15	0	53	129	68	125	134	204	220	259	274	303	317	162		(86)		123
1951																			
1952																			
1953																			
1954																			

*Per 100,000 Negro male population living in each age group.

NEGRO MALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods Since 1920

Age	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	All
Period:																	Ages
1920-24	342	100	143	363	445	354	321	307	344	317	393	396	505	513	673	231	329
1925-29	284	84	108	371	405	330	310	275	350	375	427	367	488	405	249	229	308
1930-34	252	76	106	323	384	346	384	371	381	389	383	395	406	314	442	246	322
1935-39	146	54	66	227	354	333	375	416	338	404	430	460	358	376	353	274	300
1940-44	73	18	40	167	286	241	266	248	255	300	346	315	292	293	275	159	210
1945-49	37	8	11	97	170	151	173	185	267	312	296	319	277	300	237	287	165
1950-54																	

*Per 100,000 Negro male population living in each age group.

NEGRO FEMALES, TUBERCULOSIS DEATH RATE*, BY AGE, NEW YORK CITY, SINCE 1920

Age Year:	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	All Ages
1920	350	187	152	584	461	347	339	249	204	251	68	311	88	0	0	763	0	0	313
1921	194	110	215	466	264	244	257	64	214	185	124	113	161	132	0	357	0	0	214
1922	189	178	160	410	329	262	243	243	222	261	113	206	447	119	0	0	0	0	250
1923	245	29	147	286	238	300	167	164	252	204	208	238	207	329	173	310	0	0	214
1924	281	13	180	577	309	267	216	175	156	235	96	132	0	305	163	287	0	0	235
1925	321	60	223	469	406	269	240	178	239	304	67	205	303	93	0	0	0	0	263
1926	249	54	130	344	328	204	196	201	137	202	168	38	115	175	0	0	606	0	206
1927	347	70	134	372	310	233	208	159	193	201	237	72	164	0	139	0	0	0	222
1928	258	83	137	433	344	241	181	216	208	342	186	137	156	0	134	248	0	0	237
1929	164	102	162	418	342	288	217	140	198	166	159	130	50	0	0	0	508	0	221
1930	234	55	174	413	363	305	217	279	117	293	218	400	48	207	126		(126)		254
1931	194	61	132	493	428	330	296	153	169	178	187	222	128	121	113		(225)		255
1932	268	103	106	379	346	246	213	223	125	159	145	252	39	108	0		(102)		220
1933	208	71	164	297	351	279	209	166	151	177	108	91	141	146	181		(188)		211
1934	130	55	84	283	341	288	197	141	186	143	215	209	226	88	82		(0)		199
1935	95	67	122	295	340	262	258	240	165	216	178	134	235	159	151		(234)		217
1936	67	46	162	270	371	272	242	182	145	145	223	106	54	36	0		(143)		200
1937	113	45	102	352	315	278	178	136	122	153	168	163	100	99	192		(197)		187
1938	139	50	84	321	358	235	151	142	76	63	79	166	115	182	233		(62)		169
1939	106	24	79	265	305	317	188	122	126	126	187	98	86	112	162		(0)		175
1940	66	12	64	299	335	229	229	161	133	133	184	104	119	154	0		(0)		175
1941	53	17	51	292	277	210	185	150	113	101	172	122	111	24	46		(145)		153
1942	79	26	74	191	330	188	164	131	111	100	92	115	17	130	125		(132)		144
1943	47	15	48	231	307	146	195	110	122	84	72	108	142	121	77		(41)		135
1944	69	19	32	237	271	199	178	126	124	109	108	72	59	150	0		(112)		140
1945	35	9	27	191	244	202	139	91	101	94	102	107	110	70	66		(243)		122
1946	22	21	26	149	200	147	160	112	90	98	85	102	64	49	31		(0)		106
1947	26	21	22	170	206	172	112	105	90	102	92	70	48	153	85		(119)		107
1948	58	0	17	151	200	185	108	97	90	73	82	76	57	115	0		(28)		102
1949	31	8	13	80	125	101	133	106	99	97	36	40	108	82	50		(78)		82
1950	39	7	16	43	89	85	79	66	69	85	84	54	81	38	94		(49)		63
1951																			
1952																			
1953																			
1954																			

*Per 100,000 Negro female population living in each age group.

NEGRO FEMALE TUBERCULOSIS DEATH RATE*, NEW YORK CITY
Annual Average During Five-Year Periods Since 1920

Age Period:	0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	All Ages
1920-24	251	94	171	461	314	282	239	178	209	227	124	195	179	190	74	192	242
1925-29	264	76	156	407	344	248	208	178	195	242	166	116	153	49	56	85	229
1930-34	206	69	130	368	365	289	225	190	151	187	174	227	124	129	102	122	227
1935-39	104	46	108	301	337	272	202	162	125	138	166	134	115	118	153	118	189
1940-44	63	18	53	248	303	193	189	134	121	104	123	103	88	117	50	88	148
1945-49	35	11	21	147	193	160	130	102	94	92	78	78	77	95	46	89	103
1950-54																	

*Per 100,000 Negro female population living in each age group.

TUBERCULOSIS MORTALITY AMONG INFANTS
New York City, Since 1898

Year	Meningitis		Respiratory		Abdominal		Other Forms		All Forms	
	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1898	291	245	69	58	41	34	101	85	502	422
1899	281	242	98	85	34	29	79	68	492	424
1900	301	245	66	54	31	25	80	65	478	389
1901	246	202	64	52	52	43	33	27	395	324
1902	236	186	47	37	42	33	23	18	348	274
1903	249	193	40	31	42	33	22	17	353	274
1904	211	159	61	46	33	25	17	12	322	242
1905	154	114	65	48	33	24	17	13	269	199
1906	197	140	64	45	39	28	23	16	323	229
1907	193	130	64	43	35	23	24	16	316	212
1908	181	124	56	38	33	23	19	13	289	198
1909	182	128	85	60	24	17	20	14	311	219
1910	166	116	53	37	37	26	36	25	292	204
1911	198	140	51	36	24	17	42	30	315	223
1912	173	124	43	31	39	28	36	25	291	208
1913	169	121	40	29	27	19	42	30	278	199
1914	155	110	40	28	8	6	36	26	239	170
1915	171	121	46	33	10	7	51	36	278	197
1916	153	111	42	31	11	8	39	28	245	178
1917	130	92	37	26	9	6	53	38	229	162
1918	151	110	42	30	10	7	36	26	239	173
1919	107	82	47	36	14	11	26	20	194	149
1920	77	58	46	34	14	11	19	14	156	117
1921	88	66	39	29	7	5	21	16	155	116
1922	69	53	31	24	4	3	29	22	133	102
1923	66	51	28	22	7	5	21	16	122	94
1924	63	48	16	12	1	1	15	12	95	73
1925	57	44	20	16	7	6	21	16	105	82
1926	50	40	18	14	4	3	22	18	94	75
1927	43	34	16	12	5	4	22	17	86	67
1928	44	35	18	14	4	3	27	22	93	74
1929	30	24	10	8	7	6	29	23	76	61
1930	34	28	25	20	1	1	28	23	88	72
1931	24	21	15	13	2	2	9	7	50	43
1932	14	13	15	14	2	2	17	15	48	44
1933	17	16	19	18	0	0	14	14	50	48
1934	14	14	18	18	2	2	11	10	45	44
1935	5	5	13	13	0	0	10	10	28	28
1936	5	5	12	12	0	0	3	3	20	20
1937	5	5	10	10	0	0	3	3	18	18
1938	2	2	10	10	0	0	6	6	18	18
1939	11	11	10	10	0	0	5	5	26	26

TUBERCULOSIS MORTALITY AMONG INFANTS
New York City, Since 1898

Year	Meningitis		Respiratory		Abdominal		Other Forms		All Forms	
	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1940	6	6	8	7	0	0	0	0	14	13
1941	7	6	6	5	1	1	4	4	18	16
1942	7	5	8	6	0	0	4	3	19	14
1943	2	1	3	2	0	0	6	5	11	8
1944	4	3	5	4	0	0	3	3	12	10
1945	4	3	9	7	0	0	5	4	18	14
1946	2	1	4	3	0	0	3	2	9	6
1947	3	2	7	4	0	0	3	2	13	8
1948	3	2	8	5	0	0	7	4	18	11
1949	2	1	3	2	0	0	6	4	11	7
1950	2	1	10	7	0	0	3	2	15	10
1951										
1952										
1953										
1954										

*Per 100,000 live births.

TUBERCULOSIS MORTALITY AMONG INFANTS
Annual Average During Five-Year Periods Since 1900

Year	Meningitis		Respiratory		Abdominal		Other Forms		All Forms	
	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1900-04	249	196	55	43	40	32	35	28	379	299
1905-09	181	127	67	47	33	23	21	15	302	212
1910-14	172	122	46	32	27	19	38	28	283	201
1915-19	142	103	43	31	11	8	41	30	237	172
1920-24	73	55	32	25	6	5	21	16	132	101
1925-29	45	36	17	13	5	4	24	19	91	72
1930-34	21	19	18	17	1	1	16	14	56	51
1935-39	6	6	11	11	0	0	5	5	22	22
1940-44	5	4	6	5	1	0.2	3	3	15	12
1945-49	3	2	6	3	0	0	5	3	14	8
1950-54										

*Per 100,000 live births.

TUBERCULOSIS MORTALITY AMONG CHILDREN UNDER FIFTEEN
New York City, Since 1898

Year	Meningitis		Respiratory		Abdominal		Other Forms†		All Forms	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1898	786	78	307	31	54	5	223	22	1,370	136
1899	766	74	362	35	40	4	233	23	1,401	136
1900	803	76	316	30	43	4	206	20	1,368	130
1901	675	62	290	26	89	8	137	13	1,191	109
1902	722	64	239	21	78	7	125	11	1,164	103
1903	720	62	259	22	94	8	82	7	1,155	99
1904	663	58	328	28	92	8	95	8	1,178	102
1905	568	48	332	28	75	6	105	9	1,080	91
1906	665	54	350	28	82	7	100	8	1,197	97
1907	664	54	345	28	76	6	88	7	1,173	95
1908	691	54	327	26	86	7	96	7	1,200	94
1909	716	54	364	27	76	6	101	8	1,257	95
1910	688	50	271	20	85	6	155	11	1,199	87
1911	764	55	335	24	74	5	156	11	1,329	95
1912	681	48	287	20	94	7	160	11	1,222	86
1913	694	48	353	25	77	5	164	11	1,288	89
1914	630	43	321	22	65	4	150	10	1,166	79
1915	649	44	324	22	50	3	177	12	1,200	81
1916	568	37	256	17	44	3	135	9	1,003	66
1917	571	37	272	18	42	3	198	13	1,083	71
1918	615	40	314	20	49	3	128	8	1,106	71
1919	479	31	271	17	49	3	115	7	914	58
1920	395	24	241	15	45	3	95	6	776	48
1921	298	18	168	10	34	2	74	5	574	35
1922	320	20	195	12	23	1	82	5	620	38
1923	277	17	162	10	22	1	86	5	547	33
1924	296	18	136	8	21	1	97	6	550	33
1925	244	15	135	8	22	1	82	5	483	29
1926	236	14	149	9	10	0.6	79	4.7	474	28
1927	215	13	129	8	17	1	85	5	446	27
1928	215	13	143	9	22	1	85	5	465	28
1929	149	9	87	5	14	0.8	113	6.6	363	21
1930	171	10	131	8	14	0.8	84	5	400	24
1931	135	8	124	7	11	0.7	63	4	333	20
1932	138	8	100	6	16	1.0	74	5	328	20
1933	130	8	108	7	5	0.3	63	4	306	19
1934	87	5	83	5	10	0.6	58	4	238	15
1935	92	6	83	5	3	0.2	36	2	214	13
1936	73	5	96	6	1	0.1	23	1	193	12
1937	68	4	84	6	6	0.4	28	2	186	12
1938	61	4	74	5	4	0.3	31	2	170	11
1939	62	4	63	4	4	0.3	25	2	154	10

TUBERCULOSIS MORTALITY AMONG CHILDREN UNDER FIFTEEN
New York City, Since 1898

Year	Meningitis		Respiratory		Abdominal		Other Forms†		All Forms	
	Deaths	Rate‡	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1940	39	2.6	50	3.4	3	0.2	18	1.2	110	7.4
1941	49	3.0	61	3.7	3	0.2	19	1.1	132	8.0
1942	46	3.1	55	3.6	0	0	21	1.4	122	8.1
1943	32	2.1	37	2.4	4	0.3	17	1.1	90	5.9
1944	45	2.9	40	2.6	2	0.1	12	0.8	99	6.4
1945	40	2.6	31	2.0	1	0.1	20	1.2	92	5.9
1946	41	2.6	32	2.0	2	0.1	20	1.3	95	6.0
1947	26	1.6	29	1.8	2	0.1	13	0.8	70	4.4
1948	32	2.0	27	1.7	1	0.1	14	0.8	74	4.6
1949	27	1.7	12	0.7	0	0	13	0.8	52	3.2
1950	31	1.9	33	2.0	0	0	14	0.8	78	4.7
1951										
1952										
1953										
1954										

†Includes acute military tuberculosis, Pott's disease, white swelling, scrofula and general tuberculosis. ‡Death rate per 100,000 children under fifteen years of age.

TUBERCULOSIS MORTALITY AMONG CHILDREN UNDER FIFTEEN
Annual Average During Five-Year Period Since 1900

Year	Meningitis		Respiratory		Abdominal		Other Forms		All Forms	
	Deaths	Rate‡	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1900-04	717	64	286	25	79	7	129	12	1,211	108
1905-09	661	53	343	28	79	6	98	8	1,181	95
1910-14	692	49	313	22	79	5	157	11	1,241	87
1915-19	576	37	287	19	47	3	151	10	1,061	69
1920-24	317	19	180	11	29	2	87	5	613	37
1925-29	212	13	128	8	17	1	89	5	446	27
1930-34	132	8	109	6	11	1	69	4	321	19
1935-39	71	5	80	5	4	0.2	28	2	183	12
1940-44	42	3	49	3	2	0.1	18	1	111	7
1945-49	33	2	26	2	1	0.1	16	1	76	5
1950-54										

‡Death rate per 100,000 children under fifteen years of age.

TUBERCULOSIS MORTALITY, NEW YORK CITY

HEALTH CENTER DISTRICTS

1929-1950

TUBERCULOSIS DEATHS, ALL FORMS, BY HEALTH CENTER DISTRICTS
New York City, Since 1929

HEALTH CENTER DISTRICT	Deaths from Tuberculosis																											
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954		
MANHATTAN:																												
Central Harlem	459	517	532	510	506	466	570	542	560	473	490	429	478	405	421	379	375	318	333	331	306	237						
East Harlem	280	308	301	262	285	249	215	242	248	190	182	182	182	177	174	132	140	109	119	128	98	82						
Kips Bay-Yorkville	202	180	165	154	123	147	124	141	119	119	97	98	93	106	105	93	102	78	98	86	69	65						
Lower East Side	400	374	385	336	317	281	269	332	287	269	245	244	239	227	279	242	229	257	234	260	199	214						
Lower West Side	532	451	449	363	344	361	342	350	295	275	243	266	269	251	181	279	296	251	259	258	218	193						
Riverside	187	211	197	179	187	205	169	219	200	182	196	164	162	162	165	184	188	177	152	150	143	104						
Washington Hgts.	187	188	178	184	178	178	184	180	178	158	169	144	163	161	156	157	154	140	113	133	97	94						
Miscellaneous	30	38	29	25	31	23	13	12	18	9	27	23	26	†	†	†	†	†	†	†	†	†						
Manhattan	2324	2345	2312	2147	2105	2028	1983	2100	1979	1741	1734	1633	1689	1550	1623	1522	1550	1437	1401	1482	1237	1084						
BRONX:																												
Fordham-Riverdale	113	107	81	94	102	91	75	87	74	70	73	48	63	60	63	56	49	68	57	50	38	24						
Morrisania	130	146	144	123	154	127	114	127	117	103	129	89	108	110	133	117	127	112	112	117	92	87						
Mott Haven	162	157	168	117	137	138	127	146	130	118	128	95	101	105	109	108	125	100	97	80	93	71						
Pelham Bay	65	76	45	50	57	50	47	45	40	34	25	35	33	36	35	30	41	29	35	25	9	12						
Tremont	127	123	116	105	111	109	119	115	104	98	81	83	77	75	86	77	76	68	57	53	41	38						
Westchester	81	74	80	77	78	66	52	77	64	54	48	45	48	64	59	52	65	49	43	36	24	26						
Bronx	695	702	645	578	652	599	557	642	569	522	524	434	467	488	538	486	520	454	442	387	311	272						
BROOKLYN:																												
Bay Ridge	106	124	100	92	109	95	108	130	88	79	72	84	92	92	77	69	76	72	54	64	47	55						
Bedford	159	158	183	132	140	172	162	191	166	142	167	173	165	181	166	186	165	144	138	163	126	137						
Brownsville	104	111	96	105	103	97	97	97	90	91	81	95	85	66	70	81	63	55	58	52	50	47						
Bushwick	151	131	132	117	128	112	121	113	100	122	103	86	97	95	81	90	75	81	78	79	56	45						
Flatbush	137	113	125	120	114	116	115	110	99	102	95	100	100	91	97	92	79	98	75	75	46	44						
Fort Greene	208	213	192	155	156	158	158	178	152	142	147	151	109	108	121	127	111	120	110	120	81	88						
Gravesend	69	70	57	78	61	68	62	72	60	46	51	63	65	49	59	44	51	40	43	29	25	31						
Red Hook-Gowanus	193	204	167	157	168	137	142	138	134	113	125	98	120	86	98	99	104	101	87	70	81	67						
Sunset Park	156	119	112	105	98	99	126	103	123	93	80	97	101	79	84	87	98	84	72	62	49	48						
Wmsbrg.-Greenpoint	190	172	164	162	159	140	139	127	153	132	123	130	107	112	97	95	92	83	78	74	77	57						
Brooklyn	1487	1442	1344	1245	1248	1205	1246	1269	1170	1074	1054	1079	1047	968	960	978	922	886	799	799	652	618						
QUEENS:																												
Astoria-L.I.City	114	120	112	108	93	89	95	80	86	75	72	82	70	80	93	72	89	71	73	56	46	47						
Corona	68	62	64	65	69	63	63	67	55	49	62	54	57	56	57	53	53	44	52	45	40	35						
Flushing	56	59	54	48	55	66	59	65	59	70	51	47	67	56	56	58	50	42	43	38	32	36						
Jamaica East	82	73	84	91	72	86	83	91	101	68	74	75	74	77	82	83	79	71	81	60	48	44						
Jamaica West	115	96	115	99	102	91	120	106	96	101	84	90	76	81	74	80	73	66	73	75	58	53						
Maspeth-Forest Hills	89	71	77	71	79	79	83	74	78	62	66	59	78	53	70	69	51	61	54	47	38	47						
Queens	545	504	539	498	488	500	522	491	486	440	421	420	437	420	447	438	409	378	412	365	292	292						
RICHMOND:																												
St. George	88	76	61	54	61	71	53	57	43	37	60	40	45	35	63	62	55	43	30	43	47	35						
Tottenville	16	13	19	14	19	14	8	17	6	14	13	7	17	14	14													
Richmond	109	96	82	72	84	88	63	83	60	56	81	61	75	76	92	110	112	90	74	79	85	55						
New York City Residents.	5056	4935	4787	4355	4402	4250	4217	4431	4123	3690	3659	3476	3567	3350	3511	3353	3331	3032	2908	2859	2374	2143						
Non-Residents	132	105	97	73	77	72	82	87	72	73	80	79	92	92	105	129	132	115	120	127	85	81						
Unknown	104	22	30	88	102	93	72	67	69	70	75	72	56	60	44	52	50	98	100	126	118	97						
NEW YORK CITY TOTAL	5160	5089	4922	4540	4577	4420	4371	4585	4264	3833	3814	3627	3715	3502	3660	3534	3513	5245	3128	3112	2577	2321						

NOTE: Included in the borough and city totals are deaths of miscellaneous population on islands, boats, and in parks, also deaths of non-residents and persons with unknown address. †Assigned to proper health center district.

TUBERCULOSIS* DEATH RATES, BY HEALTH CENTER DISTRICTS
New York City, Since 1929

HEALTH CENTER DISTRICT	Rate per 100,000 population as of July 1st of each year																										
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	
MANHATTAN:																											
Central Harlem	222	251	258	247	244	225	274	260	268	226	234	204	227	191	198	178	175	148	155	153	141	109					
East Harlem	120	136	134	118	130	114	100	114	118	91	88	87	87	84	82	62	66	51	55	59	45	38					
Kips Bay-Yorkville	81	74	68	63	51	60	51	58	49	49	40	39	37	42	42	37	40	31	38	34	27	25					
Lower East Side	117	115	119	105	100	90	87	109	95	90	83	84	82	77	94	81	76	85	77	85	65	69					
Lower West Side	175	154	154	125	119	125	119	122	104	97	86	92	93	87	63	97	103	87	90	90	76	60					
Riverside	66	74	68	61	63	68	55	70	63	56	60	49	48	48	48	54	54	51	43	42	40	32					
Washington Hgts.	73	72	67	68	65	63	65	62	60	53	55	47	53	52	50	51	50	45	36	43	31	30					
Manhattan	122	126	124	115	112	108	106	112	105	92	92	86	89	81	85	79	80	74	72	76	63	55					
BRONX:																											
Fordham-Riverdale	63	57	42	48	52	46	37	42	35	33	34	22	29	27	29	25	22	30	25	22	17	11					
Morrisania	46	50	49	42	52	43	38	43	39	34	43	29	36	37	44	39	42	38	37	39	31	29					
Mott Haven	70	68	72	51	59	60	55	63	56	51	56	41	43	45	47	47	54	43	42	35	41	31					
Pelham Bay	66	73	42	46	51	44	40	37	33	27	20	27	25	27	26	22	30	21	25	18	6	8					
Tremont	46	43	40	36	38	37	40	38	34	32	26	26	25	24	28	25	25	22	19	17	13	13					
Westchester	52	44	47	45	44	37	28	41	34	28	25	23	23	30	27	24	29	21	18	15	10	10					
Bronx	57	55	50	45	50	45	42	48	42	38	38	31	33	35	38	34	37	32	31	27	21	19					
BROOKLYN:																											
Bay Ridge	38	43	34	31	37	32	36	43	29	26	23	27	29	29	24	22	24	23	17	20	15	11					
Bedford	57	55	64	46	48	59	55	65	56	48	56	57	55	60	55	61	54	47	45	53	41	44					
Brownsville	36	37	32	35	35	33	33	33	30	31	27	32	29	23	24	28	22	19	20	18	18	17					
Bushwick	62	54	55	49	53	47	50	47	42	51	43	36	41	40	34	38	32	34	33	34	24	19					
Flatbush	40	32	34	32	30	30	29	27	24	24	22	23	23	20	21	20	17	21	16	16	10	9					
Fort Greene	95	98	89	72	73	74	74	84	72	68	70	73	52	51	57	59	52	55	50	55	37	40					
Gravesend	34	35	26	35	27	29	26	30	24	18	20	24	25	18	22	16	19	15	16	10	9	11					
Red Hook-Gowanus	105	110	91	86	92	75	79	77	75	64	71	56	68	49	56	57	60	58	50	40	47	39					
Sunset Park	71	53	50	46	43	43	55	45	54	40	35	42	44	34	37	38	43	37	32	28	22	22					
Wmsbrg.-Greenpoint	74	69	66	66	65	58	58	53	64	56	53	56	46	49	43	42	41	37	35	34	35	26					
Brooklyn	59	56	52	48	48	46	47	48	44	40	39	40	39	36	35	36	34	33	29	29	24	23					
QUEENS:																											
Astoria-L.I.City	57	57	52	50	42	40	42	34	36	31	30	33	28	32	37	28	35	28	28	22	18	18					
Corona	49	42	43	42	44	40	39	40	33	28	35	30	31	30	30	28	27	22	26	22	19	17					
Flushing	48	47	42	36	39	46	39	42	37	42	30	26	35	28	26	26	21	17	17	14	11	12					
Jamaica East	49	41	46	49	38	44	41	44	48	31	33	33	32	33	35	35	32	29	32	24	19	17					
Jamaica West	50	40	48	41	42	37	48	42	38	40	33	35	29	31	28	30	28	25	27	28	21	19					
Maspeth-Forest Hills ..	49	38	41	37	40	40	41	36	37	29	31	27	35	23	30	29	21	25	22	19	15	18					
Queens	53	46	49	44	42	43	44	40	39	35	33	32	33	31	32	31	29	26	28	24	19	19					
RICHMOND:																											
Richmond	67	56	50	42	49	51	37	44	29	30	42	26	40	31	35	34	30	23	16	23	25	18					
Richmond	70	60	51	44	51	53	38	49	35	33	47	35	42	43	51	61	61	49	40	42	45	29					
New York City Residents	..	71	68	62	62	59	59	61	56	50	49	47	47	44	46	43	43	39	37	35	30	27					
NEW YORK CITY †	75	73	70	64	64	62	61	63	58	52	51	49	49	46	48	46	46	42	40	40	33	29					

*Tuberculosis, all forms. †Rate for all deaths recorded within city.

TUBERCULOSIS DEATHS BY HEALTH CENTER DISTRICTS
Annual Average During Five-Year Periods Since 1930

Health Center DISTRICT	Annual Average†					Death Rate per 100,000				
	1930-1934	1935-1939	1940-1944	1945-1949	1950-1954	1930-1934	1935-1939	1940-1944	1945-1949	1950-1954
MANHATTAN:										
Central Harlem	506	527	422	333		245	253	200	154	
East Harlem	281	215	169	119		126	102	81	55	
Kips Bay-Yorkville.	154	120	99	87		63	49	39	34	
Lower East Side ...	339	280	246	236		106	93	83	78	
Lower West Side ...	394	301	249	256		135	106	86	89	
Riverside	196	193	167	162		67	61	50	46	
Washington Hgts. ..	181	174	156	127		67	59	50	41	
Manhattan	2188	1907	1604	1421		117	101	84	73	
BRONX:										
Ford'm-Riverdale ..	95	76	58	52		49	36	26	23	
Morrisania	139	118	111	112		47	39	37	38	
Mott Haven	143	130	104	99		62	56	45	43	
Pelham Bay	56	38	34	28		51	31	25	20	
Tremont	113	103	80	59		39	34	26	19	
Westchester	75	59	54	43		43	31	26	18	
Bronx	635	563	483	423		49	41	34	29	
BROOKLYN:										
Bay Ridge	104	95	83	63		35	31	26	20	
Bedford	157	166	174	147		54	56	57	48	
Brownsville	102	91	79	56		34	31	27	20	
Bushwick	124	112	90	74		52	47	38	31	
Flatbush	118	104	96	75		31	25	21	16	
Fort Greene	175	155	123	108		81	74	58	50	
Gravesend	67	58	56	38		30	23	21	14	
Red Hook-Gowanus ..	167	130	100	89		91	73	57	51	
Sunset Park	107	105	90	73		47	46	39	32	
Wmsbrg.-Greenpoint.	159	135	108	81		65	57	47	37	
Brooklyn	1297	1162	1006	812		50	44	37	30	
QUEENS:										
Astoria-L.I.City ..	104	82	79	67		48	35	32	26	
Corona	65	59	55	47		42	35	30	23	
Flushing	56	61	57	41		42	38	28	16	
Jamaica East	81	83	78	68		43	39	34	27	
Jamaica West	101	101	80	69		41	40	31	26	
Maspeth-Fer.Hills .	75	73	66	50		39	35	29	20	
Queens	506	472	432	371		45	38	32	25	
RICHMOND:										
Richmond	80	62	57	44		50	36	32	23	
Richmond	84	69	83	88		52	40	46	47	
NEW YORK CITY	4710	4173	3608	3113		67	57	48	40	

†Borough and city totals include deaths of miscellaneous population on islands, boats, and in parks, also deaths of non-residents and persons with unknown address.

TUBERCULOSIS MORTALITY AMONG NONWHITE* RESIDENTS BY HEALTH CENTER DISTRICTS

New York City, Since 1929

HEALTH CENTER DISTRICT	Deaths of Nonwhite Residents Each Year																											
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954		
MANHATTAN:																												
Central Harlem	350	410	432	450	426	391	496	476	500	424	447	400	439	376	394	355	352	296	319	318	293	222						
East Harlem	53	74	92	84	83	86	67	93	78	56	54	64	56	53	38	42	43	39	37	45	36	28						
Kips Bay-Yorkville ...	4	9	7	4	5	6	2	6	6	1	2	1	2	2	2	1	2	2	2	3	1	1						
Lower East Side	20	33	22	26	26	29	27	33	23	16	20	25	26	31	30	24	34	28	25	28	32	24						
Lower West Side	98	79	103	77	78	68	66	67	61	53	49	54	63	42	52	44	46	38	32	47	33	26						
Riverside	53	49	59	49	52	54	61	62	55	62	87	54	51	46	61	77	86	70	64	64	60	46						
Washington Hgts.	54	61	66	75	58	67	77	68	74	68	64	64	70	62	71	86	78	71	75	75	59	55						
Miscellaneous	6	5	2	1	3	3	0	2	3	1	4	6	4	4	4	4	4	4	4	4	4	4						
Manhattan	648	739	798	759	757	719	807	819	807	686	736	683	721	623	657	636	657	566	575	609	543	420						
BRONX:																												
Fordham-Riverdale	2	6	2	6	3	4	2	1	0	1	0	0	0	2	1	0	0	1	1	0	1	0						
Morrisania	6	19	8	10	13	15	15	8	8	12	14	8	16	25	43	53	54	54	63	67	56	47						
Mott Haven	8	8	15	13	14	12	7	10	9	6	6	8	7	10	8	11	15	9	14	13	14	6						
Pelham Bay	2	2	4	1	3	2	1	3	2	2	1	2	1	1	1	0	1	4	0	1	1	1						
Tremont	2	4	14	8	11	4	14	7	7	4	2	4	1	2	4	9	4	7	6	6	4	1						
Westchester	1	1	5	0	3	1	4	1	0	0	1	0	2	3	0	1	1	0	3	0	0	0						
Bronx	25	47	48	39	47	43	47	36	30	28	29	26	31	48	63	85	86	79	97	93	79	55						
BROOKLYN:																												
Bay Ridge	0	2	1	2	1	2	3	4	2	2	4	0	4	3	1	3	2	4	1	0	1	1						
Bedford	31	47	76	39	55	66	76	90	81	66	94	106	103	119	106	117	111	97	109	117	88	99						
Brownsville	16	15	20	14	21	15	20	24	20	19	16	27	23	14	18	24	14	16	21	20	17	17						
Bushwick	7	6	3	6	4	8	7	5	6	2	2	4	5	3	4	9	9	4	13	10	5	5						
Flatbush	0	4	3	4	8	4	3	0	2	2	2	3	5	3	3	5	1	2	4	2	3	2						
Fort Greene	48	68	49	55	54	62	64	70	70	65	67	59	54	40	52	45	38	48	43	49	34	41						
Gravesend	3	6	6	8	3	3	3	14	7	5	8	11	9	4	2	7	2	1	3	3	5	5						
Red Hook-Gowanus	14	19	14	12	18	14	17	14	16	11	13	11	7	10	11	8	9	7	12	4	8	8						
Sunset Park	1	0	0	1	1	0	1	1	0	2	0	0	0	1	1	1	0	0	0	1	1	0						
Wmsbrg.-Greenpoint ...	4	16	11	13	15	11	15	11	13	13	11	15	8	14	6	6	6	10	5	12	9	16						
Brooklyn	124	190	185	158	182	186	213	233	219	189	220	236	218	213	205	226	194	191	212	222	176	197						
QUEENS:																												
Astoria-L.I.City	2	1	2	3	1	1	0	1	0	1	0	1	1	1	1	0	2	0	1	1	2	1						
Corona	4	7	3	1	5	10	7	6	10	6	7	6	1	6	6	6	7	8	4	4	7	9						
Flushing	6	6	4	6	7	10	6	8	3	5	0	2	5	9	3	10	7	5	7	1	3	3						
Jamaica East	16	15	16	26	11	24	17	23	25	22	18	17	19	23	30	30	25	19	25	16	13	17						
Jamaica West	3	5	4	6	3	4	1	13	12	6	13	10	8	5	2	4	7	3	6	7	7	5						
Maspeth-Forest Hills..	0	0	0	0	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0	0	1	1						
Queens	35	35	36	43	29	55	35	52	53	43	41	37	36	44	43	51	51	40	47	38	38	41						
RICHMOND:																												
St. George	9	5	3	4	8	7	1	5	5	5	6	4	5	2	8	7	6	3	4	4	2	3						
Tottenville	0	1	2	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0						
Richmond	9	6	6	6	9	9	2	6	8	5	7	5	7	8	14	15	17	11	12	8	6	4						
New York City Residents	819	983	1048	985	993	986	1082	1126	1098	939	1014	966	996	912	960	985	961	846	899	918	796	690						
Non-Residents	17	27	16	13	8	13	7	7	9	7	6	11	7	11	16	23	36	20	22	18	16	9						
Unknown	5	7	9	7	23	13	9	13	10	5	13	10	10	13	6	5	8	21	22	34	30	18						
NEW YORK CITY TOTAL ..	841	1017	1073	1005	1024	1012	1104	1146	1117	951	1033	987	1013	936	982	1013	1005	887	943	970	842	717						

*Nonwhite includes Negroes, Chinese, Japanese and Indians. †Assigned to proper health center district. Note: Borough and city totals include deaths of miscellaneous population on islands, boats, and in parks, also deaths of non-residents and persons with unknown address.

RECORDED AND RESIDENT TUBERCULOSIS MORTALITY, NEW YORK CITY, SINCE 1932

Race Year	Recorded in Town				Resident Mortality Only, Anywhere				
	Resi- dents of City	Non- Resi- dents	Total		In Town	Upstate New York	Out-of- State	Total	
			Number	Rate*				Number	Rate*
ALL RACES:					ALL RACES:				
1932	4,443	97	4,540	64	4,443	519	58	5,020	71
1933	4,504	73	4,577	64	4,504	508	61	5,073	71
1934	4,343	77	4,420	62	4,343	448	20	4,811	67
1935	4,289	82	4,371	61	4,289	488	47	4,824	67
1936	4,498	87	4,585	63	4,498	514	51	5,063	70
1937	4,192	72	4,264	58	4,192	550	56	4,798	66
1938	3,760	73	3,833	52	3,760	449	48	4,257	58
1939	3,734	80	3,814	51	3,734	455	45	4,234	57
1940	3,548	79	3,627	49	3,548	457	50	4,055	54
1941	3,623	92	3,715	49	3,623	485	62	4,170	56
1942	3,410	92	3,502	46	3,410	511	25	3,946	52
1943	3,568	92	3,660	48	3,568	562	40	4,170	55
1944	3,419	115	3,534	46	3,419	515	56	3,990	52
1945	3,385	128	3,513	46	3,385	443	40	3,868	50
1946	3,132	113	3,245	42	3,132	445	47	3,624	47
1947	3,020	108	3,128	40	3,020	402	35	3,457	45
1948	2,995	117	3,112	40	2,995	432	37	3,464	44
1949	2,497	80	2,577	33	2,497	334	43	2,874	37
1950	2,249	72	2,321	29	2,249	273	23	2,545	32
WHITE:					WHITE:				
1932	3,451	84	3,535	53	3,451	480	50	3,981	60
1933	3,488	65	3,553	53	3,488	465	58	4,011	60
1934	3,344	64	3,408	50	3,344	409	19	3,772	56
1935	3,198	69	3,267	48	3,198	435	42	3,675	54
1936	3,359	80	3,439	50	3,359	446	46	3,851	56
1937	3,084	63	3,147	46	3,084	477	53	3,614	53
1938	2,816	66	2,882	42	2,816	399	44	3,259	47
1939	2,707	74	2,781	40	2,707	392	41	3,140	45
1940	2,572	68	2,640	38	2,572	387	48	3,007	43
1941	2,617	85	2,702	39	2,617	405	54	3,076	44
1942	2,485	81	2,566	37	2,485	454	21	2,960	42
1943	2,589	89	2,678	38	2,589	493	32	3,114	44
1944	2,427	94	2,521	36	2,427	437	41	2,905	41
1945	2,414	94	2,508	36	2,414	375	31	2,820	40
1946	2,267	91	2,358	33	2,267	357	39	2,663	38
1947	2,097	88	2,185	31	2,097	346	29	2,472	35
1948	2,044	98	2,142	30	2,044	365	34	2,443	34
1949	1,670	65	1,735	24	1,670	262	35	1,967	28
1950	1,542	62	1,604	23	1,542	210	19	1,771	25
NONWHITE:**					NONWHITE:				
1932	992	13	1,005	270	992	39	8	1,039	279
1933	1,016	8	1,024	266	1,016	43	3	1,062	276
1934	999	13	1,012	254	999	39	1	1,039	260
1935	1,091	13	1,104	268	1,091	53	5	1,149	278
1936	1,139	7	1,146	269	1,139	68	5	1,212	284
1937	1,108	9	1,117	254	1,108	73	3	1,184	269
1938	944	7	951	210	944	50	4	998	220
1939	1,027	6	1,033	221	1,027	63	4	1,094	234
1940	976	11	987	204	976	70	2	1,048	216
1941	1,006	7	1,013	197	1,006	80	8	1,094	213
1942	925	11	936	172	925	57	4	986	181
1943	966	16	982	171	966	69	8	1,043	182
1944	992	21	1,013	168	992	78	15	1,085	180
1945	971	34	1,005	159	971	68	9	1,048	165
1946	865	22	887	134	865	88	8	961	145
1947	923	20	943	136	923	56	6	985	142
1948	951	19	970	134	951	67	3	1,021	141
1949	827	15	842	112	827	72	8	907	120
1950	707	10	717	92	707	63	4	774	99

*Per 100,000 population. **Negro and "other" colored. †Deaths of 13 residents for whom details by race were not known are included in the total. Based on reports, courtesy of the Office of Vital Statistics, New York State Department of Health.

TUBERCULOSIS MORTALITY

UNITED STATES

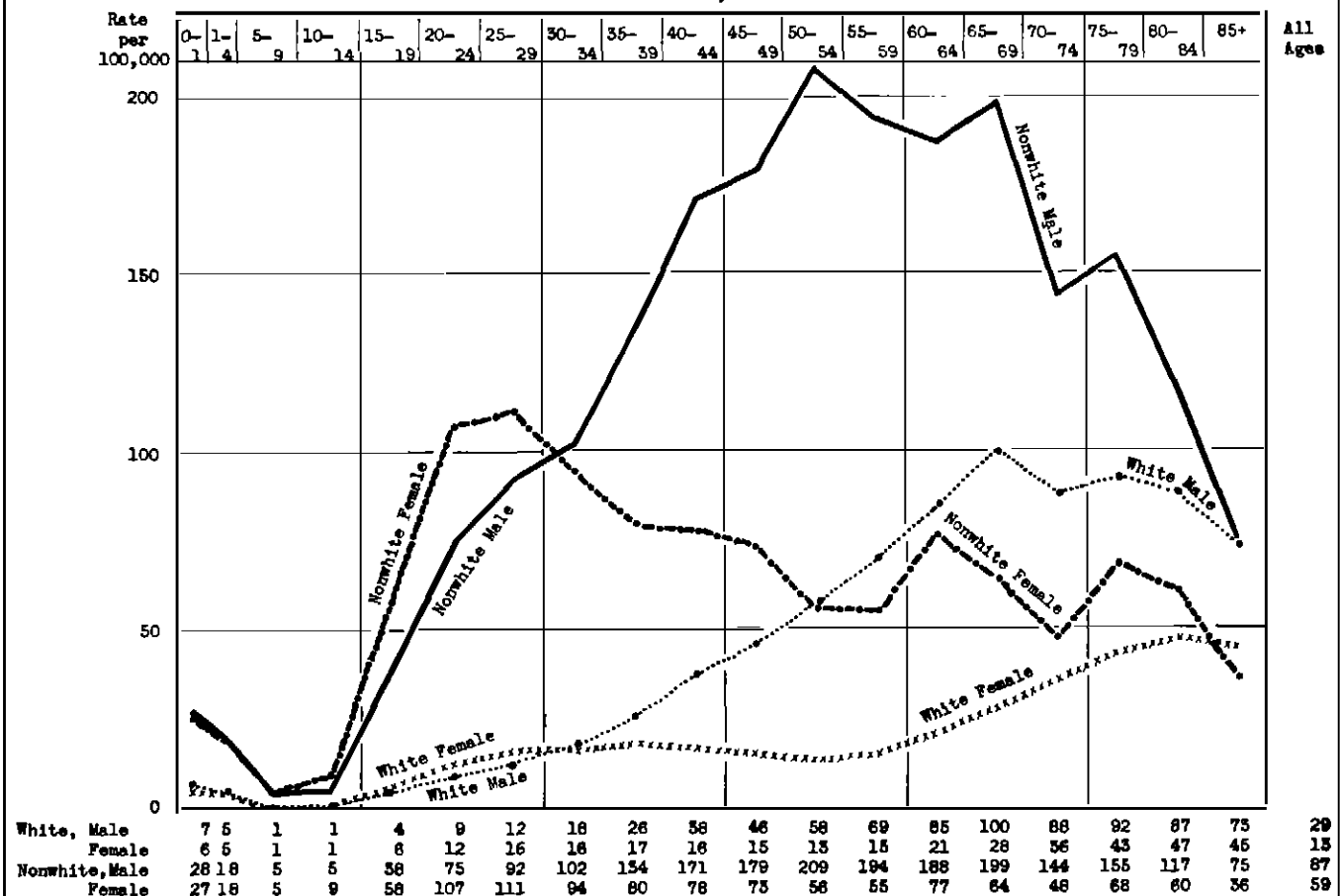
1900-1950

TUBERCULOSIS MORTALITY IN THE UNITED STATES SINCE 1900*

Year	Deaths, All Forms		Rate per 100,000		
	Registration Area	Entire U. S.†	Pulmonary	Other Forms	All Forms
1900	62,096	153,781	182	20	202
1901	61,767	153,162	176	21	197
1902	59,083	146,826	164	21	185
1903	61,040	153,059	167	22	189
1904	66,921	166,029	178	23	201
1905	65,478	161,701	168	24	192
1906	75,648	154,507	157	23	180
1907	76,759	156,545	156	23	179
1908	78,409	149,643	146	22	168
1909	81,835	146,013	139	22	161
1910	86,309	147,627	140	20	160
1911	94,205	148,955	138	21	159
1912	90,360	142,646	130	20	150
1913	93,421	142,838	128	20	148
1914	96,903	143,953	128	19	147
1915	98,194	145,040	128	18	146
1916	101,396	143,076	124	18	142
1917	110,285	150,194	129	18	147
1918	122,249	155,381	133	17	150
1919	106,985	132,304	111	15	126
1920	99,916	121,459	101	13	114
1921	88,135	107,126	86	13	99
1922	90,452	105,478	84	12	96
1923	90,732	103,730	81	12	93
1924	89,724	101,882	78	12	90
1925	89,268	99,934	76	11	87
1926	91,568	101,383	76	11	87
1927	87,567	95,739	71	10	81
1928	90,659	94,691	70	9	79
1929	88,352	92,360	68	8	76
1930	84,741	88,000	63	8	71
1931	81,395	84,521	61	7	68
1932	75,509	78,484	56	7	63
1933	74,842	74,842	54	6	60
1934	71,609	71,609	51	6	57
1935	70,080	70,080	50	5	55
1936	71,527	71,527	51	5	56
1937	69,324	69,324	49	5	54
1938	63,735	63,735	45	4	49
1939	61,609	61,609	43	4	47
1940	60,428	60,428	42	4	46
1941	59,251	59,251	41	3	44
1942	57,690	57,690	40	3	43
1943	57,005	57,005	39	4	43
1944	54,731	54,731	38	3	41
1945	52,916	52,916	37	3	40
1946	50,911	50,911	33	3	36
1947	48,064	48,064	31	3	34
1948	43,833	43,833	28	2	30
1949	39,100	39,100	24	2	26
1950‡	33,557	33,557	21	2	23

*From reports, National Office of Vital Statistics. †Figured by applying death rate in Registration Area to population of entire continental United States. Note: In 1900, the Registration Area covered only 40.5% of the population numbering in the entire United States, 76,129,408; in 1910, 58.3% of 92,267,080; in 1920, 82.3% of 106,543,031; in 1930, 96.2% of 123,091,000; beginning 1933, entire continental United States, population, 1940=131,669,275; 1950=150,697,361. ‡Provisional.

TUBERCULOSIS DEATH RATES, UNITED STATES, 1949 ACCORDING TO RACE, SEX AND AGE



Compiled from reports, National Office of Vital Statistics, by G.J. Drolet and A.M. Lowell, New York Tuberculosis and Health Association.

LEADING CAUSES OF DEATH, UNITED STATES, 1949 BY RACE AND SEX

Line	Cause of death*	Deaths								Death Rate per 100,000								Line
		Total Deaths	White		Nonwhite		Rate All Races	White		Nonwhite		Rate All Races	White		Nonwhite			
			Both Sexes	Male	Female	Both Sexes		Male	Female	Rate	Rate		Rate	Rate	Rate	Rate		
1	Heart diseases	518568	471425	281716	189709	47143	25141	22002	349	354	428	283	300	328	274	1		
2	Malignant neoplasms	206325	190286	96469	93827	16059	7573	8466	139	143	146	140	102	99	106	2		
3	Cerebral hemorrhage	149953	151590	64490	66900	18585	8702	9861	101	99	98	100	118	118	128	3		
4	Accidents	90108	79678	54876	24802	10428	7600	2828	61	60	83	57	68	99	35	4		
5	Pre-birth, dis. infancy	83045	69755	40553	29202	13288	7484	5804	56	52	61	44	85	98	72	5		
6	Pneumonias	40036	52426	18679	15747	7612	4268	3344	27	24	28	21	48	58	42	6		
7	Tuberculosis	39100	27718	18884	8854	11382	6654	4728	26	21	29	15	72	87	59	7		
8	Dis. arteries	35853	31416	16289	15127	2437	1521	1118	25	24	25	23	16	17	14	8		
9	Nephritis	29532	23859	12760	11099	5875	2865	2808	20	18	19	17	36	37	35	9		
10	Dis. liver, gallbladder, pancreas	26948	24814	15874	10940	2134	1160	974	18	19	21	16	14	15	12	10		
11	Diabetes	25069	22875	8717	14158	2214	714	1500	17	17	15	21	14	9	19	11		
12	Suicide	16993	16350	12668	3662	863	541	122	11	12	19	5	4	7	2	12		
13	Hypertension	12199	9988	4931	5057	2211	1078	1133	8	8	7	8	14	14	14	13		
14	Hernia, intest. obst.	9854	8707	4496	4211	1147	614	533	7	7	7	6	7	8	7	14		
15	Syphilis	8581	5583	4221	1342	3018	2080	938	6	4	6	2	19	27	12	15		
16	Dis. stom., duodenum	8151	7368	5995	1373	785	574	209	5	6	9	2	5	7	3	16		
17	Homicide	8033	5643	2729	914	4390	3485	905	5	3	4	1	28	45	11	17		
18	Prostate, hyperplasia†	6860	6097	6097	...	763	763	...	9	9	9	...	10	10	...	18		
19	Benign neoplasms	5881	4940	2104	2836	921	234	687	4	4	3	4	6	3	9	19		
20	Influenza	4602	3360	1704	1656	1242	646	596	3	3	3	2	8	8	7	20		
21	Appendicitis	5744	5193	2002	1191	551	323	228	3	2	3	2	4	4	5	21		
22	Bronchitis	3284	2871	1731	1140	413	199	214	2	2	3	2	3	3	3	22		
-	Other (remaining) causes	112890	91146	50194	40952	21744	11103	10641	72	65	77	62	153	145	129	-		
-	All causes	1443607	1268848	726169	542879	174759	95122	79637	972	964	1099	611	1112	1259	990	-		

*Classified according to 6th rev. (1948) Inter. List Causes of Death (1) Diseases of heart 410-443; (2) malignant neoplasms, neoplasms of lymphatic and hematopoietic tissues 140-205; (3) vascular lesions affecting central nervous system 330-354; (4) accidents 800-982; (5) congenital malformations 750-759, certain diseases of early infancy 780-778; (6) pneumonias, except pneumonia of newborn 490-495; (7) tuberculosis, all forms 001-019; (8) diseases of arteries 450-456; (9) nephritis and nephrosis 590-594; (10) cirrhosis liver 581, cholelithiasis and cholecystitis 584, 585, other dis. digestive system, residual; (11) diabetes mellitus 260, (12) suicide 863, 970-979; (13) hypertension without mention of heart 444-447; (14) hernia and intestinal obstruction 580-570; (15) syphilis and its sequelae 020-029; (16) ulcer stomach 546, ulcer duodenum 541, gastritis and duodenitis 543; (17) homicide 964, 980-985; (18) hyperplasia of prostate 610; (19) benign neoplasm and neoplasms of unspecified nature 210-259; (20) influenza 480-485; (21) appendicitis 550-553; (22) acute bronchitis 500, bronchitis, chronic and unqualified 501, 502.

†Rate based on male population. Based on reports of National Office of Vital Statistics.

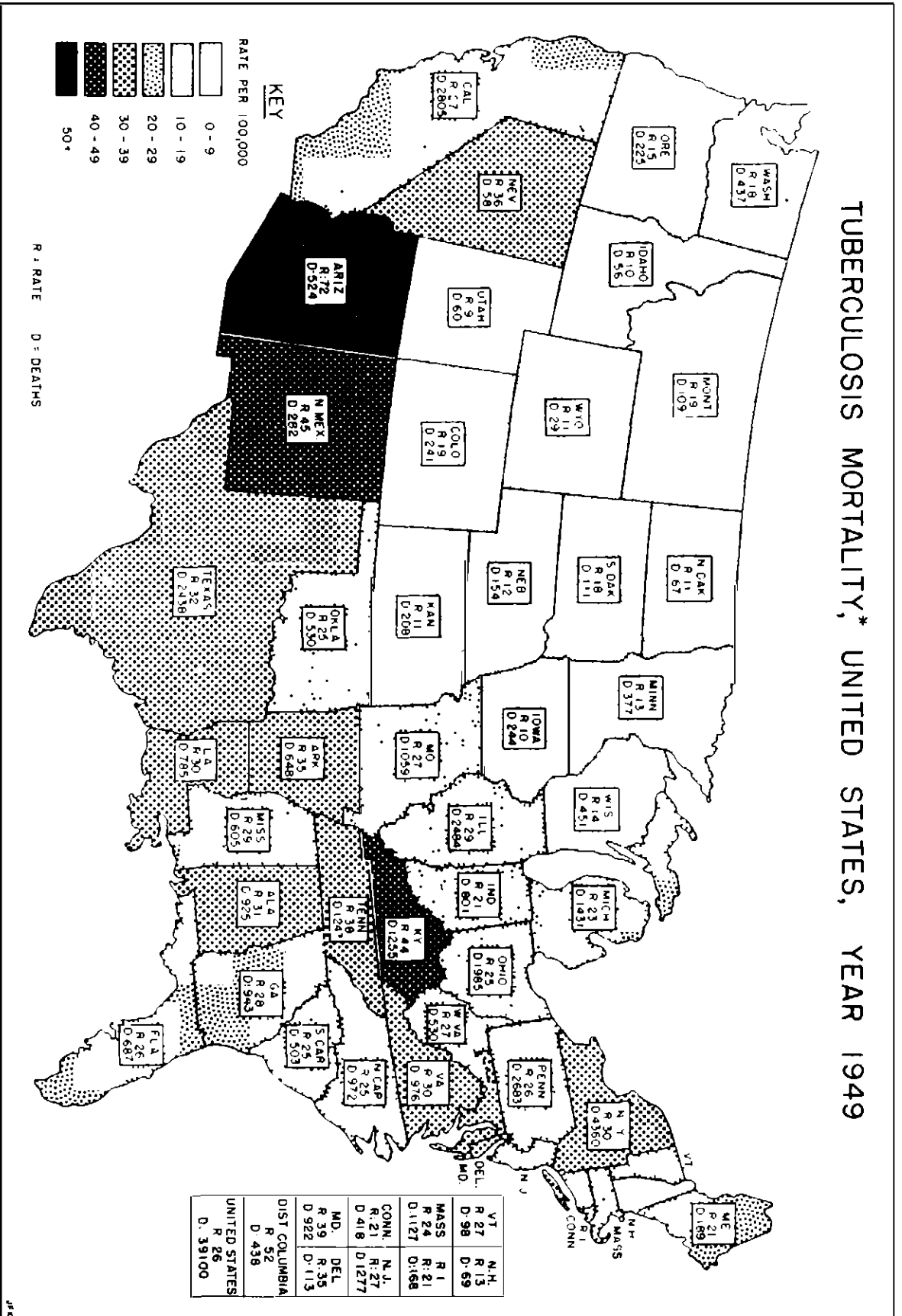
TUBERCULOSIS MORTALITY IN EACH STATE, UNITED STATES, YEAR 1949

STATE, DIVISION	Federal Census 1950†	Nonwhite Population	Deaths, 1949			Resident Death Rate*							
			White	Non-white	All Races	White	Non-white	All Races	0	10	20	30	40	50
NEW ENGLAND													
Vermont	377,747	559	98	..	98	27	—	27	████████████████████				
Massachusetts	4,690,514	64,000	1,056	71	1,127	22	109	24	████████████████████				
Rhode Island	791,896	14,861	146	22	168	19	149	21	████████████████████				
Maine	913,774	2,927	188	1	189	21	54	21	████████████████████				
Connecticut	2,007,280	54,953	363	55	418	19	100	21	████████████████████				
New Hampshire	533,242	967	68	1	69	13	101	13	████████████████████				
MIDDLE ATLANTIC													
New York	14,850,192	928,000	3,285	1,075	4,360	24	116	30	████████████████████				
New Jersey	4,835,329	278,000	949	328	1,277	21	119	27	████████████████████				
Pennsylvania	10,498,012	654,000	2,040	643	2,683	21	99	26	████████████████████				
EAST NORTH CENTRAL													
Illinois	8,712,176	628,000	1,753	731	2,484	22	118	29	████████████████████				
Ohio	7,946,627	470,000	1,437	548	1,985	19	154	25	████████████████████				
Michigan	6,571,766	452,000	995	436	1,431	17	98	23	████████████████████				
Indiana	5,954,224	175,785	649	152	801	17	87	21	████████████████████				
Wisconsin	3,434,575	41,884	428	23	451	15	57	14	████████████████████				
WEST NORTH CENTRAL													
Missouri	3,954,653	315,000	826	233	1,059	23	75	27	████████████████████				
South Dakota	652,740	24,236	49	62	111	8	270	18	████████████████████				
Minnesota	2,982,463	28,805	361	16	377	13	57	13	████████████████████				
Nebraska	1,325,510	24,166	120	34	154	10	145	12	████████████████████				
North Dakota	619,636	11,188	55	12	67	10	114	11	████████████████████				
Kansas	1,906,299	76,338	166	20	206	11	27	11	████████████████████				
Iowa	2,621,075	21,507	237	7	244	9	33	10	████████████████████				
SOUTH ATLANTIC													
District Columbia	802,178	284,031	138	300	438	25	101	52	████████████████████				
Maryland	2,343,001	388,014	461	461	922	24	119	39	████████████████████				
Delaware	518,085	44,207	66	47	113	24	106	35	████████████████████				
Virginia	3,318,680	737,038	475	501	976	19	68	30	████████████████████				
Georgia	3,444,578	1,084,005	370	573	943	16	55	28	████████████████████				
West Virginia	2,005,552	115,268	455	75	530	25	67	27	████████████████████				
Florida	2,771,305	805,258	313	374	687	15	64	28	████████████████████				
South Carolina	2,117,027	823,624	147	356	503	12	46	25	████████████████████				
North Carolina	4,081,929	1,078,819	385	587	972	13	56	25	████████████████████				
EAST SOUTH CENTRAL													
Kentucky	2,944,808	202,876	1,040	215	1,255	39	109	44	████████████████████				
Tennessee	3,291,718	531,468	859	384	1,243	31	73	38	████████████████████				
Alabama	3,081,743	982,243	417	508	925	20	53	31	████████████████████				
Mississippi	2,178,914	990,485	202	408	606	18	43	29	████████████████████				
WEST SOUTH CENTRAL													
Arkansas	1,909,511	428,005	398	250	648	28	61	35	████████████████████				
Texas	7,711,194	886,000	1,987	451	2,438	29	51	32	████████████████████				
Louisiana	2,685,516	888,968	359	426	785	20	49	30	████████████████████				
Oklahoma	2,233,351	200,796	358	172	530	19	90	25	████████████████████				
MOUNTAIN													
Arizona	749,587	95,076	374	150	524	59	163	72	████████████████████				
New Mexico	681,187	50,976	213	69	282	36	146	45	████████████████████				
Nevada	180,085	10,178	48	10	58	32	99	36	████████████████████				
Montana	591,024	18,986	75	34	109	14	188	19	████████████████████				
Colorado	1,325,089	28,436	222	19	241	16	71	19	████████████████████				
Wyoming	290,529	6,520	24	5	29	9	81	11	████████████████████				
Idaho	588,637	7,242	52	4	56	9	58	10	████████████████████				
Utah	688,862	11,958	44	16	60	7	136	9	████████████████████				
PACIFIC													
California	10,586,223	659,000	2,362	443	2,805	24	70	27	████████████████████				
Washington	2,578,963	62,468	375	62	437	16	99	18	████████████████████				
Oregon	1,521,341	24,213	208	17	225	14	71	15	████████████████████				
UNITED STATES	150,697,561	15,482,000	27,718	11,582	39,300	21	75	28	████████████████████				

*Per 100,000 population as of July 1, 1949, based on Bureau of the Census reports. †Exclusive of armed forces overseas.
 Note: Tuberculosis death rate: Alaska=174, Hawaii=21, Puerto Rico=146, Virgin Islands=22. Compiled from reports, National Office of Vital Statistics, by G. J. Drolet and A. M. Lowell, New York Tuberculosis and Health Association.

Fig. 16

TUBERCULOSIS MORTALITY,* UNITED STATES, YEAR 1949



TUBERCULOSIS MORTALITY, BY RACE, SEX AND AGE, UNITED STATES, 1949

Age Group	Tuberculosis Deaths*, All Forms										Death Rate per 100,000						
	White		Negro		Other Col'd		All Races		White		Nonwhite		All Races		Age Group		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		Total	
0-1	96	82	37	39	15	10	148	131	279	6.5	5.8	28.0	26.5	8.9	8.2	8.5	0-1
1-4	263	286	111	105	29	37	403	428	831	4.7	5.3	18.2	18.4	6.3	7.0	6.6	1-4
5-9	84	69	38	43	10	4	132	116	248	1.4	1.2	5.4	5.3	1.9	1.8	1.8	5-9
10-14	47	66	28	61	12	9	87	136	223	1.0	1.4	5.3	9.4	1.5	2.4	2.0	10-14
15-19	169	256	222	355	25	37	416	648	1064	3.6	5.5	38.1	58.2	7.9	12.2	10.0	15-19
20-24	433	618	464	691	31	46	928	1355	2283	8.5	11.8	75.2	106.8	16.0	22.8	19.5	20-24
25-29	648	862	535	722	35	34	1218	1618	2836	12.3	15.7	91.6	111.3	20.7	26.2	23.5	25-29
30-34	890	837	529	570	23	27	1442	1434	2876	18.1	16.1	101.8	93.6	26.4	24.5	25.5	30-34
35-39	1219	853	666	450	22	23	1907	1326	3233	25.6	17.2	133.6	80.3	36.1	24.0	29.9	35-39
40-44	1673	709	746	369	25	16	2444	1094	3538	37.8	15.7	171.3	77.8	50.1	21.8	35.7	40-44
45-49	1873	623	717	331	49	16	2639	970	3609	46.1	15.1	178.6	72.9	58.8	21.1	39.7	45-49
50-54	2142	499	671	194	50	5	2863	698	3561	57.8	13.3	209.0	55.7	70.7	17.0	43.7	50-54
55-59	2343	510	511	148	27	7	2881	665	3546	69.3	15.0	193.5	55.0	78.8	18.1	48.3	55-59
60-64	2373	589	366	145	37	11	2776	745	3521	84.7	20.9	188.3	77.2	92.0	24.6	58.3	60-64
65-69	2045	599	269	82	37	7	2351	688	3039	100.4	28.0	198.7	63.6	107.4	30.2	68.0	65-69
70-74	1245	566	127	44	23	4	1395	614	2009	87.6	35.7	144.2	47.5	91.5	36.4	62.6	70-74
75-79	822	450	84	40	17	5	923	495	1418	91.8	42.5	155.4	68.2	97.4	43.5	68.0	75-79
80-84	378	250	36	21	5	4	419	275	694	86.5	47.3	117.1	59.5	88.5	48.4	66.6	80-84
85+	127	102	15	11	3	2	145	115	260	73.0	44.9	75.0	36.1	69.1	45.6	56.4	85+
All Ages†	18884	8834	6179	4424	475	304	25538	13562	39100	28.6	13.2	86.7	58.8	34.6	18.1	26.3	All Ages

*Exclusive of deaths among armed forces overseas. †Includes 32 persons whose age was not stated. Based on reports of National Office of Vital Statistics.

TUBERCULOSIS MORTALITY IN FIFTY LARGE AMERICAN CITIES
Among Residents, Year 1949

CITY	Federal Census 1950	Nonwhite Population †	Deaths, 1949				Resident Death Rate*								
			White ‡	Nonwhite		All Races	White	Non- white	All Races	10	20	30	40	50	60
				Num- ber	Per- cent										
CITIES, OVER 1,000,000															
Chicago, Illinois . . .	5,620,962	509,437	1,042	650	59%	1,672	33	128	46						
Detroit, Michigan . . .	1,849,568	305,721	464	549	43%	813	50	119	44						
Philadelphia, Pa. . . .	2,071,605	578,968	507	583	43%	890	50	104	45						
New York, N. Y.	7,891,957	776,529	1,933	900	32%	2,833	27	119	36						
Los Angeles, Cal. . . .	1,970,358	211,585	491	126	20%	616	28	62	32						
CITIES, 500,000-1,000,000															
Baltimore, Maryland . .	949,708	228,053	247	349	59%	596	54	158	63						
Washington, D.C. . . .	802,178	284,031	138	500	66%	438	27	108	55						
Boston, Mass.	801,444	42,744	358	51	13%	407	47	123	51						
Cincinnati, Ohio	503,998	78,685	139	112	45%	251	33	146	50						
New Orleans, La.	870,445	182,682	154	139	51%	273	36	77	48						
San Francisco, Cal. . . .	776,357	81,469	286	63	18%	349	42	81	46						
Buffalo, N. Y.	580,132	37,700	191	58	23%	249	35	160	43						
Pittsburgh, Pa.	676,806	82,983	177	113	39%	290	30	139	43						
Cleveland, Ohio	914,808	149,547	228	162	42%	390	30	112	43						
St. Louis, Mo.	856,798	154,448	209	131	59%	340	30	87	40						
Houston, Texas	596,163	125,660	148	70	32%	218	32	57	38						
Milwaukee, Wis.	637,392	22,742	142	16	10%	158	23	74	25						
Minneapolis, Minn. . . .	521,718	8,468	101	5	3%	104	20	38	20						
CITIES, 500,000-500,000															
San Antonio, Texas . . .	408,442	29,545	280	21	7%	501	76	73	76						
Newark, New Jersey . . .	438,778	75,626	139	110	44%	249	38	150	57						
Atlanta, Georgia	331,314	121,416	65	118	64%	183	31	98	56						
Birmingham, Ala.	326,037	130,142	48	116	71%	164	26	90	51						
Louisville, Ky.	369,129	57,772	109	75	41%	184	36	132	50						
Toledo, Ohio	305,618	25,350	98	32	25%	130	36	130	43						
Indianapolis, Ind.	427,173	64,091	98	66	41%	162	27	105	38						
Memphis, Tenn.	396,000	147,267	45	89	66%	134	19	61	35						
Kansas City, Mo.	456,622	56,023	104	49	32%	153	28	89	34						
Columbus, Ohio	375,901	47,151	75	50	40%	125	23	108	34						
Portland, Oregon	373,628	13,240	115	9	7%	124	32	71	34						
Rochester, N. Y.	332,488	7,645	96	8	8%	104	30	106	31						
Oakland, California . . .	364,575	55,778	91	25	23%	116	28	47	31						
Seattle, Washington . . .	467,591	27,167	119	22	16%	141	27	84	31						
Denver, Colorado	415,786	18,252	102	12	11%	114	28	68	28						
Dallas, Texas	454,462	57,263	66	39	57%	105	18	69	25						
San Diego, California . .	354,387	18,364	68	11	14%	79	22	63	24						
St. Paul, Minnesota . . .	311,349	6,237	55	1	2%	56	18	16	18						
CITIES, 200,000-500,000															
Jacksonville, Fla.	204,517	72,529	36	92	72%	128	28	128	63						
Richmond, Va.	230,310	73,087	46	60	57%	106	29	83	47						
Norfolk, Virginia	213,513	63,456	31	59	66%	90	21	95	43						
Jersey City, N.J.	299,017	20,966	100	26	21%	126	36	127	42						
Syracuse, N.Y.	220,583	5,058	79	9	10%	88	21	185	40						
Miami, Florida	249,276	40,576	46	34	43%	80	23	84	33						
Dayton, Ohio	243,872	34,273	53	24	31%	77	25	72	32						
Fort Worth, Texas	278,778	37,426	62	22	26%	84	26	60	31						
Providence, R.I.	248,674	8,681	55	15	21%	70	23	176	28						
Omaha, Nebraska	251,117	16,882	44	16	29%	62	19	109	25						
Akron, Ohio	274,605	23,878	42	23	35%	65	17	100	24						
Oklahoma City, Okla. . .	243,504	22,666	33	12	27%	45	15	63	19						
Worcester, Mass.	203,466	1,719	36	1	3%	37	18	59	18						
Long Beach, Cal.	250,767	6,587	30	4	12%	34	13	64	14						
FIFTY CITIES	36,890,890	5,042,765	9,397	5,208	36%	14,603	30	106	40						
UNITED STATES	150,697,861	16,462,000	27,718	11,382	29%	39,100	21	75	26						

†Based on Census Bureau reports to date. ‡Deaths by color provisional. *Per 100,000 population as of July 1, 1949.
Compiled from reports, National Office of Vital Statistics and U.S. Bureau of the Census by G.J. Drolet and A.M. Lowell,
New York Tuberculosis and Health Association.