

**SOCIO-ECONOMIC CONDITIONS
AND
TUBERCULOSIS PREVALENCE
NEW YORK CITY**

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**By
ANTHONY M. LOWELL**

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**NEW YORK TUBERCULOSIS
AND HEALTH ASSOCIATION
1956**



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ACKNOWLEDGMENTS

The author wishes to express sincere thanks to:

Officials of the Bureau of Tuberculosis and the Bureau of Records and Statistics, Department of Health, City of New York, for their cordial assistance in making available the basic statistics on tuberculosis prevalence;

Staff members of the New York Tuberculosis and Health Association, Mr. Godias J. Drolet and Mrs. K.Z. Whipple for invaluable advice and suggestions, Mr. Thomas H. Darling and Mr. Philip Patchen for preparing the charts and graphs, Mrs. Lydia Kavalenko for compiling the thousands of statistical units and computing rates, Miss Jean MacGregor for her careful typing of text and tables, and Mrs. Claire Turtz for expert reproduction of the mimeographed report;

Dr. Herbert R. Edwards, Yale University, former Executive Director of the Association, for the original suggestion that this study be undertaken;

Miss Jane Hoey, Director, Social Research Division, National Tuberculosis Association, for arranging financial assistance, and Miss Regina Loewenstein, Associate, for consultation on technical problems;

Dr. J. Burns Amberson, Director, and Mr. Irving Mushlin, Associate Director, New York Tuberculosis and Health Association, for their constant support and encouragement.

July, 1956

A. M. Lowell

SOCIO-ECONOMIC CONDITIONS AND TUBERCULOSIS PREVALENCE

IN NEW YORK CITY, 1949-1951

Social and economic elements of daily environment are important determinants in health and welfare especially in our congested large cities. Differences in economic status, housing, sanitation, overcrowding, medical care, occupation, and other factors, are measurably associated with and related to the disease rates of a community. It is axiomatic that improvement of a community's environment must be the will of the people and it depends in great measure upon the degree of enlightenment of public opinion.

Over a half century ago Biggs 1/ wrote that -- "It may be said, within certain limitations, that the inhabitants of every city have it largely within their power to determine what the death-rate of their city shall be. The presence of much sickness and of a high death-rate in any urban population are largely due to the existence of unsanitary conditions in the occupations, habitations, food, and water supply of the inhabitants -- all factors which lie to a great extent within their control."

As the organized campaign against tuberculosis gained momentum in New York City both the public and private health and welfare agencies gave serious attention to the difficult problems connected with raising the standard of living and improving the environmental conditions of those who contracted tuberculosis. 2/

In speaking of "environment" something more than physical surroundings is implied. Krause 3/ gave the following definition thirty-five years ago: "..... The long and short of it is that environment comprises all and everything that enters into the experience of a human being; and that, as regards tuberculosis, any experience that may modify in any way the origin and development of infection is an environmental influence."

Frost 4/ stressed the weight of environment when he said: "It is probable that one of the most important factors in the decline of tuberculosis has been progressively increasing human resistance, due to the influence of selective mortality and to environmental improvements such as better nutrition and relief from physical stress, tending to raise what may be called non-specific resistance. Probably nothing has

1/Biggs, Hermann M.: Tuberculosis--Its Causation and Prevention, Appendix 6, A Handbook on the Prevention of Tuberculosis, The Charity Organization Society, New York City, 1903.

2/Drolet, G.J., Lowell, A.M.: A Half Century's Progress Against Tuberculosis in New York City, 1900-1950, New York Tuberculosis and Health Association, 1952.

3/Krause, Allen K.: Environmental Factors in Tuberculosis, Amer. Rev. Tuberc., Vol. IV, No. 9, Nov. 1920, page 713.

4/Frost, Wade H.: How Much Control of Tuberculosis? Amer. Journal of Public Health, Aug. 1937, Vol. 27, No. 8.

been more influential in bringing about the decline of tuberculosis than progressive improvement in the social order as a whole; and nothing, perhaps, is more essential to the further effective control of the disease than to hold up, and so far as possible to improve, the standards of living of the lower economic strata. Obviously, the tuberculosis control program cannot expand to include the whole scheme of social betterment; but it can, and I think it should be concerned with raising the standards of living of those groups who are in most imminent danger of tuberculosis, beginning with the families of the tuberculous, and extending thence as far as practicable."

Since tuberculosis is a disease that responds, in the long run, to changes in social factors, such as improvement in housing, bettering of income and other selected social conditions which bring about community-wide benefits, as is evident from the record, it becomes increasingly hard to contend that progressive steps in these matters be delayed until more is known as to the precise modus operandi. This does not preclude, of course, a systematic and intensive search, when time and money are available, into the origins and causes underlying the problem.

An opportunity was provided through a grant from the National Tuberculosis Association 1/ to gather for New York City tuberculosis prevalence data by health areas and to compile a few of the more common socioeconomic indices. Additional work to unravel details and relationships of various factors, in an attempt to explain the high or low prevalence of tuberculosis by neighborhoods in New York, could be undertaken but such an analysis for health areas was beyond the scope of the present study.

We have tried to bring to public attention only a small portion of the valuable published and unpublished records in the statistical archives of the New York City Department of Health, to which agency and its representatives, we express deep appreciation for the many courtesies extended to us in preparing the data on tuberculosis prevalence by health areas. It is hoped that this study may make some small addition to the pool of contemporary experience, stimulate the social conscience and public awareness to the need of remedies, and uphold the efforts of those in our community who daily must implement words with deeds.

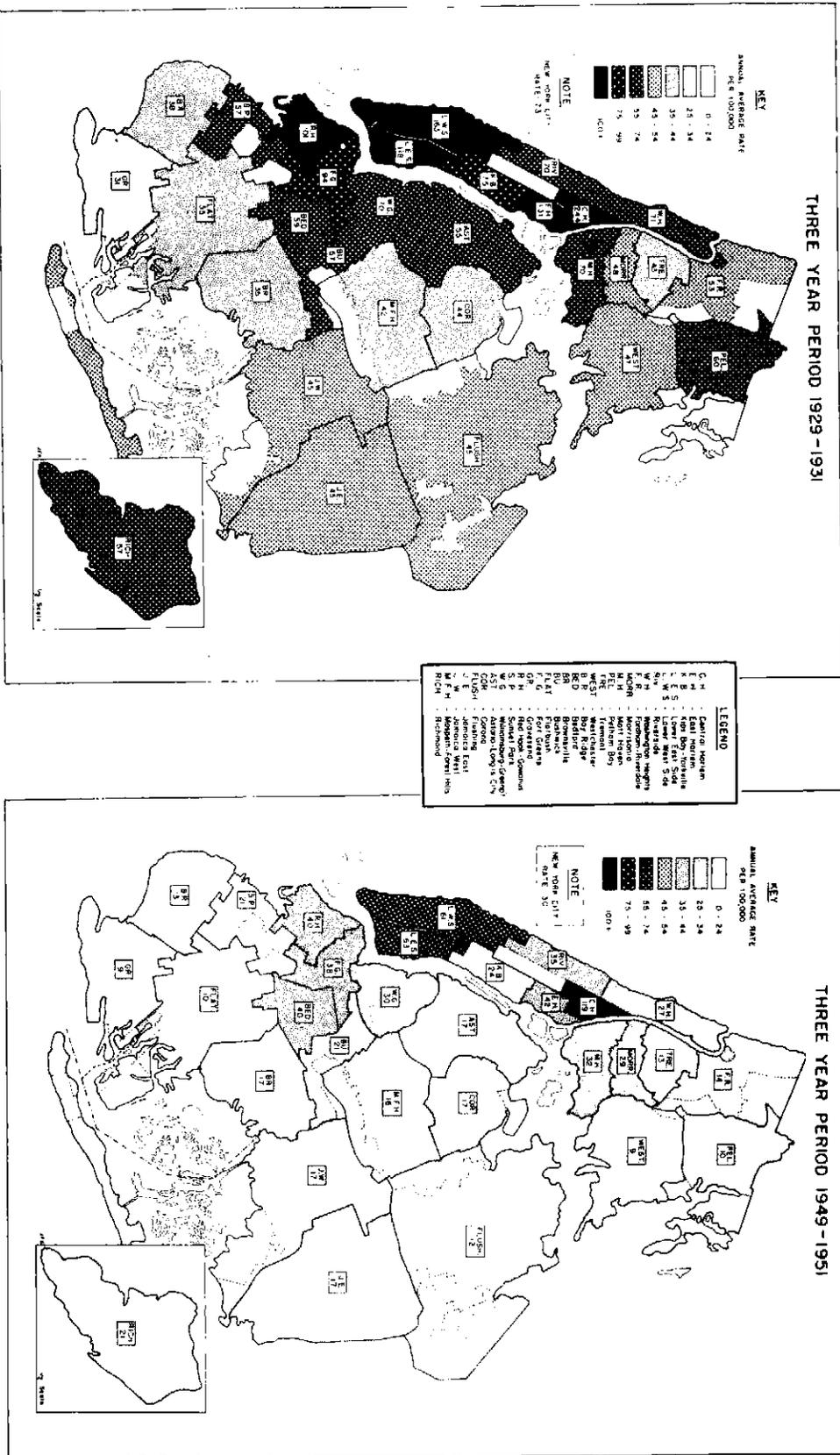
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1/Financial aid and assistance for this investigation was given by the National Tuberculosis Association.

Fig. 1

A GENERATION'S PROGRESS AGAINST TUBERCULOSIS IN NEW YORK CITY

DEATH RATE* IN EACH HEALTH CENTER DISTRICT



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

A FEW CONSIDERATIONS

Inquiry into the relationship of tuberculosis and socio-economic conditions is a matter which does not lend itself to an easy or ready solution and the problem must be reexamined in many ways. The present investigation, based on the type of data available for many communities, is a demonstration of one such approach.^{1/} Similar studies in other communities would be of value not only for local program planning but might reveal different types of relationships of tuberculosis and socio-economic indices.

In the past inadequate or incomplete reporting of causes of illness, on a community-wide basis, required students of the social sciences to utilize mainly mortality statistics which were then considered to be more completely reported. On a limited scale studies were made of the prevalence of illness.

In 1916, Guilfooy and Wynne ^{2/} of the New York City Department of Health voiced the need for better health indices: "The time has come when the death rate can no longer be accepted as a standard by which to judge the healthfulness of a community or the efficiency of its health department. Rather has the amount of illness come to be the measure of community healthfulness and health department efficiency. Illness must be prevented not only by attacking disease and its immediate causes, but also by correcting the social and economic conditions that we have come to know play so important a part in the propagation of illness. No longer can the scope of health work be limited to the narrow confines of sanitation; on the contrary it must be extended to include within its activities, sociology and economics."

It is almost anachronistic, and an interesting commentary on our conservatism in respect to an obviously progressive measure, that as recently as 1950 Edwards and Drolet ^{3/} still had to point out that "The death rate from tuberculosis is a limited and inadequate index of the prevalence of the disease in the community. . . . The number of known, active cases is the proper basis for estimating required facilities. Hospital beds are needed for those stricken and not for the dead."

During recent years, and particularly in our urban centers, tuberculosis cases have been reported to health departments more fully and in many instances are classified in some detail by age, sex, race, place of residence, type of care, and so forth. This type of information provides a basis for useful analyses especially when details on the demographic characteristics of a population are at hand at the time of the decennial Federal Census. Attempts are also being made in the United States to develop other sources of morbidity data for purposes of planning programs in medical care and public health.^{4/}

^{1/}Sheps, Cecil G., Taylor, Eugene E.: Needed Research in Health and Medical Care, A Bio-social Approach, University of North Carolina Press, Chapel Hill, 1954.

^{2/}Guilfooy, William H., Wynne, Shirley W.: An Analysis of Mortality Returns of the Sanitary Areas of the Borough of Manhattan for the Year 1915, Department of Health, City of New York, Monograph Series, No. 15, August 1916.

^{3/}Edwards, Herbert R., Drolet, Godias J.: The Implications of Changing Morbidity and Mortality Rates from Tuberculosis, Amer. Rev. of Tuberc., Vol. 61, No. 1, Jan. 1950.

^{4/}Fraenkel, Marta, Erhardt, Carl L.: Morbidity in the Municipal Hospitals of the City of New York, Russell Sage Foundation, New York, 1955.

Socio-economic environment alone does not necessarily determine the degree of tuberculosis prevalence among those exposed to it. There exists, as is well recognized, a complex of interrelated causes that can obscure and often make difficult the interpretation of an apparent association between illness and selected socio-economic characteristics of a stated population.

However, a responsible public health official in his day-to-day activities must make practical decisions upon, and the best use of, the information he has readily at hand. It cannot be overlooked that most communities normally have access to only a few vital statistics and population indices, compiled more or less routinely, upon which to base decisions for action. Refinements made possible through costly investigations which require specialized personnel may be beyond the means of the local health budget.

* * *

EARLIER STUDIES

The association of tuberculosis and environment, social, economic and physical, has been recognized and to some degree recorded in New York City for almost a century. The various observations and investigations in the years prior to the registration of tuberculosis cases, started by Biggs in 1894 ^{1/}, were based mainly, as mentioned earlier, on mortality data for large units of population. At first the statistical units for which mortality statistics were compiled were either boroughs or wards, the existing political units, and in time data were analyzed by areas known as sanitary districts.

In those days, because of the very high tuberculosis death rates in certain parts of New York City, by observing the general environmental conditions prevailing therein (poverty, inadequate sanitation, slum conditions, substandard housing and malnutrition), an association with tuberculosis was inferred. Although deplored, tuberculosis was considered to be an inevitable scourge of urban life. Stephen Smith ^{2/}, Commissioner of the Metropolitan Board of Health (1868-70) and the Board of Health of New York (1870-75), in his classic description of health conditions at that time, observed that the "White Plague" or consumption was the common inheritance of the poor and rich alike.

Beginning with the first annual report (year 1866) of the Board of Health of the Metropolitan Sanitary District of the State of New York ^{3/}, tuberculosis ("phthisis", "pulmonary consumption") mortality in New York City was classified by wards and "sanitary divisions". Some consideration

^{1/}Adoption by Board of Health, December 13, 1893, and further elaborated, February 13, 1894, of plan prepared by Dr. Hermann M. Biggs giving the basis for a local program for the control of tuberculosis and establishing policies of free sputum examinations, compulsory reporting and registration of cases by public institutions (and request of reporting from private practitioners), official supervision of isolation, terminal disinfection, provision of hospital facilities and instructions to the public in regard to the care of the disease. Reporting of tuberculosis in 1897 required by Sanitary Code of all medical practitioners (in addition to 1894 requirement concerning institutions).

^{2/}Smith, Stephen: The City That Was, pub. F. Allaben, New York, 1911.

^{3/}Annual Report of the Metropolitan Board of Health, 1866 (New York, 1867).

was given to the geographical and social distribution of the population and attempts were made to explain the underlying reasons for the differences in mortality rates.

In 1894 the Census Office of the United States Department of the Interior published records for New York City, during the late 1880's, giving the health conditions by wards and sanitary districts. The report, prepared under the direction of Dr. John S. Billings 1/ of the U.S. Army, an expert special agent of the Census Office, was a detailed study of the population, general living conditions, and the vital statistics of different parts of 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.

Billings commented on the physical environment and referred to the prevalence of high tuberculosis mortality rates in the crowded areas of New York. He noted that in the Second Ward of New York, in downtown Manhattan above Maiden Lane, the mortality rate from consumption was 776 per 100,000 population. The people in the area suffered the highest mortality rates from nearly all the common causes of death. As a contrast, in the upper section of the West Side of New York City, Ward 22, District K, located between West 68th and 77th Streets, the death rate for consumption was only 49 per 100,000 population, or one-sixteenth that in Ward 2, and the area was described as "a beautiful residence section containing handsome residences and apartment houses."

The Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York in its annual report 2/, reviewing the first year of activity, 1902-1903, included a chapter on "The Social Aspects of Tuberculosis" and the monograph by Ernest Poole, "The Plague in Its Stronghold--Tuberculosis in the New York Tenement". The evils of "the lung block" were portrayed dramatically.

During the first fifty years of the twentieth century, since the organization of the voluntary anti-tuberculosis movement, many other revealing reports and studies 3/ were prepared, by public and private agencies, on health conditions in New York City and special attention was given to tuberculosis. * * *

1/Billings, John S.: Vital Statistics of New York City and Brooklyn, Six Years ending May 31, 1890, Census Office, Department of the Interior, Washington, D.C. 1894.

2/A Handbook on the Prevention of Tuberculosis, first annual report of the Committee on the Prevention of Tuberculosis, the Charity Organization Society, New York City, 1903.

3/SELECTED REFERENCES (in addition to those mentioned elsewhere in this report)

- (a) Winslow, C.-E.A., Zimand, Savel: Health under the "E1", the Story of the Bellevue Yorkville Health Demonstration in Midtown N.Y., Harper & Bros., 1937.
- (b) Bellevue-Yorkville Health Demonstration Dist., N.Y.C., Statistical Reports, beginning 1926.
- (c) Charity Organization Society, Annual Reports 1900-1919.
- (d) Assn of TB Clinics of the City of N.Y., Annual Reports, 1910-1917.
- (e) Bulletins, N.Y. TB Assn, 1920-1926.
- (f) East Harlem Health Center Demonstration, A Report of the First Three Years' Work (under auspices of the American Red Cross, N.Y. County Chapter), 1925.
- (g) Committee on Neighborhood Health Development, Dept. of Health, City of N.Y., Statistical Reports, four editions, 1930, 1931, 1935, 1944.
- (h) Tuberculosis Reference Statistical Yearbook, for years 1931-1948, N.Y. TB & Health Assn, 1932-1949.
- (i) Drolet, G.J.: Tuberculosis-Year 1950, 1951, N.Y. TB and Health Assn, 1951, 1952.
- (j) Lowell, A.M.: Tuberculosis in N.Y. City, for years 1952-1954, New York Tuberculosis and Health Association, 1953-1955.

NEW YORK CITY -- CHARACTERISTICS

New York City has at present slightly over eight million residents. Because so large a population is concentrated in a comparatively small land area, a brief orientation is advisable to give the reader at least a minimum of background data as to the distribution of its people. In the last few years there have been material shifts in the migration of population and marked physical changes are altering the man-made topography of New York.1/

The City of New York covers 315.5 square miles, exclusive of inland waters, and it is divided into five boroughs which comprise the five political units or divisions. In addition, for administrative purposes so far as health matters are concerned, each borough is divided into health center districts with the exception of the Borough of Richmond which is considered as one health center district. There are thirty such districts in the city. For statistical purposes, a further subdivision of each health center district is made into health areas. A variety of data relating to vital statistics, population, and social conditions are available for these health areas.

According to the Federal Census, on April 1, 1950 there were 7,891,957 persons living in New York City; 6,889,760 were white, 727,981 were Negro, 246,309 Puerto Rican 2/ and 27,908 listed as being of other races. The Borough of Brooklyn had the largest number of residents, 2,738,175, Manhattan had 1,960,101, Queens 1,550,849, the Bronx 1,451,277, and Richmond 191,555.

Since 1950 several hundred thousand residents of Puerto Rico have come to New York. It should be mentioned that, although the nonwhite population and the Puerto Ricans tended at first to concentrate in certain neighborhoods, as has been the experience of newcomers in the past, they are beginning to be distributed generally throughout the city. Also there has been some migration of the city's population to nearby counties in upstate New York, Long Island and New Jersey.

In 1950 the native white residents comprised 5,332,235 of the total population and foreign-born white 1,784,206. The foreign-born nonwhite population amounted to 70,731 (included in "Negro" and/or "other races"). Although it is somewhat difficult to ascertain with any degree of precision the ethnic stock from which these many peoples have derived, it can be said that most of the major races of the world are represented. The leading nationality groups among the foreign-born white population, by country of birth, were: Italy (344,115), U.S.S.R. (308,306) and Ukraine (6,297), Germany (185,467), Poland (179,878), Fire (141,723), Austria (124,256), United Kingdom (England and Wales 53,614, Scotland 26,405, Northern Ireland 3,085), Hungary (51,968), Canada (35,860), Asia (31,977), Czechoslovakia (30,130), Greece (29,815), Rumania (29,409), Norway (25,552), Sweden (20,424) and the remainder from other countries, Mexico (3,234), other foreign countries in America (38,295).

1/The New York Times: Our Changing City, 1955.

2/Puerto Rican as used here denotes persons who were born in Puerto Rico, or whose parents were born there.

There were more females than males in New York City in 1950 and this proportion of females over males prevailed for both the white and the nonwhite population.

Although the median family income in New York, as reported for 1949 at the time of 1950 Federal Census, amounted to \$3,526, there were 98,905 families with incomes of more than \$10,000 and 562,485 with incomes of less than \$2,500. The median income for unrelated individuals was \$1,482.

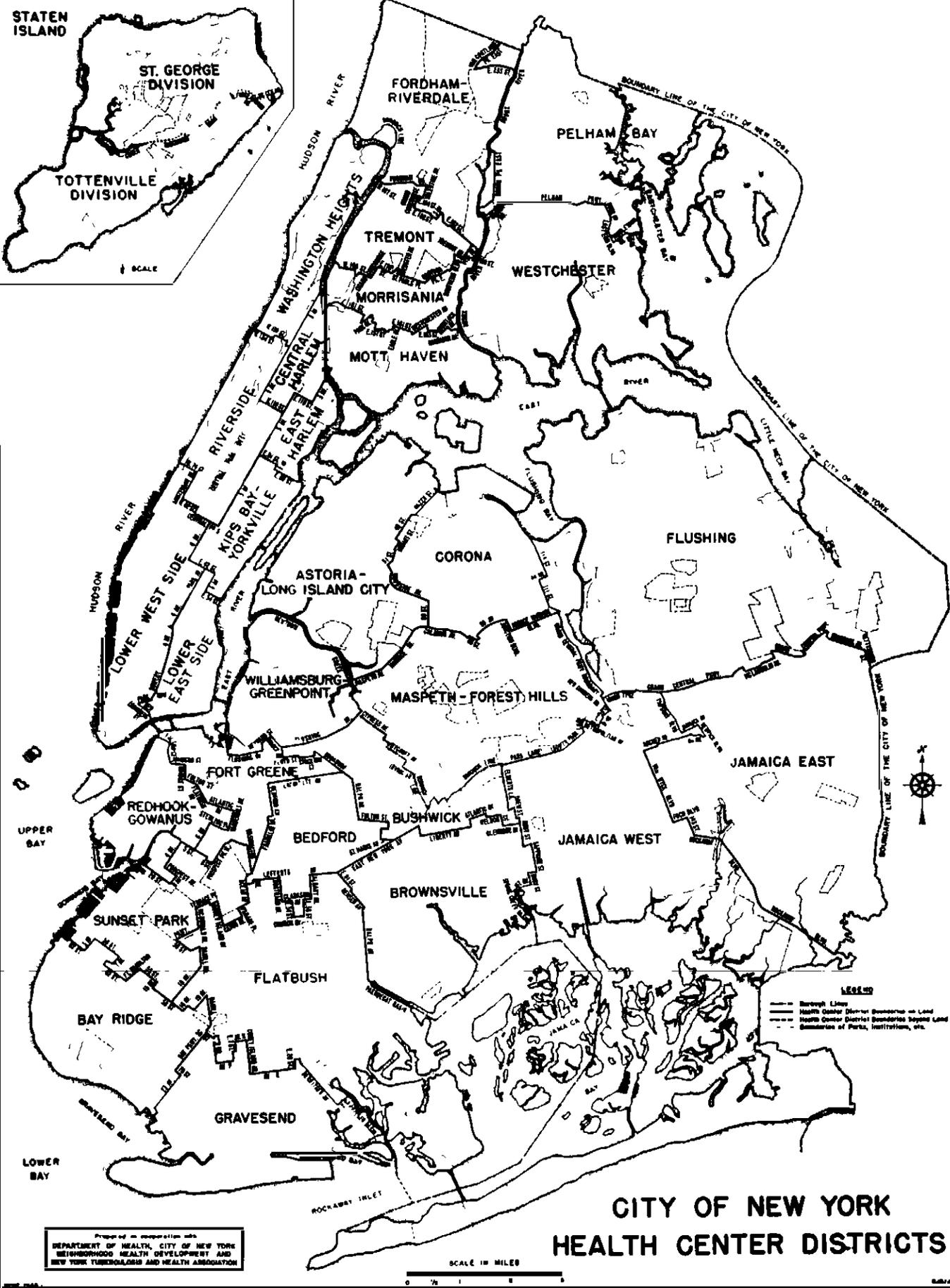
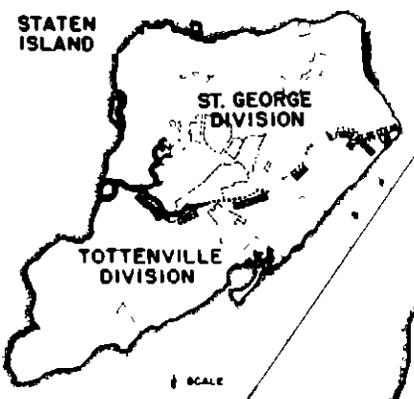
Annually the death rate (residents) for all causes averaged 9.5 per 1,000 population (white = 9.5, Nonwhite = 9.1) for the three-year period 1949-1951. The birth rate was 18.9 per 1,000 population (White = 17.9, Nonwhite = 28.9), infant mortality rate was 24.4 per 1,000 live births (White = 22.0, Nonwhite = 38.1), maternal mortality rate was 0.76 per 1,000 live births (White = 0.58, Nonwhite = 1.77) and the tuberculosis death rate was 27 per 100,000 population (White = 20, Nonwhite = 91). On an average, there were 7,956 new active cases of tuberculosis reported and 29,150 total known cases during the year.

Daily movement of the population is difficult to measure. However, the Department of City Planning reports 1/ that 46 percent of all wage and salary workers in the city work in a small area of about 500 city blocks in midtown and downtown Manhattan. Each working day nearly 400,000 commuters come to the central part of the city and additional thousands are here as visitors.

New York City has tuberculosis rates that exceed those for the rest of New York State and because of its size the City contributes more new cases and deaths each year than any other American community. Parkhurst 2/, reviewing in 1933 the mortality from tuberculosis in urban and rural New York State, concluded that: "The causative factors in the higher urban mortality from tuberculosis are very likely environmental, since the excess over rural mortality remains when correction is made for the unlike sex, age, color, and native composition of the population.

* * *

1/Bulletin, Department of City Planning, City of New York, December 1955.
2/Parkhurst, Elizabeth: Resident mortality from tuberculosis in urban and rural New York according to age, sex, color, and general nativity, Amer. Jl. of Public Health, Vol. XXIII, No. 9, pp. 901-909, Sept. 1933.



Prepared in cooperation with
 DEPARTMENT OF HEALTH, CITY OF NEW YORK
 NEIGHBORHOOD HEALTH DEVELOPMENT AND
 NEW YORK TUBERCULOSIS AND HEALTH ASSOCIATION

CITY OF NEW YORK HEALTH CENTER DISTRICTS



TUBERCULOSIS RATES, POPULATION BY RACE, BIRTH AND DEATH RATES
Health Center Districts, New York City

Health Center DISTRICT	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Birth Rate‡ Live Births 1949-51			Death Rate‡ All Causes 1949-51		
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Wh.	Non-Wh.	To-tal	Wh.	Non-Wh.	To-tal
			Wh.	Non-Wh.	To-tal										
Gen. Harlem.	1255	389	128	118	119	3.9	92.8	3.1	0.2	31.7	25.7	26.0	18.6	10.8	11.3
E. Harlem ..	753	226	34	82	42	58.8	13.1	27.6	0.5	22.1	30.9	23.6	9.2	8.6	9.1
Kips Bay-Y.	353	84	25	35	25	98.2	0.8	0.7	0.3	11.4	14.7	11.4	11.5	11.1	11.5
Lower E.S..	865	272	58	201	64	90.4	2.0	5.5	2.0	22.4	42.6	23.2	12.2	10.4	12.1
Lower W.S..	736	230	54	210	61	90.7	2.5	5.0	1.8	14.7	29.1	15.3	12.2	13.8	12.2
Riverside .	449	144	23	91	34	76.7	14.8	7.4	1.0	13.5	25.6	15.4	11.5	9.1	11.1
Wash. Hgts..	404	113	15	62	27	71.3	24.2	4.1	0.4	14.4	20.3	15.9	10.3	8.1	9.8
MANHATTAN:	665	202	37	106	51	73.0	18.9	7.1	1.0	16.3	25.7	18.3	11.4	10.0	11.1
Ford 'm-Riv.	206	44	13	26	13	99.2	0.4	0.3	0.1	15.2	24.5	15.2	9.5	9.2	9.5
Morrisania.	411	107	16	73	29	70.7	22.4	6.7	0.2	16.3	28.8	19.2	9.9	7.3	9.3
Mott Haven.	480	125	29	60	32	77.0	7.0	15.8	0.2	19.2	31.3	20.2	9.0	7.3	8.9
Pelham Bay.	185	40	9	30	10	97.4	2.2	0.3	0.1	16.4	22.7	16.5	7.7	10.0	7.7
Tremont ...	215	52	12	38	13	96.5	2.2	1.2	0.1	14.5	39.3	15.1	9.4	9.1	9.4
Westchester	189	40	9	34	9	98.7	0.7	0.5	0.1	17.3	75.4	17.8	7.6	9.5	7.7
BRONX:	288	70	15	65	18	89.1	6.5	4.3	0.1	16.4	30.7	17.3	9.0	7.6	8.9
Bay Ridge .	198	38	12	104	12	99.5	0.2	0.2	0.1	18.7	29.2	18.7	8.2	11.1	8.2
Bedford ...	389	128	19	73	40	59.6	39.9	0.4	0.1	15.9	31.1	22.0	11.0	8.0	9.8
Brownsville	233	56	10	103	16	93.0	6.4	0.4	0.1	18.6	40.3	20.1	9.3	8.2	9.2
Bushwick ..	302	76	20	72	21	94.8	3.2	1.9	0.1	18.9	37.1	19.5	10.3	8.4	10.2
Flatbush ..	161	33	9	63	10	99.2	0.5	0.2	0.1	17.5	28.7	17.5	8.9	12.3	8.9
Ft. Greene .	441	138	25	94	38	78.1	17.8	3.7	0.4	20.6	36.1	23.5	10.5	9.1	10.2
Gravesend .	132	31	7	162	8	98.9	0.8	0.2	0.1	19.3	34.9	19.4	7.8	12.2	7.8
Red Hook-G.	494	139	37	108	40	90.3	3.2	6.0	0.5	21.2	38.1	22.0	10.5	8.9	10.5
Sunset Fk..	302	69	21	51	21	98.8	0.2	0.9	0.1	18.2	28.2	18.2	9.2	11.3	9.2
Wms.-Greenpt	356	89	27	149	31	92.0	2.7	5.1	0.2	20.1	41.8	20.8	9.4	9.2	9.4
BROOKLYN:	278	73	17	84	22	90.8	7.5	1.5	0.2	18.7	33.7	19.9	9.3	8.4	9.2
Astoria, LIC	279	61	18	47	18	98.8	0.7	0.4	0.1	18.7	51.2	18.9	8.0	8.4	8.0
Corona	277	63	15	60	17	94.0	5.4	0.4	0.1	19.7	33.2	20.4	8.4	7.6	8.3
Flushing ..	209	46	11	83	12	98.1	1.4	0.2	0.3	22.5	24.6	22.5	7.3	10.5	7.4
Jamaica E..	274	66	13	45	17	88.1	11.4	0.4	0.1	17.4	28.6	18.7	8.5	8.0	8.5
Jamaica W..	246	56	16	126	18	98.3	1.4	0.2	0.1	18.7	37.2	18.9	9.8	9.7	9.8
Maspeth-F.H.	236	54	17	115	17	99.5	0.2	0.2	0.1	16.9	31.4	16.9	8.5	3.8	8.5
QUEENS:	252	57	15	59	16	96.2	3.3	0.3	0.1	19.0	30.8	19.4	8.4	8.2	8.4
RICHMOND:	222	56	20	53	21	96.7	2.8	0.4	0.1	20.6	24.3	20.8	9.9	9.1	9.8
NEW YORK CITY	369	101	20	91	27	87.3	9.2	3.1	0.4	17.9	28.9	18.9	9.5	9.1	9.5

†Per 100,000 population. ‡Per 1,000 population. Birth and death rates annual average 1949-1951.

Based on reports of Department of Health, City of New York and U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

SOURCES OF DATA

New York City today is the largest urban community in the United States. It is, in a sense, a social laboratory where within certain limits it is possible to select and study areas with different levels of tuberculosis prevalence and environmental conditions present therein. The city is divided into statistical units known as health areas 1/ for which basic statistics on population, morbidity and mortality have been collected systematically for over two decades.2/ The health areas created prior to the 1930 Census were to form population units of about 25,000 persons. Health areas are aggregations of contiguous census tracts and therefore census tract data of the Federal Census can be combined to form the larger health areas. In 1950 there were 2,463 census tracts in 352 health areas or on an average seven census tracts per health area.

The Department of Health of the City of New York publishes yearly 3/ for each health area the number of tuberculosis deaths (white, Nonwhite) and new tuberculosis cases reported as well as similar data for other causes of death and selected reportable communicable diseases. It has in addition unpublished details on new cases of tuberculosis reported during the year and cases on the Tuberculosis Register as of December 31st of each year.

Demographic data on the characteristics of population (race, age, sex, family income, etc.) by health areas are based on reports compiled by the Welfare and Health Council of the City of New York 4/ and the U.S. Bureau of the Census.5/

Housing statistics were abstracted from the reports on housing of the U.S. Bureau of the Census.6/

Juvenile delinquency rates shown are those published by the Youth Board of the City of New York.7/

1/1950 revision of health area map, copyrighted 1951, New York Tuberculosis and Health Association, Inc. (Health areas: 1950 = 352, 1940 = 348).

2/Organization of Local Health Area Statistics in New York City, Drolet, Godias J., Guilfooy, William E., Amer.Jl. Pub. Health, XX:4 (Apr.) 1930.

3/Vital Statistics by Health Areas and Health Center Districts, City of New York (for each year since 1929), Dept. of Health, City of New York.

4/Characteristics of the Population by Health Areas, New York City: 1950, Part I and Part II (Manhattan, Bronx, Brooklyn, Queens, Richmond), Research Bureau, Welfare and Health Council of New York City, 1953. Population of Puerto Rican Birth or Parentage, New York City: 1950, Data for Boroughs, Health Areas and Census Tracts, Research Bureau, Welfare and Health Council of New York City, 1952.

5/U.S. Bureau of the Census. U.S. Census of Population: 1950, Vol. III, Census Tract Statistics, Chapter 37 (New York City), U.S. Government Printing Office, Washington, D.C., 1952.

6/U.S. Bureau of the Census. U.S. Census of Housing: 1950, Vol. V, Block Statistics, Parts 126-130 (New York City), U.S. Government Printing Office, Washington, D.C., 1952.

7/Juvenile Delinquency Rates: 1953, New York City, Research Department, New York City Youth Board, 1954. (Juvenile Delinquency Rates for 1954 by Health Areas and Age were published in March 1955).

Limited use was made of unpublished data on density of population by health areas provided by courtesy of the City Planning Commission of the City of New York.

Information on Public Assistance was abstracted from reports of the Department of Welfare of the City of New York. The data were available only on a Welfare District basis.^{1/}

The official Health Area base maps (1940 and 1950 revisions) were originally prepared by the Statistical Division of the New York Tuberculosis and Health Association in cooperation with the Department of Health, City of New York, Welfare and Health Council of New York City, and the New York Metropolitan Chapter, American Statistical Association.

* * *

INDICES: TUBERCULOSIS, SOCIO-ECONOMIC

The more significant index used in this study is the total annual TUBERCULOSIS PREVALENCE RATE -- in contradistinction to the commonly used new case rate.

The prevalence rate, for the three-year period 1949-1951, here represents the yearly average for the three years 1949, 1950 and 1951 of the known tuberculosis cases, namely active cases already known on the first day of the year, the new cases reported during the year, plus the smaller number of former cases resumed -- exclusive therefore of the arrested or inactive cases. The rate is expressed as the number of active cases known during the year per 100,000 population.

In interpreting the data and correlations presented the reader should constantly bear in mind the utilization of this total tuberculosis "prevalence" during the year as defined above. It differs from "incidence" which is the rate at which new cases of a disease develop in a given number of the population over a specified period of time, usually a year. Known prevalence on a specific day of the year is still another index limited to a particular day.

MEDIAN FAMILY INCOME, as of 1949, is the combined incomes of all members of each family as defined in the 1950 Federal Census and does not include unrelated individuals whose income is given separately. The "median" is the value which divides the distribution into two equal parts, half the families falling below the value and half exceeding it. In the tables "individual" median income refers to unrelated individuals.

HOUSING. The important aspect selected here refers to the percentage of "poor" housing or dwelling units in dilapidated condition or with inadequate plumbing facilities. Data, expressed as a percent, on condition of a dwelling unit are shown in combination with data for selected plumbing facilities and, therefore, limited to units for which both condition of dwelling units and plumbing facilities were reported. Plumbing facilities include water supply, toilet and bathing facilities. Dwelling units with private toilet and bath, and only cold water were not included. (See addenda for detailed definition.)

^{1/}Monthly Statistical Reports, Years 1949-1954, Dept. of Welfare, City of N.Y.

CROWDING. Dwelling units with 1.51 or more persons per room were used as a measure of overcrowding. This was expressed as the percentage of dwelling units reporting 1.51 or more persons per room.

UNEMPLOYMENT. Percentage of civilians unemployed as reported in the 1950 Federal Census.

JUVENILE DELINQUENCY RATES (1953) are based on an analysis of 80,000 records, over a two-year period, by the New York City Youth Board and are expressed as a ratio per 1,000 youths in the age group 5-20 years.

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For some of the above indices it was necessary to abstract details for 2,463 census tracts (1950 Federal Census) and to compile these units for 348 health areas (1940 health area map), thirty health center districts and five boroughs. The 1950 revision of the health area map has a total of 352 areas.

In order to utilize the information provided through the April 1, 1950 Federal Census, when enumeration of the population gave details not available for intercensal years, the main indices were centered around the three-year period 1949-1951. The 1940 revision of the health area map served as a base since vital statistics (New York City) according to the 1950 health area revision were first published for the year 1952.

Although this study concerns itself primarily with tuberculosis and its association with housing and income a few other vital statistics such as juvenile delinquency rates, birth rates, general death rates, race, etc., were included in the tabulations for those interested in background data for local planning in various parts of the city.

Since 1951 there has been some redevelopment in several neighborhoods with consequent improvement in housing, etc. These recent changes should be taken into account when appraising the present status of any given health area which may be of current interest. It is probable that today (1956) the level of the indices differs from the 1949-51 period. However, it is reasonable to assume that the interrelationship of these indices has remained substantially the same.

* * *

TUBERCULOSIS PREVALENCE IN HEALTH AREAS WITH HIGH AND LOW RATES

The summary table on page 13 presents the range of indices in ten health areas with the highest and ten health areas with the lowest tuberculosis prevalence rates in each borough and the City. The determining item for inclusion of the health areas was the tuberculosis prevalence rate. Those ten health areas at the top and bottom of the list were studied, for which all indices were available, and the indices shown are the low and high within each group of ten areas.

First, in New York City, tuberculosis rates in ten health areas with highest tuberculosis prevalence rates, located in the Borough of Manhattan, ranged from 1087 to 2392 per 100,000 population and the family income from \$1,778 to \$2,637. Dwelling units reported as dilapidated or with inadequate plumbing rose from 19.1 percent in one health area to 57.5 percent in another. The index of crowding, that is, dwelling units having 1.51 or more persons per room, rose from 5.8 percent to 17.5 percent. Unemployed civilians reached 9.3 percent to 16.7 percent in these areas, with an average of 11.48 percent for the ten areas combined. Juvenile delinquency ratios were 30.3 to 84.0 per 1,000 youths (5-20 years) and the white population range was 0.3 percent to 92.1 percent.

At the other end of the scale, in ten health areas with the lowest tuberculosis prevalence rates, located in the Borough of Brooklyn, the tuberculosis rates ranged from 59 to 113 per 100,000 population. It will be noted that the range of family income was substantially higher (\$3,701-\$4,798) than that found in the ten health areas with the high tuberculosis rates. For "poor" housing, as expressed by dilapidation and inadequate plumbing, the percentages (0.8%-2.4%) were substantially lower than the average for the City. The index of crowding ranged in nine of the areas from 2.4 to 4.2 percent. The tenth health area (91.20), located in the Sheepshead Bay District, had an index of 15.7 percent. The unemployment percentages, a maximum of 5.9 and minimum of 3.8, or an average of 5.03 percent for the ten areas, were lower than the City average. The juvenile delinquency rates in these areas were relatively low (6.5-15.1), and white residents made up 99 percent of the total population.

The age distribution in the above two groups of ten health areas shows some small differences; in the high tuberculosis rate group, 26 percent of the population was under 25 years of age and 9 percent 60 years or older, and in the low rate group the percentages were 29 and 11 for the corresponding age groups.

MAJOR OCCUPATION GROUPS OF THE POPULATION
In the Ten Health Areas with High and Low TB Rates

Occupation Group*	Percentage of Population by Occupation	
	High TB Areas †	Low TB Areas ‡
Professional, technical, Managers, officials	7.6%	32.1%
Clerical and sales workers	11.9%	32.0%
Craftsmen, foremen, operatives, kindred workers..	37.9%	28.6%
Private household workers, service workers, laborers ...	42.6%	7.3%

*As classified in 1950 Federal Census. Health Areas: †Manhattan (10,12,13, 15,19,24,25,30,74,77). ‡Brooklyn (71,2,72,2,73,2,74,2,83,85,1,85,22,87,1 87,22,91,2).

RANGE OF INDICES IN TEN HEALTH AREAS
WITH HIGHEST OR LOWEST TUBERCULOSIS PREVALENCE RATES
NEW YORK CITY

Borough	Tuberculosis Prevalence Rate† 1949-51	Family Income 1949 (Median)	Dwelling Units Percent Dilep- tated or Inade- quate Plumbing 1950*	1.51 or More Persons per Room Percent of Dwell. Units 1950	Unemployed (Civilian) Percent 1950	Population Percent White† 1950	Juvenile Delinquency Rate 1953*
Manhattan	High TB rate Borough average .. Low TB rate 1087-2392 (665) 143-264	\$1778-\$2637 (\$3073) \$2545-\$10000+	19.1% (18.5%) 0.4% 57.5% 18.3%	5.8% (6.7%) 1.7% 17.5% 11.0%	9.3% (8.4%) 2.5% 16.7% 10.6%	0.3% (73.0%) 77.6% 92.1% 99.5%	30.3-84.0 (35.4) 3.6-39.7
Bronx	High TB rate Borough average .. Low TB rate 497-827 (288) 117-166	\$2335-\$3368 (\$3612) \$3676-\$5247	1.7% (4.7%) 0.5% 4.6% 3.9%	4.9% (4.9%) 2.5% 8.2% 6.6%	7.6% (7.1%) 2.3% 12.6% 7.9%	7.5% (89.1%) 92.9% 93.7% 99.8%	28.9-80.3 (25.2) 6.1-25.9
Brooklyn	High TB rate Borough average .. Low TB rate 539-1295 (278) 59-113	\$2338-\$3700 (\$3447) \$3701-\$4798	10.6% (8.4%) 0.8% 49.9% 2.4%	6.0% (4.4%) 2.4% 14.6% 15.7%	6.2% (7.1%) 3.8% 16.1% 5.9%	11.5% (90.8%) 98.8% 88.5% 99.7%	15.5-64.3 (20.9) 6.5-15.1
Queens	High TB rate Borough average .. Low TB rate 332-547 (252) 127-187	\$2951-\$3955 (\$4121) \$3422-\$5999	1.8% (4.7%) 0.8% 13.7% 10.7%	0.7% (2.4%) 0.3% 5.1% 4.4%	3.4% (4.3%) 1.7% 8.9% 5.7%	47.8% (96.2%) 96.6% 99.8% 99.7%	8.6-44.3 (16.3) 7.4-31.1
Richmond	High TB rate Borough average .. Low TB rate 376 (222) 39	\$4211 (\$3845) \$3447	18.0% (9.2%) 3.1%	9.5% (2.7%) 0.9%	9.6% (7.3%) 5.0%	99.6% (96.7%) 94.2%	37.4 (20.1) 5.7
New York City	High TB rate City average Low TB rate 1087-2392 (369) 59-113	\$1778-\$2637 (\$3526) \$3701-\$4798	19.1% (9.6%) 0.8% 57.5% 2.4%	5.8% (4.6%) 2.4% 17.5% 15.7%	9.3% (6.9%) 3.8% 16.7% 5.9%	0.3% (87.3%) 98.8% 92.1% 99.7%	30.3-84.0 (23.6) 6.5-15.1

† Annual average tuberculosis cases during three-year period 1949-51 per 100,000 population. #Percentage of dwelling units reporting = dilepidated or no running water; or no private bath, with running water, not dilepidated. *Per 1,000 youths in age group 5-20 years. †Inclusive of white Puerto Ricans. #Range for 9 areas = 2.4% - 4.2%.

A similar comparison of health areas with high and low tuberculosis prevalence rates within each borough brought out similar interrelationships. Health areas with high tuberculosis prevalence rates generally had lower family incomes, a higher percentage of dwelling units in a dilapidated condition, proportionately more crowding, and higher percentage of persons who were unemployed than was found in health areas with the low tuberculosis rates. As to population according to race, a greater number of health areas with high tuberculosis prevalence rates had proportionately a higher percentage of Nonwhite population than was the case in areas with low tuberculosis prevalence. Nevertheless, even in the high tuberculosis health areas there was some variation in this respect, for example, in Manhattan among the ten high tuberculosis prevalence rate areas there was one area with 0.3 percent white population and at the other extreme one with 92.1 percent. It was not possible in the present investigation to study separately the white and Nonwhite tuberculosis prevalence rates and socio-economic status by race and health areas.

* * *

TUBERCULOSIS PREVALENCE BY BOROUGHES

Inspection of the tuberculosis rates in the five boroughs, for the period 1949-1951, brings out that within each borough there are health areas with relatively high prevalence rates as compared to the city average. The tuberculosis total known prevalence rate for the City is 369 per 100,000 population. The Borough of Manhattan leads with a rate of 665, not quite twice the City average, for the Bronx the rate is 288, Brooklyn 278, Queens 252, and Richmond 222. The starting level of tuberculosis prevalence rates in each of the boroughs is also different. In Manhattan we find sixteen health areas with rates over 1000, the highest rates in the City. In Brooklyn, the highest rate of 1295 is found in Health Area 10, the Bronx 827 in Health Area 35, Queens 547 in Health Area 34, and in Richmond a rate of 376 in Health Area 6. For location of health areas see maps in addenda.

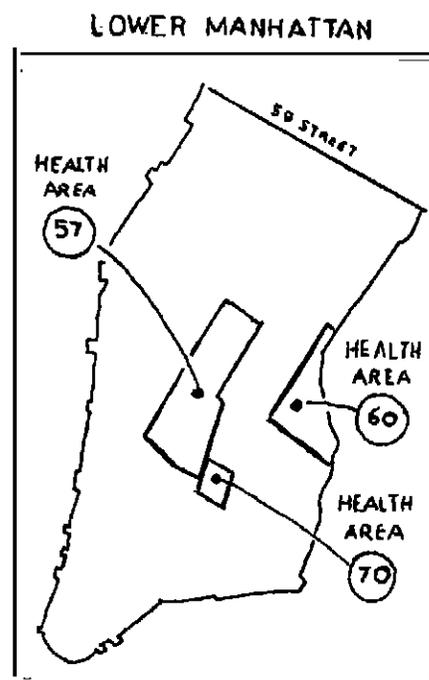
Even though health areas are relatively small in acreage and population 1/, as compared to health center districts and boroughs, and are useful statistical units for general purposes, there are a few areas where a more detailed examination is necessary in order to clarify what appear to be inconsistencies.

Pertaining to tuberculosis prevalence, for example, a special condition prevails in Health Area 60 2/ on the lower east side of Manhattan. The area includes two large housing developments 3/, Stuyvesant Town and Cooper Village. Located in the northern part of this health area is a segment occupied by the New York University-Bellevue Medical Center as well as a few blocks with older type houses. At the time of 1950 Federal Census 98.5 percent of the population was listed as white. The median family income was reported at \$5,722 whereas the median income for unrelated individuals was one of the lowest in the city, or \$492. Because of the comparatively new housing developments, mentioned above, only 0.2 percent of the dwelling units in the whole area were listed as dilapidated or with inadequate plumbing. The juvenile delinquency rate in 1953 was 4.8, the second

1/Average population for 352 health areas in 1950 was 22,420, acreage 573.
2/Located between First Ave. and East River, and East 34th St. and 14th St.
3/Peter Cooper Village, 2495 units, Stuyvesant Town, 8755 units (Metropolitan Life Insurance Company, 1947-1949).

lowest of any health area in Manhattan. Therefore, the high tuberculosis prevalence rate of 790 annual average for the three-year period 1949-1951 seemed to contradict the general experience in other high socio-economic level areas. Investigation of details, in so far as they were available, brought out that the majority of the tuberculosis cases were "residents" of the upper part of the area where special chest X-ray surveys of homeless persons had been conducted during the last few years.

For the three-year period 1949-1951, 216 new cases of tuberculosis were reported for Health Area 60 and of this total only 18 were in the part occupied by the housing developments. Of the 50 new cases with active tuberculosis found in the whole area in 1954, Stuyvesant Town contributed five and Cooper Village added one. Of the 166 cases on the tuberculosis register as of December 31, 1950, one person resided in Peter Cooper Village and another in Stuyvesant Town. The remaining 164 cases were assigned to the rest of the district. In 1951, of the 148 cases on the register, four and nine respectively were found in the above mentioned housing developments whereas the remaining portion of the health area accounted for 135 of the cases. It was quite obvious that some adjustment would have to be made in order to reflect the true tuberculosis prevalence rate exclusive of the area covered by the Bellevue Hospital neighborhood where many persons with no permanent home address were assigned. Taking these facts into consideration an adjustment was made and the tuberculosis prevalence rate for Health Area 60, exclusive of the Bellevue Hospital sector, was therefore estimated to be around 59 per 100,000.



Health Area 57 1/ in Manhattan is another instance where it would appear that the high tuberculosis prevalence rate of 834 per 100,000 population was associated with a high family income of \$4,791 and an income of \$2,457 for unrelated persons. For the area as a whole the percentage of dwelling units reported as dilapidated or with inadequate plumbing amounted to 15.1 percent as compared with 18.5 for the Borough of Manhattan. In the southeast of Health Area 57 we find a few lodging houses or hotels where the so-called "homeless" men are housed. X-ray surveys conducted by the Department of Health during recent years have uncovered a substantial number of "unattached" men with active tuberculosis who were added to the new cases assigned to the district. In this instance it was not possible to make an adjustment in the tuberculosis rates since sufficient details were not available.

Health Area 70,2/ adjoining the lower right corner of Health Area 57, had the highest tuberculosis rates in the City, 93 percent of both the known cases and the new cases reported during the three years 1949-1951 were in the

1/ Located between 6th Avenue (Ave. of the Americas) and 4th Avenue (Park Ave.); and 28th Street and Houston Street.

2/ Located between Bowery and Allen Street; and 3rd Street and Irvington Street (1940 Health Area map).

moderately advanced or far advanced stages of tuberculosis. In 1950, the population of this health area was 10,461; 6,949 of the total were men. The over-all median family income was given as \$1,302. Interestingly enough, of the group for whom "family status" was given (6,105), it was indicated that there were 4,185 unrelated individuals and 1,920 families. An analysis of the men, according to age, brought out that 24 percent in this area were sixty years or over as compared with 14 percent for the Borough of Manhattan. Too, of the men who reported marital status, 59.5 percent stated that they were either single, widowed or divorced as compared with 39.7 percent for the Borough of Manhattan. Since nowadays tuberculosis is concentrating itself more among the men, particularly those in the older age groups, an interpretation of high prevalence rates in parts of the city, such as the "Bowery", must take this factor into consideration and specific rates by age and sex computed.

Yerushalmy and Silverman 1/ called attention to the problem, especially in large cities, when they noted that "the tuberculosis mortality rate among males in practically all age groups shows a consistent relationship to size of community. The rate in large cities is considerably higher than in the intermediate-sized cities and the rate in the latter is in turn higher than that of the rural areas. The differences in rates are more pronounced for Nonwhites than for whites."

* * *

HOUSING AND TUBERCULOSIS

New York City, since the Second World War, has undertaken on a broader scale than formerly the Herculean task of providing for its citizens more good and adequate housing. Obviously in so large a community this is no easy task that can be completed in a short time. The Mayor's Committee for Better Housing 2/ estimated that even if the program for public housing construction, which is now proceeding at a rate of 8,000 dwelling units per year, were to be increased to 11,000, and if all such new housing were made available to the occupants now in the old-law tenements, it would take at least 38 years or until about the year 1990 to eliminate the existing tenements. About 1,500,000 people are said to live in 53,000 of these buildings constructed before 1901. 3/

Stebbins 4/, Director of the School of Hygiene and Public Health of the Johns Hopkins University, stated that: "The relationship between housing and health has been generally recognized but is admittedly extremely difficult of measurement in any precise sense. Health surveys have repeatedly demonstrated higher death rates from the infectious diseases, particularly tuberculosis, in areas of substandard housing. There are undoubtedly many other factors associated with poor housing that have a direct bearing upon

1/Yerushalmy, Jacob, Silverman, Charlotte: Tuberculosis Mortality in Communities of Different Size, Amer. Rev. of Tuberc., Vol. 51, No. 5, May 1945, pp. 413-431.

2/The Mayor's Committee for Better Housing, Final Report, New York City, September 1955.

3/Citizens' Housing News, Vol. 14, Nos. 4,5, Dec. 1955, Jan. 1956.

4/Public Health News, New Jersey State Department of Health, Vol. 35, No.1, January 1954, pp. 5-6.

the occurrence of disease and disability, but the inevitable problem of crowding and environmental sanitation associated with slums has without doubt an important bearing on general health."

Wilner 1/ describing a five-year study recently undertaken on some of the effects of housing quality on health and family life in Baltimore, Maryland, commented that "In a number of studies, it has been repeatedly observed that disease rates are higher among persons who are poorly housed than among those who are better housed. There are very few studies reporting the reverse relationship. The common inference is that components of bad housing environment, that is, inadequate sanitary facilities, crowding, the presence of vermin, and the like, are responsible for the higher disease rates. This is of course not the only interpretation possible. Another, for example, suggests that it is not the housing environment itself that encourages the incidence of disease. Rather, the hypothesis is advanced that the population living in a poor housing environment has certain characteristics which -- aside from housing -- result in a high observed prevalence of disease. These characteristics are: low income, little education, poor diet and health habits and a lessened proneness to seek out medical attention when needed. Thus, the issue may be people rather than housing, or at the very least some complex interaction between the two, and the relationship between housing and health, while repeatedly observable, may simply not have the causal direction that is popularly accepted."

Forty years ago Lawrence Veiller 2/, in commenting on the futility of returning a patient from a sanatorium to what he described as "vile slum to live under unsanitary and degrading conditions", pointed out that "so long as there are bad housing conditions existent in any of our cities, so long will people live under conditions which make for the breaking down of the physical system and the weakening of the capacity of the human body to resist the attacks of tuberculosis and other germ diseases." This warning is timely today when so many New Yorkers are receiving treatment for tuberculosis while under "care at home".

Studying the correlation of housing and tuberculosis in Cleveland, Ohio, covering the period 1928-1931, Green 3/ reported that the white tuberculosis death rate of 19 per 100,000 population prevailed where the highest rents were paid; whereas it was 127 in the area where the lowest rents were paid. He noted the same ratio among the colored in that the tuberculosis death rate increased in this group as the rent paid came down.

In another Ohio city Allen 4/ states: "Upon analyzing all these mortality data (1949-1951) on tuberculosis in Cincinnati, it seems clear to us that after many years of control efforts the problem with this disease still is to a large degree in an unfit living environment. Recent death rates were relatively low in the more outlying sections of Cincinnati. They indicate that tuberculosis no longer presents any real problem there. The

1/Wilner, Daniel M., Walkley, Rosabelle P., Taback, Matthew: How Does the Quality of Housing Affect Health and Family Adjustment? Presented at Annual Meeting, Amer. Public Health Assn, Kansas City, Mo., Nov. 17, 1955.

2/Veiller, Lawrence: Housing and Tuberculosis, Transactions of the Eleventh Annual Meeting, The National Association for the Study and Prevention of Tuberculosis, 1915.

3/Green, Howard Whipple: Tuberculosis and Economic Strata, Cleveland's Five-City Area, 1928-1931, Anti-Tuberculosis League of Cleveland, 1932.

4/Allen, Floyd P.: People of the Shadows, Studies of Mortality in Cincinnati, Public Health Federation, 1954.

challenge to controlling tuberculosis is in the slums of the Basin where death rates have been excessively high. As stated in the preceding part of this brochure, it is recognized that there are factors other than poor housing involved in the high death rates from preventable causes, including tuberculosis, which prevail in the Basin area. Among these are low income, a relatively low level of education, lack of early medical care and an apathetic and sometimes resistant attitude toward preventive health measures. Whatever the relative influence of these factors may be, there appears to be a correlation between bad housing and unfavorable death rates that cannot be discounted. This is particularly true when we find such a striking reduction of deaths from tuberculosis in an area where slums have been replaced by better housing, despite the fact that this area, in census tract 3, is surrounded by slums. It is true that to a large degree the same people have not been rehoused, but it is also true that all of them have come from the Basin area or from bad housing elsewhere in the city and that all of them are definitely in the low income group."

Horwood 1/, in 1924, observed most carefully in three Philadelphia wards, inhabited by large numbers of foreign-born whites, predominately Jewish and Italian, living under pronounced slum conditions and overcrowding, that in these neighborhoods tuberculosis mortality rates were comparatively low. He cautioned that "Facts such as these make it evident that in studying the relationship of overcrowding to tuberculosis, it is necessary to consider simultaneously such factors as the racial composition, economic status and personal habits of the people, as well as many other factors."

Drolet 2/ made the following comments on conditions in New York City of two decades ago: "With tuberculosis mortality generally greatest at present in the large cities, it also stands to reason that housing conditions should be considered to have weight in affecting mortality. However, there is the difficulty, in appraising this factor singly, that it is only part of a picture largely ruled by the economic conditions of the family, which itself may greatly influence other things like quantity and quality of food available, work and rest hours, as well as opportunity or lack of ability to get early and adequate medical or institutional care, so important in such a disease. But the similarity of findings as to a greater prevalence or a higher mortality rate in parts of large cities where housing conditions are obviously inferior demand recognition in tuberculosis. that generally speaking the areas with highest mortality were usually found to be where the housing was poorest."

"In New York City, there is difficulty in appraising the weight of housing between different sections if the predominating racial groups are not the same, but an interesting measure of perhaps just and only the housing factor was found by the writer (Drolet) in a study made in 1922 of pulmonary tuberculosis death rates in three different Jewish sections. In the older Gouverneur District downtown, the pulmonary tuberculosis death rate that year was 83 per 100,000; in the Mt. Sinai District in upper Manhattan, where housing was comparatively better and of more recent construction, the death rate the same year was 65; again, for that same group, mainly Jewish, it was found in Tremont, in the Bronx, where new housing had been erected a few years previously, following new subway transportation extensions, at that time the

1/Horwood, Murray P.: A Tuberculosis Survey of Philadelphia, Amer. Journal of Public Health, Jan.-Feb., 1924.

2/Drolet, Godias J.: Epidemiology of Tuberculosis, Chapter I, Clinical Tuberculosis, edited by Benjamin Goldberg, Philadelphia, 1944.



HARLEM AREA (Manhattan): (upper) Dilapidated structures exterior;
(lower) crowded interior. Reproduction by courtesy, New York
City Housing Authority.



pulmonary tuberculosis death rate was only 52; finally in certain residential sections of Brooklyn where Jewish people lived in individual homes, it was as low as 35 -- in order words, as housing improved, likewise did tuberculosis come down."

Edwards 1/ stated in 1940 that "Tuberculosis in New York City as elsewhere bears a direct relation to the housing available. In the so-called tenement areas the rates exceed by far those in better areas the congestion of the population in certain areas is excessively high the opportunities for close contact and spread of infection are ideal. Congested housing of the tenement type is not a problem found only in the old tenement house districts. It has also developed in districts that were formerly considered good housing. In the Harlem District are apartment houses that were formerly occupied by white people who could afford to pay the rentals and live in reasonable comfort. In more recent years, these same houses have been almost completely taken over by the colored and Puerto Ricans. The rents have remained beyond the ability of a single family budget with the result, in many instances, that more than a single family occupies the space reasonably adequate for one. In some instances, a single bed is used on an eight hour shift by three individuals A similar problem is developing in other sections of the city where the colored populations are moving into the old brown-stone-front houses formerly occupied by a single family. This congestion of a population predominately on a low economic level develops breeding points for tuberculosis."

As the most recent newcomers to New York City the Puerto Ricans are said to be faced here with difficult housing conditions. A report 2/ referring to the present problem in New York states: "Every day the situation grows more acute. On the heels of the housing shortage come the many evils to which the newcomer to the city falls prey -- rent gouging, critical overcrowding in converted rooming houses, lack of sanitary conditions, building violations which are a hazard to health and safety, and countless other social ills. New York City's program for low-rent public housing offers little emergency relief because the Housing Authority regulations require an applicant to be a resident of the City for at least two years before he can be eligible for occupancy Most families migrating from Puerto Rico come from a life of dire poverty, bringing with them all of the evils and privations inherent in marginal living." It should be mentioned that for the five years 1950-1954, accompanying the large migration of Puerto Ricans into New York, the number of new cases of active tuberculosis (Puerto Ricans) reported have increased from 574, 636, 718, 725 to 783 in 1954.

On the other hand Senior 3/ brings to attention that there are "..... hundreds of thousands of Puerto Ricans who do not live in slums, who have always been self-supporting, whose labor is basic to the welfare of New York's economy"

1/Edwards, Herbert R.: Tuberculosis Case-Finding, Studies in Mass Surveys, Supplement, Amer. Rev. of Tuberc., Vol. XLI, No. 6, June, 1940.

2/Tannenbaum, Dora, McCaulley, Sara, Carpenter, H. Daniel: The Puerto Rican Migration, pub. Hudson Guild Neighborhood House, Colony House, the Grand Street Settlement, New York, 1955.

3/Senior, Clarence, Chief, Migration Division, Department of Labor of Puerto Rico, Citizens Housing News, Vol. 14, No. 6, Feb. 1956.

On the island of Oahu, Hawaii, an analysis of 42 census tracts 1/ brought out that of the different diseases studied "Tuberculosis was the variable most closely associated with housing substandardness, both with respect to dilapidation (correlation coefficient = 0.726) and overcrowding (correlation coefficient = 0.639)." The author comments that the correlations found are not, in themselves, proof of causative relationship.

For England, in 1939, Hart and Wright 2/ found that income and housing were significant and independent factors in the variation of tuberculosis from area to area. They concluded that "the partial correlations calculated between diseases other than respiratory tuberculosis and the three social measures (incidence of persons on poor relief, the proportion of males in the lower economic grades, and the proportion of persons living under substandard housing conditions, i.e., more than two per room) in the county boroughs show a general similarity with those previously found for respiratory tuberculosis. The association of housing with diseases other than respiratory tuberculosis is, however, less clear than it was with the latter disease, so suggesting that of the various components of poverty, closeness of personal contact is perhaps more important in the aetiology of respiratory tuberculosis than that of all other diseases taken as a whole."

Benjamin 3/ states that tuberculosis is clearly a disease which is sensitive to changes in social factors. His study suggests "that the index or indices used to express socio-economic conditions might be chosen as a criterion of convenience alone rather than of other considerations from the available non-independent indices." He is of the opinion that "social class" and housing density "appear to have the stronger claims" and "they give almost as good a prediction as any other combination", furthermore these indices are available from census tabulations, or from local sampling surveys.

From the above brief summaries of a few studies, old and new, in this country and abroad, the conclusion can be drawn that there is a measurable degree of association between tuberculosis and housing, as well as with the parallel index of economic status expressed in terms of income. This would appear to be borne out on the basis of data for New York City.

HOUSING Condition of "poor" housing as defined in this report refers
NEW YORK to the percentage of dwelling units in a dilapidated condition
CITY or without adequate plumbing facilities. For the City 223,706,
 or 9.6 percent, of the 2,333,151 dwelling units reported upon
were considered to be in this category in 1950. An additional 58,282 dwell-
ing units with private toilet and bath, although not considered dilapidated,
had only cold water facilities.

It was not possible in the present investigation to study separately by health areas the white and Nonwhite tuberculosis prevalence rates in connection with the condition of housing or income level.

1/Schmitt, Robert C.: Housing and Health on Oahu, Amer. Jl. of Public Health, Vol. 45, No. 12, Dec. 1955.

2/Hart, P. D'Arcy, Wright, G. Payling: Tuberculosis and Social Conditions in England, National Association for the Prevention of Tuberculosis, London, 1939.

3/Benjamin, B.: Tuberculosis and Social Conditions in the Metropolitan Boroughs of London, The British Journal of Tuberculosis and Diseases of the Chest. Jan. 1953.



LOWER EAST SIDE (Manhattan): (upper) Typical area, 1942, replaced by Wald housing project; (lower) Baruch, Lillian Wald and Jacob Riis housing projects. Reproduction by courtesy, New York City Housing Authority.



The City Planning Commission 1/ reported on City-wide conditions that "It is evident that substandard housing in New York City is occupied by proportionately more Nonwhites and Puerto Ricans than by whites. Whereas 10 percent of all dwelling units occupied by whites are substandard, 29 percent of all the Nonwhite dwelling units and 22 percent of the accommodations in 'typical' Puerto Rican areas are considered substandard.

"In general, the quality of dwelling units occupied by Nonwhites and Puerto Ricans is below the quality of housing available to the rest of the population. For example, the incidence of overcrowding and dilapidation is considerably greater among Puerto Ricans and Nonwhite families than among the rest of the population.

"On a room basis greater overcrowding among these groups is evident. Only 4 percent of the white dwelling units contained more than 1.5 persons per room. However, among Nonwhites and Puerto Ricans there was twice as much 'room crowding'; 10 percent of Nonwhite and Puerto Rican dwelling units had more than 1.5 persons per room.

"Census data on 1949 income indicate that the median individual income for white income earners was \$2,717 compared to \$1,712 for Nonwhites and \$1,647 for Puerto Ricans. Of white income earners 27 percent had incomes over \$3,500, compared to only 5 percent of Nonwhites, and 6 percent of Puerto Ricans."

The highest tuberculosis prevalence rates prevailed in health areas where the percentage of dwelling units in a dilapidated condition was comparatively high. 2/ This was found to be so for each of the five boroughs when they were studied as independent units.

In the Borough of Manhattan, where "poor" housing averaged 18.5, the ten areas with low tuberculosis rates had a range from 0.4 percent to 18.3 percent. In the Bronx, with an average of 4.7 percent, the high tuberculosis areas had percentages from 1.7 to 48.7, whereas the areas with low tuberculosis rates ranged only from 0.5 to 3.9 percent. In Brooklyn, we find a similar pattern of 10.6 percent to 49.9 percent in high tuberculosis areas and 0.8 percent to 2.4 percent in the ten areas with low rates. Although the percentage of "dilapidated" housing in Queens, 4.7 percent on an average, equals that found in the Bronx, the range is somewhat different in the high tuberculosis rate areas, 1.8 percent to 13.7 percent and in the low tuberculosis areas of 0.8 percent to 10.7 percent as compared with 1.7-49.9 percent and 0.5-3.9 percent in the Bronx. Richmond had one health area with 18 percent dilapidation and a low of 3.1 percent, the average for the borough was 9.2 percent.

As mentioned earlier, the effect of housing on health conditions and the precise cause and effect relationship are still an important subject for investigation. In most instances when slum housing is destroyed and replaced with good housing we do not necessarily have conditions which can test the effect of improved housing on health. The new or remodeled structures may or may not include the identical people who previously occupied

1/Tenant Relocation Report, City Planning Commission, City of New York, Jan. 20, 1954.

2/The coefficient of correlation (r) for New York City was +0.71 (Tuberculosis prevalence and dilapidated housing).

the "poor" housing, since many families relocate in other areas.^{1/} The rehabilitated area may attract an entirely different type of inhabitant perhaps with higher income, of different age, race, etc. For example, the East Side of Manhattan, which in the past had many old tenements, is now replaced with modern apartments which, in turn, bring to the district persons of better economic standing, and this part of New York is growing into a sought-after residential area.

Health Area 60, on the lower east side of Manhattan, illustrates one such neighborhood that has benefited by redevelopment in housing. The following data show the effect of the change on the area rather than on the people. As noted, the Stuyvesant Town and Cooper Village housing developments (1947-1949) now occupy the major portion of this health area. In 1940, Health Area 60 had 16,010 people living there; by 1950, the population had doubled to 32,901. For the three-year period 1939-1941 the tuberculosis new case rate for the whole health area was 770 per 100,000 population; ten years later, for the period 1949-1951, the new case rate was 219. The tuberculosis death rates, for the corresponding periods, were 75 formerly and 7 for the more recent years. The immediately surrounding areas show no such marked improvement in tuberculosis. In 1940 the occupations of the residents were 27 percent professional, managerial, 44 percent clerical, craftsmen, operatives, and 29 percent domestic, service and laborers; whereas in 1950 the percentages for these same occupations were 54, 40 and 6.

McMurray 2/, Commissioner of Housing, State of New York, summarized some aspects of the remaining problem: "A city must have good nourishment and good blood--that is, a sound economic base, adequate employment opportunities, and decent wages. It must have well developed and functioning vital organs and a healthy circulation--its industry, commerce, recreational facilities, schools, housing, transportation system, and the like must be adequate to the needs of its people. If its housing is inadequate--and which of our great cities can boast otherwise?--the treatment of this condition must be geared into general planning for the city's future to provide a healthy urban environment in all these respects. We will never solve our housing problems without comprehensive city and metropolitan planning, any more than we can cure a tuberculous patient with cough syrup.

"If we consider the five Manhattan health areas that have the greatest proportion of bad housing, we find that they contain about 5% of the dwelling units, 6.4% of the population and 13.3% of the substandard housing in the borough. These areas also report over 11% of the tuberculosis cases in the borough, almost 15% of the tuberculosis deaths, and 21% of the reported venereal disease cases.

"Over one-fourth of Manhattan's TB deaths occur in health areas in which less than 10% of the dwelling units are found--but these same areas contain 22% of the substandard units. More than half of the TB deaths, and 53% of the substandard units, are found in health areas covering only 30% of Manhattan's dwellings.

^{1/}Black, Elinor G.: *Manhattantown Two Years Later, A Second Look at Tenant Relocation*, Women's City Club of New York City, Inc., April 1956.

^{2/}McMurray, Joseph P.: *Housing in Large Cities, Health as a Factor, Problems, Plans*, Annual Conference, New York Tuberculosis and Health Association, April 3, 1956.

"Another way of measuring the impact of housing on health is to compare the health characteristics of the same economic groups in good housing and in bad where these are found adjacent to each other.

"For example, the infant mortality rate in our three State-aided projects in Harlem is less than half that of the rest of the health area in which each is located.

"Tuberculosis incidence in the projects is also substantially lower than in the surrounding area. One project, Elliot Houses, of some 2300 units, did not have a single tuberculosis case in 1953, while the surrounding area had an incidence of three cases per thousand population. Amsterdam Houses, a low-rent project of predominantly Negro and Puerto Rican tenants, likewise did not have a single case of TB reported that year, though it would have had six cases at the rate that existed in the area around it.

"The existence of numerous old law tenements, is another symptom of the housing ills of New York City. Old law tenements are the low-rent multiple dwellings built before 1901 under the pressure of rapid population growth in the late nineteenth century. They were designed to permit the most concentrated use of land with a minimum regard for tenant convenience and sanitation. Interior bedrooms and shared hall toilets were standard features, and the existence of running cold water or the availability of any sort of interior sanitary facilities were luxuries to many of the tenants.

"At the turn of the century, new standards were prescribed by the Tenement House Law, and the construction of these 'readymade slums' ended. But there were then between 85,000 and 100,000 such buildings in existence. Today, more than fifty years later, over 50,000 of these remain, containing in the neighborhood of 415,000 dwelling units and housing between 1,250,000 and 1,500,000 persons. While many of these have been reconditioned in conformity with newer laws, their continued prevalence is an indication of housing conditions generally.

"It has been estimated that it would require the replacement of at least 250,000 units in New York City to bring housing up to a minimum physical standard. I would like to emphasize the word minimum--250,000 units needed to bring housing in New York City up to a minimum standard. Imagine that! In addition, a substantial number of units would be required to provide for families who are now overcrowded and doubled up, for those with specialized needs like the aged, and families with many children, and also to replace units, now up to standard which would be necessarily demolished in clearing areas containing primarily substandard housing. It is probable that the total number of units that would need to be built would approach half a million."

Poor housing is of direct concern to public and voluntary health and welfare agencies. Insanitary and dilapidated dwellings should receive attention, merely on principle, irrespective of any determination as to prevailing conditions of health and possible causal relationship that may be shown to exist with disease. However, the fact that "poor" housing and high prevalence of disease, such as tuberculosis, go hand in hand, can serve as an added incentive to eliminate what remains of our city slums.

CHARACTERISTICS OF HOUSING
Condition and Plumbing Facilities, Persons per Room
By Health Center Districts, New York City, 1950

Health Center DISTRICT	Condition and Plumbing Facilities			Persons per Room		
	Dwelling Units Reporting	Dilapidated or Inadequate Plumbing		Dwelling Units Reporting	Units Reporting 1.51 or More Persons per Room	
		Number	Percent		Number	Percent
Central Harlem	52,938	16,588	31.3%	55,127	5,841	10.6%
East Harlem	58,662	13,790	23.5%	59,060	4,830	8.2%
Kips Bay-Yorkville . .	95,708	10,565	11.0%	94,559	3,323	3.5%
Lower East Side . . .	97,153	23,305	24.0%	97,999	5,089	5.2%
Lower West Side . . .	105,447	23,011	21.8%	106,873	8,738	8.2%
Riverside	98,813	18,333	18.6%	100,206	8,487	8.5%
Washington Hgts. . .	90,134	5,388	6.0%	92,441	4,207	4.6%
MANHATTAN:	598,856	110,979	18.5%	606,266	40,515	6.7%
Ford'm-Riverdale . .	68,645	1,169	1.7%	69,361	3,137	4.5%
Morrisania	83,200	4,478	5.4%	84,736	4,380	5.2%
Mott Haven	63,085	8,364	13.3%	62,195	3,813	6.1%
Pelham Bay	40,778	1,051	2.6%	40,093	1,852	4.6%
Tremont	91,568	3,014	3.3%	93,215	4,130	4.4%
Westchester	70,314	1,588	2.3%	70,922	3,218	4.5%
BRONX:	417,605	19,664	4.7%	420,536	20,530	4.9%
Bay Ridge	90,060	1,972	2.2%	91,178	3,074	3.4%
Bedford	87,076	11,542	13.3%	87,533	5,719	6.5%
Brownsville	78,833	5,607	7.1%	79,419	2,352	3.0%
Bushwick	70,839	7,326	10.3%	70,777	1,932	2.7%
Flatbush	140,070	1,974	1.4%	140,458	4,400	3.1%
Fort Greene	63,143	10,228	16.2%	63,154	4,328	6.9%
Gravesend	82,960	6,697	8.1%	79,450	4,820	6.1%
Red Hook-Gowanus . .	48,202	7,205	14.9%	48,145	2,897	6.0%
Sunset Park	61,631	3,317	5.4%	61,923	1,944	3.1%
Wmsbrg.-Greenp't . .	63,516	9,923	15.6%	63,124	2,905	4.6%
BROOKLYN:	786,347	65,734	8.4%	785,278	34,371	4.4%
Astoria-L.I. City . .	80,689	2,554	3.2%	81,372	3,077	3.8%
Corona	63,031	1,487	2.4%	63,249	1,985	3.1%
Flushing	82,607	2,241	2.7%	79,371	1,237	1.6%
Jamaica East	71,698	2,166	3.0%	70,847	1,305	1.8%
Jamaica West	96,925	12,173	12.6%	79,398	2,102	2.6%
Maspeth-For.Hills..	81,634	1,744	2.1%	81,169	1,301	1.6%
QUEENS:	476,592	22,365	4.7%	455,413	10,997	2.4%
RICHMOND:	53,751	4,964	9.2%	51,060	1,372	2.7%
NEW YORK CITY	2,333,151	223,706	9.6%	2,318,553	107,785	4.6%

Based on reports U.S. Bureau of the Census--U.S. Census of Housing: 1950, Vol.V, Block Statistics, Parts 126-130, U.S. Government Printing Office, Washington, D.C., 1952. Health Center District totals compiled from details as given for each census tract which in some instances do not add up to borough totals. Compiled by Statistical Division, New York Tuberculosis and Health Association.

GROSS RESIDENTIAL DENSITY†, PERSONS PER ACRE
Range of Density by Health Areas in Health Center Districts
New York City, 1950

Health Center DISTRICT	Range of Health Areas Low and High Density	Population‡ April 1, 1950
Central Harlem	182-351	217,656
East Harlem	200-411	218,066
Kips Bay-Yorkville	149-305	257,097
Lower East Side	155-355	304,400
Lower West Side	119-364	325,717
Riverside	201-481	324,161
Washington Hgts.	135-354	313,004
MANHATTAN:	119-481	1,960,101
Ford'm-Riverdale	16-186	227,858
Morrisania	148-270	295,276
Mott Haven	16-270	228,754
Felham Bay	4-73	143,587
Tremont	116-223	304,061
Westchester	14-180	251,741
BRONX:	4-270	1,451,277
Bay Ridge	60-117	319,830
Bedford	100-181	310,437
Brownsville	20-218	279,844
Bushwick	51-155	232,746
Flatbush	9-167	480,963
Fort Greene	64-162	221,918
Gravesend	36-122	281,858
Red Hook-Gowanus	109-175	172,391
Sunset Park	48-185	222,111
Wmsbrg.-Greenp't	73-210	216,077
BROOKLYN:	9-218	2,738,175
Astoria-L.I. City	54-192	262,670
Corona	42-123	208,660
Flushing	22-50	288,644
Jamaica East	17-47	259,527
Jamaica West	15-63	274,169
Maspeth-For. Hills	43-103	257,179
QUEENS:	15-192	1,550,849
RICHMOND:	9-57	191,555
NEW YORK CITY	4-481	7,891,957

†Estimated gross residential density based on preliminary land use measurements. Residential density is based on land use whereas "area density" may also be based on gross acreage. For example in Manhattan, health area 52: Area density (persons per gross acre) = 68; Gross residential density (persons per land use) = 364.

‡According to 1940 revision of health area map. Based on reports by courtesy of Department of City Planning, City of New York. Compiled by Statistical Division, New York Tuberculosis and Health Association.

INCOME, TUBERCULOSIS PREVALENCE

MEDIAN FAMILY INCOME The median family income in the Borough of Manhattan (1949) was \$3,073 per year as compared with \$3,526 average for the City. For the ten health areas in this borough with the highest tuberculosis prevalence rates ranging from 1087 to 2392 per 100,000 population, the family income rose from a low of \$1,778 to \$2,637. In the ten health areas with the lowest tuberculosis prevalence rates, the tuberculosis rates ranged from 143 to 264 and the low and high family incomes from \$2,545 to over \$10,000. Three of these last mentioned ten areas had family incomes of over \$7,000.

A similar comparison for the Borough of the Bronx brings out that in ten health areas with tuberculosis prevalence rates from 497 to 827 the family incomes ranged from \$2,335 to \$3,368. The median family income for the borough was \$3,612. At the bottom of the scale, in health areas with lowest prevalence rates, 117 to 166 per 100,000, the incomes ranged from \$3,676 to \$5,247.

In the ten health areas in Brooklyn with the highest tuberculosis prevalence, 539 to 1295 per 100,000 population, family incomes ranged from \$2,338 to \$3,700, and the borough median income for families was \$3,447. The areas with the lowest tuberculosis prevalence rates, 59 to 113, included incomes from \$3,701 to \$4,798.

The Borough of Queens is more residential, and during the last decade, with the construction of many modern apartment houses, it has attracted new residents from other parts of New York City. The prevalence rates in ten health areas with high tuberculosis rates ranging from 332 to 547, the family incomes were \$2,951 to \$3,928. The borough median family income was \$4,121. In ten health areas, for which data were available, showing the lowest total known prevalence rates for tuberculosis, 128 to 187, the family income ranged from \$3,422 to \$5,999.

In the Borough of Richmond basic information was available for ten health areas. The prevalence rate for tuberculosis ranged from 115 to 376 per 100,000 population, and the low and high family income, by health areas, was \$3,477 and \$4,211, the borough average being \$3,845.

Whatever the significance may be so far as tuberculosis is concerned, generally in health areas where high tuberculosis prevalence rates prevailed, the median family income was substantially less than in those areas where low tuberculosis rates were found, and where income was comparatively high.1/

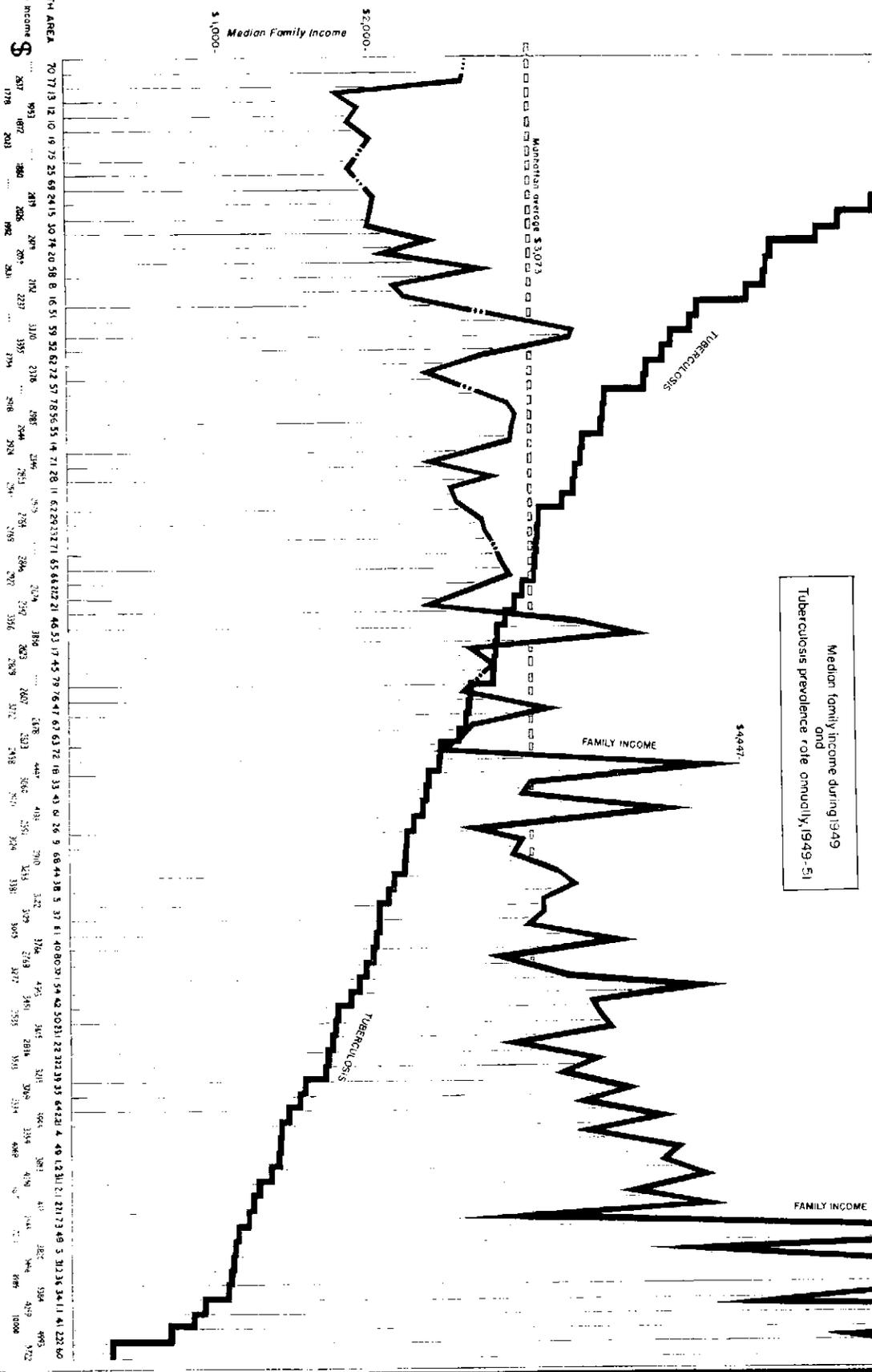
1/The coefficient of correlation (r) for New York City was -0.57 (Tuberculosis prevalence and median family income).

Note: The average (median) family income in the United States was: 1949 = \$3,100, 1954 = \$4,200, Consumer Income, Current Population Reports, Bureau of the Census, Series P-60.

Fig. 4

FAMILY INCOME - TUBERCULOSIS PREVALENCE

In each health area of Manhattan, N.Y.



Based on reports of U.S. Bureau of the Census and Department of Health, City of New York

Source: Bureau of the Census, Department of Health, City of New York

Prepared by Statistics Division, New York Tuberculosis and Health Association

INCOME IN 1949 OF FAMILIES, FOR NEW YORK CITY, BY BOROUGHS
1950 Federal Census(†)

Income Level	Number of Families						Percentage Distribution					
	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond	New York City
Less than \$500	40,980	23,495	52,065	20,205	1,970	138,715	8.9%	6.2%	7.4%	5.0%	4.4%	6.9%
\$500 to \$999	18,880	9,330	19,085	6,860	890	55,045	4.1%	2.5%	2.7%	1.7%	2.0%	2.8%
\$1,000 to \$1,499	28,975	14,510	29,585	10,135	1,495	84,700	6.3%	3.8%	4.2%	2.5%	3.3%	4.2%
\$1,500 to \$1,999	36,210	18,445	38,400	13,500	1,965	108,520	7.8%	4.9%	5.4%	3.3%	4.4%	5.4%
\$2,000 to \$2,499	53,090	31,355	61,970	25,700	3,390	175,505	11.5%	8.3%	8.8%	6.3%	7.6%	8.8%
\$2,500 to \$2,999	46,030	36,420	71,395	31,185	4,110	189,140	10.0%	9.6%	10.1%	7.7%	9.2%	9.5%
\$3,000 to \$3,499	47,340	47,715	90,230	47,020	5,480	237,785	10.2%	12.6%	12.8%	11.6%	12.3%	11.9%
\$3,500 to \$3,999	30,855	35,355	63,910	38,370	4,400	172,890	6.7%	9.3%	9.1%	9.5%	9.9%	8.7%
\$4,000 to \$4,499	28,090	35,670	60,070	40,870	4,435	169,135	6.1%	9.4%	8.5%	10.1%	9.9%	8.5%
\$4,500 to \$4,999	17,475	21,795	37,685	25,970	2,790	105,715	3.8%	5.8%	5.3%	6.4%	6.2%	5.3%
\$5,000 to \$5,999	33,655	41,750	72,245	51,880	5,230	204,760	7.3%	11.0%	10.2%	12.8%	11.7%	10.3%
\$6,000 to \$6,999	18,670	22,055	37,570	30,595	3,020	111,910	4.0%	5.8%	5.3%	7.5%	6.8%	5.6%
\$7,000 to \$9,999	26,240	28,040	46,230	39,955	3,825	144,290	5.7%	7.4%	6.5%	9.8%	8.6%	7.2%
\$10000 or more	35,670	12,385	25,720	23,460	1,670	98,905	7.7%	3.3%	3.6%	5.8%	3.7%	5.0%
Not reported	34,330	18,520	34,915	26,535	2,215	116,515	..	..	..	..	..	..
All families	496,490	396,840	741,075	432,240	46,885	2,113,530	100%	100%	100%	100%	100%	100%

Median income: Manhattan = \$3,073, Bronx = \$3,612, Brooklyn = \$3,447, Queens = \$4,121, Richmond = \$3,845, New York City = \$3,526.

(†) A family, as defined in the 1950 Census, is a group of two or more persons related by blood, marriage, or adoption and living together; all such persons are regarded as members of one family. Family income: For family groups, the combined incomes of all members of each family are treated as a single amount. Income data are based on a 20 percent sample of persons 14 years of age and over. If the sample person was the head of a family, the income questions were repeated for the other family members as a group in order to obtain the income of the whole family. The composition of families is as found at the time of interview, although the time period covered by the income statistics is the calendar year 1949.

POVERTY AND TUBERCULOSIS

The relationship of poverty and disease is a mutual one. It is generally agreed that prolonged disease may have a costly and devastating impact upon the financial resources of an individual and his family. On the other hand, it should not be overlooked that poverty may play an important role in the causation of disease. The over-all acceptance of the thesis that such mutual relationship exists, and is made evident for instance in the records of individual cases, is not seriously disputed. Documentation, which would show specifically on a community-wide basis, in New York City, that this is so remains somewhat elusive.

Intentional or accidental failure to receive adequate medical care can aggravate or protract the course of tuberculosis. With the many public and private clinic and hospital facilities available to New Yorkers the opportunity to obtain medical care nowadays is perhaps less acute here than in other places. The ability to get medical care may vary with the economic status of the individual and the community resources available for providing medical care.

Warren and Sydenstricker 1/ found forty years ago that the incidence of tuberculosis among garment workers (family heads) with earnings of less than \$700 per year was twelve times as great as among workers in the same industry with annual earnings of \$700 or more.

The National Health Survey 2/ brought out that, during the period of economic depression of twenty years ago, the days of disability from tuberculosis per person per year for individuals in the families on relief was almost nine times as high as that for persons not on relief but with annual incomes of less than \$1,000, and the rate was almost four times as high as that for persons in the upper income group, \$3,000 and over.

Britten 3/, said that although no very clear picture of the association between congestion in the home and the prevalence of tuberculosis was possible from the data of the National Health Survey it did show that "there was a considerable increase in the frequency of tuberculosis with increase in crowding both for the relief group and for all incomes combined. Greatest association with crowding was found for the illness rates in the youngest age group, with a ratio of the rate in category C (more than 1.5 persons per room) in the relief group to that in A (1 person or less per room) of 260, a ratio much higher than that shown by the 25-64 year age group (158) or the group between 15 and 25 years of age (131)."

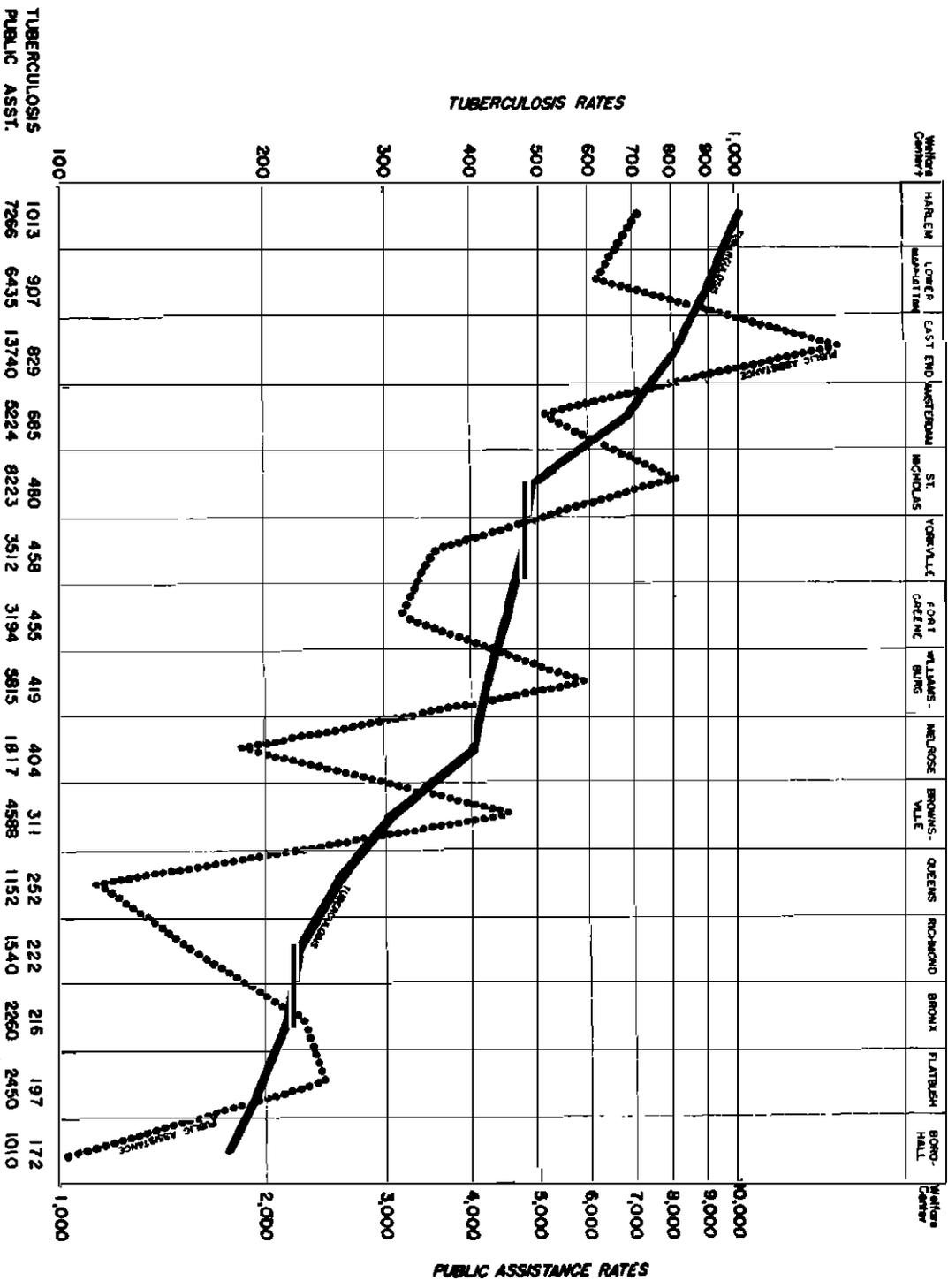
Occupation can with reservation be used as an index of "financial status". Presumably in the past and to some degree even during recent years the professional, managerial and skilled occupations provide a higher income and better environmental and living conditions than the unskilled jobs. But the comparison with the past must be made with recognition of

1/Warren, B.S., Sydenstricker, Edgar: "Health of Garment Workers", Public Health Reports, Vol. 31, No. 21, U.S. Public Health Service, Washington, May 26, 1916, pp. 1298-1305.

2/National Health Survey, 1935-1936, Preliminary Reports, Sickness and Medical Care Series, Bulletin 9, National Institutes of Health, the U.S. Public Health Service, Washington, 1938.

3/Britten, Rollo H.: Illness and Accidents Among Persons Living Under Different Housing Conditions, Public Health Reports, Vol. 56, No. 13, March 28, 1941.

TUBERCULOSIS AND PUBLIC ASSISTANCE RATES WELFARE CENTER DISTRICTS, NEW YORK CITY



* Welfare Center districts noted in order of tuberculosis total known prevalence rate. Note: Rates are per 100,000 population. Tuberculosis - Annual average (1949-1951) total known cases during period; Public assistance - Persons receiving public assistance as of December 1951.

Based on reports submitted by Department of Health and Department of Welfare, City of New York. Prepared by Statistical Division, New York Tuberculosis and Health Association.

the fact that the "laborer" today enjoys health, welfare and other social benefits not available to most of the population only a few years ago. This progress in social and economic standing brings about incalculable good to all and consequently is reflected in improved health of the community.

Terris 1/ analyzed tuberculosis mortality by age, sex and economic status in Buffalo (N.Y.), 1939-1941, and found that the inverse correlation of economic status with tuberculosis mortality was greater for adult males than for adult females. He concluded that economic status per se was not the only factor involved, but that conditions of occupation probably had an important effect.

For England and Wales the Registrar General 2/ recently classified mortality rates for respiratory tuberculosis according to "social class" for men aged 20 to 64. This record brings out that for the "professional" class, listed as Class I, the "standard mortality ratio" was 64, for Class II, comprising "intermediate occupations", the ratio was 62, for the "skilled occupations" (Class III) it was 103, for the "partly skilled occupations" (Class IV) it was 95, and for the "unskilled occupations" (Class V) the ratio was 149. In studies for the years 1930-1932 and 1921-1923 comparable ratios were found. This relative order by social class appears to hold for rates computed for married women in the same age group as the men.

For the years 1931-1932 in Canada an analysis of the tuberculosis death rates (respiratory system) of occupied males aged 20 to 64 showed a somewhat similar ranking of occupations. 3/

The report by Whitney 4/, for the year 1930 for the United States, in which she classified mortality rates according to seven general occupational groups, recorded that the unskilled workers had a pulmonary tuberculosis death rate of 185 as compared with a rate of 26 for professional men and 43 for proprietors, managers and officials.

Information relating specifically to tuberculosis prevalence and "poverty" in New York City, for health areas, is not available. The Department of Welfare of the City of New York classifies its statistical reports according to Welfare Centers. 5/ These administrative areas differ from the Health Center Districts both as to boundaries and size of population although in general the boundaries of the small health areas are followed.

1/Terris, Milton: Relation of Economic Status to Tuberculosis Mortality by Age and Sex, Amer. Journal of Public Health, Vol. 36, No. 8, Aug. 1948, pp. 1061-1070.

2/The Registrar General's Decennial Supplement, England and Wales, 1951, Occupational Mortality, Part I, London, Her Majesty's Stationery Office, 1954.

3/Occupational Mortality in Canada, 1931-1932, Dominion Bureau of Statistics, 1937.

4/Death Rates by Occupation, J.S. Whitney, National Tuberculosis Association, 1934.

5/Directory of Offices of the Department of Welfare, City of New York, March 1955. (Includes boundaries of territory covered by each Welfare Center.)

TUBERCULOSIS AND PUBLIC ASSISTANCE RATES
Welfare Center Districts, New York City

Welfare Center District †	Tuberculosis Rate† Annual Average 1949-1951		Public Assistance Rate†, December 1951 Persons Receiving Aid per 100,000 Population							Population April 1, 1950
	Total Known Prevalence	New Cases Reported	Total Receiving Public Assistance	Type of Assistance					Dis-abled	
				Home Relief	Aid to Dependent Children	Old Age	Blind	Dis-abled		
Harlem	1,013	319	7,266	1,613	4,238	748	75	592	288,150	
Lower Manhattan	907	300	6,435	1,486	1,862	2,311	88	688	295,189	
East Bnd	829	252	13,740	4,064	7,151	1,676	85	763	164,115	
Amsterdam	685	199	5,224	1,427	1,745	1,591	51	410	351,505	
St. Nicholas ..	480	151	8,223	2,148	4,521	983	66	506	256,285	
Yorkville	458	123	3,512	846	1,310	1,031	42	284	355,539	
Fort Greene ...	455	134	3,194	692	1,646	622	30	204	347,978	
Williamsburg ..	419	118	5,615	1,496	2,974	960	56	329	440,728	
Melrose	404	104	1,817	999	1,710	669	28	199	702,641	
Brownsville ...	311	82	4,588	1,125	2,061	1,046	42	314	507,975	
Queens	252	57	1,152	201	494	361	12	83	1,550,849	
Richmond	222	56	1,540	389	669	397	10	74	191,555	
Bronx	216	49	2,260	416	979	655	23	186	982,139	
Flatbush	197	49	2,450	508	1,179	547	28	190	500,241	
Borough Hall ..	172	36	1,010	209	368	333	11	88	941,253	
New York City .	369	101	3,361*	806	1,538	744	32	240	7,891,957†	

†Welfare Center Districts ranked according to tuberculosis (total known prevalence) rate.
 ‡Per 100,000 population. *Exclusive of veterans and nonresidents. †Includes islands.
 Based on reports, Departments of Health and Welfare, City of New York. Compiled by Statistical Division, New York Tuberculosis and Health Association.

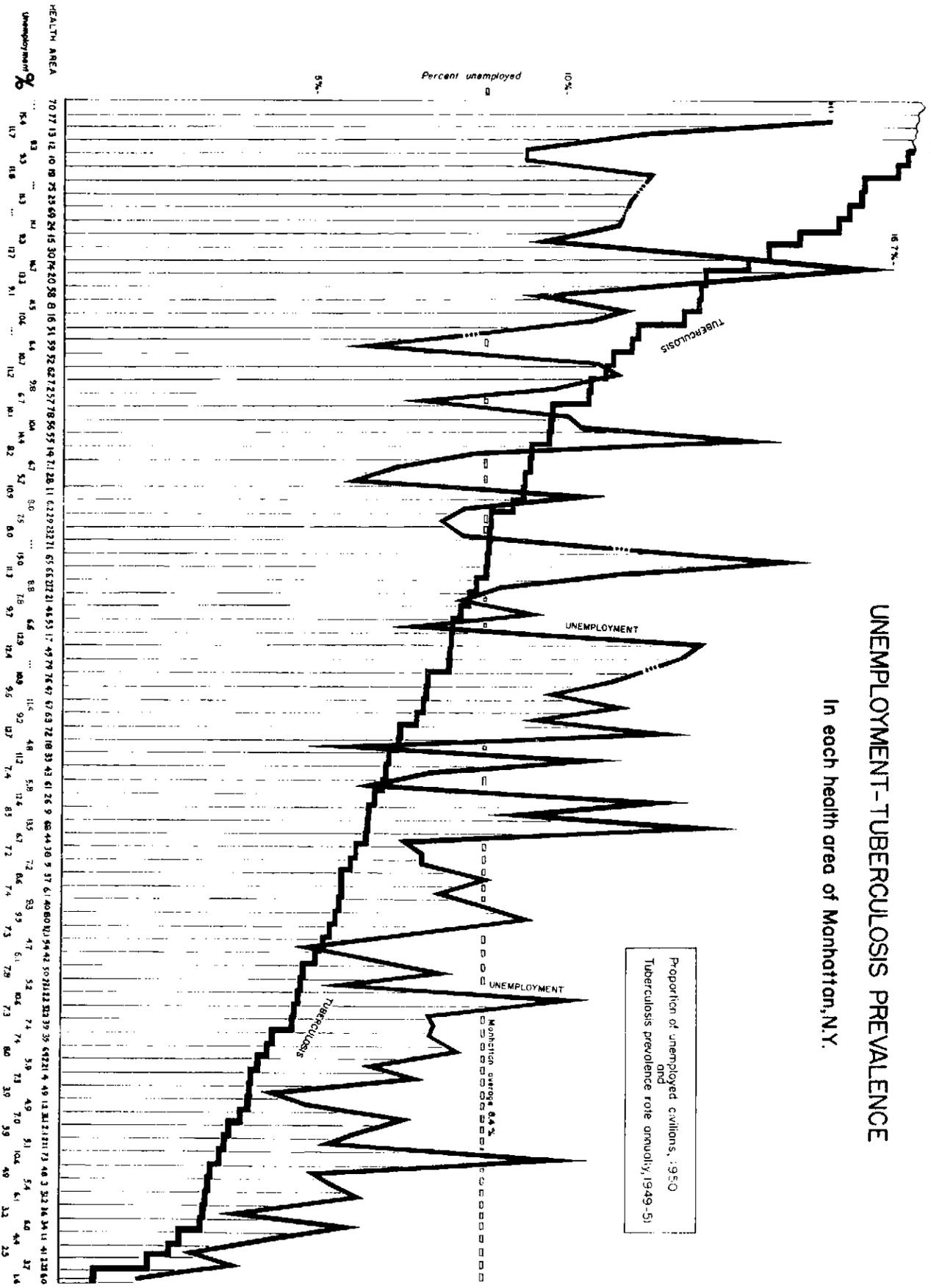
PUBLIC ASSISTANCE BY TYPE
New York City, December 1951

Welfare Center District †	Total Receiving Public Assistance		Home Relief		Add to Dependent Children		Old Age		Blind		Disabled	
	Cases	Persons	Cases	Persons	Cases	Persons	Cases	Persons	Cases	Persons	Cases	Persons
Harlem	10,881	20,936	2,927	4,649	3,879	12,212	2,155	2,155	215	215	1,705	1,705
Lower Manhattan	12,968	18,995	2,230	4,387	1,625	5,495	6,821	6,821	261	261	2,031	2,031
East End	10,149	22,550	2,564	6,670	3,441	11,736	2,751	2,751	140	140	1,253	1,253
Amsterdam	11,963	18,361	2,730	5,016	2,021	6,133	5,591	5,591	181	181	1,440	1,440
St. Nicholas ..	10,825	21,075	3,051	5,506	3,791	11,586	2,519	2,519	168	168	1,296	1,296
Yorkville	7,474	12,488	1,305	3,007	1,345	4,657	3,664	3,664	150	150	1,010	1,010
Fort Greene ...	5,683	11,114	992	2,408	1,712	5,727	2,164	2,164	104	104	711	711
Williamsburg ...	12,598	25,627	2,798	6,594	3,873	13,106	4,230	4,230	248	248	1,449	1,449
Melrose	13,129	26,048	2,895	7,218	3,761	12,357	4,831	4,831	202	202	1,440	1,440
Brownsville ...	12,284	23,306	2,161	5,714	3,000	10,469	5,314	5,314	215	215	1,594	1,594
Queens	10,734	17,862	1,415	3,112	2,235	7,666	5,605	5,605	192	192	1,287	1,287
Richmond	1,485	2,949	237	746	326	1,281	761	761	19	19	142	142
Bronx	13,161	22,192	1,816	4,089	2,859	9,617	6,437	6,437	222	222	1,827	1,827
Flatbush	6,559	12,263	959	2,539	1,773	5,897	2,736	2,736	139	139	952	952
Borough Hall ..	6,043	9,511	940	1,971	1,031	3,468	3,133	3,133	108	108	831	831
Total	145,936	265,277	29,020	63,626	36,672	121,407	58,712	58,712	2,564	2,564	18,968	18,968
Vet. Asst., Vet. # H.R. #	5,582	14,660	3,269	8,948	1,103	4,502	440	440	39	39	731	731
Non-Residents ..	4,334	14,660	1,898	7,959	1,783	6,048	374	374	39	39	240	240
Grand Total ...	156,112	295,020	34,447	80,956	39,558	131,957	59,526	59,526	2,642	2,642	19,939	19,939

†Welfare Center Districts ranked according to tuberculosis (total known prevalence) rate.
Compiled from Monthly Statistical Report, December 1951, Vol. 12, No. 12, Division of Statistics, Department of Welfare, City of New York, by Statistical Division, New York Tuberculosis and Health Association.

UNEMPLOYMENT - TUBERCULOSIS PREVALENCE

In each health area of Manhattan, N.Y.



Based on reports of U.S. Bureau of the Census and Department of Health, City of New York

Statistical Section and Department of Health, City of New York, New York, N.Y. (1960)

Prepared by Statistical Division, New York Tuberculosis and Health Association

Due to lack of welfare data on a health area basis, an analysis of socio-economic conditions and welfare statistics was not possible. However, prevalence rates were computed for tuberculosis cases (three-year period 1949-1951) and compared with rates as to number of persons receiving public assistance as of December 1951, grouped according to Welfare Districts.1/ (See table and chart.)

Tuberculosis rates were highest in the group of welfare districts where the proportion of the population receiving public assistance was high, and the tuberculosis rates were lowest in districts where the proportion receiving public assistance was comparatively low. In attempting to interpret the significance of these rates it should be borne in mind that some of the Welfare Districts cut across borough and other boundaries and include populations of contrasting economic, social and racial make-up.

* * *

TUBERCULOSIS IN DIFFERENT RACIAL GROUPS

Tuberculosis in New York City is complicated by the presence of large groups of the population of different racial and ethnic origins, some established here for many generations and others newly arrived. It is estimated that in 1954 there were 6,725,000 white residents, almost 800,000 Negroes and 485,000 Puerto Ricans 2/ with about 30,000 listed as of other races within the City.

It has been the experience in New York City that in neighborhoods with large Nonwhite populations, or where the population is heterogeneous, the tuberculosis rates are substantially higher than in areas with relatively small Nonwhite populations. Obviously this fact must be taken into consideration when attempting an appraisal of tuberculosis in a predominately Negro, white, or Oriental neighborhood, or in one where there is a high concentration of people of the same ethnic origin. A careful student of the problem should keep in mind the possible influence of factors from the standpoint of race or recent migration which can have an important bearing on the incidence of tuberculosis, particularly in groups who are relatively new arrivals in an urban environment.3/ As has been recorded in the various tables included here, some health areas with predominately white population have unusually high tuberculosis rates. We cannot assume, therefore, that the proportion of Nonwhite population per se will be a sufficient index in "predicting" the level of prevalence of tuberculosis.

New cases of tuberculosis reported during the year can be considered to be the "incidence" of the disease in the community or reflect the rate at which the residents become ill enough to be recognized as needing medical attention. The extent of their disease is defined and classified by medical

1/Monthly Statistical Report, December 1951, Vol. 12, No. 12, Division of Statistics, Department of Welfare, City of New York.

2/Persons born in Puerto Rico, or whose parents were born there.

3/Rich, Arnold R.: The Pathogenesis of Tuberculosis, Charles C Thomas, Springfield, Ill., 1944.

authorities according to agreed-upon standards 1/ which criteria provide us with a measure for purposes of statistical comparison. More than three-quarters of all newly reported active cases of pulmonary tuberculosis in New York City are already in the moderately advanced or far advanced stages of the disease.

Of the many thousands of tuberculous persons under medical care in New York City, during the three-year period 1949-1951, 23,867 new cases with active disease were reported for the first time. Almost two-thirds, 14,949, were males and 8,918 females. When the figures are analyzed according to race it is seen that the white population contributed 14,100 of these new cases, 6,180 were Negroes, 1,760 Puerto Ricans, 429 persons of other races, and for the remainder race was not stated. Although the greatest proportion of new cases were white, when the numbers in each group are related to population and expressed as an incidence rate per 100,000 persons of each race, the importance of tuberculosis among the Nonwhite group is made more clear. For example, the highest recorded incidence rate was found to prevail among the yellow races, particularly the men, the annual average new case rate being 618 per 100,000 for men and 263 for women. The new case rate for white males was 95 as compared with 43 for white females. Among the Negro males, the rate was 342 and for the Negro females 234. In each of the above groups the incidence rate was higher for men than for women. On the other hand, among the Puerto Ricans the new case rate of 253 for women exceeded the rate for men which was 222 per 100,000. For the white and Negro males the higher incidence rates were found in the older age groups. Among the Puerto Ricans, who in general are a younger population, the highest incidence rate prevailed in the 20-24 age group. Among the Negro males there was a high rate in the 20-24 age group and then a still higher rate in the 55 and over age group. In the Negro females, the highest incidence rate was in the 20-24 age group.

**TUBERCULOSIS IN NEW YORK CITY BY RACE
During Year 1954**

Race	Cases of Active Tuberculosis in Register December 31, 1954		New Cases of Active TB Reported During 1954		Resident Deaths* Reported During 1954	
	Number	Percent	Number	Percent	Number	Percent
White	9,321	60%	3,572	56%	733	67%
Negro	4,460	28%	1,933	30%	293	27%
Puerto Rican	1,581	10%	783	12%	42	4%
Yellow	256	2%	92	2%	22	2%
Other	35	0.2%	22	0.3%		
Not reported	329	..	180	..	23	..
All races	15,982	100%	6,582	100%	1,113	100%

*Included are deaths of residents which occurred outside of New York City. Percentage distribution based on total of known color only. Compiled from reports of Department of Health, City of New York, by Statistical Division, New York Tuberculosis and Health Association.

1/Diagnostic Standards and Classification of Tuberculosis, National Tuberculosis Association, 1955 edition.

NEW CASES OF TUBERCULOSIS BY AGE, SEX AND RACE
NEW YORK CITY, THREE-YEAR PERIOD 1949-1951

Number of Newly Reported Cases of Active Tuberculosis During Three Years 1949-1951

Age Group	M a l e						F e m a l e						Total All Races
	White	Negro	Puerto Rican	Oth-er	Not Rep.	Total Male	White	Negro	Puerto Rican	Oth-er	Not Rep.	Total Female	
0-4	217	200	98	4	19	538	211	217	88	6	10	532	1,070
5-9	117	95	55	0	13	280	77	116	71	1	8	273	553
10-14	60	48	22	1	14	145	79	95	41	2	10	227	372
15-19	226	144	53	5	13	441	284	233	93	8	31	649	1,090
20-24	603	330	156	23	62	1,174	623	492	196	13	73	1,397	2,571
25-34	1,114	811	186	49	147	2,307	1,108	854	284	23	114	2,383	4,690
35-44	1,413	726	100	59	149	2,447	821	431	137	5	75	1,469	3,916
45-54	2,280	512	42	98	181	3,113	482	205	44	8	37	776	3,889
55-64	1,856	296	29	74	101	2,356	338	79	25	0	28	470	2,826
65+	1,470	167	13	38	72	1,760	396	73	11	0	24	504	2,264
Unk.	208	35	6	11	128	388	117	21	10	1	89	238	626
All Ages	9,564	3,364	760	362	899	14,949	4,536	2,816	1,000	67	499	8,918	23,867

Totals include those of unknown age or race.

New Case Rate Per 100,000 Population, Annual Average, 1949-1951

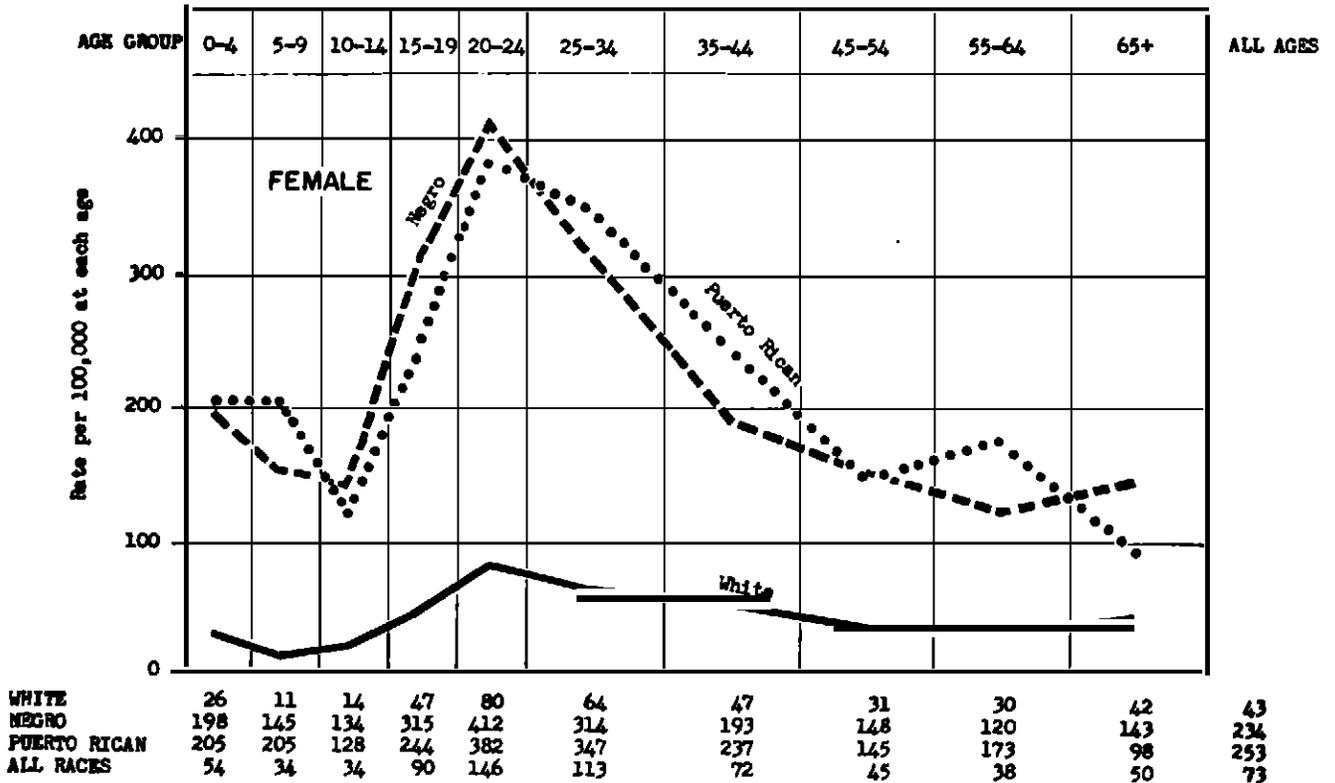
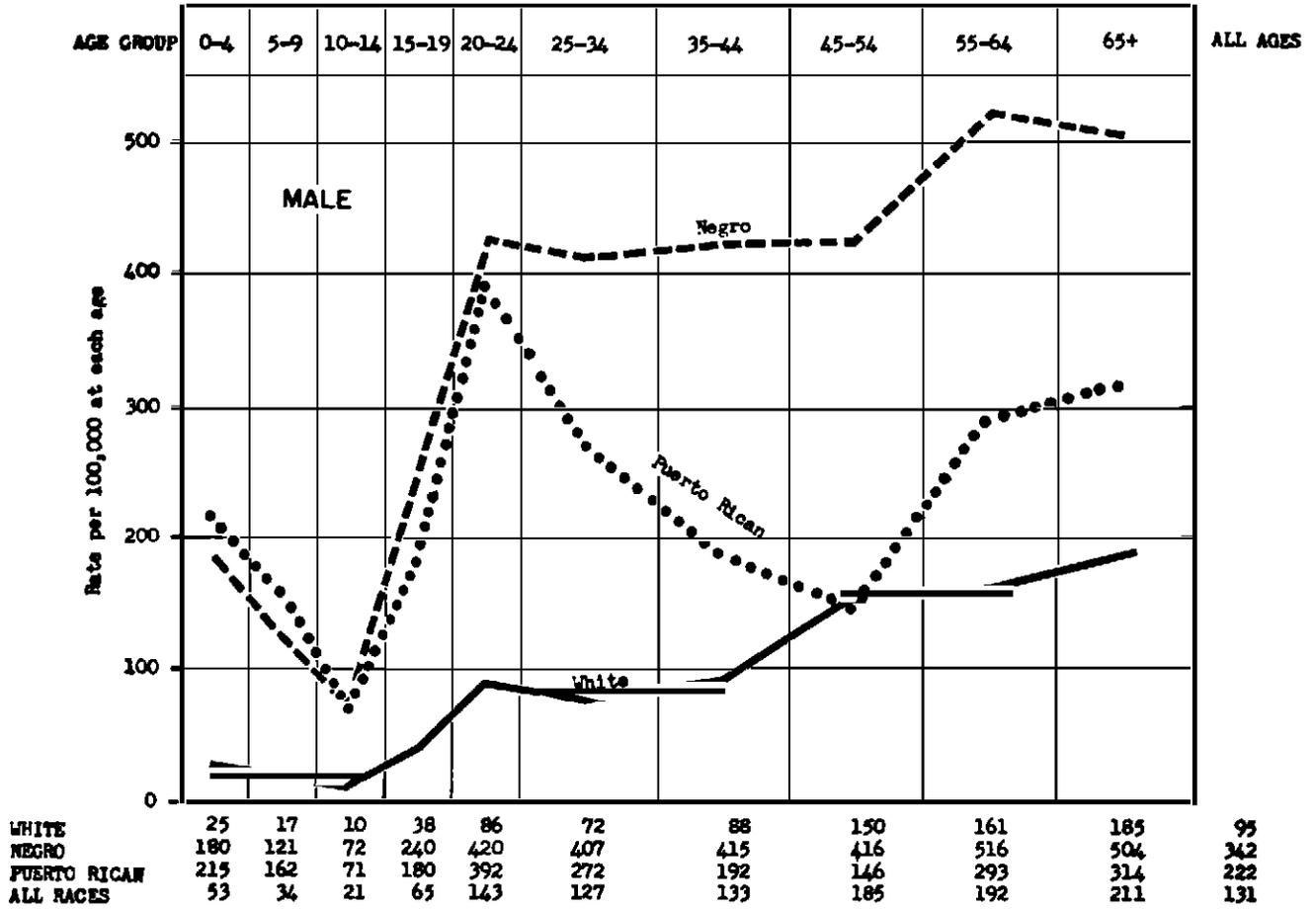
Age Group	M a l e						F e m a l e						All Races
	White	Negro	Puerto Rican	Oth-er	Not Rep.	Male	White	Negro	Puerto Rican	Oth-er	Not Rep.	Female	
0-4	25	180	215	117	..	53	26	198	205	153	..	54	53
5-9	17	121	162	0	..	34	11	145	205	70	..	34	34
10-14	10	72	71	42	..	21	14	134	128	106	..	34	28
15-19	38	240	180	251	..	65	47	315	244	477	..	90	78
20-24	86	420	392	670	..	143	80	412	382	381	..	146	145
25-34	72	407	272	499	..	127	64	314	347	372	..	113	120
35-44	88	415	192	500	..	133	47	193	237	145	..	72	111
45-54	150	416	146	742	..	185	31	148	145	396	..	45	114
55-64	161	516	293	1024	..	192	30	120	173	0	..	38	115
65+	185	504	314	1078	..	211	42	143	98	0	..	50	123
All Ages	95	342	222	618	..	131	43	234	253	263	..	73	101

Based on reports of Bureau of Records and Statistics, Department of Health, City of New York. Compiled by Statistical Division, New York Tuberculosis and Health Association.

Fig. 7

TUBERCULOSIS NEW CASE RATES BY AGE, SEX AND RACE

Three-year period 1949-1951, New York City



Based on reports of Department of Health, City of New York

Prepared by Statistical Division
New York Tuberculosis and Health Association

**CORRELATION OF TUBERCULOSIS PREVALENCE 1/
and Selected Socio-Economic Indices**

The reader may have observed that certain characteristics of health areas tend to rise and fall together. Correlation analysis is one method of measuring such relationships.

Tables B, C, and D illustrate semigraphically the association between specific ranges of tuberculosis prevalence rates and indices describing housing, income, and race. In general, tuberculosis rates are higher in areas with a high proportion of dwelling units that are dilapidated. But the association is not perfect. There are some areas with "poor" housing and low tuberculosis rates, and other areas with better housing and higher tuberculosis rates.

One number that can be used to describe the closeness of such a relationship is a simple correlation coefficient, usually called *r*. Table A shows correlation coefficients between pairs of the four indices selected for study in this chapter.

A simple correlation coefficient is some number between +1.0 and -1.0. A value of *r* near +1.0 indicates that an upward movement of one characteristic is usually accompanied by an upward movement of the other. A value near -1.0 indicates that one characteristic is inversely related to the other characteristic. If *r* is near 0, there is little relationship between the two characteristics. A higher value of *r*, regardless of sign, indicates a closer relationship.

Table A

COEFFICIENTS OF CORRELATION BETWEEN TUBERCULOSIS,
"Poor" Housing, Family Income and Race Indices* in Health Areas
New York City, 1949-1951

Pairs of Indices	Manhattan	Bronx	Brooklyn	Queens	New York City
Tuberculosis and poor housing	+.64	+.53	+.78	+.09	+.71
Tuberculosis and income	-.56	-.79	-.70	-.48	-.57
Tuberculosis and race	-.66	-.86	-.64	-.36	-.71
Poor housing and income	-.52	-.47	-.76	-.33	-.56
Poor housing and race	-.39	-.36	-.61	-.18	-.52
Income and race	+.51	+.77	+.60	+.35	+.56

*Indices: Tuberculosis (average annual prevalence rate) 1949-1951; "Poor" housing (proportion of dwelling units in dilapidated condition or with inadequate plumbing in 1950); Income (median family income in 1949); Race (proportion of population white, excluding Puerto Ricans, 1950).

Note: Coefficients for Richmond not shown due to small number of health areas, but figures are included in New York City.

1/ Material utilized in this chapter was prepared by Miss Regina Loewenstein, Associate, Social Research Division, National Tuberculosis Association.

In New York City, (in all health areas studied), the association between tuberculosis and the proportion of dilapidated dwelling units ($r = +.71$) is greater than between tuberculosis and median family income ($r = -.57$). Tuberculosis and race (white) have a high correlation ($r = -.71$). The correlations of housing, income and race with each other affect the relationships of tuberculosis prevalence with each of these indices. Further analyses of the interrelationships of these socio-economic indices with each other and with tuberculosis prevalence will be presented in a separate report.

Differences in coefficients for comparable indices by boroughs bring out the need for further analyses as to statistical significance of the differences and interpretation in terms of conditions prevailing in each community. Correlation coefficients for cities with heterogeneous populations and a variety of housing and economic differences may differ markedly from the coefficients for communities with uniform health and socio-economic conditions.

DISTRIBUTION OF HEALTH AREAS, NEW YORK CITY

Table B - "Poor" Housing*

Tuberculosis Prevalence Rate†	Percentage Dwelling Units Dilapidated or with Inadequate Plumbing												Total Health Areas	
	0-4.9	5-9.9	10-14.9	15-19.9	20-24.9	25-29.9	30-34.9	35-39.9	40-44.9	45-49.9	50-54.9	55-59.9		
1500+								1	1					2
1400-1499 ..												1		1
1300-1399 ..				1		1								2
1200-1299 ..					1		1			1				3
1100-1199 ..								1					1	2
1000-1099 ..				1		1		2						4
900- 999 ..		1		1										2
800- 899 ..				2	1	2								5
700- 799 ..		1	2	1	3		2							9
600- 699 ..	1	3	4	1	4	4	1	2						20
500- 599 ..		5	2	2	4	2	2		1					18
400- 499 ..		10	9	5	3	1	1	1		1				31
300- 399 ..	21	10	8	3	6	1								49
200- 299 ..	60	16	10	6	1			1						94
100- 199 ..	66	7	4	1		3								81
0- 99 ..	5													5
Total health areas	153	53	39	24	23	15	7	8	2	2	1	1		328

Coefficient of correlation: $r = +0.71$.

†Average annual tuberculosis prevalence rate per 100,000 population, 1949-1951.

*Percentage of dwelling units in dilapidated condition or with inadequate plumbing in 1950.

DISTRIBUTION OF HEALTH AREAS, NEW YORK CITY

Table C - Median Family Income*

Tuberculosis Prevalence Rate†	Median Family Income										Total Health Areas
	\$1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500-4999	5000-5499	5500-5999	6000-and over	
1500+	1		1								2
1400-1499 ..	1										1
1300-1399 ..	1	1									2
1200-1299 ..	1	1	1								3
1100-1199 ..	1	1									2
1000-1099 ..		3	1								4
900- 999 ..		1		1							2
800- 899 ..		2	1	1			1				5
700- 799 ..		1	8								9
600- 699 ..		4	12	3	1						20
500- 599 ..		3	9	3	1	2					18
400- 499 ..		2	9	16	3	1					31
300- 399 ..			8	19	14	7	1				49
200- 299 ..			5	18	36	28	3	2		2	94
100- 199 ..			1	15	32	23	4	3	2	1	81
0- 99 ..					1	2	1		1		5
Total health areas	5	19	56	76	88	63	10	5	3	3	328

Coefficient of correlation: r = -0.57.

†Average annual tuberculosis prevalence rate per 100,000 population, 1949-1951.

*Median family income for New York City in 1949.

Table D - Race*

Tuberculosis Prevalence Rate†	Percentage White Population										Total Health Areas
	0-9.9	10-19.9	20-29.9	30-39.9	40-49.9	50-59.9	60-69.9	70-79.9	80-89.9	90-100	
1500+	1						1				2
1400-1499	1										1
1300-1399	2										2
1200-1299	1		1					1			3
1100-1199	1			1							2
1000-1099	1	1						1		1	4
900- 999			1							1	2
800- 899	2								2	1	5
700- 799	1		1	1	1	1			3	1	9
600- 699		2		2	1	3	3	2	2	5	20
500- 599				2	2	3		1	3	7	18
400- 499		1				2	4	3	6	15	31
300- 399						1	1	4	8	35	49
200- 299								1	2	91	94
100- 199									1	80	81
0- 99										5	5
Total health areas ...	10	4	3	6	4	10	9	13	27	242	328

Coefficient of correlation: r = -0.71.

†Average annual tuberculosis prevalence rate per 100,000 population, 1949-1951.

*Percentage of population that was white, excluding Puerto Ricans, 1950.

Note: Complete data for above tabulations were available for 328 of the total 348 health areas (1940 health area map).

HEALTH CENTER DISTRICTS

Tuberculosis Rates and Socio-Economic Indices by Neighborhoods

It has often been stated that the word "health" implies more than the mere absence of disease. Perhaps health might be described as a condition under which the body functions at a high level of efficiency both physically and mentally. Anything that influences adversely this equilibrium of well-being therefore has an unfavorable impact on health.

The term "slum area" brings to mind a neighborhood lacking adequate housing, and overcrowded with the economically, and perhaps even socially, underprivileged segments of our population, whereas a "good" residential area implies good housing with adequate air and light, clean streets and the existence of all wholesome conditions which we consider salubrious. We emphasize again that many factors, not specifically enumerated here, may complicate the interpretation of the effect of slum areas on disease particularly when resident populations differ as to basic characteristics such as race, age, literacy, employment and others. Attempts to measure the association of slum areas and health in terms of mortality or morbidity are always of general interest and a comparison of "good" and "poor" neighborhoods in this respect, although not necessarily a pleasant task, can serve an instructive and useful purpose.

The accompanying charts portray the comparative levels of tuberculosis prevalence rates (by health areas) and the indices of income and "poor" housing in several health center districts. As these graphic presentations show, there are striking differences not only between health center districts but even within a district contrasts may exist.

On the charts of the selected health center districts are shown the health areas ranked in decreasing order according to the level of tuberculosis prevalence rates, and the data relating to family income and housing follow this order. These indices are all related to the average for the Borough of Manhattan, and this "average" is indicated by a heavy dotted line drawn horizontally through the center of the graph. Therefore, any point above the dotted line means that the index exceeds the borough average, whereas any point below the line is lower than the borough average. All charts are on the same scale and comparable.

CENTRAL HARLEM The Central Harlem Health District, when considered as a unit, has the highest tuberculosis rates in New York City. This applies both to the rate for total known prevalence and the new case rate. The tuberculosis mortality rate too is the highest in the city for both the white and the Nonwhite population. The white mortality rate is based on a relatively small population and few deaths, therefore the death rates should be used with reservation since no attempt was made to standardize the data. Median family income for all health areas is substantially below the Borough average and the district had one of the highest percentages of unsatisfactory housing conditions (31.3 percent) in New York City at the time of the 1950 Census. Central Harlem's population was 92.8 percent Negro, 3.9 percent white, 3.1 percent Puerto Rican, plus a small proportion of persons of other races. Over ten percent of the dwelling units reported 1.51 or more persons per room.

LOWER EAST SIDE The Lower East Side Health Center District had the second highest tuberculosis prevalence rate in the city. Here we find that 90.4 percent of the residents were white, 5.5 percent Puerto Rican, 2.0 percent Negro, and the remainder Chinese and other races. In this part of town is located "The Bowery" with its large complement of "homeless" men, also a large Chinese population. Twenty-four percent of the dwelling units were classified as dilapidated or with inadequate plumbing, 5.2 percent with 1.51 or more persons per room. The median family income for most of the district was below the Manhattan average, though three health areas had incomes above the borough figure.

EAST HARLEM East Harlem Health Center District had a known tuberculosis prevalence rate of 753 per 100,000 population, the third highest of any district in Manhattan. In the 1950 Census, the district had 60,165 Puerto Ricans comprising 27.6 percent of the total population in the area. The median family incomes for all of the health areas were below the Manhattan average. Almost 24 percent of the dwelling units were reported as dilapidated or with inadequate plumbing facilities and 8.2 percent were said to have 1.51 persons or more per room. In 1953, of the 4,521 live births 1,899 or 42 percent of the births, were to Puerto Rican mothers.

KIPS BAY- YORKVILLE This health center district, with a tuberculosis prevalence rate of 353, had the lowest tuberculosis rate in Manhattan and below the average for the city. It is composed mainly of white population, which comprised 98.2 percent of the total in the district. Its birth rate was 11.4 per 1,000 population. The median family incomes were above the Manhattan average. Three of the health areas reported incomes over \$7,200. Only 11 percent of the dwelling units were in dilapidated condition.

WASHINGTON HEIGHTS Washington Heights is located in the uppermost part of Manhattan with the lower half of the district on a parallel with the upper part of Central Harlem. The statistics of this district illustrate the need of looking into the details by health areas since the overall district figures mask the differences that exist within the larger administrative unit. In seven of the health areas located in the upper half of the Washington Heights District most of the population was white accounting for over 95 percent of the total. The family incomes by health areas ranged from \$3,354 to \$4,993. The known tuberculosis prevalence rates ranged from 143 to 315 and the dilapidated dwellings only from 0.4 percent to 3.0 percent. Juvenile delinquency rates go from 9.0 to 31.5. The tuberculosis death rates range from 7 per 100,000 in one health area to 26 in another and new case rates from 29 to 80.

In the lower half of the district, six health areas, approximately half of the population was Nonwhite, mainly Negro. Here the tuberculosis rates for total known prevalence ranged from 446 to 837 per 100,000, the new case rates from 129 to 289, and the death rates from 23 to 86. Family incomes were lower than in the upper part of the district, \$2,349 in one health area and \$3,122 in another. Dilapidated dwelling units rose from 6.9 percent to 27.1 percent and the juvenile delinquency rates 27.6 to 80.3.

In the first mentioned group of health areas, located in the upper part of the district, the birth, infant mortality and maternal mortality rates were somewhat lower than in the rest of the district. The incidence rates of syphilis and gonorrhoea were substantially lower than the rates in the lower part of the district.

Washington Heights Health Center District portrays the pattern found in other parts of New York City, bringing out that in those areas where the tuberculosis prevalence rates are high the income is comparatively low and more housing is in a dilapidated condition.

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A further narrative description, in addition to that given above, for the remaining health center districts can only repeat what has already been demonstrated for purposes of this report.

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S U M M A R Y

1. Social and economic elements of daily environment are important determinants in health and welfare especially in congested large cities. Differences in economic status, housing, sanitation, overcrowding, medical care, occupation and other factors, are measurably associated with and related to the disease rates of a community.

2. The present investigation of socio-economic conditions and tuberculosis in New York City demonstrates one approach that can be employed in bringing to public attention some of the existing community problems in tuberculosis control. The statistical evidence presented strengthens once more the association of tuberculosis prevalence with "poor" housing and inadequate income.

3. During the three-year period 1949-1951 the tuberculosis prevalence rate, based on all known active cases, old and new, for New York City, averaged annually 369 per 100,000 population; in the borough of Manhattan, the rate was 665 or not quite twice as high, and in Queens, it was 252, or two-thirds of the city average.

4. At the same time, according to the data available from the last decennial Federal Census, the median family income during 1949 was \$3,526 for the entire city and \$3,073 or \$453 less in Manhattan but nearly \$600 more among those residing in Queens, namely \$4,121. In other words, the highest tuberculosis prevalence rate occurred where income was lowest, and the lowest tuberculosis rate was found where income was highest.

5. One particular aspect of "poor" housing -- the proportion of dwelling units found to be "dilapidated" or with inadequate plumbing -- was reported upon in 1950. As against an average of 9.6 percent such units for the city as a whole, in Manhattan these comparatively unfit dwellings were found in 18.5 percent or nearly one out of five instances. But in Queens, recalling that it is in this borough that a lower tuberculosis prevalence rate occurs and a higher income is enjoyed by its residents, only 4.7 percent of the dwelling units were considered to be dilapidated.

6. Tuberculosis prevalence rates computed for welfare districts, the administrative units utilized by the Department of Welfare, brought out that the tuberculosis rates were highest in districts where the proportion of the population receiving public assistance was high, and the rates were lowest in the districts where the proportion receiving assistance was comparatively low.

7. In ten health areas with the highest tuberculosis prevalence rates, ranging from 1087 to 2392 per 100,000 population, the median family incomes in these same health areas ranged only from \$1,778 to \$2,637. The index of "poor" housing rose from 19.1 percent to 57.5 percent. At the other end of the scale, in ten health areas with the lowest tuberculosis prevalence rates, 59 to 113 per 100,000 population, family incomes ranged from \$3,701 to \$4,798 and the percentage of "poor" housing was only 0.8 percent to 2.4 percent.

8. The degree of association in New York City between tuberculosis and the proportion of dilapidated dwelling units is even greater than between tuberculosis and family income. The simple correlation coefficient calculated between tuberculosis and "poor" housing was +.71 and for tuberculosis and median family income it was -.57.

9. Unemployment and consequent limitation of income brings with it a weighted chain of reduced income, poorer home conditions and higher tuberculosis rates. In 1950 in the civilian adult population slightly under 7 percent were unemployed (6.9 percent). In Manhattan, where higher rents prevail, unemployment was high, 8.4 percent. Whereas in Queens, with low tuberculosis rates, unemployment was but half (4.3 percent) that of Manhattan.

10. In like manner the association of the above mentioned socio-economic indices and tuberculosis rates was studied in all five boroughs of New York City, for each of the 30 health center districts in these boroughs and their subdivisions, the 348 health areas.

11. The supporting evidence leads to the conclusion that where urban living is accompanied by inadequate or slum housing, low income, deleterious effects of overcrowding and poverty, tuberculosis continues to exist at a higher level of prevalence than where the general physical and social environment is salubrious.

If optimum benefits are to be realized in mastering tuberculosis, progress in medicine and public health must be accompanied by comparable and parallel socio-economic improvements in living conditions.

A.M.L.

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Part II: STATISTICAL SECTION

- A - Socio-economic indices and tuberculosis rates by health areas within boroughs, 1949-1951.
- B - Socio-economic indices and tuberculosis rates by health areas within health center districts and boroughs, 1949-1951.
- C - Tuberculosis, total known prevalence, 1949-1951, and active cases in tuberculosis register on December 31st of each year, by health areas within health center districts and boroughs, 1949-1954.
- D - New cases of tuberculosis reported each year, by health areas within health center districts and boroughs, 1949-1954.
- E - Population, white, Negro, Puerto Rican, other races, by health areas within health center districts and boroughs, April 1, 1950.

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TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS 1/
NEW YORK CITY, 1949-1951

MANHATTAN - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Percent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 §
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily	Indi-vid-ual		
			Wh.	Non-Wh.	To-tal								
70.00	4675	1819	310	201	303	87.0	2.2	8.7	2.1	\$..	\$..	29.9%	..
77.00	2392	765	164	315	210	67.3	8.0	2.4	22.3	2637	967	38.9%	30.3
13.00	1634	500	159	150	150	0.7	98.8	0.3	0.1	1778	1001	42.1%	57.6
12.00	1496	471	0	143	143	0.3	99.4	0.1	0.1	1953	1139	52.6%	44.6
10.00	1337	404	532	131	132	0.4	99.3	0.2	0.1	1872	1179	27.6%	43.5
19.00	1322	399	183	134	136	1.2	94.8	3.8	0.2	2023	1257	19.1%	68.5
75.00	1271	491	167	299	184	79.1	0.9	8.4	11.5	..	..	38.6%	..
25.00	1268	354	70	53	67	23.7	7.2	68.8	0.2	1880	772	30.3%	60.8
69.00	1249	459	145	352	154	92.1	0.3	3.5	4.0	..	..	35.9%	..
24.00	1232	369	240	111	118	2.2	88.4	9.1	0.2	2039	1377	21.8%	50.9
15.00	1168	395	157	105	105	1.3	97.6	0.8	0.3	2026	1321	57.5%	54.9
30.00	1120	393	38	93	61	32.1	33.4	34.0	0.5	1992	910	36.2%	84.0
74.00	1087	382	70	282	104	76.1	2.0	8.0	13.9	2479	957	36.3%	31.7
20.00	1029	327	55	75	66	14.0	46.4	39.3	0.3	2059	878	28.1%	44.5
58.00	1016	244	78	0	77	90.7	0.1	7.8	1.3	2831	1521	36.6%	27.0
8.00	1012	308	794	90	93	0.4	99.2	0.3	0.1	2152	1152	19.7%	42.6
16.00	986	314	89	91	90	20.6	69.9	9.4	0.1	2237	1208	19.0%	50.3
51.00	915	282	103	547	110	93.6	0.6	4.8	1.0	..	..	31.8%	..
59.00	904	282	76	216	77	94.4	0.4	4.6	0.6	3370	1896	7.6%	36.6
52.00	873	288	63	445	72	89.7	1.6	8.2	0.5	3355	2065	23.9%	57.1
62.00	861	226	65	141	66	89.4	0.5	8.8	1.3	2754	1277	29.9%	21.2
7.20	837	289	0	88	86	1.5	97.6	0.6	0.3	2378	1540	27.1%	80.3
57.00	834	282	86	83	86	97.9	1.1	0.7	0.3	4791	2457	15.1%	19.3
60.00	790	219	7	0	7	98.5	0.8	0.4	0.2	5722	492	0.2%	4.8
78.00	778	249	77	338	96	91.3	1.1	1.8	5.8	2918	1070	31.6%	24.3
56.00	775	235	55	112	56	86.7	1.0	11.7	0.6	2985	1984	24.0%	58.3
55.00	774	224	46	0	45	87.6	2.2	9.8	0.4	2944	1535	34.0%	51.5
14.00	745	228	35	68	48	48.6	34.9	11.7	4.8	2924	1093	21.4%	29.9
7.10	743	227	0	49	48	0.7	98.8	0.3	0.1	2349	1574	6.9%	80.3
28.00	735	218	24	55	29	54.4	12.1	31.8	1.7	2853	1333	24.3%	30.3
11.00	734	269	38	114	83	25.6	58.3	15.8	0.3	2541	1139	13.0%	43.4
6.20	713	203	37	39	38	32.5	58.9	7.7	0.9	2575	1381	14.7%	46.8
29.00	678	200	25	121	35	63.8	7.8	27.7	0.6	2764	1350	16.0%	48.6
23.20	677	226	28	74	42	52.7	27.5	18.6	1.1	2769	1494	31.3%	34.6
71.00	676	169	34	323	45	89.7	1.2	6.4	2.6	..	..	29.8%	..
65.00	675	194	46	99	47	95.6	1.1	2.1	1.2	2846	774	28.5%	46.1
66.00	674	160	36	500	39	98.3	0.3	1.2	0.2	2922	988	26.6%	23.9
27.20	655	198	46	84	51	66.2	11.1	21.9	0.8	2674	1463	13.1%	39.7
21.00	642	210	23	235	30	72.9	2.7	24.2	0.2	2342	924	21.5%	47.4
46.00	630	176	42	88	44	89.4	3.6	6.3	0.7	3356	1784	20.4%	37.9

1/In decreasing order of tuberculosis prevalence rates.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

MANHATTAN - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
53.00	618	209	49	0	48	95.6	0.2	3.4	0.8	3850	2377	7.0%	33.0
17.00	617	189	39	159	47	86.4	6.0	7.4	0.2	2623	855	13.6%	30.2
45.00	615	134	57	1100	62	94.6	0.3	5.1	0.0	2828	1445	37.4%	37.3
79.00	614	198	43	110	47	80.5	3.2	14.7	1.6	..	..	34.7%	..
76.00	578	199	29	303	41	86.1	4.1	9.5	0.3	2607	467	33.6%	12.9
47.00	576	176	37	200	45	90.6	3.7	4.6	1.1	3272	1825	20.6%	45.7
67.00	571	139	48	619	54	95.5	0.9	3.3	0.2	2678	810	25.6%	24.9
63.00	561	136	18	122	23	91.4	4.5	3.5	0.6	2623	942	24.9%	26.2
72.00	534	176	44	253	49	90.0	1.4	7.9	0.6	2438	733	41.2%	21.1
18.00	532	182	16	93	53	51.5	46.4	0.7	1.4	4447	1257	34.0%	51.5
33.00	519	123	23	162	28	91.9	3.2	4.3	0.6	3060	1301	19.2%	34.9
43.00	513	130	42	0	41	98.8	0.1	0.7	0.4	2971	1385	22.6%	34.1
61.00	509	156	31	183	34	96.8	1.6	1.1	0.4	4133	2450	6.9%	24.9
26.00	496	154	16	68	18	82.5	4.2	13.2	0.1	2591	837	28.8%	49.8
9.00	487	154	8	62	23	57.0	25.7	15.7	1.5	3024	1186	11.5%	41.2
68.00	486	138	36	0	36	98.7	0.2	1.0	0.1	2910	855	35.6%	23.5
44.00	486	92	37	0	37	98.7	0.2	0.8	0.2	3253	1683	7.0%	50.1
38.00	466	96	46	0	46	99.2	0.3	0.3	0.2	3381	1451	7.1%	42.0
5.00	460	129	18	74	36	63.5	31.2	5.1	0.2	3122	1335	10.6%	27.6
37.00	446	104	28	0	28	98.8	0.4	0.7	0.1	3129	1636	13.2%	27.0
6.10	446	138	20	43	30	53.1	43.0	3.2	0.7	3005	1400	7.6%	46.8
40.00	441	130	23	187	26	92.7	0.8	5.4	1.1	3766	1963	9.9%	24.2
80.00	437	156	13	278	25	88.8	4.1	6.8	0.2	2768	980	14.8%	25.3
32.10	425	104	30	77	34	85.6	8.0	5.7	0.7	3277	1764	16.6%	67.5
54.00	414	116	25	277	26	97.6	0.2	1.7	0.5	4343	2891	10.9%	16.1
42.00	403	95	31	0	31	98.9	0.4	0.5	0.2	3451	1743	22.5%	28.7
50.00	384	84	42	0	42	98.3	0.3	1.0	0.4	3535	2250	10.6%	22.0
23.10	381	128	14	59	15	92.9	0.7	4.8	1.6	3615	1537	9.4%	34.6
22.00	377	102	28	62	29	89.0	0.8	10.1	0.1	2836	847	22.9%	33.3
32.20	372	110	25	0	24	93.6	0.7	5.3	0.4	3533	1986	23.0%	67.5
39.00	359	118	12	51	16	84.9	9.8	4.6	0.7	3215	1888	21.7%	31.2
35.00	339	94	21	0	21	94.8	0.6	3.9	0.7	3769	1875	19.3%	35.0
64.00	332	67	15	0	14	98.4	0.8	0.5	0.3	3334	2338	21.4%	24.9
2.21	315	57	13	0	13	98.3	0.1	0.9	0.7	3995	1694	0.7%	9.0
4.00	304	80	19	58	21	89.4	3.3	7.1	0.2	3354	1513	3.0%	31.5
49.00	303	82	15	131	17	98.2	0.5	0.6	0.7	4068	2205	13.1%	17.5
1.20	291	57	21	367	22	99.2	0.1	0.4	0.3	3893	1750	0.7%	16.9
31.10	289	110	27	143	28	96.4	0.5	2.6	0.5	4250	1879	20.6%	12.6
2.10	272	57	7	0	7	96.5	0.5	2.8	0.2	3615	1286	2.3%	23.8
27.10	264	69	16	260	19	93.3	0.4	5.7	0.6	4333	1829	6.0%	39.7

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

MANHATTAN - Part C

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
73.00	257	91	19	16	18	77.6	15.6	6.3	0.5	2545	872	18.3%	17.3
48.00	240	61	13	0	13	98.9	0.5	0.3	0.3	7211	2603	8.6%	12.9
3.00	239	62	9	0	9	96.6	0.7	2.5	0.2	3820	1686	0.6%	17.4
31.20	236	81	7	266	9	97.5	0.6	1.5	0.4	5496	2048	13.0%	12.6
36.00	233	52	7	0	7	98.2	1.1	0.4	0.3	8989	1905	3.5%	7.1
34.00	229	70	10	0	10	97.1	0.9	1.6	0.3	5384	1778	18.0%	14.5
1.10	191	29	26	0	26	99.2	0.2	0.5	0.1	4259	1800	0.6%	16.9
41.00	175	47	10	0	10	98.3	1.0	0.5	0.2	10000+	1900	4.8%	3.6
2.22	143	52	9	0	9	99.5	0.1	0.3	0.1	4993	2103	0.4%	9.0
83.00	406	123	14	45	18	83.4	12.3	3.4	0.9	NS	1620	33.3%	..
82.00	278	221	0	0	0	94.2	3.0	0.1	2.7	NS	NS	0.0%	..
84.00	77	54	18	97	31	81.6	15.5	2.4	0.5	NS	NS	11.8%	..
81.00	50	0	0	0	0	95.6	2.0	0.9	1.5	NS	1220	1.8%	..
MAN- HATTAN	665	202	42	112	56	73.0	18.9	7.1	1.0	3073	1595	18.5%	34.5

*Boundaries according to 1940 revision of health area map. ..Data not available for health area. †Rate not computed. ‡Per 100,000 population. §Percent of dwell- ing units = dilapidated or no running water or no private bath, with running water, not dilapidated. ¶Per 1,000 youths in age group 5-20 years. Juvenile delin- quency rates for combined health areas: 1.10 (1.20), 2.21 (2.22), 6.10 (6.20), 7.10 (7.20), 23.10 (23.20), 27.10 (27.20), 31.10 (31.20), 32.10 (32.20). Health areas: 83 = Welfare Island, 82 = Ellis and Bedloes Islands, 84 = Ward's and Randall's Islands, 81 = Governors Island. NS = Not stated. Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Divi- sion, New York Tuberculosis and Health Association.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS 1/
NEW YORK CITY, 1949-1951

BRONX - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
35.00	827	232	90	73	75	7.5	84.8	7.4	0.2	2335	1281	17.7%	39.1
36.00	665	179	36	85	45	50.7	14.8	34.2	0.3	2764	1268	5.7%	46.1
41.00	615	137	23	135	30	66.4	4.8	28.6	0.2	3107	1144	7.2%	28.9
37.00	612	154	27	50	33	50.9	23.8	25.1	0.2	2693	975	1.7%	35.9
45.00	612	136	47	0	47	93.7	0.4	5.8	0.1	3368	1610	13.0%	80.3
28.00	606	171	26	82	50	42.1	42.9	14.8	0.2	2637	1244	11.0%	59.3
40.00	599	163	39	50	40	53.9	14.6	31.4	0.1	2739	1163	6.8%	45.7
26.00	577	152	18	79	53	38.3	57.0	4.6	0.1	2483	1147	9.6%	52.1
27.00	526	147	25	51	37	46.9	46.6	5.9	0.6	2712	1344	6.2%	39.6
47.00	497	159	39	83	41	82.7	3.4	13.7	0.1	3138	1243	48.7%	53.6
46.00	490	128	40	0	40	81.7	0.3	17.7	0.3	3013	1382	19.7%	65.1
42.00	477	143	16	81	21	68.1	7.6	24.0	0.3	2923	987	9.4%	31.9
44.00	442	103	32	171	35	94.0	1.7	4.2	0.1	3092	942	10.3%	57.6
34.00	424	115	17	78	26	80.7	15.2	4.0	0.1	3143	1250	7.4%	49.3
24.00	422	131	7	32	14	62.3	27.3	10.2	0.1	2498	956	14.4%	42.9
30.30	406	78	21	0	20	99.2	0.3	0.5	(..)	3705	NS	5.4%	19.2
29.00	352	83	21	~	22	88.5	2.2	9.1	0.1	3291	1280	2.1%	26.2
39.00	322	85	29	0	29	98.3	0.6	1.0	(..)	3292	1083	20.8%	29.5
18.00	322	71	22	0	21	94.6	1.5	3.7	0.2	2974	757	9.6%	37.7
2.00	288	49	17	0	16	98.1	1.1	0.6	0.2	4484	1161	0.9%	20.2
33.10	286	67	11	~	12	99.3	0.2	0.5	(..)	3897	1181	1.7%	17.9
15.20	280	57	16	0	16	99.2	0.3	0.3	0.2	3782	1224	1.4%	12.2
7.20	267	112	17	0	17	99.1	0.5	0.2	0.1	4222	NS	13.5%	28.4
7.10	263	79	~	0	..	98.1	1.4	0.4	0.1	3802	NS	6.8%	28.4
38.00	251	62	18	~	19	91.8	6.4	1.7	0.1	3505	1157	7.4%	32.5
19.00	248	55	15	294	17	98.6	0.7	0.6	0.1	3326	963	1.6%	20.0
32.20	248	47	10	0	10	99.5	0.1	0.2	0.2	3969	798	2.3%	15.3
13.20	246	74	14	0	14	99.2	0.5	0.2	(..)	3630	NS	4.0%	19.4
3.10	238	45	16	0	16	99.4	0.2	0.3	0.1	4178	1432	1.8%	25.9
17.00	237	71	17	0	17	98.5	0.4	1.0	0.1	3769	1180	3.6%	29.4
10.00	236	49	19	0	19	98.7	0.4	0.7	0.1	3396	638	1.4%	31.9
32.10	232	40	17	0	17	99.7	0.1	0.1	0.1	3680	NS	5.0%	15.8
43.00	225	50	11	~	13	93.7	2.0	4.2	(..)	3437	1000	0.8%	16.9
5.10	225	50	11	0	11	99.3	0.3	0.2	0.1	4094	1477	1.8%	27.1
5.20	218	47	14	0	14	99.3	0.4	0.2	0.1	3811	1383	2.3%	23.9

1/In decreasing order of tuberculosis prevalence rates.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

BRONX - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 §
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
9.00	218	41	11	0	11	99.6	0.1	0.2	(..)	4148	1644	1.1%	16.9
14.10	217	40	~	0	~	99.7	0.2	(..)	(..)	4278	NS	3.4%	14.0
15.10	216	35	14	0	14	99.5	0.2	0.2	0.1	4262	960	2.0%	12.2
31.00	216	48	12	0	12	95.9	2.4	1.7	(..)	3549	NS	2.1%	6.9
4.20	212	53	13	0	13	99.7	0.2	0.1	(..)	4085	1839	3.1%	21.9
30.10	212	58	7	~	10	98.4	0.2	1.3	0.1	3855	1196	0.8%	18.0
25.00	203	47	6	0	6	98.1	1.3	0.6	(..)	3713	1118	2.2%	11.0
14.20	202	36	10	0	10	99.8	(..)	0.1	(..)	3949	1391	2.0%	13.8
6.10	202	41	13	~	14	95.6	4.1	0.3	(..)	3752	1294	4.2%	15.5
21.20	199	47	13	109	21	87.2	8.1	4.3	0.4	3232	909	5.1%	14.2
11.00	198	38	11	~	13	99.2	0.4	0.3	0.1	3269	528	3.0%	25.5
21.10	198	37	6	0	6	98.6	0.9	0.4	0.1	3496	1119	3.1%	14.2
20.00	191	50	13	0	13	97.6	1.3	1.0	0.1	3473	881	3.6%	15.6
16.00	184	42	5	~	6	99.4	0.2	0.3	0.1	3991	1338	1.1%	16.3
22.10	177	43	10	0	10	99.1	0.6	0.3	(..)	3963	1119	2.5%	17.3
33.20	176	39	6	149	8	98.5	1.2	0.3	(..)	4143	1207	0.5%	10.1
4.10	175	36	13	0	13	99.0	0.8	0.1	0.1	4234	1360	1.9%	12.9
22.20	172	44	11	0	10	99.4	0.3	0.2	0.1	3765	1170	3.1%	19.3
8.10	167	27	6	0	6	99.2	0.5	0.2	0.1	3814	1183	1.0%	15.2
13.10	166	33	5	0	5	99.8	0.1	0.1	(..)	4404	1810	0.7%	7.5
3.20	151	45	12	0	12	99.5	0.3	0.1	0.1	4401	1828	0.9%	25.9
6.20	151	32	7	~	8	92.9	6.7	0.3	0.1	3963	NS	1.7%	16.8
1.00	138	35	~	0	~	98.3	0.6	0.3	0.8	5247	520	0.5%	19.9
12.10	137	27	5	0	5	99.4	0.2	0.2	0.1	4203	1521	1.3%	12.0
30.20	137	30	12	0	12	96.8	2.0	1.2	(..)	3755	1179	3.9%	10.2
23.10	134	27	14	0	14	98.9	0.5	0.4	0.2	4274	1688	2.0%	6.1
12.20	133	27	6	0	6	98.3	1.2	0.4	0.1	3676	880	2.8%	12.0
8.20	126	26	3	~	4	97.4	2.1	0.5	(..)	3985	NS	1.6%	20.3
23.20	117	22	3	0	3	99.6	0.3	0.1	(..)	4125	1135	0.6%	6.1
48.00	142	118	..	0	..	55.7	34.6	6.3	3.4	NS	NS	0%	Riker's Is.
BRONX	288	70	16	69	19	89.1	6.5	4.3	0.1	3612	1173	4.7%	25.2

*Boundaries according to 1940 revision of health area map. ..Data not available for health area. ~Rate not computed. †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. §Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 3.10 (3.20), 7.10 (7.20), 12.10 (12.20), 15.10 (15.20), 21.10 (21.20), 23.10 (23.20). NS = Not stated. Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS 1/
NEW YORK CITY, 1949-1951

BROOKLYN - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Percent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 §
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
10.00	1295	446	101	120	103	70.4	6.3	21.6	1.7	2505	830	49.9%	15.5
26.00	730	217	49	224	67	86.5	9.1	3.9	0.5	2754	1550	19.4%	59.5
28.00	691	245	59	85	82	11.5	87.7	0.6	0.2	2338	1307	36.6%	63.4
13.00	647	249	37	89	71	33.3	64.9	1.4	0.3	2578	1351	23.3%	55.6
20.00	641	213	54	73	71	13.8	85.0	1.0	0.2	2463	1360	25.5%	64.3
36.00	619	225	10	101	70	34.4	65.1	0.3	0.2	2426	1115	26.8%	63.6
24.00	616	158	39	44	40	76.8	10.3	11.3	1.6	2632	1364	20.0%	64.2
23.00	577	202	37	~	37	88.5	1.0	9.6	0.8	3700	2043	10.6%	30.9
16.00	570	161	43	99	56	56.3	22.0	21.0	0.7	2533	786	28.0%	43.3
21.00	539	177	41	50	47	36.2	62.5	1.1	0.2	2470	1129	19.2%	49.9
40.00	537	153	42	214	46	87.3	0.6	11.9	0.2	2662	1130	23.5%	30.4
11.00	528	139	20	109	41	71.8	21.4	5.5	1.3	2660	857	12.9%	69.4
59.00	499	137	22	76	40	65.1	33.7	1.1	0.1	2464	682	14.2%	31.1
64.30	493	74	0	0	0	81.3	16.0	2.6	0.1	NS	NS	4.7%	34.1
57.00	477	142	22	168	54	77.8	21.6	0.5	0.1	2629	604	16.6%	34.5
30.00	472	162	37	55	52	19.5	79.9	0.4	0.2	2590	1297	20.6%	35.9
65.00	469	114	34	0	34	96.4	0.3	3.0	0.3	3100	1825	6.2%	22.7
27.10	469	135	23	75	37	71.2	27.5	1.2	0.1	2840	1163	19.7%	51.7
44.00	441	104	33	0	33	96.5	0.2	3.2	0.1	3066	1800	14.4%	17.1
1.00	439	87	47	~	49	98.5	0.0	1.3	0.2	3381	1565	15.2%	18.0
3.00	428	98	34	0	34	99.3	0.1	0.4	0.1	3331	1278	20.8%	14.9
17.00	407	145	25	89	31	72.5	7.8	19.0	0.7	2652	778	30.5%	23.8
77.00	398	62	31	0	31	98.9	0.1	0.9	0.1	3445	1843	2.8%	16.9
2.00	390	87	33	0	33	99.6	(..)	0.3	0.1	3337	1047	12.0%	11.9
12.00	388	116	29	139	34	93.6	3.8	2.3	0.3	3340	1639	21.1%	28.1
31.00	387	125	20	66	29	81.8	17.7	0.4	0.1	3011	1120	7.0%	26.0
41.00	387	96	39	~	39	94.1	2.5	3.3	0.1	2793	1284	11.8%	42.2
66.00	385	82	31	0	31	98.7	0.1	1.1	0.1	3503	1462	3.5%	11.3
52.00	382	116	12	64	33	59.6	39.5	0.8	0.1	2616	915	9.8%	52.5
46.00	372	78	24	~	26	99.4	0.1	0.3	0.2	3401	1538	6.1%	22.9
43.00	370	107	37	0	37	98.4	(..)	1.4	0.2	2844	1278	11.6%	21.4
6.00	369	94	25	181	28	90.4	1.4	7.8	0.4	3001	1244	6.4%	24.5
18.00	360	122	12	139	29	77.5	13.3	9.0	0.2	3120	911	11.6%	43.9
4.00	351	99	45	0	44	96.5	0.2	3.2	0.1	3166	1216	17.0%	16.6
25.00	338	71	37	0	36	97.9	0.2	1.6	0.2	3089	767	8.5%	23.2
29.00	336	104	29	73	39	77.8	21.8	0.3	0.1	3442	1727	10.3%	44.1
34.00	323	87	23	0	23	99.6	0.1	0.2	0.1	3359	1147	9.1%	20.0
76.00	316	64	18	0	18	99.7	0.1	0.1	0.1	4241	1913	1.6%	9.9
19.00	308	98	11	123	25	83.1	12.0	4.4	0.5	2950	938	8.9%	32.0
9.00	307	75	25	0	25	98.2	0.7	1.1	(..)	2882	870	26.2%	29.6
15.00	305	86	27	259	40	82.9	5.1	11.8	0.2	2737	750	19.8%	27.7
22.00	299	77	17	0	17	99.1	0.1	0.8	(..)	3092	931	15.4%	13.3
61.00	293	63	16	130	20	96.4	3.4	0.1	0.1	3249	742	10.9%	12.9
14.00	288	77	20	66	27	82.3	15.1	2.3	0.2	2917	871	12.6%	43.1
35.00	288	57	20	0	20	99.9	(..)	(..)	(..)	3170	1092	4.9%	20.8

1/In decreasing order of tuberculosis prevalence rates.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

BROOKLYN - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap-idated or Inadequate Plumbing‡	Juvenile Delin-quency Rate 1953 ¶
	Total Preva-lence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fem-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
5.00	287	90	14	263	19	92.7	1.9	5.2	0.1	3119	995	6.2%	19.6
37.00	285	63	13	-	15	94.3	5.1	0.5	0.1	3070	NS	10.8%	21.5
8.00	284	74	6	-	8	94.9	1.8	3.2	0.1	2977	902	15.8%	24.5
45.00	280	76	21	0	21	99.3	0.2	0.4	0.1	3738	2083	13.7%	26.1
47.00	276	69	22	0	22	99.6	(..)	0.3	0.1	3374	1089	9.8%	30.9
33.00	273	68	26	-	27	99.7	(..)	0.2	(..)	3255	922	6.0%	14.5
42.00	270	48	19	0	19	98.8	(..)	1.1	0.1	2881	757	15.0%	21.2
89.00	268	48	18	0	18	99.8	0.1	0.1	(..)	3456	NS	11.7%	16.6
27.20	261	51	17	0	16	99.4	0.3	0.2	0.1	4101	1868	1.5%	51.7
60.00	257	69	16	112	26	88.2	10.9	0.8	0.1	2781	763	10.4%	15.9
7.00	257	46	17	-	18	99.0	0.2	0.7	0.1	3152	1080	19.9%	12.8
78.10	255	52	17	-	18	99.7	0.1	0.1	0.1	4207	2184	1.8%	14.4
32.00	254	51	18	0	18	99.6	(..)	0.3	0.1	3110	819	16.9%	20.0
39.00	254	47	17	0	17	99.8	(..)	0.1	0.1	3784	1261	3.9%	16.7
38.00	244	40	11	0	11	99.5	0.2	0.2	0.1	3587	1096	6.8%	15.8
67.00	242	55	12	0	12	99.6	0.1	0.2	0.1	3554	1455	2.1%	8.4
79.10	238	42	5	0	5	99.8	0.1	0.1	(..)	4212	1458	1.4%	6.6
54.00	236	50	16	-	17	97.0	2.5	0.3	0.2	4081	1742	1.5%	19.4
74.10	229	44	21	0	21	99.7	0.1	0.2	(..)	4080	2000	1.6%	18.4
51.00	220	68	7	125	15	92.4	7.3	0.2	0.1	3115	799	3.3%	20.4
56.00	220	34	5	143	10	96.5	3.1	0.1	0.3	3087	553	5.7%	15.4
64.10	213	35	11	-	13	99.7	0.1	0.1	0.1	3376	NS	6.5%	10.3
91.10	213	43	3	-	5	99.2	0.6	0.1	0.1	3351	1233	12.1%	6.5
55.20	208	40	11	322	13	99.2	0.5	0.1	0.1	3999	1156	1.8%	9.5
48.00	203	66	9	0	9	99.3	0.5	0.1	0.1	4007	803	2.9%	16.9
49.00	202	57	17	54	20	91.1	8.6	0.1	0.1	4099	1506	3.5%	20.4
79.20	199	54	20	0	20	99.9	(..)	0.0	0.1	3933	1643	1.8%	6.6
80.10	197	31	11	0	11	99.8	0.0	0.2	(..)	3320	NS	4.5%	12.8
90.20	184	56	14	361	25	96.2	2.7	0.6	0.5	2786	843	26.6%	32.5
72.10	182	37	11	-	12	99.2	0.6	0.1	0.1	4456	1928	1.1%	12.8
75.10	178	42	8	0	8	99.3	0.1	0.5	0.1	3783	NS	4.6%	8.1
88.22	176	53	8	0	8	99.4	0.1	0.4	0.1	3821	1296	3.0%	8.3
53.10	173	34	15	0	15	99.5	0.2	0.2	0.1	4049	1250	1.7%	9.5
63.00	173	37	7	0	7	99.8	0.1	0.1	(..)	3406	676	1.6%	8.3
53.20	170	38	11	-	11	99.1	0.6	0.1	0.2	4478	1631	1.0%	17.9
70.00	169	32	7	0	7	99.5	0.3	0.2	(..)	3951	1324	2.0%	8.9
88.21	162	32	9	0	9	99.6	0.2	0.2	(..)	4384	1115	1.6%	8.3
62.00	160	39	10	68	12	96.3	3.6	(..)	(..)	3335	837	5.2%	13.1
64.20	159	34	9	0	9	97.8	1.9	0.2	0.1	3590	NS	3.8%	7.5
82.00	159	27	7	0	7	99.1	0.7	0.1	(..)	3699	1028	2.9%	11.7
73.10	158	28	3	0	3	99.1	0.6	0.1	0.2	4676	1539	1.0%	7.4
69.00	155	38	10	0	10	99.5	0.2	0.2	0.1	3401	1031	3.1%	11.4
81.20	154	28	10	-	12	99.8	0.1	(..)	(..)	3491	NS	1.0%	5.4
87.21	154	34	7	0	7	97.1	2.6	0.1	0.1	3640	1274	5.4%	9.8
75.20	153	40	6	0	6	94.7	3.4	1.6	0.3	3394	NS	13.6%	22.6

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

BROOKLYN - Part C

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 §
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
90.10	150	52	12	7	13	98.5	1.3	0.1	0.1	3342	625	29.4%	32.5
81.10	145	33	16	0	16	99.7	0.1	0.1	(..)	3576	NS	2.3%	9.9
71.10	144	31	5	0	5	99.7	0.1	(..)	0.1	3939	NS	1.5%	10.4
85.21	142	19	5	1	8	99.7	0.2	0.1	(..)	3801	NS	0.6%	15.1
50.10	141	40	14	1	15	96.8	3.1	0.1	(..)	3940	1250	1.8%	11.5
68.00	141	27	8	1	8	99.6	0.2	0.1	0.1	3977	1338	2.5%	3.8
86.20	139	31	5	1	6	99.1	0.5	0.3	(..)	3488	NS	5.0%	10.4
58.20	135	26	8	1	10	99.5	0.4	(..)	(..)	3516	829	1.2%	6.0
58.10	135	31	2	1	4	99.6	0.3	(..)	0.1	3960	1182	0.8%	4.3
78.20	133	27	5	0	5	99.8	0.1	(..)	0.1	4110	NS	2.3%	7.1
80.20	130	21	0	0	0	99.8	(..)	0.1	0.1	3587	NS	3.4%	10.3
50.20	127	25	4	344	8	98.7	1.1	(..)	0.1	3721	620	1.1%	11.5
84.00	127	31	7	1	8	99.3	0.6	(..)	(..)	4049	1094	2.4%	12.4
88.10	126	26	9	1	10	99.4	0.3	0.1	0.1	5018	1118	1.2%	7.7
55.10	123	19	5	0	5	99.0	0.8	0.1	(..)	4301	1476	1.1%	6.7
86.10	117	22	7	0	7	99.6	0.1	0.2	0.1	3552	NS	2.1%	12.9
87.22	113	39	12	0	12	99.3	0.5	0.2	(..)	4313	NS	0.9%	9.8
83.00	111	26	5	0	5	99.5	0.2	0.2	0.1	3954	880	1.3%	10.1
85.10	106	21	6	0	6	99.3	0.3	0.2	0.1	4106	962	2.4%	10.9
73.20	105	21	5	0	5	99.5	0.3	(..)	0.1	4453	1222	1.1%	8.1
74.20	104	30	6	0	6	99.4	0.4	0.1	(..)	4520	NS	1.5%	7.7
71.20	100	20	8	0	8	99.2	0.5	0.1	0.2	4328	1018	0.8%	10.4
87.10	96	20	3	0	3	99.6	0.2	0.1	0.1	4289	1111	1.4%	7.1
72.20	92	18	4	0	4	99.1	0.7	0.1	(..)	4798	1513	1.0%	8.3
85.22	86	27	5	0	5	99.7	0.1	0.1	0.1	3701	NS	1.2%	15.1
91.20	59	19	3	0	3	98.8	0.9	0.2	0.1	4075	1636	2.3%	6.5
92.00	0	0	0	0	0	97.4	0.6	0.6	1.4	NS	1909	0%	(a)
93.00	0	0	0	0	0	97.3	0.8	1.5	0.4	NS	NS	0%	(b)
BROOKLYN 278	73	73	17	85	23	90.8	7.5	1.5	0.2	3447	1280	8.4%	20.9

*Boundaries according to 1940 revision of health area map. ..Data not available for health area. -Rate not computed. †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. §Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 27.10 (27.20), 50.10 (50.20), 79.10 (79.20), 85.21 (85.22), 87.21 (87.22), 88.21 (88.22), 90.10 (90.20), 91.10 (91.20). NS = not stated. (a)Ft. Hamilton. (b)U.S. Navy Yard. Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS 1/
NEW YORK CITY, 1949-1951

QUEENS - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Percent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 §
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Other	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
34.00	547	138	30	34	32	47.8	51.4	0.6	0.2	3006	1321	8.6%	44.3
7.20	435	87	28	66	29	93.6	4.8	1.5	0.1	2951	1300	7.0%	26.0
12.00	402	78	17	134	25	92.2	7.1	0.4	0.3	3955	1500	8.9%	19.4
22.00	397	69	27	0	27	99.8	(..)	0.1	(..)	3564	1563	2.0%	14.0
35.10	383	109	14	56	30	62.2	37.1	0.5	0.2	3807	NS	3.4%	35.6
14.10	341	73	20	0	20	99.5	0.1	0.4	(..)	3928	2300	3.4%	8.6
24.00	338	79	22	0	22	99.8	0.1	0.1	(..)	3860	1239	1.8%	9.8
6.10	336	104	13	51	22	74.8	24.6	0.4	0.2	3672	1359	3.8%	17.1
2.10	334	59	16	0	16	99.7	0.1	0.1	0.1	3822	1089	13.7%	14.9
33.00	332	69	9	66	22	76.7	22.4	0.7	0.1	3450	1310	4.8%	32.8
16.00	331	76	27	0	27	99.8	(..)	0.1	0.1	3451	955	3.4%	15.3
11.00	327	70	14	77	24	83.4	16.1	0.3	0.2	3415	1463	3.4%	13.2
7.10	318	65	14	0	14	99.0	0.5	0.3	0.2	3528	1882	4.8%	26.0
21.11	316	62	20	0	20	98.7	1.1	0.1	0.1	4753	NS	1.2%	10.4
13.20	313	57	12	~	13	98.1	1.4	0.4	0.1	4295	1806	1.9%	15.9
28.10	311	64	23	0	22	99.1	0.2	0.5	0.2	4255	1819	5.9%	16.7
9.10	311	63	16	0	16	99.6	0.1	0.2	0.1	3876	2165	1.0%	23.1
26.00	307	69	16	0	16	99.4	0.3	0.3	(..)	4169	1250	2.4%	13.5
14.20	302	66	22	0	22	99.4	0.1	0.4	0.1	4387	2250	1.3%	12.5
36.11	294	49	15	0	15	99.8	0.1	0.1	(..)	3905	NS	4.2%	31.1
10.10	291	58	19	0	19	99.5	0.2	0.2	0.1	4661	2268	0.7%	12.4
4.00	282	42	18	0	18	99.5	0.1	0.3	0.1	3614	1760	2.7%	16.3
31.00	267	52	20	~	21	99.4	0.4	0.1	(..)	3954	1307	2.5%	14.7
18.21	265	51	11	0	11	99.4	0.1	0.4	0.1	3800	NS	4.0%	12.8
37.00	265	72	13	185	26	92.2	7.1	0.5	0.2	3583	1198	36.2%	32.0
9.20	262	63	24	0	23	99.3	0.1	0.5	0.1	4136	2093	2.9%	23.1
8.00	262	68	15	~	16	99.3	0.1	0.4	0.1	4049	2286	1.7%	14.1
5.00	262	66	18	0	18	98.9	0.8	0.2	0.1	3799	1789	1.7%	18.3
3.00	260	54	25	0	25	98.7	0.7	0.4	0.1	3491	1990	7.2%	27.1
23.00	259	52	17	~	18	99.9	(..)	(..)	0.1	3659	1375	2.2%	21.4
10.20	258	52	16	0	16	99.4	0.1	0.4	0.1	4572	2201	2.1%	12.4
13.10	251	53	11	0	11	99.3	0.2	0.3	0.2	4926	1371	1.9%	9.8
25.00	244	61	28	0	28	99.9	0.1	(..)	(..)	3942	1242	2.7%	14.4
30.00	243	46	16	0	16	99.6	0.1	0.2	0.1	3692	962	4.3%	13.0
32.00	238	59	13	0	13	99.5	0.2	0.3	(..)	3862	NS	2.3%	16.4

1/In decreasing order of tuberculosis prevalence rates.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS
NEW YORK CITY, 1949-1951

QUEENS - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 §
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
27.00	236	52	14	~	15	99.4	0.1	0.4	0.1	4297	1545	2.4%	24.1
28.20	234	46	8	0	8	99.4	0.2	0.3	0.1	4492	1932	1.4%	16.3
1.20	231	61	13	0	12	99.2	0.1	0.4	0.3	3850	1866	2.7%	11.6
29.10	230	71	15	0	15	99.6	(..)	0.1	0.2	4375	1292	0.9%	8.5
1.10	218	48	6	0	6	99.6	(..)	0.3	0.1	3750	1725	1.7%	9.8
17.00	214	55	13	0	13	99.7	0.1	0.1	0.1	3783	1400	4.9%	10.9
6.20	213	42	9	0	9	96.5	2.5	0.8	0.2	4120	2183	1.2%	12.7
18.10	206	40	19	0	19	99.8	0.1	(..)	0.1	4120	1719	2.4%	5.7
35.20	201	53	18	0	18	99.8	(..)	0.1	0.1	4463	1125	1.0%	7.0
38.00	196	61	13	~	14	93.8	6.1	0.1	(..)	3918	1250	26.8%	26.7
35.31	191	34	6	0	6	99.4	0.2	0.3	0.1	4626	NS	1.2%	9.3
15.00	187	61	5	111	8	96.6	2.8	0.5	0.1	3422	NS	6.5%	14.5
29.20	180	36	12	0	12	99.7	(..)	0.2	(..)	4272	827	1.1%	8.5
2.20	180	48	8	0	8	99.6	0.2	0.2	(..)	4458	1350	2.7%	14.9
35.32	179	54	9	0	9	98.1	1.5	0.3	0.1	4031	1375	1.5%	9.3
20.00	172	38	8	0	8	97.7	1.3	0.2	0.8	NS	NS	1.0%	12.4
19.10	171	51	12	~	12	98.9	0.5	0.4	0.2	5583	2361	0.8%	7.4
19.20	166	37	10	0	10	99.2	0.6	0.1	0.1	5999	1750	0.8%	7.4
21.12	147	50	10	267	15	98.0	1.5	0.3	0.1	5042	1875	2.4%	10.4
18.22	133	41	18	~	20	99.5	0.1	0.2	0.2	4380	1125	1.9%	12.8
21.21	129	28	8	0	8	99.1	0.5	0.1	0.2	NS	NS	0.7%	9.5
36.12	129	29	9	~	11	99.5	(..)	0.4	(..)	3426	NS	10.7%	31.1
36.20	128	22	8	0	8	99.3	0.2	0.4	0.1	3923	NS	4.6%	19.8
21.22	127	31	8	0	8	98.5	0.9	0.4	0.2	NS	NS	1.1%	9.5
39.00	0	0	0	0	0	88.7	11.1	0.2	0	NS	NS	9.6%	..
QUEENS	252	57	16	68	18	96.2	3.3	0.3	0.1	4121	1613	4.7%	16.3

*Boundaries according to 1940 revision of health area map. ..Data not available for health area. ~Rate not computed. †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. §Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 2.10 (2.20), 7.10 (7.20), 9.10 (9.20), 18.21 (18.22), 19.10 (19.20), 21.11 (21.12), 21.21 (21.22), 29.10 (29.20), 35.31 (35.32), 36.11 (36.12). NS = Not stated. Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH AREAS 1/
NEW YORK CITY, 1949-1951

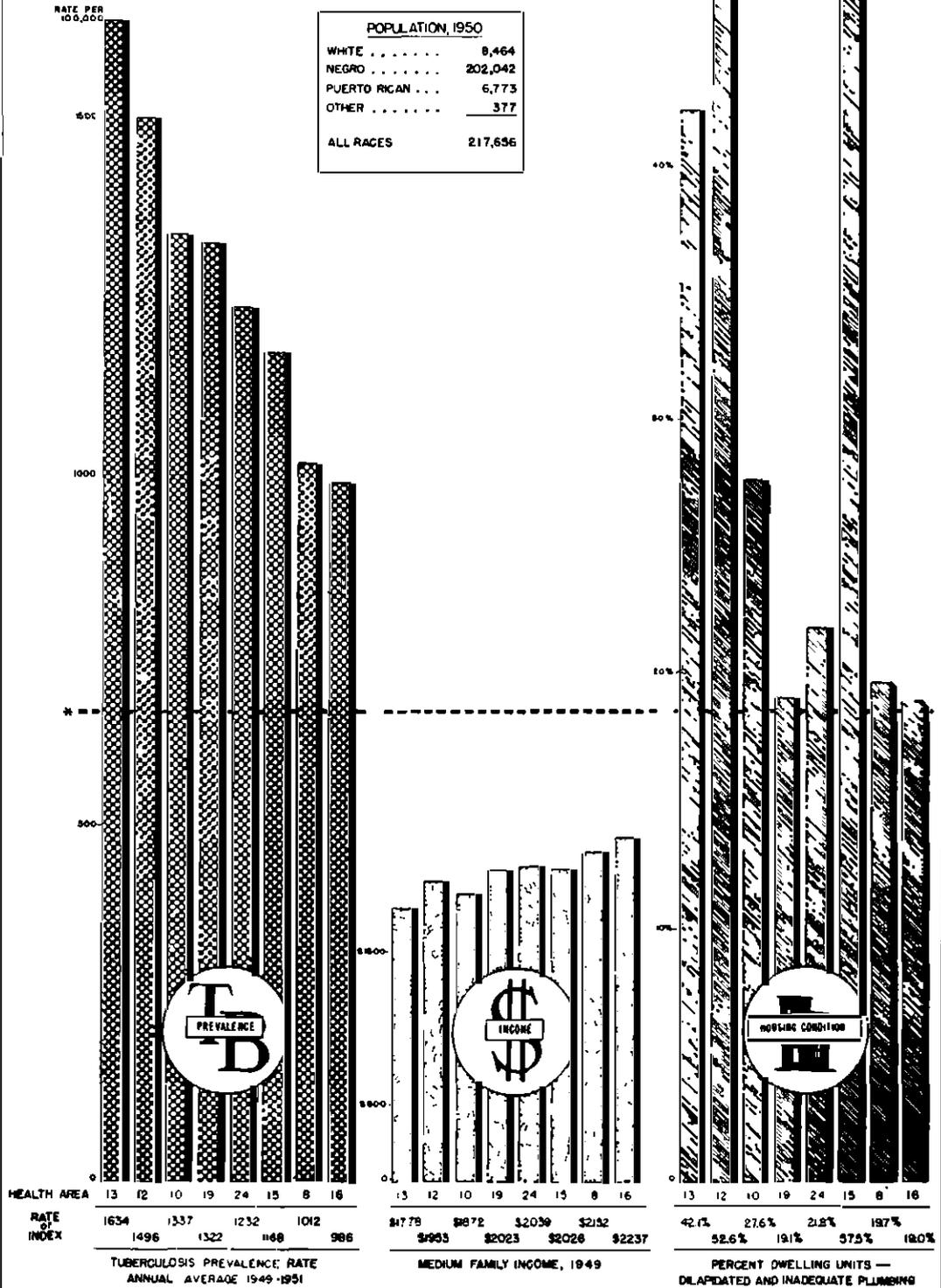
RICHMOND

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vid- ual \$		
			Wh.	Non- Wh.	To- tal								
6.00	376	89	14	0	13	94.7	3.9	1.2	0.2	4211	1363	3.1%	10.7
8.00	253	58	19	~	21	97.6	2.0	0.3	(..)	3690	621	12.0%	21.4
3.00	228	45	19	53	21	94.2	5.6	0.2	(..)	4126	1182	6.3%	32.1
9.20	227	61	18	0	17	99.6	0.1	0.1	0.1	4112	1306	8.2%	15.6
4.00	215	63	27	134	31	96.4	3.5	(..)	0.1	4058	1463	8.2%	20.6
9.10	199	55	3	~	5	98.9	0.6	0.5	(..)	3509	NS	16.5%	15.6
2.00	187	39	13	0	12	97.2	2.4	0.3	0.1	3654	1250	9.0%	24.1
10.00	184	0	42	0	41	97.6	1.8	0.2	0.4	NS	NS	18.0%	..
7.00	173	42	26	0	25	98.6	0.9	0.3	0.2	3447	870	6.4%	14.4
5.00	158	51	18	0	17	95.7	3.6	0.3	0.3	3679	1133	12.3%	37.4
1.00	115	40	52	~	53	95.9	3.5	0.5	0.1	3715	NS	11.1%	5.7
RICHMOND	222	56	33	101	35	96.7	2.8	0.4	0.1	3845	1277	9.2%	20.1
NEW YORK CITY	369	101	23	96	30	87.3	9.2	3.1	0.4	3526	1482	9.6%	23.6

1/In decreasing order of tuberculosis prevalence rates. *Boundaries according to 1940 revision of health area map. ..Data not available for health area. ~Rate not computed. †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. ¶Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 9.10 (9.20). NS = Not stated. Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

Fig. 9

CENTRAL HARLEM INDICES OF TUBERCULOSIS, INCOME AND HOUSING



Note: Based on 1940 revision of health area map. **MANHATTAN AVERAGES**

Socio-Economic Conditions and Tuberculosis Prevalence in New York City, A. H. Lowell, New York Tuberculosis and Health Association

Prepared by Statistical Division, New York Tuberculosis and Health Association

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

MANHATTAN - Part A

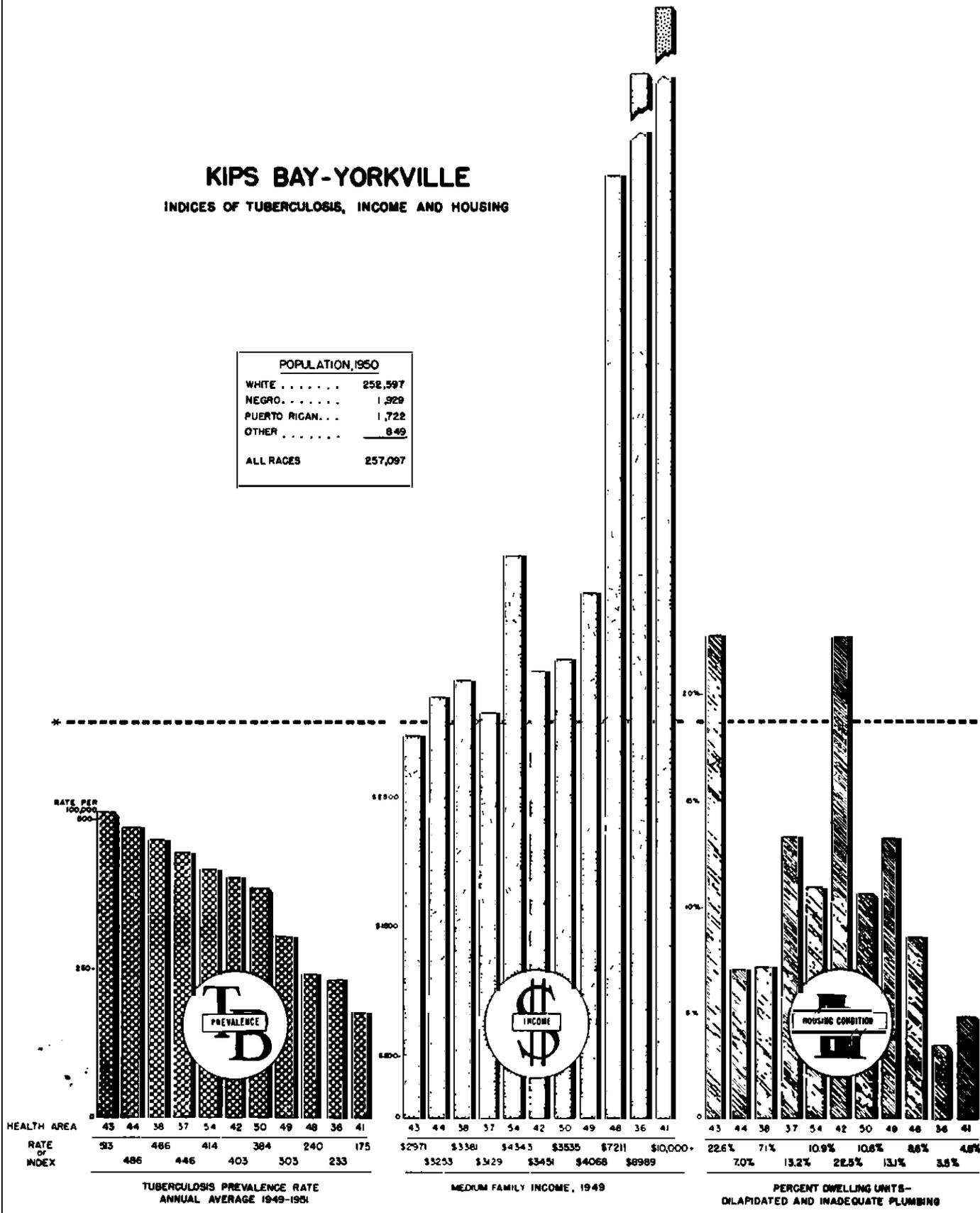
Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap-idated or Inadequate Plumbing‡	Juvenile Delin-quency Rate 1953 ¶
	Total Preva-lence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
CENTRAL HARLEM													
8.00	1012	308	794	90	93	0.4	99.2	0.3	0.1	2152	1152	19.7%	42.6
10.00	1337	404	532	131	132	0.4	99.3	0.2	0.1	1872	1179	27.6%	43.5
12.00	1496	471	0	143	143	0.3	99.4	0.1	0.1	1953	1139	52.6%	44.6
13.00	1634	500	~	150	150	0.7	98.8	0.3	0.1	1778	1001	42.1%	57.6
15.00	1168	395	157	105	105	1.3	97.6	0.8	0.3	2026	1321	57.5%	54.9
16.00	986	314	89	91	90	20.6	69.9	9.4	0.1	2237	1208	19.0%	50.3
19.00	1322	399	183	134	136	1.2	94.8	3.8	0.2	2023	1257	19.1%	68.5
24.00	1232	369	240	111	118	2.2	88.4	9.1	0.2	2039	1377	21.8%	50.9
	1255	389	128	118	119	3.9	92.8	3.1	0.2	..	..	31.3%	..
EAST HARLEM													
17.00	617	189	39	159	47	86.4	6.0	7.4	0.2	2623	855	13.6%	30.2
20.00	1029	327	55	75	66	14.0	46.4	39.3	0.3	2059	878	28.1%	44.5
21.00	642	210	23	235	30	72.9	2.7	24.2	0.2	2342	924	21.5%	47.4
22.00	377	102	28	~	29	89.0	0.8	10.1	0.1	2836	847	22.9%	33.3
25.00	1268	354	70	53	67	23.7	7.2	68.8	0.2	1880	772	30.3%	60.8
26.00	496	154	16	68	18	82.5	4.2	13.2	0.1	2591	837	28.8%	49.8
28.00	735	218	24	55	29	54.4	12.1	31.8	1.7	2853	1333	24.3%	30.3
29.00	678	200	25	121	35	63.8	7.8	27.7	0.6	2764	1350	16.0%	48.6
30.00	1120	393	38	93	61	32.1	33.4	34.0	0.5	1992	910	36.2%	84.0
33.00	519	123	23	162	28	91.9	3.2	4.3	0.6	3060	1301	19.2%	34.9
84.00	77	54	18	97	31	81.6	15.5	2.4	0.5	NS	NS	11.8%	..
	753	226	34	82	42	58.8	13.1	27.6	0.5	..	..	23.5%	..
KIPS BAY-YORKVILLE													
36.00	233	52	7	0	7	98.2	1.1	0.4	0.3	8989	1905	3.5%	7.1
37.00	446	104	28	0	28	98.8	0.4	0.7	0.1	3129	1636	13.2%	27.0
38.00	466	96	46	0	46	99.2	0.3	0.3	0.2	3381	1451	7.1%	42.0
41.00	175	47	10	0	10	98.3	1.0	0.5	0.2	10000+	1900	4.8%	3.6
42.00	403	95	31	0	31	98.9	0.4	0.5	0.2	3451	1743	22.5%	28.7
43.00	513	130	42	0	41	98.8	0.1	0.7	0.4	2971	1385	22.6%	34.1
44.00	486	92	37	0	37	98.7	0.2	0.8	0.2	3253	1683	7.0%	50.1
48.00	240	61	13	0	13	98.9	0.5	0.3	0.3	7211	2603	8.6%	12.9
49.00	303	82	15	~	17	98.2	0.5	0.6	0.7	4068	2205	13.1%	17.5
50.00	384	84	42	0	42	98.3	0.3	1.0	0.4	3535	2250	10.6%	22.0
54.00	414	116	25	~	26	97.6	0.2	1.7	0.5	4343	2891	10.9%	16.1
83.00	406	123	14	~	18	83.4	12.3	3.4	0.9	NS	1620	33.3%	..
	353	84	25	35	25	98.2	0.8	0.7	0.3	..	..	11.0%	..

Fig.10

KIPS BAY-YORKVILLE

INDICES OF TUBERCULOSIS, INCOME AND HOUSING

POPULATION, 1950	
WHITE	258,597
NEGRO	1,329
PUERTO RICAN	1,722
OTHER	849
ALL RACES	257,097



Note: Based on 1940 revision of health area map. Health area 82.00 (Welfare Island) not included.

Socio-Economic Conditions and Tuberculosis Prevalence in New York City, A. H. Lowell, New York Tuberculosis and Health Association.

* MANHATTAN AVERAGES

Prepared by Statistical Division
New York Tuberculosis and Health Association

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

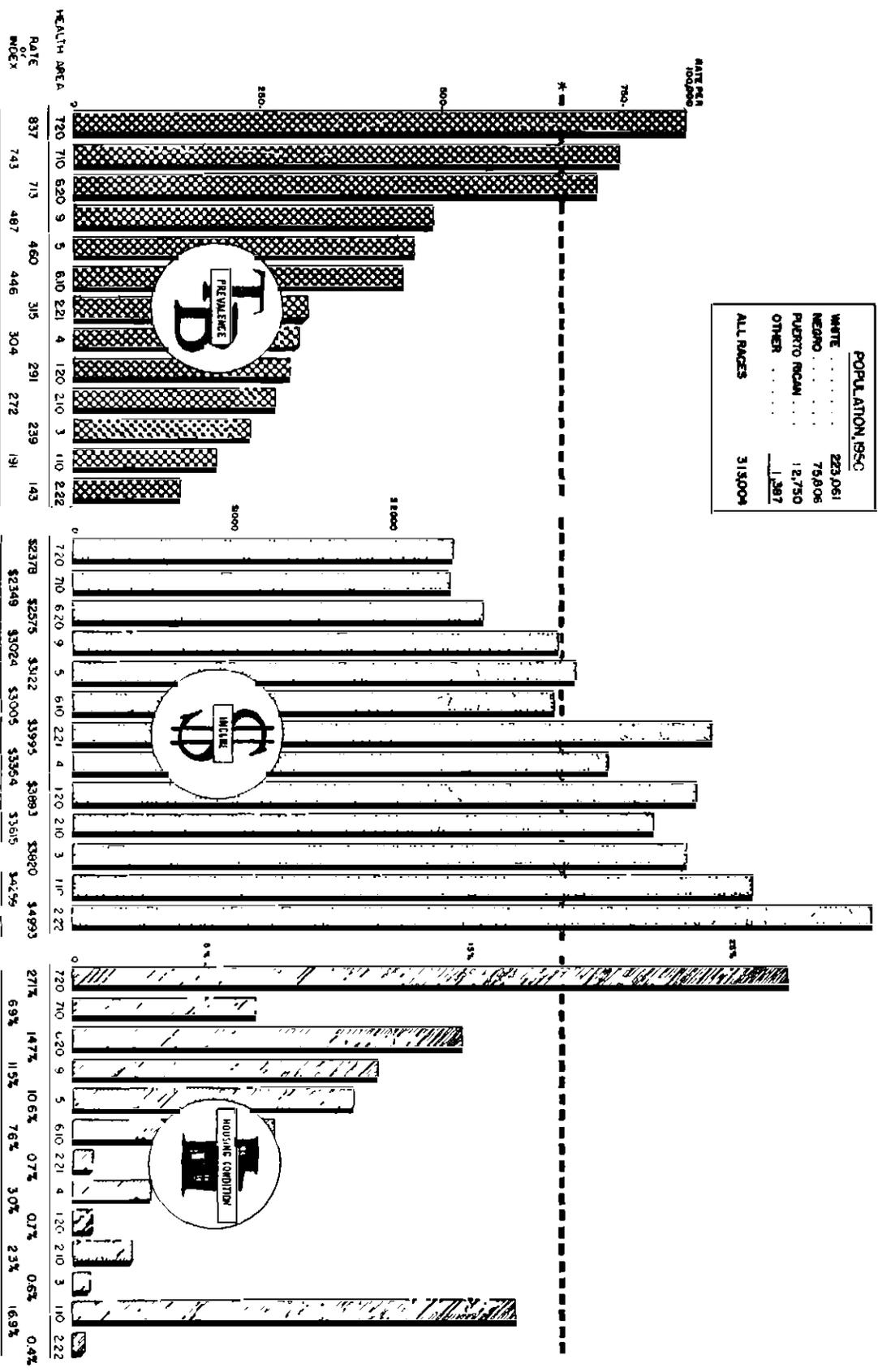
MANHATTAN - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap-idated or Inadequate Plumbing‡	Juvenile Delin-quency Rate 1953 ¶
	Total Preva-lence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
LOWER EAST SIDE													
53.00	618	209	49	0	48	95.6	0.2	3.4	0.8	3850	2377	7.0%	33.0
58.00	1016	244	78	0	77	90.7	0.1	7.8	1.3	2831	1521	36.6%	27.0
59.00	904	282	76	~	77	94.4	0.4	4.6	0.6	3370	1896	7.6%	36.6
60.00	790	219	7	0	7	98.5	0.8	0.4	0.2	5722	492	0.2%	4.8
62.00	861	226	65	141	66	89.4	0.5	8.8	1.3	2754	1277	29.9%	21.2
63.00	561	136	18	122	23	91.4	4.5	3.5	0.6	2623	942	24.9%	26.2
65.00	675	194	46	~	47	95.6	1.1	2.1	1.2	2846	774	28.5%	46.1
66.00	674	160	36	~	39	98.3	0.3	1.2	0.2	2922	988	26.6%	23.9
67.00	571	139	48	619	54	95.5	0.9	3.3	0.2	2678	810	25.6%	24.9
70.00(a)	4675	1819	310	201	303	87.0	2.2	8.7	2.1	..	..	29.9%	..
71.00(a)	676	169	34	323	45	89.7	1.2	6.4	2.6	..	..	29.8%	..
72.00	534	176	44	253	49	90.0	1.4	7.9	0.6	2438	733	41.2%	21.1
73.00	257	91	19	~	18	77.6	15.6	6.3	0.5	2545	872	18.3%	17.3
74.00	1087	382	70	282	104	76.1	2.0	8.0	13.9	2479	957	36.3%	31.7
75.00(a)	1271	491	167	299	184	79.1	0.9	8.4	11.5	..	..	38.6%	..
76.00	578	199	29	303	41	86.1	4.1	9.5	0.3	2607	467	33.6%	12.9
78.00	778	249	77	338	96	91.3	1.1	1.8	5.8	2918	1070	31.6%	24.3
79.00(a)	614	198	43	110	47	80.5	3.2	14.7	1.6	..	..	34.7%	..
80.00	437	156	13	278	25	88.8	4.1	6.8	0.2	768	980	14.8%	25.3
	865	272	58	201	64	90.4	2.0	5.5	2.0	..	..	24.0%	..
LOWER WEST SIDE													
39.00	359	118	12	51	16	84.9	9.8	4.6	0.7	3215	1888	21.7%	31.2
40.00(b)	441	130	23	187	26	92.7	0.8	5.4	1.1	3766	1963	9.9%	24.2
45.00	615	134	57	~	62	94.6	0.3	5.1	0	2828	1445	37.4%	37.3
46.00	630	176	42	88	44	89.4	3.6	6.3	0.7	3356	1784	20.4%	37.9
47.00	576	176	37	200	45	90.6	3.7	4.6	1.1	3272	1825	20.6%	45.7
51.00(a)	915	282	103	547	110	93.6	0.6	4.8	1.0	..	..	31.8%	..
52.00	873	288	63	445	72	89.7	1.6	8.2	0.5	3355	2065	23.9%	57.1
55.00	774	224	46	0	45	87.6	2.2	9.8	0.4	2944	1535	34.0%	51.5
56.00	775	235	55	112	56	86.7	1.0	11.7	0.6	2985	1984	24.0%	58.3
57.00	834	282	86	~	86	97.9	1.1	0.7	0.3	4791	2457	15.1%	19.3
61.00	509	156	31	183	34	96.8	1.6	1.1	0.4	4133	2450	6.9%	24.9
64.00	332	67	15	0	14	98.4	0.8	0.5	0.3	3334	2338	21.4%	24.9
68.00	486	138	36	0	36	98.7	0.2	1.0	0.1	2910	855	35.6%	23.5
69.00(a)	1249	459	145	352	154	92.1	0.3	3.5	4.0	..	..	35.9%	..
77.00	2392	765	164	315	210	67.3	8.0	2.4	22.3	2637	967	38.9%	30.3
81.00	50	0	0	0	0	95.6	2.0	0.9	1.5	NS	1220	1.8%	..
82.00	278	221	0	0	0	94.2	3.0	0.1	2.7	NS	NS	0%	..
	736	230	54	210	61	90.7	2.5	5.0	1.8	..	..	21.8%	..

WASHINGTON HEIGHTS

INDICES OF TUBERCULOSIS, INCOME AND HOUSING

POPULATION, 1950	
WHITE	223,061
NEGRO	75,808
PUERTO RICAN	12,750
OTHER	1,387
ALL RACES	313,004



Based on 1949 prevalence of health area, and U.S. Bureau of the Census.

Source: Census and Dept. of Health, New York State, and U.S. Bureau of the Census.

MANHATTAN AREAS

Prepared by Statistical Division, New York State Department of Health

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS AND HEALTH AREAS, NEW YORK CITY, 1949-1951

MANHATTAN - Part C

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap-idated or Inadequate Plumbing‡	Juvenile Delin-quency Rate 1953 ¶
	Total Preva-lence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
RIVERSIDE													
11.00	734	269	38	114	83	25.6	58.3	15.8	0.3	2541	1139	13.0%	43.4
14.00	745	228	35	68	48	48.6	34.9	11.7	4.8	2924	1093	21.4%	29.9
18.00	532	182	16	93	53	51.5	46.4	0.7	1.4	4447	1257	34.0%	51.5
23.10	381	128	14	~	15	92.9	0.7	4.8	1.6	3615	1537	9.4%	34.6
23.20	677	226	28	74	42	52.7	27.5	18.6	1.1	2769	1494	31.3%	34.6
27.10	264	69	16	~	19	93.3	0.4	5.7	0.6	4333	1829	6.0%	39.7
27.20	655	198	46	84	51	66.2	11.1	21.9	0.8	2674	1463	13.1%	39.7
31.10	289	110	27	~	28	96.4	0.5	2.6	0.5	4250	1879	20.6%	12.6
31.20	236	81	7	266	9	97.5	0.6	1.5	0.4	5496	2048	13.0%	12.6
32.10	425	104	30	77	34	85.6	8.0	5.7	0.7	3277	1764	16.6%	67.5
32.20	372	110	25	0	24	93.6	0.7	5.3	0.4	3533	1986	23.0%	67.5
34.00	229	70	10	0	10	97.1	0.9	1.6	0.3	5384	1778	18.0%	14.5
35.00	339	94	21	0	21	94.8	0.6	3.9	0.7	3769	1875	19.3%	35.0
	449	144	23	91	34	76.7	14.8	7.4	1.0	..	..	18.6%	..
WASHINGTON HEIGHTS													
1.10	191	29	26	0	26	99.2	0.2	0.5	0.1	4259	1800	0.6%	16.9
1.20	291	57	21	~	22	99.2	0.1	0.4	0.3	3893	1750	0.7%	16.9
2.10	272	57	7	0	7	96.5	0.5	2.8	0.2	3615	1286	2.3%	23.8
2.21	315	57	13	0	13	98.3	0.1	0.9	0.7	3995	1694	0.7%	9.0
2.22	143	52	9	0	9	99.5	0.1	0.3	0.1	4993	2103	0.4%	9.0
3.00	239	62	9	0	9	96.6	0.7	2.5	0.2	3820	1686	0.6%	17.4
4.00	304	80	19	58	21	89.4	3.3	7.1	0.2	3354	1513	3.0%	31.5
5.00	460	129	18	74	36	63.5	31.2	5.1	0.2	3122	1335	10.6%	27.6
6.10	446	138	20	43	30	53.1	43.0	3.2	0.7	3005	1400	7.6%	46.8
6.20	713	203	37	39	38	32.5	58.9	7.7	0.9	2575	1381	14.7%	46.8
7.10	743	227	0	49	48	0.7	98.8	0.3	0.1	2349	1574	6.9%	80.3
7.20	837	289	0	88	86	1.5	97.6	0.6	0.3	2378	1540	27.1%	80.3
9.00	487	154	8	62	23	57.0	25.7	15.7	1.5	3024	1186	11.5%	41.2
	404	113	15	62	27	71.3	24.2	4.1	0.4	..	..	6.0%	..
MANHATTAN													
(x)	665	202	37	106	51	73.0	18.9	7.1	1.0	3073	1595	18.5%	34.5
(y)			42	112	56								

*Boundaries according to 1940 revision of health area map. ~ = Rate not computed. ..Data not available for health area or health center district. NS = Not stated. †Per 100,000 population. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. ¶Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 1.10 (1.20), 2.21 (2.22), 6.10 (6.20), 7.10 (7.20), 23.10 (23.20), 27.10 (27.20), 31.10 (31.20), 32.10 (32.20). Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Sum of percentages do not always add to 100% due to rounding. (a)Health areas combined 65(70), 66(71), 74(75), 78(79), 45(51), 68(69). (b)On Jan. 1, 1950 health area 40 transferred from Riverside to Lower West Side Health Center District. (x)Residents. (y)Including non-residents and persons whose address was unknown. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

RIVERSIDE

INDICES OF TUBERCULOSIS, INCOME AND HOUSING

POPULATION 1950	
WHITE	248,792
NEGRO	47,947
PUERTO RICAN	24,133
OTHER	3,289
ALL RACES	324,161



Map based on 1949-1950 Division of Health Area Maps, Bureau of Department of Health, City of New York and U.S. Bureau of the Census.

Socio-economic Conditions and Tuberculosis Prevalence in New York City, A. H. Lounsbury, New York Tuberculosis and Health Association.

* ADMINISTRATIVE AVERAGES

Prepared by Municipal Office, Bureau of Tuberculosis and Health Administration

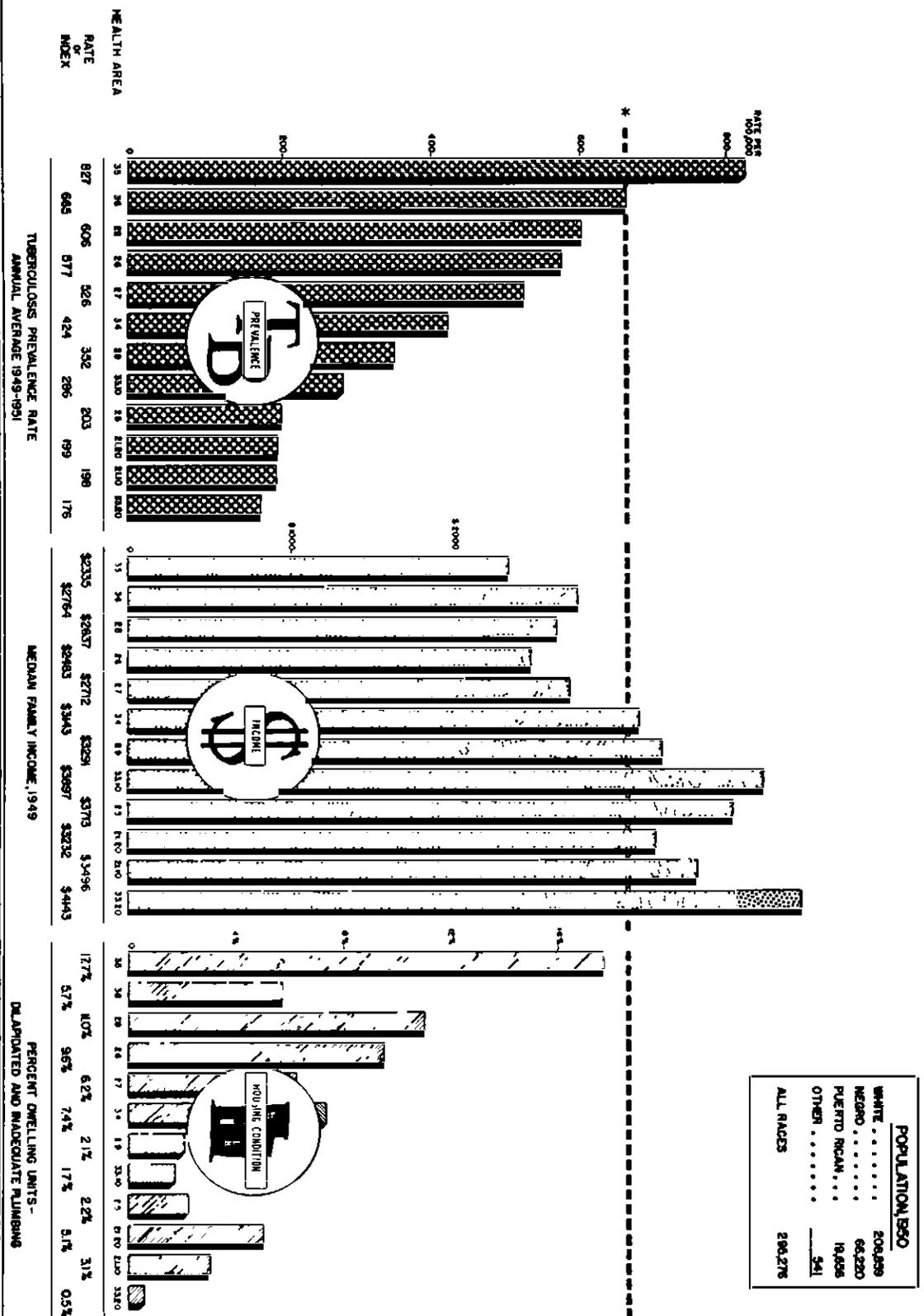
TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS AND HEALTH AREAS, NEW YORK CITY, 1949-1951

BRONX - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
FORDHAM-RIVERDALE													
1.00	138	35	~	0	~	98.3	0.6	0.3	0.8	5247	520	0.5%	19.9
2.00	288	49	17	0	16	98.1	1.1	0.6	0.2	4484	1161	0.9%	20.2
3.10	238	45	16	0	16	99.4	0.2	0.3	0.1	4178	1432	1.8%	25.9
3.20	151	45	12	0	12	99.5	0.3	0.1	0.1	4401	1828	0.9%	25.9
4.10	175	36	13	0	13	99.0	0.8	0.1	0.1	4234	1360	1.9%	12.9
4.20	212	53	13	0	13	99.7	0.2	0.1	(.)	4085	1839	3.1%	21.9
9.00	218	41	11	0	11	99.6	0.1	0.2	(.)	4148	1644	1.1%	16.9
10.00	236	49	19	0	19	98.7	0.4	0.7	0.1	3396	638	1.4%	31.9
11.00	198	38	11	~	13	99.2	0.4	0.3	0.1	3269	528	3.0%	25.5
	206	44	13	~	13	99.2	0.4	0.3	0.1	..	..	1.7%	..
MORRISANIA													
21.10	198	37	6	0	6	98.6	0.9	0.4	0.1	3496	1119	3.1%	14.2
21.20	199	47	13	109	21	87.2	8.1	4.3	0.4	3232	909	5.1%	14.2
25.00	203	47	6	0	6	98.1	1.3	0.6	(.)	3713	1118	2.2%	11.0
26.00	577	152	18	79	53	38.3	57.0	4.6	0.1	2483	1147	9.6%	52.1
27.00	526	147	25	51	37	46.9	46.6	5.9	0.6	2712	1344	6.2%	39.6
28.00	606	171	26	82	50	42.1	42.9	14.8	0.2	2637	1244	11.0%	59.3
29.00	352	83	21	~	22	88.5	2.2	9.1	0.1	3291	1280	2.1%	26.2
33.10	286	67	11	~	12	99.3	0.2	0.5	(.)	3897	1181	1.7%	17.9
33.20	176	39	6	149	8	98.5	1.2	0.3	(.)	4143	1207	0.5%	10.1
34.00	424	115	17	78	26	80.7	15.2	4.0	0.1	3143	1250	7.4%	49.3
35.00	827	232	90	73	75	7.5	84.8	7.4	0.2	2335	1281	17.7%	39.1
36.00	665	179	36	85	45	50.7	14.8	34.2	0.3	2764	1268	5.7%	46.1
	411	107	16	73	29	70.7	22.4	6.7	0.2	..	..	5.4%	..
MOTT HAVEN													
37.00	612	154	27	50	33	50.9	23.8	25.1	0.2	2693	975	1.7%	35.9
38.00	251	62	18	~	19	91.8	6.4	1.7	0.1	3505	1157	7.4%	32.5
39.00	322	85	29	0	29	98.3	0.6	1.0	(.)	3292	1083	20.8%	29.5
40.00	599	163	39	50	40	53.9	14.6	31.4	0.1	2739	1163	6.8%	45.7
41.00	615	137	23	135	30	66.4	4.8	28.6	0.2	3107	1144	7.2%	28.9
42.00	477	143	16	81	21	68.1	7.6	24.0	0.3	2923	987	9.4%	31.9
43.00	225	50	11	~	13	93.7	2.0	4.2	(.)	3437	1000	0.8%	16.9
44.00	442	103	32	171	35	94.0	1.7	4.2	0.1	3092	942	10.3%	57.6
45.00	612	136	47	0	47	93.7	0.4	5.8	0.1	3368	1610	13.0%	80.3
46.00	490	128	40	0	40	81.7	0.3	17.7	0.3	3013	1382	19.7%	65.1
47.00	497	159	39	83	41	82.7	3.4	13.7	0.1	3138	1243	48.7%	53.6
48.00	142	118	~	0	~	55.7	34.6	6.3	3.4	NS	NS	0%	..
	480	125	29	60	32	77.0	7.0	15.8	0.2	..	..	13.3%	..

MORRISANNA

INDEXES OF TUBERCULOSIS, INCOME AND HOUSING



Notes: Based on 1949 prevalence of health area data. Source: Department of Health, City of New York and U.S. Bureau of the Census.

Source: Economic Council of New York and Tuberculosis Prevalence in New York City, A. H. Lamont, New York Tuberculosis and Health Association.

* SANITARIUM AREAS

Prepared by Statistical Section, New York Tuberculosis and Health Association.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS AND HEALTH AREAS, NEW YORK CITY, 1949-1951

BRONX - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 ¶
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
PELHAM BAY													
5.10	225	50	11	0	11	99.3	0.3	0.2	0.1	4094	1477	1.8%	27.1
5.20	218	47	14	0	14	99.3	0.4	0.2	0.1	3811	1383	2.3%	23.9
6.10	202	41	13	~	14	95.6	4.1	0.3	(..)	3752	1294	4.2%	15.5
6.20	151	32	7	~	8	92.9	6.7	0.3	0.1	3963	NS	1.7%	16.8
7.10	263	79	~	0	~	98.1	1.4	0.4	0.1	3802	NS	6.8%	28.4
7.20	267	112	17	0	17	99.1	0.5	0.2	0.1	4222	NS	13.5%	28.4
8.10	167	27	6	0	6	99.2	0.5	0.2	0.1	3814	1183	1.0%	15.2
8.20	126	26	3	~	4	97.4	2.1	0.5	(..)	3985	NS	1.6%	20.3
	185	40	9	30	10	97.4	2.2	0.3	0.1	..	..	2.6%	..
TREMONT													
15.10	216	35	14	0	14	99.5	0.2	0.2	0.1	4262	960	2.0%	12.2
15.20	280	57	16	0	16	99.2	0.3	0.3	0.2	3782	1224	1.4%	12.2
16.00	184	42	5	~	6	99.4	0.2	0.3	0.1	3991	1338	1.1%	16.3
17.00	237	71	17	0	17	98.5	0.4	1.0	0.1	3769	1180	3.6%	29.4
18.00	322	71	22	0	21	94.6	1.5	3.7	0.2	2974	757	9.6%	37.7
19.00	248	55	15	294	17	98.6	0.7	0.6	0.1	3326	963	1.6%	20.0
20.00	191	50	13	0	13	97.6	1.3	1.0	0.1	3473	881	3.6%	15.6
22.10	177	43	10	0	10	99.1	0.6	0.3	(..)	3963	1119	2.5%	17.3
22.20	172	44	11	0	10	99.4	0.3	0.2	0.1	3765	1170	3.1%	19.3
23.10	134	27	14	0	14	98.9	0.5	0.4	0.2	4274	1688	2.0%	6.1
23.20	117	22	3	0	3	99.6	0.3	0.1	(..)	4125	1135	0.6%	6.1
24.00	422	131	7	32	14	62.3	27.3	10.2	0.1	2498	956	14.4%	42.9
	215	52	12	38	13	96.5	2.2	1.2	0.1	..	..	3.3%	..
WESTCHESTER													
12.10	137	27	5	0	5	99.4	0.2	0.2	0.1	4203	1521	1.3%	12.0
12.20	133	27	6	0	6	98.3	1.2	0.4	0.1	3676	880	2.8%	12.0
13.10	166	33	5	0	5	99.8	0.1	0.1	(..)	4404	1810	0.7%	7.5
13.20	246	74	14	0	14	99.2	0.5	0.2	(..)	3630	NS	4.0%	19.4
14.10	217	40	~	0	~	99.7	0.2	(..)	(..)	4278	NS	3.4%	14.0
14.20	202	36	10	0	10	99.8	(..)	0.1	(..)	3949	1391	2.0%	13.8
30.10	212	58	7	~	10	98.4	0.2	1.3	0.1	3855	1196	0.8%	18.0
30.20	137	30	12	0	12	96.8	2.0	1.2	(..)	3755	1179	3.9%	10.2
30.30	406	78	21	0	20	99.2	0.3	0.5	(..)	3705	NS	5.4%	19.2
31.00	216	48	12	0	12	95.9	2.4	1.7	(..)	3549	NS	2.1%	6.9
32.10	232	40	17	0	17	99.7	0.1	0.1	0.1	3680	NS	5.0%	15.8
32.20	248	47	10	0	10	99.5	0.1	0.2	0.2	3969	798	2.3%	15.3
	189	40	9	34	9	98.7	0.7	0.5	0.1	..	..	2.3%	..
BRONX													
(x)	288	70	15	65	18	89.1	6.5	4.3	0.1	3612	1173	4.7%	25.2
(y)			16	69	19								

*Boundaries according to 1940 revision of health area map. ~ = Rate not computed.
 ..Data not available for health area or health center district. NS = Not stated.
 †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units=dilapidated or no running water or no private bath, with running water, not dilapidated.
 ¶Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 3.10 (3.20), 7.10 (7.20), 12.10 (12.20), 15.10 (15.20), 21.10 (21.20), 23.10 (23.20). Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Sum of percentages do not always add to 100% due to rounding. (x)Residents. (y)Including non-residents and persons whose address was unknown. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

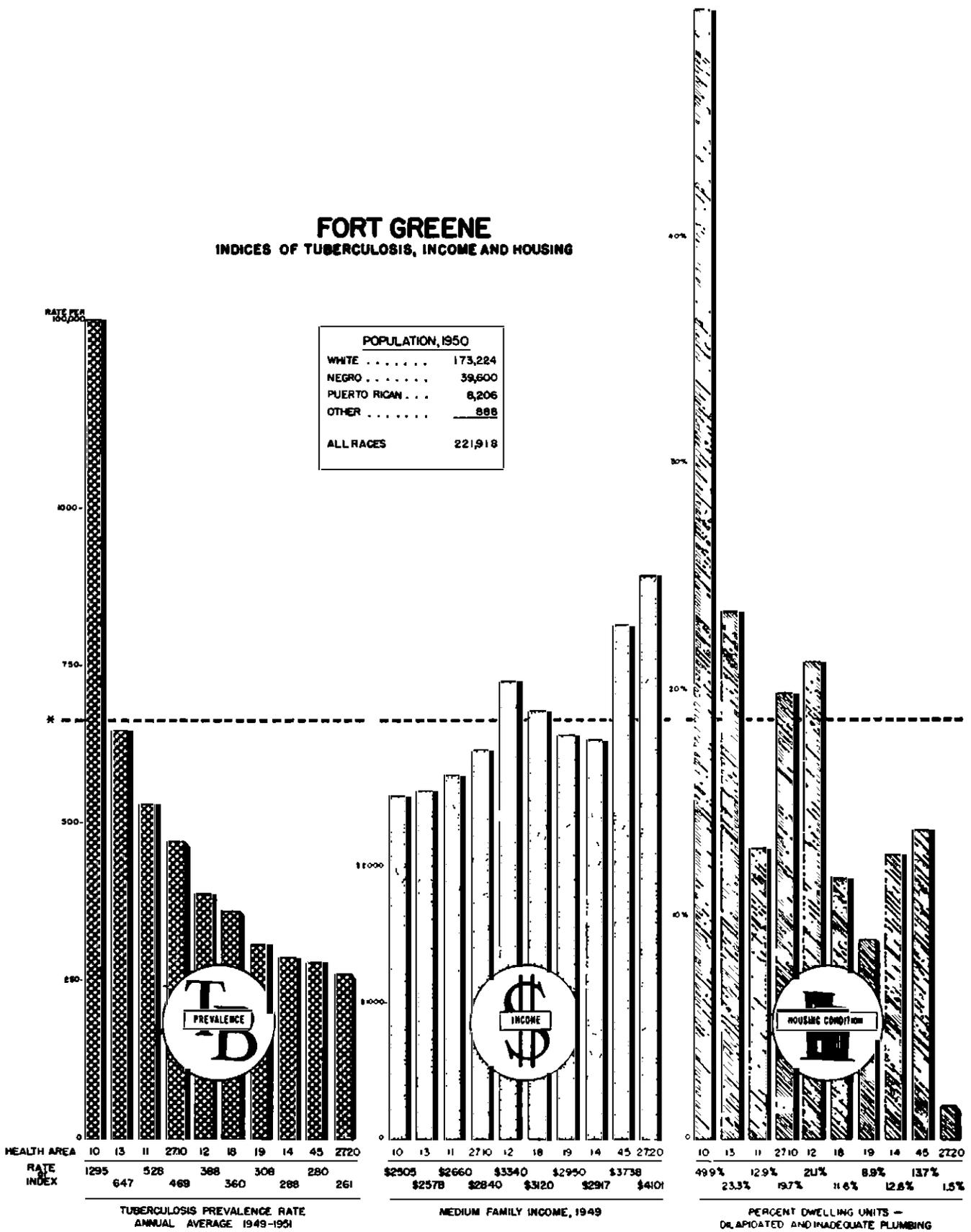
TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

BROOKLYN - Part A

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per- cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 §
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vid- ual \$		
			Wh.	Non- Wh.	To- tal								
BAY RIDGE													
76.00	316	64	18	0	18	99.7	0.1	0.1	0.1	4241	1913	1.6%	9.9
77.00	398	62	31	0	31	98.9	0.1	0.9	0.1	3445	1843	2.8%	16.9
78.10	255	52	17	~	18	99.7	0.1	0.1	0.1	4207	2184	1.8%	14.4
78.20	133	27	5	0	5	99.8	0.1	(..)	0.1	4110	NS	2.3%	7.1
79.10	238	42	5	0	5	99.8	0.1	0.1	(..)	4212	1458	1.4%	6.6
79.20	199	54	20	0	20	99.9	(..)	0.0	0.1	3933	1643	1.8%	6.6
80.10	197	31	11	0	11	99.8	0.0	0.2	(..)	3220	NS	4.5%	12.8
80.20	130	21	0	0	0	99.8	(..)	0.1	0.1	3587	NS	3.4%	10.3
81.10	145	33	16	0	16	99.7	0.1	0.1	(..)	3576	NS	2.3%	9.9
81.20	154	28	10	~	12	99.8	0.1	(..)	(..)	3491	NS	1.0%	5.4
82.00	159	27	7	0	7	99.1	0.7	0.1	(..)	3699	1028	2.9%	11.7
83.00	111	26	5	0	5	99.5	0.2	0.2	0.1	3954	880	1.3%	10.1
84.00	127	31	7	~	8	99.3	0.6	(..)	(..)	4049	1094	2.4%	12.4
92.00	0	0	0	0	0	97.4	0.6	0.6	1.4	NS	1909	0%	..
	198	39	12	104	12	99.5	0.2	0.2	0.1	..	..	2.2%	..
BEDFORD													
20.00	641	213	54	73	71	13.8	85.0	1.0	0.2	2463	1360	25.5%	64.3
21.00	539	177	41	50	47	36.2	62.5	1.1	0.2	2470	1129	19.2%	49.9
28.00	691	245	59	85	82	11.5	87.7	0.6	0.2	2338	1307	36.6%	63.4
29.00	336	104	29	73	39	77.8	21.8	0.3	0.1	3442	1727	10.3%	44.1
30.00	472	162	37	55	52	19.5	79.9	0.4	0.2	2590	1297	20.6%	35.9
36.00	619	225	10	101	70	34.4	65.1	0.3	0.2	2426	1115	26.8%	63.6
48.00	203	66	9	0	9	99.3	0.5	0.1	0.1	4007	803	2.9%	16.9
49.00	202	57	17	54	20	91.1	8.6	0.1	0.1	4099	1506	3.5%	20.4
50.10	141	40	14	~	15	96.8	3.1	0.1	(..)	3940	1250	1.8%	11.5
50.20	127	25	4	344	8	98.7	1.1	(..)	0.1	3721	620	1.1%	11.5
51.00	220	68	7	125	15	92.4	7.3	0.2	0.1	3115	799	3.3%	20.4
52.00	382	116	12	64	33	59.6	39.5	0.8	0.1	2616	915	9.8%	52.5
	389	128	19	73	40	59.6	39.9	0.4	0.1	..	..	13.3%	..
BROWNSVILLE													
56.00	220	34	5	143	10	96.5	3.1	0.1	0.3	3087	553	5.7%	15.4
57.00	477	142	22	168	54	77.8	21.6	0.5	0.1	2629	604	16.6%	34.5
58.10	135	31	2	~	4	99.6	0.3	(..)	0.1	3960	1182	0.8%	4.3
58.20	135	26	8	~	10	99.5	0.4	(..)	(..)	3516	829	1.2%	6.0
59.00	499	137	22	76	40	65.1	33.7	1.1	0.1	2464	682	14.2%	31.1
60.00	257	69	16	112	26	88.2	10.9	0.8	0.1	2781	763	10.4%	15.9
61.00	293	63	16	130	20	96.4	3.4	0.1	0.1	3249	742	10.9%	12.9
62.00	160	39	10	68	12	96.3	3.6	(..)	(..)	3335	837	5.2%	13.1
63.00	173	37	7	0	7	99.8	0.1	0.1	(..)	3406	676	1.6%	8.3
64.10	213	35	11	~	13	99.7	0.1	0.1	0.1	3376	NS	6.5%	10.3
64.20	159	34	9	0	9	97.8	1.9	0.2	0.1	3590	NS	3.8%	7.5
64.30	493	74	0	0	0	81.3	16.0	2.6	0.1	NS	NS	4.7%	34.1
75.10	178	42	8	0	8	99.3	0.1	0.5	0.1	3783	NS	4.6%	8.1
75.20	153	40	6	0	6	94.7	3.4	1.6	0.3	3394	NS	13.6%	22.6
	233	56	10	103	16	93.0	6.4	0.4	0.1	..	..	7.1%	..

Fig.14

FORT GREENE INDICES OF TUBERCULOSIS, INCOME AND HOUSING



Note: Based on 1940 census of health area emp.

Socio-economic Conditions and Tuberculosis Prevalence in New York City, A. N. Lowell, New York Tuberculosis and Health Association.

*MANHATTAN AVERAGES

Prepared by Statistical Division
New York Tuberculosis and Health Association

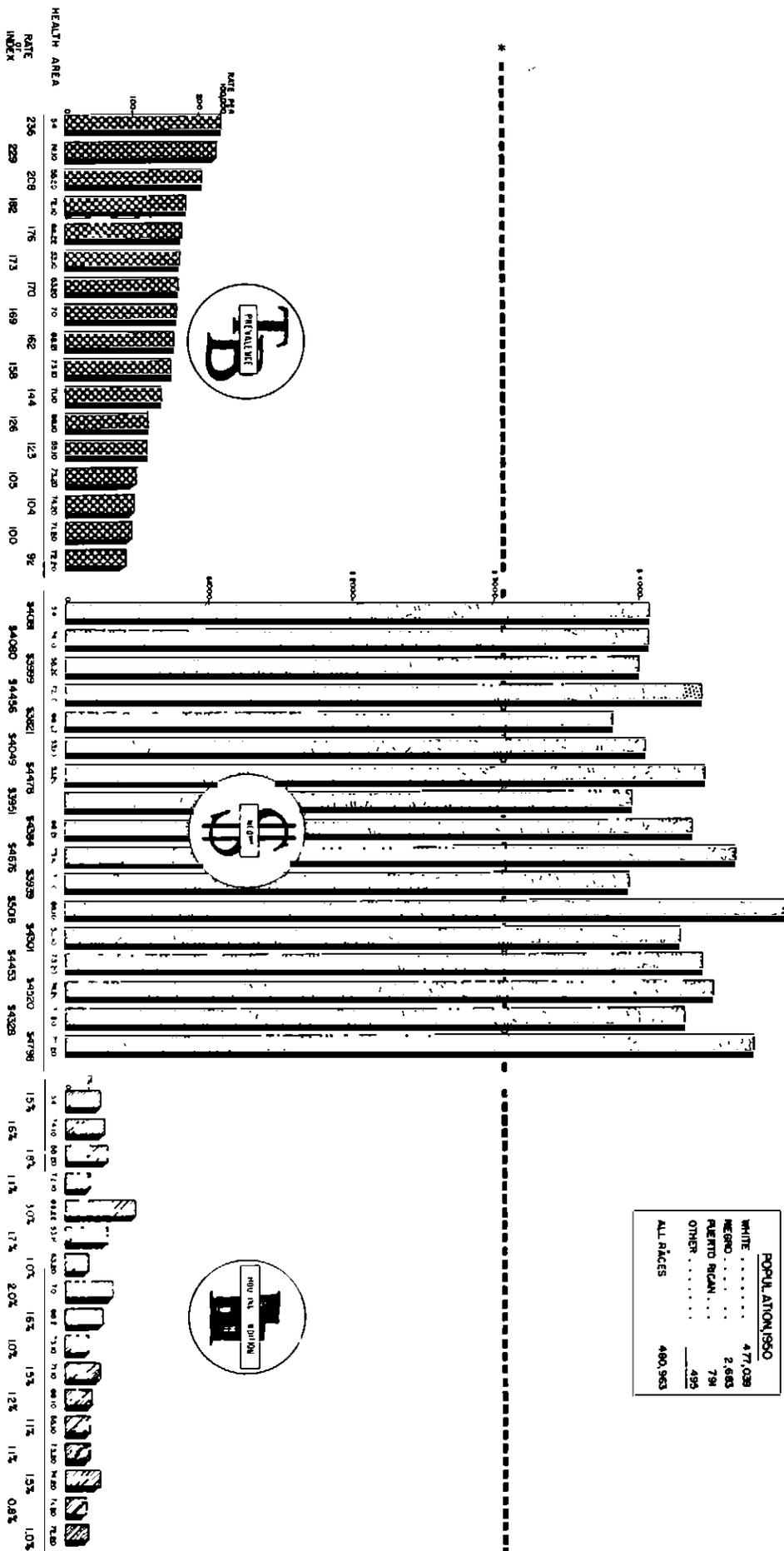
TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

BROOKLYN - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 ¶
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
BUSHWICK													
17.00	407	145	25	89	31	72.5	7.8	19.0	0.7	2652	778	30.5%	23.8
22.00	299	77	17	0	17	99.1	0.1	0.8	(..)	3092	931	15.4%	13.3
31.00	387	125	20	66	29	81.8	17.7	0.4	0.1	3011	1120	7.0%	26.0
32.00	254	51	18	0	18	99.6	(..)	0.3	0.1	3110	819	16.9%	20.0
33.00	273	68	26	~	27	99.7	(..)	0.2	(..)	3255	922	6.0%	14.5
34.00	323	87	23	0	23	99.6	0.1	0.2	0.1	3359	1147	9.1%	20.0
35.00	288	57	20	0	20	99.9	(..)	(..)	(..)	3170	1092	4.9%	20.8
37.00	285	63	13	~	15	94.3	5.1	0.5	0.1	3070	NS	10.8%	21.5
38.00	244	40	11	0	11	99.5	0.2	0.2	0.1	3587	1096	6.8%	15.8
39.00	254	47	17	0	17	99.8	(..)	0.1	0.1	3784	1261	3.9%	16.7
	302	76	20	72	21	94.8	3.2	1.9	0.1	..	..	10.3%	..
FLATEBUSH													
53.10	173	34	15	0	15	99.5	0.2	0.2	0.1	4049	1250	1.7%	9.5
53.20	170	38	11	~	11	99.1	0.6	0.1	0.2	4478	1631	1.0%	17.9
54.00	236	50	16	~	17	97.0	2.5	0.3	0.2	4081	1742	1.5%	19.4
55.10	123	19	5	0	5	99.0	0.8	0.1	(..)	4301	1476	1.1%	6.7
55.20	208	40	11	322	13	99.2	0.5	0.1	0.1	3999	1156	1.8%	9.5
70.00	169	32	7	0	7	99.5	0.3	0.2	(..)	3951	1324	2.0%	8.9
71.10	144	31	5	0	5	99.7	0.1	(..)	0.1	3939	NS	1.5%	10.4
71.20	100	20	8	0	8	99.2	0.5	0.1	0.2	4328	1018	0.8%	10.4
72.10	182	37	11	~	12	99.2	0.6	0.1	0.1	4456	1928	1.1%	12.8
72.20	92	18	4	0	4	99.1	0.7	0.1	(..)	4798	1513	1.0%	8.3
73.10	158	28	3	0	3	99.1	0.6	0.1	0.2	4676	1539	1.0%	7.4
73.20	105	21	5	0	5	99.5	0.3	(..)	0.1	4453	1222	1.1%	8.1
74.10	229	44	21	0	21	99.7	0.1	0.2	(..)	4080	2000	1.6%	18.4
74.20	104	30	6	0	6	99.4	0.4	0.1	(..)	4520	NS	1.5%	7.7
88.10	126	26	9	~	10	99.4	0.3	0.1	0.1	5018	1118	1.2%	7.7
88.21	162	32	9	0	9	99.6	0.2	0.2	(..)	4384	1115	1.6%	8.3
88.22	176	53	8	0	8	99.4	0.1	0.4	0.1	3821	1296	3.0%	8.3
	161	33	9	63	10	99.2	0.5	0.2	0.1	..	..	1.4%	..
FORT GREENE													
10.00	1295	446	101	120	103	70.4	6.3	21.6	1.7	2505	830	49.9%	15.5
11.00	528	139	20	109	41	71.8	21.4	5.5	1.3	2660	857	12.9%	69.4
12.00	388	116	29	139	34	93.6	3.8	2.3	0.3	3340	1639	21.1%	28.1
13.00	647	249	37	89	71	33.3	64.9	1.4	0.3	2578	1351	23.3%	55.6
14.00	288	77	20	66	27	82.3	15.1	2.3	0.2	2917	871	12.6%	43.1
18.00	360	122	12	139	29	77.5	13.3	9.0	0.2	3120	911	11.6%	43.9
19.00	308	98	11	123	25	83.1	12.0	4.4	0.5	2950	938	8.9%	32.0
27.10	469	135	23	75	37	71.2	27.5	1.2	0.1	2840	1163	19.7%	51.7
27.20	261	51	17	0	16	99.4	0.3	0.2	0.1	4101	1868	1.5%	51.7
45.00	280	76	21	0	21	99.3	0.2	0.4	0.1	3738	2083	13.7%	26.1
93.00	0	0	0	0	0	97.3	0.8	1.5	0.4	NS	NS	0%	..
	441	138	25	94	38	78.1	17.8	3.7	0.4	..	..	16.2%	..

FLATBUSH

INDICES OF TUBERCULOSIS, INCOME AND HOUSING



From Bureau of Health Statistics, New York City Department of Health, Office of Health Statistics, and the Division of the Census. Prepared by Population Council, Inc., 1110 Columbia University Building, New York 28, N.Y.

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

BROOKLYN - Part C

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 ¶
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Oth-er	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
GRAVESEND													
85.10	106	21	6	0	6	99.3	0.3	0.2	0.1	4106	962	2.4%	10.9
85.21	142	19	5	~	8	99.7	0.2	0.1	(..)	3801	NS	0.6%	15.1
85.22	86	27	5	0	5	99.7	0.1	0.1	0.1	3701	NS	1.2%	15.1
86.10	117	22	7	0	7	99.6	0.1	0.2	0.1	3552	NS	2.1%	12.9
86.20	139	31	5	~	6	99.1	0.5	0.3	(..)	3488	NS	5.0%	10.4
87.10	96	20	3	0	3	99.6	0.2	0.1	0.1	4289	1111	1.4%	7.1
87.21	154	34	7	0	7	97.1	2.6	0.1	0.1	3640	1274	5.4%	9.8
87.22	113	39	12	0	12	99.3	0.5	0.2	(..)	4313	NS	0.9%	9.8
89.00	268	48	18	0	18	99.8	0.1	0.1	(..)	3456	NS	11.7%	16.6
90.10	150	52	12	~	13	98.5	1.3	0.1	0.1	3342	625	29.4%	32.5
90.20	184	56	14	361	25	96.2	2.7	0.6	0.5	2786	843	26.6%	32.5
91.10	213	43	3	~	5	99.2	0.6	0.1	0.1	3351	1233	12.1%	6.5
91.20	59	19	3	0	3	98.8	0.9	0.2	0.1	4075	1636	2.3%	6.5
	132	31	7	162	8	98.9	0.8	0.2	0.1	..	..	8.1%	..
RED HOOK-GOWANUS													
23.00	577	202	37	~	37	88.5	1.0	9.6	0.8	3700	2043	10.6%	30.9
24.00	616	158	39	44	40	76.8	10.3	11.3	1.6	2632	1364	20.0%	64.2
25.00	338	71	37	0	36	97.9	0.2	1.6	0.2	3089	767	8.5%	23.2
26.00	730	217	49	224	67	86.5	9.1	3.9	0.5	2754	1550	19.4%	59.5
40.00	537	153	42	214	46	87.3	0.6	11.9	0.2	2662	1130	23.5%	30.4
41.00	387	96	39	~	39	94.1	2.5	3.3	0.1	2793	1284	11.8%	42.2
42.00	270	48	19	0	19	98.8	(..)	1.1	0.1	2881	757	15.0%	21.2
43.00	370	107	37	0	37	98.4	(..)	1.4	0.2	2844	1278	11.6%	21.4
	494	139	37	108	40	90.3	3.2	6.0	0.5	..	..	14.9%	..
SUNSET PARK													
44.00	441	104	33	0	33	96.5	0.2	3.2	0.1	3066	1800	14.4%	17.1
46.00	372	78	24	~	26	99.4	0.1	0.3	0.2	3401	1538	6.1%	22.9
47.00	276	69	22	0	22	99.6	(..)	0.3	0.1	3374	1089	9.8%	30.9
65.00	469	114	34	0	34	96.4	0.3	3.0	0.3	3100	1825	6.2%	22.7
66.00	385	82	31	0	31	98.7	0.1	1.1	0.1	3503	1462	3.5%	11.3
67.00	242	55	12	0	12	99.6	0.1	0.2	0.1	3554	1455	2.1%	8.4
68.00	141	27	8	0	8	99.6	0.2	0.1	0.1	3977	1338	2.5%	3.8
69.00	155	38	10	0	10	99.5	0.2	0.2	0.1	3401	1031	3.1%	11.4
	302	69	21	~	21	98.8	0.2	0.9	0.1	..	..	5.4%	..

**TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951**

BROOKLYN - Part D

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
WILLIAMSBURG-GREENPOINT													
1.00	439	87	47	~	49	98.5	0	1.3	0.2	3381	1565	15.2%	18.0
2.00	390	87	33	0	33	99.6	(..)	0.3	0.1	3337	1047	12.0%	11.9
3.00	428	98	34	0	34	99.3	0.1	0.4	0.1	3331	1278	20.8%	14.9
4.00	351	99	45	0	44	96.5	0.2	3.2	0.1	3166	1216	17.0%	16.6
5.00	287	90	14	263	19	92.7	1.9	5.2	0.1	3119	995	6.2%	19.6
6.00	369	94	25	181	28	90.4	1.4	7.8	0.4	3001	1244	6.4%	24.5
7.00	257	46	17	~	18	99.0	0.2	0.7	0.1	3152	1080	19.9%	12.8
8.00	284	74	6	~	8	94.9	1.8	3.2	0.1	2977	902	15.8%	24.5
9.00	307	75	25	0	25	98.2	0.7	1.1	(..)	2882	870	26.2%	29.6
15.00	305	86	27	259	40	82.9	5.1	11.8	0.2	2737	750	19.8%	27.7
16.00	570	161	43	99	56	56.3	22.0	21.0	0.7	2533	786	28.0%	43.3
	356	89	27	149	31	92.0	2.7	5.1	0.2	..	..	15.6%	..
BROOKLYN													
(x)	278	73	17	84	22	90.8	7.5	1.5	0.2	3447	1280	8.4%	20.9
(y)			17	85	23								

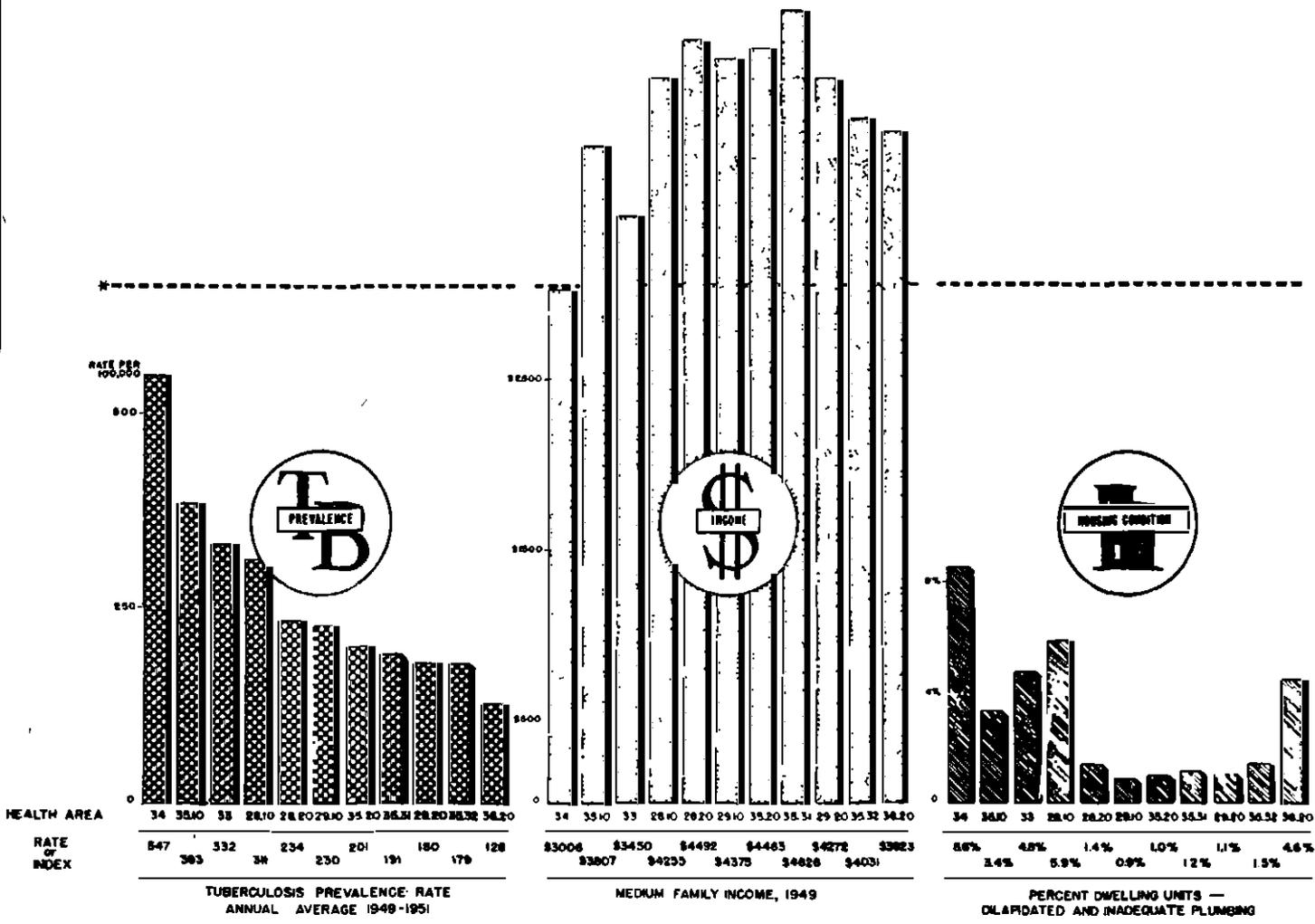
*Boundaries according to 1940 revision of health area map. ~ = Rate not computed.
 ..Data not available for health area or health center district. NS = Not stated.
 †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. ¶Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 27.10 (27.20), 50.10 (50.20), 79.10 (79.20), 85.21 (85.22), 87.21 (87.22), 88.21 (88.22), 90.10 (90.20), 91.10 (91.20). Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Sum of percentages do not always add to 100% due to rounding. (x)Residents. (y)Including non-residents and persons whose address was unknown. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

Fig. 16

JAMAICA EAST

INDICES OF TUBERCULOSIS, INCOME AND HOUSING

POPULATION, 1950	
WHITE	228,573
NEGRO	29,643
PUERTO RICAN	976
OTHER	355
ALL RACES	259,527



Note: Based on 1949 revision of health area map.

Socio-economic Conditions and Tuberculosis Prevalence in New York City, Dr. R. Lowell, New York Tuberculosis and Health Association.

42 MANHATTAN AVENUES

Prepared by Statistical Division, New York Tuberculosis and Health Association

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

QUEENS - Part A

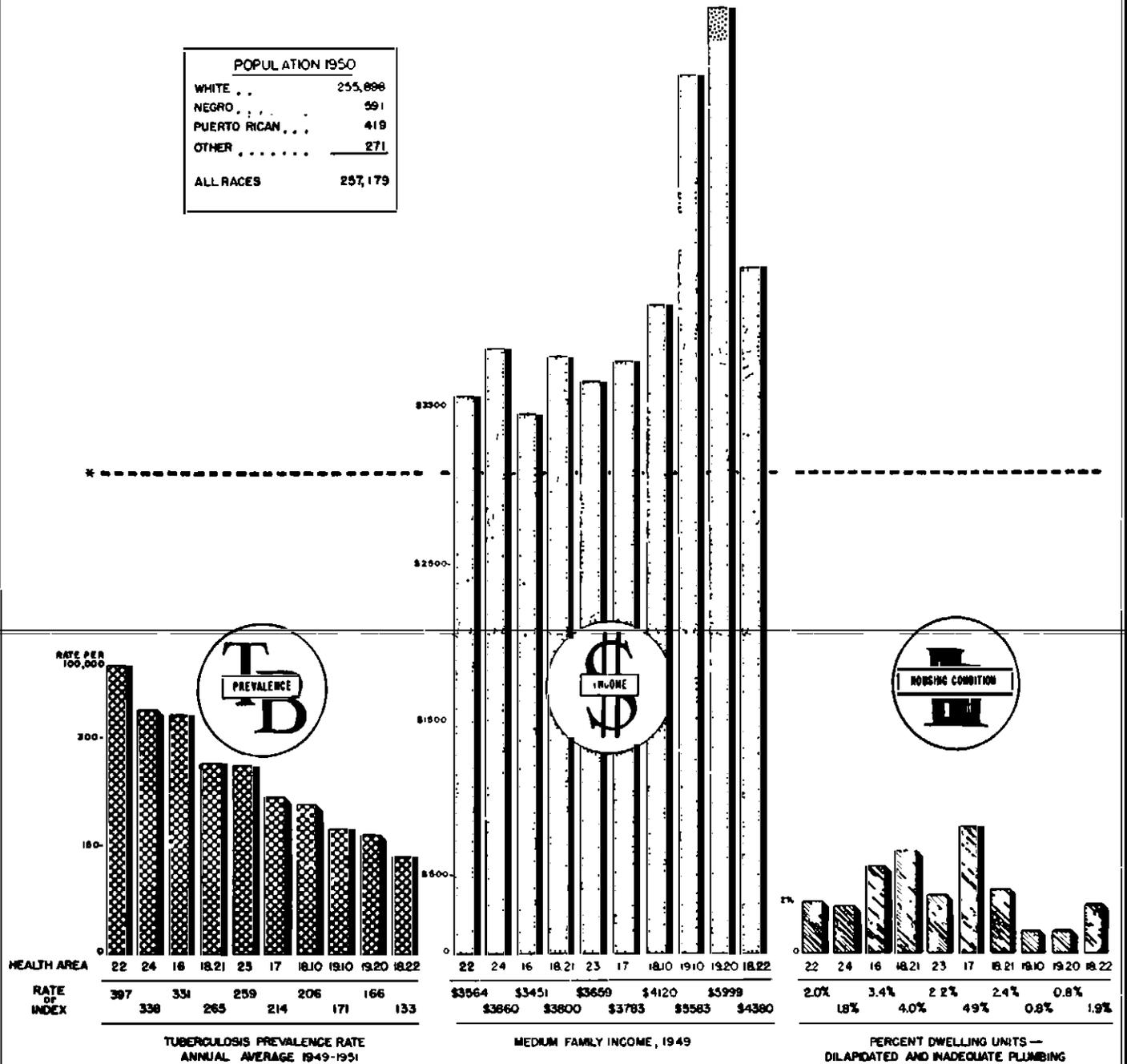
Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per-cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
ASTORIA-LONG ISLAND CITY													
1.10	218	48	6	0	6	99.6	(..)	0.3	0.1	3750	1725	1.7%	9.8
1.20	231	61	13	0	12	99.2	0.1	0.4	0.3	3850	1866	2.7%	11.6
3.00	260	54	25	0	25	98.7	0.7	0.4	0.1	3491	1990	7.2%	27.1
4.00	282	42	18	0	18	99.5	0.1	0.3	0.1	3614	1760	2.7%	16.3
5.00	262	66	18	0	18	98.9	0.8	0.2	0.1	3799	1789	1.7%	18.3
7.10	318	65	14	0	14	99.0	0.5	0.3	0.2	3528	1882	4.8%	26.0
7.20	435	87	28	66	29	93.6	4.8	1.5	0.1	2951	1300	7.0%	26.0
8.00	262	68	15	~	16	99.3	0.1	0.4	0.1	4049	2286	1.7%	14.1
9.10	311	63	16	0	16	99.6	0.1	0.2	0.1	3876	2165	1.0%	23.1
9.20	262	63	24	0	23	99.3	0.1	0.5	0.1	4136	2093	2.9%	23.1
	279	61	18	47	18	98.8	0.7	0.4	0.1	..	..	3.2%	..
CORONA													
6.10	336	104	13	51	22	74.8	24.6	0.4	0.2	3672	1359	3.8%	17.1
6.20	213	42	9	0	9	96.5	2.5	0.8	0.2	4120	2183	1.2%	12.7
10.10	291	58	19	0	19	99.5	0.2	0.2	0.1	4661	2268	0.7%	12.4
10.20	258	52	16	0	16	99.4	0.1	0.4	0.1	4572	2201	2.1%	12.4
11.00	327	70	14	77	24	83.4	16.1	0.3	0.2	3415	1463	3.4%	13.2
14.10	341	73	20	0	20	99.5	0.1	0.4	(..)	3928	2300	3.4%	8.6
14.20	302	66	22	0	22	99.4	0.1	0.4	0.1	4387	2250	1.3%	12.5
15.00	187	61	5	111	8	96.6	2.8	0.5	0.1	3422	NS	6.5%	14.5
	277	63	15	60	17	94.0	5.4	0.4	0.1	..	..	2.4%	..
FLUSHING													
2.10	334	59	16	0	16	99.7	0.1	0.1	0.1	3822	1089	13.7%	14.9
2.20	180	48	8	0	8	99.6	0.2	0.2	(..)	4458	1350	2.7%	14.9
12.00	402	78	17	134	25	92.2	7.1	0.4	0.3	3955	1500	8.9%	19.4
13.10	251	53	11	0	11	99.3	0.2	0.3	0.2	4926	1371	1.9%	9.8
13.20	313	57	12	~	13	98.1	1.4	0.4	0.1	4295	1806	1.9%	15.9
20.00	172	38	8	0	8	97.7	1.3	0.2	0.8	NS	NS	1.0%	12.4
21.11	316	62	20	0	20	98.7	1.1	0.1	0.1	4753	NS	1.2%	10.4
21.12	147	50	10	267	15	98.0	1.5	0.3	0.1	5042	1875	2.4%	10.4
21.21	129	28	8	0	8	99.1	0.5	0.1	0.2	NS	NS	0.7%	9.5
21.22	127	31	8	0	8	98.5	0.9	0.4	0.2	NS	NS	1.1%	9.5
39.00	0	0	0	0	0	88.7	11.1	0.2	0	NS	NS	9.6%	..
	209	46	11	83	12	98.1	1.4	0.2	0.3	..	..	2.7%	..

Fig.17

MASPETH - FOREST HILLS

INDICES OF TUBERCULOSIS, INCOME AND HOUSING

POPULATION 1950	
WHITE	255,066
NEGRO	591
PUERTO RICAN	419
OTHER	271
ALL RACES	257,179



Note: Based on 1949 revision of health area map.

Socio-economic conditions and Tuberculosis Prevalence in New York City. A. N. Lowell, New York Tuberculosis and Health Association.

MANHATTAN AVERAGES

Prepared by Statistical Division, New York Tuberculosis and Health Association

TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951

QUEENS - Part B

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Per- cent Dilap- idated or Inadequate Plumbing‡	Juvenile Delin- quency Rate 1953 ¶
	Total Preva- lence Rate	New Case Rate	Death Rate			Wh.	Neg- ro	P. R.	Oth- er	Fam- ily \$	Indi- vidual \$		
			Wh.	Non- Wh.	To- tal								
JAMAICA EAST													
28.10	311	64	23	0	22	99.1	0.2	0.5	0.2	4255	1819	5.9%	16.7
28.20	234	46	8	0	8	99.4	0.2	0.3	0.1	4492	1932	1.4%	16.3
29.10	230	71	15	0	15	99.6	(..)	0.1	0.2	4375	1292	0.9%	8.5
29.20	180	36	12	0	12	99.7	(..)	0.2	(..)	4272	827	1.1%	8.5
33.00	332	69	9	66	22	76.7	22.4	0.7	0.1	3450	1310	4.8%	32.8
34.00	547	138	30	34	32	47.8	51.4	0.6	0.2	3006	1321	8.6%	44.3
35.10	383	109	14	56	30	62.2	37.1	0.5	0.2	3807	NS	3.4%	35.6
35.20	201	53	18	0	18	99.8	(..)	0.1	0.1	4463	1125	1.0%	7.0
35.31	191	34	6	0	6	99.4	0.2	0.3	0.1	4626	NS	1.2%	9.3
35.32	179	54	9	0	9	98.1	1.5	0.3	0.1	4031	1375	1.5%	9.3
36.20	128	22	8	0	8	99.3	0.2	0.4	0.1	3923	NS	4.6%	19.8
	274	66	13	45	17	88.1	11.4	0.4	0.1	..	..	3.0%	..
JAMAICA WEST													
25.00	244	61	28	0	28	99.9	0.1	(..)	(..)	3942	1242	2.7%	14.4
26.00	307	69	16	0	16	99.4	0.3	0.3	(..)	4169	1250	2.4%	13.5
27.00	236	52	14	~	15	99.4	0.1	0.4	0.1	4297	1545	2.4%	24.1
30.00	243	46	16	0	16	99.6	0.1	0.2	0.1	3692	962	4.3%	13.0
31.00	267	52	20	~	21	99.4	0.4	0.1	(..)	3954	1307	2.5%	14.7
32.00	238	59	13	0	13	99.5	0.2	0.3	(..)	3862	NS	2.3%	16.4
36.11	294	49	15	0	15	99.8	0.1	0.1	(..)	3905	NS	4.2%	31.1
36.12	129	29	9	~	11	99.5	(..)	0.4	(..)	3426	NS	10.7%	31.1
37.00	265	72	13	185	26	92.2	7.1	0.5	0.2	3583	1198	36.2%	32.0
38.00	196	61	13	~	14	93.8	6.1	0.1	(..)	3918	1250	26.8%	26.7
	246	56	16	126	18	98.3	1.4	0.2	0.1	..	..	12.6%	..
MASPETH-FOREST HILLS													
16.00	331	76	27	0	27	99.8	(..)	0.1	0.1	3451	955	3.4%	15.3
17.00	214	55	13	0	13	99.7	0.1	0.1	0.1	3783	1400	4.9%	10.9
18.10	206	40	19	0	19	99.8	0.1	(..)	0.1	4120	1719	2.4%	5.7
18.21	265	51	11	0	11	99.4	0.1	0.4	0.1	3800	NS	4.0%	12.8
18.22	133	41	18	~	20	99.5	0.1	0.2	0.2	4380	1125	1.9%	12.8
19.10	171	51	12	~	12	98.9	0.5	0.4	0.2	5583	2361	0.8%	7.4
19.20	166	37	10	0	10	99.2	0.6	0.1	0.1	5999	1750	0.8%	7.4
22.00	397	69	27	0	27	99.8	(..)	0.1	(..)	3564	1563	2.0%	14.0
23.00	259	52	17	~	18	99.9	(..)	(..)	0.1	3659	1375	2.2%	21.4
24.00	338	79	22	0	22	99.8	0.1	0.1	(..)	3860	1239	1.8%	9.8
	236	54	17	115	17	99.5	0.2	0.2	0.1	..	..	2.1%	..
QUEENS													
(x)	252	57	15	59	16	96.2	3.3	0.3	0.1	4121	1613	4.7%	16.3
(y)			16	68	18								

*Boundaries according to 1940 revision of health area map. ~ = Rate not computed.

..Data not available for health area or health center district. NS = Not stated.

†Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. ¶Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 2.10 (2.20), 7.10 (7.20), 9.10 (9.20), 18.21 (18.22), 19.10 (19.20), 21.11 (21.12), 21.21 (21.22), 29.10 (29.20), 35.31 (35.32), 36.11 (36.12).

Note: Population, median income and data on dwelling units as reported in 1950

Federal Census. Sum of percentages do not always add to 100% due to rounding.

(x)Residents. (y)Including non-residents and persons whose address was unknown.

Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

**TUBERCULOSIS RATES AND SOCIO-ECONOMIC INDICES BY HEALTH CENTER DISTRICTS
AND HEALTH AREAS, NEW YORK CITY, 1949-1951**

RICHMOND

Health Area *	Tuberculosis, 1949-1951 Annual Average†					Population Percentage Distribution by Race 1950				Median Income 1949		Dwelling Units Percent Dilapidated or Inadequate Plumbing‡	Juvenile Delinquency Rate 1953 §
	Total Prevalence Rate	New Case Rate	Death Rate			Wh.	Neg-ro	P. R.	Other	Fam-ily \$	Indi-vid-ual \$		
			Wh.	Non-Wh.	To-tal								
RICHMOND													
1.00	115	40	52	~	53	95.9	3.5	0.5	0.1	3715	NS	11.1%	5.7
2.00	187	39	13	0	12	97.2	2.4	0.3	0.1	3654	1250	9.0%	24.1
3.00	228	45	19	53	21	94.2	5.6	0.2	(..)	4126	1182	6.3%	32.1
4.00	215	63	27	134	31	96.4	3.5	(..)	0.1	4058	1463	8.2%	20.6
5.00	158	51	18	0	17	95.7	3.6	0.3	0.3	3679	1133	12.3%	37.4
6.00	376	89	14	0	13	94.7	3.9	1.2	0.2	4211	1363	3.1%	10.7
7.00	173	42	26	0	25	98.6	0.9	0.3	0.2	3447	870	6.4%	14.4
8.00	253	58	19	~	21	97.6	2.0	0.3	(..)	3690	621	12.0%	21.4
9.10	199	55	3	~	5	98.9	0.6	0.5	(..)	3509	NS	16.5%	15.6
9.20	227	61	18	0	17	99.6	0.1	0.1	0.1	4112	1306	8.2%	15.6
10.00	184	0	42	0	41	97.6	1.8	0.2	0.4	NS	NS	18.0%	..
RICHMOND													
(x)	222	56	20	53	21	96.7	2.8	0.4	0.1	3845	1277	9.2%	20.1
(y)			33	101	35								
NEW YORK CITY													
(x)	369	101	20	91	27	87.3	9.2	3.1	0.4	3526	1482	9.6%	23.6
(y)			23	96	30								

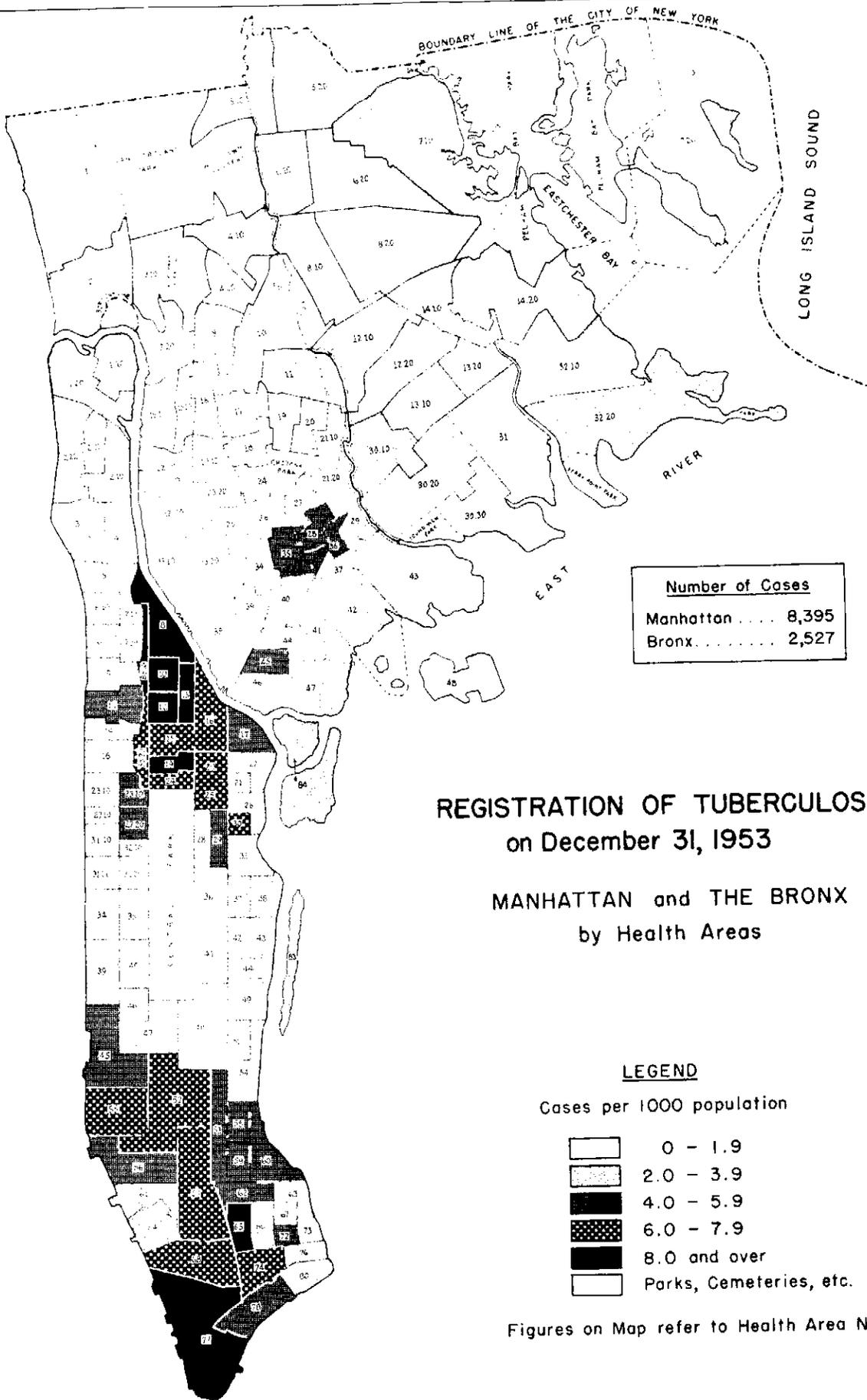
*Boundaries according to 1940 revision of health area map. ~ = Rate not computed. ..Data not available. NS = Not stated. †Per 100,000 population. (..) = Less than 0.05%. ‡Percent of dwelling units = dilapidated or no running water or no private bath, with running water, not dilapidated. §Per 1,000 youths in age group 5-20 years. Juvenile delinquency rates for combined health areas: 9.10 (9.20). Note: Population, median income and data on dwelling units as reported in 1950 Federal Census. Sum of percentages do not always add to 100% due to rounding. (x)Residents. (y)Including non-residents and persons whose address was unknown. Based on reports, Department of Health, City of New York, Welfare and Health Council, City of New York, New York City Youth Board, U.S. Bureau of the Census. Compiled by Statistical Division, New York Tuberculosis and Health Association.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

MANHATTAN - Part A

Health Center Dist.	Health Area	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
										1 9 5 4 - According to Race					
				1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
No.	Rate†														
CENTRAL HARLEM															
8.00		316	1012	200	218	249	271	256	235	0	229	2	0	0	4
10.00		381	1337	244	261	276	261	254	255	3	243	2	2	0	5
12.00		339	1496	231	227	223	217	205	214	2	209	2	0	0	1
13.00		434	1634	277	295	315	297	275	236	4	227	0	0	0	5
15.00		318	1168	192	205	235	233	203	186	7	177	1	0	0	1
16.00		324	986	205	210	247	276	238	227	41	153	30	0	0	3
19.00		305	1322	210	186	228	226	219	222	9	203	4	0	1	5
24.00		315	1232	206	214	225	191	173	172	10	146	15	0	0	1
85.10		(a)	11	135	118	0	113	0	0	0	5
85.20		(a)	12	202	182	2	171	1	0	2	6
		2732	1255	1765	1816	1998	1995	2160	2047	78	1871	57	2	3	36
EAST HARLEM															
17.00		119	617	78	74	85	81	80	60	33	7	14	3	0	3
20.00		296	1029	182	192	195	183	181	159	23	69	63	0	0	4
21.00		85	642	55	59	63	54	43	40	13	8	19	0	0	0
22.00		83	377	55	57	55	56	48	41	23	5	11	0	1	1
25.00		354	1268	234	229	181	187	180	155	51	19	82	1	0	2
26.00		99	496	66	62	67	55	66	59	31	7	18	1	0	2
28.00		187	735	123	118	98	77	73	55	26	12	17	0	0	0
29.00		160	678	99	105	112	93	96	94	44	20	28	0	0	2
30.00		152	1120	83	110	102	91	104	77	27	27	21	1	0	1
33.00		104	519	77	73	55	51	39	37	25	2	6	1	0	3
84.00		3	77	1	2	3	1	9	8	6	2	0	0	0	0
		1642	753	1053	1081	1016	929	919	785	302	178	279	7	1	18
KIPS BAY-YORKVILLE															
36.00		81	233	62	48	44	42	36	28	27	0	0	1	0	0
37.00		107	446	71	73	66	57	63	65	59	0	2	0	0	4
38.00		115	466	77	74	79	78	67	54	51	1	1	1	0	0
41.00		42	175	30	23	23	18	22	14	13	0	0	0	0	1
42.00		101	403	67	67	67	56	44	45	43	0	0	0	0	2
43.00		95	513	62	62	45	43	36	41	36	0	3	2	0	0
44.00		74	486	55	48	41	33	24	32	31	0	0	0	0	1
48.00		75	240	46	47	44	43	43	39	36	0	0	0	0	3
49.00		66	303	41	43	47	41	36	35	34	0	0	1	0	0
50.00		61	384	41	40	45	45	41	38	37	0	1	0	0	0
54.00		68	414	41	41	40	40	29	28	25	0	2	0	0	1
83.00		22	406	10	15	14	9	14	10	10	0	0	0	0	0
		907	353	603	581	555	505	455	429	402	1	9	5	0	12

Fig.19



Number of Cases	
Manhattan	8,395
Bronx	2,527

REGISTRATION OF TUBERCULOSIS *
on December 31, 1953

MANHATTAN and THE BRONX
by Health Areas

LEGEND

Cases per 1000 population

- 0 - 1.9
- 2.0 - 3.9
- 4.0 - 5.9
- 6.0 - 7.9
- 8.0 and over
- Parks, Cemeteries, etc.

Figures on Map refer to Health Area Numbers

* Total known cases per 1000 population on Dec. 31, 1953 in Department of Health Register.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

MANHATTAN - Part B

Health Center Dist.	Total Known Cases during Period 1949-1951		Active Cases on Tuberculosis Register December 31st of Each Year											
	Annual Average		1954 - According to Race											
	No.	Rate†	1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
LOWER EAST SIDE														
53.00	141	618	87	89	114	109	108	86	63	1	17	1	0	4
58.00	220	1016	154	142	128	109	109	95	76	1	13	1	0	4
59.00	137	904	86	90	95	79	76	66	48	6	7	2	0	3
60.00	260	790	181	166	148	142	138	112	103	2	2	2	1	2
62.00	209	861	137	149	135	114	115	107	75	8	15	6	1	2
63.00	88	561	67	66	68	48	46	44	31	6	7	0	0	0
65.00	96	675	56	73	70	450	451	481	416	32	20	6	3	4
66.00	81	674	53	56	61	98	86	79	52	4	13	7	1	2
67.00	105	571	70	74	71	55	59	47	33	2	11	0	0	1
70.00	489	4675	340	307	341	(b)	...	...	...	...	...	...	...	...
71.00	89	676	60	59	62	(b)	...	...	...	...	...	...	...	...
72.00	70	534	44	49	46	53	58	40	22	6	11	0	0	1
73.00	33	257	19	27	26	28	24	22	9	10	2	0	0	1
74.00	104	1087	63	70	75	180	167	153	84	6	18	42	0	3
75.00	198	1271	111	120	124	(b)	...	...	...	...	...	...	...	...
76.00	71	578	43	46	52	38	36	33	13	8	11	1	0	0
78.00	105	778	58	78	84	117	132	108	60	19	22	6	0	1
79.00	65	614	46	35	48	(b)	...	...	...	...	...	...	...	...
80.00	71	437	40	45	71	65	56	39	19	10	10	0	0	0
	2632	865	1715	1741	1819	1685	1661	1512	1104	121	179	74	6	28
LOWER WEST SIDE														
39.00	88	359	52	55	70	82	58	50	34	8	5	2	0	1
40.00(c)	151	441	95	97	109	97	97	102	74	6	19	2	0	1
45.00	40	615	29	27	25	103	103	85	74	1	8	1	0	1
46.00	111	630	76	66	66	71	69	67	51	6	7	1	2	0
47.00	214	576	131	147	129	126	130	93	69	12	8	3	0	1
51.00	133	915	76	92	82	(b)	...	...	...	...	...	...	...	...
52.00	279	873	159	179	174	197	206	171	117	24	26	2	1	1
55.00	138	774	94	95	95	105	117	91	64	6	20	1	0	0
56.00	230	775	148	142	160	159	158	135	105	2	25	1	1	1
57.00	240	834	144	145	150	174	185	155	141	9	1	3	0	1
61.00	89	509	56	55	53	58	51	41	37	3	1	0	0	0
64.00	69	332	50	42	45	43	59	56	51	0	3	1	0	1
68.00	45	486	30	28	22	157	160	130	119	0	2	9	0	0
69.00	217	1249	118	142	149	(b)	...	...	...	...	...	...	...	...
77.00	349	2392	207	205	212	223	248	227	150	6	1	68	2	0
81.00	1	50	2	0	0	0	0	1	0	0	0	1	0	0
82.00	2	278	0	1	0	0	0	0	0	0	0	0	0	0
	2396	736	1467	1518	1541	1595	1641	1404	1086	83	126	95	6	8

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

MANHATTAN - Part C

Health Center Dist.	Health Area	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
				1 9 5 4 - According to Race											
				1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
No.	Rate†														
RIVERSIDE															
11.00(a)		192	734	131	126	137	131	97	98	18	56	16	2	0	6
14.00(a)		154	745	108	110	91	85	72	64	20	24	13	5	0	2
18.00(a)		170	532	148	134	123	133	38	27	16	4	3	1	1	2
23.10		90	381	65	46	66	62	66	59	38	4	8	6	1	2
23.20(a)		114	677	83	76	90	91	52	36	18	4	11	1	1	1
27.10		33	264	24	21	25	20	28	31	14	2	13	0	0	2
27.20		215	655	131	145	161	164	162	129	58	25	40	3	0	3
31.10		69	289	36	41	52	63	76	89	66	9	6	5	0	3
31.20		59	236	34	38	48	35	49	36	28	0	5	0	0	3
32.10		63	425	46	40	43	56	53	49	28	6	13	0	0	2
32.20		102	372	64	66	92	72	87	91	57	10	22	2	0	0
34.00		75	229	49	47	51	56	67	57	42	3	9	1	0	2
35.00		121	339	77	77	86	98	101	113	76	5	26	1	1	4
40.00(c)	
		1457	449	996	967	1065	1066	948	879	479	152	185	27	4	32
WASHINGTON HEIGHTS															
1.10		44	191	36	28	22	16	22	19	16	1	0	0	0	2
1.20		65	291	52	38	30	23	22	34	25	4	2	0	0	3
2.10		76	272	59	52	49	45	45	33	29	1	1	0	0	2
2.21		73	315	50	48	40	32	23	21	19	2	0	0	0	0
2.22		27	143	24	22	27	16	20	12	10	0	0	0	0	2
3.00		69	239	50	41	42	33	38	23	20	2	0	0	0	1
4.00		98	304	69	60	55	49	54	36	30	4	1	0	0	1
5.00		137	460	89	90	73	78	83	60	21	31	6	1	0	1
6.10		79	446	52	50	56	48	48	40	10	27	2	0	0	1
6.20		149	713	99	106	78	70	80	61	12	46	1	1	0	1
7.10(a)		118	743	96	74	66	62	41	33	2	29	0	0	0	2
7.20(a)		188	837	134	125	149	137	63	46	1	44	0	0	0	1
9.00(a)		143	487	109	96	100	100	72	60	28	9	15	3	0	5
		1266	404	919	830	787	709	611	478	223	200	28	5	0	22
MANHATTAN															
		13032	665	8518	8534	8781	8484	8395	7534	3674	2606	863	215	20	156

Note: Data for period 1949-1951 according to boundaries of 1940 revision of health area map, beginning with 1952 vital statistics on basis of 1950 revision of health area map. †Per 100,000 population.

(a) Health areas 85.10 and 85.20 prior to 1952 in Washington Heights and Riverside Health Center Districts, thereafter transferred to Central Harlem Health Center District. (b) Health areas combined 65(70), 66(71), 74(75), 78(79), 45(51), 68(69). (c) On January 1, 1950 health area 40 transferred from Riverside to Lower West Side Health Center District.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BRONX - Part A

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
									1954 - According to Race					
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
FORDHAM-RIVERDALE														
1.00	17	138	11	12	11	5	10	8	8	0	0	0	0	0
2.00	47	288	40	27	24	30	31	24	24	0	0	0	0	0
3.10	49	238	40	31	24	24	24	15	14	0	0	0	0	1
3.20	38	151	22	30	31	31	25	18	17	1	0	0	0	0
4.10	61	175	42	32	35	28	26	21	20	0	1	0	0	0
4.20	64	212	40	43	44	32	38	29	29	0	0	0	0	0
9.00	83	218	61	53	43	35	26	31	31	0	0	0	0	0
10.00	62	236	44	40	31	35	36	34	32	1	0	0	0	1
11.00	47	198	36	31	28	24	30	26	21	3	0	2	0	0
	468	206	336	299	271	244	246	206	196	5	1	2	0	2
MORRISANIA														
21.10	43	198	37	28	36	24	31	21	17	1	1	2	0	0
21.20	34	199	24	18	22	32	25	24	15	6	3	0	0	0
25.00	66	203	51	32	32	39	35	36	22	7	4	0	1	2
26.00	126	577	85	90	88	80	75	63	19	38	4	0	0	2
27.00	136	526	101	87	83	75	85	69	15	46	4	0	0	4
28.00	112	606	88	73	74	75	80	66	16	33	14	0	1	2
29.00	102	352	71	75	76	70	75	63	36	6	20	0	0	1
33.10	70	286	51	52	47	47	44	40	35	4	0	0	0	1
33.20	64	176	52	40	36	40	34	28	27	1	0	0	0	0
34.00	70	424	51	48	48	46	45	43	27	9	4	1	0	2
35.00	242	827	176	152	124	126	121	90	6	73	7	0	0	4
36.00	149	665	107	93	97	96	98	104	37	21	44	0	0	2
	1214	411	894	788	763	750	748	647	272	245	105	3	2	20
MOTT HAVEN														
37.00	143	612	102	94	86	71	81	83	19	29	34	0	0	1
38.00	44	251	26	31	36	28	35	36	18	13	5	0	0	0
39.00	52	322	38	25	39	47	56	40	29	6	5	0	0	0
40.00	153	599	117	96	98	99	101	114	27	28	57	0	0	2
41.00	151	615	106	108	103	100	85	97	41	9	40	0	0	7
42.00	119	477	92	64	73	63	70	75	26	9	37	0	0	3
43.00	34	225	27	22	16	20	20	18	15	0	3	0	0	0
44.00	97	442	74	63	72	69	66	53	38	2	10	0	0	3
45.00	110	612	82	69	86	90	88	78	55	6	14	0	0	3
46.00	82	490	60	50	42	47	45	53	29	2	20	0	0	2
47.00	110	497	68	66	60	74	73	75	46	6	21	0	0	2
48.00	4	142	1	1	1	1	2	2	2	0	0	0	0	0
	1099	480	793	689	712	709	722	724	345	110	246	0	0	23

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BRONX - Part B

Health Center Dist. Health Area	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
			1954 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yellow	Other	Not Rep.
No.	Rate†													
FELHAM BAY														
5.10	42	225	29	27	26	22	16	10	8	0	0	0	0	2
5.20	52	218	43	30	30	20	20	23	20	1	0	0	0	2
6.10	49	202	39	32	28	29	23	24	21	3	0	0	0	0
6.20	30	151	21	19	17	28	27	15	11	2	0	0	0	2
7.10	10	263	8	6	6	3	14	10	4	4	2	0	0	0
7.20	10	267	7	3	10	9	12	9	8	1	0	0	0	0
8.10	45	167	38	28	24	31	37	39	29	4	2	0	0	4
8.20	28	126	15	23	22	27	20	18	18	0	0	0	0	0
	266	185	200	168	163	169	169	148	119	15	4	0	0	10
TRIMONT														
15.10	41	216	32	27	27	19	15	11	11	0	0	0	0	0
15.20	62	280	45	45	41	35	23	20	17	2	0	0	0	1
16.00	61	184	45	43	38	37	41	31	27	1	1	1	0	1
17.00	56	237	37	28	36	25	24	22	20	2	0	0	0	0
18.00	56	322	45	31	28	24	30	41	21	7	11	0	0	2
19.00	67	248	49	47	40	40	36	24	20	2	1	1	0	0
20.00	55	191	33	35	38	30	24	25	21	3	1	0	0	0
22.10	55	177	42	35	25	25	29	25	21	2	0	1	0	1
22.20	60	172	40	41	45	39	23	26	21	4	0	1	0	0
23.10	39	134	25	23	24	25	24	26	25	1	0	0	0	0
23.20	23	117	19	8	7	7	14	15	13	1	0	0	0	1
24.00	79	422	48	55	64	56	60	39	18	14	7	0	0	0
	654	215	460	418	413	362	343	305	235	39	21	4	0	6
WESTCHESTER														
12.10	36	137	29	21	21	25	22	21	19	0	0	0	0	2
12.20	28	133	23	17	19	19	18	16	16	0	0	0	0	0
13.10	88	166	75	52	52	52	47	38	36	0	0	0	0	2
13.20	30	246	18	23	23	16	22	19	18	1	0	0	0	0
14.10	11	217	7	9	3	5	6	10	8	1	0	0	0	1
14.20	49	202	39	27	30	24	19	23	23	0	0	0	0	0
30.10	48	212	35	25	54	55	46	41	25	11	4	0	0	1
30.20	45	137	39	21	28	27	33	41	23	15	3	0	0	0
30.30	40	406	30	29	23	20	17	20	14	4	1	1	0	0
31.00	43	216	38	25	24	21	25	20	19	0	0	0	0	1
32.10	33	232	26	17	16	19	20	20	20	0	0	0	0	0
32.20	25	248	19	18	17	12	24	17	14	1	1	1	0	0
	476	189	378	284	310	295	299	286	235	33	9	2	0	7
BRONX	4177	288	3061	2646	2632	2529	2527	2316	1402	447	386	11	2	68

†Per 100,000 population.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BROOKLYN - Part A

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
RAY RIDGE														
76.00	105	316	89	71	62	62	52	38	38	0	0	0	0	0
77.00	90	398	74	61	58	55	51	48	45	0	2	0	0	1
78.10	74	255	63	47	40	39	36	19	19	0	0	0	0	0
78.20	18	133	12	11	15	11	11	6	6	0	0	0	0	0
79.10	45	238	39	32	31	20	21	11	11	0	0	0	0	0
79.20	39	199	28	23	25	24	24	20	20	0	0	0	0	0
80.10	40	197	36	25	18	14	17	7	7	0	0	0	0	0
80.20	20	130	15	16	15	15	17	10	10	0	0	0	0	0
81.10	28	145	21	17	11	8	11	6	6	0	0	0	0	0
81.20	35	154	33	17	14	16	13	14	14	0	0	0	0	0
82.00	58	159	49	37	43	43	39	24	23	1	0	0	0	0
83.00	36	111	24	25	23	20	18	10	10	0	0	0	0	0
84.00	44	127	30	28	23	20	17	18	17	1	0	0	0	0
92.00	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	632	198	513	410	378	347	327	232	227	2	2	0	0	1
BEDFORD														
20.00	163	641	98	95	122	121	121	107	6	96	0	1	0	4
21.00	119	539	76	73	88	87	91	79	8	66	1	0	1	3
28.00	232	691	136	153	133	151	156	131	8	116	5	0	0	2
29.00	125	336	91	70	62	83	74	68	22	39	0	0	0	7
30.00	152	472	93	78	101	89	103	85	8	74	1	0	0	2
36.00	121	619	67	75	71	74	74	62	8	53	0	0	0	1
48.00	69	203	41	45	39	32	33	29	28	1	0	0	0	0
49.00	57	202	37	35	51	34	42	34	15	14	2	0	1	2
50.10	32	141	20	20	22	9	13	13	9	4	0	0	0	0
50.20	20	127	16	9	13	11	10	10	10	0	0	0	0	0
51.00	48	220	32	27	22	20	21	15	7	8	0	0	0	0
52.00	70	382	46	48	62	60	68	61	14	43	3	0	0	1
	1208	389	753	728	786	771	806	694	143	514	12	1	2	22
BROWNSVILLE														
56.00	45	220	31	38	32	33	33	26	21	5	0	0	0	0
57.00	91	477	58	74	55	45	55	34	11	18	4	0	0	1
58.10	37	135	27	29	23	22	21	12	12	0	0	0	0	0
58.20	28	135	23	22	16	12	14	10	9	1	0	0	0	0
59.00	116	499	89	84	65	61	62	72	28	40	4	0	0	0
60.00	49	257	38	32	27	30	37	34	11	18	5	0	0	0
61.00	65	293	52	42	37	26	30	26	21	5	0	0	0	0
62.00	43	160	31	30	20	13	19	14	12	1	1	0	0	0
63.00	42	173	31	33	25	18	21	18	16	2	0	0	0	0
64.10	33	213	30	20	16	18	16	14	14	0	0	0	0	0
64.20	34	159	28	23	20	15	10	10	8	2	0	0	0	0
64.30	6	493	6	3	3	2	1	0	0	0	0	0	0	0
75.10	28	178	23	20	18	11	12	5	5	0	0	0	0	0
75.20	35	153	24	27	18	29	38	33	15	16	2	0	0	0
	652	233	491	477	375	335	369	308	183	108	16	0	0	1

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BROOKLYN - Part B

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel. low	Other	Not Rep.
Health Area	No.	Rate†												
BUSHWICK														
17.00	83	407	55	51	57	60	68	54	25	9	17	3	0	0
22.00	52	299	33	40	40	30	27	23	21	1	0	0	0	1
31.00	109	387	62	72	72	60	72	79	41	36	2	0	0	0
32.00	60	254	48	36	42	41	34	33	27	1	5	0	0	0
33.00	73	273	50	48	50	35	38	32	32	0	0	0	0	0
34.00	95	323	60	69	67	54	51	45	42	0	1	0	0	2
35.00	76	288	58	45	45	38	49	47	44	0	3	0	0	0
37.00	38	285	24	27	33	30	22	18	14	4	0	0	0	0
38.00	57	244	41	49	36	41	37	31	28	0	2	0	0	1
39.00	61	254	45	44	37	27	27	28	25	0	0	0	0	3
	704	302	476	481	479	416	425	390	299	51	30	3	0	7
FLATBUSH														
53.10	39	173	30	26	19	22	25	25	23	0	1	0	0	1
53.20	59	170	50	36	32	24	32	32	29	1	1	1	0	0
54.00	74	236	53	47	47	42	30	25	22	3	0	0	0	0
55.10	40	123	34	22	23	22	24	20	20	0	0	0	0	0
55.20	70	208	51	51	54	50	37	28	28	0	0	0	0	0
70.00	57	169	44	37	42	28	23	25	25	0	0	0	0	0
71.10	20	144	17	13	11	4	2	1	1	0	0	0	0	0
71.20	29	100	20	20	14	10	13	13	13	0	0	0	0	0
72.10	73	182	53	47	41	40	36	35	31	3	0	0	0	1
72.20	17	92	15	10	16	11	12	9	7	1	1	0	0	0
73.10	47	158	33	32	32	26	23	24	22	1	0	0	0	1
73.20	30	105	22	17	16	9	13	10	9	1	0	0	0	0
74.10	72	229	51	53	36	37	34	34	32	0	0	0	0	2
74.20	17	104	10	10	13	8	9	12	12	0	0	0	0	0
88.10	40	126	28	25	30	29	35	20	19	0	0	0	0	1
88.21	51	162	31	29	24	15	21	14	13	0	0	0	0	1
88.22	38	176	36	34	26	21	21	14	13	0	0	0	0	1
	773	161	578	509	476	398	390	341	319	10	3	1	0	8
FORT GREENE														
10.00	147	1295	89	98	94	91	72	63	39	15	8	0	1	0
11.00	90	528	70	65	57	52	66	65	25	31	6	2	0	1
12.00	111	388	64	76	77	94	93	88	47	23	14	2	0	2
13.00	188	647	105	119	112	119	143	127	17	105	3	0	0	2
14.00	74	288	56	54	51	42	32	42	14	19	6	0	0	3
18.00	70	360	44	40	40	55	55	66	14	42	10	0	0	0
19.00	65	308	37	42	40	47	43	57	19	30	7	0	0	1
27.10	106	469	67	73	77	65	65	60	20	36	3	0	0	1
27.20	42	261	32	26	23	19	15	18	15	2	1	0	0	0
45.00	85	280	52	61	57	44	51	41	35	3	1	0	0	2
93.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	978	441	616	654	628	628	635	627	245	306	59	4	1	12

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954 C-8
by Health Center Districts and Health Areas

BROOKLYN - Part C

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
GRAVESTEND														
85.10	31	106	26	23	25	25	18	11	11	0	0	0	0	0
85.21	28	142	15	12	11	9	12	5	4	1	0	0	0	0
85.22	17	86	19	12	10	14	10	5	5	0	0	0	0	0
86.10	30	117	22	22	15	11	11	9	9	0	0	0	0	0
86.20	39	139	33	26	25	19	22	13	13	0	0	0	0	0
87.10	24	96	19	15	12	9	5	5	5	0	0	0	0	0
87.21	29	154	13	15	16	17	15	10	9	1	0	0	0	0
87.22	28	113	26	23	31	22	15	17	15	2	0	0	0	0
89.00	24	268	17	19	18	17	17	13	13	0	0	0	0	0
90.10	30	150	18	23	21	26	20	20	15	5	0	0	0	0
90.20	37	184	22	23	24	37	37	29	24	1	4	0	0	0
91.10	42	213	33	33	17	17	17	12	12	0	0	0	0	0
91.20	13	59	7	10	10	10	8	7	6	1	0	0	0	0
	372	132	270	256	235	233	207	156	141	11	4	0	0	0
RED HOOK-GOWANUS														
23.00	178	577	106	99	109	99	91	98	63	5	26	1	3	0
24.00	140	616	100	103	75	88	88	77	33	11	31	1	1	0
25.00	46	338	38	25	22	18	26	29	25	0	4	0	0	0
26.00	165	730	115	104	101	99	116	102	60	19	23	0	0	0
40.00	105	537	77	56	64	50	44	47	31	1	14	0	1	0
41.00	108	387	81	65	77	80	76	72	49	10	12	1	0	0
42.00	56	270	43	40	44	39	35	23	19	0	4	0	0	0
43.00	53	370	35	35	37	41	33	23	23	0	0	0	0	0
	851	494	595	527	529	514	509	471	303	46	114	3	5	0
SUNSET PARK														
44.00	75	441	57	45	50	48	51	32	31	0	1	0	0	0
46.00	97	372	74	69	64	59	70	48	48	0	0	0	0	0
47.00	79	276	57	50	59	56	50	41	38	1	1	1	0	0
65.00	138	469	103	93	99	108	126	84	78	0	4	1	0	1
66.00	118	385	93	78	72	62	62	32	29	0	3	0	0	0
67.00	81	242	63	51	48	38	42	34	34	0	0	0	0	0
68.00	47	141	37	34	22	24	21	9	9	0	0	0	0	0
69.00	36	155	26	26	15	18	22	15	15	0	0	0	0	0
	671	302	510	446	429	413	444	295	282	1	9	2	0	1
WILLIAMSBURG-GREENPOINT														
1.00	77	439	57	50	46	51	47	37	36	0	1	0	0	0
2.00	79	390	56	54	51	47	36	35	35	0	0	0	0	0
3.00	63	428	42	44	47	41	38	29	26	0	3	0	0	0
4.00	55	351	36	39	30	28	30	31	28	0	3	0	0	0
5.00	86	287	53	55	67	56	56	52	33	8	11	0	0	0
6.00	111	369	70	71	66	69	84	62	47	1	12	2	0	0
7.00	56	257	40	40	35	31	32	20	17	0	3	0	0	0
8.00	49	284	30	36	44	41	32	20	18	0	1	0	1	0
9.00	49	307	34	29	27	29	31	24	18	2	4	0	0	0
15.00	51	305	32	32	38	36	48	39	19	9	11	0	0	0
16.00	92	570	59	60	55	63	64	57	19	17	20	0	0	1
	768	356	509	510	506	492	498	406	296	37	69	2	1	1
BROOKLYN	7609	278	5311	4998	4821	4547	4610	3920	2438	1086	318	16	9	53

†Per 100,000 population.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

QUEENS - Part A

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year											
			1954 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
ASTORIA-LONG ISLAND CITY														
1.10	45	218	33	35	38	37	27	18	18	0	0	0	0	0
1.20	68	231	50	42	39	38	44	29	27	0	0	0	1	1
3.00	75	260	52	50	54	57	56	41	35	5	1	0	0	0
4.00	105	282	84	85	70	68	71	66	65	1	0	0	0	0
5.00	104	262	78	73	72	62	61	54	51	2	0	1	0	0
7.10	59	318	42	41	43	45	47	45	37	4	2	0	0	2
7.20	89	435	71	62	82	85	78	74	49	19	6	0	0	0
8.00	71	262	49	49	52	50	44	42	41	0	0	0	0	1
9.10	73	311	54	59	59	46	46	32	32	0	0	0	0	0
9.20	45	262	30	31	28	25	21	19	19	0	0	0	0	0
	734	279	543	527	537	513	495	420	374	31	9	1	1	4
CORONA														
6.10	71	336	50	40	35	38	46	51	21	30	0	0	0	0
6.20	69	213	54	49	45	44	40	28	26	0	0	0	0	2
10.10	97	291	73	69	59	67	57	35	34	0	0	0	0	1
10.20	88	258	62	62	61	60	51	43	43	0	0	0	0	0
11.00	95	327	76	63	45	58	70	51	21	28	0	0	0	2
14.10	40	341	27	29	26	26	22	14	14	0	0	0	0	0
14.20	79	302	65	45	45	38	36	27	27	0	0	0	0	0
15.00	39	187	24	30	27	20	16	15	14	1	0	0	0	0
	578	277	431	387	343	351	338	264	200	59	0	0	0	5
FLUSHING														
2.10	47	334	41	31	32	28	20	23	23	0	0	0	0	0
2.20	39	180	25	29	26	21	22	10	9	0	0	1	0	0
12.00	95	402	72	70	60	51	49	38	29	9	0	0	0	0
13.10	67	251	51	47	43	35	42	32	31	1	0	0	0	0
13.20	64	313	56	41	26	26	23	16	16	0	0	0	0	0
20.00	85	172	56	67	67	67	64	49	43	5	0	1	0	0
21.11	53	316	29	25	31	26	25	14	13	0	0	1	0	0
21.12	44	147	38	39	32	27	31	26	26	0	0	0	0	0
21.21	59	129	43	46	33	33	39	32	31	0	0	1	0	0
21.22	51	127	40	30	27	42	44	46	45	0	0	0	0	1
21.29	0	0	1	0	1	0	1	0	0	0	0	0	0	0
39.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	604	209	452	425	378	356	360	286	266	15	0	4	0	1

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

QUEENS - Part B

Health Center Dist.	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year														
												1954 - According to Race					
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.			
Health Area	No.	Rate†															
JAMAICA EAST																	
28.10	65	311	49	36	35	40	32	25	25	0	0	0	0	0			
28.20	49	234	41	25	26	32	42	30	29	0	0	1	0	0			
29.10	47	230	30	26	21	26	23	23	21	0	0	0	0	2			
29.20	45	180	34	27	27	27	25	22	19	0	0	0	0	3			
33.00	82	332	57	50	48	45	59	46	15	30	0	0	0	1			
34.00	163	547	113	100	105	105	120	114	22	88	2	0	0	2			
35.10	85	383	58	50	46	56	61	50	17	32	0	0	0	1			
35.20	57	201	40	30	26	30	30	30	27	1	0	0	0	2			
35.31	58	191	37	21	20	27	23	17	15	0	0	0	0	2			
35.32	45	179	40	38	41	33	35	33	29	3	0	0	0	1			
36.20	15	128	13	5	7	16	16	15	14	1	0	0	0	0			
44.00(d)	0	0	0	1	0	...	...	...	...	...	...	...	...	...
	711	274	512	409	402	437	466	405	233	155	2	1	0	14			
JAMAICA WEST																	
25.00	64	244	49	42	39	39	35	25	24	0	0	0	0	1			
26.00	86	307	70	44	48	35	39	33	32	0	1	0	0	0			
27.00	87	236	69	51	39	54	55	60	57	0	0	0	0	3			
30.00	79	243	61	55	47	40	45	39	39	0	0	0	0	0			
31.00	83	267	67	54	50	62	49	52	49	2	0	1	0	0			
32.00	85	238	59	51	63	57	69	48	46	1	0	0	0	1			
36.11	52	294	35	24	32	36	32	24	24	0	0	0	0	0			
36.12	19	129	20	19	18	18	15	18	18	0	0	0	0	0			
37.00	71	265	47	48	41	53	66	64	33	28	2	0	1	0			
38.00	47	196	28	31	23	31	38	28	20	8	0	0	0	0			
	673	246	505	419	400	425	443	391	342	39	3	1	1	5			
MASPETH-FOREST HILLS																	
16.00	61	331	47	45	39	37	33	25	20	0	0	0	0	5			
17.00	66	214	47	54	44	47	52	36	34	0	0	0	0	2			
18.10	43	206	35	23	20	28	30	12	11	0	0	0	0	1			
18.21	47	265	28	29	30	23	26	22	18	0	0	0	0	4			
18.22	25	133	24	22	26	27	25	10	8	0	0	1	0	1			
19.10	87	171	63	62	53	51	55	31	26	0	0	4	0	1			
19.20	52	166	39	36	36	40	31	29	24	1	0	1	1	2			
22.00	82	397	64	63	59	55	58	35	34	0	0	0	0	1			
23.00	57	259	45	38	36	41	36	26	26	0	0	0	0	0			
24.00	87	338	72	56	58	38	42	26	24	1	0	0	0	1			
	607	236	464	428	401	387	388	252	225	2	0	6	1	18			
QUEENS	3907	252	2907	2595	2461	2469	2490	2018	1640	301	14	13	3	47			

(d) Health area 44.00 data only for 1950.

†Per 100,000 population.

KNOWN PREVALENCE OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

RICHMOND

Health Center Dist. Health Area	Total Known Cases during Period 1949-1951 Annual Average		Active Cases on Tuberculosis Register December 31st of Each Year												
	No.	Rate†	1949	1950	1951	1952	1953	1954	1954 - According to Race						Not Rep.
									White	Negro	Puerto Rican	Yel-low	Other		
RICHMOND															
1.00	15	115	6	11	16	18	11	12	9	3	0	0	0	0	0
2.00	35	187	22	27	20	17	23	15	11	1	0	0	0	0	3
3.00	51	228	42	33	32	35	30	20	12	8	0	0	0	0	0
4.00	60	215	33	45	49	34	35	32	28	3	0	1	0	0	0
5.00	25	158	14	14	17	16	17	16	14	2	0	0	0	0	0
6.00	93	376	60	61	65	55	43	45	41	2	0	0	1	1	1
7.00	27	173	19	17	13	12	19	9	9	0	0	0	0	0	0
8.00	41	253	31	26	23	23	18	16	15	1	0	0	0	0	0
9.10	40	199	26	27	30	26	24	17	16	0	0	0	0	0	1
9.20	35	227	24	22	25	19	18	12	12	0	0	0	0	0	0
10.00	3	184	2	3	3	2	1	0	0	0	0	0	0	0	0
	425	222	279	286	293	257	239	194	167	20	0	1	1	1	5
NEW YORK CITY	29150		20076		18988		18261		9321		1581		35		
		369		19059		18286		15982		4460		256			329

†Per 100,000 population.

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

MANHATTAN - Part A

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
CENTRAL HARLEM														
8.00	96	308	96	81	111	104	112	92	0	89	1	0	0	2
10.00	115	404	121	121	103	100	119	87	3	82	1	0	0	1
12.00	107	471	122	102	96	80	90	77	1	74	1	1	0	0
13.00	133	500	143	125	131	114	129	83	2	79	0	0	0	2
15.00	107	395	116	106	100	92	85	101	5	95	0	0	0	1
16.00	104	314	108	99	103	106	95	87	13	64	8	0	1	1
19.00	92	399	116	72	88	91	98	89	5	81	0	0	0	3
24.00	94	369	96	88	99	71	69	63	0	58	5	0	0	0
85.10	...	...	...	...	(a)	11	50	45	0	43	0	0	0	2
85.20	...	...	...	...	(a)	8	70	79	0	75	2	0	1	1
	848	389	918	794	831	777	917	803	29	740	18	1	2	13
EAST HARLEM														
17.00	37	189	33	29	48	26	35	23	12	5	6	0	0	0
20.00	94	327	100	105	77	105	98	86	19	35	28	0	0	4
21.00	28	210	33	28	23	30	19	19	6	3	10	0	0	0
22.00	22	102	27	19	21	28	14	21	8	2	9	0	1	1
25.00	99	354	124	101	71	89	83	75	27	11	35	0	0	2
26.00	31	154	37	16	39	23	26	29	13	3	11	0	0	2
28.00	55	218	71	46	49	37	34	23	14	2	7	0	0	0
29.00	47	200	43	47	51	39	41	34	10	9	14	0	0	1
30.00	53	393	44	68	48	47	58	50	18	17	15	0	0	0
33.00	25	123	31	21	22	17	11	15	11	2	2	0	0	0
84.00	2	54	1	5	1	0	9	0	0	0	0	0	0	0
	493	226	544	485	450	441	428	375	138	89	137	0	1	10
KIPS BAY-YORKVILLE														
36.00	18	52	21	18	15	9	12	9	9	0	0	0	0	0
37.00	25	104	26	28	20	20	23	24	19	0	3	0	0	2
38.00	24	96	25	20	26	25	17	14	13	1	0	0	0	0
41.00	11	47	15	8	11	6	8	6	6	0	0	0	0	0
42.00	23	95	26	26	19	21	17	9	8	1	0	0	0	0
43.00	24	130	25	29	18	15	11	18	17	0	0	1	0	0
44.00	14	92	14	11	17	2	6	10	10	0	0	0	0	0
48.00	19	61	20	17	20	11	13	15	14	0	0	0	0	1
49.00	18	82	22	13	19	9	14	18	17	0	0	0	0	1
50.00	13	84	15	9	16	12	14	16	15	0	0	1	0	0
54.00	19	116	22	12	23	14	12	16	15	0	1	0	0	0
83.00	7	123	6	11	3	7	7	4	4	0	0	0	0	0
	215	84	237	202	207	151	154	159	147	2	4	2	0	4

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas
MANHATTAN - Part B

Health Center Dist. — Health Area	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
	No.	Rate†	1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
LOWER EAST SIDE														
53.00	48	209	41	41	61	38	47	50	39	0	9	0	0	2
58.00	53	244	55	52	52	48	53	64	46	2	12	0	0	4
59.00	43	282	39	51	38	41	32	29	21	1	5	1	0	1
60.00	72	219	84	76	56	68	70	57	50	4	3	0	0	0
62.00	55	226	52	58	54	50	64	59	41	6	9	1	0	2
63.00	21	136	25	24	15	17	26	23	15	1	6	0	0	1
65.00	27	194	25	33	24	179	174	278	241	17	14	1	2	3
66.00	19	160	14	19	25	31	36	41	25	4	9	2	0	1
67.00	26	139	28	24	25	22	31	24	17	0	6	0	0	1
70.00	190	1819	272	152	147	(b)	...	...	...	...	...	...	...	...
71.00	22	169	25	19	23	(b)	...	...	...	...	...	...	...	...
72.00	23	176	23	24	22	22	42	13	6	1	6	0	0	0
73.00	12	91	10	14	11	20	9	16	8	6	2	0	0	0
74.00	37	382	34	39	37	62	78	78	41	6	9	21	0	1
75.00	77	491	78	92	60	(b)	...	...	...	...	...	...	...	...
76.00	24	199	18	25	30	11	23	19	10	1	7	1	0	0
78.00	34	249	29	25	47	54	73	50	31	8	6	4	0	1
79.00	21	198	18	18	27	(b)	...	...	...	...	...	...	...	...
80.00	25	156	22	25	29	25	16	16	7	4	5	0	0	0
	829	272	892	811	783	688	774	817	598	61	108	31	2	17
LOWER WEST SIDE														
39.00	29	118	28	20	39	30	26	24	15	4	2	1	0	2
40.00(c)	45	130	48	42	44	43	40	45	32	4	6	2	0	1
45.00	9	134	10	10	6	42	38	33	25	1	3	1	0	3
46.00	31	176	26	32	35	32	26	41	31	2	5	0	2	1
47.00	66	176	66	83	48	56	54	42	34	6	1	0	0	1
51.00	41	282	52	43	28	(b)	...	...	...	...	...	...	...	...
52.00	92	288	101	103	73	104	107	85	49	13	18	0	1	4
55.00	40	224	50	41	29	40	48	34	18	3	9	0	0	4
56.00	70	235	72	70	67	65	62	63	46	1	13	0	1	2
57.00	81	282	85	84	74	84	95	81	72	5	1	0	0	3
61.00	27	156	29	28	25	18	16	17	13	2	1	0	0	1
64.00	14	67	13	16	13	20	19	13	11	0	1	0	0	1
68.00	13	138	13	15	10	79	66	53	48	1	1	1	0	2
69.00	80	459	77	81	81	(b)	...	...	...	...	...	...	...	...
77.00	111	765	122	123	90	101	105	88	55	5	1	27	0	0
81.00	0	0	0	0	0	0	0	2	0	0	0	1	0	1
82.00	1	221	0	1	3	0	0	0	0	0	0	0	0	0
	750	230	792	792	665	714	702	621	449	47	62	33	4	26

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

MANHATTAN - Part C

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
RIVERSIDE														
11.00(a)	70	269	78	54	79	53	49	43	6	23	11	1	0	2
14.00(a)	47	228	62	36	44	39	38	37	16	13	4	3	1	0
18.00(a)	58	182	73	46	56	64	14	5	2	1	2	0	0	0
23.10	30	128	27	27	37	23	28	15	9	1	3	0	0	2
23.20(a)	38	226	41	43	30	34	20	13	8	0	5	0	0	0
27.10	9	69	11	9	6	8	17	14	6	2	6	0	0	0
27.20	65	198	60	61	74	88	93	66	27	9	26	2	1	1
31.10	26	110	29	21	28	24	25	34	23	6	2	0	1	2
31.20	20	81	19	21	21	11	22	14	9	0	4	0	0	1
32.10	16	104	11	12	23	25	27	29	18	4	7	0	0	0
32.20	30	110	23	30	37	26	25	28	18	0	9	1	0	0
34.00	23	70	30	24	15	20	22	27	19	1	5	0	0	2
35.00	34	94	35	37	29	52	43	57	36	1	14	1	1	4
40.00(c)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	466	144	499	421	479	467	423	382	197	61	98	8	4	14
WASHINGTON HEIGHTS														
1.10	7	29	8	8	4	13	11	8	8	0	0	0	0	0
1.20	13	57	13	17	8	11	11	16	13	2	0	0	0	1
2.10	16	57	20	14	14	15	14	14	12	0	1	0	0	1
2.21	13	57	17	14	9	9	7	7	7	0	0	0	0	0
2.22	10	52	11	9	10	1	10	2	2	0	0	0	0	0
3.00	18	62	22	14	18	13	15	6	4	1	0	1	0	0
4.00	26	80	31	31	15	25	30	20	17	2	1	0	0	0
5.00	38	129	46	37	32	37	36	29	7	18	2	0	0	2
6.10	24	138	20	29	24	18	35	28	7	17	2	0	1	1
6.20	42	203	49	47	31	36	33	40	4	34	2	0	0	0
7.10(a)	36	227	34	35	39	36	26	15	0	15	0	0	0	0
7.20(a)	65	289	76	50	69	53	28	29	1	27	0	0	0	1
9.00(a)	45	154	51	37	48	62	36	33	17	4	6	3	0	3
	353	113	398	342	321	329	292	247	99	120	14	4	1	9
MANHATTAN	3954	202	4280	3847	3736	3567	3690	3404	1657	1120	441	79	14	93

Note: Data for period 1949-1951 according to boundaries of 1940 revision of health area map, beginning with 1952 vital statistics on basis of 1950 revision of health area map. †Per 100,000 population.

(a) Health areas 85.10 and 85.20 prior to 1952 in Washington Heights and Riverside Health Center Districts, thereafter transferred to Central Harlem Health Center District. (b) Health areas combined 65(70), 66(71), 74(75), 78(79), 45(51), 68(69). (c) On January 1, 1950 health area 40 transferred from Riverside to Lower West Side Health Center District.

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BRONX - Part A

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					Not Rep.
									White	Negro	Puerto Rican	Yel-low	Other	
Health Area	No.	Rate†												
FORDHAM-RIVERDALE														
1.00	4	35	5	4	4	2	7	3	1	0	0	1	0	1
2.00	8	49	8	3	13	9	12	7	5	0	0	1	0	1
3.10	9	45	14	9	5	7	7	1	1	0	0	0	0	0
3.20	11	45	12	12	10	12	7	1	1	0	0	0	0	0
4.10	13	36	15	5	18	13	7	9	9	0	0	0	0	0
4.20	16	53	19	14	15	12	10	10	10	0	0	0	0	0
9.00	16	41	15	14	18	10	12	12	10	0	1	0	0	1
10.00	13	49	15	13	11	14	14	9	8	0	0	0	0	1
11.00	9	38	9	10	8	9	9	6	4	0	0	2	0	0
	99	44	112	84	102	88	85	58	49	0	1	4	0	4
MORRISANIA														
21.10	8	37	8	7	9	4	8	6	3	1	2	0	0	0
21.20	8	47	6	2	16	11	10	8	5	1	0	0	0	2
25.00	15	47	15	19	11	10	13	12	8	3	0	0	0	1
26.00	33	152	32	35	33	23	24	19	3	13	3	0	0	0
27.00	38	147	52	38	24	29	33	21	3	15	2	0	0	1
28.00	32	171	44	28	23	25	28	11	1	4	5	0	1	0
29.00	24	83	24	28	20	31	29	18	5	5	8	0	0	0
33.10	16	67	16	20	13	13	12	5	3	2	0	0	0	0
33.20	14	39	16	14	13	12	11	8	7	1	0	0	0	0
34.00	19	115	21	16	20	14	21	12	8	2	1	0	0	1
35.00	68	232	79	62	62	49	41	24	2	17	4	0	0	1
36.00	40	179	38	47	35	32	36	40	14	8	17	0	0	1
	315	107	351	316	279	253	266	184	62	72	42	0	1	7
MOTT HAVEN														
37.00	36	154	31	44	33	31	32	42	8	12	21	0	0	1
38.00	11	62	10	6	17	11	18	13	4	4	4	0	0	1
39.00	14	85	13	14	14	18	16	17	8	3	5	0	0	1
40.00	42	163	44	41	40	37	38	44	12	7	24	0	0	1
41.00	34	137	33	44	24	45	22	38	16	4	16	0	0	2
42.00	36	143	46	27	34	30	23	27	12	5	8	0	0	2
43.00	7	50	8	7	8	12	11	7	5	0	2	0	0	0
44.00	23	103	22	27	19	21	22	15	9	0	5	0	0	1
45.00	24	136	24	19	30	32	31	25	12	3	9	0	0	1
46.00	21	128	27	17	20	20	21	24	11	1	11	0	0	1
47.00	35	159	35	36	34	35	21	31	15	3	11	0	0	2
48.00	3	118	6	3	1	0	1	4	4	0	0	0	0	0
	286	125	299	285	274	292	256	287	116	42	116	0	0	13

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BRONX - Part B

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1954 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
PELHAM BAY														
5.10	9	50	10	9	9	7	8	1	1	0	0	0	0	0
5.20	11	47	14	8	12	4	7	11	11	0	0	0	0	0
6.10	10	41	11	9	10	10	10	10	9	1	0	0	0	0
6.20	6	32	6	6	7	5	8	5	4	0	0	0	0	1
7.10	3	79	6	1	2	1	5	3	3	0	0	0	0	0
7.20	4	112	2	1	10	3	15	10	8	2	0	0	0	0
8.10	8	27	6	10	6	12	13	12	11	0	1	0	0	0
8.20	6	26	3	4	10	8	3	9	8	1	0	0	0	0
	57	40	58	48	66	50	69	61	55	4	1	0	0	1
TREMONT														
15.10	7	35	5	8	7	7	3	4	4	0	0	0	0	0
15.20	13	57	19	11	8	13	4	12	9	2	1	0	0	0
16.00	14	42	21	8	13	9	18	9	7	0	0	0	0	2
17.00	17	71	15	15	20	8	10	6	3	2	0	0	0	1
18.00	12	71	15	8	14	12	12	20	8	6	6	0	0	0
19.00	15	55	21	8	15	19	8	7	4	1	2	0	0	0
20.00	14	50	15	12	16	8	7	10	9	1	0	0	0	0
22.10	13	43	20	9	11	6	17	9	9	0	0	0	0	0
22.20	15	44	13	15	18	10	6	15	12	2	0	1	0	0
23.10	8	27	8	4	11	14	10	9	8	1	0	0	0	0
23.20	4	22	5	4	4	1	8	5	3	1	0	0	0	1
24.00	25	131	23	23	28	24	26	27	9	13	5	0	0	0
	157	52	180	125	165	131	129	133	85	29	14	1	0	4
WESTCHESTER														
12.10	7	27	8	6	7	9	12	6	5	0	0	0	0	1
12.20	6	27	4	7	6	9	10	3	3	0	0	0	0	0
13.10	17	33	22	16	14	16	15	9	9	0	0	0	0	0
13.20	9	74	11	6	10	3	9	3	3	0	0	0	0	0
14.10	2	40	2	3	1	2	3	4	3	1	0	0	0	0
14.20	9	36	10	9	7	6	3	6	6	0	0	0	0	0
30.10	13	58	9	6	24	13	12	10	5	4	0	0	0	1
30.20	10	30	16	5	9	10	12	17	9	8	0	0	0	0
30.30	8	78	5	8	10	3	3	7	5	2	0	0	0	0
31.00	10	48	15	7	7	11	9	6	6	0	0	0	0	0
32.10	6	40	6	6	5	9	7	5	4	0	0	0	0	1
32.20	4	47	3	7	4	5	4	5	5	0	0	0	0	0
	101	40	111	86	104	96	99	81	63	15	0	0	0	3
BRONX	1015	70	1111	944	990	910	904	804	430	162	174	5	1	32

†Per 100,000 population.

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BROOKLYN - Part A

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
BAY RIDGE														
76.00	21	64	30	16	18	14	13	17	17	0	0	0	0	0
77.00	14	62	12	16	14	20	15	16	13	0	2	0	0	1
78.10	15	52	20	17	8	9	13	3	3	0	0	0	0	0
78.20	4	27	2	2	7	2	5	3	3	0	0	0	0	0
79.10	8	42	9	8	7	5	5	6	6	0	0	0	0	0
79.20	11	54	14	10	8	7	6	7	7	0	0	0	0	0
80.10	6	31	10	4	5	10	8	4	4	0	0	0	0	0
80.20	3	21	1	4	5	3	3	3	3	0	0	0	0	0
81.10	6	33	9	6	4	3	5	4	4	0	0	0	0	0
81.20	6	28	6	5	8	4	4	3	3	0	0	0	0	0
82.00	10	27	8	8	13	6	10	9	9	0	0	0	0	0
83.00	9	26	9	13	4	10	8	6	6	0	0	0	0	0
84.00	11	31	10	11	11	6	4	13	12	1	0	0	0	0
92.00	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	124	39	140	120	112	99	99	95	91	1	2	0	0	1
BEDFORD														
20.00	54	213	54	45	64	56	53	48	2	44	1	0	0	1
21.00	39	177	45	38	34	40	50	47	4	41	0	0	0	2
28.00	82	245	96	85	65	86	60	54	3	50	1	0	0	0
29.00	39	104	57	36	23	49	47	28	6	18	0	0	0	4
30.00	52	162	57	48	52	42	67	42	3	37	1	0	0	1
36.00	44	225	48	46	38	43	27	32	4	28	0	0	0	0
48.00	22	66	26	23	18	18	23	12	11	0	1	0	0	0
49.00	16	57	13	10	25	16	15	22	8	12	1	0	0	1
50.10	9	40	11	10	6	6	10	7	5	2	0	0	0	0
50.20	4	25	3	5	4	5	3	3	2	1	0	0	0	0
51.00	15	68	12	19	13	8	10	11	4	7	0	0	0	0
52.00	22	116	25	20	19	31	21	25	2	23	0	0	0	0
	398	128	447	385	361	400	386	331	54	263	5	0	0	9
BROWNSVILLE														
56.00	7	34	6	10	5	13	6	11	8	2	0	0	0	1
57.00	27	142	29	36	16	22	28	14	4	7	2	0	0	1
58.10	8	31	8	10	7	7	5	6	6	0	0	0	0	0
58.20	5	26	7	6	3	7	3	2	2	0	0	0	0	0
59.00	32	137	40	33	23	29	23	32	12	19	1	0	0	0
60.00	13	69	16	11	12	15	18	21	8	10	3	0	0	0
61.00	14	63	14	14	14	8	9	12	9	3	0	0	0	0
62.00	11	39	11	12	9	4	10	11	10	1	0	0	0	0
63.00	9	37	10	7	10	2	6	3	3	0	0	0	0	0
64.10	6	35	7	5	4	9	6	10	10	0	0	0	0	0
64.20	7	34	8	7	7	6	4	3	3	0	0	0	0	0
64.30	1	74	1	0	2	0	0	0	0	0	0	0	0	0
75.10	7	42	11	5	4	4	9	1	1	0	0	0	0	0
75.20	9	40	8	12	7	17	17	16	8	8	0	0	0	0
	156	56	176	168	123	143	144	142	84	50	6	0	0	2

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BROOKLYN - Part B

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1949	1950	1951	1952	1953	1954	1954 - According to Race					
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
BUSHWICK														
17.00	30	145	37	20	32	28	26	31	18	5	7	1	0	0
22.00	13	77	15	13	12	8	6	6	6	0	0	0	0	0
31.00	35	125	30	39	36	29	31	36	15	18	2	0	0	1
32.00	12	51	13	8	15	14	7	7	6	0	1	0	0	0
33.00	18	68	19	14	22	5	12	14	14	0	0	0	0	0
34.00	26	87	25	33	19	20	10	14	13	0	0	0	0	1
35.00	15	57	22	14	9	6	16	14	11	0	3	0	0	0
37.00	8	63	12	5	8	10	6	4	2	1	0	0	0	1
38.00	10	40	9	17	2	16	10	8	7	1	0	0	0	0
39.00	11	47	15	10	9	5	10	6	6	0	0	0	0	0
	178	76	197	173	164	141	134	140	98	25	13	1	0	3
FLATBUSH														
53.10	8	34	8	8	7	4	7	13	11	1	1	0	0	0
53.20	13	38	18	14	8	8	17	12	11	1	0	0	0	0
54.00	16	50	15	19	13	16	13	7	6	1	0	0	0	0
55.10	6	19	8	5	6	11	10	6	6	0	0	0	0	0
55.20	13	40	12	13	15	13	6	12	11	1	0	0	0	0
70.00	11	32	15	8	9	8	9	12	12	0	0	0	0	0
71.10	4	31	7	3	3	1	4	3	3	0	0	0	0	0
71.20	6	20	4	6	7	5	4	6	6	0	0	0	0	0
72.10	15	37	13	18	14	15	18	5	5	0	0	0	0	0
72.20	4	18	2	2	6	2	6	4	4	0	0	0	0	0
73.10	8	28	5	12	8	9	6	5	4	1	0	0	0	0
73.20	6	21	6	4	8	3	6	3	2	1	0	0	0	0
74.10	14	44	15	21	6	13	11	12	12	0	0	0	0	0
74.20	5	30	5	6	4	2	1	4	4	0	0	0	0	0
88.10	8	26	9	8	8	12	11	3	3	0	0	0	0	0
88.21	10	32	15	7	8	6	5	5	5	0	0	0	0	0
88.22	11	53	13	15	6	10	7	3	3	0	0	0	0	0
	158	33	170	169	136	138	141	115	108	6	1	0	0	0
FORT GREENE														
10.00	51	446	60	43	49	40	32	11	4	4	2	0	1	0
11.00	24	139	25	22	24	26	33	20	6	10	3	1	0	0
12.00	33	116	30	31	39	54	42	47	19	16	11	0	0	1
13.00	72	249	82	71	64	64	77	62	9	52	0	0	0	1
14.00	20	77	21	22	17	16	20	19	9	5	4	0	0	1
18.00	24	122	26	23	22	28	29	40	4	29	6	0	0	1
19.00	21	98	17	19	26	28	25	37	16	17	3	0	0	1
27.10	30	135	32	26	33	21	24	26	11	13	2	0	0	0
27.20	8	51	12	7	6	7	5	2	2	0	0	0	0	0
45.00	23	76	19	25	25	23	23	19	18	0	1	0	0	0
93.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	306	138	324	289	305	307	310	283	98	146	32	1	1	5

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

BROOKLYN - Part C

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1954 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
GRAVESEND														
85.10	6	21	7	5	6	8	6	2	2	0	0	0	0	0
85.21	4	19	0	5	6	6	6	2	2	0	0	0	0	0
85.22	5	27	5	4	7	5	3	1	1	0	0	0	0	0
86.10	6	22	5	10	2	8	7	5	5	0	0	0	0	0
86.20	9	31	11	5	10	8	8	3	3	0	0	0	0	0
87.10	5	20	7	2	6	2	0	5	5	0	0	0	0	0
87.21	6	34	6	6	7	12	10	6	6	0	0	0	0	0
87.22	10	39	10	6	13	4	3	2	2	0	0	0	0	0
89.00	5	48	3	7	3	7	4	7	7	0	0	0	0	0
90.10	10	52	8	16	7	15	10	4	2	2	0	0	0	0
90.20	11	56	15	10	8	22	16	12	9	2	1	0	0	0
91.10	8	42	11	10	4	7	2	2	2	0	0	0	0	0
91.20	4	19	1	10	2	7	3	5	4	1	0	0	0	0
	89	31	89	96	81	111	78	56	50	5	1	0	0	0
RED HOOK-GOWANUS														
23.00	62	202	61	58	68	46	41	42	24	3	13	0	1	1
24.00	36	158	36	41	31	45	43	34	13	3	16	1	0	1
25.00	10	71	15	8	6	3	11	12	11	0	1	0	0	0
26.00	49	217	61	35	51	26	39	44	16	11	16	0	0	1
40.00	30	153	43	19	28	21	17	14	6	1	7	0	0	0
41.00	27	96	30	26	25	23	28	25	16	1	8	0	0	0
42.00	10	48	13	7	10	19	11	12	8	0	4	0	0	0
43.00	15	107	9	12	25	13	10	5	5	0	0	0	0	0
	239	139	268	206	244	196	200	188	99	19	65	1	1	3
SUNSET PARK														
44.00	18	104	16	17	20	19	17	13	12	0	1	0	0	0
46.00	20	78	18	27	16	15	22	20	20	0	0	0	0	0
47.00	20	69	19	14	26	22	13	12	12	0	0	0	0	0
65.00	34	114	35	30	36	36	47	23	19	0	3	0	0	1
66.00	25	82	30	31	14	25	18	14	13	0	1	0	0	0
67.00	18	55	19	17	19	13	16	10	10	0	0	0	0	0
68.00	9	27	8	13	6	10	8	4	4	0	0	0	0	0
69.00	8	37	9	7	10	7	6	6	5	0	0	0	0	1
	152	69	154	156	147	147	147	102	95	0	5	0	0	2
WILLIAMSBURG-GREENPOINT														
1.00	15	87	16	15	15	20	13	10	10	0	0	0	0	0
2.00	18	87	21	15	17	14	10	10	10	0	0	0	0	0
3.00	14	98	13	17	13	14	11	5	4	0	1	0	0	0
4.00	16	99	14	20	13	11	11	13	10	0	3	0	0	0
5.00	27	90	29	22	30	27	26	22	11	4	7	0	0	0
6.00	28	94	34	26	25	28	41	31	20	3	5	0	1	2
7.00	10	46	11	9	10	6	12	9	5	1	2	0	0	1
8.00	13	74	11	13	14	10	4	7	5	1	1	0	0	0
9.00	12	75	12	10	14	13	12	14	11	1	2	0	0	0
15.00	14	86	13	9	21	14	27	12	7	3	2	0	0	0
16.00	26	161	27	30	21	36	39	34	10	10	12	1	0	1
	193	89	201	186	193	193	206	167	103	23	35	1	1	4
BROOKLYN	1993	73	2166	1948	1866	1875	1845	1619	880	538	165	4	3	29

†Per 100,000 population.

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

QUEENS - Part A

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year												
			1949	1950	1951	1952	1953	1954	1954 - According to Race						
									White	Negro	Puerto Rican	Yel-low	Other	Not Rep.	
Health Area	No.	Rate†													
ASTORIA-LONG ISLAND CITY															
1.10	10	48	9	11	10	11	10	5	5	0	0	0	0	0	0
1.20	18	61	22	14	18	20	14	10	8	0	0	0	1	1	
3.00	16	54	13	13	21	24	16	7	6	1	0	0	0	0	
4.00	16	42	15	21	11	27	17	17	17	0	0	0	0	0	
5.00	26	66	27	26	26	22	22	15	14	1	0	0	0	0	
7.10	12	65	12	15	9	12	11	16	13	2	0	0	0	0	1
7.20	18	87	22	10	21	12	13	9	7	1	1	0	0	0	
8.00	18	68	19	22	14	14	10	11	10	0	0	0	0	0	1
9.10	15	63	16	21	7	9	9	9	9	0	0	0	0	0	
9.20	10	63	10	13	9	3	4	4	4	0	0	0	0	0	
	159	61	165	166	146	154	126	103	93	5	1	0	1	3	
CORONA															
6.10	22	104	24	16	25	16	27	16	7	9	0	0	0	0	
6.20	14	42	18	14	9	16	10	9	9	0	0	0	0	0	
10.10	19	58	20	17	21	17	18	4	4	0	0	0	0	0	
10.20	18	52	13	16	24	15	13	16	16	0	0	0	0	0	
11.00	20	70	28	16	17	24	30	22	11	10	0	0	0	0	1
14.10	8	73	5	9	12	8	3	1	1	0	0	0	0	0	
14.20	17	66	15	13	24	12	13	12	12	0	0	0	0	0	
15.00	13	61	15	9	14	8	5	3	3	0	0	0	0	0	
	131	63	138	110	146	116	119	83	63	19	0	0	0	0	1
FLUSHING															
2.10	8	59	7	7	11	9	7	11	11	0	0	0	0	0	
2.20	11	48	8	11	13	11	9	6	6	0	0	0	0	0	
12.00	18	78	16	17	22	15	20	13	10	3	0	0	0	0	
13.10	14	53	9	18	16	9	20	11	11	0	0	0	0	0	
13.20	12	57	18	5	12	14	6	6	6	0	0	0	0	0	
20.00	19	38	12	22	22	20	27	25	19	5	0	1	0	0	
21.11	10	62	9	11	11	4	10	0	0	0	0	0	0	0	
21.12	15	50	19	16	9	5	13	10	9	0	0	0	0	0	1
21.21	13	28	12	15	11	20	12	14	13	0	0	0	0	0	1
21.22	12	31	20	10	7	22	13	26	25	0	0	0	0	0	1
21.29	0	0	0	0	0	3	0	0	0	0	0	0	0	0	
39.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	132	46	130	132	134	132	137	122	110	8	0	1	0	0	3

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

QUEENS - Part B

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1954 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
JAMAICA EAST														
28.10	13	64	12	12	16	10	10	14	14	0	0	0	0	0
28.20	10	46	11	8	10	15	17	3	2	0	0	1	0	0
29.10	14	71	16	18	9	10	3	6	6	0	0	0	0	0
29.20	9	36	11	9	7	9	5	8	7	0	0	0	0	1
33.00	17	69	17	18	16	23	25	20	6	14	0	0	0	0
34.00	41	138	32	50	41	35	53	40	9	28	0	0	1	2
35.10	24	109	31	20	22	25	27	13	4	8	0	0	0	1
35.20	15	53	14	18	13	10	13	6	6	0	0	0	0	0
35.31	10	34	18	9	4	11	10	8	6	0	0	0	0	2
35.32	14	54	18	12	11	10	9	17	14	2	0	0	0	1
36.20	3	22	4	0	4	9	6	4	4	0	0	0	0	0
	170	66	184	174	153	167	178	139	78	52	0	1	1	7
JAMAICA WEST														
25.00	16	61	20	13	15	17	13	9	9	0	0	0	0	0
26.00	19	69	19	15	24	6	19	9	9	0	0	0	0	0
27.00	19	52	27	17	14	28	18	27	24	0	0	0	0	3
30.00	15	46	15	16	14	12	18	18	17	1	0	0	0	0
31.00	16	52	14	15	20	16	18	17	16	1	0	0	0	0
32.00	21	59	16	18	29	8	17	16	14	2	0	0	0	0
36.11	9	49	4	10	12	11	8	6	6	0	0	0	0	0
36.12	5	29	4	4	5	9	8	8	6	2	0	0	0	0
37.00	19	72	22	16	20	28	22	25	8	14	2	0	1	0
38.00	15	61	10	23	11	11	12	7	5	2	0	0	0	0
	154	56	151	147	164	146	153	142	114	22	2	0	1	3
MASPETH-FOREST HILLS														
16.00	14	76	17	15	10	8	5	7	6	0	0	0	0	1
17.00	17	55	15	19	17	16	13	15	13	0	0	0	0	2
18.10	8	40	11	6	8	12	8	1	1	0	0	0	0	0
18.21	9	51	7	12	8	7	3	7	5	0	0	0	0	2
18.22	8	41	5	7	11	8	9	2	2	0	0	0	0	0
19.10	26	51	25	26	27	17	19	14	13	0	0	0	0	1
19.20	12	37	13	7	15	12	8	12	10	1	0	0	0	1
22.00	14	69	9	16	18	11	10	6	6	0	0	0	0	0
23.00	12	52	13	10	11	11	12	15	14	0	0	0	0	1
24.00	20	79	34	12	15	8	12	4	4	0	0	0	0	0
	140	54	149	130	140	110	99	83	74	1	0	0	0	8
QUEENS	886	57	917	859	883	825	812	672	532	107	3	2	3	25

†Per 100,000 population.

NEW CASES OF TUBERCULOSIS, NEW YORK CITY, 1949-1954
by Health Center Districts and Health Areas

RICHMOND

Health Center Dist.	New Cases during Period 1949-1951 Annual Average		New Cases Reported during Each Year											
			1 9 5 4 - According to Race											
			1949	1950	1951	1952	1953	1954	White	Negro	Puerto Rican	Yel-low	Other	Not Rep.
Health Area	No.	Rate†												
RICHMOND														
1.00	5	40	4	6	6	10	7	5	5	0	0	0	0	0
2.00	8	39	6	11	5	9	9	6	6	0	0	0	0	0
3.00	10	45	11	8	11	14	8	8	7	1	0	0	0	0
4.00	18	63	11	20	22	12	20	15	12	2	0	1	0	0
5.00	8	51	6	8	10	9	5	5	5	0	0	0	0	0
6.00	22	89	16	24	26	17	18	22	19	2	0	0	1	0
7.00	7	42	10	8	2	6	15	3	2	0	0	1	0	0
8.00	9	58	10	14	4	7	6	4	3	1	0	0	0	0
9.10	11	55	8	12	13	9	7	11	10	0	0	0	0	1
9.20	9	61	11	8	9	11	3	4	4	0	0	0	0	0
10.00	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	107	56	93	119	108	105	98	83	73	6	0	2	1	1
NEW YORK CITY	7956	101	8567	7717	7583	7282	7349	6582	3572	1933	783	92	22	180

†Per 100,000 population.

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950*

MANHATTAN - Part A

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
CENTRAL HARLEM									
8.00	31,219	118	30,962	102	37	0.4	99.2	0.3	0.1
10.00	28,472	118	28,267	52	35	0.4	99.3	0.2	0.1
12.00	22,656	77	22,521	31	27	0.3	99.4	0.1	0.1
13.00	26,588	198	26,279	72	39	0.7	98.8	0.3	0.1
15.00	27,192	360	26,527	228	77	1.3	97.6	0.8	0.3
16.00	32,863	6,754	22,982	3,077	50	20.6	69.9	9.4	0.1
19.00	23,071	269	21,869	879	54	1.2	94.8	3.8	0.2
24.00	25,595	570	22,635	2,332	58	2.2	88.4	9.1	0.2
85.10	..	..	..	..	..	..	..	..	..
85.20	..	..	..	..	..	..	..	..	..
	217,656	8,464	202,042	6,773	377	3.9	92.8	3.1	0.2
EAST HARLEM									
17.00	19,354	16,719	1,160	1,429	46	86.4	6.0	7.4	0.2
20.00	28,760	4,032	13,339	11,304	85	14.0	46.4	39.3	0.3
21.00	13,352	9,735	362	3,230	25	72.9	2.7	24.2	0.2
22.00	21,927	19,506	185	2,210	26	89.0	0.8	10.1	0.1
25.00	27,881	6,617	2,020	19,185	59	23.7	7.2	68.8	0.2
26.00	19,978	16,476	842	2,628	32	82.5	4.2	13.2	0.1
28.00	25,403	13,819	3,073	8,082	429	54.4	12.1	31.8	1.7
29.00	23,540	15,028	1,830	6,531	151	63.8	7.8	27.7	0.6
30.00	13,575	4,357	4,535	4,610	73	32.1	33.4	34.0	0.5
33.00	19,980	18,360	647	852	121	91.9	3.2	4.3	0.6
84.00	4,316	3,522	668	104	22	81.6	15.5	2.4	0.5
	218,066	128,171	28,661	60,165	1,069	58.8	13.1	27.6	0.5
KIPS BAY-YORKVILLE									
36.00	34,946	34,330	380	137	99	98.2	1.1	0.4	0.3
37.00	23,817	23,524	84	170	39	98.8	0.4	0.7	0.1
38.00	24,764	24,555	81	80	48	99.2	0.3	0.3	0.2
41.00	24,202	23,787	233	113	69	98.3	1.0	0.5	0.2
42.00	24,894	24,617	108	125	44	98.9	0.4	0.5	0.2
43.00	18,528	18,306	22	133	67	98.8	0.1	0.7	0.4
44.00	15,211	15,016	30	128	37	98.7	0.2	0.8	0.2
48.00	31,145	30,812	143	78	112	98.9	0.5	0.3	0.3
49.00	21,889	21,508	107	130	144	98.2	0.5	0.6	0.7
50.00	15,868	15,601	40	165	62	98.3	0.3	1.0	0.4
54.00	16,409	16,015	33	281	80	97.6	0.2	1.7	0.5
83.00	5,424	4,526	668	182	48	83.4	12.3	3.4	0.9
	257,097	252,597	1,929	1,722	849	98.2	0.8	0.7	0.3

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

MANHATTAN - Part B

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
LOWER EAST SIDE									
53.00	22,805	21,796	61	765	183	95.6	0.2	3.4	0.8
58.00	21,696	19,685	29	1,693	289	90.7	0.1	7.8	1.3
59.00	15,114	14,272	53	693	96	94.4	0.4	4.6	0.6
60.00	32,901	32,407	278	141	75	98.5	0.8	0.4	0.2
62.00	24,226	21,655	126	2,130	315	89.4	0.5	8.8	1.3
63.00	15,674	14,330	708	543	93	91.4	4.5	3.5	0.6
65.00	14,120	13,498	160	298	164	95.6	1.1	2.1	1.2
66.00	12,060	11,849	38	145	28	98.3	0.3	1.2	0.2
67.00	18,446	17,624	160	617	45	95.5	0.9	3.3	0.2
70.00	10,461	9,097	231	905	228	87.0	2.2	8.7	2.1
71.00	13,207	11,853	165	849	340	89.7	1.2	6.4	2.6
72.00	13,046	11,747	179	1,036	84	90.0	1.4	7.9	0.6
73.00	12,853	9,980	2,001	813	59	77.6	15.6	6.3	0.5
74.00	9,594	7,300	197	764	1,333	76.1	2.0	8.0	13.9
75.00	15,608	12,346	143	1,317	1,802	79.1	0.9	8.4	11.5
76.00	12,218	10,520	500	1,157	41	86.1	4.1	9.5	0.3
78.00	13,537	12,355	148	248	786	91.3	1.1	1.8	5.8
79.00	10,589	8,525	335	1,559	170	80.5	3.2	14.7	1.6
80.00	16,245	14,433	669	1,104	39	88.8	4.1	6.8	0.2
	304,400	275,272	6,181	16,777	6,170	90.4	2.0	5.5	2.0
LOWER WEST SIDE									
39.00	24,598	20,891	2,399	1,132	176	84.9	9.8	4.6	0.7
40.00	34,339	31,849	284	1,840	366	92.7	0.8	5.4	1.1
45.00	6,455	6,104	17	329	5	94.6	0.3	5.1	0.0
46.00	17,580	15,719	625	1,116	120	89.4	3.6	6.3	0.7
47.00	37,253	33,750	1,388	1,697	418	90.6	3.7	4.6	1.1
51.00	14,530	13,596	89	696	149	93.6	0.6	4.8	1.0
52.00	32,009	28,718	498	2,615	178	89.7	1.6	8.2	0.5
55.00	17,876	15,667	400	1,743	66	87.6	2.2	9.8	0.4
56.00	29,682	25,744	311	3,458	169	86.7	1.0	11.7	0.6
57.00	28,730	28,138	317	196	79	97.9	1.1	0.7	0.3
61.00	17,480	16,929	288	190	73	96.8	1.6	1.1	0.4
64.00	20,789	20,454	170	104	61	98.4	0.8	0.5	0.3
68.00	9,199	9,076	22	88	13	98.7	0.2	1.0	0.1
69.00	17,342	15,975	57	609	701	92.1	0.3	3.5	4.0
77.00	14,593	9,817	1,176	352	3,248	67.3	8.0	2.4	22.3
81.00	2,661	2,544	54	23	40	95.6	2.0	0.9	1.5
82.00	601	566	18	1	16	94.2	3.0	0.1	2.7
	325,717	295,537	8,113	16,189	5,878	90.7	2.5	5.0	1.8

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

MANHATTAN - Part C

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
RIVERSIDE									
11.00	26,158	6,687	15,258	4,122	91	25.6	58.3	15.8	0.3
14.00	20,724	10,072	7,229	2,415	1,008	48.6	34.9	11.7	4.8
18.00	31,998	16,482	14,842	216	458	51.5	46.4	0.7	1.4
23.10	23,731	22,036	157	1,145	393	92.9	0.7	4.8	1.6
23.20	16,786	8,853	4,620	3,122	191	52.7	27.5	18.6	1.1
27.10	12,507	11,669	47	713	78	93.3	0.4	5.7	0.6
27.20	32,813	21,706	3,645	7,198	264	66.2	11.1	21.9	0.8
31.10	23,643	22,801	114	615	113	96.4	0.5	2.6	0.5
31.20	25,183	24,549	146	392	96	97.5	0.6	1.5	0.4
32.10	14,807	12,681	1,182	839	105	85.6	8.0	5.7	0.7
32.20	27,266	25,518	192	1,433	123	93.6	0.7	5.3	0.4
34.00	32,821	31,877	298	535	111	97.1	0.9	1.6	0.3
35.00	35,724	33,861	217	1,388	258	94.8	0.6	3.9	0.7
	324,161	248,792	47,947	24,133	3,289	76.7	14.8	7.4	1.0
WASHINGTON HEIGHTS									
1.10	23,223	23,034	59	107	23	99.2	0.2	0.5	0.1
1.20	22,224	22,041	26	93	64	99.2	0.1	0.4	0.3
2.10	28,039	27,047	138	780	74	96.5	0.5	2.8	0.2
2.21	23,284	22,892	32	205	155	98.3	0.1	0.9	0.7
2.22	19,144	19,054	25	48	17	99.5	0.1	0.3	0.1
3.00	28,930	27,957	195	724	54	96.6	0.7	2.5	0.2
4.00	32,241	28,815	1,051	2,284	91	89.4	3.3	7.1	0.2
5.00	29,774	18,894	9,293	1,515	72	63.5	31.2	5.1	0.2
6.10	17,571	9,324	7,551	564	132	53.1	43.0	3.2	0.7
6.20	20,890	6,792	12,306	1,606	186	32.5	58.9	7.7	0.9
7.10	15,845	107	15,661	55	22	0.7	98.8	0.3	0.1
7.20	22,453	348	21,903	141	61	1.5	97.6	0.6	0.3
9.00	29,386	16,756	7,566	4,628	436	57.0	25.7	15.7	1.5
	313,004	223,061	75,806	12,750	1,387	71.3	24.2	4.1	0.4
MANHATTAN	1960,101	1431,894	370,679	138,509	19,019	73.0	18.9	7.1	1.0

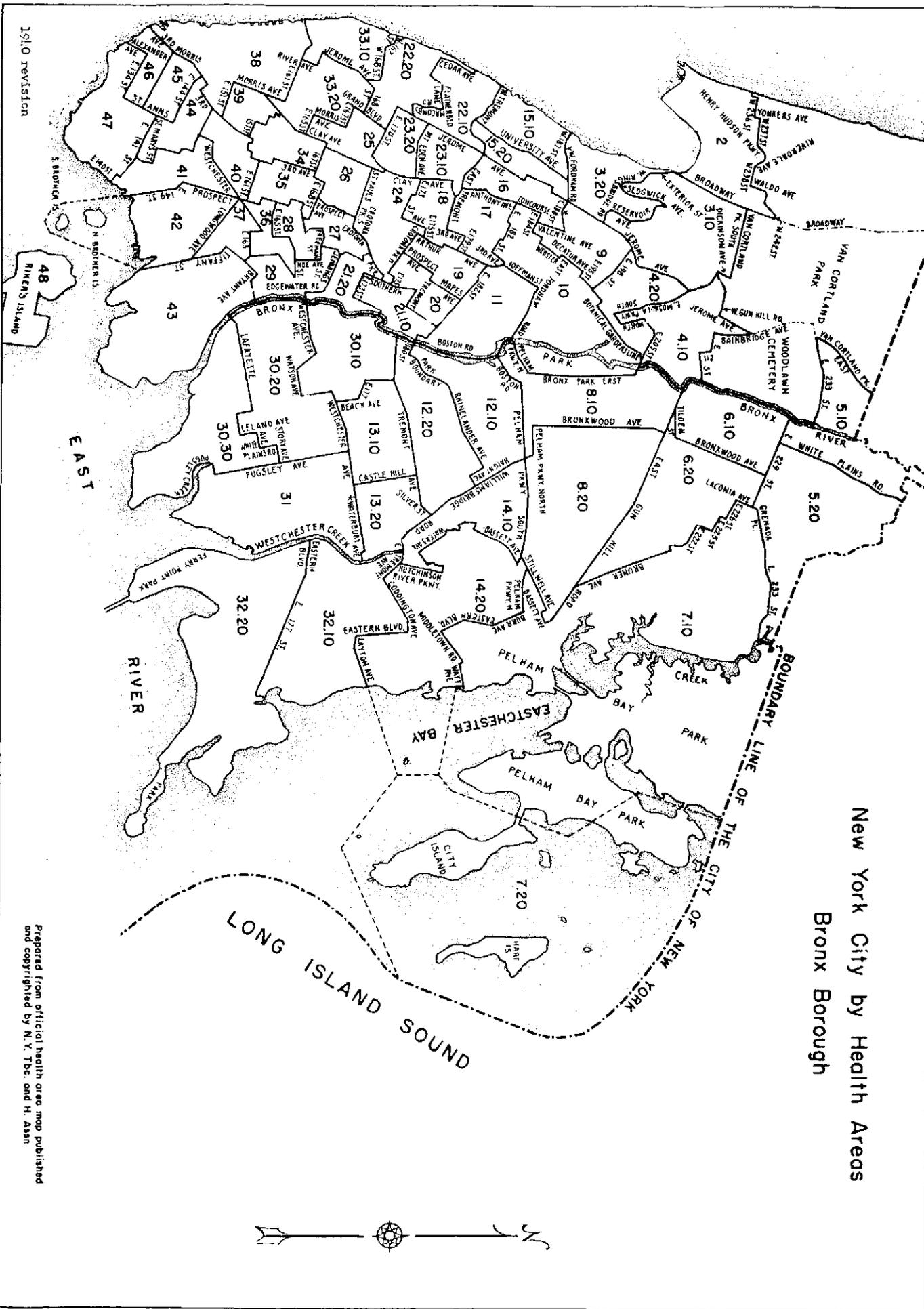
*Boundaries according to 1940 revision of health area map. †Federal Census April 1, 1950. ..Data not available for 1940 revision of health area map. Sum of percentages do not always add to 100% due to rounding. Compiled by Statistical Division, New York Tuberculosis and Health Association.

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

BRONX - Part A

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
FORDHAM-RIVERDALE									
1.00	12,336	12,125	74	42	95	98.3	0.6	0.3	0.8
2.00	16,345	16,043	176	93	33	98.1	1.1	0.6	0.2
3.10	20,616	20,499	43	52	22	99.4	0.2	0.3	0.1
3.20	25,110	24,984	73	32	21	99.5	0.3	0.1	0.1
4.10	35,115	34,770	273	42	30	99.0	0.8	0.1	0.1
4.20	30,361	30,257	57	33	14	99.7	0.2	0.1	(..)
9.00	38,003	37,859	49	80	15	99.6	0.1	0.2	(..)
10.00	26,293	25,944	117	193	39	98.7	0.4	0.7	0.1
11.00	23,679	23,493	92	79	15	99.2	0.4	0.3	0.1
	227,858	225,974	954	646	284	99.2	0.4	0.3	0.1
MORRISANIA									
21.10	21,580	21,276	187	98	19	98.6	0.9	0.4	0.1
21.20	17,111	14,922	1,386	731	72	87.2	8.1	4.3	0.4
25.00	32,140	31,514	409	205	12	98.1	1.3	0.6	(..)
26.00	21,883	8,383	12,474	999	27	38.3	57.0	4.6	0.1
27.00	25,933	12,172	12,080	1,535	146	46.9	46.6	5.9	0.6
28.00	18,540	7,802	7,945	2,754	39	42.1	42.9	14.8	0.2
29.00	29,080	25,738	653	2,650	39	88.5	2.2	9.1	0.1
33.10	24,328	24,151	52	114	11	99.3	0.2	0.5	(..)
33.20	36,594	36,051	429	93	21	98.5	1.2	0.3	(..)
34.00	16,511	13,318	2,509	659	25	80.7	15.2	4.0	0.1
35.00	29,210	2,185	24,780	2,174	71	7.5	84.8	7.4	0.2
36.00	22,366	11,347	3,316	7,644	59	50.7	14.8	34.2	0.3
	295,276	208,859	66,220	19,656	541	70.7	22.4	6.7	0.2
MOTT HAVEN									
37.00	23,408	11,911	5,572	5,883	42	50.9	23.8	25.1	0.2
38.00	17,662	16,216	1,126	294	26	91.8	6.4	1.7	0.1
39.00	16,031	15,763	100	164	4	98.3	0.6	1.0	(..)
40.00	25,533	13,769	3,726	8,007	31	53.9	14.6	31.4	0.1
41.00	24,533	16,298	1,166	7,026	43	66.4	4.8	28.6	0.2
42.00	25,018	17,046	1,889	6,003	80	68.1	7.6	24.0	0.3
43.00	15,227	14,275	304	644	4	93.7	2.0	4.2	(..)
44.00	21,937	20,618	368	935	16	94.0	1.7	4.2	0.1
45.00	17,862	16,733	73	1,035	21	93.7	0.4	5.8	0.1
46.00	16,684	13,624	57	2,947	56	81.7	0.3	17.7	0.3
47.00	22,046	18,243	759	3,019	25	82.7	3.4	13.7	0.1
48.00	2,813	1,566	974	177	96	55.7	34.6	6.3	3.4
	228,754	176,062	16,114	36,134	444	77.0	7.0	15.8	0.2

New York City by Health Areas Bronx Borough



1940 revision

Prepared from official health area map published and copyrighted by N.Y. Tbe. and H. Assn.

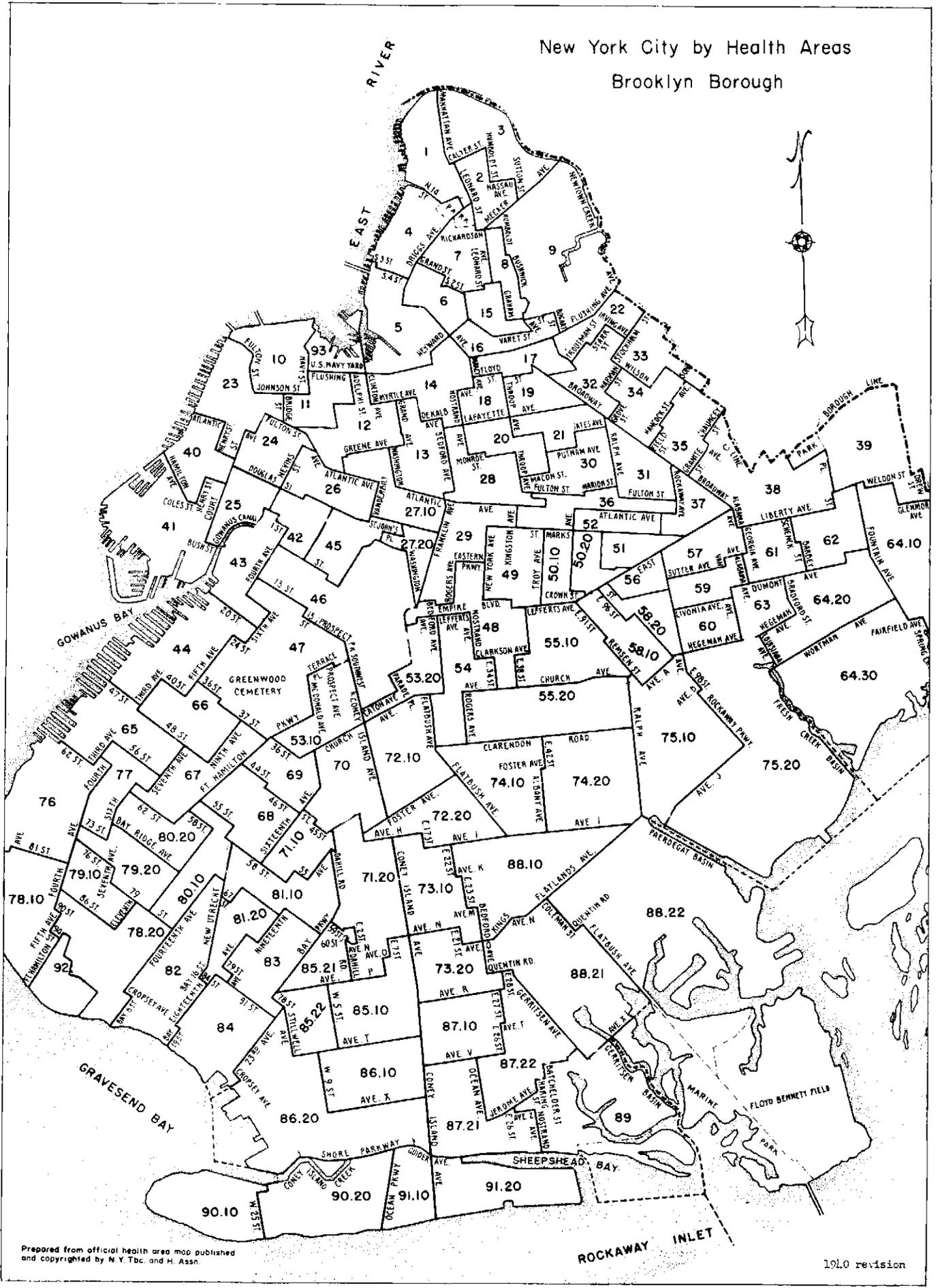
POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

BRONX - Part B

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
PETHAM BAY									
5.10	18,703	18,576	63	39	25	99.3	0.3	0.2	0.1
5.20	23,879	23,709	106	47	17	99.3	0.4	0.2	0.1
6.10	24,277	23,202	995	66	14	95.6	4.1	0.3	(..)
6.20	19,912	18,503	1,340	53	16	92.9	6.7	0.3	0.1
7.10	3,797	3,724	54	15	4	98.1	1.4	0.4	0.1
7.20	3,869	3,835	20	9	5	99.1	0.5	0.2	0.1
8.10	26,919	26,703	144	42	30	99.2	0.5	0.2	0.1
8.20	22,231	21,656	466	106	3	97.4	2.1	0.5	(..)
	143,587	139,908	3,188	377	114	97.4	2.2	0.3	0.1
TREMONT									
15.10	19,091	19,004	36	36	15	99.5	0.2	0.2	0.1
15.20	22,399	22,218	71	57	53	99.2	0.3	0.3	0.2
16.00	32,983	32,801	67	84	31	99.4	0.2	0.3	0.1
17.00	23,590	23,245	93	229	23	98.5	0.4	1.0	0.1
18.00	17,280	16,342	267	643	28	94.6	1.5	3.7	0.2
19.00	26,849	26,471	201	152	25	98.6	0.7	0.6	0.1
20.00	28,775	28,090	365	288	32	97.6	1.3	1.0	0.1
22.10	31,004	30,719	172	89	24	99.1	0.6	0.3	(..)
22.20	34,973	34,775	109	65	24	99.4	0.3	0.2	0.1
23.10	28,919	28,612	150	107	50	98.9	0.5	0.4	0.2
23.20	19,378	19,294	54	26	4	99.6	0.3	0.1	(..)
24.00	18,820	11,732	5,147	1,924	17	62.3	27.3	10.2	0.1
	304,061	293,303	6,732	3,700	326	96.5	2.2	1.2	0.1
WESTCHESTER									
12.10	26,308	26,153	64	62	29	99.4	0.2	0.2	0.1
12.20	21,235	20,874	258	88	15	98.3	1.2	0.4	0.1
13.10	53,171	53,039	42	72	18	99.8	0.1	0.1	(..)
13.20	12,210	12,112	62	30	6	99.2	0.5	0.2	(..)
14.10	5,059	5,045	10	2	2	99.7	0.2	(..)	(..)
14.20	24,366	24,314	11	32	9	99.8	(..)	0.1	(..)
30.10	22,370	22,019	40	293	18	98.4	0.2	1.3	0.1
30.20	33,179	32,108	648	406	17	96.8	2.0	1.2	(..)
30.30	9,774	9,699	27	47	1	99.2	0.3	0.5	(..)
31.00	20,043	19,213	473	348	9	95.9	2.4	1.7	(..)
32.10	14,075	14,036	12	16	11	99.7	0.1	0.1	0.1
32.20	9,951	9,904	12	15	20	99.5	0.1	0.2	0.2
	251,741	248,516	1,659	1,411	155	98.7	0.7	0.5	0.1
BRONX	1451,277	1292,622	94,867	61,924	1,864	89.1	6.5	4.3	0.1

*Boundaries according to 1940 revision of health area map. †Federal Census April 1, 1950. (..) = Less than 0.05%. Sum of percentages do not always add to 100% due to rounding. Compiled by Statistical Division, New York Tuberculosis and Health Association.

New York City by Health Areas Brooklyn Borough



Prepared from official health area map published and copyrighted by N. Y. Tbc. and H. Assn.

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

BROOKLYN - Part A

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
BAY RIDGE									
76.00	33,380	33,281	33	38	28	99.7	0.1	0.1	0.1
77.00	22,513	22,275	12	208	18	98.9	0.1	0.9	0.1
78.10	28,834	28,753	33	30	18	99.7	0.1	0.1	0.1
78.20	13,537	13,511	9	8	9	99.8	0.1	(..)	0.1
79.10	18,914	18,872	23	11	8	99.8	0.1	0.1	(..)
79.20	19,805	19,786	8	0	11	99.9	(..)	0.0	0.1
80.10	20,351	20,309	0	32	10	99.8	0.0	0.2	(..)
80.20	15,846	15,814	3	18	11	99.8	(..)	0.1	0.1
81.10	19,140	19,092	24	17	7	99.7	0.1	0.1	(..)
81.20	22,443	22,409	20	7	7	99.8	0.1	(..)	(..)
82.00	36,461	36,133	272	41	15	99.1	0.7	0.1	(..)
83.00	32,852	32,675	68	70	39	99.5	0.2	0.2	0.1
84.00	34,671	34,424	196	26	25	99.3	0.6	(..)	(..)
92.00	1,083	1,055	7	6	15	97.4	0.6	0.6	1.4
	319,830	318,389	708	512	221	99.5	0.2	0.2	0.1
BEDFORD									
20.00	25,466	3,513	21,656	250	47	13.8	85.0	1.0	0.2
21.00	22,073	7,988	13,797	250	38	36.2	62.5	1.1	0.2
28.00	33,465	3,856	29,349	186	74	11.5	87.7	0.6	0.2
29.00	37,218	28,964	8,129	100	25	77.8	21.8	0.3	0.1
30.00	32,252	6,287	25,763	140	62	19.5	79.9	0.4	0.2
36.00	19,588	6,737	12,756	65	30	34.4	65.1	0.3	0.2
48.00	33,871	33,638	179	37	17	99.3	0.5	0.1	0.1
49.00	28,179	25,669	2,433	35	42	91.1	8.6	0.1	0.1
50.10	22,662	21,937	702	14	9	96.8	3.1	0.1	(..)
50.20	15,690	15,491	180	4	15	98.7	1.1	(..)	0.1
51.00	21,657	20,009	1,582	45	21	92.4	7.3	0.2	0.1
52.00	18,316	10,912	7,230	157	17	59.6	39.5	0.8	0.1
	310,437	185,001	123,756	1,283	397	59.6	39.9	0.4	0.1
BROWNSVILLE									
56.00	20,455	19,738	640	19	58	96.5	3.1	0.1	0.3
57.00	19,074	14,831	4,119	91	33	77.8	21.6	0.5	0.1
58.10	27,230	27,119	89	5	17	99.6	0.3	(..)	0.1
58.20	20,458	20,353	72	17	16	99.5	0.4	(..)	(..)
59.00	23,298	15,178	7,842	245	33	65.1	33.7	1.1	0.1
60.00	18,930	16,699	2,070	149	12	88.2	10.9	0.8	0.1
61.00	22,193	21,400	752	24	17	96.4	3.4	0.1	0.1
62.00	27,036	26,037	977	10	12	96.3	3.6	(..)	(..)
63.00	24,269	24,214	31	13	11	99.8	0.1	0.1	(..)
64.10	15,368	15,324	17	18	9	99.7	0.1	0.1	0.1
64.20	21,568	21,083	403	58	24	97.8	1.9	0.2	0.1
64.30	1,354	1,101	217	35	1	81.3	16.0	2.6	0.1
75.10	15,913	15,798	20	86	9	99.3	0.1	0.5	0.1
75.20	22,698	21,506	765	358	69	94.7	3.4	1.6	0.3
	279,844	260,381	18,014	1,128	321	93.0	6.4	0.4	0.1

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

BROOKLYN - Part B

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
BUSHWICK									
17.00	20,409	14,796	1,594	3,877	142	72.5	7.8	19.0	0.7
22.00	17,265	17,105	13	140	7	99.1	0.1	0.8	(..)
31.00	27,981	22,889	4,955	100	37	81.8	17.7	0.4	0.1
32.00	23,576	23,479	11	70	16	99.6	(..)	0.3	0.1
33.00	26,864	26,790	15	43	16	99.7	(..)	0.2	(..)
34.00	29,413	29,314	24	52	23	99.6	0.1	0.2	0.1
35.00	26,488	26,462	11	8	7	99.9	(..)	(..)	(..)
37.00	13,205	12,450	673	69	13	94.3	5.1	0.5	0.1
38.00	23,378	23,259	52	45	22	99.5	0.2	0.2	0.1
39.00	24,167	24,113	10	21	23	99.8	(..)	0.1	0.1
	232,746	220,657	7,358	4,425	306	94.8	3.2	1.9	0.1
FLATBUSH									
53.10	22,302	22,194	36	52	20	99.5	0.2	0.2	0.1
53.20	34,961	34,662	204	32	63	99.1	0.6	0.1	0.2
54.00	31,319	30,375	789	102	53	97.0	2.5	0.3	0.2
55.10	32,559	32,245	266	34	14	99.0	0.8	0.1	(..)
55.20	33,718	33,464	161	46	47	99.2	0.5	0.1	0.1
70.00	33,824	33,651	86	70	17	99.5	0.3	0.2	(..)
71.10	13,904	13,863	18	4	19	99.7	0.1	(..)	0.1
71.20	28,544	28,306	141	42	55	99.2	0.5	0.1	0.2
72.10	40,126	39,794	248	49	35	99.2	0.6	0.1	0.1
72.20	18,779	18,612	131	27	9	99.1	0.7	0.1	(..)
73.10	29,959	29,695	172	40	52	99.1	0.6	0.1	0.2
73.20	28,341	28,201	96	12	32	99.5	0.3	(..)	0.1
74.10	31,480	31,373	39	62	6	99.7	0.1	0.2	(..)
74.20	16,727	16,635	61	24	7	99.4	0.4	0.1	(..)
88.10	31,500	31,318	96	45	41	99.4	0.3	0.1	0.1
88.21	31,365	31,234	69	56	6	99.6	0.2	0.2	(..)
88.22	21,555	21,417	25	94	19	99.4	0.1	0.4	0.1
	480,963	477,039	2,638	791	495	99.2	0.5	0.2	0.1
FORT GREENE									
10.00	11,354	7,994	714	2,450	196	70.4	6.3	21.6	1.7
11.00	16,998	12,210	3,630	939	219	71.8	21.4	5.5	1.3
12.00	28,701	26,850	1,087	680	84	93.6	3.8	2.3	0.3
13.00	29,043	9,670	18,852	420	101	33.3	64.9	1.4	0.3
14.00	25,908	21,334	3,905	605	64	82.3	15.1	2.3	0.2
18.00	19,471	15,084	2,594	1,760	33	77.5	13.3	9.0	0.2
19.00	21,136	17,568	2,534	924	110	83.1	12.0	4.4	0.5
27.10	22,540	16,056	6,191	262	31	71.2	27.5	1.2	0.1
27.20	16,219	16,127	43	37	12	99.4	0.3	0.2	0.1
45.00	30,289	30,079	48	125	37	99.3	0.2	0.4	0.1
93.00	259	252	2	4	1	97.3	0.8	1.5	0.4
	221,918	173,224	39,600	8,206	888	78.1	17.8	3.7	0.4

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

BROOKLYN - Part C

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
GRAVESEND									
85.10	28,973	28,766	100	71	36	99.3	0.3	0.2	0.1
85.21	19,662	19,610	30	18	4	99.7	0.2	0.1	(..)
85.22	19,691	19,635	22	23	11	99.7	0.1	0.1	0.1
86.10	25,398	25,290	23	66	19	99.6	0.1	0.2	0.1
86.20	28,299	28,055	138	94	12	99.1	0.5	0.3	(..)
87.10	24,976	24,869	47	26	34	99.6	0.2	0.1	0.1
87.21	18,878	18,324	499	28	27	97.1	2.6	0.1	0.1
87.22	25,079	24,902	130	39	8	99.3	0.5	0.2	(..)
89.00	9,086	9,069	9	5	3	99.8	0.1	0.1	(..)
90.10	20,022	19,731	266	11	14	98.5	1.3	0.1	0.1
90.20	19,777	19,026	534	122	95	96.2	2.7	0.6	0.5
91.10	19,605	19,441	127	21	16	99.2	0.6	0.1	0.1
91.20	22,412	22,158	191	42	21	98.8	0.9	0.2	0.1
	281,858	278,876	2,116	566	300	98.9	0.8	0.2	0.1
RED HOOK-GOWANUS									
23.00	30,795	27,258	308	2,971	258	88.5	1.0	9.6	0.8
24.00	22,743	17,467	2,345	2,576	355	76.8	10.3	11.3	1.6
25.00	13,705	13,417	30	224	34	97.9	0.2	1.6	0.2
26.00	22,553	19,504	2,048	875	126	86.5	9.1	3.9	0.5
40.00	19,620	17,122	108	2,342	48	87.3	0.6	11.9	0.2
41.00	28,012	26,349	704	921	38	94.1	2.5	3.3	0.1
42.00	20,654	20,407	4	229	14	98.8	(..)	1.1	0.1
43.00	14,309	14,075	2	203	29	98.4	(..)	1.4	0.2
	172,391	155,599	5,549	10,341	902	90.3	3.2	6.0	0.5
SUNSET PARK									
44.00	17,025	16,431	38	541	15	96.5	0.2	3.2	0.1
46.00	26,099	25,948	28	68	55	99.4	0.1	0.3	0.2
47.00	28,602	28,479	15	85	23	99.6	(..)	0.3	0.1
65.00	29,423	28,372	98	872	81	96.4	0.3	3.0	0.3
66.00	30,559	30,148	27	335	49	98.7	0.1	1.1	0.1
67.00	33,430	33,303	35	72	20	99.6	0.1	0.2	0.1
68.00	33,783	33,660	63	36	24	99.6	0.2	0.1	0.1
69.00	23,190	23,071	45	54	20	99.5	0.2	0.2	0.1
	222,111	219,412	349	2,063	287	98.8	0.2	0.9	0.1
WILLIAMSBURG-GREENPOINT									
1.00	17,603	17,341	0	232	30	98.5	0.0	1.3	0.2
2.00	20,319	20,231	8	54	26	99.6	(..)	0.3	0.1
3.00	14,627	14,531	17	59	20	99.3	0.1	0.4	0.1
4.00	15,767	15,210	29	501	27	96.5	0.2	3.2	0.1
5.00	29,934	27,761	575	1,545	53	92.7	1.9	5.2	0.1
6.00	30,179	27,281	424	2,357	117	90.4	1.4	7.8	0.4
7.00	21,702	21,491	33	154	24	99.0	0.2	0.7	0.1
8.00	17,143	16,277	305	546	15	94.9	1.8	3.2	0.1
9.00	15,950	15,662	111	169	8	98.2	0.7	1.1	(..)
15.00	16,705	13,842	858	1,971	34	82.9	5.1	11.8	0.2
16.00	16,148	9,097	3,547	3,396	108	56.3	22.0	21.0	0.7
	216,077	198,724	5,907	10,984	462	92.0	2.7	5.1	0.2
BROOKLYN	2738,175	2487,302	205,995	40,299	4,579	90.8	7.5	1.5	0.2

*Boundaries according to 1940 revision of health area map. †Federal Census April 1, 1950. (..) = Less than 0.05%. Sum of percentages do not always add to 100% due to rounding. Compiled by Statistical Division, New York Tuberculosis and Health Association.

POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

QUEENS - Part A

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
ASTORIA-LONG ISLAND CITY									
1.10	20,767	20,676	10	61	20	99.6	(..)	0.3	0.1
1.20	29,437	29,205	22	123	87	99.2	0.1	0.4	0.3
3.00	28,994	28,631	214	123	26	98.7	0.7	0.4	0.1
4.00	37,162	36,963	39	108	52	99.5	0.1	0.3	0.1
5.00	39,884	39,440	343	74	27	98.9	0.8	0.2	0.1
7.10	18,561	18,377	97	50	37	99.0	0.5	0.3	0.2
7.20	20,371	19,059	983	316	13	93.6	4.8	1.5	0.1
8.00	27,008	26,826	33	119	30	99.3	0.1	0.4	0.1
9.10	23,464	23,360	18	54	32	99.6	0.1	0.2	0.1
9.20	17,022	16,910	16	81	15	99.3	0.1	0.5	0.1
	262,670	259,447	1,775	1,109	339	98.8	0.7	0.4	0.1
CORONA									
6.10	20,908	15,642	5,141	79	46	74.8	24.6	0.4	0.2
6.20	32,584	31,432	815	258	79	96.5	2.5	0.8	0.2
10.10	33,418	33,259	57	73	29	99.5	0.2	0.2	0.1
10.20	34,088	33,871	37	126	54	99.4	0.1	0.4	0.1
11.00	29,020	24,199	4,682	90	49	83.4	16.1	0.3	0.2
14.10	11,843	11,779	10	48	6	99.5	0.1	0.4	(..)
14.20	26,138	25,992	23	102	21	99.4	0.1	0.4	0.1
15.00	20,661	19,967	578	103	13	96.6	2.8	0.5	0.1
	208,660	196,141	11,343	879	297	94.0	5.4	0.4	0.1
FLUSHING									
2.10	14,165	14,129	11	13	12	99.7	0.1	0.1	0.1
2.20	22,048	21,952	40	49	7	99.6	0.2	0.2	(..)
12.00	23,574	21,735	1,675	100	64	92.2	7.1	0.4	0.3
13.10	26,800	26,609	64	73	54	99.3	0.2	0.3	0.2
13.20	20,350	19,972	287	72	19	98.1	1.4	0.4	0.1
20.00	49,254	48,104	660	115	375	97.7	1.3	0.2	0.8
21.11	16,694	16,482	180	22	10	98.7	1.1	0.1	0.1
21.12	29,610	29,015	457	97	41	98.0	1.5	0.3	0.1
21.21	45,337	44,946	238	47	106	99.1	0.5	0.1	0.2
21.22	40,307	39,694	382	154	77	98.5	0.9	0.4	0.2
39.00	505	448	56	1	0	88.7	11.1	0.2	0.0
	288,644	283,086	4,050	743	765	98.1	1.4	0.2	0.3

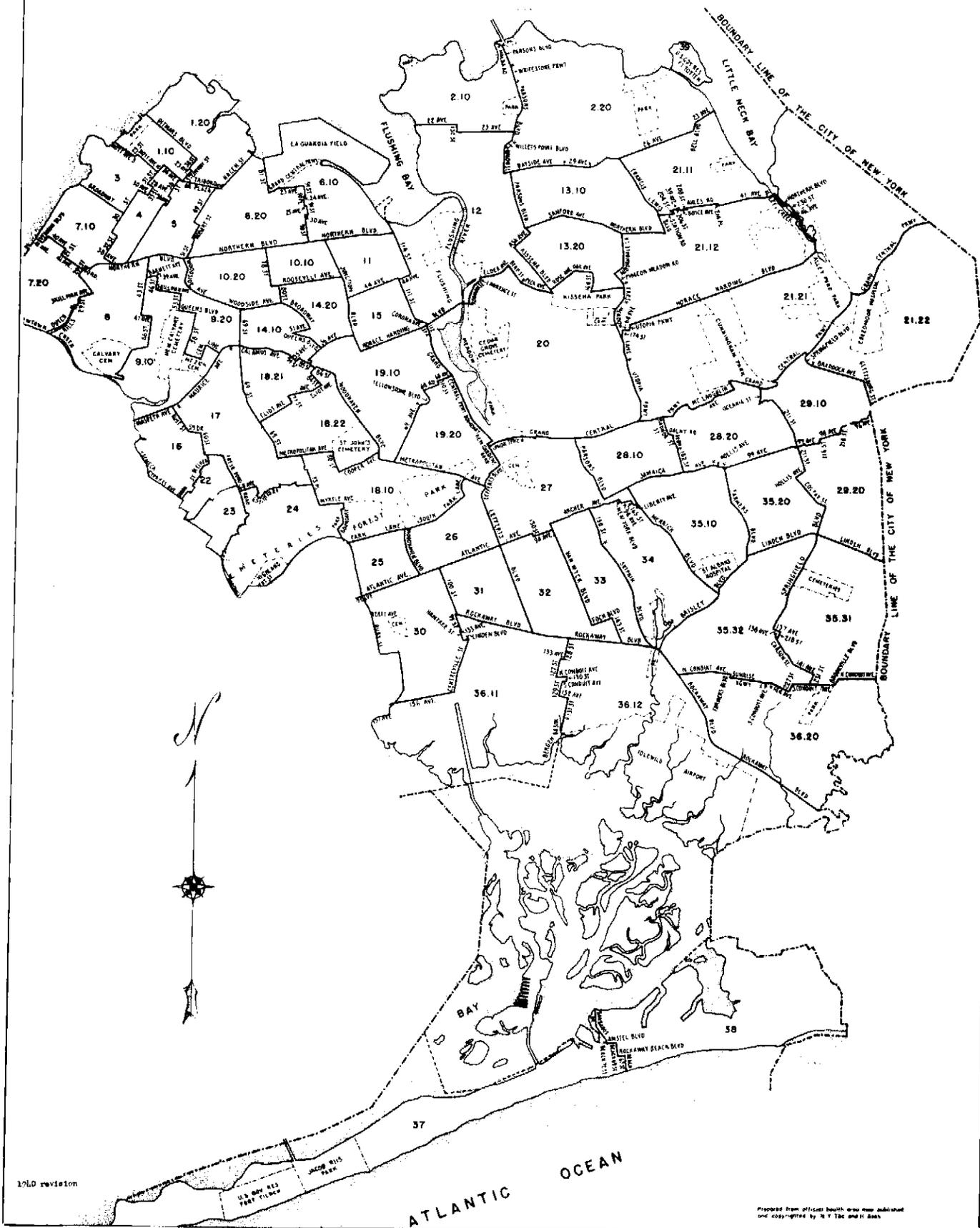
POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

QUEENS - Part B

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
JAMAICA EAST									
28.10	20,776	20,596	47	99	34	99.1	0.2	0.5	0.2
28.20	20,840	20,722	33	66	19	99.4	0.2	0.3	0.1
29.10	20,260	20,183	8	29	40	99.6	(..)	0.1	0.2
29.20	25,117	25,046	9	50	12	99.7	(..)	0.2	(..)
33.00	24,570	18,856	5,501	178	35	76.7	22.4	0.7	0.1
34.00	29,790	14,233	15,309	173	75	47.8	51.4	0.6	0.2
35.10	22,287	13,854	8,279	117	37	62.2	37.1	0.5	0.2
35.20	28,479	28,410	13	34	22	99.8	(..)	0.1	0.1
35.31	30,269	30,096	52	87	34	99.4	0.2	0.3	0.1
35.32	25,169	24,687	369	93	20	98.1	1.5	0.3	0.1
36.20	11,970	11,890	23	50	7	99.3	0.2	0.4	0.1
	259,527	228,573	29,643	976	335	88.1	11.4	0.4	0.1
JAMAICA WEST									
25.00	26,074	26,037	17	10	10	99.9	0.1	(..)	(..)
26.00	27,905	27,732	80	73	20	99.4	0.3	0.3	(..)
27.00	36,999	36,770	50	131	48	99.4	0.1	0.4	0.1
30.00	32,439	32,301	27	87	24	99.6	0.1	0.2	0.1
31.00	31,219	31,041	128	38	12	99.4	0.4	0.1	(..)
32.00	35,759	35,568	56	120	15	99.5	0.2	0.3	(..)
36.11	17,673	17,639	12	19	3	99.8	0.1	0.1	(..)
36.12	14,998	14,927	1	63	7	99.5	(..)	0.4	(..)
37.00	26,953	24,860	1,909	133	51	92.2	7.1	0.5	0.2
38.00	24,150	22,646	1,466	36	2	93.8	6.1	0.1	(..)
	274,169	269,521	3,746	710	192	98.3	1.4	0.2	0.1
MASPETH-FOREST HILLS									
16.00	18,509	18,473	9	15	12	99.8	(..)	0.1	0.1
17.00	30,925	30,825	47	29	24	99.7	0.1	0.1	0.1
18.10	20,742	20,703	18	4	17	99.8	0.1	(..)	0.1
18.21	17,602	17,503	21	69	9	99.4	0.1	0.4	0.1
18.22	18,493	18,397	14	47	35	99.5	0.1	0.2	0.2
19.10	51,128	50,577	261	181	109	98.9	0.5	0.4	0.2
19.20	31,529	31,268	180	37	44	99.2	0.6	0.1	0.1
22.00	20,754	20,720	9	19	6	99.8	(..)	0.1	(..)
23.00	21,869	21,845	9	4	11	99.9	(..)	(..)	0.1
24.00	25,628	25,587	23	14	4	99.8	0.1	0.1	(..)
	257,179	255,898	591	419	271	99.5	0.2	0.2	0.1
QUEENS	1550,849	1492,666	51,148	4,836	2,199	96.2	3.3	0.3	0.1

*Boundaries according to 1940 revision of health area map. †Federal Census April 1, 1950. (..) = Less than 0.05%. Sum of percentages do not always add to 100% due to rounding. Compiled by Statistical Division, New York Tuberculosis and Health Association.

New York City by Health Areas
Queens Borough

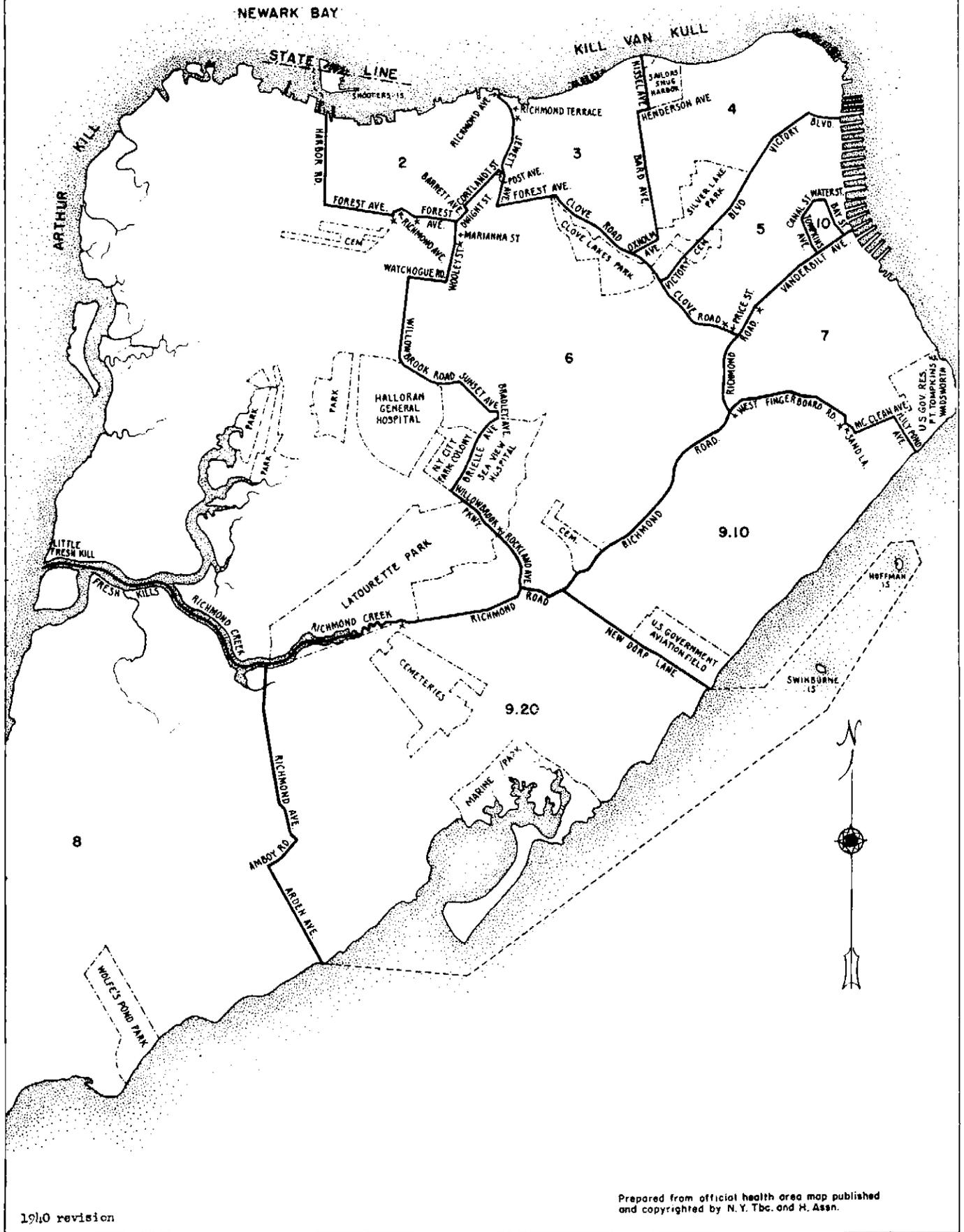


1970 revision

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New York City by Health Areas

Richmond Borough



POPULATION BY HEALTH CENTER DISTRICTS AND HEALTH AREAS
NEW YORK CITY, APRIL 1, 1950†

RICHMOND

Health Area *	Total All Races	R a c e				Percentage Distribution			
		White	Negro	Puerto Rican	Other	White	Negro	Puerto Rican	Other
RICHMOND									
1.00	13,325	12,782	464	65	14	95.9	3.5	0.5	0.1
2.00	18,872	18,336	461	58	17	97.2	2.4	0.3	0.1
3.00	22,183	20,895	1,233	42	13	94.2	5.6	0.2	(..)
4.00	28,074	27,067	971	13	23	96.4	3.5	(..)	0.1
5.00	15,570	14,906	561	51	52	95.7	3.6	0.3	0.3
6.00	24,728	23,407	970	291	60	94.7	3.9	1.2	0.2
7.00	15,753	15,538	140	40	35	98.6	0.9	0.3	0.2
8.00	16,066	15,680	328	55	3	97.6	2.0	0.3	(..)
9.10	20,063	19,839	115	100	9	98.9	0.6	0.5	(..)
9.20	15,291	15,235	20	21	15	99.6	0.1	0.1	0.1
10.00	1,630	1,591	29	4	6	97.6	1.8	0.2	0.4
RICHMOND	191,555	185,276	5,292	740	247	96.7	2.8	0.4	0.1
NEW YORK CITY	7,891,957	6,889,760	727,981	246,308	27,908	87.3	9.2	3.1	0.4

*Boundaries according to 1940 revision of health area map. †Federal Census April 1, 1950. (..) = Less than 0.05%. Sum of percentages do not always add to 100% due to rounding. Compiled by Statistical Division, New York Tuberculosis and Health Association.

A P P E N D I X

HOUSING

Dwelling unit.--In general, a dwelling unit is a group of rooms or a single room, occupied or intended for occupancy as separate living quarters, by a family or other group of persons living together or by a person living alone. A group of rooms, occupied or intended for occupancy as separate living quarters, is a dwelling unit if it has separate cooking equipment or a separate entrance. A single room, occupied or intended for occupancy as separate living quarters, is a dwelling unit if it has separate cooking equipment or if it constitutes the only living quarters in the structure. Also, each apartment in a regular apartment house is a dwelling unit even though it may not have separate cooking equipment. Excluded from the dwelling unit count are large rooming houses, institutions, dormitories and transient hotels and tourists courts.

Condition and plumbing facilities.--Data on condition of a dwelling unit are shown in combination with data for selected plumbing facilities and are, therefore, limited to units for which both condition and plumbing facilities are reported. Plumbing facilities include water supply, toilet facilities and bathing facilities. The category "with private bath" includes those dwelling units reported with both a flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the unit. The category "no private bath" includes those dwelling units not having private flush toilet or not having private bathing facilities. The "no running water" category includes units with only piped running water outside the structure or with only other sources such as a hand pump. A dwelling unit is "dilapidated" when it is run-down or neglected, or is of inadequate original construction, so that it does not provide adequate shelter or protection against the elements or it endangers the safety of the occupants.

Persons per room.--The number of persons per room has been computed for each occupied dwelling unit by dividing the number of persons in the dwelling unit by the number of rooms in the dwelling unit. All persons enumerated in the Population Census as members of the household (including lodgers, servants, and other nonrelated persons) are counted in determining the number of persons that occupy the dwelling unit. The number of rooms in the dwelling unit includes all rooms available for living quarters throughout the year. Not counted as rooms are bathrooms, closets, pantries, halls, screened porches, and unfinished rooms in the basement and attic.