

TUBERCULOSIS
IN
NEW YORK CITY

1963

Rising Tuberculosis Morbidity
A Challenge To Community Efforts

NEW YORK TUBERCULOSIS
AND HEALTH ASSOCIATION

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Rising Tuberculosis Morbidity—
A Challenge To Community Efforts

A Compilation and Review
by
ROLAND S. MERCHANT, M.A., M.S.
Statistician
New York Tuberculosis and
Health Association

NEW YORK TUBERCULOSIS
AND HEALTH ASSOCIATION
260 Park Ave. South
New York, N. Y. 10010

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FOREWORD

In the United States tuberculosis is a striking concomitant of life in the big cities. Among the 54,000 people struck down by the disease in 1963, there were 21,000, or 40 percent, living in 53 cities — each with a population of more than 250,000. In New York City the rate of attack was 3.3 times that of all the rest of New York State. There are known reasons for some of this disparity, but research and study must go on to identify factors which are still obscure. This report contains a mass of factual data, so far as these are obtainable, and, being a continuation of the story at annual intervals, it provides basic material for the information of those who are interested.

The statistics reflect indirectly and often only dimly the biological factors which explain the almost uniform susceptibility of human beings to infection by the tubercle bacillus. They point only in a wavering way to the reasons why, after infection is acquired, some people quickly sicken and die from the disease while others — the majority — hold the living germs in abeyance. Since tuberculosis is now the most serious disease in the world caused by a single class of germs, it is one of the most challenging of threats to all the people and to the scientists and other workers who try to solve its secrets. Statistical reports are not in themselves the answer, but they contain many of the clues to the most promising pursuit of the problem. In this way the New York Tuberculosis and Health Association is pleased to make one of its contributions toward the well-being of the people.

J. Burns Amberson, M.D.
General Director

October 16, 1964

PREFACE

This 1963 edition of "Tuberculosis in New York City" describes many aspects of the New York City tuberculosis problem and program and provides a record of tuberculosis morbidity and mortality by age, sex, ethnic group and geographic location; as well as information concerning New York Tuberculosis and Health Association activities in the tuberculosis control program. A large portion of the data contained in this Yearbook was supplied by the Bureau of Tuberculosis and the Bureau of Records and Statistics of the New York City Department of Health. Consequently, the diagnostic standards and classification of the data presented in this publication follow the practice of the Department of Health.

The content of this statistical report is useful for developing effective measures and programs by those who are active in the fight against tuberculosis, for reference, and as source material for epidemiological investigation or research studies. It indicates the direction of tuberculosis morbidity and mortality during past years and is, therefore, of immediate help in the analysis of present trends.

I wish to thank Mrs. Claire Turtz and Miss Joyce Werney for typing the manuscript.

October 1964

Roland S. Merchant

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Brooklyn Tuberculosis and Health Association

Queensboro Tuberculosis and Health Association

New York State Department of Health

Tuberculosis Control Program

New York State Division of Vocational Rehabilitation

New York State Department of Labor, Selective Placement

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New Jersey State Department of Health

Public Health Statistics Program

New Jersey Tuberculosis and Health Association

Community Council of Greater New York

Research Department

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Regional Plan Association

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Public Health Service

National Center for Health Statistics

U. S. Bureau of the Census

**Commissioners of Health and Other Public Health Authorities
of Large Cities**

National Health Officials of Selected Countries

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I - SUMMARY

TUBERCULOSIS HIGHLIGHTS NEW YORK CITY YEAR: 1963

TUBERCULOSIS, among 7,780,000 New York City residents, was responsible for:

683 . . . deaths in 1963 compared to 740 in 1962

4,891 . . . persons newly reported to have active disease; 4,437
the year before

6,588 . . . residents with active disease under medical care on
December 31, 1963 compared with 6,349 in 1962.

* * *

Of the 6,588 residents with active tuberculosis at the end of 1963, 3,106 were in hospitals and sanatoria, 2,364 were attending clinics, 385 were under private physicians' care, 678 were under other types of supervision, and 55 were not recorded as being under any medical or clinic care.

Among 317,025 patients having chest X-ray examinations at the time of admission to 38 General Hospitals there were 1,892 persons with active tuberculosis, including 1,114 previously not registered.

The Department of Health and the Tuberculosis Associations made 615,146 chest X-ray examinations for tuberculosis, which included case finding surveys and follow-up of patients in clinics.

Specific antibacterial drug treatment for tuberculosis by the Department of Health alone was provided to 8,758 individuals at the end of the year. These included persons with active tuberculosis, some with inactive tuberculosis on long-term chemotherapy and a lesser number of infected persons who were receiving prophylactic drug treatment. In the Department of Hospitals clinics, there were approximately 4,500 such patients. Therefore, approximately 13,200 persons were under drug treatment by municipal clinics. These figures do not include persons receiving treatment from the following: private physicians, voluntary hospital clinics, and in-patients of municipal and voluntary hospitals.

Tuberculosis cost residents of New York City approximately 25 million dollars last year in items than can be estimated. Other expenditures incurred because of losses to the general economy as a direct result of tuberculosis will increase the total cost by millions.

It is estimated that 35 million people (approximately one-fifth of the United States population) in the United States are infected with the tubercle bacillus.¹ Furthermore, the National Tuberculosis Association estimates that one out of every three adults over the age of 25 is infected with the tubercle bacillus. These infected adults are more susceptible to breakdown through their lifetime because approximately three-fourths of all active cases of tuberculosis come from this group. Since New York City's new case rate and death rate are higher than the national rates, it seems likely that the tuberculosis infection rate for New York City would exceed the infection rate for the nation.

THE 1963 UPSURGE IN TUBERCULOSIS MORBIDITY AND COUNTER MEASURES ADOPTED

The eight-year downward trend in newly reported active tuberculosis cases was reversed in 1962 and continued upward during 1963, producing a 10.2 per cent increase over that of 1962. During the same period the deaths from tuberculosis have declined steadily except for minor fluctuations, such as in 1957, when there was a 0.8 per cent increase. In 1960, there was a 4.0 per cent increase; in 1962, there was a 0.3 per cent increase; and in 1963, there was a 7.7 per cent decrease.

Close attention should be focussed on the fact that while the number of newly reported active cases increased 10.2 per cent in 1963, the number of deaths from tuberculosis decreased 7.7 per cent.

One of the aspects of the 1963 increase in the newly reported active tuberculosis cases is analyzed in the Department of Health Report "Tuberculosis Control: Progress and Recent Problems" as follows²:

"While 23 of the 30 Health Districts in the City experienced increases in the number of new active cases in 1963, there was considerable variation in the size of the changes and in their relationship to the geographic and socio-economic characteristics of the Districts. The Boroughs of Richmond, Brooklyn, Queens, and Manhattan all showed increases, in descending order of magnitude, while the Bronx experienced a decrease of 4.7 per cent. The two Districts with the largest relative increases in number of cases, Gravesend (+68.4 per cent) and Flatbush (+38.2 per cent), are both relatively prosperous areas. At the same time, the two Districts with the largest relative decreases, Fordham-Riverdale (-24.2 per cent) and Pelham Bay (-22.2 per cent), are also both relatively prosperous areas. The four Districts with the lowest socio-economic status experienced more moderate changes, ranging from +17.3 per cent in Central Harlem to -7.9 per cent in Mott Haven."

At the present time no report of any epidemiological investigation, pertaining to the causes of this increase, is available.

MEASURES TAKEN TO COMBAT THE INCREASE

The following is a summary of the measures which were taken to combat the increase as reported by Dr. George James, Commissioner of Health, New York City, in his testimony before the Subcommittee of Health, Education and Welfare Appropriations of the House of Representatives, March 12, 1964.

1. Assignment of Tuberculosis Lay Investigators

The Department of Health employed 12 specially selected lay investigators who were given intensive training and then assigned to assist public health nurses in the home follow-up of tuberculosis suspects and patients. These include tuberculosis suspects and cases in the hospital admission X-ray program, contacts and patients on drug treatment who are delinquent in clinic attendance. The program was supported on a demonstration basis by grants from the New York and Brooklyn Tuberculosis Associations. New York City funds were expected to assume the cost of this program on July 1, 1964.

2. Improved Hospital Admission X-ray Program

The Department of Hospitals assigned additional funds (\$200,000) and personnel for the Hospital Admission X-ray Program in municipal hospitals. This additional assistance includes the allocation of 55 positions to 13 hospitals. Included are 13 X-ray technicians, 20 clerks, 10 aids and 12 messengers. This is expected to result in securing the X-ray examination of a larger proportion of the hospital admissions, and a more complete and prompt follow-up of individuals found in the program who are in need of further supervision.

At the request of the Commissioners of Health and Hospitals, the New York Academy of Medicine studied the tuberculosis problem. The Academy recommended that in New York City all general hospitals should take chest X-rays of all adult admissions, as part of good medical practice.³ This was immediately translated into action with the requirement by the Commissioners of Health and Hospitals that every City-charge patient receive this service.

3. More Intensive Mass X-ray Services

More intensive use is being made of mobile X-ray units in areas of high tuberculosis prevalence.

4. BCG Program

BCG vaccination will be offered to the 7th grade pupils in areas of high tuberculosis prevalence. It is believed that a well-conducted immunization program accompanied by intensive case-finding and high quality treatment and carried out for a sufficient period of time, will eventually contribute to a substantial reduction in the incidence of tuberculosis in New York City.

Table 1.
TUBERCULOSIS MORBIDITY AND MORTALITY, CITY OF NEW YORK, 1962 AND 1963
A - New Cases of Tuberculosis Reported in Each Borough

Boroughs	Number of New Cases			Case Rate per 100,000 Pop.		
	1962	1963	Change 1962-1963	1962	1963	Change 1962-1963
Manhattan	1746	1913	+ 167 = + 9.6%	105.8	115.9	+ 10.1 = + 9.5%
Bronx	770	734	- 36 = - 4.7%	53.8	51.3	- 2.5 = - 4.6%
Brooklyn	1380	1615	+ 235 = + 17.0%	52.9	61.9	+ 9.0 = +17.0%
Queens	504	580	+ 76 = + 15.1%	27.1	31.2	+ 4.1 = +15.1%
Richmond	37	49	+ 12 = + 32.4%	16.1	21.3	+ 5.2 = +32.3%
New York City	4437	4891	+ 454 = + 10.2%	57.0	62.9	+ 5.9 = +10.4%

B - Mortality From All Forms of Tuberculosis, By Boroughs

Boroughs	Deaths within City			Death Rate per 100,000 Pop.		
	1962	1963	Change 1962-1963	1962	1963	Change 1962-1963
Manhattan	276	237	- 39 = - 14.1%	16.7	14.4	- 2.3 = -13.8%
Bronx	93	62	- 31 = - 33.3%	6.5	4.3	- 2.2 = -33.8%
Brooklyn	214	232	+ 18 = + 8.4%	8.2	8.9	+ 0.7 = + 8.5%
Queens	105	98	- 7 = - 6.7%	5.6	5.3	- 0.3 = - 5.4%
Richmond	7	4	- 3 = - 42.9%	3.0	1.7	- 1.3 = -43.3%
N.Y. City Residents	695	633	- 62 = - 8.9%	8.9	8.1	- 0.8 = - 9.0%
Total Recordedt	740	683	- 57 = - 7.7%	9.5	8.8	- 0.7 = - 7.4%

^tIncluding non-residents (1962=21, 1963=21) and persons with unknown addresses (1962=24, 1963=29).

C - Cases of Active Tuberculosis on Health District Rosters
By Type of Current Care as of December 31, 1963

Classification	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond
Institutions in city	2617	1086	412	784	314	21
Out of town in sanatoria	489	282	41	113	41	12
Total hospitalized	3106	1368	453	897	355	33
Health Department clinics	1894	671	356	647	216	4
Other clinics	470	220	102	119	28	1
Attending clinics	2364	891	458	766	244	5
Private physicians	385	94	53	124	98	16
"Pending"†	662	411	108	121	19	3
Out of town, not in hospital	16	10	3	2	1	--
No Medical or Clinic care	55	32	12	4	6	1
Total in Register	6588	2806	1087	1914	723	58

[†]Type of care not confirmed, unassigned or in process of change of care.

POPULATION: Estimated, July 1, 1962 and 1963: New York City, 7,780,000.

Manhattan, 1,650,000; Bronx, 1,430,000; Brooklyn, 2,610,000;

Queens, 1,860,000; and Richmond, 230,000.

CHART 1

TUBERCULOSIS, NEW CASES AND DEATHS, NEW YORK CITY, 1945-1963

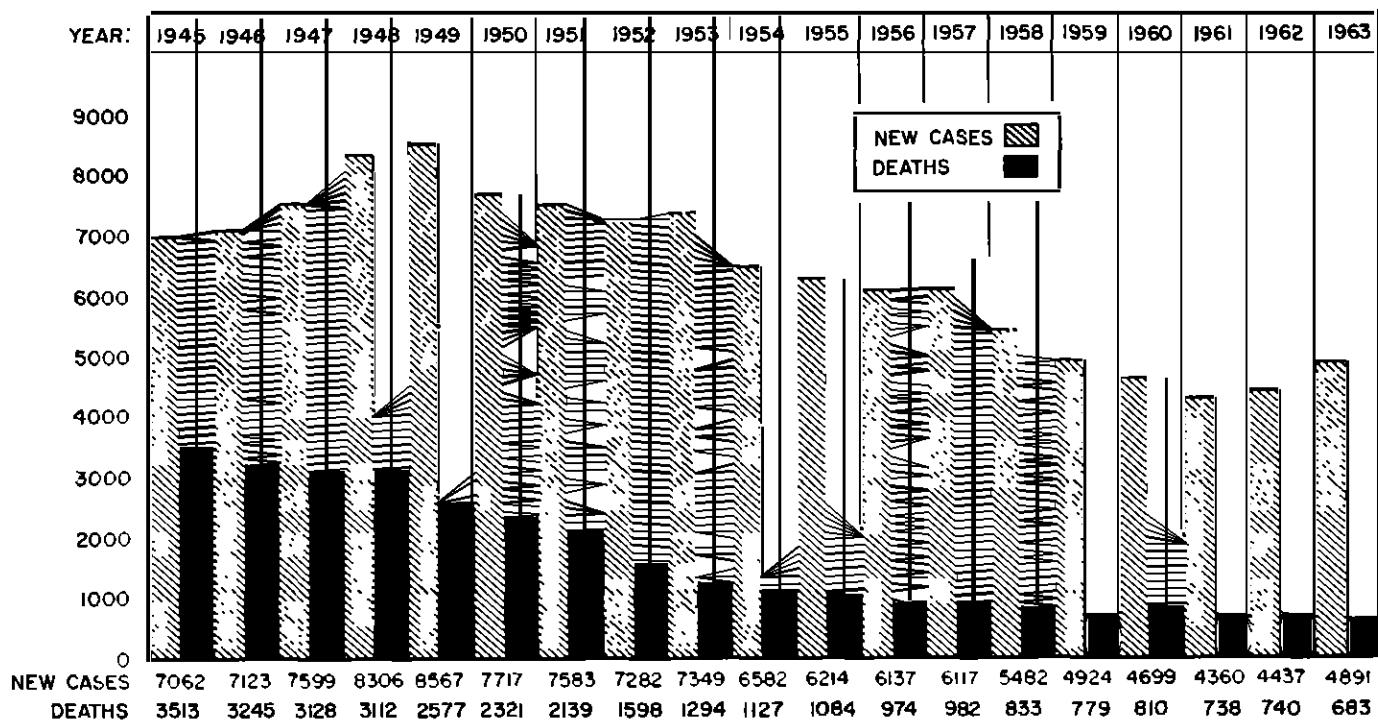


CHART 2

TUBERCULOSIS, NEW CASE RATE AND DEATH RATE, NEW YORK CITY 1945-1963

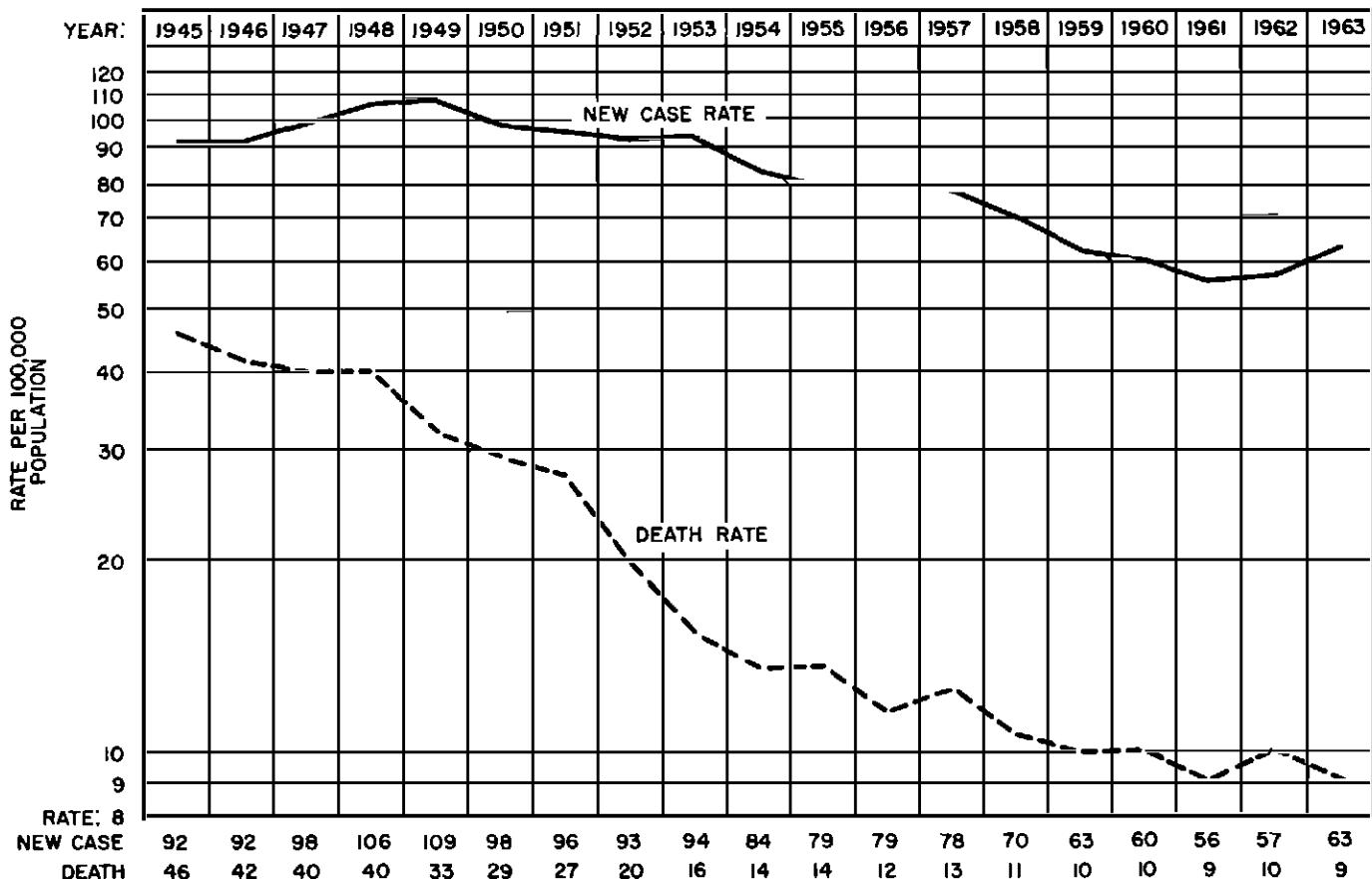


CHART 3

CASE AND DEATH RATES (PER 100,000 POPULATION) FROM
 TUBERCULOSIS: NEW YORK CITY, NEW YORK STATE, NEW YORK STATE
 (EXCLUSIVE OF NEW YORK CITY), AND UNITED STATES, 1952-1963

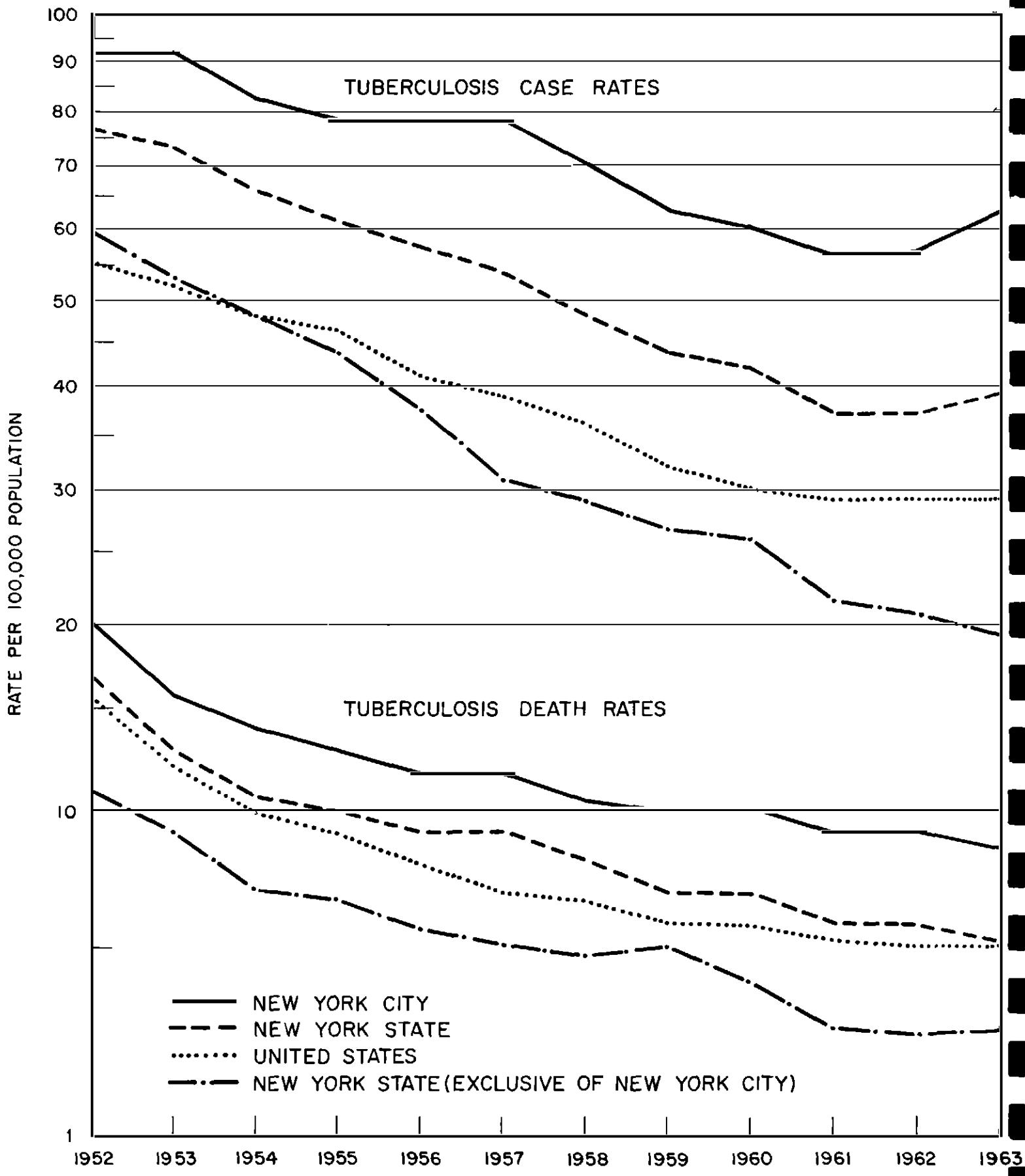


Table 2.
TUBERCULOSIS MORBIDITY AND MORTALITY, 1963
Tri-State New York Metropolitan Region

State County	New Cases			Tuberculosis		Estimated Population 1963	
	Total New Cases Reported	Active and Probably Active		Deaths All forms			
		Number	Rate*	Number	Rate*		
NEW YORK							
New York (Manhattan)	1959	1913	115.9	237	14.4	1,650,000	
Bronx	756	734	51.3	62	4.3	1,430,000	
Kings (Brooklyn)	1661	1615	61.9	232	8.9	2,610,000	
Queens	601	580	31.2	98	5.3	1,860,000	
Richmond	52	49	21.3	4	1.7	230,000	
New York City	5029	4891	62.9	683†	8.8	7,780,000	
Dutchess	43	43	25.1	4‡	2.3	171,380	
Nassau	207	207	14.9	30‡	2.2	1,387,426	
Orange	36	36	18.8	10‡	5.2	191,188	
Putnam	3	3	8.4	--	--	35,886	
Rockland	27	27	17.7	3‡	2.0	152,689	
Suffolk	158	158	20.9	18‡	2.3	789,993	
Westchester	138	138	15.9	22‡	2.6	843,616	
CONNECTICUT							
Fairfield	95	95	13.6	21	3.0	697,000	
NEW JERSEY							
Bergen	421	86	10.0	15	1.7	859,000	
Essex	538	420	45.2	86	9.3	929,000	
Hudson	322	220	36.7	52	8.7	599,000	
Middlesex	123	77	15.7	19	3.9	489,000	
Monmouth	135	102	27.6	14	3.8	370,000	
Morris	76	42	14.3	10	3.4	293,000	
Passaic	182	118	27.5	17	4.0	429,000	
Somerset	67	31	19.6	10	6.3	158,000	
Union	192	118	21.9	29	5.4	539,000	
Tri-State Region§	7792	6812	40.8	1043	6.2	16,714,187	

*Per 100,000 population. †Deaths for New York City counties are of residents who died in city, total for the city includes residents, non-residents and persons with unknown address. ‡Provisional. §22 counties. Based on reports by courtesy of authorities of respective areas.

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THE NEW JERSEY-NEW YORK-CONNECTICUT METROPOLITAN REGION

The New York Metropolitan Region is a 22-county metropolis spreading roughly fifty miles from Times Square in every direction, and covering parts of three states. The Region was defined in 1922 for the purpose of research studies leading to the Regional Plan of New York and Its Environs and has been used since then for economic, population and land-planning research by the Regional Plan Association.

The Region's land area is approximately 7,000 square miles of which New York City covers 320 square miles. The Region's 1960 population was 16,139,000.

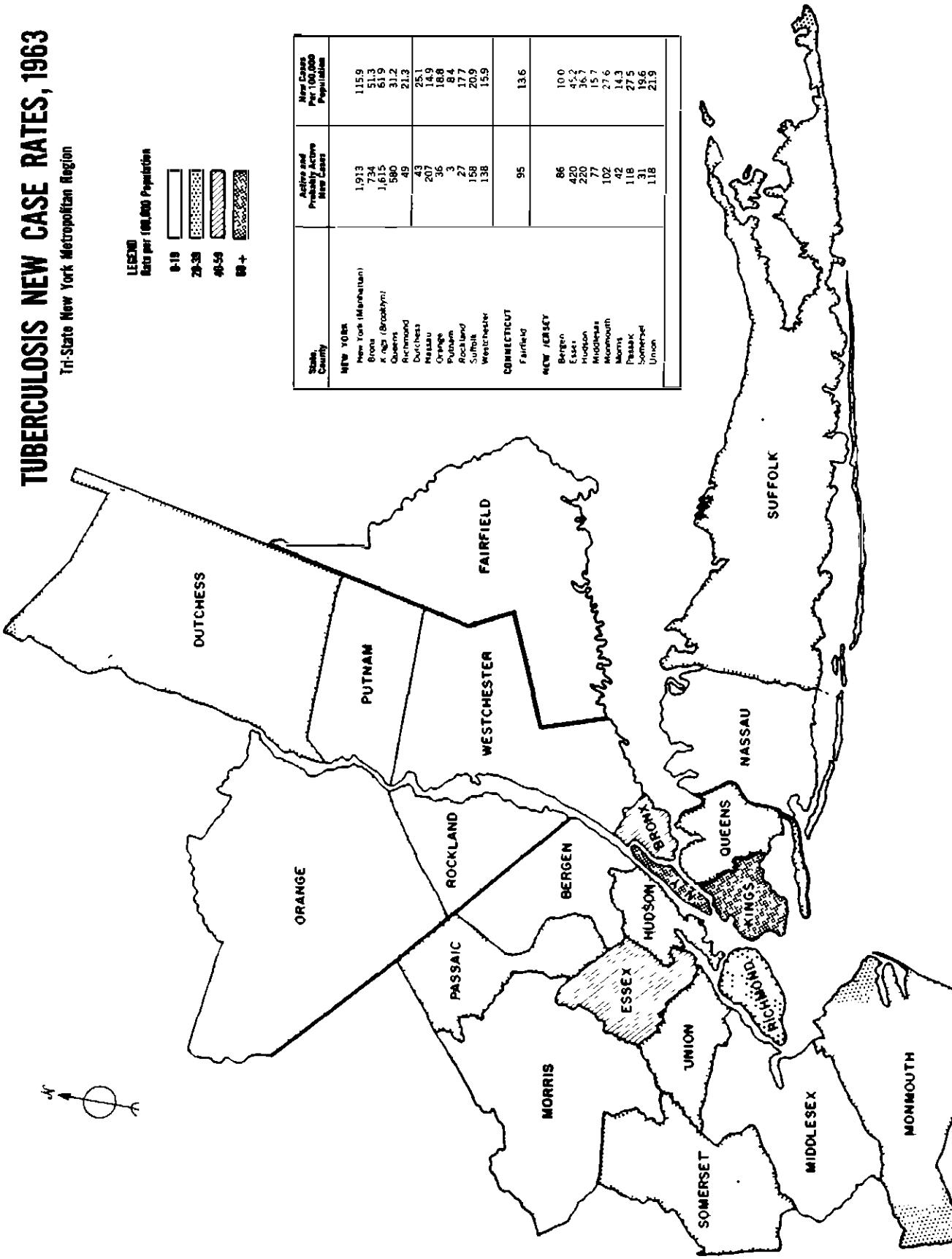
TUBERCULOSIS NEW CASE RATES, 1963

Tri-State New York Metropolitan Region

CHART 4

LEGEND
Ratio per 10,000 Population
0-19
20-39
40-59
60+

State County	Active and Probable Active New Cases	New Cases Per 100,000 Population
NEW YORK		
New York (Manhattan)	1,913	115.9
Bronx	734	51.3
X (N.Y. Bronx)	1,615	61.9
Queens	580	31.2
Archbishop	49	21.3
Duchess	43	25.1
Nassau	207	14.9
Orange	36	18.8
Putnam	3	8.4
Rockland	27	17.7
Suffolk	158	20.9
Westchester	138	15.9
CONNECTICUT		
Fairfield	95	13.6
NEW JERSEY		
Bergen	86	10.0
Essex	420	45.2
Hudson	220	36.7
Middlesex	77	15.7
Mercy	102	27.6
Morris	42	14.3
Passaic	118	27.5
Somerset	31	19.6
Union	118	21.9



NEW YORK TUBERCULOSIS AND HEALTH ASSOCIATION

BASE MAP BY COURTESY OF THE REGIONAL PLANNING ASSOCIATION, INC.

II. MORBIDITY DUE TO TUBERCULOSIS

NEW TUBERCULOSIS CASES REPORTED DURING THE YEAR

The number of newly reported active tuberculosis cases in New York City increased in 1962 for the first time since 1953 and again in 1963. In 1963, the number of new cases of active tuberculosis discovered and reported was 4,891 compared with 4,437 in 1962—a 10.2% increase.

Thirty-nine per cent (1,913) of the new cases in 1963 were registered as residents of Manhattan, producing a case rate of 116 per 100,000 population for this borough or several times the rates in the other four boroughs (Bronx, 51; Brooklyn, 62; Queens, 31; and Richmond, 21). Bronx was the only borough in which there was a decrease in the number of newly reported cases of active tuberculosis. Twenty-three of the 30 health center districts had an increase in the number of new cases reported in 1963 above that of 1962.

Of all persons newly reported to have tuberculosis, 38.9% were white, 39.6% Negro, 12.9% Puerto Rican, and the remaining 8.6% were of other ethnic groups or ethnic group was not stated.

Table 3.
NEW ACTIVE TUBERCULOSIS CASES AND RATES BY BOROUGH
New York City, 1952-1963

Year:-	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond
NEW CASES REPORTED						
1952	7,282	3,567	910	1,875	825	105
1953	7,349	3,690	904	1,845	812	98
1954	6,582	3,404	804	1,619	672	83
1955 (*)	6,214	2,994	872	1,644	605	99
1956	6,137	2,895	850	1,700	626	66
1957	6,117	3,002	821	1,598	634	62
1958	5,482	2,602	751	1,501	559	69
1959	4,924	2,290	725	1,371	478	60
1960	4,699	2,141	690	1,359	466	43
1961	4,360	1,832	704	1,318	458	48
1962	4,437	1,746	770	1,380	504	37
1963	4,891	1,913	734	1,615	580	49
CASE RATE PER 100,000(†)						
1952	93	187	63	70	51	53
1953	94	196	63	69	49	49
1954	84	183	56	61	40	41
1955	79	163	61	62	35	48
1956	79	160	60	65	36	31
1957	78	168	58	61	36	29
1958	70	148	53	57	31	32
1959	63	133	51	52	27	27
1960	60	127	48	52	26	19
1961	56	108	49	50	25	22
1962	57	106	54	53	27	16
1963	63	116	51	62	31	21

(*)Includes 51 infants, recently tuberculin positive, given prophylactic antimicrobials. (†)Case rates based on revised population estimates taking into account the 1960 enumeration by the U. S. Bureau of the Census.

Table 4.
NEW CASES OF ACTIVE TUBERCULOSIS REPORTED IN NEW YORK CITY
 By Health Center Districts, 1953 - 1963

Health District	New Cases Reported During Year										
	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
NEW YORK CITY	7349 6582 6214 6137 6117 5482 4924 4699 4360 4437 4891										
MANHATTAN	3690 3404 2994 2895 3002 2602 2290 2141 1832 1746 1913										
Central Harlem	917	803	697	692	658	611	514	581	464	439	515
East Harlem	428	375	310	247	277	242	245	168	166	196	189
Kips Bay-Yorkville	154	159	121	100	116	95	99	74	65	68	58
Lower East Side	774	817	697	800	911	734	655	562	520	416	471
Lower West Side	702	621	591	494	568	477	386	325	258	274	288
Riverside	423	382	354	309	293	291	263	275	230	228	253
Washington Heights	292	247	227	253	179	152	128	156	129	125	139
BRONX	904	804	872	850	821	751	725	690	704	770	734
Fordham-Riverdale	85	58	80	47	87	64	75	48	48	66	50
Morrisania	266	184	223	232	244	217	201	198	233	264	224
Mott Haven	256	287	307	325	245	203	191	234	227	229	211
Pelham Bay	69	61	50	41	44	42	60	43	33	45	35
Tremont	129	133	145	132	114	130	125	114	99	98	135
Westchester	99	81	67	73	87	95	73	53	64	68	79
BROOKLYN	1845 1619 1644 1700 1598 1501 1371 1359 1318 1380 1615										
Bay Ridge	99	95	73	76	76	70	60	58	54	67	71
Bedford	386	331	371	420	309	349	286	291	329	329	337
Brownsville	144	142	150	156	170	153	165	163	138	178	237
Bushwick	134	140	148	131	133	138	109	130	126	156	182
Flatbush	141	115	112	84	110	100	94	85	88	76	105
Fort Greene	310	283	267	279	251	231	235	213	223	214	239
Gravesend	78	56	64	73	66	65	48	66	50	38	64
Red Hook-Gowanus	200	188	190	185	173	133	150	136	102	113	141
Sunset Park	147	102	130	112	124	88	80	81	66	72	85
Williamsburg-Greenpoint.	206	167	139	184	186	174	144	136	142	137	154
QUEENS	812	672	605	626	634	559	478	466	458	504	580
Astoria-L.I. City	126	103	118	131	119	104	79	70	69	72	94
Corona	119	83	86	75	90	84	89	70	67	82	84
Flushing	137	122	102	76	86	97	77	84	71	75	90
Jamaica East	178	139	145	152	173	119	104	121	115	130	158
Jamaica West	153	142	80	107	97	99	72	75	88	92	81
Maspeth-Forest Hills ...	99	83	74	85	69	56	57	46	48	53	73
RICHMOND	98	83	99	66	62	69	60	43	48	37	49

Table 5.
NEW CASE RATE
NEW CASES OF ACTIVE TUBERCULOSIS REPORTED IN NEW YORK CITY
By Health Center Districts, 1953 - 1963

Health District	New Case Rate per 100,000 population ^t										
	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
NEW YORK CITY	94	84	79	79	78	70	63	60	56	57	63
MANHATTAN	196	183	163	160	168	148	133	127	108	106	116
Central Harlem	367	325	285	287	276	258	219	250	200	193	226
East Harlem	212	190	161	132	151	133	137	95	94	108	104
Kips Bay-Yorkville	63	67	52	43	51	43	45	35	30	32	27
Lower East Side	256	272	233	270	311	257	236	208	193	161	183
Lower West Side	224	200	192	162	190	167	141	125	99	108	114
Riverside	150	138	130	115	111	109	98	102	86	91	101
Washington Heights	101	86	80	89	64	55	47	58	48	47	52
BRONX	63	56	61	60	58	53	51	48	49	54	51
Fordham-Riverdale	37	25	34	20	37	27	32	21	21	27	21
Morrisania	93	65	80	84	90	81	76	76	89	102	87
Mott Haven	114	129	139	148	112	92	86	104	101	106	97
Pelham Bay	44	38	30	24	25	24	33	23	18	25	19
Tremont	45	47	52	48	42	48	47	43	38	37	51
Westchester	39	32	26	29	34	37	28	20	25	25	30
BROOKLYN	69	61	62	65	61	57	52	52	50	53	62
Bay Ridge	32	31	24	25	26	24	21	20	19	23	25
Bedford	129	112	127	146	108	122	100	101	115	115	118
Brownsville	52	51	54	57	62	54	56	54	46	56	75
Bushwick	60	63	68	61	62	64	50	60	58	74	86
Flatbush	30	24	24	18	23	21	20	18	18	16	22
Fort Greene	140	128	121	127	114	106	109	99	104	100	112
Gravesend	28	20	23	26	23	23	16	22	17	13	21
Red Hook-Gowanus	118	111	113	111	104	81	92	84	63	72	90
Sunset Park	70	49	64	56	63	45	41	42	34	39	46
Williamsburg-Greenpoint	100	83	70	94	97	90	75	71	74	74	84
QUEENS	49	40	35	36	36	31	27	26	25	27	31
Astoria, L.I. City	48	39	45	50	46	40	31	27	27	28	36
Corona	57	40	41	36	43	40	41	32	31	37	38
Flushing	38	32	26	18	20	22	17	19	16	16	20
Jamaica East	66	51	52	54	61	41	36	41	39	41	50
Jamaica West	54	49	28	36	33	33	24	24	28	29	25
Maspeth-Forest Hills	37	31	27	30	25	20	20	16	17	19	26
RICHMOND	49	41	48	31	29	32	27	19	22	16	21

^tCase rates based on population estimates as of July 1st.

SOURCE OF REPORT

Fifty-six per cent of all new cases of active tuberculosis were reported last year by hospitals within the city. The Department of Health clinics account for 28.8% of all new cases registered and other clinics, 5.8%. Private physicians reported only 5.0% of all new cases, but this low percentage may be due partly to the practice of physicians referring patients to clinics when tuberculosis is suspected or to hospitals when such care is indicated so that the clinics and hospitals are credited with making the final diagnosis. Sanatoria out of town reported 2.0% and the remaining 2.5% of the new cases of tuberculosis was reported by other sources.

Table 6.
SOURCES OF REPORT, NEW CASES OF ACTIVE TUBERCULOSIS, ALL FORMS
New York City, 1953 - 1963

Source of Report	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
NUMBER OF NEW CASES REPORTED											
Hospitals in city	3894	3537	3335	3100	3209	3062	2781	2732	2523	2502	2736
Health Dept. clinic ...	1903	1696	1686	2035	1894	1535	1430	1274	1173	1227	1406
Other clinics	615	569	495	497	465	406	328	301	267	248	283
Private physicians	526	419	392	276	239	247	208	194	199	199	245
Sanatoria out-town	305	266	214	125	151	116	88	107	113	108	99
Other sources	106	95	92	104	159	116	89	91	85	153	122
All sources	7349	6582	6214	6137	6117	5482	4924	4699	4360	4437	4891
PERCENT DISTRIBUTION BY SOURCE											
Hospitals in city	53.0	53.7	53.7	50.5	52.4	55.9	56.5	58.2	57.9	56.4	55.9
Health Dept. clinic ...	25.9	25.8	27.1	33.2	31.0	28.0	29.0	27.1	26.9	27.7	28.8
Other clinics	8.4	8.7	8.0	8.1	7.6	7.4	6.7	6.4	6.1	5.6	5.8
Private physicians	7.2	6.4	6.3	4.5	3.9	4.5	4.2	4.1	4.6	4.5	5.0
Sanatoria out-town	4.1	4.0	3.4	2.0	2.5	2.1	1.8	2.3	2.6	2.4	2.0
Other sources	1.4	1.4	1.5	1.7	2.6	2.1	1.8	1.9	1.9	3.4	2.5
All sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Included are newly reported cases identified through death certificates or reported at time of death only.

Table 7.
SOURCES OF REPORT, NEW CASES OF ACTIVE TUBERCULOSIS, BY ETHNIC GROUP AND SEX
New York City, 1963

Source of Report	All Ethnic Groups*			White			Negro			Puerto Rican	Other Ethnic Groups	
	T	M	F	T	M	F	T	M	F	T	M	F
Hospitals in city...	2736	1827	849	1132	844	288	1142	742	400	242	139	103
Health Dept. clinic.	1406	858	548	404	288	116	604	349	255	306	145	161
Other clinics	283	157	126	81	51	30	105	58	47	67	27	40
Private physicians..	245	148	97	169	113	56	24	10	14	7	3	4
Sanatoria out-town .	99	85	14	65	54	11	21	19	2	3	3	-
Other sources	122	69	53	49	28	21	40	24	16	8	4	4
All sources	4801	3204	1687	1900	1378	522	1936	1202	734	633	321	312

*Totals include persons of other ethnic groups and those whose ethnic group was not reported. M = Male, F = Female.

STAGE OF PULMONARY DISEASE

Over twenty-one per cent of the newly reported active pulmonary tuberculosis cases for 1963 were in the minimal stage, while 47.9% were moderately advanced, the lowest percentage since 1951 (45.9%) and 31.0% far advanced, the lowest percentage since 1960 (29.9%). This is the first time since 1950, at which time 20.7% were in the minimal stage, that such a high percentage of newly reported active pulmonary cases was found in the minimal stage. Despite the 10.2% increase in the new cases of tuberculosis, it is worthy of note that the newly reported pulmonary tuberculosis cases in the minimal stage showed a 36.7% increase in 1963 over that of 1962 in this category. During the past twelve years, the proportion of new cases found in the moderate and far advanced stages of pulmonary tuberculosis has fluctuated between a low of 78.9% in 1963 to a high of 83.2% in 1962.

One successful aspect of the tuberculosis control program is that a greater proportion of the new cases are found in the minimal stage. It is known that the failure to discover a greater proportion of cases in the minimal stage, in spite of modern diagnostic methods, is due largely to the fact that people do not seek medical attention until the appearance of the more severe symptoms associated with the advanced stages. Minimal tuberculosis is known to be relatively symptomless subjectively and it is often impossible to pin-point the time of its insidious onset.

The classification of tuberculosis by stage of disease relates almost entirely to its anatomical extent in the lungs, but not to the severity of the symptoms, the presence of complications such as tuberculous involvement of organs other than the lungs, nor the pathological phase of the pulmonary disease (e.g. acute pneumonic or chronic fibroid). It is gratifying to observe that in these respects the situation has improved markedly.

Table 8.
**NEWLY REPORTED CASES OF ACTIVE PULMONARY TUBERCULOSIS, IN PERSONS
 10 YEARS OF AGE AND OVER, BY STAGE AT TIME OF REPORT**
 New York City, 1952 - 1963

Year	Stage of Disease						Un-known ↑	Dead ♦	Total New Cases §			
	Minimal		Mod. Adv.		Far Adv.							
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent						
1952	970	18.6	2535	48.7	1703	32.7	453	360	6021			
1953	1020	18.9	2709	50.1	1681	31.0	385	315	6110			
1954	935	19.3	2411	49.9	1489	30.8	332	272	5439			
1955	834	18.9	2166	49.0	1421	32.1	418	225	5064			
1956	902	20.3	2187	49.2	1356	30.5	454	190	5089			
1957	827	18.4	2429	54.1	1232	27.5	460	214	5162			
1958	764	19.7	2018	52.0	1100	28.3	478	153	4513			
1959	731	20.0	1975	54.1	948	25.9	398	144	4196			
1960	653	20.4	1585	49.7	954	29.9	564	167	3923			
1961	530	18.0	1451	49.4	959	32.6	516	179	3635			
1962	504	16.8	1447	48.4	1040	34.8	512	199	3702			
1963	689	21.1	1567	47.9	1015	31.0	603	183	4057			

†State of disease unknown.

‡Cases identified through death certificate or reported at time of death only.

§Pulmonary cases only.

Table 9.

NEWLY REPORTED CASES OF ACTIVE PULMONARY TUBERCULOSIS, IN PERSONS 10 YEARS OF AGE AND OVER BY AGE, SEX AND ETHNIC GROUP BY STAGE AT TIME OF FIRST REPORT

New York City, 1963

Age, Ethnic Group	M A L E S							F E M A L E S						
	Total	Stage				% (†)	Min. Stage	Total	Stage				% (†)	Min. Stage
		Min- imal	Mod. Adv.	Far. Adv.	Not Rep.				Min- imal	Mod. Adv.	Far. Adv.	Not Rep.		
WHITE														
10-14 ..	6	3	--	1	2	--	75.0	7	3	2	--	2	--	60.0
15-24 ..	72	24	30	8	10	--	38.7	51	22	23	5	1	--	44.0
25-34 ..	103	24	41	23	14	1	27.3	70	13	32	14	9	2	22.0
35-44 ..	172	28	73	41	27	3	19.7	64	11	33	10	8	2	20.4
45+	900	99	381	231	121	68	13.9	236	43	99	36	36	22	24.2
Total*	1275	180	537	307	179	72	17.6	436	94	191	66	59	26	26.8
NEGRO														
10-14 ..	11	3	--	--	8	--	100.0	17	2	4	3	8	--	22.2
15-24 ..	84	15	26	25	18	--	22.7	110	34	36	23	17	--	36.6
25-34 ..	188	33	58	69	25	3	20.6	134	28	47	35	23	1	25.5
35-44 ..	261	23	89	92	45	12	11.3	124	19	37	38	20	10	20.2
45+	457	41	153	146	83	34	12.1	158	13	50	55	25	15	11.0
Total*	1007	117	328	333	180	49	15.0	551	98	178	154	95	26	22.8
PUERTO RICAN														
10-14 ..	11	1	1	1	8	--	33.3	3	--	2	--	1	--	--
15-24 ..	55	21	24	8	2	--	39.6	64	21	27	11	5	--	35.6
25-34 ..	68	18	30	14	6	--	29.0	62	21	23	11	7	--	38.2
35-44 ..	56	10	25	14	6	1	20.4	36	11	16	4	5	--	35.5
45+	59	12	20	17	8	2	24.5	54	16	22	13	3	--	31.4
Total*	252	62	100	55	32	3	28.6	222	71	91	39	21	--	35.3
OTHER ETHNIC GROUPS														
10-14 ..	3	--	2	--	1	--	--	1	--	--	--	1	--	--
15-24 ..	9	4	2	--	3	--	66.7	12	9	1	1	1	--	81.8
25-34 ..	34	14	13	3	4	--	46.7	9	2	4	2	1	--	25.0
35-44 ..	28	6	17	2	3	--	24.0	9	3	4	2	--	--	33.3
45+	159	20	77	41	16	5	14.5	23	4	9	4	4	2	23.5
Total*	247	45	118	51	28	5	21.0	67	22	24	10	9	2	39.3
GRAND TOTAL	2781	404	1083	746	419	129	18.1	1276	285	484	269	184	54	27.5

*Totals include persons of unknown age.

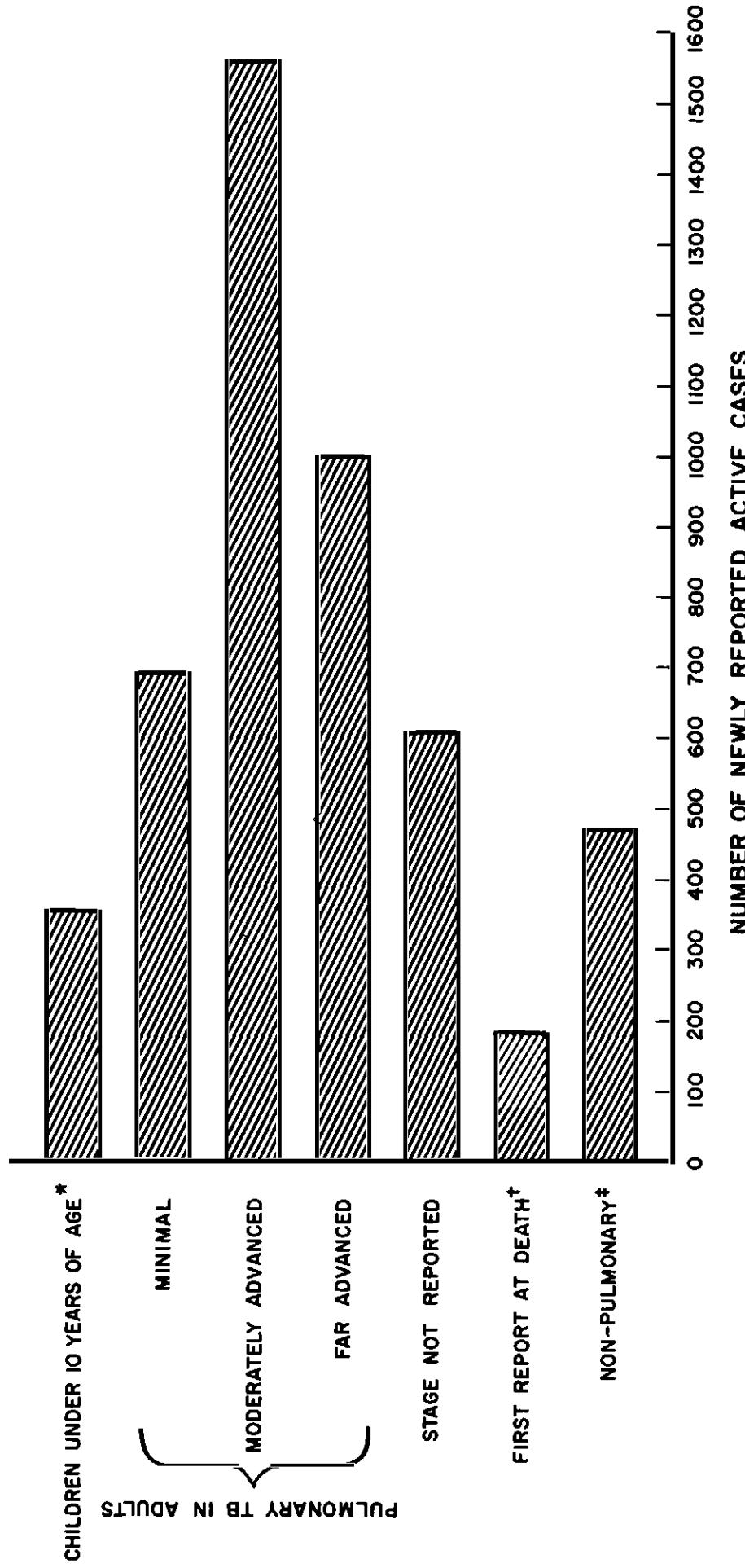
†Percentages based on total patients for which stage was reported.

The males have a significantly higher percentage of pulmonary tuberculosis in the advanced stage than the females for all ethnic groups. The proportion of minimal pulmonary tuberculosis reported among young persons (under 25 years of age) is relatively higher than that among the persons in the older age groups. However, the numbers in the under 25 age group are very small relative to those in the older age group.

It is well known that tuberculosis discovered in minimal stage is more amenable to treatment and under proper treatment the recovery rate is close to 100%.

CHART 5

**NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY STAGE
OF DISEASE, NEW YORK CITY, 1963**



* PRIMARY TUBERCULOSIS NOT CLASSIFIED AS TO STAGE

† NOT CLASSIFIED AS TO STAGE

‡ NOT SEPARATED AS TO AGE

Table 10.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE, SEX AND DIAGNOSIS
New York City, 1963
ALL ETHNIC GROUPS

Age (in years)	Sex	Total (New Active)	Adult Pulmonary				Primary (Children under 10 years of age)	Mili- ary	Pleural Effusion	Menin- gitis	Other TB
			Total	Min.	M.A.	F.A.					
Total	Total	4,891	4,057	691	1,591	1,109	666	358	38	100	28
All ages	Male	3,204	2,781	405	1,103	812	461	180	28	63	14
	Female	1,687	1,276	286	488	297	205	178	10	37	14
Under 5	Male	125	--	--	--	--	--	114	2	--	5
	Female	74	--	--	--	--	--	112	1	--	4
5 - 9	Male	70	--	--	--	--	--	66	--	--	4
10 - 14	Male	42	31	7	3	2	19	--	1	2	--
	Female	28	28	5	8	3	12	--	--	--	8
15 - 19	Male	82	69	28	17	14	10	--	--	--	10
	Female	90	72	38	20	10	4	--	--	--	10
20 - 24	Male	174	151	26	65	27	23	--	--	1	1
	Female	186	165	48	67	30	20	--	3	9	1
25 - 34	Male	448	393	89	142	110	52	--	--	5	1
	Female	328	275	64	106	64	41	--	3	8	7
35 - 44	Male	552	517	67	204	163	83	--	--	5	2
	Female	267	233	44	91	60	38	--	3	5	12
45 - 54	Male	602	576	62	225	184	105	--	5	6	4
	Female	193	166	26	62	47	31	--	5	6	14
55 - 64	Male	561	533	54	241	155	83	--	5	7	2
	Female	166	147	22	52	48	25	--	3	5	20
65 - 74	Male	315	298	39	114	98	47	--	3	1	1
	Female	86	82	18	40	15	9	--	3	3	3
75 & over	Male	179	168	18	71	49	30	--	3	3	6
	Female	90	76	11	29	18	18	--	3	3	8
Not stated	Male	50	45	5	21	10	9	--	2	2	5
	Female	48	32	10	13	2	7	--	--	--	14

Table 11.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE, SEX AND DIAGNOSIS
New York City, 1963
WHITE *

Age (in years)	Sex	Total (New Active)	Adult Pulmonary			Primary (Children under 10 years of age)	Mili- ary	Pleural Effusion	Menin- gitis	Other TB
			Total	Min.	M.A.	F.A.	N.S.			
Total		2,811	2,373	441	1,020	547	365	170	13	34
All ages ..	Male	1,896	1,678	265	724	425	264	92	8	21
	Female	915	695	176	296	122	101	78	5	13
Under 5 ...	Male	67	--	--	--	--	--	62	1	--
	Female	57	--	--	--	--	--	49	1	--
5 - 9 ...	Male	36	--	--	--	--	--	30	1	--
	Female	32	--	--	--	--	--	29	1	--
10 - 14 ...	Male	23	18	4	2	2	10	--	1	--
	Female	16	11	3	4	12	4	--	--	--
15 - 19 ...	Male	49	43	38	18	13	8	3	--	1
	Female	46	85	25	41	6	1	--	1	1
20 - 24 ...	Male	97	78	28	35	10	5	--	1	4
	Female	91	78	48	78	39	25	--	4	8
25 - 34 ...	Male	210	190	34	55	27	17	--	1	9
	Female	168	133	43	108	59	26	--	5	15
35 - 44 ...	Male	262	246	23	50	16	14	--	1	2
	Female	123	103	39	140	89	52	--	2	32
45 - 54 ...	Male	333	320	17	35	17	10	--	1	9
	Female	89	79	43	124	102	55	--	1	18
55 - 64 ...	Male	382	366	35	174	25	19	--	1	9
	Female	110	100	19	37	25	35	--	1	14
65 - 74 ...	Male	247	233	32	93	16	8	--	1	9
	Female	70	66	17	58	29	9	--	1	10
75 & over..	Male	148	140	10	25	11	17	--	1	3
	Female	73	63	2	18	9	5	--	1	6
Not stated.	Male	42	37	8	9	2	5	--	2	5
	Female	40	24	--	--	--	--	--	--	14

*The total of 2,811 cases includes 601 Puerto Rican cases and 310 with ethnic group not reported.

Table 12.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE, SEX AND DIAGNOSIS
New York City, 1963
NON-WHITE

Age (in years)	Sex	Total (New Active)	Adult Pulmonary				Primary (Children under 10 years of age)	Mili- ary	Pleural Effusion	Menin- gitis	Other TB
			Total	Min.	M.A.	F.A.					
Total		2,080	1,684	250	571	562	301	188	25	66	13
All ages	Male	1,308	1,103	140	379	387	197	88	20	42	7
	Female	772	581	110	192	175	104	100	5	24	6
Under 5	Male	58	--	--	--	--	--	52	1	--	3
	Female	68	--	--	--	--	--	63	--	1	1
5 - 9	Male	38	--	--	--	--	--	36	--	--	1
	Female	38	--	--	--	--	--	37	--	--	1
10 - 14	Male	19	13	3	1	-	9	--	--	2	--
	Female	22	17	2	4	3	8	--	--	1	--
15 - 19	Male	33	26	8	5	6	7	--	--	1	--
	Female	44	34	20	7	4	3	--	--	7	--
20 - 24	Male	77	66	11	24	19	12	--	--	3	--
	Female	95	87	20	32	20	15	--	--	4	--
25 - 34	Male	238	203	41	64	71	27	--	--	3	--
	Female	160	142	30	51	37	24	--	--	1	--
35 - 44	Male	290	271	24	96	104	47	--	--	17	--
	Female	144	130	21	41	44	24	--	--	4	--
45 - 54	Male	269	256	23	85	95	53	--	--	5	--
	Female	104	87	9	27	30	21	--	--	1	--
55 - 64	Male	179	167	19	67	53	28	--	--	6	--
	Female	56	47	3	15	21	13	--	--	3	--
65 - 74	Male	68	65	7	21	25	12	--	--	1	--
	Female	16	16	2	13	14	7	--	--	2	--
75 & over	Male	31	28	1	13	13	7	--	--	1	--
	Female	17	13	1	14	1	1	--	--	2	--
Not stated	Male	8	8	3	2	4	1	--	--	1	--
	Female	8	8	2	4	1	2	--	--	1	--

Table 13.
NEWLY REPORTED CASES OF ACTIVE TUBERCULOSIS BY FORM
 New York City, 1952 - 1963

Year	Total All Forms	Pulmonary		General- ized Miliary	Menin- gitis	Pleural Effusion	Other Forms
		10 Years+|	Under 10				
1952, Reported during life	6,798	5,661	456	41	33	1	606
Death Certificate Report	484	360	2	28	28	--	66
Total	7,282	6,021	458	69	61	1	672
1953, Reported during life	6,945	5,795	510	28	63	189	360
Death Certificate Report	404	311	3	22	34	4	30
Total	7,349	6,106	513	50	97	193	390
1954, Reported during life	6,226	5,167	477	39	32	113	398
Death Certificate Report	356	272	1	22	22	--	39
Total	6,582	5,439	478	61	54	113	437
1955, Reported during life	5,919	4,839	513	36	30	83	418
Death Certificate Report	295	224	1	25	19	--	26
Total	6,214	5,063	514	61	49	83	444
1956, Reported during life	5,900	4,899	493	30	23	124	331
Death Certificate Report	237	190	--	7	12	--	28
Total	6,137	5,089	493	37	35	124	359
1957, Reported during life	5,852	4,948	422	16	25	124	317
Death Certificate Report	265	214	--	12	21	--	18
Total	6,117	5,162	422	28	46	124	335
1958, Reported during life	5,276	4,360	443	18	18	112	325
Death Certificate Report	206	153	--	20	16	2	15
Total	5,482	4,513	443	38	34	114	340
1959, Reported during life	4,752	4,052	337	14	10	87	252
Death Certificate Report	172	144	--	12	10	1	5
Total	4,924	4,196	337	26	20	88	257
1960, Reported during life	4,491	3,756	329	22	17	105	262
Death Certificate Report	208	167	--	19	13	1	8
Total	4,699	3,923	329	41	30	106	270
1961, Reported during life	4,142	3,456	343	19	19	73	232
Death Certificate Report	218	179	--	17	10	12	--
Total	4,360	3,635	343	36	29	85	232
1962, Reported during life	4,197	3,503	298	29	9	100	258
Death Certificate Report	240	199	1	16	10	1	13
Total	4,437	3,702	299	45	19	101	271
1963, Reported during life	4,653	3,874	358	15	15	99	292
Death Certificate Report	238	183	--	23	13	1	18
Total	4,891	4,057	358	38	28	100	310

Table 15.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASE RATES*
BY ETHNIC GROUP
New York City, 1952 - 1963

Year	Total	Ethnic Group			
		White	Negro	Puerto Rican	Other
1952	92.6	63.3	269.6	234.7	490.4
1953	93.7	63.4	271.7	208.3	557.8
1954	84.0	56.1	235.2	206.2	319.0
1955	79.4	52.9	217.9	176.5	371.4
1956	78.6	51.6	215.2	162.0	421.4
1957	78.4	53.4	195.3	159.3	316.5
1958	70.4	46.6	183.0	126.1	250.4
1959	63.2	41.2	159.4	117.2	171.8
1960	60.4	37.5	160.9	102.8	136.2
1961	56.0	32.9	158.2	98.9	127.1
1962	57.0	30.3	156.8	99.4	181.7
1963	62.9	31.4	182.1	103.3	209.8

*Per 100,000 population.

Table 16.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY ETHNIC GROUP
New York City, 1962 - 1963

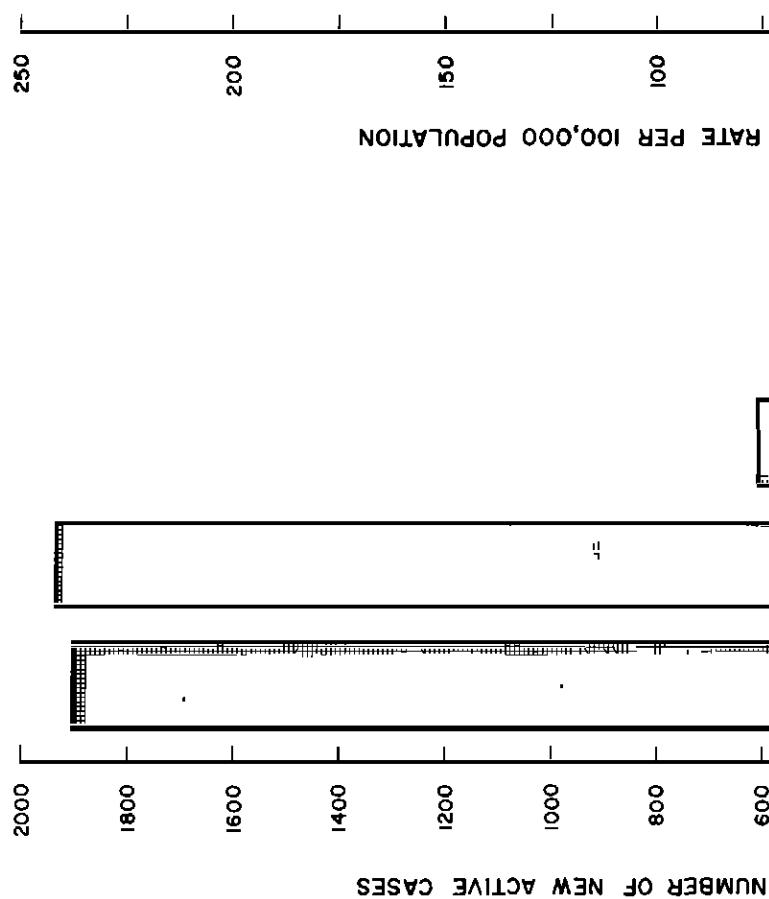
Ethnic Group	Year		Change 1962-1963	
	1962	1963	Number	Percent
White	1837	1900	+ 63	3.4
Negro	1667	1936	+ 269	16.1
Puerto Rican	609	633	+ 24	3.9
Other	97	112	+ 15	15.5
Ethnic Group not Reported .	227	310	+ 83	36.6
All Ethnic Groups	4437	4891	+ 454	10.2

There was an increase among all ethnic groups in the incidence of newly reported cases of tuberculosis between the years 1962 and 1963. The highest increase of 16.1% occurred among the Negroes.

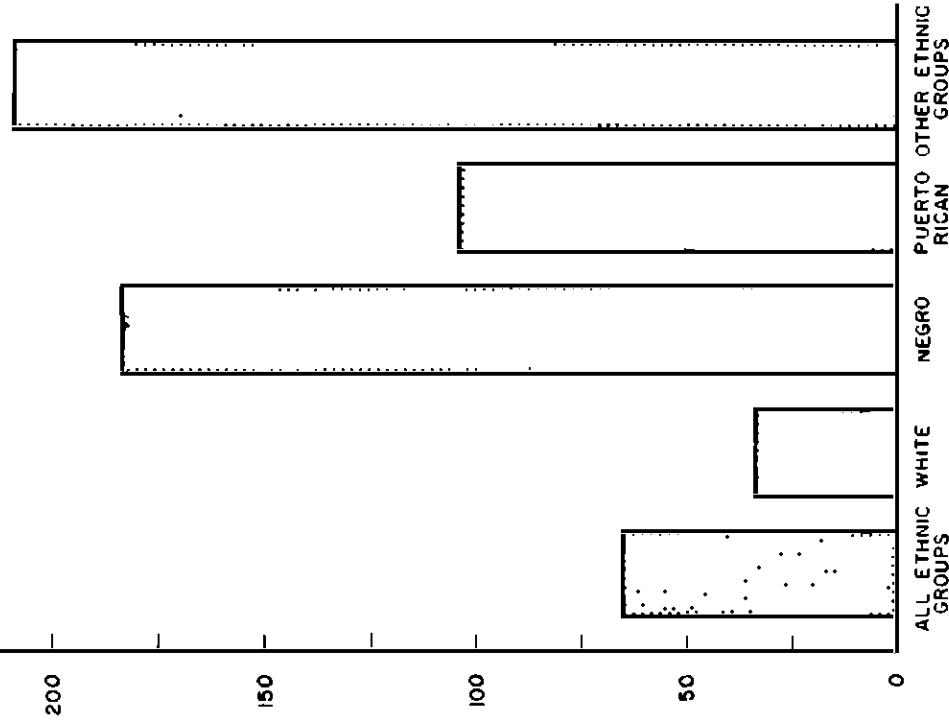
CHART 6

**NEWLY REPORTED ACTIVE TUBERCULOSIS CASES AND
RATES BY ETHNIC GROUPS, NEW YORK CITY, 1963**

NEW ACTIVE TUBERCULOSIS CASES (458) *
BY ETHNIC GROUP



RATE PER 100,000 POPULATION



*DOES NOT INCLUDE 310 CASES-ETHNIC GROUP UNKNOWN

Table 17
MALES: NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE
By Health Center Districts, New York City, 1963

Health District	Total Male	Age Group											
		0- 4	5- 9	10- 14	15- 19	20- 24	25- 29	30- 34	35- 44	45- 54	55- 64	65+	N.S.
NEW YORK CITY	3204	125	74	42	82	174	208	240	552	602	561	494	50
MANHATTAN	1329	38	29	17	24	61	86	110	235	278	259	178	14
Central Harlem	325	6	4	2	6	23	26	34	72	83	47	21	1
East Harlem	115	13	6	6	10	6	7	11	14	17	18	7	-
Kips Bay-Yorkville	36	1	-	-	-	2	4	4	8	9	8	-	-
Lower East Side	371	11	13	1	2	9	12	18	53	100	94	54	4
Lower West Side	233	1	3	2	-	9	10	17	44	41	57	46	3
Riverside	157	4	3	3	5	8	21	18	27	17	21	25	5
Washington Heights	92	2	-	3	1	6	8	8	21	12	13	17	1
BRONX	456	13	12	7	11	35	38	40	72	72	70	77	9
Fordham-Riverdale	36	-	-	-	-	3	1	-	2	8	7	14	1
Morrisania	117	4	4	2	4	9	12	15	23	18	16	7	3
Mott Haven	129	7	6	3	3	17	8	16	17	19	17	14	2
Pelham Bay	25	-	1	-	-	-	-	1	7	5	3	7	1
Tremont	90	2	1	-	1	4	9	4	13	15	19	22	-
Westchester	59	-	-	2	3	2	8	4	10	7	8	13	2
BROOKLYN	991	66	31	16	39	58	65	69	184	163	138	151	11
Bay Ridge	52	-	1	-	1	3	1	4	9	8	9	16	-
Bedford	212	12	6	1	3	14	16	23	54	34	34	15	-
Brownsville	122	12	4	4	7	7	12	11	16	18	12	19	-
Bushwick	107	8	7	2	6	5	5	6	23	13	16	15	1
Flatbush	67	2	-	-	1	5	4	2	9	15	11	18	-
Fort Greene	150	7	6	3	11	7	14	12	31	29	13	13	4
Gravesend	40	3	1	-	-	4	2	1	5	10	6	7	1
Red Hook-Gowanus	89	8	4	4	4	4	3	3	12	13	15	18	1
Sunset Park	58	2	-	1	3	4	1	2	11	7	10	17	-
Williamsburg-Greenpoint ...	94	12	2	1	3	5	7	5	14	16	12	13	4
QUEENS	388	8	2	2	8	19	18	18	56	82	82	78	15
Astoria-L.I. City	64	-	-	-	2	3	4	2	7	13	13	20	-
Corona	58	2	2	-	1	4	4	3	3	12	10	15	2
Flushing	66	2	-	-	2	3	3	3	13	14	16	8	2
Jamaica East	95	3	-	1	1	5	4	6	20	26	19	7	3
Jamaica West	57	1	-	1	2	1	1	3	7	7	15	15	4
Maspeth-Forest Hills	48	-	-	-	-	3	2	1	6	10	9	13	4
RICHMOND	40	-	-	-	-	1	1	3	5	7	12	10	1

N.S. = Age not stated.

Among males newly reported to have tuberculosis in 1963, 7.5% were less than 15 years of age, 39.2% were in the 15 to 44 age group. 51.7% were 45 years and older, and in 1.6%, age was not stated.

Table 18.
FEMALES: NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE
by Health Center Districts, New York City, 1963

Health District	Total Female	Age Group											
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+	N.S.
NEW YORK CITY	1687	125	70	38	90	186	166	162	267	193	166	176	48
MANHATTAN	584	35	22	11	44	70	52	62	97	71	57	53	10
Central Harlem	190	8	9	2	17	21	17	17	36	32	17	14	-
East Harlem	74	3	2	5	7	11	8	10	13	7	5	2	1
Kips Bay-Yorkville	22	-	-	-	1	1	2	2	3	1	6	4	2
Lower East Side	100	15	8	1	6	14	7	7	16	8	9	9	-
Lower West Side	55	6	1	1	7	4	5	6	9	3	9	3	1
Riverside	96	2	2	2	5	10	11	15	12	12	4	16	5
Washington Heights	47	1	-	-	1	9	2	5	8	8	7	5	1
BRONX	278	10	8	6	13	33	34	28	37	33	35	30	11
Fordham-Riverdale	14	1	-	-	-	1	1	-	3	-	3	4	1
Morrisania	107	3	1	2	3	15	15	14	16	20	7	8	3
Mott Haven	82	5	7	4	4	12	10	8	11	4	8	6	3
Pelham Bay	10	-	-	-	-	1	1	1	3	1	1	1	1
Tremont	45	1	-	-	4	4	4	2	4	4	10	9	3
Westchester	20	-	-	-	2	-	3	3	-	4	6	2	-
BROOKLYN	624	67	36	17	29	68	65	52	96	69	49	63	13
Bay Ridge	19	-	-	-	1	-	1	2	5	5	-	5	-
Bedford	125	17	4	3	7	14	12	11	20	17	12	5	3
Brownsville	115	17	12	2	4	18	15	8	13	13	6	7	-
Bushwick	75	10	5	4	4	5	7	4	12	7	6	8	3
Flatbush	38	1	1	1	1	2	1	3	7	2	6	11	2
Fort Greene	89	8	5	4	5	11	9	9	17	9	6	5	1
Gravesend	24	2	-	-	1	2	4	1	5	1	2	4	2
Red Hook-Gowanus	52	5	3	1	2	6	10	5	5	8	3	4	-
Sunset Park	27	2	-	-	2	1	2	2	3	5	2	8	-
Williamsburg-Greenpoint ...	60	5	6	2	2	9	4	7	9	2	6	6	2
QUEENS	192	13	4	4	4	15	13	19	35	18	25	28	14
Astoria-L.I. City	30	-	-	-	1	1	2	1	7	3	7	5	3
Corona	26	1	-	1	2	1	2	4	3	6	4	2	-
Flushing	24	1	1	-	-	3	1	3	3	1	3	5	3
Jamaica East	63	8	2	2	-	6	5	8	11	6	6	6	3
Jamaica West	24	1	1	1	-	4	1	2	6	1	1	4	2
Maspeth-Forest Hills	25	2	-	-	1	-	2	1	5	1	4	6	3
RICHMOND	9	-	-	-	-	-	2	1	2	2	-	2	-

N.S. = Age not stated.

Among females newly reported to have tuberculosis in 1963, 13.8% were less than 15 years of age, 51.6% were in the 15 to 44 age group, 31.7% were 45 years and older, and in 2.9%, age was not stated.

CHART 1

NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY AGE
AND SEX, NEW YORK CITY, 1963

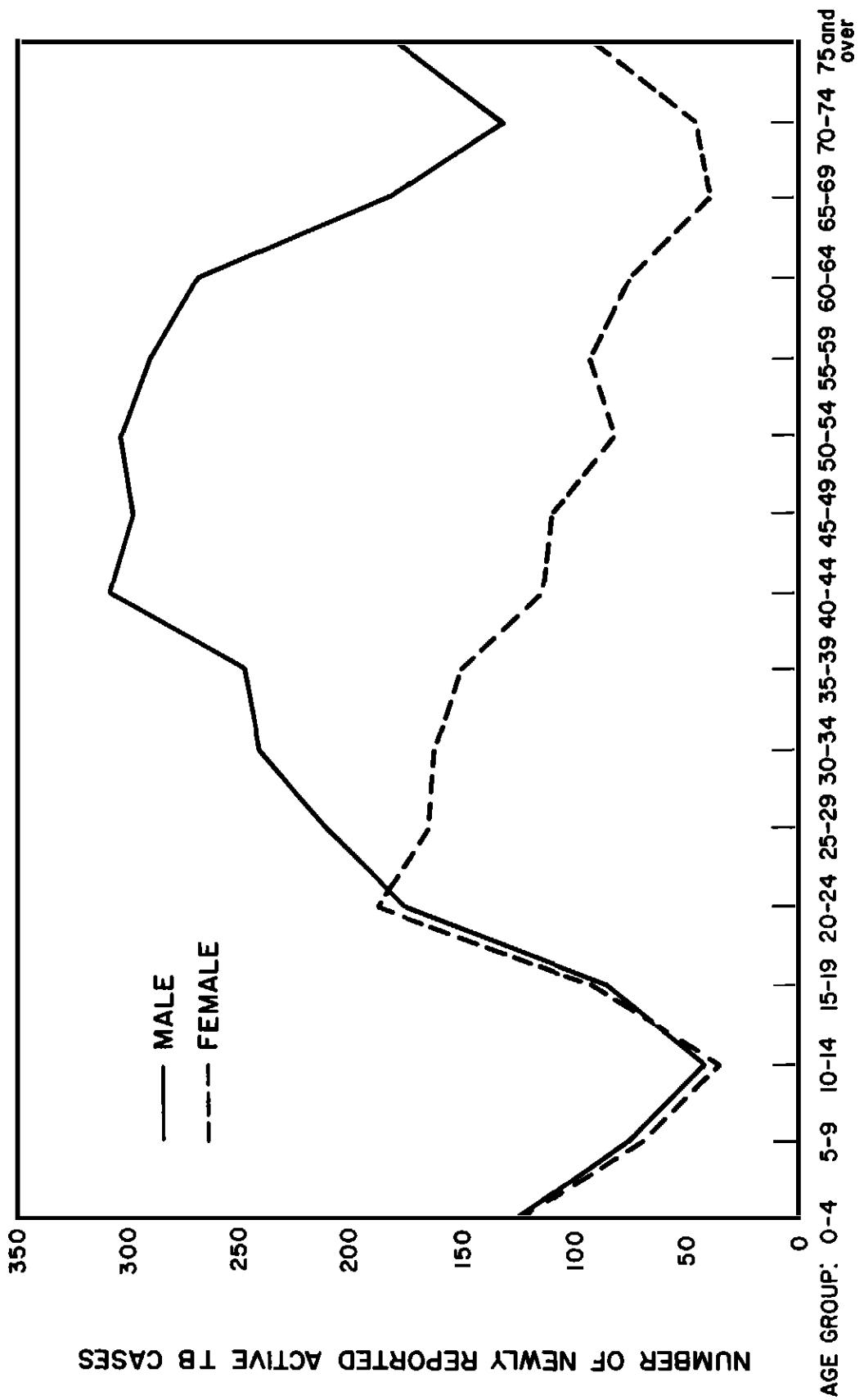


Table 19.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY ETHNIC GROUP
By Health Center Districts, New York City, 1963

Health District	All Ethnic Groups		White	Negro	Puerto Rican	Other	N.S.
	Number	Rate†					
NEW YORK CITY	4891	62.9	1900	1936	633	95	327
MANHATTAN	1913	115.9	632	824	245	64	148
Central Harlem	515	225.9	12	478	16	--	9
East Harlem	189	103.8	45	62	68	1	13
Kips Bay-Yorkville..	58	27.4	39	2	3	1	13
Lower East Side	471	182.6	212	75	91	27	66
Lower West Side	288	113.8	189	36	19	28	16
Riverside	253	101.2	84	99	38	6	26
Washington Heights..	139	52.1	51	72	10	1	5
BRONX	734	51.3	300	233	157	6	38
Fordham-Riverdale ..	50	20.7	42	3	--	1	4
Morrisania	224	86.5	35	111	66	--	12
Mott Haven	211	97.2	67	69	65	1	9
Pelham Bay	35	19.3	23	7	1	--	4
Tremont	135	50.9	77	36	14	4	4
Westchester	79	29.6	56	7	11	--	5
BROOKLYN	1615	61.9	599	715	225	11	65
Bay Ridge	71	24.6	65	1	--	--	5
Bedford	337	118.2	32	269	19	1	16
Brownsville	237	74.5	72	113	42	--	10
Bushwick	182	86.3	76	81	21	--	4
Flatbush	105	22.4	82	13	1	1	8
Fort Greene	239	112.2	48	157	26	1	7
Gravesend	64	21.3	44	11	5	3	1
Red Hook-Gowanus ...	141	89.8	58	27	48	2	6
Sunset Park	85	45.9	70	3	7	--	5
Wmsbrg-Greenpoint ..	154	83.7	52	40	56	3	3
QUEENS	580	31.2	329	160	6	14	71
Astoria-L.I. City ..	94	36.0	74	6	4	5	5
Corona	84	37.7	49	22	1	1	11
Flushing	90	19.7	54	13	--	2	21
Jamaica East	158	50.2	40	102	--	4	12
Jamaica West	81	25.3	53	15	1	1	11
Maspeth-Forest Hills	73	25.6	59	2	--	1	11
RICHMOND	49	21.3	40	4	--	--	5

†Per 100,000 population. N.S. = Ethnic group not stated.

According to ethnic group, of the new cases reported in New York City during 1963, 38.9% were White, 39.6% Negro, 12.9% Puerto Rican, 1.9% other ethnic groups; in 6.7% the ethnic group was not stated. The proportions for boroughs differed. Negroes accounted for 44.3% of the new cases in Brooklyn, 43.1% in Manhattan, 31.7% in the Bronx, and 27.6% in Queens. New cases among Puerto Ricans were found mainly in the boroughs of Manhattan, Bronx, and Brooklyn. In Queens, 56.7% of the new cases were White and in Richmond, 81.6%.

Table 20.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES BY ETHNIC GROUP, SEX
 and Health Center Districts, New York City, 1963

Health District	All Ethnic Groups			White		Negro		Puerto Rican		Yellow		Other		N.S.	
	Total	Male	Female	M	F	M	F	M	F	M	F	M	F	M	F
NEW YORK CITY	4891	3204	1687	1378	522	1202	734	321	312	76	19	13	6	214	94
MANHATTAN	1913	1329	584	494	138	539	285	130	115	54	10	6	3	106	33
Central Harlem	515	325	190	7	5	302	176	9	7	-	-	-	2	7	-
East Harlem	189	115	74	30	15	38	24	37	31	1	-	1	-	8	4
Kips Bay Yorkville	58	36	22	28	11	1	1	2	1	-	1	-	-	5	8
Lower East Side	471	371	100	180	32	62	13	45	46	25	2	2	-	57	7
Lower West Side	288	233	55	162	27	30	6	8	11	23	5	-	-	10	6
Riverside	253	157	96	53	31	59	40	22	16	5	1	2	-	16	8
Washington Heights	139	92	47	34	17	47	25	7	3	-	1	1	1	3	-
BRONX	734	456	278	207	93	147	86	70	87	5	1	4	-	23	11
Fordham-Riverdale	50	36	14	31	11	1	2	-	-	-	1	-	-	4	-
Morrisania	224	117	107	20	15	62	49	27	39	-	-	3	-	5	4
Mott Haven	211	129	82	39	28	50	19	32	33	1	-	1	-	6	2
Pelham Bay	35	25	10	19	4	5	2	-	1	-	-	-	-	1	3
Tremont	135	90	45	52	25	26	10	5	9	4	-	-	-	3	1
Westchester	79	59	20	46	10	3	4	6	5	-	-	-	-	4	1
BROOKLYN	1615	991	624	416	183	411	304	117	108	9	2	1	1	37	26
Bay Ridge	71	52	19	47	18	1	-	-	-	-	-	-	-	4	1
Bedford	337	212	125	25	7	169	100	7	12	-	1	-	-	11	5
Brownsville	237	122	115	44	28	49	64	21	21	-	-	1	-	7	2
Bushwick	182	107	75	50	26	42	39	14	7	-	-	-	-	1	3
Flatbush	105	67	38	52	30	10	3	-	1	1	-	-	-	4	4
Fort Greene	239	150	89	31	17	98	59	17	9	1	-	-	-	3	4
Gravesend	64	40	24	32	12	4	7	1	4	2	1	-	-	1	-
Red Hook-Gowanus	141	89	52	47	11	14	13	24	24	2	-	-	-	2	4
Sunset Park	85	58	27	50	20	2	1	4	3	-	-	1	-	2	2
Williamsburg-Greenpoint.	154	94	60	38	14	22	18	29	27	3	-	-	-	2	1
QUEENS	580	388	192	228	101	103	57	4	2	8	6	2	2	43	24
Astoria L.I. City	94	64	30	50	24	6	-	2	2	4	1	-	-	2	3
Corona	84	58	26	33	16	15	7	1	-	-	1	-	-	9	2
Flushing	90	66	24	41	13	10	3	-	-	2	-	-	1	13	7
Jamaica East	158	95	63	25	15	62	40	-	-	1	3	1	1	6	4
Jamaica West	81	57	24	39	14	9	6	1	-	1	-	-	-	7	4
Maspeth-Forest Hills ...	73	48	25	40	19	1	1	-	-	1	1	-	-	6	4
RICHMOND	49	40	9	33	7	2	2	-	-	-	-	-	-	5	-

N.S. = Race not stated.

Table 21.
PERCENTAGE DISTRIBUTION OF NEW CASES OF ACTIVE TUBERCULOSIS
 Ethnic Group by Sex, New York City, 1963

Ethnic Group:	Total	White	Negro	Puerto Rican	Yellow	Other Ethnic Groups
Male	65.5	72.5	62.1	50.7	80.0	68.4
Female	34.5	27.5	37.9	49.3	20.0	31.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 22.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
 By Ethnic Group and Health Center Districts, New York City, 1958 - 1963

Health Center District	White						Negro						Puerto Rican					
	1958	1959	1960	1961	1962	1963	1958	1959	1960	1961	1962	1963	1958	1959	1960	1961	1962	1963
NEW YORK CITY	2802	2404	2156	1902	1837	1900	1738	1559	1648	1632	1667	1936	658	644	602	580	609	632
MANHATTAN	1200	971	827	663	621	632	894	804	865	733	718	824	334	319	279	289	239	245
Central Harlem	27	14	12	9	11	12	554	462	540	427	406	478	14	20	12	16	12	16
East Harlem	91	87	57	48	53	45	64	69	58	50	59	62	78	82	49	57	73	68
Kips Bay-Yorkville	87	92	62	59	60	39	3	2	3	1	2	2	0	0	1	2	0	3
Lower East Side	442	372	305	258	192	212	80	72	58	72	63	75	144	115	111	112	82	91
Lower West Side	339	243	201	171	177	189	52	44	49	26	42	36	32	46	30	30	19	38
Riverside	134	116	122	76	81	84	86	80	76	82	99	98	49	54	62	38	38	38
Washington Heights	80	47	68	42	47	51	55	65	77	71	64	72	8	7	6	10	4	10
BRONX	422	406	352	343	321	300	155	151	172	202	210	233	134	125	122	125	195	157
Fordham-Riverdale	56	65	33	44	58	42	3	4	8	3	3	3	1	1	1	0	4	--
Morrisania	80	65	70	62	52	35	77	82	76	106	112	111	54	45	38	54	83	66
Mott Haven	106	102	112	106	84	67	43	21	52	53	46	69	46	53	59	57	86	65
Pelham Bay	27	46	26	19	22	23	8	10	8	8	17	7	1	1	3	1	1	1
Tremont	81	70	73	64	59	77	13	29	20	24	23	36	24	18	18	8	13	14
Westchester	72	58	38	48	45	56	11	5	8	8	9	7	8	7	3	3	8	11
BROOKLYN	729	632	634	549	551	599	556	494	485	572	602	715	183	197	196	164	170	225
Bay Ridge	66	55	57	53	58	65	2	2	0	0	4	1	1	0	1	0	1	--
Bedford	45	36	39	34	37	32	292	230	235	271	278	269	9	10	11	18	10	19
Brownsville	65	77	82	51	70	72	59	65	52	64	86	113	22	20	26	21	17	42
Bushwick	82	63	70	71	75	76	34	21	33	45	50	81	17	16	16	6	24	21
Flatbush	90	86	74	77	62	82	6	4	6	7	10	13	0	1	0	0	0	1
Fort Greene	78	71	58	56	49	48	118	126	119	130	133	157	30	30	29	34	20	26
Gravesend	55	41	53	34	28	44	9	5	7	11	6	11	1	0	5	5	0	5
Red Hook-Gowanus	71	73	63	38	52	58	17	27	20	24	18	27	40	43	49	33	37	48
Sunset Park	81	76	74	58	60	70	1	0	1	2	1	3	5	2	3	2	7	7
Williamsburg-Greenpoint	96	54	64	77	60	52	18	14	12	19	16	40	58	76	56	44	55	56
QUEENS	396	344	310	309	313	329	126	104	122	121	136	160	5	1	4	2	4	6
Astoria-L.I. City	80	66	60	53	61	74	10	7	4	8	4	6	3	0	0	0	0	4
Corona	59	71	48	53	48	49	23	17	20	14	20	22	1	0	0	0	0	1
Flushing	80	69	66	59	60	54	10	5	12	6	5	13	1	1	2	0	1	--
Jamaica East	59	45	41	36	29	40	56	57	74	71	93	102	0	0	0	1	0	--
Jamaica West	69	50	57	62	63	53	27	18	12	22	14	15	0	0	2	1	3	1
Maspeth-Forest Hills	49	43	38	46	52	59	0	0	0	0	0	2	0	0	0	0	0	--
RICHMOND	55	51	33	28	31	40	7	6	4	3	1	4	2	2	1	0	1	--

Table 23.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
ALL FORMS, BY ETHNIC GROUP AND SEX, NEW YORK CITY. 1944-1963

Year	All Ethnic Groups		White		Negro		Puerto Rican		Yellow		Not Stated†
	Total	Male | Fem.	Total	Male | Fem.	Total	Male | Fem.	Total	Male | Fem.	Total	Male | Fem.	
1944	7973	5149	2733	5015	3426	1578	1525	814	710	196	98
1945	7062	4322	2651	4416	2906	1489	1522	766	756	254	123
1946	7123	4411	2699	4538	3015	1522	1613	817	796	291	124
1947	7599	4710	2889	4842	3204	1638	1695	906	789	431	191
1948	8306	5179	3127	5072	3383	1689	1959	1044	915	505	216
1949	8567	5307	3260	4986	3296	1690	2190	1193	997	550	236
1950	7717	4854	2863	4646	3212	1424	1934	1017	917	574	244
1951	7583	4788	2795	4468	3056	1412	2056	1154	902	636	280
1952	7282	4527	2755	4086	2769	1317	2052	1118	934	718	330
1953	7349	4626	2723	4093	2802	1291	2167	1224	943	725	346
1954	6582	4210	2372	3572	2516	1056	1933	1100	833	783	386
1955	6214	3971	2243	3347	2393	954	1862	1028	834	741	361
1956	6137	3985	2152	3162	2321	841	1861	1071	790	723	329
1957	6117	4002	2115	3258	2381	877	1763	995	768	772	393
1958	5482	3637	1845	2802	2003	799	1738	1083	655	658	337
1959	4924	3232	1692	2404	1719	685	1559	942	617	644	323
1960	4699	3124	1575	2156	1579	577	1648	1017	631	602	300
1961	4360	2879	1481	1902	1369	533	1632	1020	612	580	298
1962	4437	2870	1567	1837	1306	531	1667	1013	654	609	336
1963	4891	3204	1687	1900	1378	522	1936	1202	734	633	321

†Race and/or sex not stated. Note: Totals include other races and cases whose race or sex was not reported.

Table 24.
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
By Ethnic Group, Age and Sex, New York City, 1952 - 1963
Part A - ALL ETHNIC GROUPS

Year	All Ages	AGE												N.S.
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+		
MALE, ALL ETHNIC GROUPS														
1952	4527	217	100	46	156	275	339	370	712	927	727	502	156	
1953	4626	215	105	49	126	288	420	335	765	927	711	596	89	
1954	4210	192	98	44	123	264	346	330	630	857	736	512	78	
1955	3971	224	84	41	100	232	277	295	632	778	709	527	72	
1956	3985	200	92	41	91	193	248	311	671	806	711	567	74	
1957	4002	135	93	37	98	185	246	292	612	777	757	702	68	
1958	3637	191	89	44	86	212	209	301	598	675	649	515	68	
1959	3232	123	67	34	73	151	214	253	531	624	574	526	62	
1960	3124	132	78	31	74	148	177	219	562	568	582	513	40	
1961	2879	137	66	28	49	184	181	229	506	531	504	422	42	
1962	2870	111	51	37	73	156	185	198	545	511	510	438	55	
1963	3204	125	74	42	82	174	208	240	552	602	561	494	50	
FEMALE, ALL ETHNIC GROUPS														
1952	2755	163	80	61	210	393	428	319	430	245	153	167	106	
1953	2723	174	123	64	177	392	473	277	446	250	139	161	47	
1954	2372	183	96	78	142	289	392	284	389	210	128	137	44	
1955	2243	210	80	64	140	262	304	287	360	210	139	147	40	
1956	2152	178	79	48	153	231	323	268	353	211	126	151	31	
1957	2115	163	90	49	150	213	264	237	359	234	161	156	39	
1958	1845	147	73	56	105	192	198	218	322	220	97	166	51	
1959	1692	121	62	54	103	165	176	201	284	207	127	151	41	
1960	1575	102	55	46	98	146	162	198	278	198	106	158	28	
1961	1481	117	63	46	87	151	160	133	270	187	103	136	28	
1962	1567	122	59	41	107	147	159	146	312	176	97	166	35	
1963	1687	125	70	38	90	186	166	162	267	193	166	176	48	
BOTH SEXES, ALL ETHNIC GROUPS														
1952	7282	380	180	107	366	668	767	689	1142	1172	880	669	262	
1953	7349	389	228	113	303	680	893	612	1211	1177	850	757	136	
1954	6582	375	194	122	265	553	738	614	1019	1067	864	649	122	
1955	6214	434	164	105	240	494	581	582	992	988	848	674	112	
1956	6137	378	171	89	244	424	571	579	1024	1017	837	718	85	
1957	6117	298	183	86	248	398	510	529	971	1011	918	858	107	
1958	5482	338	162	100	191	404	407	519	920	895	746	681	119	
1959	4924	244	129	88	176	316	390	454	815	831	701	677	103	
1960	4699	234	133	77	172	294	339	417	840	766	688	671	68	
1961	4360	254	129	74	136	335	341	362	776	718	607	558	70	
1962	4437	233	110	78	180	303	344	344	857	687	607	604	90	
1963	4891	250	144	80	172	360	374	402	819	795	727	670	98	

N.S. = Age not stated.

Table 24 - continued
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
By Ethnic Group, Age and Sex, New York City, 1952 - 1963
Part B - WHITE

Year	All Ages	AGE												N.S.
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+		
WHITE MALE														
1952	2769	69	29	17	60	133	157	171	405	632	589	421	86	
1953	2802	77	24	11	64	141	224	150	403	621	552	491	44	
1954	2516	53	34	14	49	126	161	136	314	582	588	424	35	
1955	2393	68	26	13	40	106	115	131	302	560	553	446	33	
1956	2321	70	22	17	43	93	98	111	310	520	536	478	23	
1957	2381	36	17	12	37	69	95	114	284	524	571	588	34	
1958	2003	38	13	7	36	80	90	111	248	449	474	420	37	
1959	1719	34	21	13	28	54	70	85	200	369	405	419	21	
1960	1579	30	21	11	26	47	66	59	199	308	395	400	17	
1961	1369	31	11	7	15	53	54	76	171	269	337	317	28	
1962	1306	27	12	3	22	41	43	58	163	244	335	333	25	
1963	1378	31	17	8	20	57	50	62	180	254	321	356	22	
WHITE FEMALE														
1952	1317	61	32	18	94	157	160	132	231	139	100	135	58	
1953	1291	53	46	22	63	171	199	121	234	147	87	126	22	
1954	1056	44	17	28	60	124	150	114	190	108	85	115	21	
1955	954	65	24	22	49	103	111	110	142	112	82	113	21	
1956	841	51	13	10	62	87	113	73	144	110	69	99	10	
1957	877	37	14	18	42	74	109	74	140	134	100	113	22	
1958	799	41	17	15	26	68	67	79	143	127	59	124	33	
1959	685	33	17	17	33	49	59	64	97	109	70	121	16	
1960	577	22	10	14	29	37	54	52	90	92	54	113	10	
1961	533	30	10	10	19	46	48	34	73	82	60	108	13	
1962	531	29	8	8	29	40	41	25	92	83	52	113	11	
1963	522	24	6	7	23	37	40	45	73	56	81	119	11	
WHITE BOTH SEXES														
1952	4086	130	61	35	154	290	317	303	636	771	689	556	144	
1953	4093	130	70	33	127	312	423	271	637	768	639	617	66	
1954	3572	97	51	42	109	250	311	250	504	690	673	539	56	
1955	3347	133	50	35	89	209	226	241	444	672	635	559	54	
1956	3162	121	35	27	105	180	211	184	454	630	605	577	33	
1957	3258	73	31	30	79	143	204	188	424	658	671	701	56	
1958	2802	79	30	22	62	148	157	190	391	576	533	544	70	
1959	2404	67	38	30	61	103	129	149	297	478	475	540	37	
1960	2156	52	31	25	55	84	120	111	289	400	449	513	27	
1961	1902	61	21	17	34	99	102	110	244	351	397	425	41	
1962	1837	56	20	11	51	81	84	83	255	327	387	446	36	
1963	1900	55	23	15	43	94	90	107	253	310	402	475	33	

N.S. = Age not stated.

Table 24 - continued
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
By Ethnic Group, Age and Sex, New York City, 1952 - 1963
Part C - NEGRO

Year	All Ages	AGE												N.S.
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+		
NEGRO MALE														
1952	1118	96	41	22	52	67	117	150	221	205	89	41	17	
1953	1224	82	43	28	33	72	135	140	288	230	94	69	10	
1954	1100	80	30	17	40	74	120	127	238	216	91	56	11	
1955	1028	84	31	16	33	61	100	114	258	165	103	52	11	
1956	1071	60	38	14	30	46	86	138	285	207	108	50	9	
1957	995	57	41	16	25	47	83	123	230	190	111	62	10	
1958	1083	99	56	23	24	66	72	140	268	162	116	53	4	
1959	942	56	28	9	25	49	83	114	225	176	109	55	13	
1960	1017	58	32	14	27	61	60	112	274	187	125	59	8	
1961	1020	61	33	12	19	72	80	108	264	198	107	62	4	
1962	1013	55	23	17	31	56	81	88	279	199	116	61	7	
1963	1202	54	37	17	32	70	103	118	280	251	158	76	6	
NEGRO FEMALE														
1952	934	67	25	35	81	155	166	130	137	69	33	23	13	
1953	943	77	42	23	72	145	184	113	147	82	28	22	8	
1954	833	72	44	29	41	93	153	122	149	82	27	16	5	
1955	834	99	36	27	59	76	117	135	158	62	38	24	3	
1956	790	62	36	22	52	89	126	116	139	70	38	34	6	
1957	768	68	50	13	63	79	93	110	173	66	32	18	3	
1958	655	60	35	31	45	67	86	95	123	57	24	27	5	
1959	617	55	28	24	40	61	70	89	134	56	36	20	4	
1960	631	55	25	17	42	63	55	92	142	71	37	25	7	
1961	612	46	38	18	34	59	67	74	155	72	28	17	4	
1962	654	56	30	20	47	65	74	78	153	63	26	32	10	
1963	734	65	37	22	39	89	72	76	138	102	53	33	8	
NEGRO BOTH SEXES														
1952	2052	163	66	57	133	222	283	280	358	274	122	64	30	
1953	2167	159	85	51	105	217	319	253	435	312	122	91	18	
1954	1933	152	74	46	81	167	273	249	387	298	118	72	16	
1955	1862	183	67	43	92	137	217	249	416	227	141	76	14	
1956	1861	122	74	36	82	135	212	254	424	277	146	84	15	
1957	1763	125	91	29	88	126	176	233	403	256	143	80	13	
1958	1738	159	91	54	69	133	158	235	391	219	140	80	9	
1959	1559	111	56	33	65	110	153	203	359	232	145	75	17	
1960	1648	113	57	31	69	124	115	204	416	258	162	84	15	
1961	1632	107	71	30	53	131	147	182	419	270	135	79	8	
1962	1667	111	53	37	78	121	155	166	432	262	142	93	17	
1963	1936	119	74	39	71	159	175	194	418	353	211	109	14	

N.S. = Age not stated.

Table 24—continued
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
By Ethnic Group, Age and Sex, New York City, 1952 - 1963
Part D - PUERTO RICAN

Year	All Ages	AGE												N.S.
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-50	55-64	65+		
PUERTO RICAN MALE														
1952	330	45	27	6	35	55	48	27	47	27	8	3	2	
1953	346	49	31	9	21	63	43	35	49	25	10	7	4	
1954	386	53	27	10	24	55	49	49	55	28	21	11	4	
1955	361	68	23	12	23	56	46	34	44	19	20	10	6	
1956	329	63	29	10	11	39	45	34	43	31	16	7	1	
1957	393	39	32	6	30	62	47	35	60	40	20	18	4	
1958	337	49	19	13	23	57	36	31	48	24	23	11	3	
1959	323	29	16	10	17	41	45	39	60	32	19	12	3	
1960	300	39	22	5	20	35	31	34	57	26	15	15	1	
1961	298	40	21	5	11	51	38	28	39	30	21	14	-	
1962	336	26	13	14	17	54	45	35	59	40	18	14	1	
1963	321	35	16	13	28	35	37	37	58	31	19	9	3	
PUERTO RICAN FEMALE														
1952	388	31	22	8	27	71	82	44	50	25	14	5	9	
1953	379	42	35	15	33	58	69	32	50	18	14	7	6	
1954	397	62	27	18	35	66	78	40	37	15	10	4	5	
1955	380	44	17	15	27	73	61	38	47	27	17	9	5	
1956	394	60	25	13	36	46	67	59	44	21	14	5	4	
1957	379	54	25	14	37	53	44	43	40	27	19	19	4	
1958	321	43	21	10	30	49	37	36	40	26	14	11	4	
1959	321	30	16	12	25	49	41	45	43	31	13	8	8	
1960	302	25	20	13	24	42	45	43	38	26	10	14	2	
1961	282	40	13	16	30	37	38	21	37	25	14	8	3	
1962	273	34	15	12	28	32	33	31	41	18	13	12	4	
1963	312	31	23	6	22	52	42	33	41	22	21	15	4	
PUERTO RICAN BOTH SEXES														
1952	718	76	49	14	62	126	130	71	97	52	22	8	11	
1953	725	91	66	24	54	121	112	67	99	43	24	14	10	
1954	783	115	54	28	59	121	127	89	92	43	31	15	9	
1955	741	112	40	27	50	129	107	72	91	46	37	19	11	
1956	723	123	54	23	47	85	112	93	87	52	30	12	5	
1957	772	93	57	20	67	115	91	78	100	67	39	37	8	
1958	658	92	40	23	53	106	73	67	88	50	37	22	7	
1959	644	59	32	22	42	90	86	84	103	63	32	20	11	
1960	602	64	42	18	44	77	76	77	95	52	25	29	3	
1961	580	80	34	21	41	88	76	49	76	55	35	22	3	
1962	609	60	28	26	45	86	78	66	100	58	31	26	5	
1963	633	66	39	19	50	87	79	70	99	53	40	24	7	

N.S. = Age not stated.

Table 24 - continued
NEWLY REPORTED ACTIVE TUBERCULOSIS CASES
By Ethnic Group, Age and Sex, New York City, 1952 - 1963
Part E - YELLOW

Year	All Ages	AGE												N.S.
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-54	55-64	65+		
YELLOW MALE														
1952	104	-	-	-	5	7	8	10	14	20	18	18	4	
1953	120	1	-	-	8	6	8	5	14	28	30	16	4	
1954	77	-	3	-	3	2	4	8	7	19	17	13	1	
1955	84	2	1	-	3	4	6	9	12	16	19	10	2	
1956	86	3	1	-	3	6	7	7	8	19	18	13	1	
1957	75	-	-	-	3	-	5	5	13	8	21	18	2	
1958	71	1	-	-	1	3	5	2	7	12	16	20	4	
1959	63	1	-	-	-	4	7	3	12	7	15	14	-	
1960	55	-	-	-	-	1	6	3	5	8	13	19	-	
1961	44	1	-	-	-	3	1	4	4	5	11	14	1	
1962	49	1	-	1	-	2	4	4	6	4	12	12	3	
1963	76	2	-	1	-	6	5	4	6	10	18	22	2	
YELLOW FEMALE														
1952	17	-	-	-	1	2	7	4	-	1	1	-	1	
1953	15	-	-	1	-	2	9	-	2	-	-	-	1	
1954	15	2	-	1	1	1	3	1	4	-	-	-	1	
1955	9	-	1	-	2	-	4	1	-	-	-	-	1	
1956	11	1	3	-	-	-	1	2	3	-	-	1	-	
1957	10	1	-	-	2	3	3	-	-	2	-	1	-	
1958	10	-	-	-	-	3	2	2	2	1	-	1	-	2
1959	8	-	-	1	-	1	-	2	2	1	-	1	-	1
1960	6	-	-	-	-	-	2	1	-	1	1	-	1	
1961	11	-	-	1	2	3	2	-	2	1	-	-	-	
1962	14	1	-	-	-	2	5	2	2	2	-	-	-	
1963	19	2	-	-	4	2	5	2	3	-	1	-	-	
YELLOW BOTH SEXES														
1952	121	-	-	-	6	9	15	14	14	21	19	18	5	
1953	135	1	-	1	8	8	17	5	16	28	30	16	5	
1954	92	2	3	1	4	3	7	9	11	19	18	13	2	
1955	93	2	2	-	5	4	10	10	12	16	19	10	3	
1956	97	4	4	-	3	6	8	9	11	19	19	13	1	
1957	85	1	-	-	5	3	8	5	13	8	21	19	2	
1958	81	1	-	-	1	6	7	4	9	13	16	20	4	
1959	71	1	-	1	-	5	7	5	13	7	16	14	2	
1960	61	-	-	-	-	1	8	4	5	9	14	19	1	
1961	55	1	-	1	2	6	3	4	6	6	11	14	1	
1962	63	2	-	1	-	4	9	6	8	6	12	12	3	
1963	95	4	-	1	4	8	10	6	9	10	19	22	2	

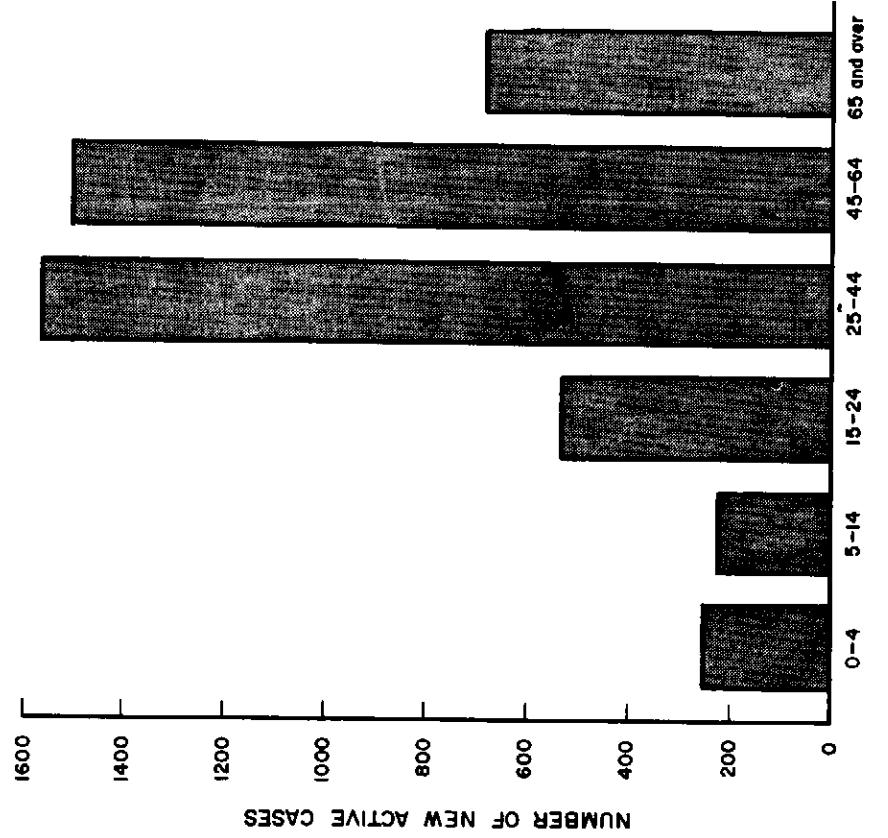
N.S. = Age not stated.

Note: All ethnic groups and those whose ethnic group was not known are included in totals for All Ethnic Groups, page 31.

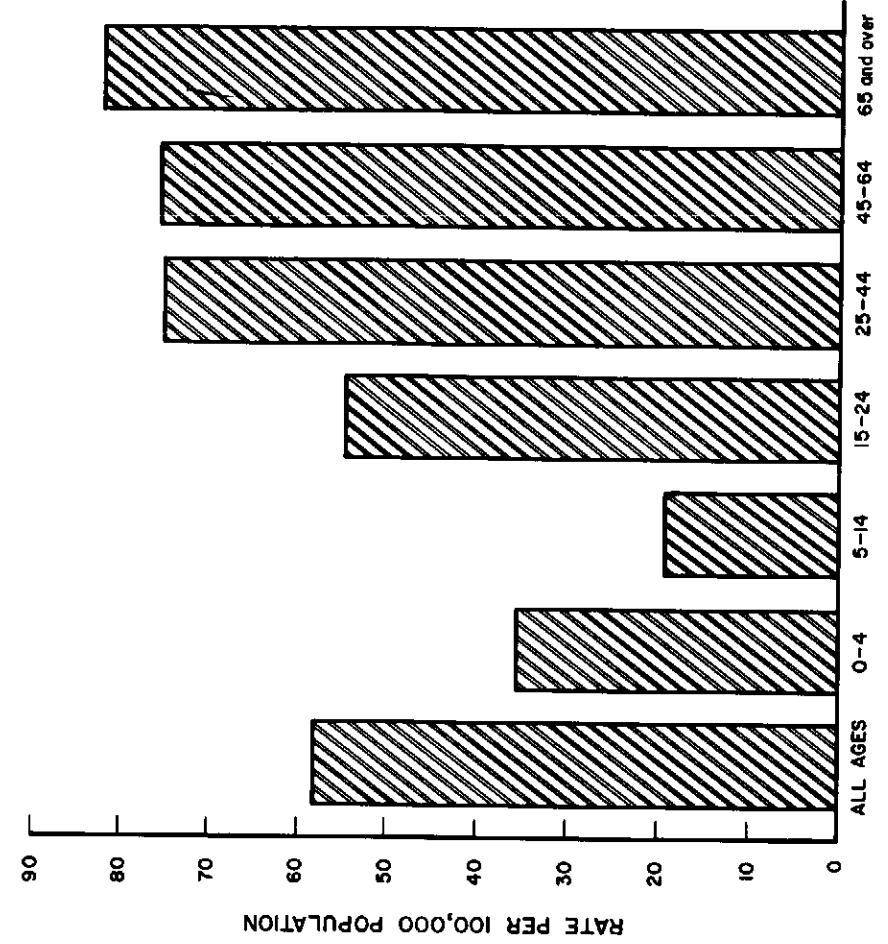
CHART 8

**NEWLY REPORTED ACTIVE TUBERCULOSIS CASES AND
RATES BY AGE GROUP, NEW YORK CITY, 1963**

**NEW ACTIVE TUBERCULOSIS CASES (489)*
BY AGE GROUP**



**NEW ACTIVE TUBERCULOSIS CASE RATE (PER 100,000 POPULATION)
BY AGE GROUP**



*DOES NOT INCLUDE 98 INDIVIDUALS - AGE UNKNOWN

III. TUBERCULOSIS REGISTER

TOTAL IN REGISTER

The New York City Department of Health, Bureau of Tuberculosis, maintains a central tuberculosis register of current information on persons with active disease providing data as to the location of patients, status of their condition, type of care or supervision, etc. This well organized register serves the public health authorities as an important instrument in the administration of their broad tuberculosis program. In addition to the active case the Bureau has a roster of names of former patients whose disease has been arrested or is inactive. The total roster of active and inactive cases is composed of approximately 90,000 names. According to the New York City Health Code, cases of tuberculosis must be reported to the Department of Health in writing within 24 hours after a diagnosis is made. (†)

On December 31, 1963, there were 6,588 persons with active tuberculosis on the tuberculosis Health District list. During the year, 4,891 persons with newly diagnosed active disease were reported for the first time and hundreds of "old cases" were resumed for additional care and supervision.

Of the 6,588 known active cases, 2,806 (42.6%) were residents of the Borough of Manhattan, 1,914 (29.0%) of Brooklyn, 1,087 (16.5%) of Bronx, 723 (11.0%) of Queens and 58 (0.9%) of Richmond.

Prior to 1960, detailed statistics on the Tuberculosis Register were available by age, ethnic group, health center district and type of care. Such detailed statistics have not been available since 1961. Cases on Health District Registers are now only recorded as to type of care.

(†) Article 11, Section 11.03, New York City Health Code, 1959. In 1893 a basic plan was prepared for the control of tuberculosis and policies established for free sputum examinations, compulsory reporting and registration of cases by public institutions (and request of reporting from private practitioners), official supervision isolation, terminal disinfection, provision of hospital facilities and instruction of the public in regard to the care of the disease. This plan was adopted by the Board of Health on December 13, 1893, and further elaborated February 13, 1894. In addition to the 1894 requirement concerning institutions, reporting of tuberculosis in 1897 was required of all medical practitioners by the Sanitary Code. The New York City Health Code (Enacted by The Board of Health of the City of New York on March 23, 1959) is a major revision of the Sanitary Code last revised in this way in 1914.

Table 25.
TUBERCULOSIS REGISTER, PATIENTS WITH ACTIVE DISEASE, NEW YORK CITY, 1946-1963

Year	Cases in Register Jan. 1	New Cases during Year	Old Cases Re- sumed	Total Cases during Year	Cases Removed during Year*	Remaining in Register Dec. 31
1946	17,614	7,123	1,441	26,178	8,727	17,451
1947	17,451	7,599	1,560	26,610	8,821	17,789
1948	17,789	8,306	1,874	27,969	9,449	18,520
1949	18,520	8,567	2,081	29,168	9,092	20,076
1950	20,076	7,717	2,224	30,017	10,958	19,059
1951	19,059	7,583	1,893	28,535	9,547	18,988
1952	18,988	7,282	1,870	28,140	9,854	18,286
1953	18,286	7,349	2,171	27,806	9,545	18,261
1954	18,261	6,582	2,088	26,931	10,949	15,982
1955†	15,982	6,214	2,025	24,221	10,379	13,842
1956	13,842	6,137	1,798	21,777	9,045	12,732
1957	12,732	6,117	1,867	20,716	9,352	11,364
1958	11,364	5,482	1,901	18,747	8,594	10,153
1959	10,153	4,924	1,832	16,909	7,639	9,270
1960	9,270	4,699	1,238‡	15,207	6,518	8,689
1961†	8,689	4,360	(...)	(...)	(...)	6,842
1962†	6,842	4,437	(...)	(...)	(...)	6,349
1963†	6,349	4,891	(...)	(...)	(...)	6,588

†"Physical inventory" of register carried out in 1955, 1961, 1962, and 1963.

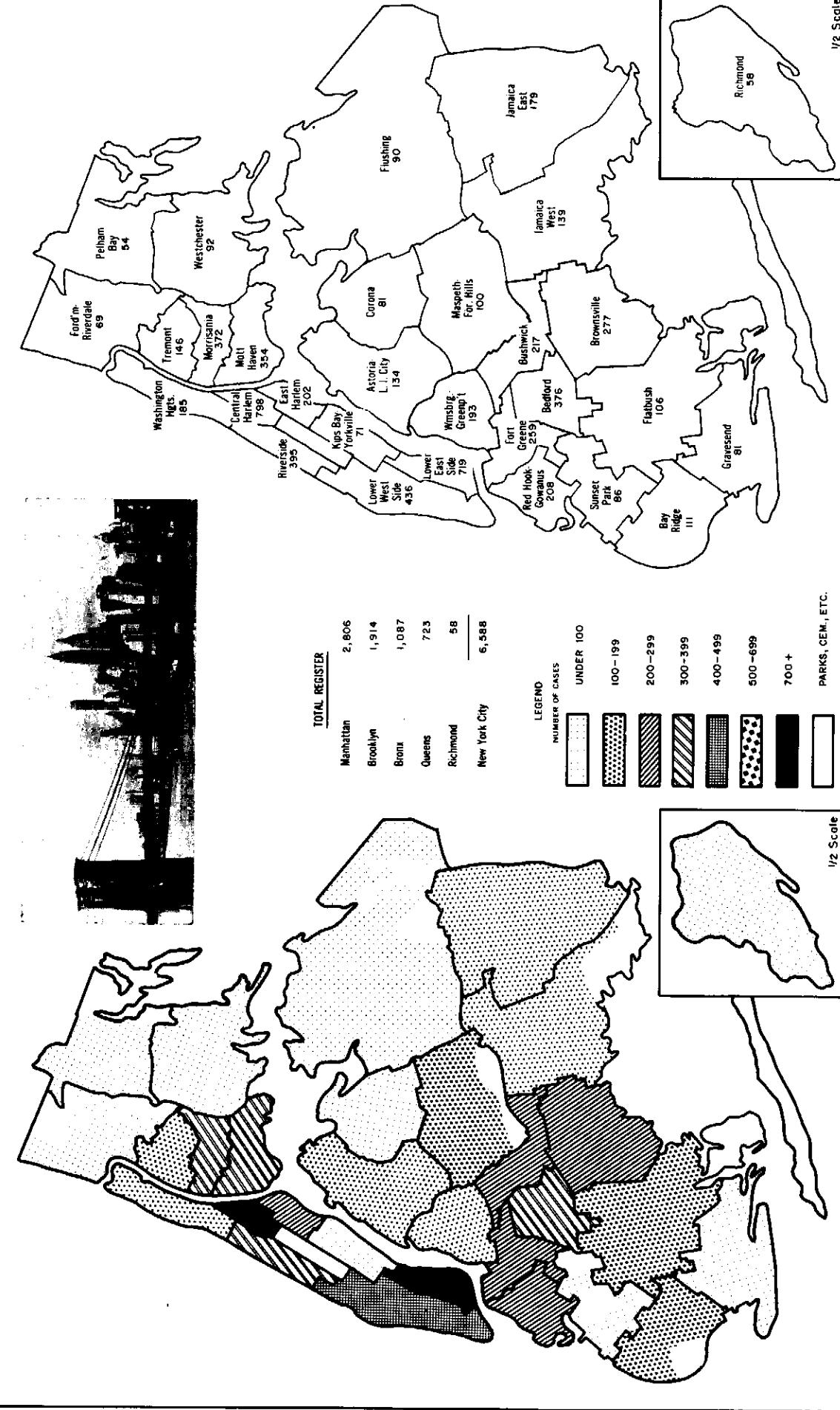
‡Prior to 1960 the numbers shown included cases resumed due to reactivation of disease as well as some which were resumed for purely administrative reasons; the figure for 1960 shows only the number which was resumed due to reactivated disease.

*Because of death, leaving city, recovery, and physical inventory of Register.

(...) = Not available for 1961, 1962, and 1963.

CHART 9

**TOTAL CASES OF TUBERCULOSIS REGISTERED IN EACH HEALTH CENTER DISTRICT
OF NEW YORK CITY ON DECEMBER 31, 1963**



BASED ON REPORTS BY COURTESY OF THE BUREAU OF TUBERCULOSIS,
DEPARTMENT OF HEALTH, THE CITY OF NEW YORK.

NEW YORK TUBERCULOSIS AND HEALTH ASSOCIATION

REACTIVATED CASES

The rate of reactivated (relapsed) tuberculosis cases is not currently known for New York City. It is difficult to follow a specific cohort. Ideally, a cohort study is needed. However, annual tabulation of reactivated cases, clinically evaluated, would be of value.

Special studies in other areas, during the past few decades, indicate that the risk of reactivation of pulmonary tuberculosis ranged from 2 per cent to 30 per cent, depending on the age, ethnic group, type of lesion and length of observation of the group studied. Non-white patients showed a greater tendency to relapse than whites. Among patients who initially were in the advanced stage of tuberculosis, the risk was greater than for those in the minimal stage. The probability of reactivation is also greater for younger persons.⁵⁻⁹

For the period 1950 to 1960 the Bureau of Tuberculosis had recorded about thirteen hundred individuals in whom previously arrested disease had become "reactivated." The annual average was 1,362. Information was insufficient to indicate the proportion of "reactivations" in relation to all previously arrested cases. There may have been additional reactivations not reported to the Department of Health.

The significance of this relatively large number of "reactivated" or relapsed cases is somewhat speculative but nevertheless serious. In 1950 these cases constituted 15 per cent of the total of new active and reactivated cases during the year; in 1960 they comprised 21 per cent of the comparable total. With modern chemotherapy we might have expected a reverse trend in this index (i.e., the proportion that the reactivated cases are to the total new and reactivated cases during the year). This phenomenon deserves study to ascertain whether because of late original diagnosis and treatment it represents unfavorable prognosis, inadequacy of drug treatment, adverse socioeconomic conditions or other influences. However, because in many cases, particularly in persons with advanced tuberculosis, there is temporary control of the disease and life is prolonged, there is increased opportunity for relapse.

IV. PREVALENCE

KNOWN PREVALENCE OF TUBERCULOSIS BY HEALTH CENTER DISTRICTS

On December 31, 1963, there were 6,588 persons with known active tuberculosis in New York City according to the Department of Health's census of the Health District Registers, or an average of less than one case (0.85) per 1,000 population.

The prevalence rates vary not only by health center districts but also by borough. The prevalence rates by boroughs were: Manhattan, 1.70; Bronx, 0.76; Brooklyn, 0.73; Queens, 0.39; and Richmond, 0.25. In reference to health center districts, high rates prevailed especially in Central Harlem (3.50), Lower East Side (2.79), Lower West Side (1.72), Mott Haven (1.63), Riverside (1.58), Morrisania (1.44), Bedford (1.32), Red Hook-Gowanus (1.32) and Fort Greene (1.22). Rates in thirteen of the thirty health center districts exceeded the average city rate. It should be noted that Central Harlem (3.50) had a prevalence rate four times that prevailing for the city (0.85) as a whole.

Forty-seven per cent of the people known currently to have tuberculosis are in a sense isolated from daily community life by being hospitalized. Most of the remainder, although under medical supervision, are free to come and go at will.

Each year over four thousand new people break down with tuberculosis and of these, on any given day perhaps hundreds, without realizing it, have opportunities to infect others. This view is given substance by the fact that each week in 1963 an average of 94 persons, previously not known to have had tuberculosis, were found with active disease.

In order to pin-point the areas in New York City where new tuberculosis cases occur, detailed tables of new cases of tuberculosis and deaths are presented by health areas.* Rates are not given due to lack of current precise population data (census) by health areas.

The City of New York is divided into 347 health areas, for which units selected, vital statistics are tabulated annually by the Department of Health. Past experience and current data on new cases and deaths suggest that practically all of these smaller neighborhoods, to a greater or lesser degree, have residents with active tuberculosis. Tuberculosis, therefore, is a disease that exists throughout all segments of New York and is a potential threat to every resident of the city. Due to differences in concentration of people with the disease, there is consequently a greater probability of exposure to infection with tuberculosis in one part of town than in another. Because of daily internal movement of the population, some ambulatory patients with disease not yet arrested, and who may have a positive sputum, may occasionally carry tuberculosis to other parts of the city.

*Health Areas are units created prior to the 1930 Census which were to form population units of about 25,000 persons. At present there are 347 health areas with defined boundaries but with wide range in the population included. In 1960 the average population in the 347 health areas was 22,491 persons. There are 30 health center districts which are administrative units made up of health areas.

Table 26.
KNOWN PREVALENCE OF ACTIVE TUBERCULOSIS IN NEW YORK CITY BY HEALTH DISTRICT
(Total known active cases in register as of December 31, 1963)

Health District	Estimated Population July 1, 1963	Known Active TB Cases in Register			
		In Hospitals or Sanatoria	Ambulant Casest	Total in Register	Prevalence per 1,000 population†
NEW YORK CITY	7,780,000	3,106	3,482	6,588	0.85
MANHATTAN	1,650,000	1,368	1,438	2,806	1.70
Central Harlem	228,000	333	465	798	3.50
East Harlem	182,000	107	95	202	1.11
Kips Bay-Yorkville ..	212,000	27	44	71	0.33
Lower East Side	258,000	390	329	719	2.79
Lower West Side	253,000	274	162	436	1.72
Riverside	250,000	160	235	395	1.58
Washington Heights ..	267,000	77	108	185	0.69
BRONX	1,430,000	453	634	1,087	0.76
Fordham-Riverdale ...	241,000	26	43	69	0.29
Morrisania	259,000	147	225	372	1.44
Mott Haven	217,000	159	195	354	1.63
Pelham Bay	181,000	17	37	54	0.30
Tremont	265,000	69	77	146	0.55
Westchester	267,000	35	57	92	0.34
BROOKLYN	2,610,000	897	1,017	1,914	0.73
Bay Ridge	289,000	56	55	111	0.38
Bedford	285,000	186	190	376	1.32
Brownsville	318,000	134	143	277	0.87
Bushwick	211,000	108	109	217	1.03
Flatbush	468,000	42	64	106	0.23
Fort Greene	213,000	117	142	259	1.22
Gravesend	300,000	25	56	81	0.27
Red Hook-Gowanus	157,000	90	118	208	1.32
Sunset Park	185,000	32	54	86	0.46
Williamsburg-Greenp't	184,000	107	86	193	1.05
QUEENS	1,860,000	355	368	723	0.39
Astoria, L.I. City ..	261,000	58	76	134	0.51
Corona	223,000	39	42	81	0.36
Flushing	456,000	47	43	90	0.20
Jamaica East	315,000	103	76	179	0.57
Jamaica West	320,000	55	84	139	0.43
Maspeth-Forest Hills.	285,000	53	47	100	0.35
RICHMOND	230,000	33	25	58	0.25

†Includes 16 persons out of town, not in sanatoria.

*On December 31, 1963.

The known prevalence of active tuberculosis cases per 1,000 population was 2.44 in 1950, 1.77 in 1955, 1.12 in 1960 and 0.85 in 1963. The decline in rate was 24.1% during the 1960 to 1963 period.

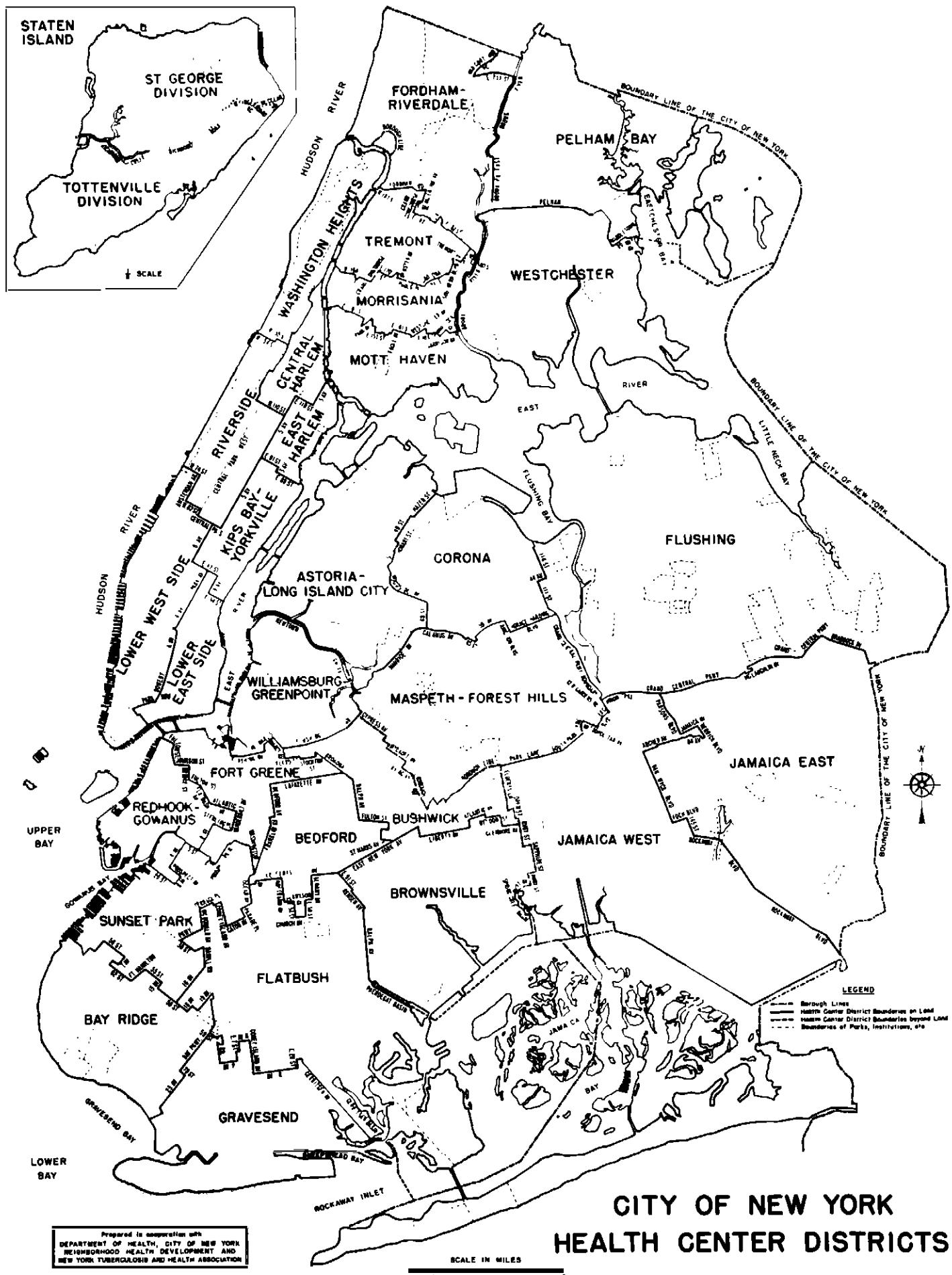


Table 27
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
MANHATTAN - Part A

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
CENTRAL HARLEM									
8.00	59	-	59	-	-	-	37	7	9
8.05	1	-	1	-	-	-	-	1	-
8.07	1	-	1	-	-	-	6	-	-
8.09	2	-	2	-	-	-	3	2	-
10.00	44	-	44	-	-	-	39	9	8
12.00	30	1	28	1	-	-	42	9	4
12.07	3	-	3	-	-	-	7	1	1
13.00	48	-	48	-	-	-	40	7	11
15.00	52	1	50	-	-	1	42	3	5
16.00	50	4	37	9	-	-	41	13	7
16.08	3	-	3	-	-	-	1	-	1
16.09	4	-	4	-	-	-	4	-	1
19.00	60	1	55	1	-	3	43	4	5
24.00	50	2	42	5	-	1	43	12	5
24.09	6	1	5	-	-	-	4	1	1
85.10	40	1	37	-	-	2	32	7	4
85.20	62	1	59	-	-	2	55	9	10
	515	12	478	16	-	9	439	85	72
EAST HARLEM									
17.00	7	1	4	2	-	-	14	4	1
17.07	4	2	2	-	-	-	2	1	2
20.00	30	2	16	11	-	1	26	5	4
20.08	1	-	-	1	-	-	-	-	-
20.09	7	-	4	3	-	-	3	-	-
21.00	30	9	5	13	-	3	33	2	3
21.07	2	1	-	1	-	-	7	-	-
25.00	25	7	8	9	-	1	37	1	4
26.00	35	9	13	10	1	2	21	3	3
26.05	1	1	-	-	-	-	5	1	-
26.06	1	-	-	1	-	-	2	-	-
26.07	3	-	2	1	-	-	1	-	-
26.09	3	-	2	1	-	-	3	1	-
28.10	20	6	5	8	-	1	16	-	3
28.15	1	-	-	1	-	-	2	-	-
28.16	-	-	-	-	-	-	1	-	-
28.20	8	3	-	1	-	4	6	1	1
33.00	6	2	-	3	-	1	16	2	2
33.07	5	2	1	2	-	-	1	1	-
	189	45	62	68	1	13	196	22	23

†Ethnic group not stated.

Note: If a health area has no new cases or any deaths, it is not shown.
The last digit in the health area number (Numbers 3 through 9)
indicates a housing project (see pages 91-94 for name of housing
project and health center district.)

See map for health area boundaries, pages 47-49.

Table 27 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
MANHATTAN - Part B

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
KIPS BAY-YORKVILLE									
36.00	7	5	-	1	-	1	9	2	-
37.00	8	8	-	-	-	-	8	2	4
38.00	2	1	-	-	-	1	4	3	2
41.00	5	5	-	-	-	-	2	2	-
42.00	4	3	-	-	-	1	7	-	-
43.00	7	4	-	2	1	-	7	-	2
44.00	3	3	-	-	-	-	7	1	1
48.00	7	2	1	-	-	4	9	2	1
49.00	5	2	1	-	-	2	3	1	1
50.00	10	6	-	-	-	4	12	2	2
83.00	-	-	-	-	-	-	-	1	1
	58	39	2	3	1	13	68	16	14
LOWER EAST SIDE									
53.00	16	10	2	1	1	2	9	5	4
58.00	25	10	4	6	2	3	14	3	4
59.00	18	13	1	3	-	1	13	4	2
60.00	23	15	6	1	-	1	20	-	-
60.08	1	1	-	-	-	-	-	-	-
60.09	-	-	-	-	-	-	3	1	-
62.00	26	7	2	12	-	5	34	4	2
63.00	11	5	2	2	-	2	17	1	1
63.08	3	1	-	2	-	-	3	-	1
65.00	192	97	37	8	4	46	170	2	8
66.00	21	11	3	5	-	2	18	3	2
67.00	37	10	4	21	1	1	24	1	2
74.00	38	17	4	4	11	2	44	7	2
74.05	3	3	-	-	-	-	1	-	-
76.00	18	3	4	10	1	-	14	1	2
76.04	6	1	1	3	-	1	11	1	-
76.07	7	1	2	4	-	-	-	-	-
78.00	12	4	-	3	5	-	10	-	1
78.05	1	1	-	-	-	-	-	-	-
78.09	6	1	1	2	2	-	4	-	1
80.00	4	1	1	2	-	-	5	1	-
80.07	1	-	-	1	-	-	-	-	-
80.09	2	-	1	1	-	-	2	-	-
	471	212	75	91	27	66	416	34	32
LOWER WEST SIDE									
39.00	5	3	2	-	-	-	3	1	-
39.09	-	-	-	-	-	-	1	-	-
40.00	18	12	1	2	1	2	23	5	2
45.00	19	17	1	-	-	1	25	2	-
46.00	6	2	1	1	-	2	1	-	-
47.00	20	13	2	2	-	3	18	5	4
52.00	32	21	7	4	-	-	38	9	6
55.00	17	13	3	1	-	-	22	1	5
55.09	-	-	-	-	-	-	-	-	1
56.00	30	18	2	8	-	2	25	4	3
57.00	38	27	7	1	1	2	26	8	6
61.00	10	6	3	-	1	-	10	2	2
64.00	16	14	-	-	1	1	8	2	2
68.00	41	26	2	-	10	3	44	11	6
77.00	35	17	5	-	13	-	30	7	2
78.09	1	-	-	-	1	-	-	-	-
	288	189	36	19	28	16	274	57	39

†Ethnic group not stated.

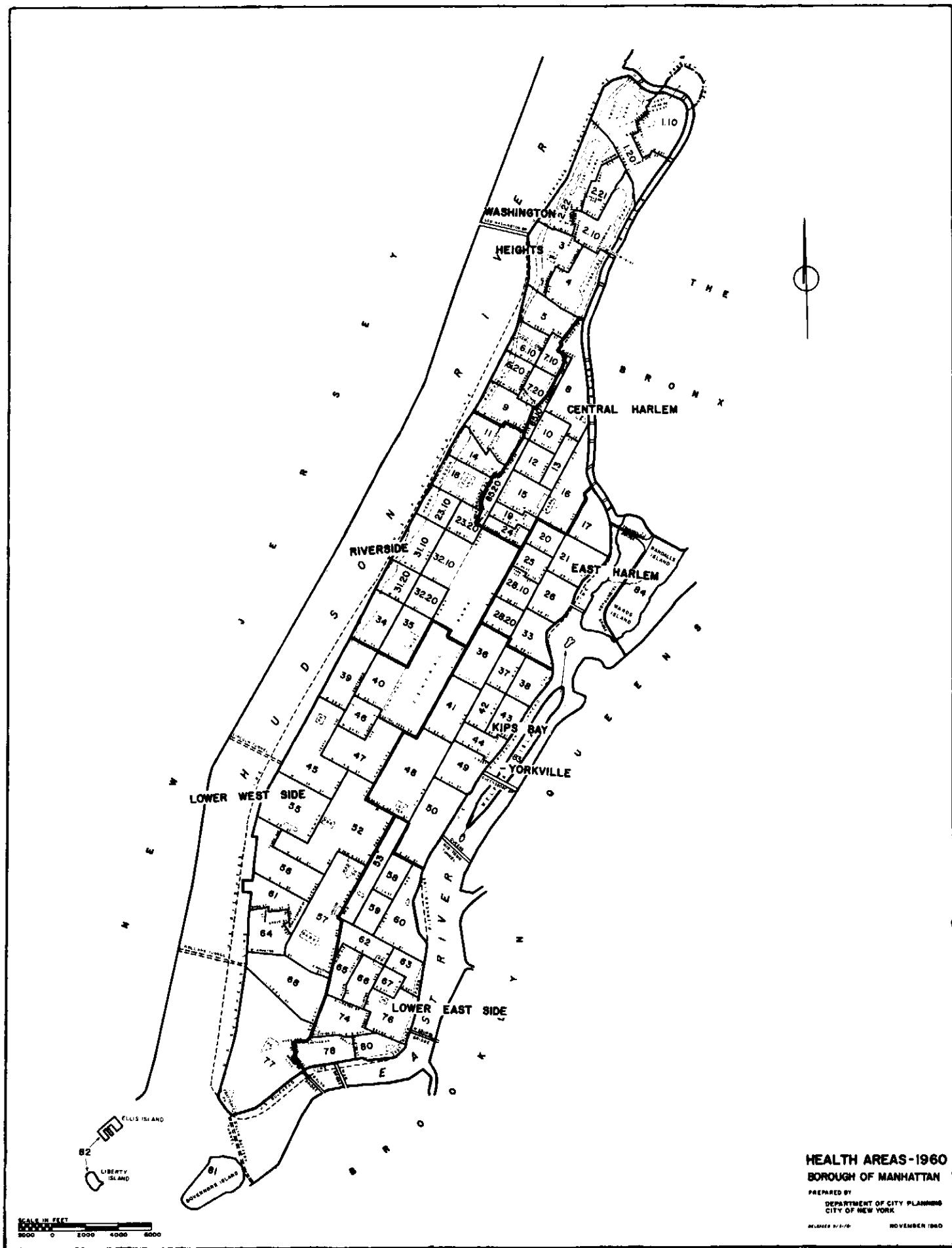
See map for health area boundaries, pages 50-52.

Table 27 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
MANHATTAN - Part C

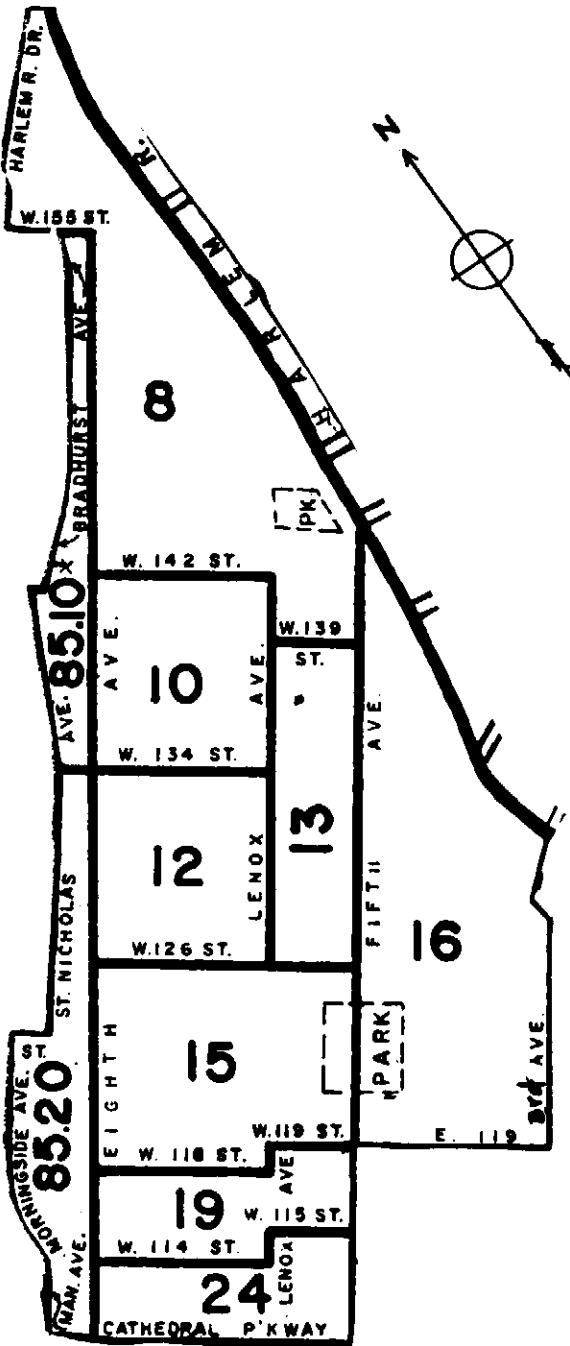
Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
RIVERSIDE									
11.00	19	-	14	3	1	1	22	2	3
11.08	3	-	1	2	-	-	-	1	-
14.00	11	1	9	-	-	1	5	1	-
14.05	-	-	-	-	-	-	1	-	-
14.07	11	2	9	-	-	-	2	-	2
18.00	6	3	1	1	1	-	6	1	4
23.10	23	10	8	-	1	4	15	3	-
23.20	12	5	4	2	-	1	11	3	1
31.10	33	13	13	4	1	2	28	9	5
31.20	19	11	3	1	-	4	10	5	5
32.10	37	9	14	10	-	4	33	-	2
32.15	-	-	-	-	-	-	1	-	-
32.16	2	1	-	1	-	-	6	1	-
32.20	23	8	6	5	1	3	36	6	5
34.00	25	12	7	1	1	4	18	4	3
35.00	29	9	10	8	-	2	34	4	5
	253	84	99	38	6	26	228	40	35
WASHINGTON HEIGHTS									
1.10	-	-	-	-	-	-	3	-	1
1.20	11	9	-	1	-	1	6	-	-
1.27	1	-	1	-	-	-	-	-	-
2.10	11	9	1	-	-	1	4	1	1
2.21	5	5	-	-	-	-	7	1	-
2.22	3	3	-	-	-	-	5	-	2
3.00	8	6	2	-	-	-	6	-	1
4.00	12	8	1	3	-	-	11	4	2
5.00	23	4	14	4	-	1	14	2	3
6.10	12	2	10	-	-	-	11	1	1
6.20	23	1	19	1	1	1	21	5	2
7.10	7	-	7	-	-	-	3	3	2
7.20	14	-	13	-	-	1	19	3	6
9.00	9	4	4	1	-	-	15	2	1
	139	51	72	10	1	5	125	22	22
MANHATTAN									
Total	1,913	632	824	245	64	148	1,746	276	237

†Ethnic group not stated.

See map for health area boundaries, pages 53-54.



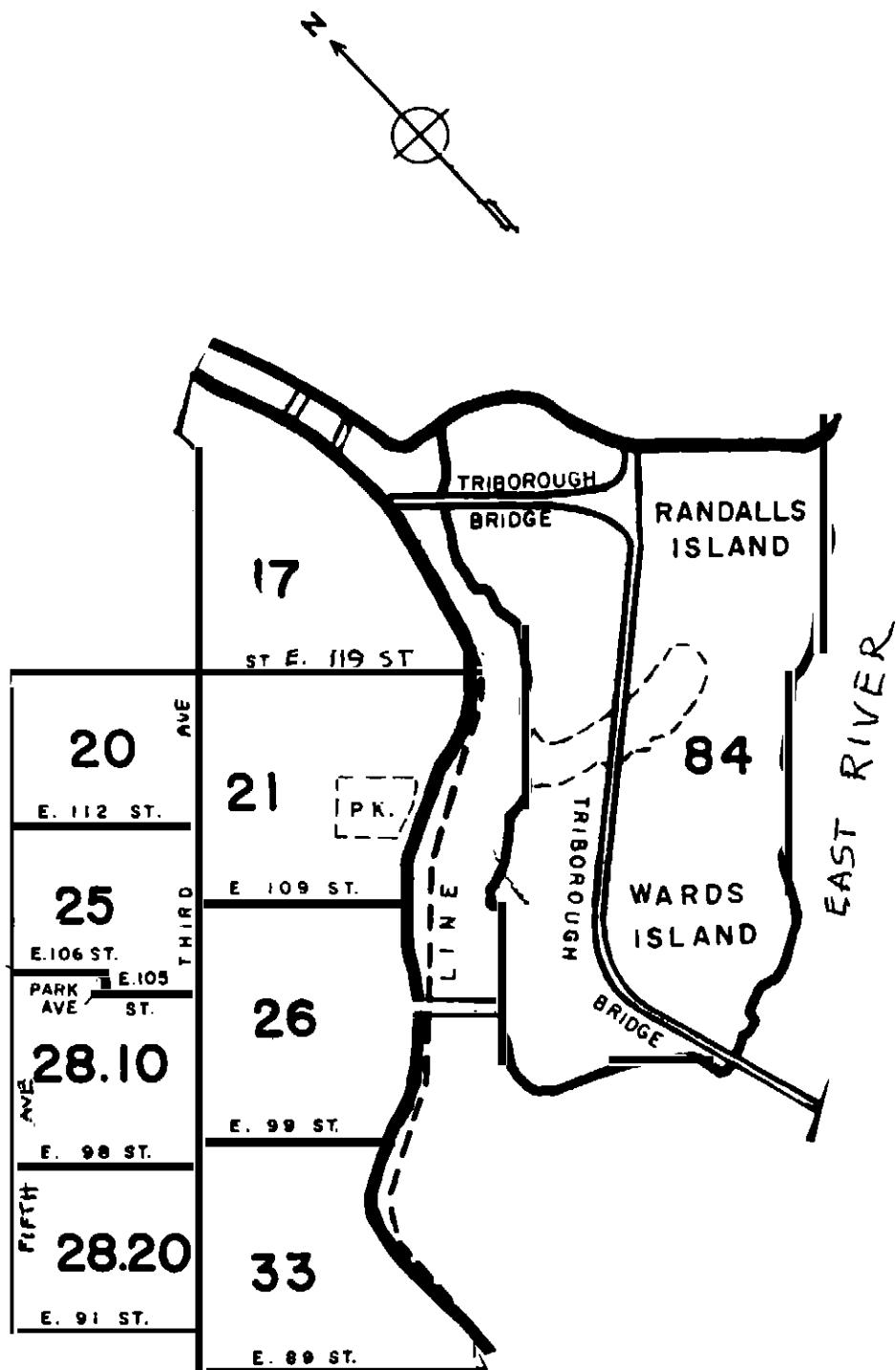
CENTRAL HARLEM HEALTH CENTER DISTRICT
Borough of Manhattan, City of New York



1960 Revision

EAST HARLEM HEALTH CENTER DISTRICT

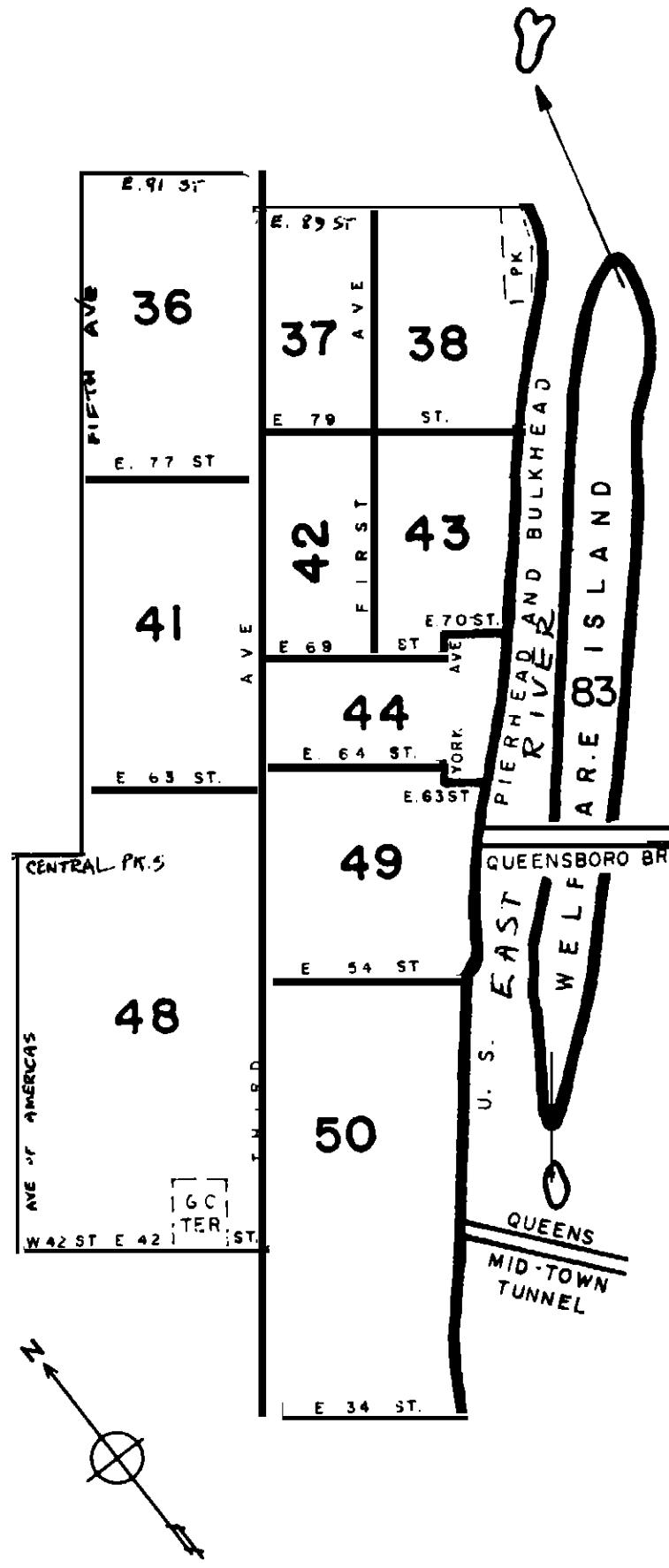
Borough of Manhattan, City of New York



1960 Revision

KIPS BAY-YORKVILLE HEALTH CENTER DISTRICT

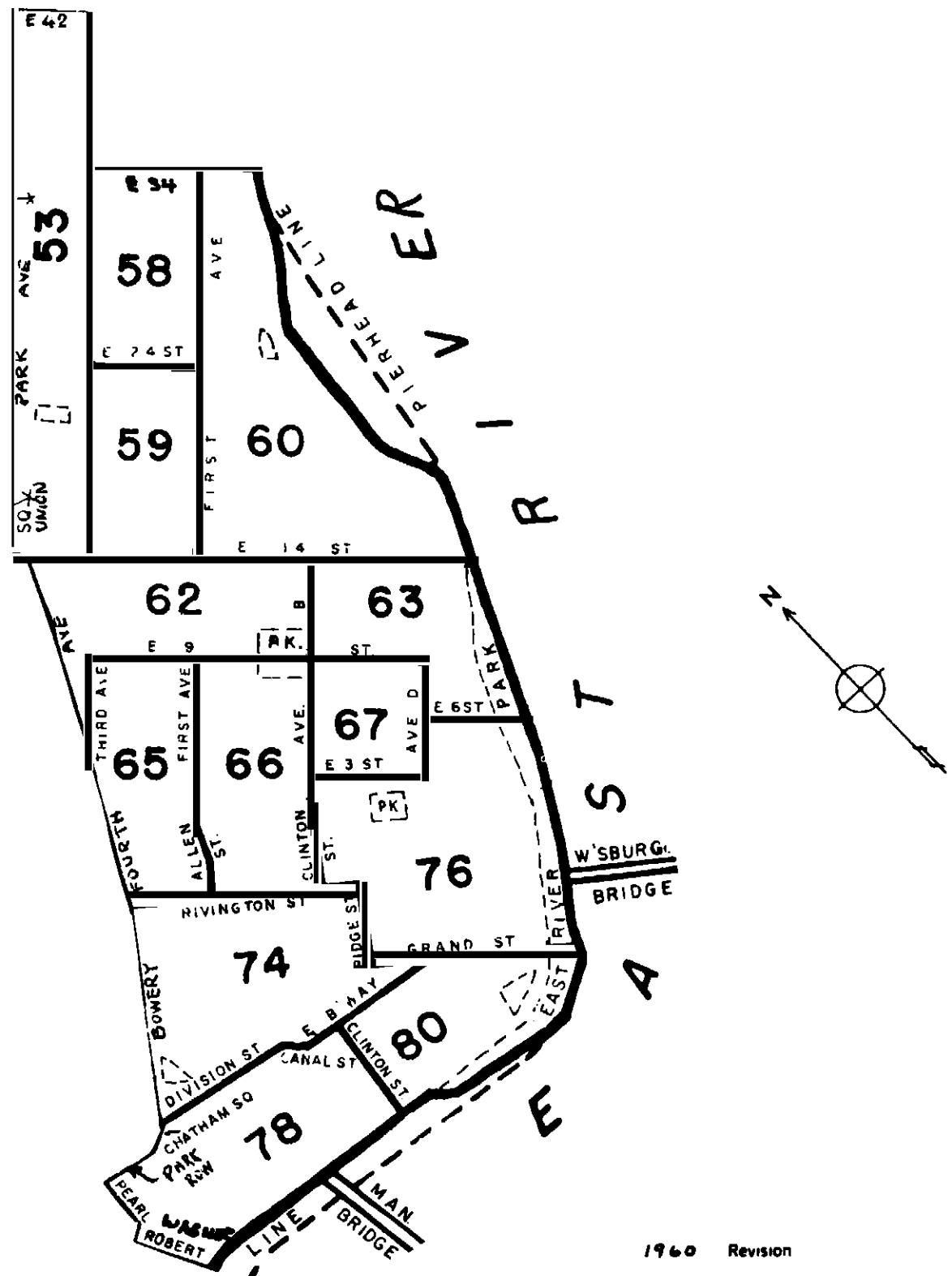
Borough of Manhattan, City of New York



1960 Revision

LOWER EAST SIDE HEALTH CENTER DISTRICT

Borough of Manhattan, City of New York

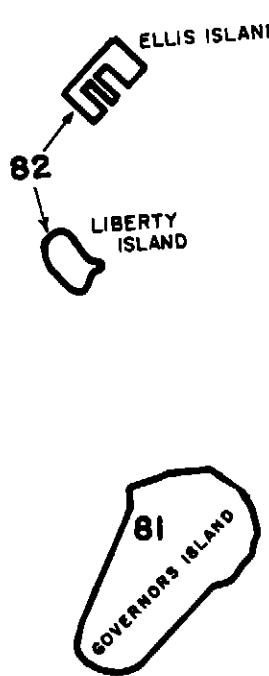
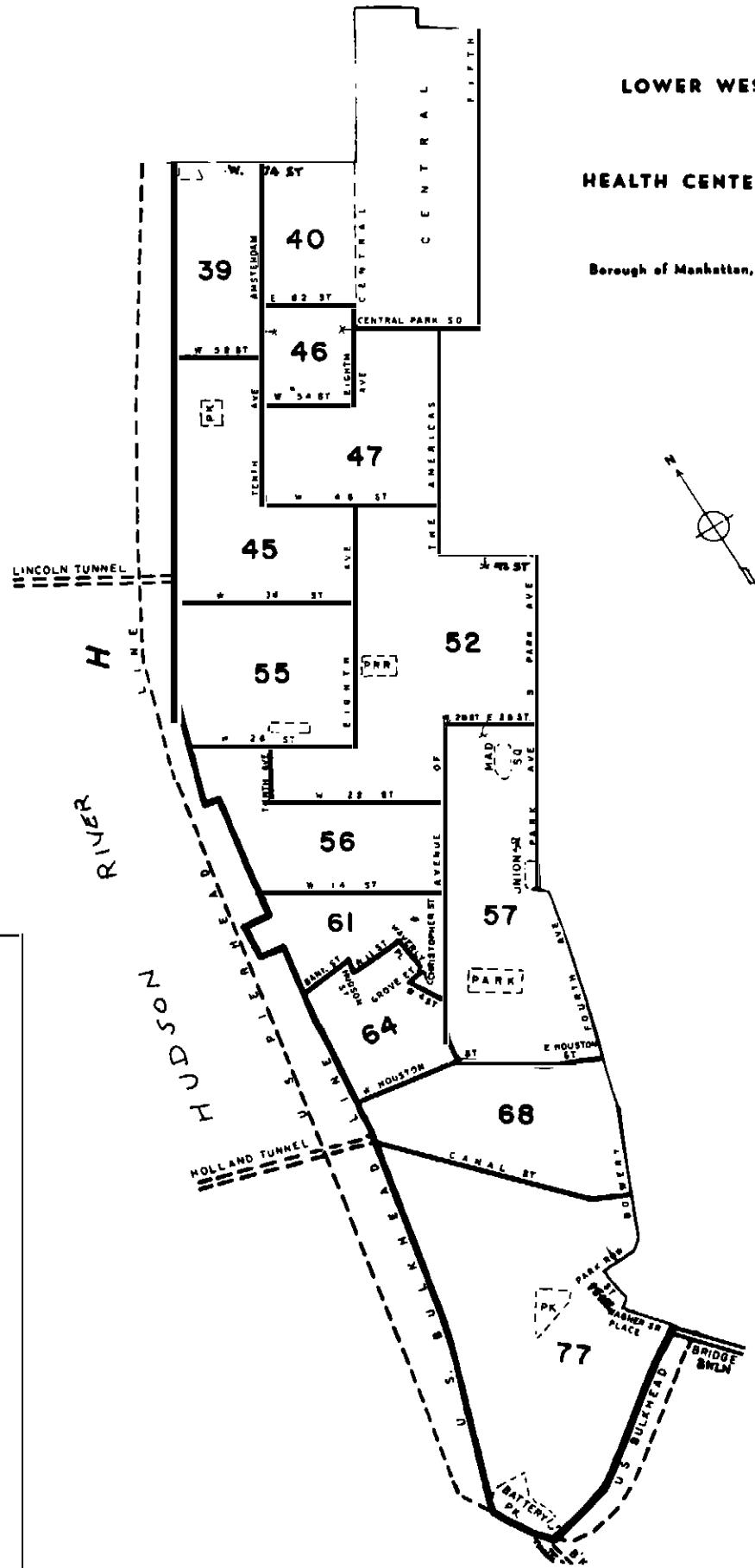


1960 Revision

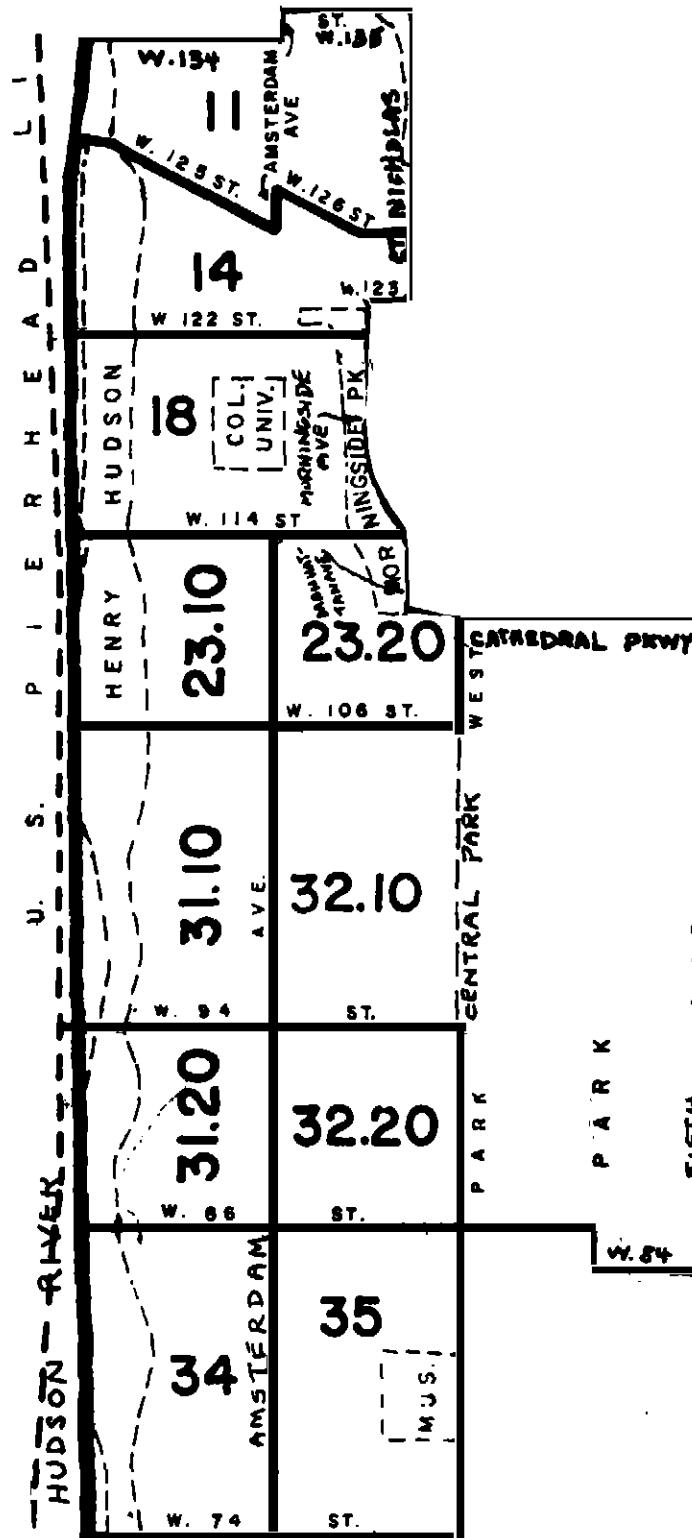
LOWER WEST SIDE

HEALTH CENTER DISTRICT

Borough of Manhattan, City of New York



RIVERSIDE HEALTH CENTER DISTRICT
BOROUGH OF MANHATTAN CITY OF NEW YORK



1960 Revision

WASHINGTON HEIGHTS HEALTH CENTER DISTRICT
BOROUGH OF MANHATTAN CITY OF NEW YORK

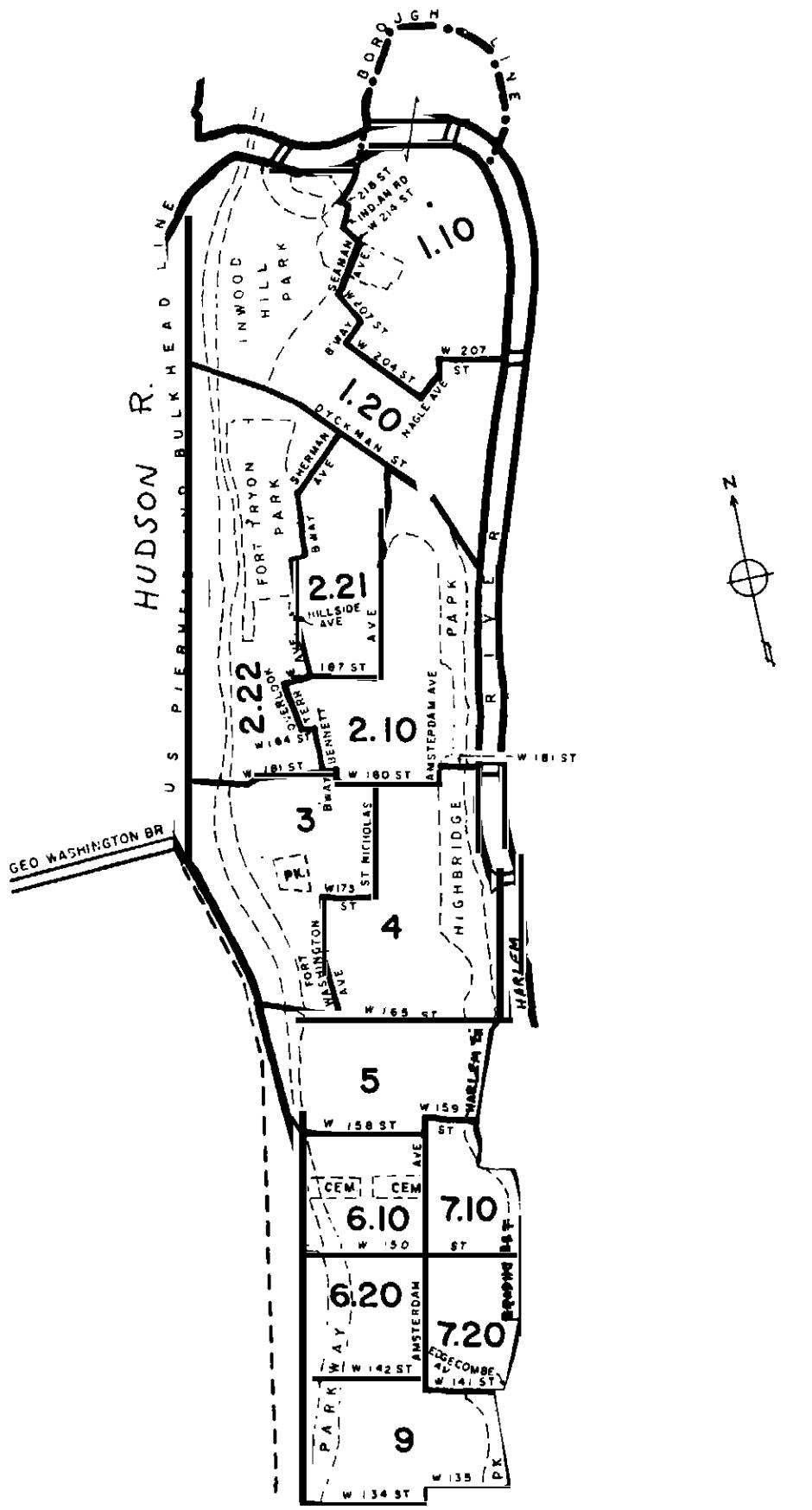


Table 28.
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BRONX - Part A

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962 | 1963	
Health Area									
FORDHAM-RIVERDALE									
1.00	3	3	-	-	-	-	6	1	-
2.00	3	3	-	-	-	-	6	2	-
3.10	5	4	1	-	-	-	5	1	1
3.20	8	5	-	-	1	2	6	1	1
3.29	-	-	-	-	-	-	-	1	-
4.10	4	3	-	-	-	1	7	1	1
4.20	5	5	-	-	-	-	11	3	1
9.00	8	8	-	-	-	-	9	5	-
10.00	10	8	1	-	-	1	12	1	2
11.00	4	3	1	-	-	-	4	-	-
	50	42	3	-	1	4	66	16	6
MORRISANIA									
21.10	12	3	1	8	-	-	13	-	1
21.20	15	4	7	4	-	-	23	2	2
25.00	19	7	6	2	-	4	15	2	1
26.00	15	1	8	5	-	1	26	1	2
27.00	25	1	16	8	-	-	39	1	2
28.00	19	3	7	7	-	2	18	1	3
29.00	29	8	10	10	-	1	30	4	1
33.10	4	1	2	-	-	1	5	4	-
33.19	1	-	-	-	-	1	2	-	-
33.20	5	3	2	-	-	-	11	-	-
34.00	18	1	12	4	-	1	14	1	-
35.00	29	1	26	2	-	-	26	3	2
35.04	1	-	1	-	-	-	-	-	-
35.05	1	-	-	1	-	-	4	-	-
35.09	-	-	-	-	-	-	-	1	3
36.00	31	2	13	15	-	1	38	2	3
	224	35	111	66	-	12	264	22	20
MOTT HAVEN									
37.00	31	7	16	6	-	2	18	2	1
38.00	14	6	2	4	1	1	12	2	-
38.09	1	1	-	-	-	-	1	-	-
39.00	9	7	1	-	-	1	16	2	-
40.00	27	4	16	7	-	-	33	2	3
40.04	1	1	-	-	-	-	-	-	-
41.00	18	5	5	5	-	3	18	1	3
42.00	24	5	7	11	-	1	27	2	5
43.00	12	3	4	5	-	-	8	1	-
44.00	24	8	3	12	-	1	27	4	-
45.00	29	9	12	8	-	-	35	4	2
45.05	-	-	-	-	-	-	1	-	-
47.00	18	9	3	6	-	-	29	2	1
47.05	1	-	-	1	-	-	-	-	-
48.00	2	2	-	-	-	-	4	-	-
	211	67	69	65	1	9	229	22	15

†Ethnic group not stated.

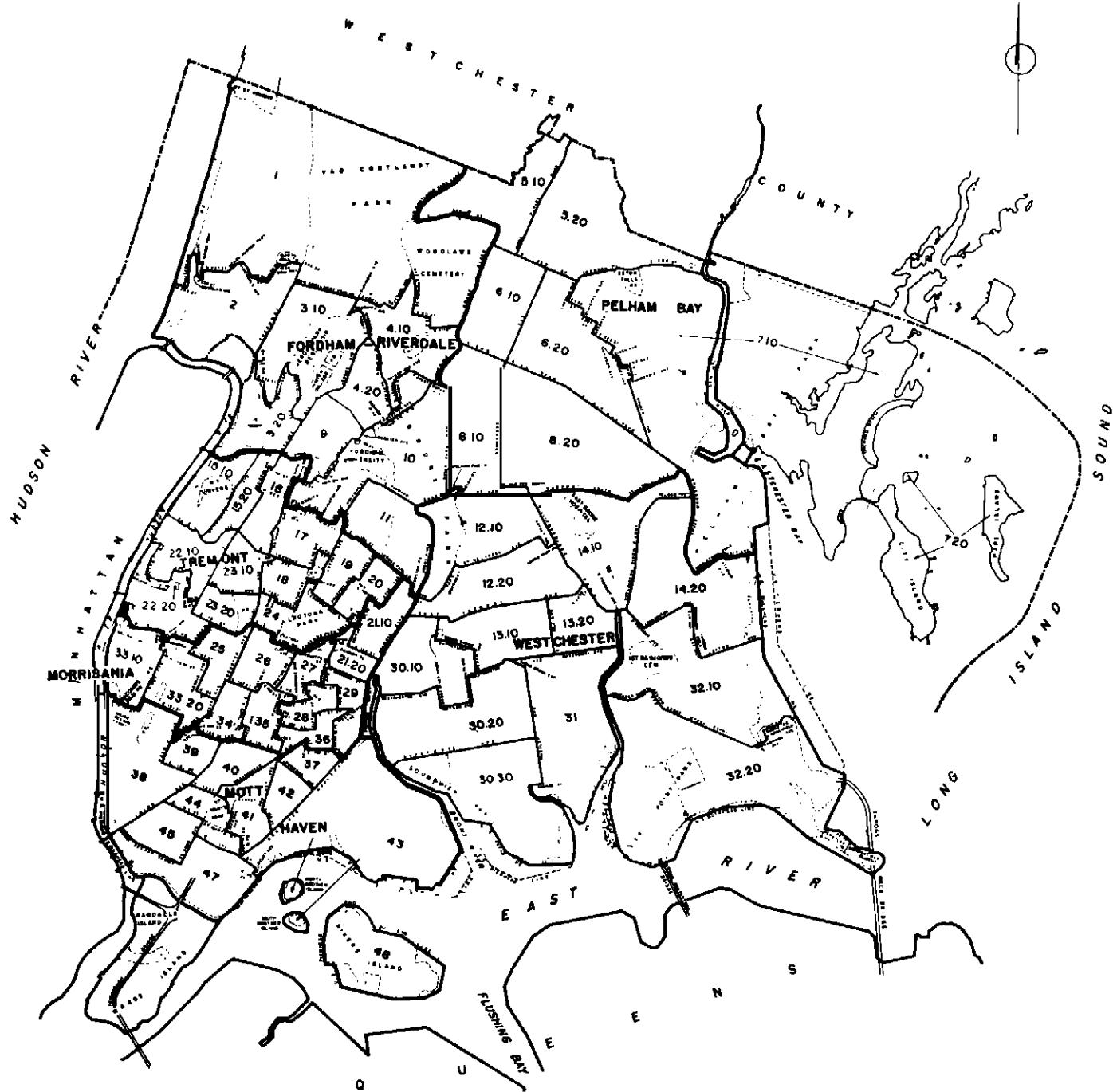
See map for health area boundaries, pages 57-60.

Table 28 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BRONX - Part B

Health Center District	Health Area	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
		All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
PELHAM BAY										
5.10	3	2	-	-	-	-	1	6	-	-
5.20	1	-	1	-	-	-	-	8	-	-
6.10	5	4	-	-	-	-	1	5	2	-
6.20	7	4	2	-	-	-	1	10	2	-
7.10	1	-	1	-	-	-	-	1	-	-
7.19	5	3	2	-	-	-	-	8	-	-
7.20	2	1	1	-	-	-	-	-	-	-
8.10	7	6	-	1	-	-	-	3	1	1
8.19	1	1	-	-	-	-	-	-	-	-
8.20	2	2	-	-	-	-	-	1	1	1
8.28	1	-	-	-	-	-	1	2	-	-
8.29	-	-	-	-	-	-	-	1	-	-
	35	23	7	1	-	4	45	6	2	
TRIMONT										
15.10	7	5	1	-	-	-	1	6	1	1
15.20	9	6	2	-	1	-	-	3	1	-
16.00	13	11	-	1	1	-	-	10	2	2
17.00	11	6	4	-	1	-	-	13	2	1
18.00	17	11	2	4	-	-	-	14	1	-
19.00	14	10	4	-	-	-	-	9	-	2
20.00	14	3	7	3	-	1	-	13	3	-
22.10	8	3	4	-	1	-	-	7	2	1
22.19	1	1	-	-	-	-	-	-	-	1
22.20	8	7	1	-	-	-	-	4	-	1
23.10	8	6	1	-	-	-	1	6	-	-
23.20	2	2	-	-	-	-	-	-	-	-
24.00	23	6	10	6	-	1	-	13	2	4
	135	77	36	14	4	4	98	14	13	
WESTCHESTER										
12.10	5	5	-	-	-	-	-	8	3	-
12.20	7	5	1	1	-	-	-	5	-	-
13.10	4	3	-	-	-	-	1	3	1	-
13.19	6	6	-	-	-	-	-	6	-	1
13.20	2	2	-	-	-	-	-	4	-	-
14.10	1	1	-	-	-	-	-	1	1	-
14.20	3	3	-	-	-	-	-	3	1	1
30.10	7	6	-	1	-	-	-	5	2	-
30.19	4	2	1	1	-	-	-	6	-	-
30.20	8	6	-	2	-	-	-	7	1	2
30.26	1	-	-	-	-	-	1	-	-	-
30.27	5	2	1	2	-	-	-	3	-	-
30.29	2	1	-	1	-	-	-	-	-	-
30.30	6	4	2	-	-	-	-	5	1	-
30.37	2	-	-	2	-	-	-	1	-	1
31.00	5	3	1	-	-	-	1	5	3	-
32.10	5	3	1	-	-	-	1	2	-	1
32.20	3	2	-	1	-	-	-	2	-	-
32.29	3	2	-	-	-	1	-	2	-	-
	79	56	7	11	-	5	68	13	6	
BRONX										
Total	734	300	233	15	6	38	770	93	62	

†Ethnic group not stated.

See map for health area boundaries, pages 61-63.



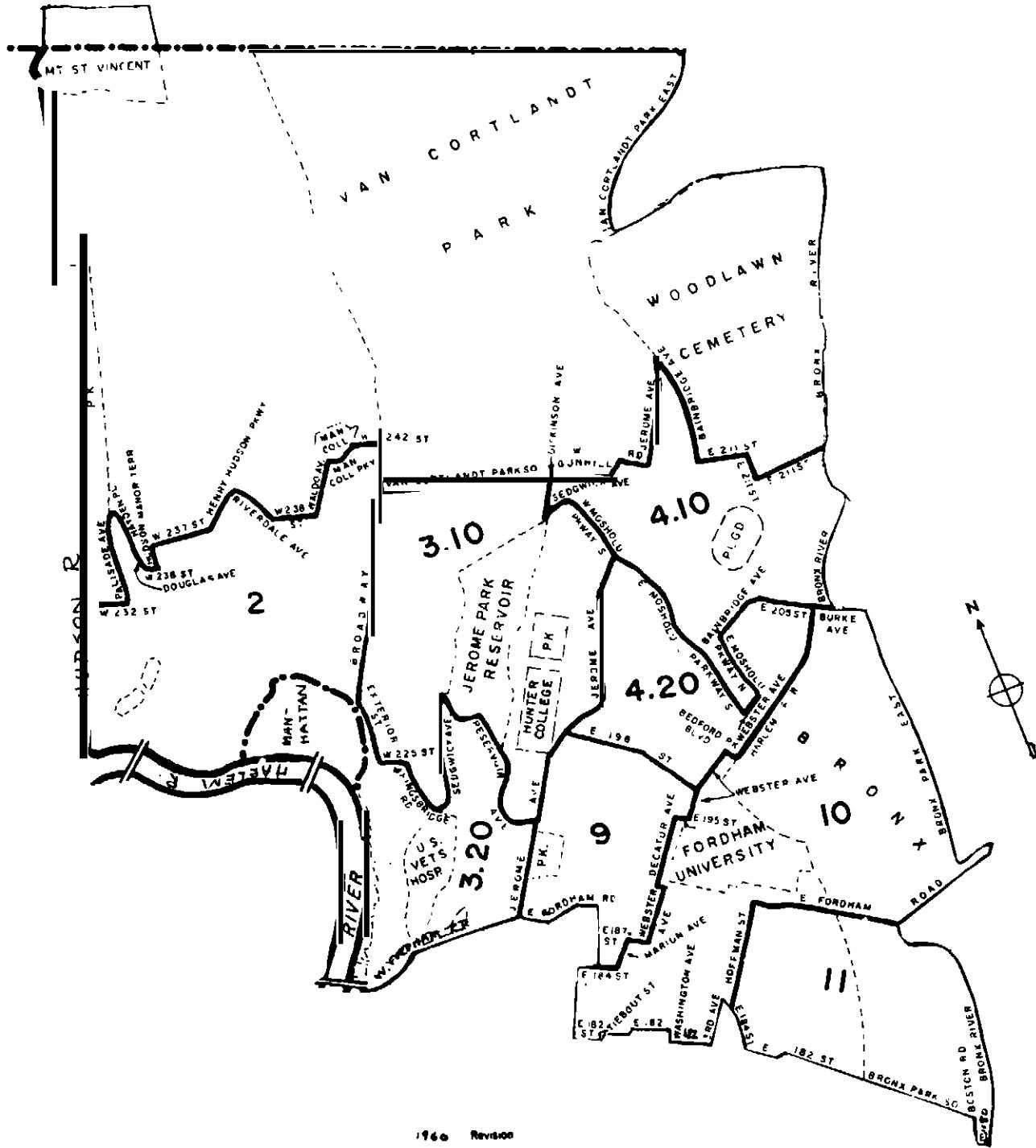
**HEALTH AREAS - 1960
BOROUGH OF THE BRONX**

PREPARED BY
DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

RECEIVED NOVEMBER 1960

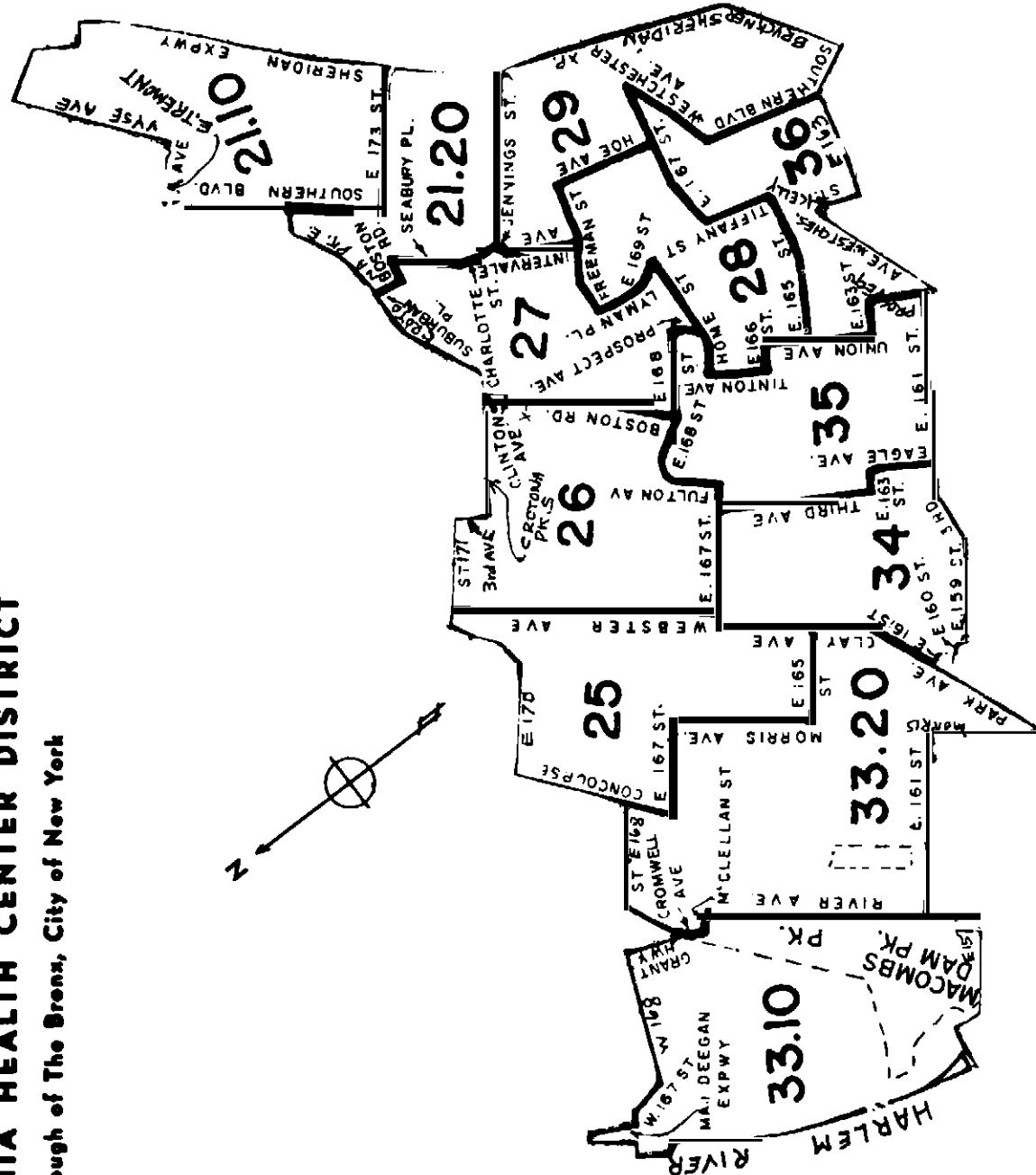
SCALE IN FEET
0 5000 10000 15000

FORDHAM-RIVERDALE HEALTH CENTER DISTRICT
 Borough of The Bronx, City of New York



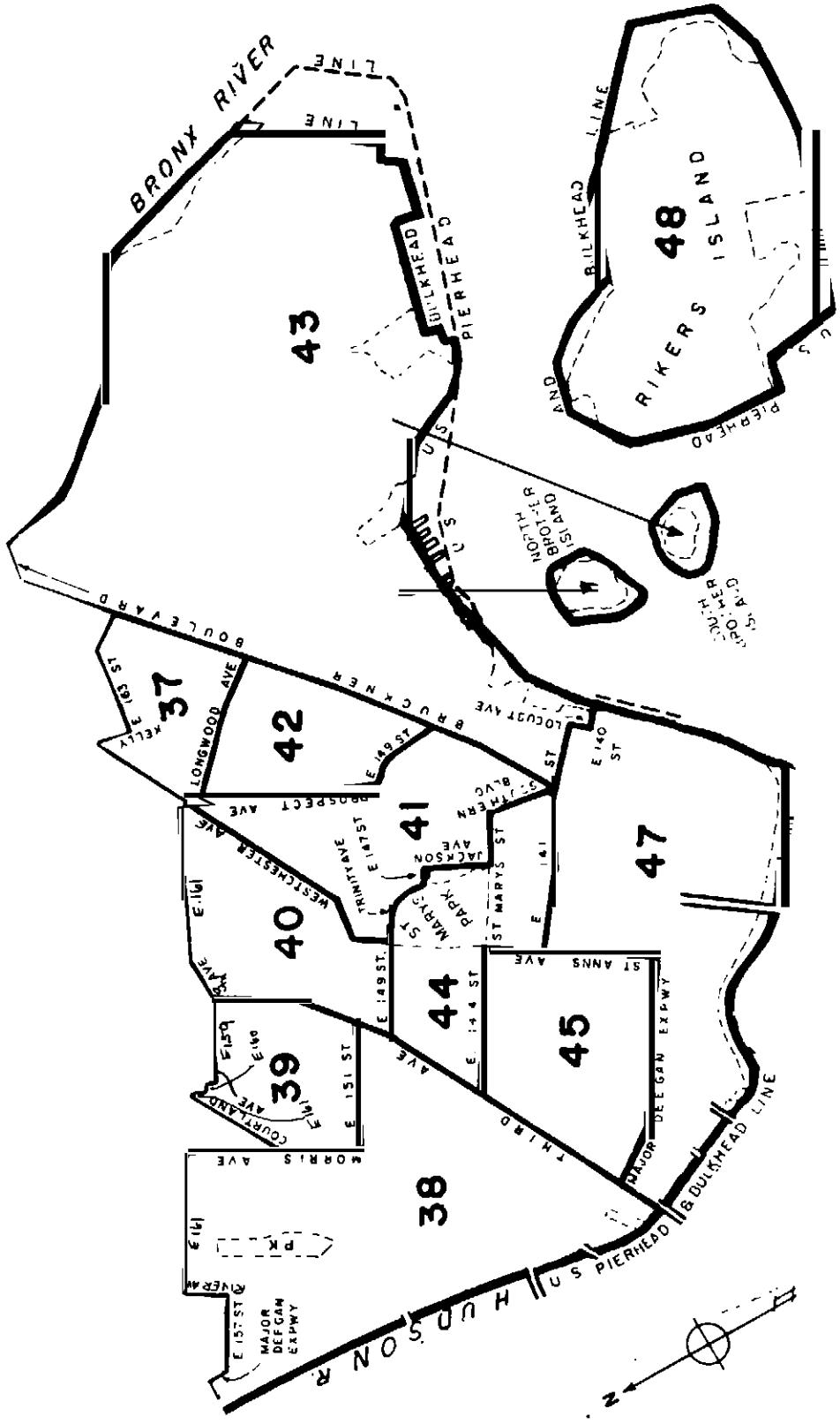
MORRISANIA HEALTH CENTER DISTRICT

Borough of The Bronx, City of New York



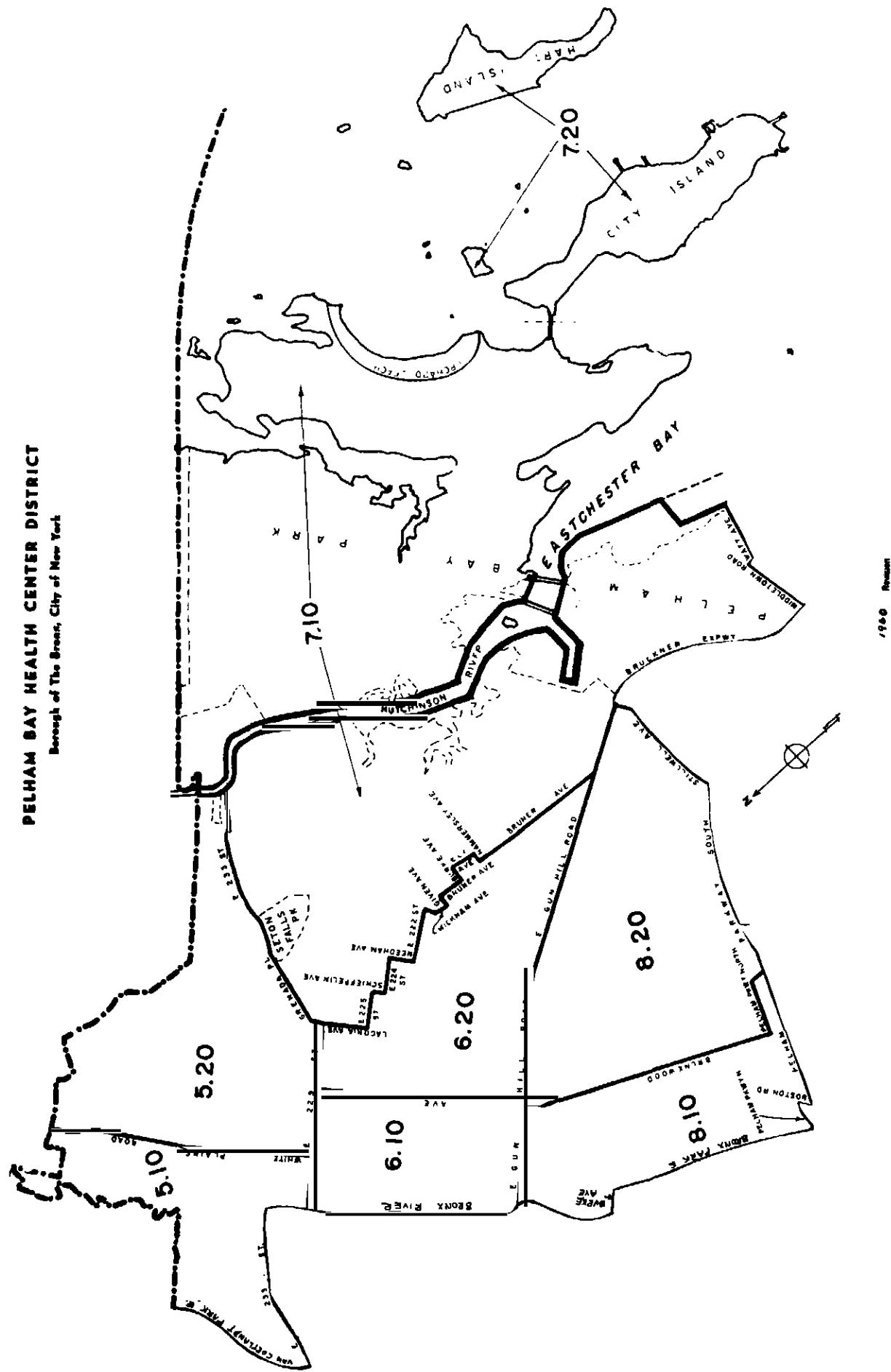
MOTT HAVEN HEALTH CENTER DISTRICT

Baruch of The Bronx, City of New York



1960 Revision

PELHAM BAY HEALTH CENTER DISTRICT
Borough of The Bronx, City of New York

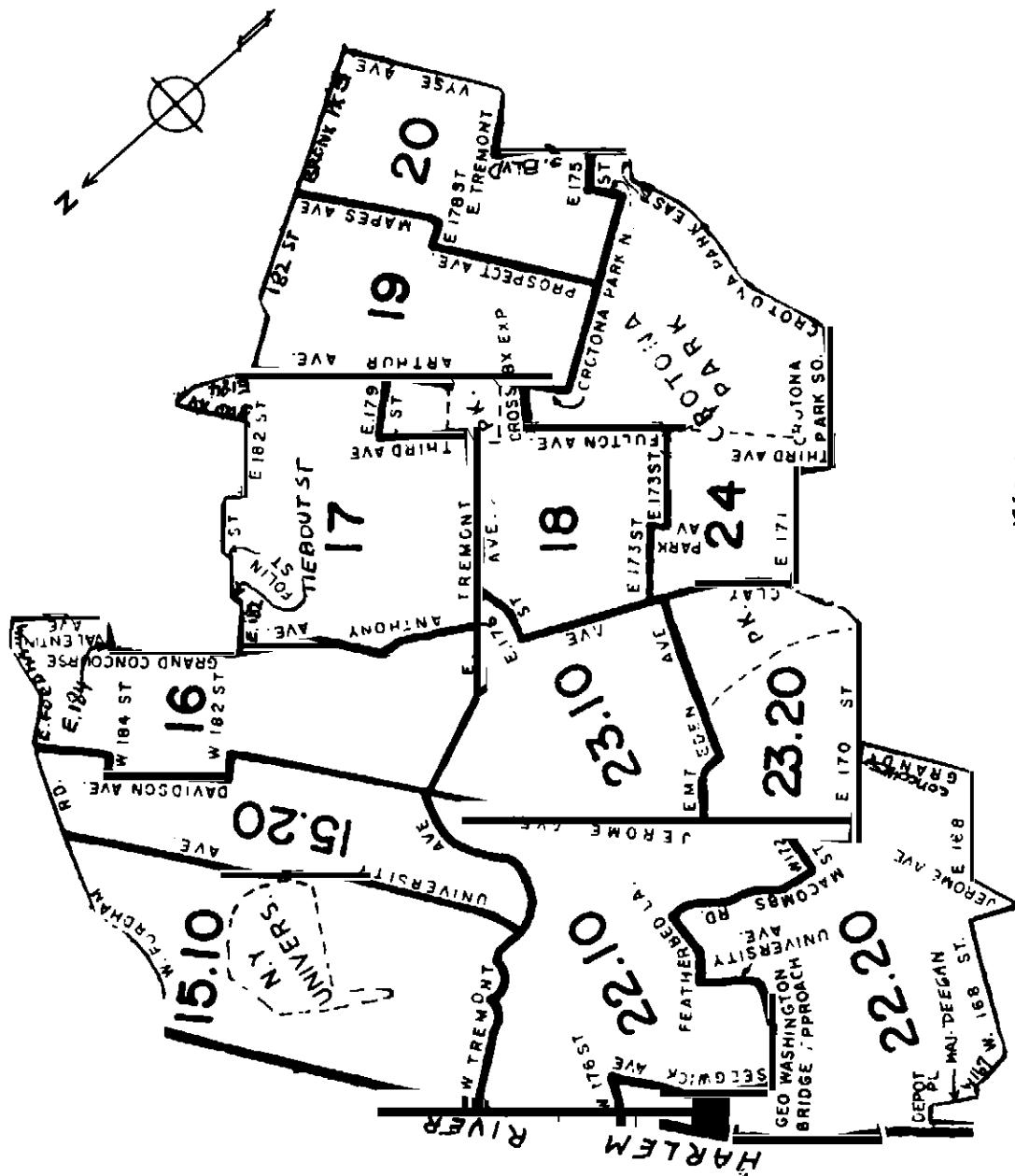


1990 Revision

DEPARTMENT OF HEALTH
CITY OF NEW YORK

TREMONT HEALTH CENTER DISTRICT

Borough of The Bronx, City of New York



WESTCHESTER HEALTH CENTER DISTRICT

Borough of The Bronx, City of New York

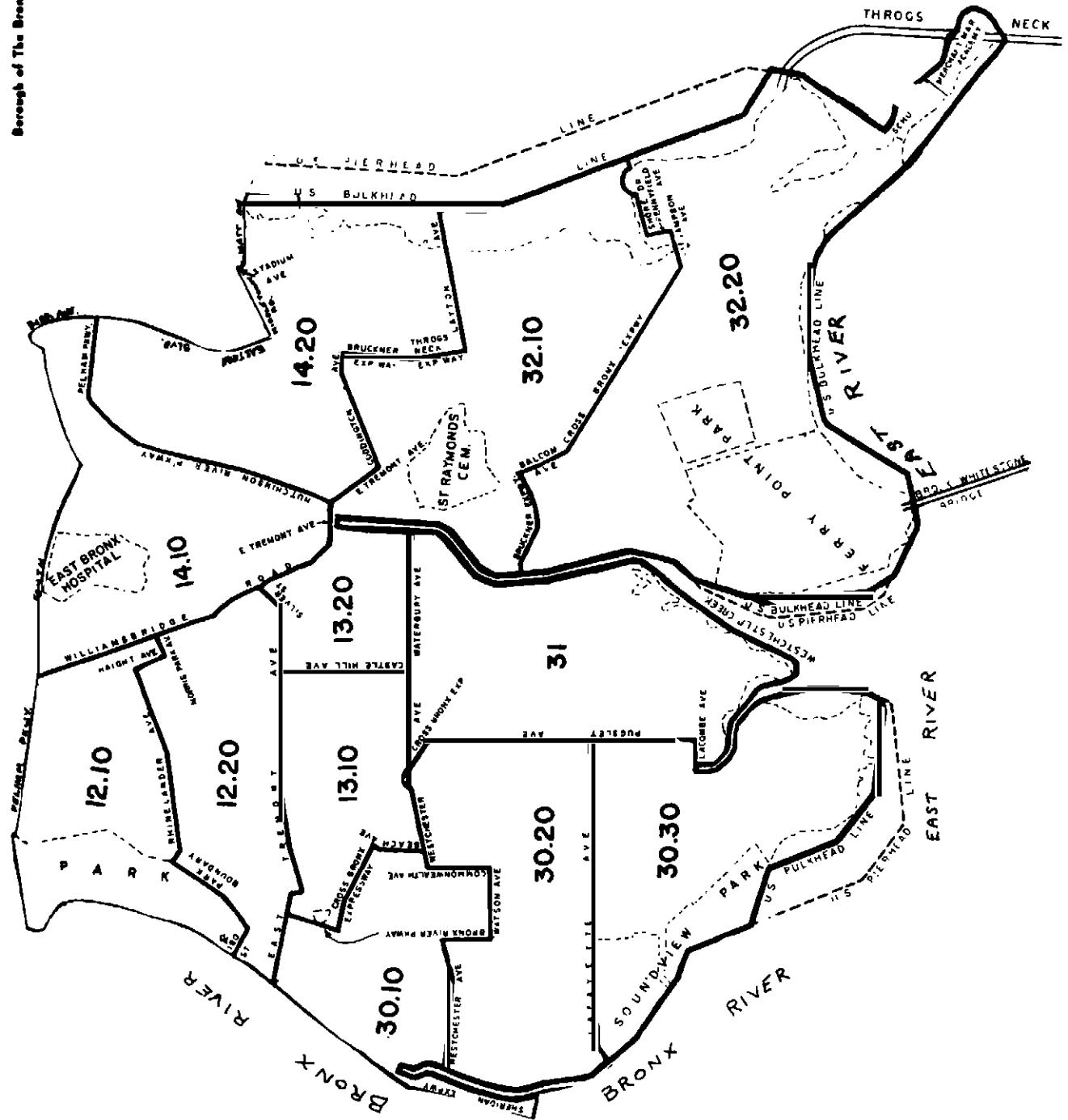


Table 29.
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BROOKLYN - Part A

Health Center District	Health Area	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
		All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
BAY RIDGE										
76.00	6	6	-	-	-	-	-	9	3	1
77.00	13	13	-	-	-	-	-	6	3	3
78.10	6	5	-	-	-	-	1	7	2	2
78.20	1	1	-	-	-	-	-	1	-	-
79.10	5	4	-	-	-	-	1	1	-	1
79.20	5	5	-	-	-	-	-	7	-	-
80.10	2	2	-	-	-	-	-	4	2	-
80.20	3	2	-	-	-	-	1	3	2	-
81.10	5	4	-	-	-	-	1	5	-	-
81.20	7	7	-	-	-	-	-	2	1	2
82.00	6	6	-	-	-	-	-	6	1	1
83.00	3	2	-	-	-	-	1	5	-	2
84.00	7	6	1	-	-	-	-	10	1	1
92.00	2	2	-	-	-	-	-	1	-	-
	71	65	1	-	-	-	5	67	15	13
BEDFORD										
20.00	38	-	36	-	-	2	38	3	4	
21.00	33	1	30	2	-	-	45	5	7	
28.00	44	1	40	-	-	3	47	9	10	
29.00	29	3	26	-	-	-	39	8	1	
30.00	42	-	40	-	-	2	47	6	1	
30.05	13	-	12	1	-	-	7	2	-	
36.00	23	-	23	-	-	-	14	1	3	
48.00	20	13	4	-	1	2	13	1	2	
49.00	12	3	8	-	-	1	14	4	1	
49.08	1	-	1	-	-	-	2	1	1	
49.09	6	2	3	-	-	1	2	1	-	
50.10	9	3	5	1	-	-	8	-	3	
50.20	34	5	16	9	-	4	23	1	4	
52.00	29	1	22	6	-	-	29	-	3	
52.09	4	-	3	-	-	1	1	1	-	
	337	32	269	19	1	16	329	43	40	

†Ethnic group not stated.

See map for health area boundaries, pages 69-71.

Table 29 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BROOKLYN - Part B

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
BROWNSVILLE									
56.00	29	10	13	5	-	1	13	1	3
57.00	33	7	18	8	-	-	27	1	3
57.05	8	3	5	-	-	-	3	-	1
58.10	3	3	-	-	-	-	3	-	-
58.20	9	4	2	3	-	-	9	2	1
59.00	21	5	13	3	-	-	23	1	3
59.06	5	1	4	-	-	-	7	-	2
59.07	6	1	4	-	-	1	5	1	-
59.09	11	1	9	1	-	-	4	-	-
60.00	27	4	11	10	-	2	23	2	-
61.00	23	8	9	5	-	1	14	-	2
62.00	14	4	6	3	-	1	8	-	2
63.00	9	4	2	2	-	1	11	1	-
64.10	6	3	3	-	-	-	5	-	1
64.15	2	-	1	-	-	1	4	-	-
64.16	4	3	1	-	-	-	2	-	-
64.20	10	3	5	2	-	-	3	-	-
64.27	1	1	-	-	-	-	2	-	-
75.10	2	2	-	-	-	-	2	-	2
75.20	10	4	4	-	-	2	7	-	2
75.25	1	1	-	-	-	-	2	-	1
75.28	3	-	3	-	-	-	1	2	1
	237	72	113	42	-	10	178	11	24
BUSHWICK									
17.00	15	5	3	7	-	-	22	-	1
17.05	6	-	5	1	-	-	2	-	-
22.00	6	6	-	-	-	-	12	-	1
31.00	33	8	25	-	-	-	33	4	7
32.00	11	9	-	2	-	-	9	3	1
33.00	17	15	-	1	-	1	19	2	3
34.00	18	4	7	7	-	-	17	3	2
35.00	38	9	27	2	-	-	19	5	2
37.00	19	3	12	1	-	3	8	-	4
38.00	12	10	2	-	-	-	10	6	1
39.00	7	7	-	-	-	-	5	-	2
	182	76	81	21	-	4	156	23	24

†Ethnic group not stated.

See map for health area boundaries, pages 72-73.

Table 29 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BROOKLYN - Part C

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
FLATBUSH									
53.10	5	5	-	-	-	-	4	-	1
53.20	5	2	3	-	-	-	7	1	2
54.00	13	4	7	-	-	2	10	-	4
55.10	7	6	1	-	-	-	5	1	-
55.20	8	8	-	-	-	-	3	-	-
70.00	8	7	1	-	-	-	6	2	1
71.10	2	2	-	-	-	-	1	2	-
71.20	6	6	-	-	-	-	2	2	-
72.10	8	5	1	1	-	1	17	1	4
72.20	3	1	-	-	-	2	3	2	-
73.10	7	7	-	-	-	-	4	-	1
73.20	3	2	-	-	-	1	1	-	-
74.10	10	10	-	-	-	-	3	2	3
74.20	1	1	-	-	-	-	1	-	1
74.29	1	1	-	-	-	-	-	-	-
88.10	8	7	-	-	-	1	1	-	1
88.21	6	5	-	-	-	1	1	1	-
88.22	4	3	-	-	1	-	7	3	2
	105	82	13	1	1	8	76	17	20
PORTE GREENE									
10.00	1	-	-	-	-	1	4	-	1
10.08	4	-	2	2	-	-	3	-	-
10.09	1	-	-	1	-	-	4	1	-
11.00	6	3	3	-	-	-	3	3	2
11.05	-	-	-	-	-	-	1	-	-
11.07	-	-	-	-	-	-	-	-	1
11.09	17	2	13	1	1	-	2	2	1
12.00	25	8	11	6	-	-	30	4	3
13.00	56	4	50	1	-	1	41	7	12
13.07	-	-	-	-	-	-	1	-	-
14.00	25	7	11	5	-	2	17	2	6
14.09	6	1	4	1	-	-	6	-	2
18.00	24	2	16	5	-	1	22	3	3
19.00	27	5	20	2	-	-	25	1	4
27.10	28	6	22	-	-	-	32	2	8
27.20	6	1	4	1	-	-	6	-	-
45.00	13	9	1	1	-	2	17	3	1
	239	48	157	26	1	7	214	28	44

†Ethnic group not stated.

See map for health area boundaries, pages 74-75.

Table 29 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BROOKLYN - Part D

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
GRAVESEND									
85.10	3	3	-	-	-	-	3	-	1
85.21	2	1	1	-	-	-	1	-	1
85.22	2	2	-	-	-	-	-	-	1
86.10	4	3	1	-	-	-	5	1	1
86.20	5	5	-	-	-	-	2	2	1
86.25	3	1	2	-	-	-	-	-	-
87.10	8	5	-	-	2	1	2	-	-
87.21	4	4	-	-	-	-	2	-	1
87.22	6	5	-	-	1	-	5	-	-
87.28	1	-	1	-	-	-	1	-	-
89.00	-	-	-	-	-	-	1	-	-
90.10	7	4	3	-	-	-	3	4	2
90.17	1	-	1	-	-	-	1	-	-
90.20	12	6	1	5	-	-	6	2	1
91.10	4	4	-	-	-	-	2	-	1
91.20	2	1	1	-	-	-	4	1	-
	64	44	11	5	3	1	38	10	10
RED HOOK-GOWANUS									
23.00	18	10	1	5	1	1	13	5	5
24.00	21	3	8	9	-	1	23	3	2
24.09	1	-	-	1	-	-	1	2	-
25.00	2	2	-	-	-	-	6	3	-
26.00	32	13	8	9	1	1	23	6	9
40.00	19	5	1	13	-	-	14	3	2
41.00	30	16	6	7	-	1	14	3	3
41.09	1	-	-	-	-	1	1	2	-
42.00	13	6	2	4	-	1	9	1	1
43.00	4	3	1	-	-	-	9	-	1
	141	58	27	48	2	6	113	28	23
SUNSET PARK									
44.00	5	3	-	1	-	1	4	2	2
46.00	14	12	-	2	-	-	12	3	6
47.00	6	5	-	1	-	-	10	1	1
65.00	32	26	3	1	-	2	18	4	3
66.00	6	5	-	1	-	-	10	-	1
67.00	8	8	-	-	-	-	9	1	1
68.00	4	4	-	-	-	-	4	-	1
69.00	10	7	-	1	-	2	5	-	1
	85	70	3	7	-	5	72	11	16

†Ethnic group not stated.

See map for health area boundaries, pages 76-78

Table 29 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
BROOKLYN - Part E

Health Center District	Health Area	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
		All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
WILLIAMSBURG-GREENPOINT										
1.00	15	12	1	2	-	-	-	8	5	3
2.00	7	7	-	-	-	-	-	3	2	2
3.00	1	1	-	-	-	-	-	8	1	-
4.00	12	8	-	4	-	-	-	14	4	-
5.00	19	6	7	5	-	1	1	15	2	-
6.00	31	6	8	15	2	-	-	29	5	4
7.00	10	4	1	4	-	1	1	5	1	3
8.00	7	2	1	4	-	-	-	6	1	2
8.09	-	-	-	-	-	-	-	1	-	-
9.00	18	1	9	8	-	-	-	13	1	-
9.09	-	-	-	-	-	-	-	-	1	-
15.00	33	5	12	14	1	1	1	35	4	1
15.05	1	-	1	-	-	-	-	-	1	2
15.09	-	-	-	-	-	-	-	-	-	1
		154	52	40	56	3	3	137	28	18
BROOKLYN										
Total	1,615	599	715	225	11	65	1,380	214	232	

†Ethnic group not stated.

See map for health area boundaries, page 79.



HEALTH AREAS - 1960
BOROUGH OF BROOKLYN

PREPARED BY
DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

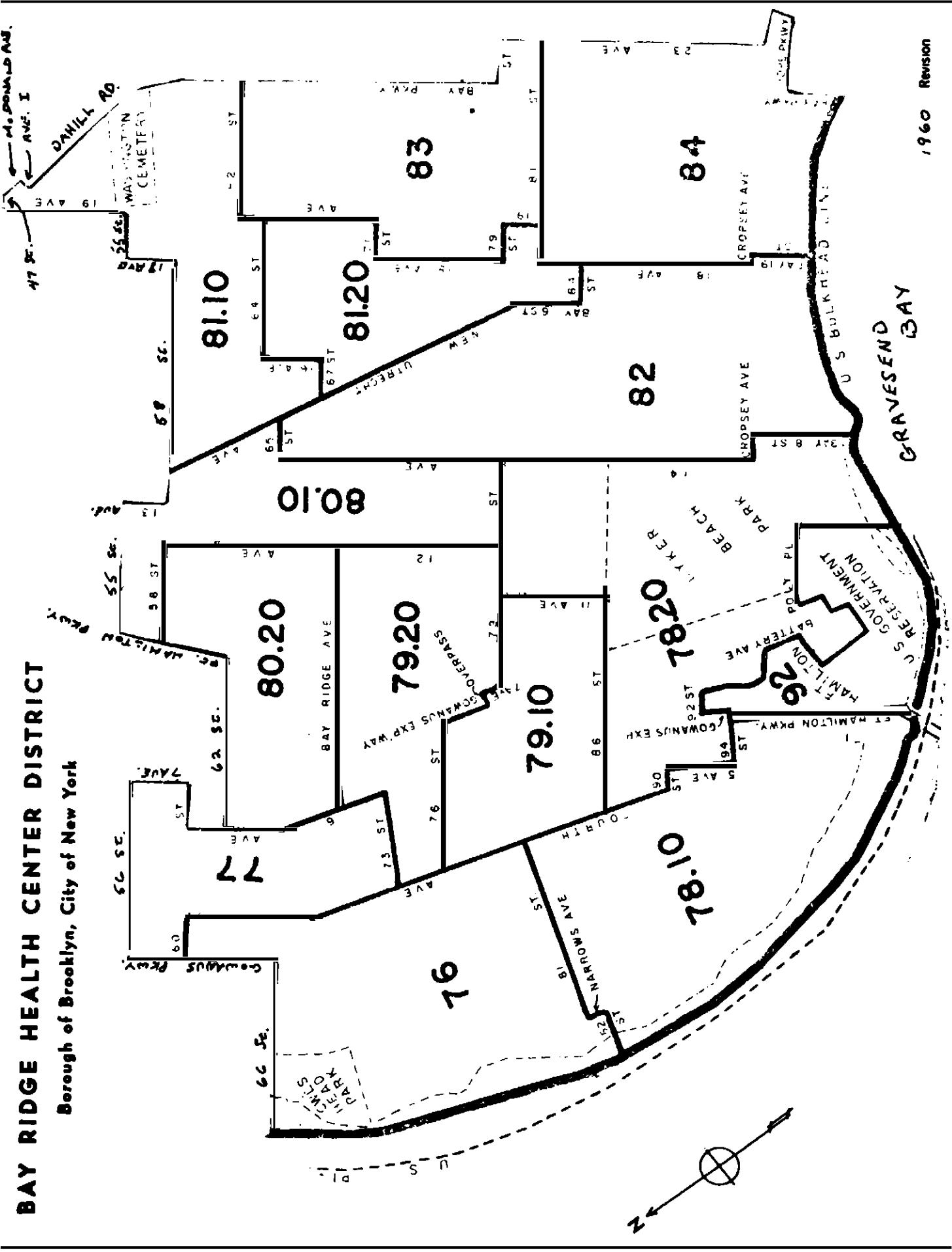
MAP NO. 114

NOVEMBER 1960

SCALE IN FEET
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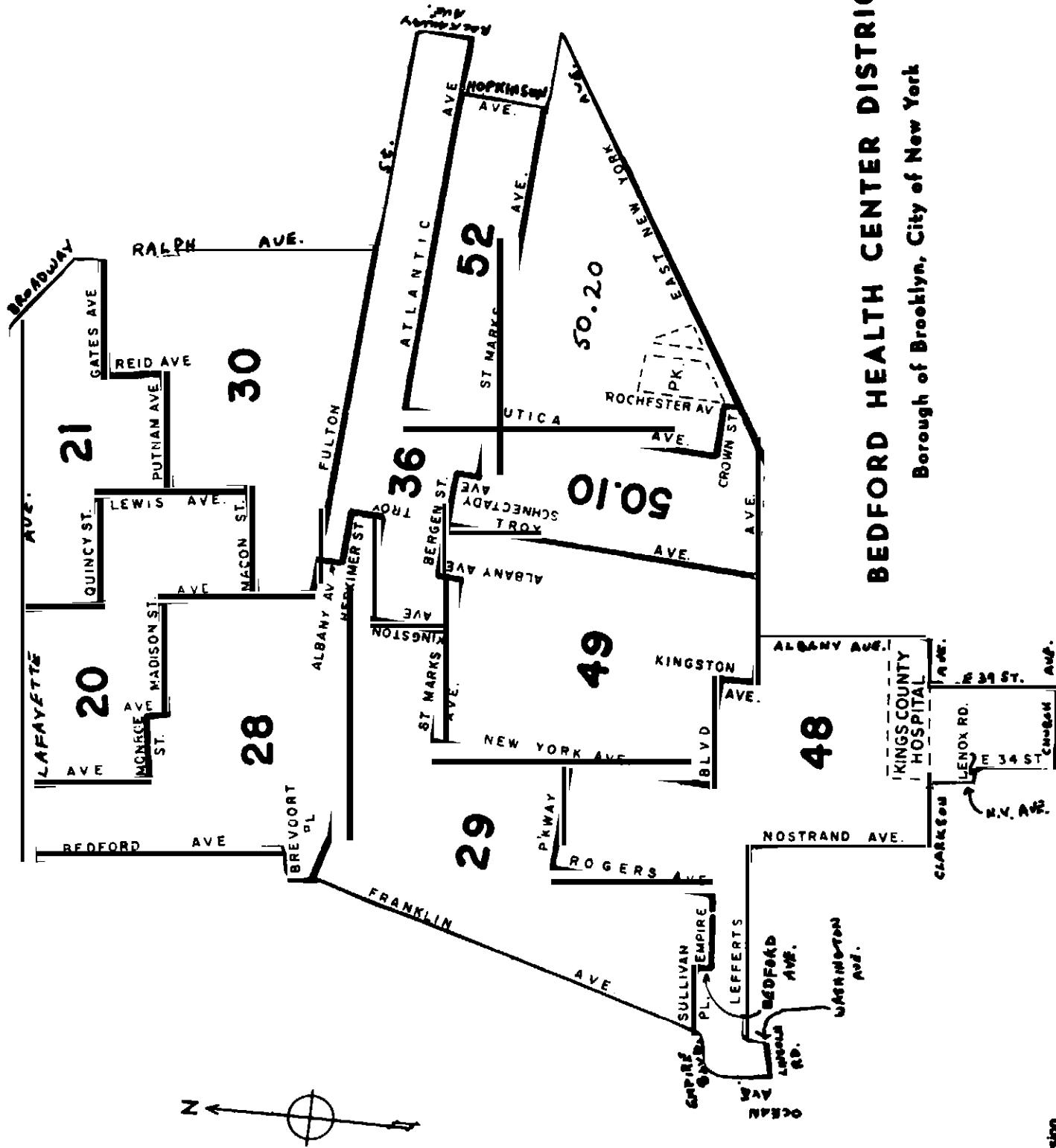
BAY RIDGE HEALTH CENTER DISTRICT

Borough of Brooklyn, City of New York

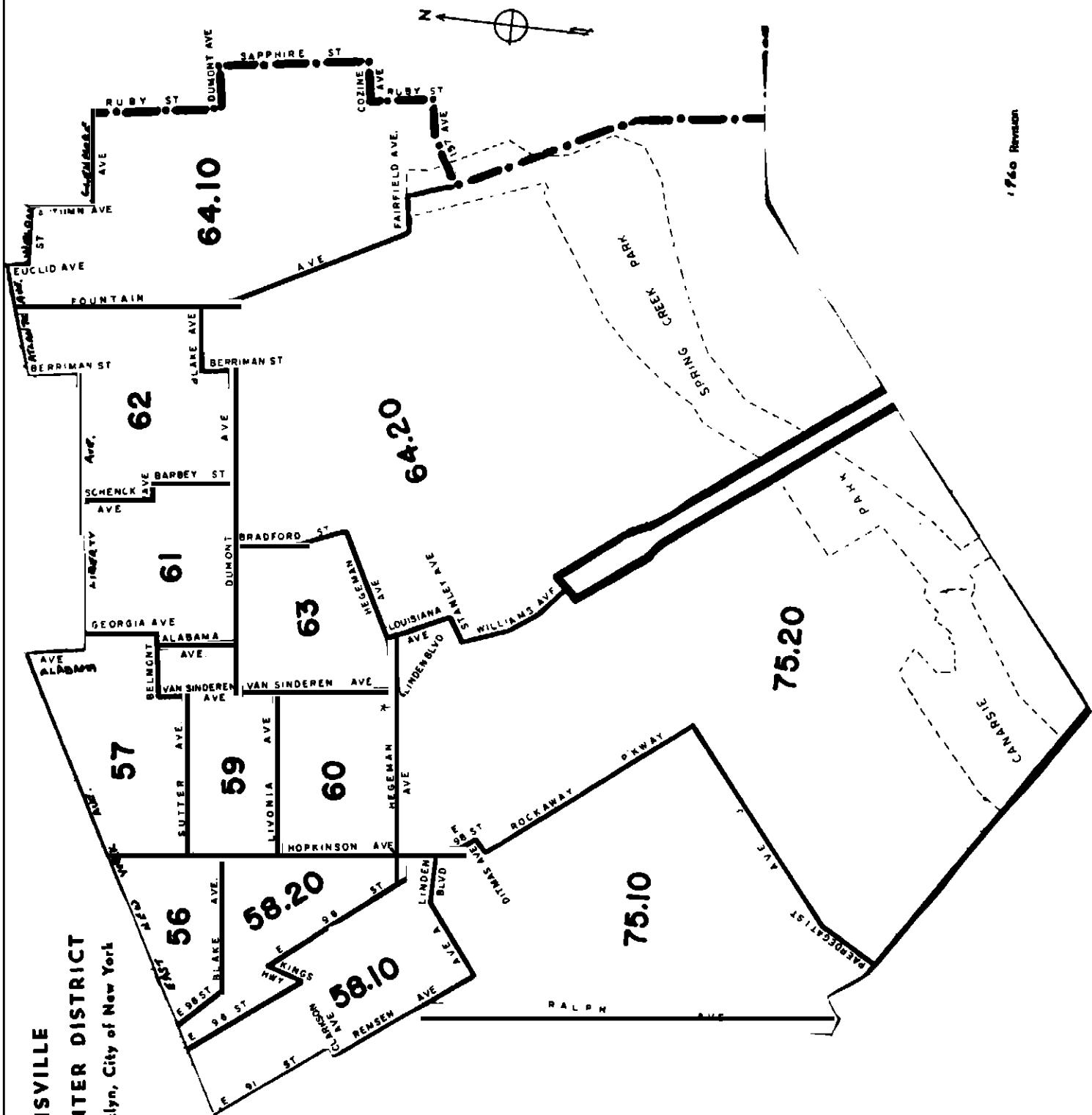


BEDFORD HEALTH CENTER DISTRICT

Borough of Brooklyn, City of New York

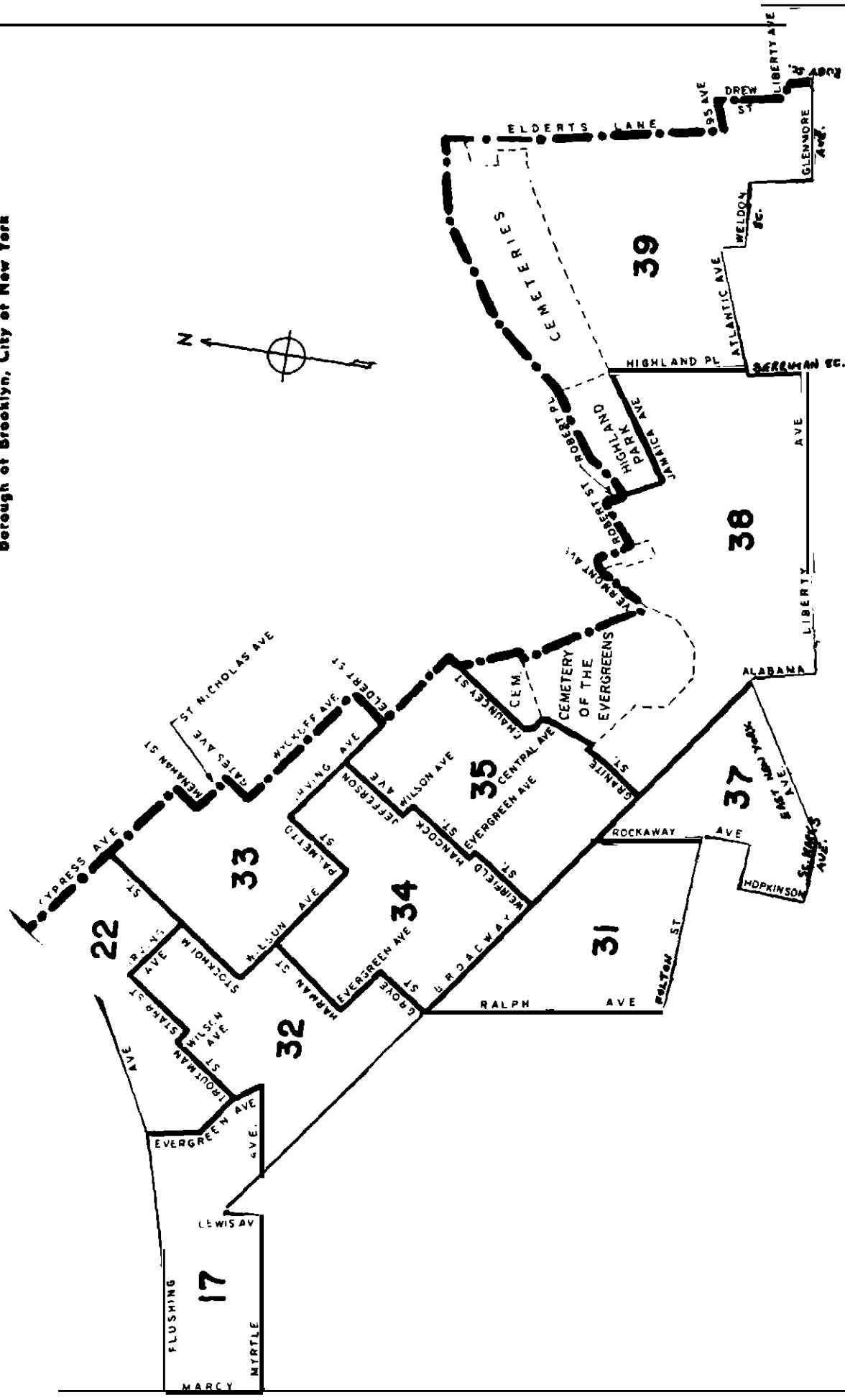


BROWNSVILLE
HEALTH CENTER DISTRICT
Borough of Brooklyn, City of New York

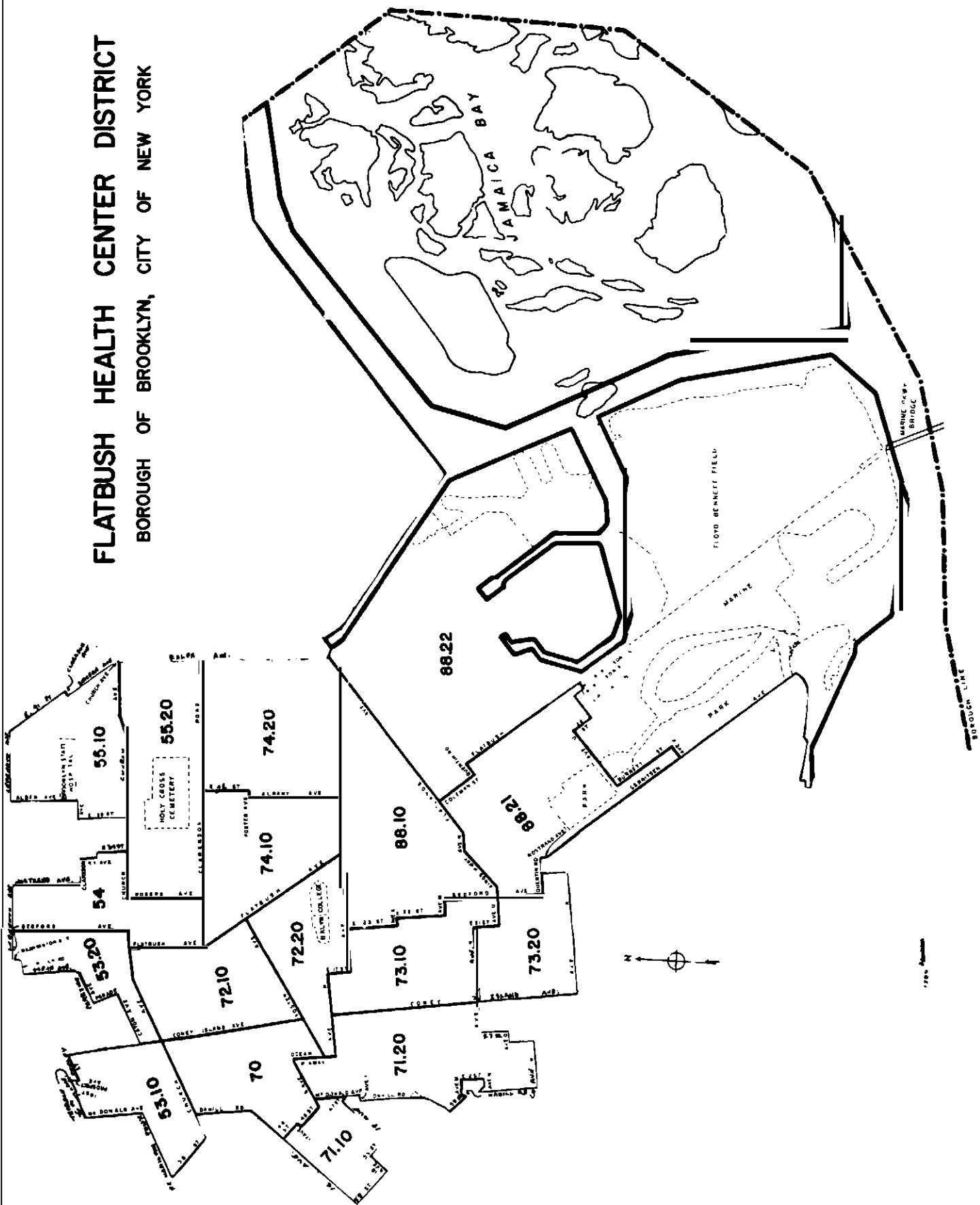


BUSHWICK HEALTH CENTER DISTRICT

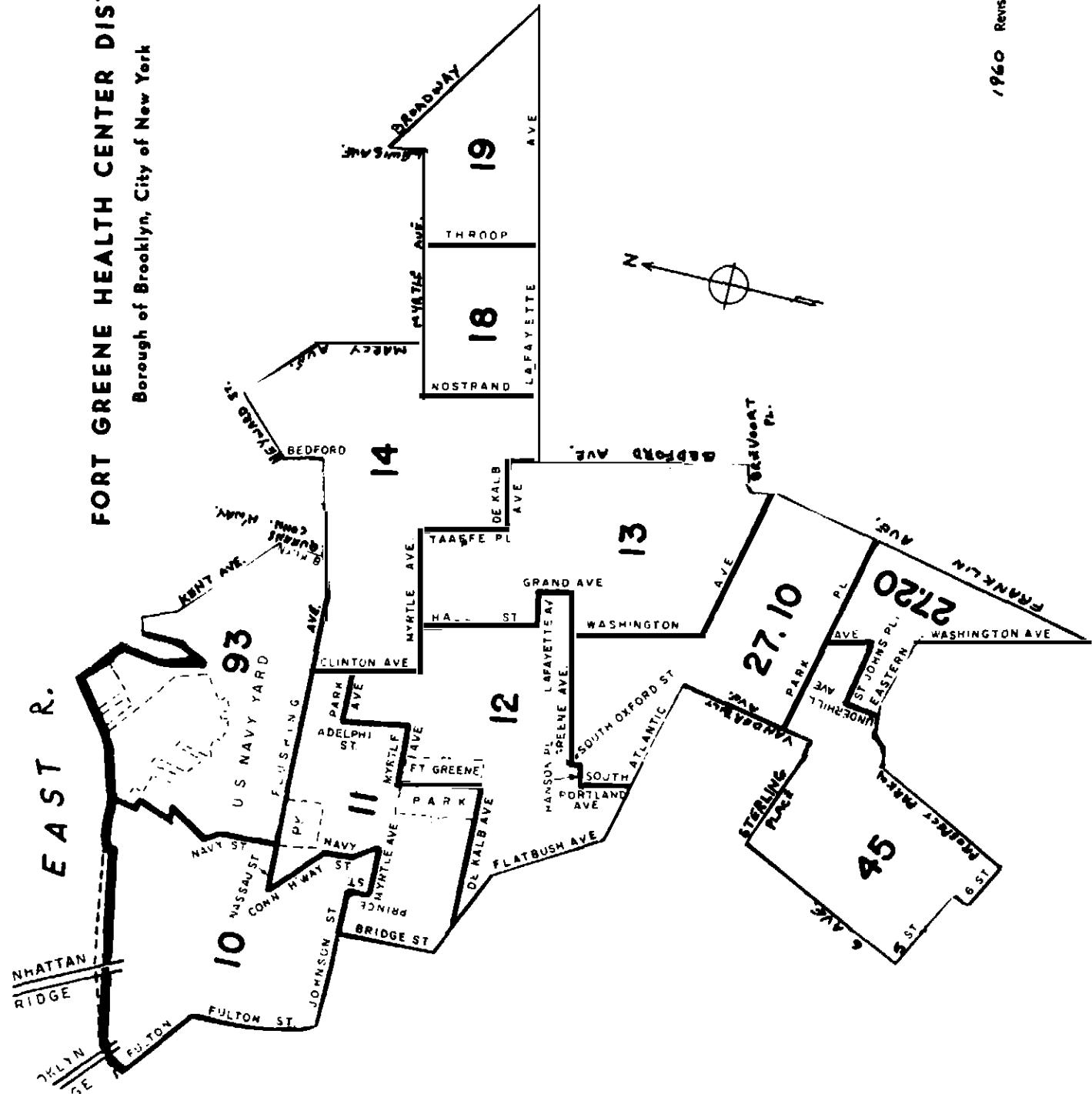
Borough of Brooklyn, City of New York



FLATBUSH HEALTH CENTER DISTRICT
BOROUGH OF BROOKLYN, CITY OF NEW YORK



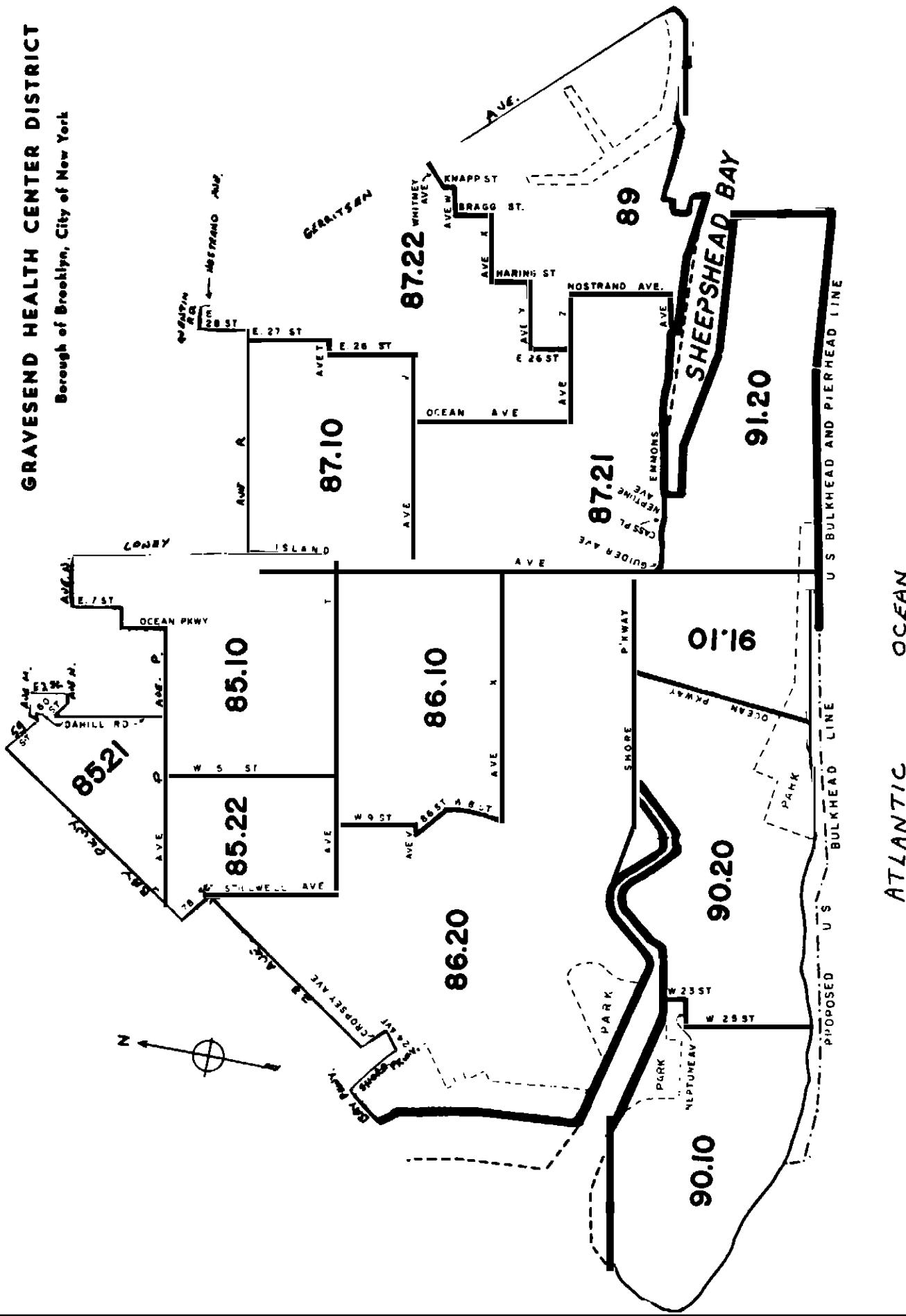
FORT GREENE HEALTH CENTER DISTRICT
 Borough of Brooklyn, City of New York



1960 Revision

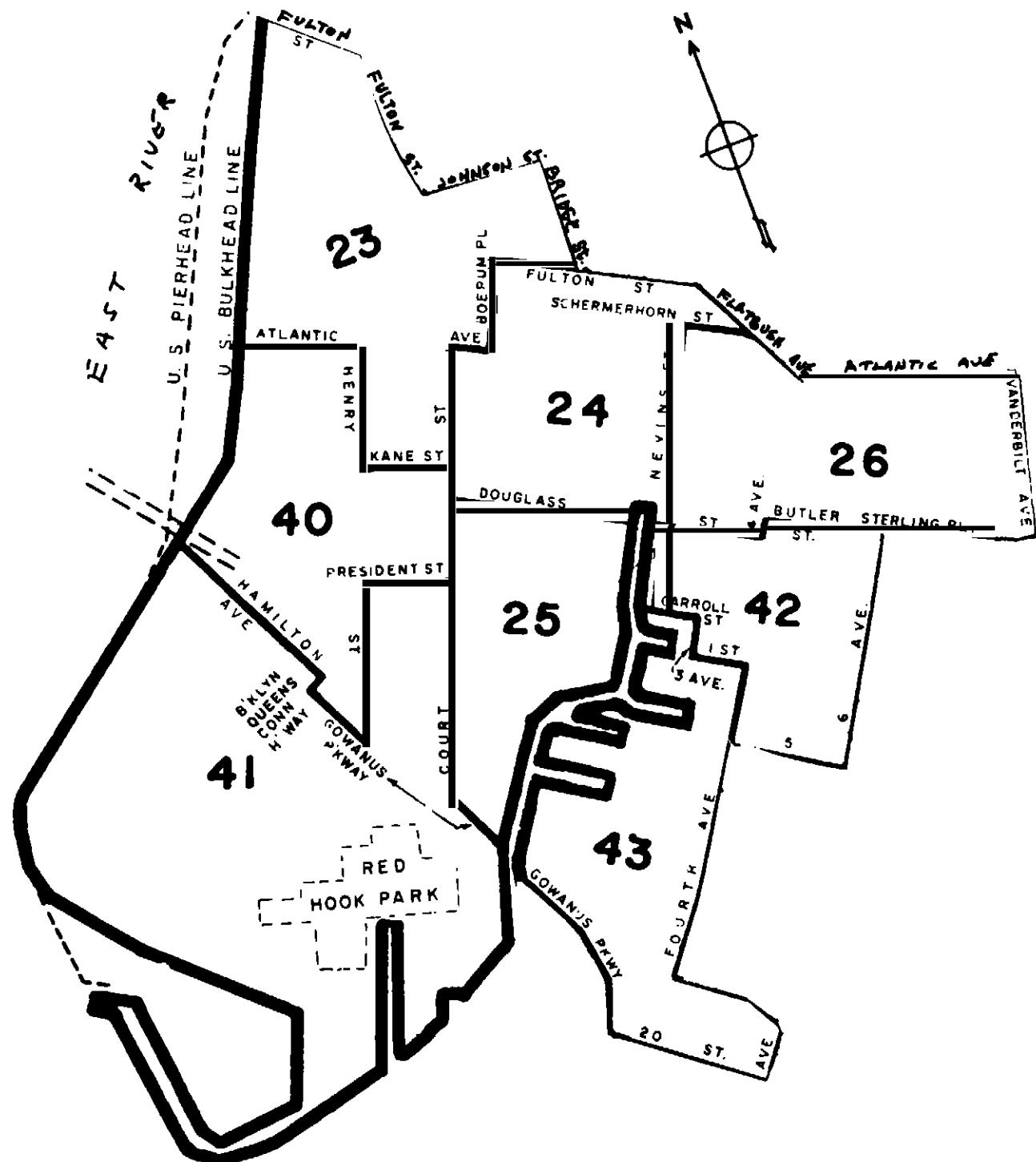
GRAVESEND HEALTH CENTER DISTRICT

Borough of Brooklyn, City of New York



RED HOOK-GOWANUS HEALTH CENTER DISTRICT

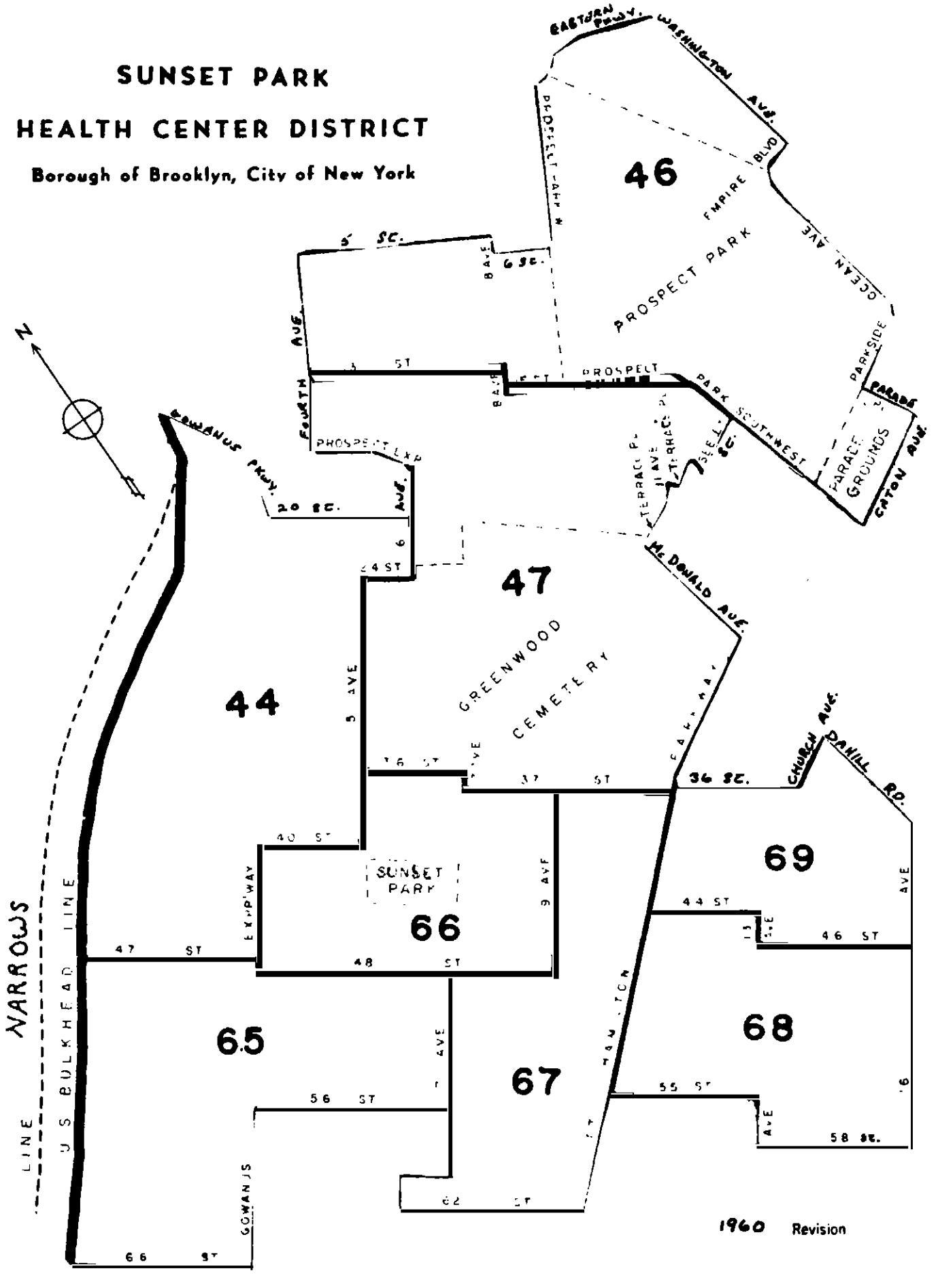
Borough of Brooklyn, City of New York



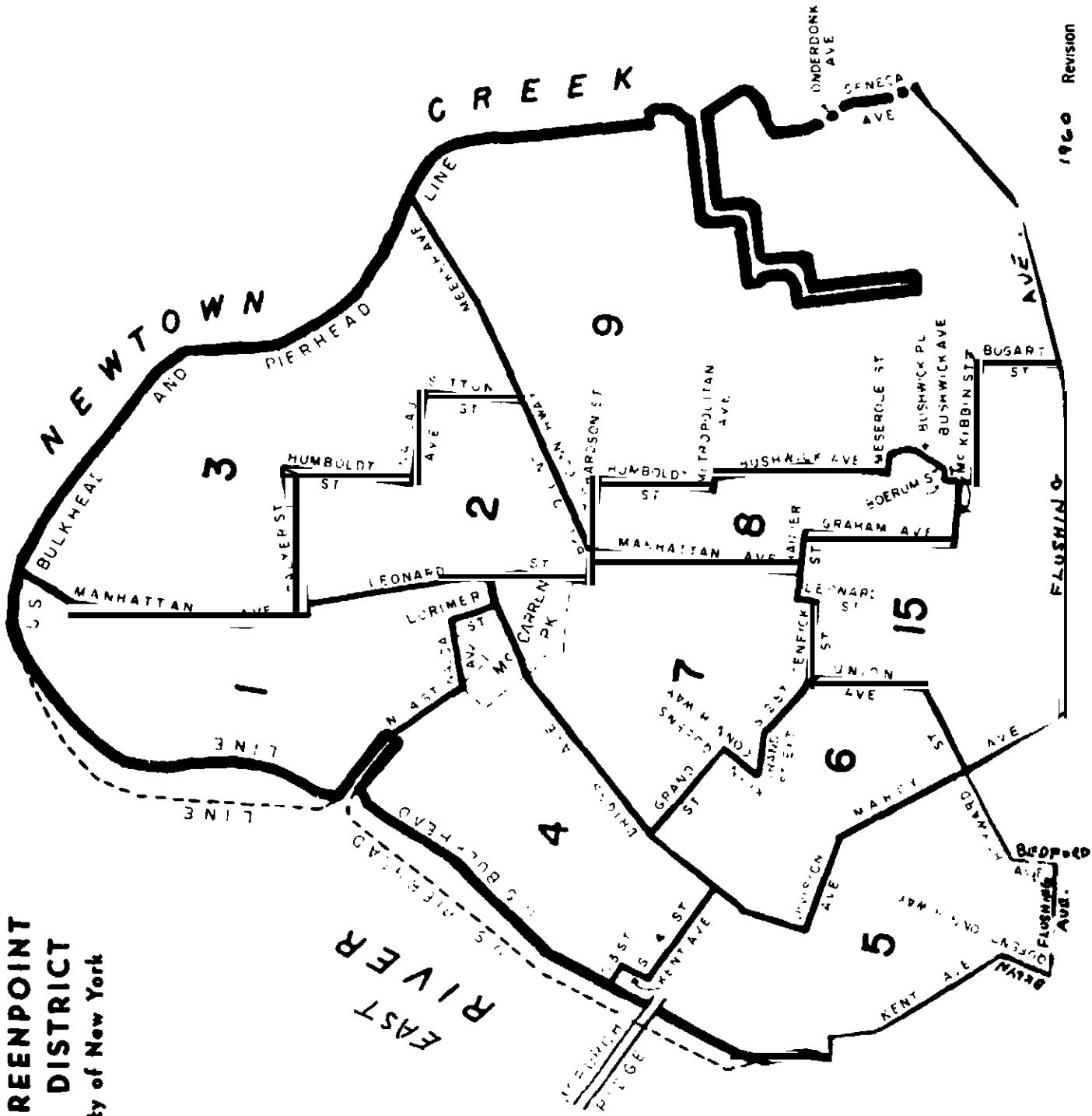
1960 Revision

**SUNSET PARK
HEALTH CENTER DISTRICT**

Borough of Brooklyn, City of New York



**WILLIAMSBURG-GREENPOINT
HEALTH CENTER DISTRICT**
Borough of Brooklyn, City of New York



Revision Page

Table 30
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962-1963
QUEENS - Part A

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
ASTORIA-LONG ISLAND CITY									
1.10	5	4	-	-	-	1	4	1	1
1.20	13	9	-	-	3	1	10	-	1
3.00	6	6	-	-	-	-	8	3	1
3.09	3	1	2	-	-	-	-	-	-
4.00	17	14	-	-	-	3	11	5	3
5.10	5	4	-	-	1	-	2	1	1
5.20	5	4	1	-	-	-	5	3	2
5.25	2	1	1	-	-	-	-	-	1
7.10	11	9	-	1	1	-	3	1	2
7.15	2	2	-	-	-	-	-	-	1
7.16	-	-	-	-	-	-	1	-	-
7.20	2	1	-	1	-	-	3	1	1
7.29	5	2	1	2	-	-	8	2	3
8.00	9	9	-	-	-	-	6	1	1
9.10	5	5	-	-	-	-	7	-	-
9.20	4	3	1	-	-	-	4	-	1
	94	74	6	4	5	5	72	18	19
CORONA									
6.10	11	3	7	-	-	1	19	3	-
6.20	6	6	-	-	-	-	3	-	2
10.11	5	4	-	-	-	1	4	-	1
10.12	5	1	-	-	1	3	1	2	-
10.21	9	8	-	-	-	1	11	-	-
10.22	2	-	2	-	-	-	9	-	-
11.00	22	8	12	1	-	1	16	2	-
14.10	5	4	-	-	-	1	1	-	-
14.20	12	10	-	-	-	2	14	4	4
15.00	7	5	1	-	-	1	4	2	-
	84	49	22	1	1	11	82	13	7
FLUSHING									
2.10	3	3	-	-	-	-	4	2	-
2.21	2	1	-	-	-	1	5	-	-
2.22	3	2	-	-	-	1	3	2	-
12.00	18	8	6	-	-	4	8	2	2
12.05	-	-	-	-	-	-	-	-	1
13.10	5	4	-	-	-	1	7	1	2
13.20	5	4	1	-	-	-	3	1	-
20.11	7	4	-	-	-	3	3	1	-
20.12	2	1	-	-	1	-	1	1	-
20.21	4	2	-	-	1	1	1	-	1
20.22	17	12	4	-	-	1	8	-	-
20.25	1	-	1	-	-	-	2	1	-
21.10	4	3	1	-	-	-	6	-	-
21.21	2	1	-	-	-	1	3	-	1
21.22	1	-	-	-	-	1	2	-	-
21.30	3	1	-	-	-	2	-	-	-
21.40	1	1	-	-	-	-	4	-	-
21.50	-	-	-	-	-	-	5	-	1
21.60	12	7	-	-	-	5	5	1	-
21.70	-	-	-	-	-	-	4	1	-
39.00	-	-	-	-	-	-	1	-	-
	90	54	13	-	2	21	75	13	8

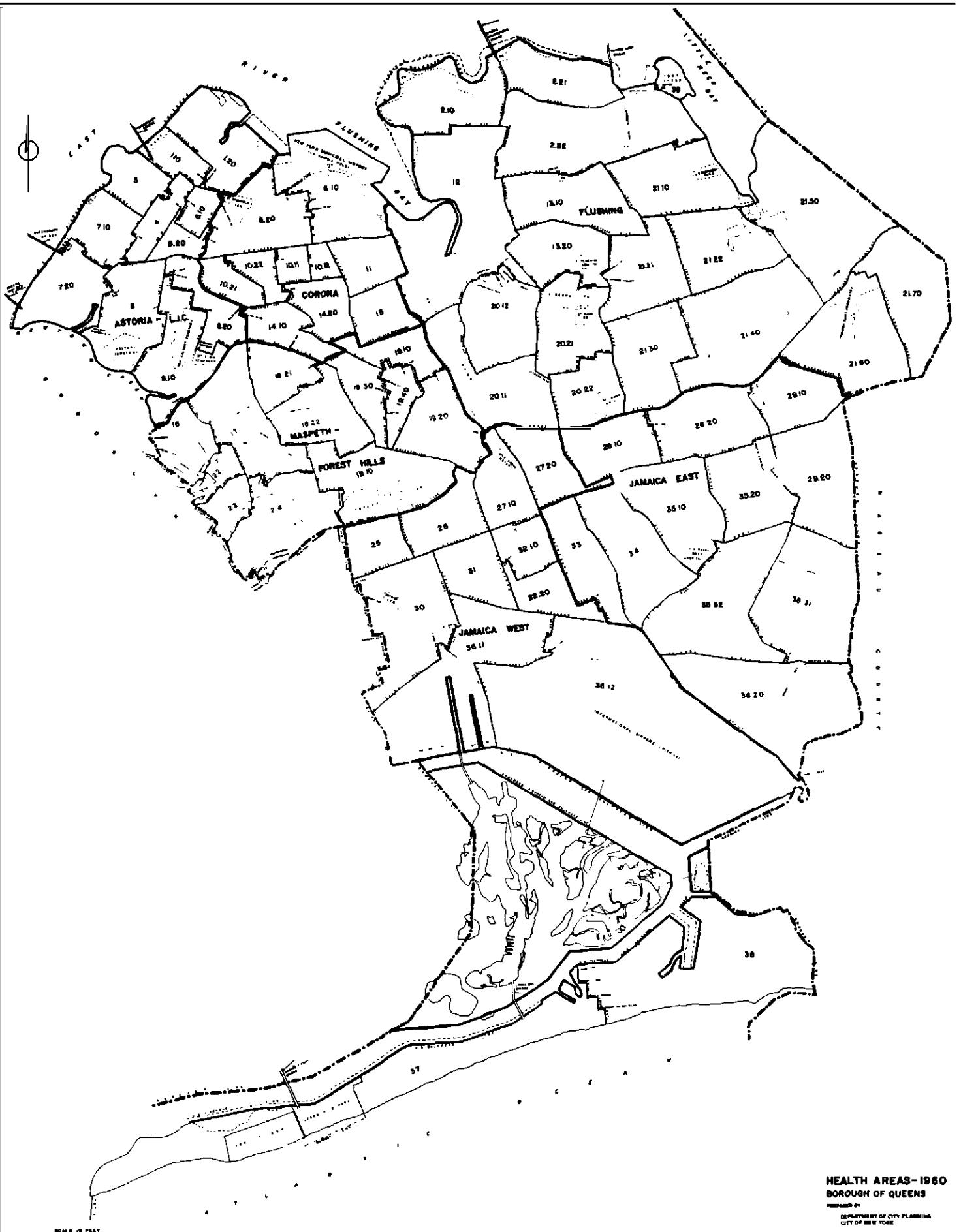
†Ethnic group not stated.

See map for health area boundaries, pages 82-85.

Table 30 - continued
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
QUEENS - Part B

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
JAMAICA EAST									
28.10	6	1	-	-	2	3	2	2	1
28.20	7	6	-	-	-	1	9	2	1
29.10	6	5	-	-	-	1	2	-	3
29.20	6	3	2	-	1	-	4	1	2
33.00	20	5	13	-	-	2	11	2	4
34.00	40	2	36	-	-	2	35	9	6
34.08	5	1	4	-	-	-	1	1	-
34.09	-	-	-	-	-	-	-	-	2
35.10	19	2	17	-	-	-	25	4	4
35.20	15	2	11	-	-	2	13	2	1
35.31	8	5	1	-	1	1	5	-	2
35.32	20	2	18	-	-	-	21	1	3
36.20	6	6	-	-	-	-	2	1	-
	158	40	102	-	4	12	130	25	29
JAMAICA WEST									
25.00	5	4	-	-	-	-	11	1	1
26.00	6	5	-	-	-	1	10	1	4
27.10	4	3	-	-	-	1	6	2	1
27.20	5	4	-	-	-	1	6	-	-
30.00	3	2	-	-	-	1	4	3	4
31.00	2	7	-	-	-	-	12	3	1
32.10	3	1	-	-	-	2	4	2	1
32.20	11	7	3	-	-	1	4	-	2
36.11	6	4	-	-	-	2	4	1	-
36.12	3	1	1	-	-	1	5	2	-
37.00	15	10	4	1	-	-	9	1	3
37.05	1	-	1	-	-	-	1	-	-
38.00	8	4	3	-	-	1	14	4	2
38.06	3	-	3	-	-	-	1	1	-
38.08	1	1	-	-	-	-	1	-	-
	81	53	15	1	1	11	92	21	19
MASPETH-FOREST HILLS									
16.00	1	1	-	-	-	-	2	-	2
17.00	8	5	-	-	-	3	8	2	-
18.10	3	3	-	-	-	-	3	3	3
18.21	10	6	1	-	-	3	2	1	-
18.22	6	6	-	-	-	-	3	3	1
19.10	4	2	-	-	-	2	6	2	2
19.20	5	3	1	-	-	1	5	1	-
19.30	4	3	-	-	-	1	5	1	1
19.40	3	2	-	-	1	-	2	1	-
22.00	10	10	-	-	-	-	8	1	3
23.00	10	10	-	-	-	-	4	-	2
24.00	9	8	-	-	-	1	5	-	2
	73	59	2	-	1	11	53	15	16
QUEENS									
Total	580	329	160	6	14	71	504	105	98

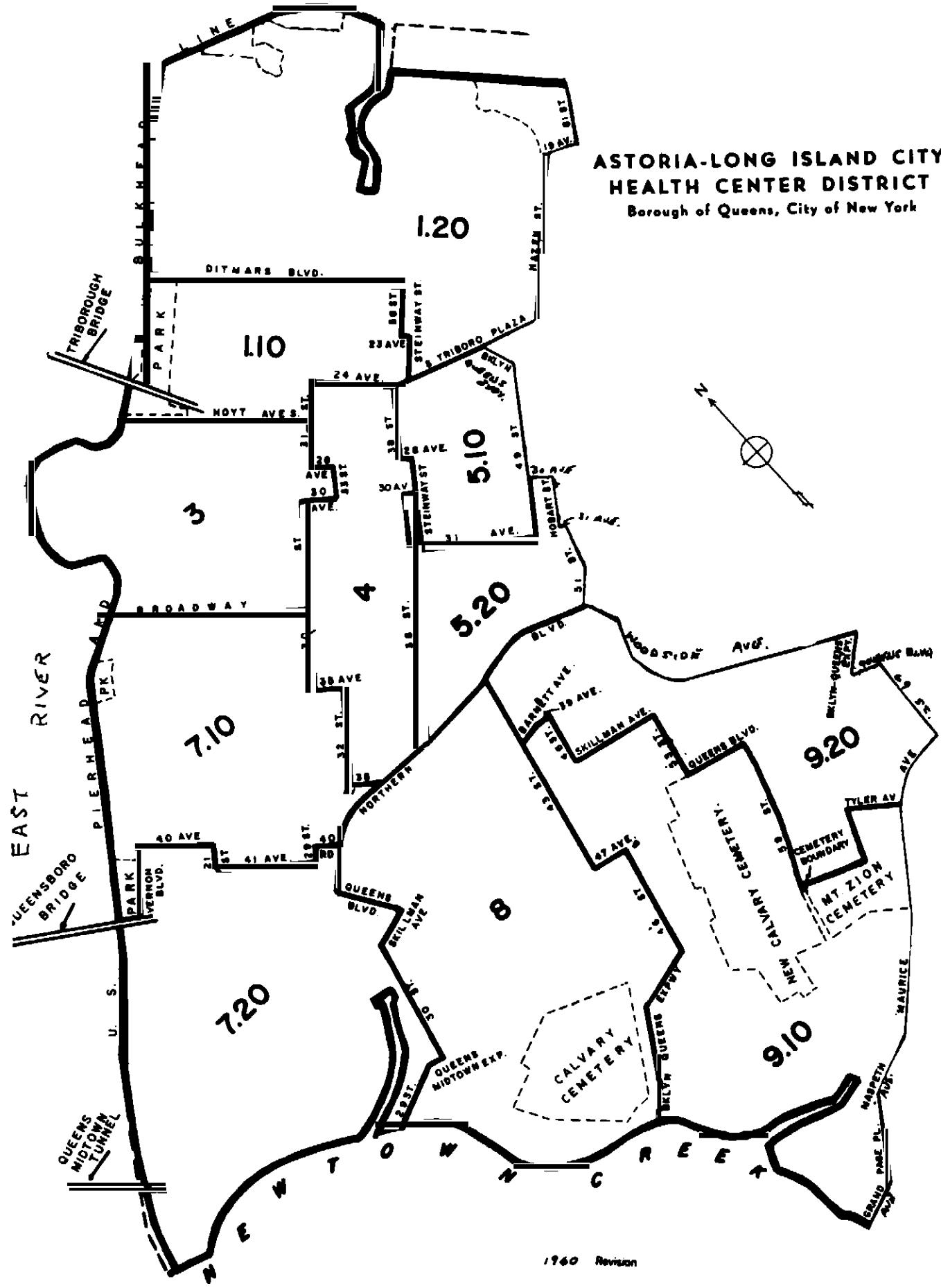
†Ethnic group not stated.
See map for health area boundaries, pages 86-88.



**HEALTH AREAS-1960
BOROUGH OF QUEENS**

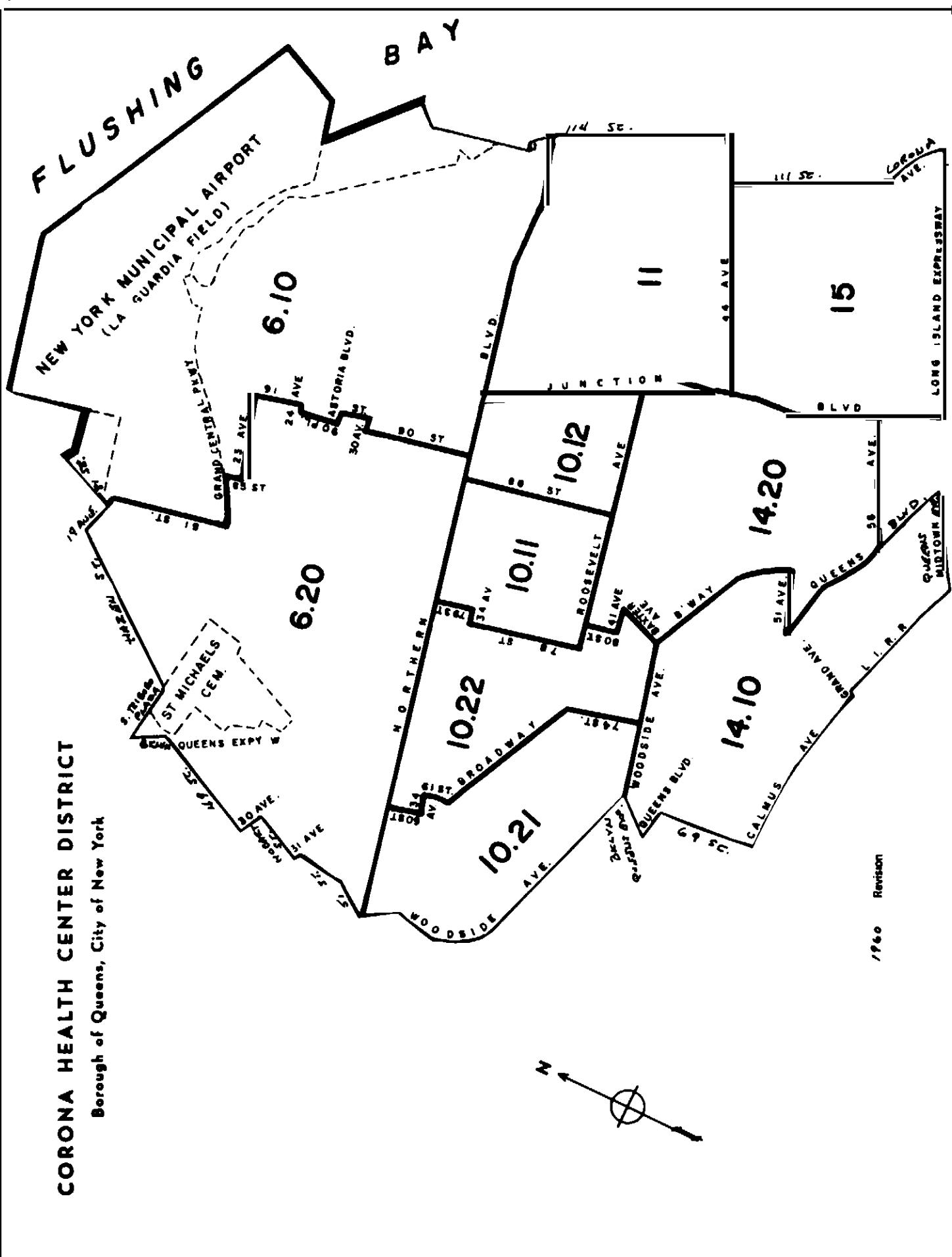
**ASTORIA-LONG ISLAND CITY
HEALTH CENTER DISTRICT**
Borough of Queens, City of New York

Borough of Queens, City of New York



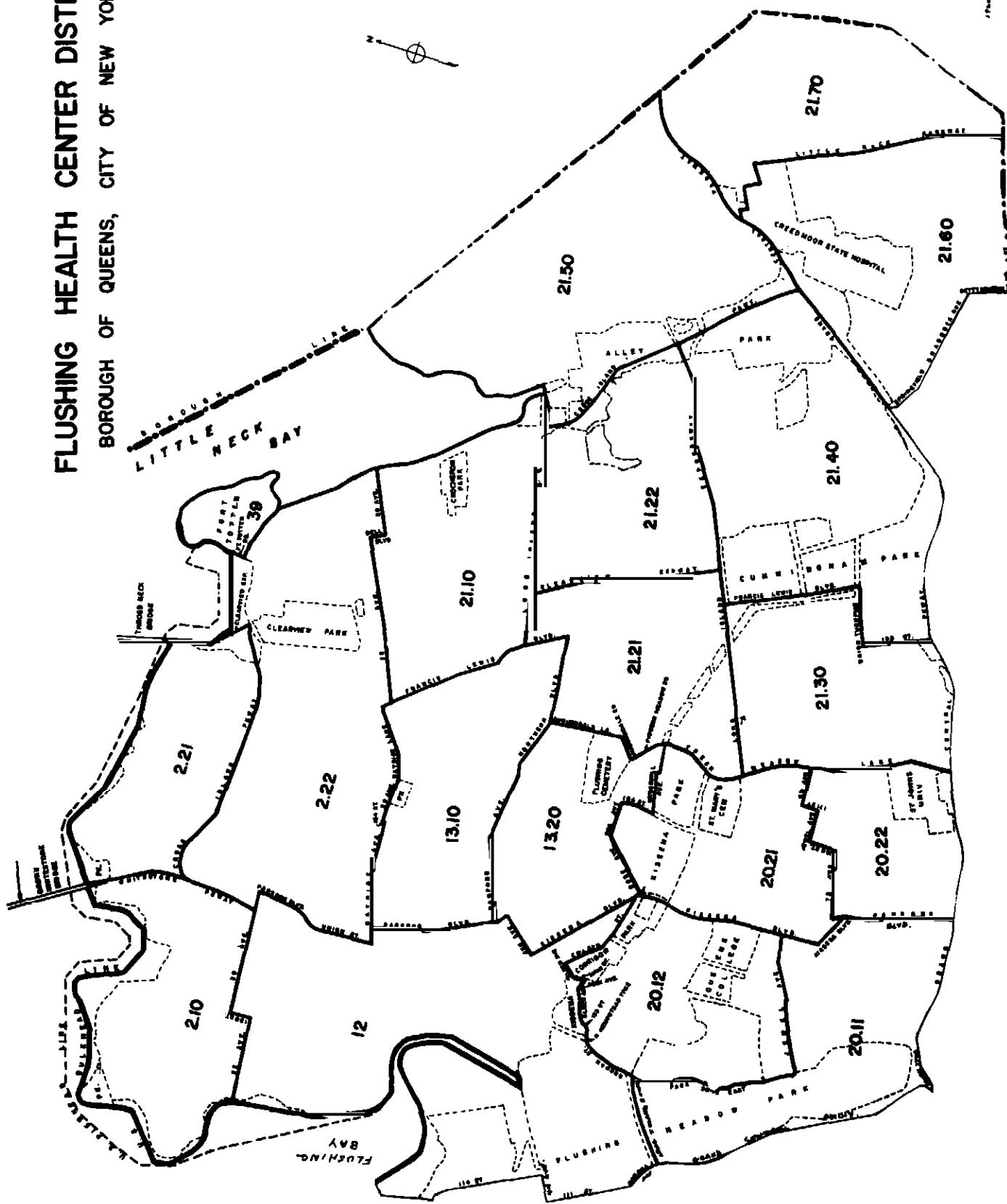
CORONA HEALTH CENTER DISTRICT

Borough of Queens, City of New York

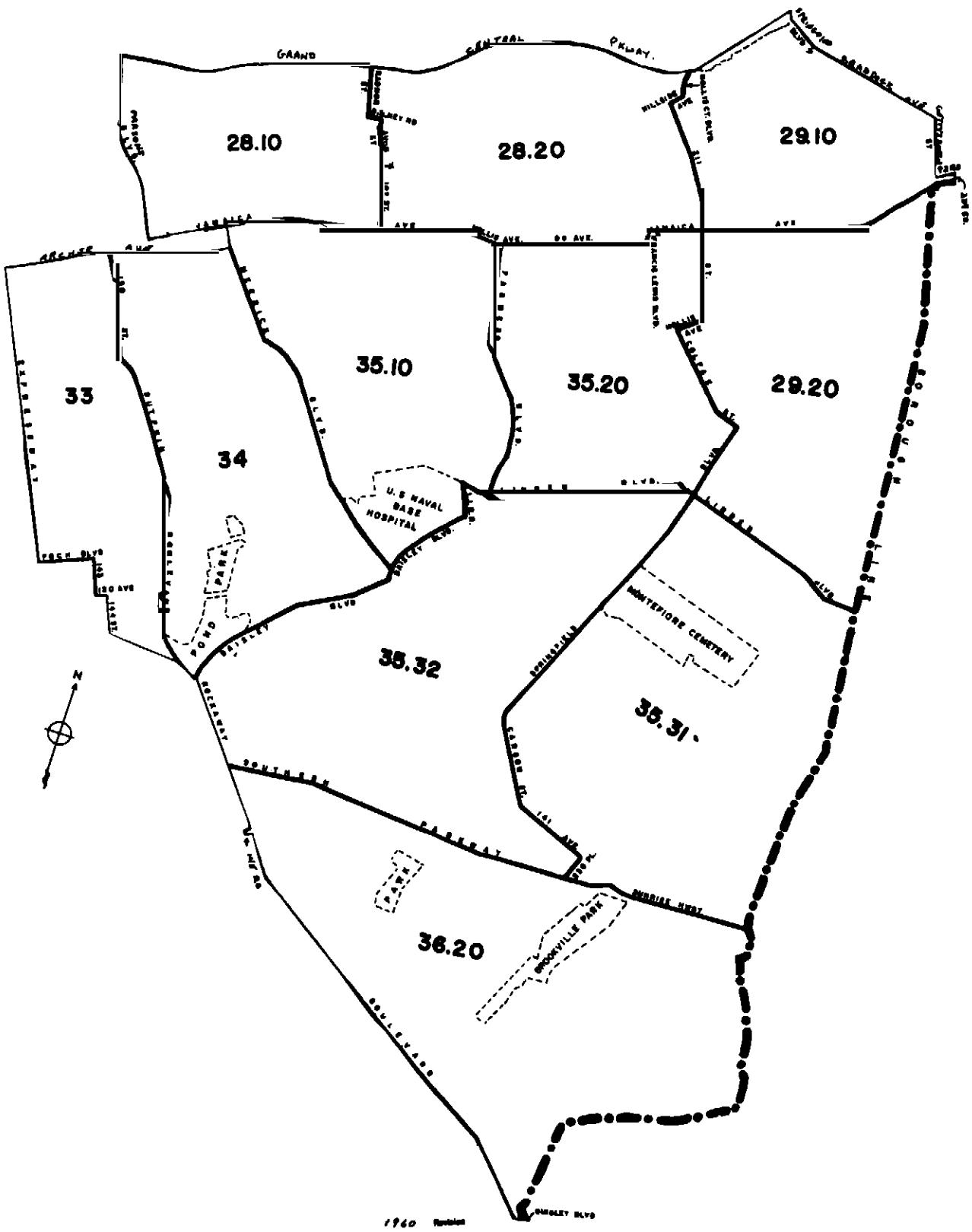


FLUSHING HEALTH CENTER DISTRICT

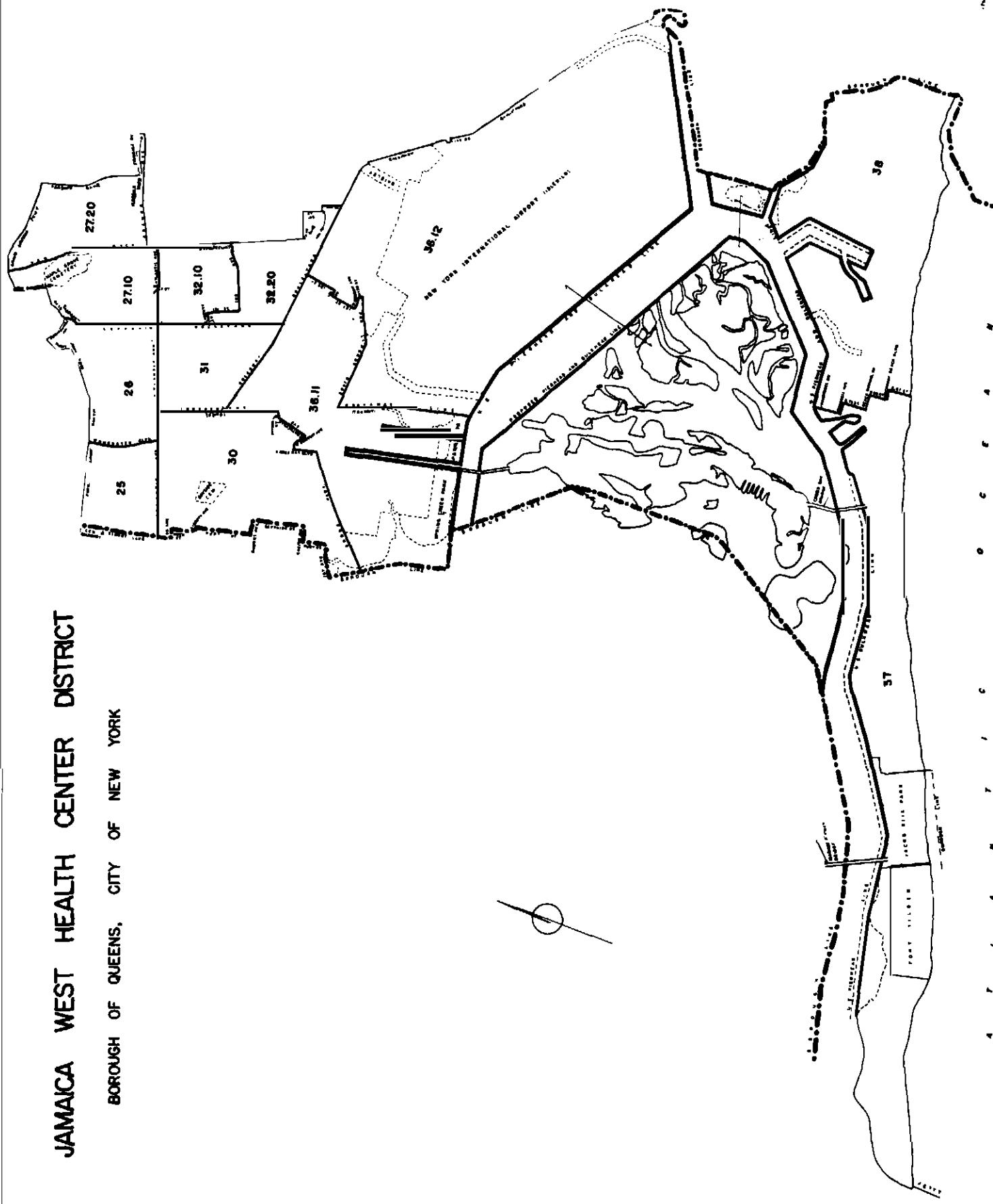
BOROUGH OF QUEENS, CITY OF NEW YORK



JAMAICA EAST HEALTH CENTER DISTRICT
BOROUGH OF QUEENS, CITY OF NEW YORK



JAMAICA WEST HEALTH CENTER DISTRICT
BOROUGH OF QUEENS, CITY OF NEW YORK



**MASPETH-FOREST HILLS
HEALTH CENTER DISTRICT**

Borough of Queens, City of New York

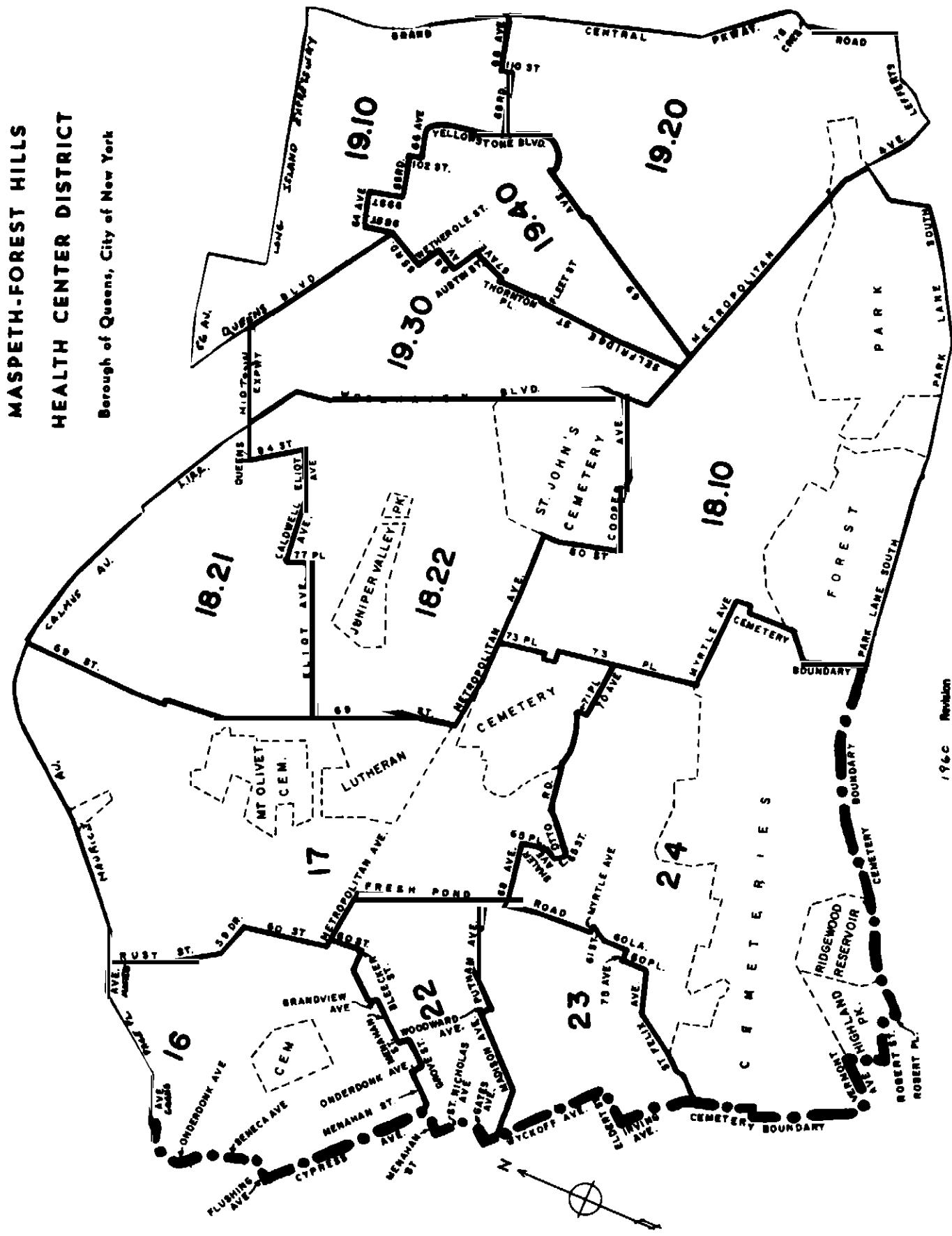


Table 31.
TUBERCULOSIS
By Ethnic Groups, Health Center Districts and Health Areas
New York City, 1962 - 1963
RICHMOND

Health Center District	New Cases of Tuberculosis Reported in 1963						New Cases Reported in 1962	Resident Tuberculosis Deaths With- in City	
	All Ethnic Groups	White	Negro	Puerto Rican	Other	N.S.(†)		1962	1963
Health Area									
RICHMOND									
1.00	3	3	-	-	-	-	1	-	-
1.05	-	-	-	-	-	-	2	-	-
2.00	3	3	-	-	-	-	2	-	1
3.00	5	4	1	-	-	-	4	3	1
4.00	12	10	1	-	-	1	4	-	1
4.90	1	1	-	-	-	-	-	1	-
5.00	6	4	1	-	-	1	4	-	-
5.05	1	1	-	-	-	-	-	-	-
6.00	6	6	-	-	-	-	9	1	-
6.05	1	-	1	-	-	-	-	-	-
7.00	3	2	-	-	-	1	1	-	-
8.00	3	2	-	-	-	1	1	1	1
9.10	3	2	-	-	-	1	5	-	-
9.16	-	-	-	-	-	-	1	-	-
9.20	2	2	-	-	-	-	3	1	-
RICHMOND									
Total	49	40	4	-	-	5	37	7	4
NEW YORK CITY									
Total	4,891	1,900	1,936	633	95	327	4,437	695	633

†Ethnic group not stated.

Note: Resident deaths include only those occurring within New York City.

See map for health area boundaries, page 90.

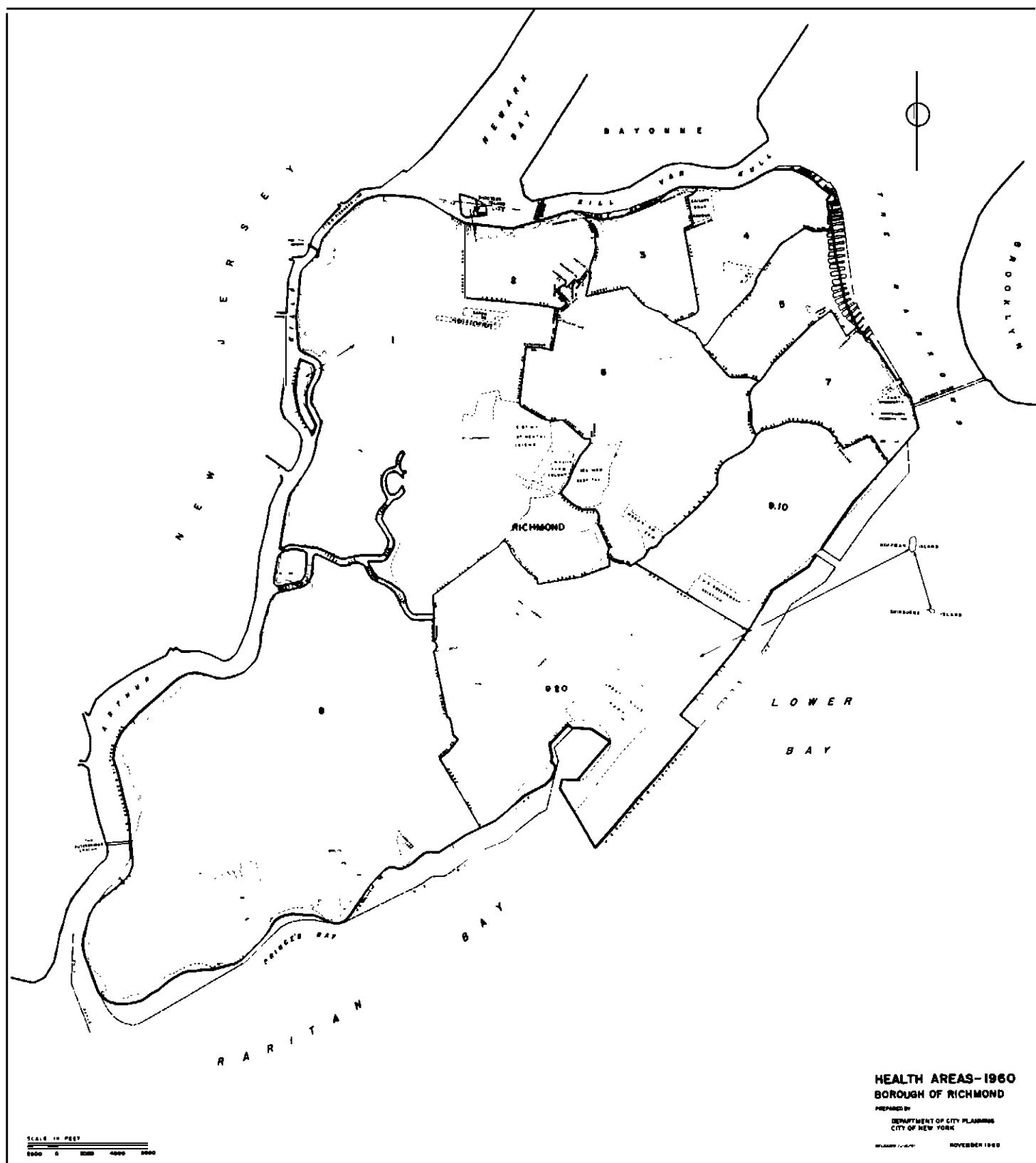


Table 32.
HOUSING PROJECTS IN NEW YORK CITY BY BOROUGH AND HEALTH AREA

Borough Health Area	Housing Project	Health Center	Original H.A.
MANHATTAN			
0117	Marble Hill†	Washington Heights	0110
0127	Dyckman	Washington Heights	0120
0717	John J Audubon	Washington Heights	0700
0805	North Harlem†	Central Harlem	0800
0806	Alexander Hamilton	Central Harlem	0800
0807	Colonial Park	Central Harlem	0800
0809	Harlem River	Central Harlem	0800
1108	Manhattanville	Riverside	1100
1207	St Nicholas	Central Harlem	1200
1306	Harlem	Central Harlem	1300
1405	Morningside Gardens	Riverside	1400
1407	Grant†	Riverside	1400
1608	Riverton	Central Harlem	1600
1609	Abraham Lincoln	Central Harlem	1600
1707	Senator Wagner Sr	East Harlem	1700
2007	Robert A Taft	East Harlem	2000
2008	Robert Taft	East Harlem	2000
2009	James W Johnson	East Harlem	2000
2107	Jefferson	East Harlem	2100
2409	Stephen Foster	Central Harlem	2400
2506	James Madison	East Harlem	2500
2605	George Washington	East Harlem	2600
2606	Woodrow Wilson	East Harlem	2600
2607	Benjamin Franklin	East Harlem	2600
2609	East River	East Harlem	2600
2815	Carver	East Harlem	2810
2816	Lexington	East Harlem	2810
3214	Park West Village	Riverside	3210
3215	Park West Village	Riverside	3200
3216	Douglass	Riverside	3210
3305	Gerard Swope	East Harlem	3300
3307	George Washington†	East Harlem	3000
3907	Lincoln Guild	Lower West Side	3900
3909	Amsterdam	Lower West Side	3900
4605	Columbus Circle	Lower West Side	4600
5207	Penn Station South	Lower West Side	5200
5209	Elliott	Lower West Side	5200
5509	Elliott†	Lower West Side	5500
6008	Peter Cooper	Lower East Side	6000
6009	Stuyvesant Town	Lower East Side	6000
6308	Jacob Riis	Lower East Side	6300
6605	Franklin D Roosevelt	Lower East Side	6600
6606	Franklin D Roosevelt	Lower East Side	3300
6609	First Houses	Lower East Side	6600
7405	Seward Park	Lower East Side	7400
7603	Lavanburg	Lower East Side	7600
7604	Lillian Wald	Lower East Side	7600

†Extends into other Health Areas.

Table 32 - continued
HOUSING PROJECTS IN NEW YORK CITY BY BOROUGH AND HEALTH AREA

Borough Health Area	Housing Project	Health Center	Original H.A.
MANHATTAN (con't.)			
7605	Corlears Hookt	Lower East Side	7600
7606	Sydney Hillman	Lower East Side	7600
7607	Barucht	Lower East Side	7600
7609	Samuel Gompers	Lower East Side	7600
7804	Rutgers	Lower East Side	7800
7805	Chatham Green	Lower East Side	7800
7807	La Guardiat	Lower East Side	7800
7809	Alfred Smith	Lower East Side	7800
8004	Mary K Simkhovitch	Lower East Side	8000
8005	Corlears Hookt	Lower East Side	8000
8007	La Guardiat	Lower East Side	8000
8009	Vladeck	Lower East Side	8000
8490	Manhattan State	East Harlem	
BRONX			
0207	Marble Hill†	Fordham-Riverdale	0320
0329	Marble Hill†	Fordham-Riverdale	0320
0719	Edenwald	Pelham Bay	0710
0817	Gun Hill	Pelham Bay	0810
0818	Parkside	Pelham Bay	0810
0819	Pelham Parkway†	Pelham Bay	0810
0828	Eastchester	Pelham Bay	0820
0829	Pelham Parkway†	Pelham Bay	0820
1319	Parkchester	Westchester	1310
2219	Sedgwick	Tremont	2210
2604	Borgia Butler	Morrisania	2600
3019	Bronx River	Westchester	3010
3025	Rosedale	Westchester	3020
3026	James Monroe	Westchester	3020
3027	Bronxdale	Westchester	3020
3029	Clason Point Gardenst	Westchester	3020
3037	Soundview	Westchester	3030
3039	Clason Point Gardenst	Westchester	3030
3105	Castle Hill	Westchester	3100
3229	Throggs Neck	Westchester	3220
3319	Highbridge	Morrisania	3310
3504	Martin Van Buren	Morrisania	3500
3505	William McKinley	Morrisania	3500
3509	Forest Houses	Morrisania	3500
3809	Patterson	Mott Haven	3800
3905	Andrew Jackson	Mott Haven	3900
3909	Melrose	Mott Haven	3900
4004	St Marys Park†	Mott Haven	4000
4104	St Marys Park†	Mott Haven	4100
4105	John Adams I	Mott Haven	4100
4106	John Adams	Mott Haven	4100
4209	North Brothers Island	Mott Haven	4200

†Extends into other Health Areas.

Table 32 continued
HOUSING PROJECTS IN NEW YORK CITY BY BOROUGH AND HEALTH AREA

Borough Health Area	Housing Project	Health Center	Original H.A.
BRONX (con't.)			
4504	John P Mitchel	Mott Haven	4500
4505	Mill Brook	Mott Haven	4500
4705	Mill Brook	Mott Haven	4700
4706	Mill Brook Extension	Mott Haven	4700
BROOKLYN			
0505	Johnathan Williams	Williamsburg Greenpoint	0500
0809	Williamsburg†	Williamsburg Greenpoint	0800
0909	Cooper Park	Williamsburg Greenpoint	0900
1008	Farragut	Fort Greene	1000
1009	Fort Greenet	Fort Greene	1000
1105	University Towers	Fort Greene	1100
1107	Kingsview Homes	Fort Greene	1100
1108	Wallabout	Fort Greene	1100
1109	Fort Greenet	Fort Greene	1100
1305	Willoughby Walk	Fort Greene	1300
1307	Lafayette	Fort Greene	1300
1409	Marcy Houses	Fort Greene	1400
1505	Bushwick	Williamsburg Greenpoint	1600
1506	John F Hylan	Williamsburg Greenpoint	1600
1509	Williamsburg†	Williamsburg Greenpoint	1500
1705	Sumner	Bushwick	1700
2409	Gowanus Houses	Red Hook Gowanus	2400
3005	Brevoort	Bedford	3000
4108	Red Hook II	Red Hook Gowanus	4100
4109	Red Hook	Red Hook Gowanus	4100
4908	Albany II	Bedford	4900
4909	Albany Houses	Bedford	4900
5209	Kingsborough	Bedford	5200
5519	Brooklyn State Hospital	Flatbush	
5705	Howard	Brownsville	5700
5906	Samuel J Tilden	Brownsville	5900
5907	Van Dyke	Brownsville	5900
5909	Brownsville	Brownsville	5900
6415	Cypress Hills	Brownsville	6410
6416	Louis H Pink	Brownsville	6410
6427	Linden	Brownsville	6420
6428	Boulevard	Brownsville	6420
7429	Glenwood	Flatbush	7420
7525	Bay View	Brownsville	7520
7528	Breukelen	Brownsville	7520
7529	Jamaica Bay	Brownsville	7520
8625	Marlboro	Gravesend	8620
8726	Sheepshead Bay	Gravesend	8722
8728	Nostrand	Gravesend	8722
8825	Marine Park	Flatbush	8820
9015	Coney Island	Gravesend	9010
9017	Gravesend	Gravesend	9010
9025	Luna Park	Gravesend	9020

†Extends into other Health Areas.

Table 32 - continued
HOUSING PROJECTS IN NEW YORK CITY BY BOROUGH AND HEALTH AREA

Borough Health Area	Housing Project	Health Center	Original H.A.
QUEENS			
0309	Astoria	Astoria, Long Island City	0300
0525	Woodside	Astoria, Long Island City	0520
0629	Northern Boulevard	Corona	0600
0715	Ravenswood	Astoria, Long Island City	0710
0716	Queensview	Astoria, Long Island City	0710
0729	Queensbridge	Astoria, Long Island City	0720
1205	James A Bland	Flushing	1200
1826	Juniper Valley	Maspeth Forest Hills	1800
1919	Rego Park	Maspeth Forest Hills	1900
2025	Pomonok	Flushing	2020
2129	Creedmoor State Hospital	Flushing	
3405	Baisley Park	Jamaica East	3400
3406	Baisley Gardens	Jamaica East	3400
3408	South Jamaica II	Jamaica East	3400
3409	South Jamaica	Jamaica East	3400
3705	Hammel	Jamaica West	3700
3707	Hammels Rockaway	Jamaica West	3700
3709	Fort Tilden	Jamaica West	3700
3805	Arverne	Jamaica West	3800
3806	Redfern	Jamaica West	3800
3807	Redfern	Jamaica West	3800
3808	Edgemere	Jamaica West	3800
RICHMOND			
0105	Mariners Harbor	Richmond	0100
0308	West Brighton	Richmond	0300
0309	Edwin Markham	Richmond	0300
0505	Stapleton	Richmond	0500
0605	Toat Hill	Richmond	0600
0915	South Beach	Richmond	0910
0916	General Berry	Richmond	0910

COMMUNITY CASE FATALITY RATES

The deaths from tuberculosis decreased by 7.7% in 1963 below that of 1962 while the newly reported cases of tuberculosis increased 10.2% over that of 1962. This is the second year in which the newly reported cases of tuberculosis has increased but the number of deaths has decreased. Prior to these years, there had been a general decrease both in deaths from tuberculosis and newly reported cases of tuberculosis.

In the main, case fatality rates, whether institutional or for the entire community, are markedly lower nowadays and prognosis, even for an advanced case of disease, is more favorable than a decade ago when less use was made of antibacterials. Prior to 1948 the annual community case fatality ratios for pulmonary tuberculosis in New York City, going back to the year 1900, averaged around 43 per cent. The yearly fluctuations ranged from 35 to 56 per cent during the period preceding the widespread use of drug therapy.

Streptomycin, which was discovered in 1944, and tested clinically in 1945 and 1946, became more generally available beginning in 1947. Para-aminosalicylic acid (PAS) was introduced in 1949. The subsequent reduction in mortality brought the case fatality ratios down by almost a third within a span of three or four years. A further impetus to this decline was given in 1952 when isoniazid was employed in the treatment of tuberculosis. Since 1953 there appears to be less change in the community case fatality ratio except for 1963 when it dropped 3 percentage points to a new low level of 16%. Case-finding procedures have contributed to maintain a high level of new cases reported. The following paragraph summarizes a general point of view with respect to case fatality rates.

"Data on tuberculosis mortality are at present of very limited value as a measure of the tuberculosis problem of a community. In underdeveloped areas such data are usually unreliable, while in technically more advanced countries the mortality is, due to the reduced case fatality ratio, so low as to be useless as an indicator of trends."¹⁰

Table 33.
COMMUNITY CASE FATALITY RATIOS
 Pulmonary Tuberculosis
 New York City, since 1900

Period	New Cases		Deaths		Community Fatality Ratio*
	Number	Rate†	Number	Rate†	
1900-04	72,551	396	40,390	220	56%
1905-09	109,633	508	44,001	204	40%
1910-14	123,605	498	43,592	176	35%
1915-19	87,941	326	42,235	156	48%
1920-24	63,600	214	26,072	88	41%
1925-29	55,878	170	23,191	71	42%
1930-34	54,185	154	20,830	59	38%
1935-39	43,936	120	19,044	52	43%
1940-44	41,328	109	16,516	44	40%
1945-49	34,153	88	14,396	37	42%
1950	6,518	83	2,154	27	33%
1951	6,331	80	1,978	25	31%
1952	6,021	77	1,460	18	24%
1953	6,110	78	1,183	15	19%
1954	5,439	69	1,048	13	19%
1955	5,064	65	1,023	13.1	20%
1956	5,089	65	916	11.7	18%
1957	5,162	66	931	11.9	18%
1958	4,513	58	772	9.9	17%
1959	4,196	54	736	9.4	18%
1960	3,923	50	763	9.8	19%
1961	3,635	47	688	8.8	19%
1962	3,702	48	694	8.9	19%
1963	4,057	52	645	8.3	16%

*Rate per 100,000 population. †Deaths per 100 new cases reported.

Note: Number of new cases and deaths prior to 1950, shown above, are totals during each quinquennial period.

V. TYPE OF CARE

CARE OF THE TUBERCULOUS

Thousands of tuberculous patients in New York City are receiving care and treatment under various public and private medical auspices. Lives are prolonged and saved each year as health and welfare services are improved and adjusted to current needs. During recent years wide application of the results of medical research in tuberculosis has made prognosis, even for persons with advanced disease, more favorable than was the experience in the era preceding the use of antituberculosis drugs.

In general, care in respect to the public health aspects of tuberculosis may be considered not too unsatisfactory. However, taking into account the individual patients in hospitals, there appears to be substantial variation as to quality of such care.¹¹ Competently trained and experienced personnel are still at a premium and their availability is of serious concern to hospital authorities. Physicians are disinclined to enter or remain in tuberculosis control programs, and recruitment is becoming exceedingly difficult. Public and private organizations in New York City are paying special attention to these matters and are suggesting ways whereby an upgrading of the present standards can be achieved without unreasonable demands upon the fiscal abilities of government and private agencies responsible for the care of the sick.

Free treatment for tuberculous patients can be obtained from tuberculosis clinics and hospitals which are supported by the municipal and state agencies. There is no means test in New York State.

On December 31, 1963, 6,588 persons in New York City were listed on the Tuberculosis Register of the Department of Health as having active tuberculosis. There were 3,106 persons in sanatoria and hospitals, both in the city (2,617) and in out-of-town institutions (489). Public and private clinics had under their care 2,364 persons with active tuberculosis. Private physicians indicated that at least 385 persons with active tuberculosis were under their supervision. Additional thousands of New York residents, with arrested and inactive disease, were under medical and public health supervision.

The volume of care provided to tuberculous patients during a given year is difficult to ascertain with exactness. Some idea as to the work involved can be envisaged from the fact that during 1963 there were 633,187 days care provided by municipal hospitals and 145,268 days care by private hospitals within the city. To these should be added services for the New York City patients in out-of-town sanatoria and care for the occasional tuberculous patients in general hospitals. Attendance at the Department of Health tuberculosis services in 1963 was 273,848 including tuberculosis cases, suspects and contacts. Thousands of visits were made also to clinics of the Department of Hospitals and voluntary hospitals. The amount of care given by private physicians is unknown.

Table 34.
TUBERCULOSIS BY TYPE OF CARE, NEW YORK CITY
Register on Last Day of 1963

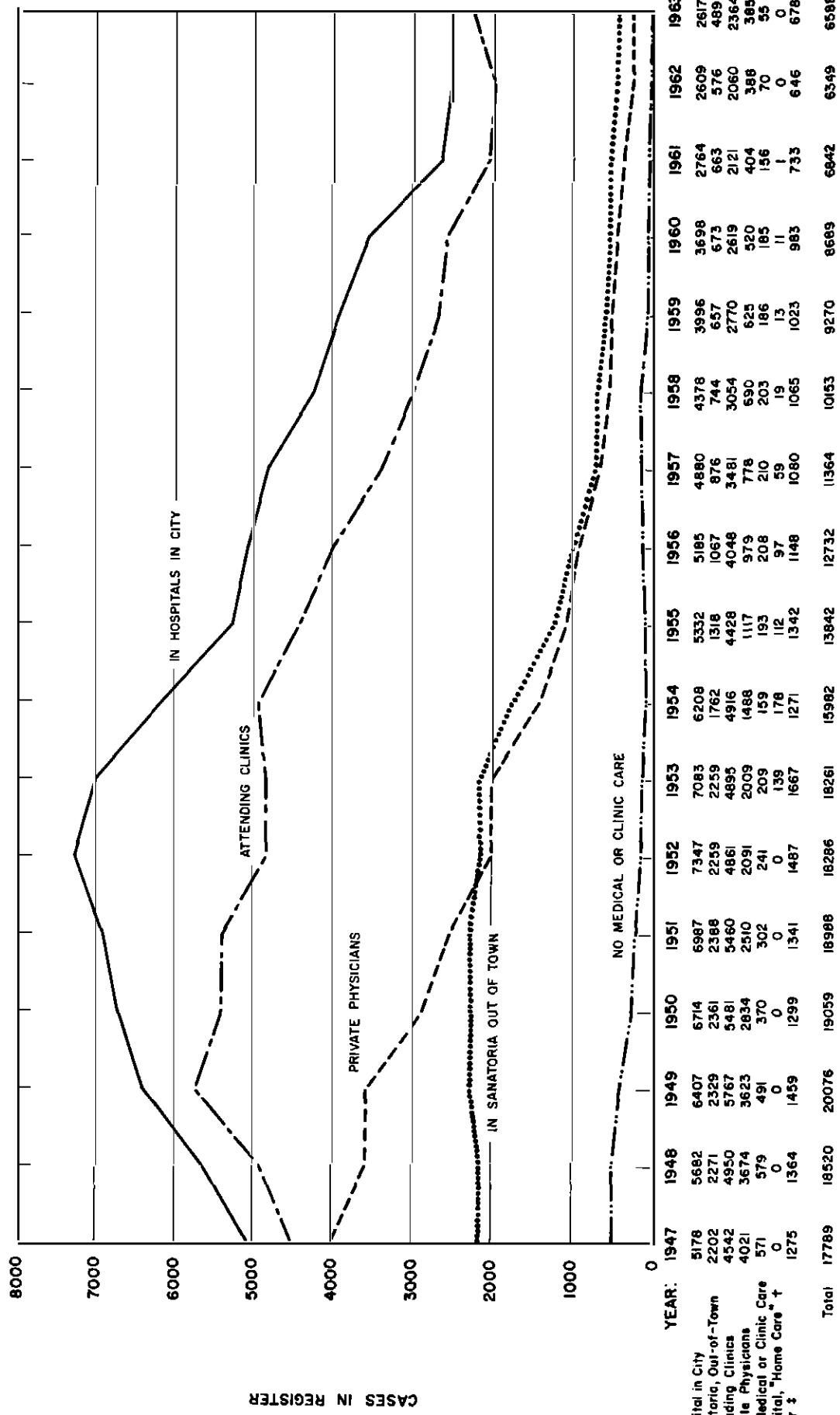
Health District	Total* in Register Dec. 31, 1963	In Institutions			Out of Institutions					
		Total †	Hospi- tals in City	Sana- toria †	Total	Clinics		Pri- vate Doc- tors	Pend- ing Care	No Med. Clin. Care‡
						Health Dept.	Other			
NEW YORK CITY	6,588	3,122	2,617	505	3,466	1,894	470	385	662	55
MANHATTAN	2,806	1,378	1,086	292	1,428	671	220	94	411	32
Central Harlem ...	798	334	293	41	464	265	67	9	109	14
East Harlem	202	107	101	6	95	50	11	1	32	1
Kips Bay-Yorkville	71	27	15	12	44	11	7	15	10	1
Lower East Side ..	719	390	287	103	329	131	62	22	111	3
Lower West Side ..	436	274	185	89	162	50	33	21	58	-
Riverside	395	168	143	25	227	104	33	19	63	8
Washington Heights	185	78	62	16	107	60	7	7	28	5
BRONX	1,087	456	412	44	631	356	102	53	108	12
Fordham-Riverdale.	69	26	20	6	43	21	5	9	8	-
Morrisania	372	150	130	20	222	118	41	11	47	5
Mott Haven	354	159	150	9	195	104	46	7	32	6
Pelham Bay	54	17	17	-	37	21	4	7	5	-
Tremont	146	69	60	9	77	55	4	8	10	-
Westchester	92	35	35	-	57	37	2	11	6	1
BROOKLYN	1914	899	784	115	1,015	647	119	124	121	4
Bay Ridge	111	56	44	12	55	39	2	9	5	-
Bedford	376	187	172	15	189	117	26	15	30	1
Brownsville	277	134	122	12	143	114	18	9	2	-
Bushwick	217	108	96	12	109	77	9	13	7	3
Flatbush	106	42	37	5	64	13	11	24	16	-
Fort Greene	259	117	100	17	142	94	7	11	30	-
Gravesend	81	25	18	7	56	25	7	13	11	-
Red Hook-Gowanus..	208	90	74	16	118	89	15	6	8	-
Sunset Park	86	33	27	6	53	18	8	15	12	-
Wmsbрг-Greenp't ..	193	107	94	13	86	61	16	9	-	-
QUEENS	723	356	314	42	367	216	28	98	19	6
Astoria-L.I. City.	134	58	43	15	76	40	13	22	-	1
Corona	81	39	36	3	42	24	3	15	-	-
Flushing	90	47	40	7	43	27	1	15	-	-
Jamaica East	179	103	99	4	76	54	4	7	10	1
Jamaica West	139	56	51	5	83	43	5	25	8	2
Maspeth-For. Hills	100	53	45	8	47	28	2	14	1	2
RICHMOND	58	33	21	12	25	4	1	16	3	1

*Cases of active tuberculosis on Health District Rosters as of December 31, 1963.

†Includes 16 out of town, not in sanatoria.

‡No medical or clinic care.

CHART 10
TUBERCULOSIS CASES* BY TYPE OF CARE, NEW YORK CITY, 1947-1963



*KNOWN CASES, DEPARTMENT OF HEALTH
REGISTER, (on DECEMBER 31).

†UNDER MEDICAL SUPERVISION, DEPARTMENT OF HOSPITALS.
‡TYPE OF CARE, UNCLASSIFIED AND FEW OUT OF TOWN NOT
IN SANATORIA.

PHYSICAL INVENTORY OF REGISTER DURING 1961
ACCOUNTS FOR PART OF DECLINE.

COMPILED FROM REPORTS OF DEPARTMENT OF HEALTH,
CITY OF NEW YORK TUBERCULOSIS AND
HEALTH ASSOCIATION.

CLINIC CARE

The 10.2 per cent increase in newly reported active tuberculosis cases resulted in a general increase in clinic services and census. Ordinarily, in addition to providing anti-microbial treatment in the chest clinics, to active tuberculosis patients, the Department of Health chest clinics also have under observation approximately 10,000 other individuals with inactive tuberculosis who receive at periodic intervals X-rays and clinical examinations. It is hoped in this way to discover evidence of relapse at the earliest moment and assure that these patients are placed under treatment promptly.

Active Cases Under Clinic Supervision

Active tuberculosis cases under the Department of Health clinic supervision increased from 1,617 in 1962 to 1,894 in 1963, a 17.1 per cent increase (Table 35). There was also a slight increase in the active tuberculosis cases under supervision in "Other Chest Clinics" (Department of Hospitals and voluntary hospitals), 443 in 1962 compared with 470 in 1963, an increase of 6.1 per cent. It is worth while noting that the proportion of persons with active tuberculosis under clinic care, compared to the known total under all auspices, i.e., hospitals, clinics, private physicians, etc., has been increasing steadily in recent years, having been 31 per cent in 1954, 30 per cent in 1959, 32 per cent in 1962, and 36 per cent in 1963. Since the advent of chemotherapy, there is a large and increasing number of non-hospitalized tuberculous patients. The foregoing statistics indicate that the Department of Health clinics care for a greater proportion of patients today than a decade ago, whereas clinics of the Department of Hospitals and voluntary hospitals now take care of fewer patients with active tuberculosis. Thus in 1951, 50 per cent of all "clinic cases" with active tuberculosis were under non-Health Department care, whereas in 1963 the proportion was 20 per cent. Furthermore, in 1963, 35 per cent (1,689) of all newly reported cases of active tuberculosis was first reported by clinics. Of these, 83 per cent were reported by Department of Health chest clinics.

There were 491 non-hospitalized individuals with positive sputum under Department of Health chest clinics supervision during the six month period July to December 1963.

All Cases Under Department of Health Clinic Supervision

There was a 14 per cent increase in the number of all tuberculosis cases under Health Department supervision in 1963. Twenty thousand four hundred and thirty-one (20,431) tuberculosis cases were under supervision in 25 chest clinics operated by the New York City Department of Health on December 31, 1963. Included were adults with pulmonary tuberculosis, 19,237 (active 1,702; inactive, arrested and apparently cured cases, 17,278; activity undetermined, 257); children with pulmonary tuberculosis, 188; persons under care for pleurisy with effusion, 342; and other forms of tuberculosis, 664 (Table 36).

Visits to Department of Health Clinics by Tuberculous Patients

More visits by tuberculous patients to Department of Health chest clinics were made during 1963 than in any of the previous four years (Table 37). The combined total visits for adults and children in 1963 was 80,236 compared to 67,084 in 1962 resulting in a 19.6 per cent increase.

Nurses' Field Visits to Tuberculous Patients at Home

In 1963, 17,044 field visits were made to tuberculous patients at home, an increase of 2.8 per cent over that of 1962 (Tables 38 and 39). Field visits are made

by nurses of the Bureau of Nursing, New York City Department of Health, for the following purposes: to encourage contacts of tuberculous patients to be examined for possible disease or infection; also to urge tuberculous patients to visit the chest clinic and continue treatment.

A new element in the program for tuberculosis control - that of the tuberculosis lay investigator - was initiated immediately after the Health Department became aware of the increase in newly reported tuberculosis cases in 1963.

Due to the shortage of public health nurses, the Department of Health with the aid of Tuberculosis Association grants, employed 12 tuberculosis lay investigators. Following intensive orientation by the Bureau of Nursing of the Department of Health, lay investigators were assigned to chest clinics located in those sections of the City in which tuberculosis is most prevalent.

Working under public health nursing supervision, the lay investigators' function is to convince suspects and delinquent patients to return to the chest clinics and continue to keep clinic appointments - remaining under medical supervision of a clinic as long as the clinic feels that the disease warrants medical supervision and treatment.

Combined Attendance of Tuberculous Patients, Contacts and Others at Tuberculosis Services

The combined attendance at the Department of Health Tuberculosis Services in 1963 was 273,848 compared to 246,821 in 1962, an increase of 11.0 per cent (Table 40).

Table 35.
PATIENTS WITH ACTIVE TUBERCULOSIS UNDER CLINIC CARE BY BOROUGH
(Active Cases on Tuberculosis Register, December 31)
New York City, 1952 - 1963

Patients	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
DEPARTMENT OF HEALTH CLINICS												
Manhattan	1053	1018	1096	1147	1041	915	741	718	701	568	540	671
Bronx	308	261	357	422	413	337	324	283	285	227	299	356
Brooklyn	835	870	952	941	915	827	757	728	651	553	565	647
Queens	267	208	263	246	252	253	280	257	237	203	205	216
Richmond	19	19	21	19	20	18	21	11	6	7	8	4
N.Y. City	2482	2376	2689	2775	2641	2350	2123	1997	1880	1558	1617	1894
OTHER CLINICS*												
Manhattan	1122	1147	1004	703	651	573	495	439	416	332	218	220
Bronx	362	400	404	250	218	189	165	142	142	79	82	102
Brooklyn	378	444	349	337	285	243	179	129	125	106	107	119
Queens	491	516	458	353	251	123	86	61	55	45	36	28
Richmond	26	12	12	10	2	3	6	2	1	1	-	1
N.Y. City	2379	2519	2227	1653	1407	1131	931	773	739	563	443	470
TOTAL ALL CLINICS												
Manhattan	2175	2165	2100	1850	1692	1488	1236	1157	1117	900	758	891
Bronx	670	661	761	672	631	526	489	425	427	306	381	458
Brooklyn	1213	1314	1301	1278	1200	1070	936	857	776	659	672	766
Queens	758	724	721	599	503	376	366	318	292	248	241	244
Richmond	45	31	33	29	22	21	27	13	7	8	8	5
N.Y. City	4861	4895	4916	4428	4048	3481	3054	2770	2619	2121	2060	2364

*Department of Hospitals and voluntary hospitals.

Table 36.
TUBERCULOSIS CASES UNDER CLINIC SUPERVISION
 Department of Health, City of New York
 On Last Day of Year, 1957 - 1963

Year:	1957	1958	1959	1960	1961	1962	1963
Adults	18,536	18,226	18,701	17,966	17,191	17,457	20,063
687	469	463	439	564	462	368	
Children							
Total	19,223	18,695	19,164	18,405	17,755	17,919	20,431
ETHNIC GROUP							
White	9,731	9,016	9,301	8,692	7,948	7,946	†
Nonwhite	5,631	5,896	6,599	5,529	6,116	6,341	†
Puerto Rican	3,861	3,783	3,264	4,184	3,691	3,632	†
Total	19,223	18,695	19,164	18,405	17,755	17,919	20,431
TYPE OF CASES							
Pulmonary, adult							
Active disease	2,327	2,014	1,834	1,563	1,403	1,375	1,702
Inactives	15,374	15,490	16,091	15,600	15,125	15,274	17,278
Activity undetermined	389	227	243	239	187	250	257
Pulmonary, childhood	311	235	208	262	234	231	188
Pleurisy with effusion	331	307	307	302	262	240	342
Other forms of TB	491	422	481	439	544	549	664
Total	19,223	18,695	19,164	18,405	17,755	17,919	20,431

†Includes arrested, inactive and apparently cured cases.

*Not available.

Table 37.
VISITS TO CHEST CLINICS, TUBERCULOSIS CASES, 1957 - 1963
 Department of Health, City of New York

Type of Visit	Visits to Chest Clinics during year						
	1957	1958	1959	1960	1961	1962	1963
ADULTS							
First visits (new cases)...	5,333	3,539	3,783	3,295	2,731	3,058	3,317
Previous year's cases	15,928	17,898	17,555	16,902	16,634	16,730	16,631
Transfers from H.D.clinics	1,470	1,207	969	601	559	585	803
Revisits	52,557	53,636	52,228	47,237	44,388	44,125	56,822
Total adult visits	80,288	76,280	74,535	68,035	64,312	64,498	77,573
CHILDREN							
First visits (new cases)...	468	325	311	276	232	208	246
Previous year's cases	898	858	767	865	866	619	517
Transfers from H.D.clinics	118	97	88	98	66	69	61
Revisits	3,428	2,727	2,633	2,838	2,276	1,690	1,839
Total children visits	4,962	4,007	3,799	4,077	3,440	2,586	2,663
TOTAL VISITS	85,250	80,287	78,334	72,112	67,752	67,084	80,235

Table 38.
NUMBER OF NURSES' FIELD VISITS TO TUBERCULOUS PATIENTS AT HOME
BY HEALTH DISTRICT
New York City, 1954 - 1963

Health District	Number of Field Visits by Nurses to Tuberculous Patients									
	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
NEW YORK CITY	42,186	32,411	31,206	27,434	23,156	18,625	18,716	16,531	16,586	17,044
MANHATTAN	18,519	12,431	12,095	11,257	10,913	8,340	8,454	7,361	6,700	5,996
Central Harlem	6,436	4,077	4,198	3,923	3,534	2,425	2,658	2,531	2,165	1,921
East Harlem	2,315	1,397	1,261	1,105	1,010	923	829	671	814	855
Kips Bay-Yorkville..	739	275	244	187	244	283	214	177	133	130
Lower East Side	3,059	2,299	1,948	2,373	2,191	1,469	1,461	1,206	1,041	891
Lower West Side	2,097	1,697	1,477	1,080	992	814	651	548	488	508
Riverside	2,714	1,717	2,044	1,892	2,072	1,816	2,050	1,675	1,518	1,126
Washington Heights..	1,159	969	923	697	870	610	591	553	541	565
BRONX	6,614	5,113	5,371	3,971	3,423	3,120	3,288	2,834	3,126	3,277
Fordham-Riverdale ..	579	379	374	407	304	252	266	187	186	201
Morrisania	1,925	1,664	1,606	1,086	955	772	938	843	972	1,091
Mott Haven	2,068	1,793	1,945	1,269	993	843	1,024	929	1,058	965
Pelham Bay	447	187	228	240	198	243	224	157	188	206
Tremont	908	720	852	629	563	619	581	468	452	465
Westchester	687	373	366	340	410	391	255	250	270	349
BROOKLYN	10,633	8,717	8,873	8,025	6,143	5,065	4,884	4,622	4,776	5,322
Bay Ridge	482	264	246	215	184	116	141	121	158	199
Bedford	2,372	1,902	1,538	1,518	1,416	1,083	928	1,164	1,034	1,186
Brownsville	776	372	473	535	392	408	494	564	617	793
Bushwick	876	765	981	666	604	430	523	449	491	546
Flatbush	617	627	472	488	454	321	300	250	184	305
Fort Greene	1,336	993	1,137	1,104	894	852	931	817	929	828
Gravesend	379	387	483	363	241	257	215	201	305	358
Red Hook-Gowanus ...	1,927	2,359	2,374	1,885	802	655	597	376	313	310
Sunset Park	749	451	409	376	236	169	150	181	194	190
Williamsburg-Greenpt	1,119	597	760	875	920	774	605	499	551	607
QUEENS	6,183	5,931	4,697	4,022	2,491	1,966	2,004	1,606	1,896	2,380
Astoria-L.I. City ..	792	784	687	589	551	419	274	306	332	334
Corona	775	906	738	624	280	232	320	212	221	313
Flushing	835	1,067	864	681	275	142	195	144	203	286
Jamaica East	1,621	1,576	1,224	1,085	639	510	611	527	545	754
Jamaica West	1,421	1,036	714	711	482	396	333	281	317	402
Maspeth-For.Hills ..	739	562	470	332	264	267	271	136	278	291
RICHMOND	237	219	170	159	186	134	86	108	88	69

Table 39.
**PER CENT NURSES' FIELD VISITS TO TUBERCULOUS PATIENTS AT HOME
OF TOTAL SERVICE VISITS BY HEALTH DISTRICT**
New York City, 1954 - 1963

Health District	Per Cent Field Visits by Nurses to TB Patients of Total Service Visits									
	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
NEW YORK CITY	13.2	11.0	11.3	10.5	9.0	8.2	9.1	9.3	9.8	11.8
MANHATTAN	29.1	23.8	23.3	22.8	21.1	19.5	22.5	22.3	20.7	25.1
Central Harlem	40.1	32.8	31.8	29.8	29.4	33.8	49.5	45.6	38.3	44.9
East Harlem	24.6	16.9	15.4	13.7	12.2	12.1	11.4	10.3	15.0	19.5
Kips Bay-Yorkville..	13.2	9.5	9.4	15.2	17.0	16.5	16.2	18.9	18.0	24.8
Lower East Side	27.1	23.5	23.7	30.0	25.7	20.4	20.2	17.8	14.7	17.6
Lower West Side	28.8	28.4	25.6	25.3	21.0	20.4	19.9	18.3	16.4	19.1
Riverside	31.2	27.6	31.7	28.0	27.5	22.3	26.4	26.7	25.7	30.2
Washington Heights..	21.7	14.4	12.6	8.6	9.6	8.8	11.1	13.8	11.9	17.1
BRONX	11.3	10.3	11.0	8.7	7.4	6.7	7.5	8.5	10.4	13.4
Fordham-Riverdale ..	6.5	5.3	5.7	6.5	4.8	3.4	4.4	4.4	4.5	11.2
Morrisania	16.5	15.3	17.6	10.7	8.7	6.4	9.5	11.7	16.0	18.8
Mott Haven	14.5	15.9	17.7	15.5	13.2	11.2	11.9	15.4	18.0	20.0
Pelham Bay	9.7	3.9	4.0	4.3	3.5	4.9	4.9	5.2	6.0	7.7
Tremont	8.2	8.5	8.6	6.3	6.0	7.0	6.7	6.1	6.9	7.4
Westchester	8.6	5.2	5.5	6.1	6.8	6.9	4.4	5.1	6.5	11.1
BROOKLYN	8.8	7.2	8.3	8.1	6.7	6.8	7.4	8.7	9.3	11.5
Bay Ridge	5.3	3.2	3.1	2.8	2.6	1.6	2.3	4.4	10.4	18.1
Bedford	18.3	14.1	15.8	15.3	12.4	12.3	13.7	21.1	19.9	27.4
Brownsville	7.4	3.3	6.6	7.4	5.4	8.5	8.7	9.8	8.8	11.3
Bushwick	8.6	6.2	7.8	10.1	9.9	9.1	10.6	10.9	9.4	13.5
Flatbush	4.8	5.0	4.4	4.9	4.4	3.5	4.0	4.7	5.7	8.0
Fort Greene	12.1	15.1	13.4	12.4	9.4	12.7	16.6	16.4	15.2	16.0
Gravesend	4.0	3.2	4.9	3.4	2.7	2.9	3.6	4.0	6.1	8.6
Red Hook-Gowanus ...	7.5	8.6	9.4	7.9	4.5	5.0	4.9	3.3	2.8	2.8
Sunset Park	9.1	5.6	6.6	6.3	4.1	3.2	4.0	6.2	9.9	12.0
Williamsburg-Greenp't	10.9	6.2	8.0	11.2	11.6	13.8	8.2	9.2	11.2	15.5
QUEENS	9.5	9.8	8.1	7.3	4.4	3.7	4.1	3.2	3.8	5.2
Astoria-L.I. City ..	5.8	5.8	5.8	5.6	5.8	4.1	3.1	4.2	4.2	5.8
Corona	14.2	16.6	14.8	12.1	5.9	5.9	4.9	2.8	3.1	4.4
Flushing	9.9	12.8	10.5	7.5	2.2	1.3	2.3	1.5	2.0	3.9
Jamaica East	11.0	11.9	10.3	9.4	5.8	5.5	5.8	5.3	5.4	8.6
Jamaica West	11.1	8.3	5.7	6.2	3.9	3.2	3.6	3.5	3.0	3.3
Maspeth-For.Hills ..	7.4	7.6	5.3	4.5	4.1	4.5	5.1	1.8	6.5	7.3
RICHMOND	2.3	2.1	2.0	1.5	1.9	1.5	1.0	1.3	2.6	2.0

Table 40.
ATTENDANCE* AT HEALTH DEPARTMENT TUBERCULOSIS SERVICES BY BOROUGH
 New York City, 1950 - 1963

Year	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond
1950	267,537	106,648	35,555	90,562	28,278	6,494
1951	249,551	99,615	31,268	86,198	25,267	7,203
1952	252,828	98,747	32,355	86,025	28,949	6,752
1953	250,581	101,524	30,484	84,147	27,684	6,742
1954	257,942	107,121	30,889	86,282	27,017	6,633
1955	309,387	127,157	40,074	106,642	27,935	7,579
1956	331,765	131,230	46,018	117,229	29,748	7,540
1957	289,141	117,183	41,749	97,178	28,687	4,344
1958	276,413	107,340	46,981	89,742	27,407	4,943
1959	267,605	93,496	50,551	88,389	30,126	5,043
1960	255,278	87,088	49,641	83,615	29,353	5,581
1961	246,503	84,586	47,230	81,113	29,195	4,379
1962	246,821	82,093	46,484	82,666	31,116	4,462
1963	273,848	90,901	51,387	94,484	32,823	4,253

*Tuberculosis cases, suspects and contacts.

Note: In 1963, there were 48,187 new admissions to the clinics, an increase of 10.8 per cent over 1962; and 80,848 individuals were examined, an increase of 7.6 per cent over 1962.

PRIVATE PHYSICIANS

Active cases of tuberculosis reported under treatment by private physicians have dropped to 385 individuals. The proportion of persons receiving such care for active tuberculosis on December 31, 1963, was 6 per cent, whereas in 1950 the proportion was 15 per cent. It is presumed that an additional number of inactive cases receive prolonged chemotherapy under the care of private physicians but specific information is not available on inactive cases.

Table 41.
TUBERCULOUS PATIENTS UNDER CARE OF PRIVATE PHYSICIANS BY BOROUGH*
 New York City, 1950 - 1963

Year	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond
1950	2,834	637	468	1,013	635	81
1951	2,510	560	438	893	535	84
1952	2,091	483	363	675	510	60
1953	2,009	456	342	642	514	55
1954	1,488	376	262	452	351	47
1955	1,117	247	204	328	292	46
1956	979	234	148	282	284	31
1957	778	164	101	228	260	25
1958	690	149	100	191	225	25
1959	625	127	95	161	214	28
1960	520	108	83	136	171	22
1961	404	74	57	142	114	17
1962	388	84	62	131	99	12
1963	385	94	53	124	98	16

*Cases with active tuberculosis on the Department of Health Register as of December 31.

ANTIBACTERIAL DRUG TREATMENT

The Department of Health introduced in its tuberculosis clinics, beginning in July, 1953, a large-scale program of specific antibacterial drug treatment of patients. By the end of 1953 there were 1,111 persons on treatment, and their number continued to increase for the following ten years so that on December 31, 1963, there were 8,758 patients receiving antituberculosis drugs. In the twelve Department of Hospital clinics it is estimated that 4,500 patients are receiving drug treatment. Therefore, at present the total number under this type of care in clinics of the municipal agencies is approximately 13,200 persons. Increasing drug treatment in clinics bears an inverse relationship to diminishing bed complement in the hospitals.

These data verify the change which has occurred in New York City, primarily as a result of effective chemotherapy for tuberculosis. The number of deaths and hospital beds have declined materially, while the number of living patients who need active treatment and supervision has continued to increase.

DISTRIBUTION OF ANTITUBERCULOSIS DRUGS FOR TUBERCULOUS PATIENTS ATTENDING CLINICS OF VOLUNTARY HOSPITALS

Since July 15, 1963 antituberculosis drugs have been made available without charge by the Bureau of Tuberculosis of the New York City Department of Health to patients under medical supervision of chest clinics of voluntary hospitals. Drugs are supplied to patients with active or inactive tuberculosis, pulmonary or non-pulmonary, as prescribed by the clinic physicians of the voluntary hospitals.

The standard first line antituberculosis drugs - Isoniazid (INH), Streptomycin (SM) and Para-aminosalicylic acid (PAS) - are being supplied. In addition, Cycloserine and Ethionamide are also being supplied to chest clinics of voluntary hospitals in New York City to be distributed to the patient, without charge, as prescribed by the clinic physician.

Table 42.
SPECIFIC ANTIBACTERIAL DRUG TREATMENT CASES, SINCE 1956
Chest Clinics, Department of Health, City of New York

Year:- Month	Patients on Treatment							
	1956		1957		1958		1959	
	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment
January	4,513	242	5,044	242	5,815	305	5,970	254
February	4,629	249	5,187	232	5,952	277	6,008	196
March	4,681	206	5,250	258	6,040	267	6,054	262
April	4,699	200	5,312	252	6,151	297	6,098	283
May	4,838	293	5,406	264	6,126	275	6,182	283
June	4,838	277	5,062	262	6,130	368	6,094	273
July	4,916	242	5,065	211	6,214	283	6,002	269
August	5,030	195	5,188	234	6,314	213	6,010	241
September	5,080	156	5,267	204	6,326	251	5,883	217
October	5,143	282	5,419	305	6,362	258	5,848	244
November	5,271	271	5,623	356	6,407	203	5,726	202
December	5,070	202	5,709	314	6,116	255	5,716	302
Year	--	2,815	--	3,134	--	3,252	--	3,026

Year:- Month	Patients on Treatment							
	1960		1961		1962		1963	
	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment	End of Month†	Started‡ Treatment
January	5,750	229	--	262	--	289	--	338
February	5,836	248	--	227	--	283	--	403
March	5,897	236	--	340	--	376	--	393
April	5,979	298	--	339	--	347	--	457
May	6,075	302	--	296	--	414	--	399
June	6,051	300	6,635	403	7,416	383	8,147	354
July	6,224	306	--	319	--	306	--	*
August	6,355	277	--	314	--	317	--	*
September	6,368	247	--	239	--	292	--	*
October	6,423	263	--	313	--	293	--	*
November	6,529	231	--	233	--	324	--	*
December	6,360	246	6,990	263	7,549	283	8,758	*
Year	--	3,183	--	3,548	--	3,907	--	*

*Patients under clinic supervision including active and arrested cases.

†Exclusive of those re-started on treatment, which was 314 during the first six months of 1963.

‡Effective July 1, 1963, collection of these data was discontinued.

Table 43.
Part A - BCG VACCINATIONS
Department of Health, City of New York, Since 1950

Year:-	1950	1951	1952	1953	1954	1955	1956
BCG Vaccinations	809	1,092	1,484	1,339	922	805	620
Year:-	1957	1958	1959	1960	1961	1962	1963
BCG Vaccinations	2,095	4,160	4,075	3,128	2,812	2,271	2,276

Part B - BCG VACCINATIONS, DEPARTMENT OF HEALTH CHEST CLINICS
New York City, 1962 and 1963

Chest Clinic	BCG Vaccinations		Chest Clinic	BCG Vaccinations	
	1962	1963		1962	1963
Morningside	216	185	Brownsville	273	364
Upper Harlem	57	46	Bushwick	19	7
East Harlem	77	64	Fort Greene	317	194
Central Chest	29	9	Red Hook	90	78
Chelsea	24	7	Sunset Park	6	2
Manhattanville	100	80	Williamsburg-Greenpoint.	38	90
Washington Heights	27	2	Astoria	--	2
Montefiore	--	--	Corona	5	11
Morrisania	248	217	Triboro	--	--
Mott Haven	181	109	Jamaica	--	--
Tremont	104	73	Rockaway	7	--
Bedford	385	667	Richmond	14	4
Crown Heights	54	65	All Clinics	2,271	2,276

Note: Approximately 90 per cent of these persons were children under 15 years of age.

In the Department of Health Clinics, children who are household contacts of tuberculous patients are tuberculin tested, while adult contacts are X-rayed. For those children who fail to react to the tuberculin test, BCG vaccination may be recommended. Children who show a positive reaction to tuberculin when first tested, or who subsequently become tuberculin positive, may be offered isoniazid treatment as a prophylactic measure.

Conference Report of the Advisory Committee
on B C G Vaccination in New York City*

The Conference of Expert Consultants to advise the New York City Commissioner of Health in regard to the use of BCG vaccination was held in New York City February 18-19, 1964.¹² It was recommended that the most suitable age group for vaccination is the seventh grade classes of junior high schools in areas of high tuberculosis prevalence. It was emphasized that in addition to the BCG vaccination program in junior high schools, the present policy of offering BCG to family contacts in Health Department clinics throughout the city would be continued. Furthermore, an extension of the program of tuberculin testing, BCG vaccination, and isoniazid treatment to reactors now conducted in 5 child health stations was contemplated to be instituted as early as administratively possible.

Pilot Project of B C G Vaccination for 7th Grade Students
In 16 Selected Junior High Schools in New York City, Spring 1964

The purpose of this project was to implement the recommendations of the BCG Advisory Committee. Since the majority of the new cases of tuberculosis that occur in New York City are derived from individuals whose infections are of considerable standing, no strong immediate impact is to be expected from this immunization program. It is anticipated, however, that if this type of BCG vaccination program is carried out effectively for a number of years, it should eventually lead to a significant reduction in the incidence of tuberculosis.

The operational plan of this pilot project provided for intradermal tuberculin test of 7th grade students of 16 junior high schools in New York City, selected from areas with a high incidence of active tuberculosis; to vaccinate with BCG those students whose cutaneous reaction to the tuberculin test is unequivocally negative and to X-ray those students whose cutaneous reaction to the tuberculin test is positive; referral to local chest clinics of the Department of Health for consideration for chemotherapy and examination of household and family members of those students whose cutaneous reaction to the tuberculin test is very strong; arrange for annual X-ray examination of those students who exhibited a positive reaction to the tuberculin test; and retest within 3 to 6 months a 10 per cent sample of those vaccinated with BCG.

Disposable syringes and needles were employed for the BCG vaccination. The BCG vaccinations and chest X-rays were given to students only on parental request.

The result of this pilot BCG vaccination project for the month of May, 1964 indicated that from a total of 8,451 children in the 7th grades of 16 selected junior high schools, who were given the opportunity to be inoculated with BCG vaccine, 4,166 (49.3%) were inoculated. An additional 2,708 7th, 8th and 9th grade children in two other junior high schools were also given the opportunity of BCG vaccination. Of these, 939 (34.7%) were inoculated.

*This report is available from the New York Tuberculosis and Health Association.

The following 2 tables are summaries of tuberculin testing and BCG vaccination results for 24 schools during February, March and May, 1964.

Table 44.
TUBERCULIN TESTING RESULTS IN 24 SELECTED JUNIOR HIGH SCHOOLS
 New York City, February, March and May, 1964

Month of BCG Vaccination (and Tuberculin Test Method used)	Number of Schools	Total Tested and Read	Tuberculin Negative		Tuberculin Positive	
			Number	Per cent	Number	Per cent
February and March (Tine)	6	1,292	1,008	78.0	284	22.0
May (Mantoux)	16	4,734	4,166	88.0	568	12.0
May (Tine)	2	1,564	1,403	89.7	161	10.3
Total	24	7,590	6,577	86.7	1,013	13.3

Table 45.
RESULT OF BCG VACCINATION PROJECT IN 24 SELECTED JUNIOR HIGH SCHOOLS
 New York City, February, March and May, 1964

Month of BCG Vaccination (and Tuberculin Test Method used)	Total Registration Covered	Maximum Eligible	Received BCG Vaccination		
			Number	Per cent of Registration	Per cent of Maximum Eligible
February and March (Tine)	2,508	1,956	889	35.4	45.4
May (Mantoux)	8,451	7,437	4,166	49.3	56.0
May (Tine)	2,708	2,429	939	34.7	38.7
Total	13,667	11,822	5,994	43.9	50.7

*Computed by applying the per cent tuberculin negative to the total registration covered.

HOSPITALIZATION FOR TUBERCULOSIS

The hospital is still an important source of medical care for tuberculous patients in New York City, although during the past decade there has been a gradual increase in non-institutionalized tuberculous patients as a result of chemotherapy. On December 31, 1963, of the 6,588 patients with all forms of active tuberculosis, 3,106* (47.1%), were under institutional care within the City or in hospitals out of town. The proportion of persons with active pulmonary tuberculosis who were in hospitals increased since 1940 until it reached a high of 52.9% in 1952 as shown on the following table. During the last decade this proportion has fluctuated around 50 per cent.

Table 46.
TUBERCULOSIS CASES HOSPITALIZED
As of December 31: 1940, 1945, 1950 - 1963

Year	Tuberculosis Cases on Register	Hospitalized (in and out-of-town)	
		Number	Percent
PULMONARY			
1940	19,846	7,118	35.9
1945	17,290	6,412	37.1
1950	17,985	8,671	48.2
1951	17,911	8,951	50.0
1952	17,278	9,135	52.9
1953	17,045	8,817	51.7
1954	14,690	7,453	50.7
1955	12,472	6,186	49.6
1956	11,318	5,824	51.5
1957	10,363	5,439	52.4
1958	9,221	4,797	52.0
1959	8,457	4,368	51.6
1960	7,916	4,090	51.7
1961 (TB ALL FORMS)	6,842	3,427	50.1
1962 (TB ALL FORMS)	6,349	3,185	50.2
1963 (TB ALL FORMS)	6,588	3,106	47.1

During the 1940-1950 period there were several thousand more persons hospitalized each year than is the case today. At that time, because of a bed shortage, institutional facilities were unequal to the need, and long waiting lists for admission were the rule. Thereafter the peak was reached in 1952 when 9,606 New Yorkers with active tuberculosis (all forms) were in hospitals. Then there followed a drop in

*It is to be noted that the figure of 3,106 patients (all forms of TB) in hospitals and sanatoria on the register as of December 31, 1963 does not appear to correspond with the patient census listed separately for the local individual institutions (2,212). This is due in part to the fact that there are some tuberculous patients in general hospitals both in and out of town, other than those listed in the local tuberculosis or chest services. Too, there may be a lag in reporting discharged patients to the Bureau of Tuberculosis.

the City of the total number of patients with active disease and a subsequent easing of the situation, so that access to a hospital bed was improved materially. More recently the bed complement has been reduced substantially so that fewer beds are available today than nine or ten years ago. Many of the remaining facilities will no doubt continue to be used to their maximum capacity. In general, hospitalization of the patient usually insures close medical supervision, the carrying out of prescribed treatment and an immediate step in preventing the patient from being a source of infection to others.

Hospital authorities point out that in the past decade significant changes have taken place in the hospital treatment of tuberculous patients and attribute them mainly to the effectiveness of antituberculosis drugs. Whereas in the past, pneumothorax was an important element in such treatment, today it has virtually disappeared. Less stress is being placed on the use of strict bed rest, and early ambulation of patients is more common. Reports indicate that hospital stay has been shortened. The need for beds is less urgent since not only are there fewer patients at any given time but their hospitalization is shorter. In New York City tuberculosis bed occupancy rates at present are relatively high and on an average are in the 85 to 90 per cent range.

On December 31, 1963, 3,106 New York City residents with various forms of active tuberculosis were receiving hospital care in public and private institutions both in and out of town. A large proportion of these people (2,617) were under institutional care within the city, mainly in hospitals under control of the Department of Hospitals of the City of New York.

Table 47.
NEW YORK CITY RESIDENTS HOSPITALIZED FOR ACTIVE TUBERCULOSIS
Patients Hospitalized on Last Day of Each Year
1950 - 1963

Year	Total TB Patients Hospitalized	Place of Hospitalization	
		Hospital in City	Institutions Out of Town
1950	9,075	6,714	2,361
1951	9,375	6,987	2,388
1952	9,606	7,347	2,259
1953	9,342	7,083	2,259
1954	7,970	6,208	1,762
1955	6,650	5,332	1,318
1956	6,252	5,185	1,067
1957	5,756	4,880	876
1958	5,122	4,378	744
1959	4,653	3,996	657
1960	4,371	3,698	673
1961	3,427	2,764	663
1962	3,185	2,609	576
1963	3,106	2,617	489

Table 48.
HOSPITALIZED TUBERCULOUS PATIENTS BY BOROUGH OF RESIDENCE
As of December 31st, 1950 - 1963

Year	Total NYC Residents Hospitalized For Tuberculosis	Borough of Residence†				
		Manhattan	Bronx	Brooklyn	Queens	Richmond
1950	9,075	4,354	1,170	2,316	1,103	132
1951	9,375	4,555	1,253	2,371	1,062	134
1952	9,606	4,672	1,269	2,414	1,106	145
1953	9,342	4,534	1,180	2,397	1,096	135
1954	7,970	4,014	1,086	1,955	808	107
1955	6,650	3,358	882	1,523	796	91
1956	6,252	3,238	774	1,455	719	66
1957	5,756	3,020	631	1,365	679	61
1958	5,122	2,626	565	1,295	573	63
1959	4,653	2,387	583	1,135	486	62
1960	4,371	2,228	576	1,030	492	45
1961	3,427	1,748	494	806	344	35
1962	3,185	1,513	504	823	316	29
1963	3,106	1,368	453	897	355	33

†Patients with active tuberculosis hospitalized in hospitals in New York City and out-of-town institutions.

Table 49.
TUBERCULOSIS FACILITIES
New York City, 1960 - 1964*

HOSPITALS	Tuberculosis Bed Complement		New York City Patient Census			Ratio Bed Occupancy
	1960	1961	1962	1963	1964	
NEW YORK HOSPITALS:						
Bellevue Hospital (a)	368	309	284	284	289	79%
Elmhurst City Hospital	20	20	20	20	14	70%
Harlem Hospital (b)	46	46	56	50	33	72%
Kings County Hospital (a)	609	605	604	546	505	533
Metropolitan Hospital (b)	134	99	99	105	128	98%
Nathan B. Van Etten Hosp. (b)	321	321	321	321	286	293
Sea View Hospital (d)	403	18	18	18	258	17
Triboro Hospital	527	508	508	508	512	500
Department of Hospitals	2428	1926	1935	1910	1852	2025
N.Y. State Hospital, Ray Brook	(†)	(†)	(†)	(†)	(†)	160
Other State and County Hospitals	(†)	(†)	(†)	(†)	(†)	15
Brooklyn Hospital	?	?	?	?	?	6
Hospital Jt. Diseases (Tbc. Cases)	(†)	(†)	(†)	(†)	(†)	2
Montefiore Hospital	20	20	20	20	20	24
New York Hospital (Tbc. Service)	12	12	12	12	6	11
St. Anthony's Hospital	389	389	389	389	369	357
St. Joseph's Hospital (e)	321	321	--	--	--	314
Private Institutions	749	749	428	402	719	574
New York City Patients	3352	2897	2559	2501	2427	2919
						2448
						2286
						2212
						1995
						875
						855
						894
						824

*Data for years 1960 to 1963 as of December 31; for 1964 as of July 31. (†)No stated bed complement for New York City patients. (§)Exclusive of City patients in hospitals not shown here. (a)TB unit, (b)Hospital, (c)Service discontinued on April 1, 1962, (d)In July 1961, Sea View was discontinued as a TB hospital. Farm Colony and Sea View were merged and the combined institution became known as the Sea View Hospital and Home, with a bed capacity of 1,032. This number included 18 beds set aside for Staten Island residents who may become ill with TB.

Table 50.
**TUBERCULOUS PATIENTS TREATED IN VOLUNTARY HOSPITALS IN CITY AND
 PUBLIC INSTITUTIONS OUT OF TOWN**
YEAR: 1963

Part A - Admissions, Total Treated, Patient Days Care

Institutions	Patients on First Day of Year	Admissions During Year			Total Treated During Year	Patient Days Care Ren- dered	Average No. Days Care During Year per Patient
		New	Re- Adm.	Total			
PRIVATE INSTITUTIONS IN CITY:							
Brooklyn Hospital(Tbc.Cases)*.	--	--	--	--	--	--	--
Hosp. Jt. Dis. (Tbc.Cases) ...	1	16	8	24	25	1,221	49
Montefiore Hosp. (Tbc.Service)	30	189	89	278	308	12,571	41
New York Hospital(Tbc.Div.) ..	11	30	--	30	41	3,848	94
St. Anthony's Hospital	354	592	156	748	1,102	127,628	116
Total Private	396	827	253	1,080	1,476	145,268	98
SUBURBAN AREA							
Grasslands Hosp.(Tbc.Service).	80	237	146	383	463	29,622	64
Nassau County Sanatorium	176	258	76	334	510	60,757	119
Summit Park Sanatorium	38	35	17	52	90	14,021	156
Total Suburban	294	530	239	769	1,063	104,400	98
N.Y.State Hospital, Ray Brook.	180	136	15	151	331	55,753	168

*Data not available.

Part B - Patients Discharged Alive or Who Died During Year

Institutions	Total Dis- charged Alive or Dead	Patients Dis- charged Alive			Deaths During Year			Percent Died in Institution (All Causes)
		Non- TB	TB	Total	Non- TB	TB	All Deaths	
PRIVATE INSTITUTIONS IN CITY:								
Brooklyn Hospital(Tbc.Cases)*.	--	--	--	--	--	--	--	--
Hosp. Jt. Dis. (Tbc.Cases) ...	25	25	--	25	--	--	--	--
Montefiore Hosp. (Tbc.Service)	272	76	172	248	1	23	24	8.8
New York Hospital(Tbc.Div.) ..	28	27	--	27	1	--	1	3.6
St. Anthony's Hospital	745	652	41	693	43	9	52	7.0
Total Private	1,070	780	213	993	45	32	77	7.2
SUBURBAN AREA								
Grasslands Hosp.(Tbc.Service).	380	194	114	308	29	43	72	18.9
Nassau County Sanatorium	378	303	41	344	19	15	34	9.0
Summit Park Sanatorium	56	47	--	47	5	4	9	16.1
Total Suburban	814	544	155	699	53	62	115	14.1
N.Y.State Hospital, Ray Brook.	193	179	--	179	9	5	14	7.3

*Data not available.

†Per cent of all discharges, alive and dead.

Table 51.
TUBERCULOSIS HOSPITAL FACILITIES
 New York City Suburban Area, 1960 - 1963

HOSPITALS and SANATORIA	Tuberculosis Bed Complement				Patient Census December 31				Ratio Bed Occupancy			
	1960	1961	1962	1963	1960	1961	1962	1963	1960	1961	1962	1963
SUBURBAN AREA-												
Grasslands Hospital (Tbc. Service)	188	100	105	105	99	82	80	83	53%	82%	76%	79%
Nassau County San. ...	326	326	271	250	245	223	176	132	75%	68%	65%	53%
Summit Park San.	77	77	77	77	49	52	38	34	64%	68%	49%	44%
New York Suburban Institutions	591	503	453	432	393	357	294	249	66%	71%	65%	58%

DEPARTMENT OF HOSPITALS INSTITUTIONS

The New York City Department of Hospitals institutions at the end of 1963 had a rated capacity of 18,802 beds, operating on a bed complement of 18,201.¹³ Administratively, there were 21 individual institutions including seven hospital centers (Bellevue, Bronx Municipal, City Elmhurst, Harlem, Kings County, Metropolitan and Queens), seven distinct general hospitals (Coney Island, Cumberland, Fordham, Greenpoint, Lincoln, Morrisania and Sydenham), and four special hospitals (Delafield, Ewing, Goldwater and Sea View). On December 31, 1963, the tuberculosis bed complement in eight of the hospitals was 1,910 or 10.5 per cent of the total, the same percentage as 1962. This indicates that, for 1963, approximately one of every ten beds was assigned for care of tuberculous patients as compared to one out of eight in 1960 and one out of four in 1952 and 1953.

Table 52.
BED COMPLEMENT*
 Department of Hospitals
 New York City, 1952 - 1963

Year	Bed Complement		
	All Hospitals	Tuberculosis Beds Number	Tuberculosis Beds Percent
1952	20,795	5,008	24.1
1953	20,346	4,911	24.1
1954	19,969	4,494	22.5
1955	19,685	3,801	19.3
1956	19,876	3,778	19.0
1957	19,899	3,694	18.6
1958	20,179	3,685	18.3
1959	19,274	2,648	13.7
1960	19,204	2,428	12.6
1961	18,531	1,926	10.4
1962	18,398	1,935	10.5
1963	18,201	1,910	10.5

The following quotes are taken from the "Annual Report For the Year 1963, Department of Hospitals, The City of New York".

"Changes in Bed Complement and Service. On January 1, 1963 the tuberculosis bed complement in the municipal hospitals was 1,935. During the year Metropolitan increased its complement from 99 to 105, Harlem had a reduction from 56 to 50 and in Bellevue the number of beds declined from 309 to 284 - at the end of the year the tuberculosis bed complement was 1,910. Tuberculous patient days in 1963 amounted to 633,187 compared to 641,138 in 1962 - a decrease of 7,951. The average daily census in the first six months was 1,718 and 1,687 for the last half of the year. The occupancy rate averaged 88.9 per cent.

*BED COMPLEMENT: The bed complement of a hospital is the number of hospital beds (exclusive of newborn infant bassinets) normally available for use by inpatients. Bed complement should not be confused with "Maximum Bed Capacity" which is theoretically the largest number of hospital beds, exclusive of newborn infant bassinets, which could be established in the hospital at any given time based upon space intended for such use, whether or not beds are installed. Handbook on Accounting, Statistics and Business Office Procedures for Hospitals, American Hospital Association (1950).

"There was no change in the bed complement in the voluntary hospital tuberculosis services, which remained at 428 with an occupancy rate of 90.8 per cent. Two New York State tuberculosis hospitals accepted City-charged patients - the average census of such cases in Ray Brook was 149, while at Homer Folks it was 15.

"Combined Health-Hospitals Clinics. The Health and Hospitals combined clinic program for the care of the ambulatory tuberculous patients continued in Triboro, Metropolitan and Van Etten. The project in the latter two hospitals, patterned on the one established in Triboro a few years ago, had financial support through a \$70,000 grant from the U.S. Public Health Service made available through the Department of Health. The purpose of the program is to give intensive services to known tuberculous patients so that they will remain under treatment until completion of therapy; bring under medical supervision those patients with active tuberculosis who have lapsed; resolve the status of those classified as "undetermined"; bring suspected cases found through the hospital X-ray admission program under care and have all contacts of newly discovered active tuberculous patients examined. The project budget also provides for personnel (physician, public health nurse, social work consultant, X-ray technician, clerks, stenographers, visiting nurses) as well as X-ray services and drugs. It is proposed to extend this program to other hospitals. A combined clinic was set up on Staten Island, co-ordinating services of the Richmond Chest Clinic with the facilities at Sea View. Patients will have available all of the usual services and drugs and in addition the hospital will perform necessary examinations, such as special laboratory tests related to drug toxicity, tomographic X-ray examination of the chest or pulmonary function tests."

It should be noted that only three voluntary general hospitals in New York City regularly maintain a total of only 33 beds for the care of tuberculous patients. The remaining beds are in a specialized voluntary hospital.

The Hospital Admission X-ray Program, for which the Departments of Health and Hospitals assume responsibility, is described elsewhere in this report.

"With the cooperation of the Department of Health, a full-time physician was assigned to Kings County as a tuberculosis control officer and to act as liaison with the chief of the hospital service. This physician will concern himself with the admission chest X-ray program and the follow-up of all tuberculosis cases discovered.

"The tuberculosis services were faced with an acute intern and resident shortage. To provide adequate medical care and treatment, additional appropriations were made to appoint licensed qualified physicians paid on a per session basis. At present \$300,000 is being used annually for regular daily sessions scheduled to cover the municipal tuberculosis services. A new budget allotment of \$350,000 to improve the personnel setup on the tuberculosis services is ready for scheduling.

"The tuberculosis subcommittee of the Interdepartment Health Council has had the problem of the "detention" patient under discussion and recommends that an adequate number of security facilities be opened in municipal tuberculosis services to provide such patients with intensive medical care, including psychiatric consultation, recreation and social service.

"In view of the frequency and importance of pulmonary insufficiency as an associated condition in tuberculous and non-tuberculous chest patients, a program has been developed in cooperation with the Department of Welfare to purchase intermittent positive pressure breathing respirators for persons in need of them for long periods. Respirators for Welfare home care patients may also be procured in this manner. Chest service physicians will visit home care patients or patients will be returned to the hospital for treatment, as necessary. Experience has shown that many patients with significant pulmonary insufficiency may remain at home in a fairly satisfactory state of health with the use of these respirators."

VI. CASE DETECTION

Detection of previously unknown tuberculosis is an important facet of a program for control of tuberculosis. Proven methods are being used widely and various established techniques are constantly improved and adjusted to meet the particular needs of the different communities in New York City. Concerted effort is directed toward case finding together with increased emphasis on case-finding follow-up as exemplified by the Harlem Area Tuberculosis Casefinding Project.

Tuberculin testing of school children, chest X-ray examinations of the population in tuberculosis high-prevalence areas, and routine chest X-ray examination of patients admitted to general hospitals account for the major portion of organized case-finding programs.

TUBERCULIN TESTING OF SCHOOL CHILDREN

The School Health Services of the Department of Health instituted a new program entitled "Pre-High School Examination and Tine Tuberculin Test Program", at the completion of the seventh year of tuberculin testing in secondary schools. In the new program, the tuberculin test was made an integral part of the pre-high school physical examination. Due to legal questions, the new program was initiated rather late in the 1962-1963 school year and the results are very spotty.¹⁴

In the Elementary and Junior High Schools-starting with the 1962-1963 school year, the program for the pre-high school examination is as follows: (1) A written parental request is required for a pre-high school examination by the school physician and (2) A tuberculin test (the Tine method) will be administered to those pupils whose parents have signed the request for this test. If the pre-high school examination is done by the private physician, he may use either the Mantoux, Heaf or Tine Tuberculin Test method.

In the Secondary Schools-the inclusion of the tuberculin test as a required part of the routine new admission examination in the secondary schools also started as of the 1962-1963 school year. The examination, tuberculin test, and X-ray require a written parental request.

The combined results of the 8th and 9th year (1962-'63 and 1963-'64) of tuberculin testing of school children are presented in the following two tables.

Table 53.
PRE-HIGH SCHOOL TINE TEST BY MEDICAL SOURCE PROVIDING TEST
 New York City, 1962 - 1963 and 1963 - 1964

Medical Source Providing Test	Number Tested and Read	Number Positive	Per cent Positive
School Physician*	20,215	1,833	9.1
Private Physician	2,862	34	1.2
Total	23,077	1,867	8.1

*Tine Test

Table 54.
**TINE TEST DONE AS NEW ADMISSIONS TO HIGH SCHOOLS
 BY TYPE OF SCHOOL**
 New York City, 1962 - 1963 and 1963 - 1964

Type of School	Number Tested and Read	Number Positive	Per cent Positive
Vocational	939	191	20.3
Public Academic	961	224	23.3
Parochial	1,132	102	9.0
Total	3,032	517	17.1

The former tuberculin testing program in secondary schools called for tuberculin testing of all students newly admitted to the public, parochial and private high schools of New York City and yearly X-ray examination of the positive reactors to the test throughout their secondary school careers. Participation of students was based upon parental request.

The seventh year (1961-1962) of tuberculin testing in the secondary schools had marked the fourth year of testing by the Heaf multiple puncture method. Results for the four years are shown, but they are not completely comparable since a refinement in the criteria of reading the results of the test was made in the second, third and fourth year of testing. Whereas PPD (Purified Protein Derivative) was used exclusively for testing in the last three years, OT (Old Tuberculin) was used almost exclusively in the first year.

Table 55.
TUBERCULIN TESTING IN SECONDARY SCHOOLS
 Department of Health, The City of New York
 1955 - 1962

School Year	Tested and Read	Number Positive	Per cent Positive
1955 - 1956 (a)	46,361	3,852	8.3
1956 - 1957 (a)	54,373	3,743	6.9
1957 - 1958 (a)	56,842	3,577	6.3
1958 - 1959 (b)	58,370	10,590	18.1
1959 - 1960 (b)	56,189	5,597	10.0
1960 - 1961 (b)	59,709	5,599	9.4
1961 - 1962 (b)	56,074	7,005	12.5

Note: Entering students, age range approximately 13-15 years.
 (a)Patch test, (b)Heaf multiple puncture test.

Upon subsequent X-raying and followup of positive reactors there were active cases of tuberculosis found: 1955-56=6, 1956-57=11, 1957-58=11, 1958-59=11, 1959-60=14, 1960-through December=6, 1961-62=6.

**HEAF TEST STUDY IN 22 PAROCHIAL SCHOOLS
NEW YORK CITY, 1959-1960 TO 1962-1963**

This summary is a preliminary report of the Heaf Test Study which was done by the New York City Department of Health with the cooperation of the Tuberculosis and Health Associations of New York City.

Purposes of Study:

1. To explore the possibility of developing a more timely if not more sensitive index of tuberculosis infection which could complement the routine mortality and morbidity data for a particular area.

With this in mind, it was hypothesized that children attending schools that are located in high tuberculosis incidence areas would have a higher percentage of positive reactors than children attending schools in low incidence areas. If the extent of positivity among elementary school children correctly reflects the magnitude of tuberculosis infection in their area, then a Heaf Test Survey would offer a quick means of determining it because it takes only a few days to apply and read this test. This relatively short time period for determination of the degree of infection would be especially useful for those areas where there have been recent significant population shifts and, therefore, past incidence statistics are no longer adequate.

2. To determine the conversion Heaf tuberculin rates by retesting, in the last study year, children who were negative in the 1st and 4th grades in the first study year. Thus the conversion rate will tell what proportion of the Heaf test negative children became positive three years later.

Method of Study

Parochial schools were selected for this study because they tend to have a more stable student population. The 22 parochial schools were divided on the basis of their areas' pre-study incidence and socio-economic statistics into Low, Medium and High Incidence Area Schools.

Arrangements were made with the school authorities to Heaf Test (with parental approval) all the students in the 1st, 4th and 7th grades, each year for 4 years. For each child tested a form was filled out specifying the child's name, school, grade, and Heaf Test result. Possible results were: negative, 1 weak (1W), 1 strong (1S), 2, 3, and 4. It was agreed to call a reaction positive if the reading was shown to be 1S or higher. Negative or 1W readings were defined as negative readings.

Follow up of home associates of all the children who reacted positively was an additional, secondary activity. (Assistance was provided by the Tuberculosis and Health Associations in New York City which furnished Public Health Nurses for intensive follow-up work.)

Result

A paper entitled "Tuberculin Reaction and Conversion Rates in School Children In New York City" was presented by Dr. Arthur B. Robins, Director, Bureau of Tuberculosis, New York City Department of Health, at the Annual Meeting of the American Thoracic Society, May 24-27, 1964, in New York City, in which some of the results of this study were given. A consistent increase in the percentage of positive reactors was found from the younger to the older children. The reactor rate in the first grade was 3.5%; in the fourth grade, 6.9%; and in the seventh grade, 10.2%; an average of 1.1% per year.

Of the 2,200 reactors X-rayed, seven were found to have active tuberculosis, six of these being primary disease. In relation to the follow up of associates of the reactors, 7,000 were examined, leading to the detection of 12 active cases of tuberculosis.

Table 56.
HEAF TEST STUDY IN 22 PAROCHIAL SCHOOLS
 Per Cent Positive By Incidence Area and School Grade
 New York City, 1959 - 1960 to 1962 - 1963

Grade and Year	Number Tested and Read			Number Positive			Per Cent Positive		
	Total	High Inci-dence	Low & Med. Inc.	Total	High Inci-dence	Low & Med. Inc.	Total	High Inci-dence	Low & Med. Inc.
1st Grade									
1959-1960	2,781	1,150	1,631	69	51	18	2.5	4.4	1.1
1960-1961	3,086	1,237	1,849	93	48	45	3.0	3.9	2.4
1961-1962	2,508	1,067	1,441	114	61	53	4.5	5.7	3.7
1962-1963	2,719	1,048	1,671	114	61	53	4.2	5.8	3.2
Total	11,094	4,502	6,592	390	221	169	3.5	4.9	2.6
4th Grade									
1959-1960	2,793	1,168	1,625	159	109	50	5.7	9.3	3.1
1960-1961	2,712	1,104	1,608	166	90	76	6.1	8.2	4.7
1961-1962	2,487	1,017	1,470	233	110	123	9.4	10.8	8.4
1962-1963	2,669	995	1,674	178	83	95	6.7	8.3	5.7
Total	10,661	4,284	6,377	736	392	344	6.9	9.2	5.4
7th Grade									
1959-1960	2,678	1,044	1,634	215	137	78	8.0	13.1	4.8
1960-1961	2,799	1,070	1,729	279	110	169	10.0	10.3	9.8
1961-1962	2,492	982	1,510	312	143	169	12.5	14.6	11.2
1962-1963	2,475	886	1,589	261	126	135	10.5	14.2	8.5
Total	10,444	3,982	6,462	1,067	516	551	10.2	13.0	8.5
Total									
1959-1960	8,252	3,362	4,890	443	297	146	5.4	8.8	3.0
1960-1961	8,597	3,411	5,186	538	248	290	6.3	7.3	5.6
1961-1962	7,487	3,066	4,421	659	314	345	8.8	10.2	7.8
1962-1963	7,863	2,929	4,934	553	270	283	7.0	9.2	5.7
TOTAL	32,199	12,768	19,431	2,193	1,129	1,064	6.8	8.8	5.5

TUBERCULOSIS INFECTION RATES

One of the intermediate objectives recommended by the Arden House Conference on tuberculosis toward the goal of eradication is the lowering of infection rate in children so that no more than 1 per cent of 14-year-old children in the nation will react to tuberculin. This is the same criterion laid down by the most recent WHO Expert Committee on tuberculosis by which a country could judge its progress towards the control of tuberculosis.

The record of New York City in respect to rates of infection is somewhat incomplete since there has been inadequate systematic testing of the 14 year-old population.

Thirty years ago it was estimated that one-third of the children in the 10 to 15 year age group reacted to intracutaneous tuberculin tests. Of adults tested and particularly older adults in congested areas in New York City, a very high proportion was found to be infected.

Since then the decline in tuberculosis incidence rates has been concomitant with corresponding lowering of the infection rates. It is estimated by the National Tuberculosis Association that one-fifth of the people in the United States are infected with the tubercle bacillus. Since New York City's new case rate and death rate are higher than the national rates, it seems likely that the tuberculosis infection rate for New York City would exceed the infection rate for the nation.

On a city-wide average, approximately 2 per cent of the children under 5 years of age show a positive reaction to the new multiple puncture tuberculin tests, 4 per cent in the group 5 to 9 years, 8 per cent in the group 10 to 14, and 20 per cent in the group 15 to 20; however, in different neighborhoods wide variations from these figures are observed. Among adults the reaction rates are substantially higher than children, insofar as can be determined from available survey data.

Long-term comparisons of infection rates must be made with a certain degree of caution since findings are not always based on the same method, technique, or tuberculin. Occasionally even modification of the same test or reading procedure may influence the result.

The early literature is replete with references to a variety of tuberculin tests. With the passing of time, the Mantoux intracutaneous test has survived and is currently used. More recently the multiple puncture tests, such as the Heaf and Tine tests, are used widely.

Since there is no practical way of standardizing retroactively the results of earlier surveys, except in a very general way, interpretation of apparent trends in infection must be based in part on deduction.

X-RAY EXAMINATIONS FOR TUBERCULOSIS

During 1963, 932,171 chest X-ray examinations for tuberculosis were reported by public and private agencies in New York City. The majority of the people so examined were adults. The case-finding methods used were community-wide surveys as well as X-ray examinations of patients in the New York City Department of Health clinics, persons admitted to general hospitals, and X-ray examinations by the three local Tuberculosis and Health Associations.

The Department of Health reported taking 568,261 chest X-ray examinations in connection with clinic and survey activities, 38 general hospitals reported 317,025 and the three local tuberculosis associations reported 46,885, a total of 932,171 for the year.

Table 57.
X-RAY EXAMINATIONS FOR TUBERCULOSIS
 By Department of Health, General Hospitals, and Tuberculosis Associations
 New York City, 1950 - 1963

Year	Total X-ray Examinations for TB	Department of Health*	General Hospital Admissions †	Brooklyn TB and Health Assn.	New York TB and Health Assn.	Queensboro TB and Health Assn.
1950	561,607	437,931	--	44,268	22,754	56,654
1951	625,690	523,683	--	49,133	24,970	27,904
1952	527,675	421,702	--	48,765	27,590	29,618
1953	564,824	456,529	--	46,441	33,949	27,905
1954	593,721	511,415	--	30,261	25,755	26,290
1955	734,604	619,247	17,264	28,231	34,663	35,199
1956	966,011	770,954	106,747	23,688	30,846	33,776
1957	1,016,078	691,467	246,630	21,341	23,759	32,881
1958	800,140	432,392	312,815	14,198	19,499	21,236
1959	788,216	427,702	299,389	19,690	20,569	20,866
1960	819,190	458,568	307,732	13,294	21,699	17,897
1961	786,038	423,421	311,477	15,187	18,630	17,324
1962	799,413	437,297	314,222	14,194	16,760	16,940
1963	932,171	568,261	317,025	12,872	17,553	16,460

*Including X-ray examinations other than for case-finding. In addition, chest X-ray examinations were made by the Department of Hospitals Clinics, Private Clinics, and Private Physicians for which agencies data were not available.

†The General Hospital Routine Admission Chest X-ray Program was initiated in New York City in 1955.

DEPARTMENT OF HEALTH

Of the 568,261 X-ray examinations reported by the Department of Health, 410,889 (72.3%) chest X-rays were taken in connection with surveys. These tables do not include X-rays taken by private industry, private physicians, and many hospitals which do not formally participate in established programs.

Table 58.
X-Ray Examinations
BUREAU OF TUBERCULOSIS, DEPARTMENT OF HEALTH
City of New York, 1956 - 1963

X-rays for Patients	1956	1957	1958	1959	1960	1961	1962	1963
Attending clinics	172,319	160,111	150,323	147,828	141,047	140,674	148,168	157,372
Survey cases..	598,635	531,356	282,069	279,874	317,521	282,747	289,129	410,889
(a) In clinics (62,611)	(40,037)	(38,744)	(41,149)	(45,396)	(42,575)	(43,082)	(45,491)	
(b) In field.. (536,024)	(491,319)	(243,325)	(238,725)	(272,125)	(240,172)	(246,047)	(365,398)	
Total	770,954	691,467	432,392	427,702	458,568	423,421	437,297	568,261

Table 59.
MASS X-RAY SURVEYS
Department of Health, The City of New York
1955 - 1963

Survey and Year	Number Persons X-rayed	Active Pulmonary Tuberculosis Not Previously Registered	
		Number	Rate†
South Bronx (1955-56)	271,225	216	0.8
Crown Heights (1956)	93,826	145	1.5
Lower East Side (1957)	140,417	154	1.1
Sunset Park, Bay Ridge (1957)	90,777	73	0.8
East Harlem (1959)	51,935	50	1.0
Morningside (1960)	87,193	93	1.1
Riverside (1961)	27,246	21	0.8
Brooklyn Neighborhoods (1961)	39,909	24	0.6
Manhattan Neighborhoods (1962)	31,835	20	0.6
Bronx Neighborhoods (1962)	26,874	31	1.2
City-wide Neighborhoods (1963)	139,320	80	0.6

†Per 1,000 persons X-rayed.

Tuberculosis casefinding program in New York City has benefited from the analysis of two methods of tuberculosis casefinding from data of surveys in Upstate New York.¹⁵ One method concentrated on general community surveys, the other on persons admitted to general hospitals. The result of the study indicated that hospital admission surveys accounted for a higher proportion of active tuberculosis cases than community surveys. In addition, this evaluative study clearly showed that in Upstate New York active tuberculosis cases could be detected at less cost if mass X-ray surveys were carried out in areas of over 80,000 population and among people over 25 years of age excluding school population and government employees.

In recent years, New York City -- being cognizant of the Upstate New York experience as indicated by the foregoing study -- had focussed its tuberculosis case-finding accordingly in order to obtain the best results at the lowest possible cost. Consequently, mass X-ray surveys have been confined to densely populated areas of known high tuberculosis prevalence.

Both the mass X-ray and general hospital admission chest X-ray program have been employed in New York City since 1955.

CITY-WIDE NEIGHBORHOODS MASS X-RAY SURVEY, 1963

The City-wide Neighborhoods Mass X-ray Survey, conducted from March 18 to June 28, 1963, resulted in X-raying 139,320 persons. This survey was not limited to just one Health District, but covered 19 Health Districts (5 Health Districts in the borough of Manhattan, 3 Health Districts in the Bronx, 7 Health Districts in Brooklyn, and 4 Health Districts in Queens).

There were 5,876 (4.2%) of all persons X-rayed called in for further examination. Of these, 4,375 (74.4%) responded.

One hundred and thirty-eight persons were diagnosed as having active pulmonary tuberculosis. Of these, 80 were not previously registered, yielding a new active case rate of 0.6 per thousand persons X-rayed. Sixty-one of the 80 newly discovered cases were diagnosed after re-examination. Twenty-three, or 28.8% of these 80 cases, were in the minimal stage.

An important dividend of tuberculosis casefinding is the other non-tuberculous conditions found. The respective individuals were informed of these non-tuberculous findings and were urged to see a private physician.

A total of 118 suspected neoplasms were diagnosed, a rate of 0.8 per thousand X-rays. Eighty-four of these 118 cases were diagnosed on re-examination. Also found were 35 cases of sarcoidosis, yielding a rate of 0.3 per thousand persons X-rayed. Thirty of these responded to a request for re-examination.

ROUTINE CHEST X-RAY EXAMINATION OF PATIENTS ADMITTED TO GENERAL HOSPITALS

New York State initiated a state-subsidized general hospital routine admission chest X-ray program in 1947. This program is a case-finding method used to discover unsuspected, previously unknown cases of tuberculosis. Under its terms the public and voluntary hospitals, outside of New York City, were encouraged to "screen" all newly admitted patients for tuberculosis. The New York State Department of Health offered two plans:

1. For hospitals with 4,000 admissions per year. New York State would lend a photoroentgen machine and would pay the hospital 50¢ for each report of the result of the examination.
2. For hospitals with less than 4,000 admissions per year. The hospital would utilize its own X-ray facilities and New York State would pay \$1.00 per examination reported. (The number 4,000 is interpreted to refer to in-patients, although the plan encourages hospitals to examine newly registered out-patients as well as employees and applicants for employment.)

On July 1, 1955 participation in this program was opened to the hospitals in New York City. At that time the Department of Health of the City of New York agreed to cooperate with the New York State Department of Health and to encourage hospitals in New York City to participate. The New York City Department of Health serves as the liaison agency between the hospitals and the New York State Department of Health. By the end of 1956, 26 hospitals were cooperating and, in 1962, 40 hospitals.

During 1957, 246,630 X-rays were taken and among them were 1,083 newly reported active pulmonary tuberculosis cases, a rate of 4.4 per 1,000 persons examined. In 1963, the total was 317,025 with 1,114 newly reported active cases, a rate of 3.5 per 1,000 X-ray examinations.

The general hospitals admission program has accounted for approximately one-fifth of all new active cases diagnosed annually (1960, 18.8%; 1961, 22.4%; 1962, 21.4%; 1963, 22.8%).

Finding these unknown cases of active tuberculosis is the very basis of a good prevention program, because the source of infection to others is thereby controlled. In addition, a valuable dividend is gained - that is, the discovery of a large number of neoplasms and other non-tuberculous chest conditions, particularly when they are in a silent or asymptomatic phase. Since nearly all of these tuberculosis suspects are hospital patients, they are available for clinical and laboratory study while they are receiving treatment for the primary condition for which they are hospitalized.

In 1962, at the request of the New York City Department of Health and the New York State Department of Health a study was made of the General Hospital Routine Admission Chest X-ray Program in New York City by the New York Tuberculosis and Health Association.¹⁶

In that year 38 general hospitals participated in the State program. The study included visits to 15 hospitals as well as review of statistical data from the City and State Departments of Health and the Veterans Administration. In summary the recommendations of the study were:

SUMMARY OF RECOMMENDATIONS

- I. It is recommended that the general hospital admission chest X-ray program be qualitatively improved and expanded in volume at the earliest possible opportunity.
- II. It is recommended that the State and City Departments of Health review their respective functions in this program and assign promotion, development and administration of the program to one department which will staff the program with qualified full-time field personnel.
- III. It is recommended that the subsidy for these examinations be increased substantially. This study indicates that a rate of \$1.50, without regard to type of X-ray examination employed, is justifiable.
- IV. It is recommended that formal approval of the admission chest X-ray program be obtained from the medical board of each hospital and that administrative and medical direction be assigned to one member of the hospital staff.
- V. It is recommended that standards of procedure for use in all hospitals be established for the purpose of improving the efficiency of the program.
- VI. It is recommended that future studies be conducted for better understanding and improvement of the program.

Following delivery of the report of this study to the Department of Health and the Department of Hospitals of the City of New York, and to the Department of Health of the State of New York, action has been taken as follows:

1. The New York Academy of Medicine in its report on the "Resurgence of TB" indicated its opinion that the routine chest X-ray examination for all patients over 15 years of age who have not had such examination in six months and whose condition does not contraindicate . . . "should be accepted as an essential part of good medical practice and should be supported by all institutions, including the voluntary hospitals."
2. The Department of Hospitals, which operates all municipal hospitals and has financed most of the admission chest X-ray program in these institutions, has made available an additional \$200,000 for expansion and improvement of the admission chest X-ray program in its own hospitals.
3. The City Health Department has assigned personnel, both professional and clerical, to a number of municipal hospitals to aid in strengthening the admission chest X-ray screening program.
4. The City of New York has taken steps to require routine chest X-ray examinations of all patients who are admitted to voluntary hospitals and whose care is paid for by the City.
5. Following discussions and suggestions by City officials, the Greater New York Hospital Association has issued this policy statement:

"It is recommended that the voluntary hospitals inaugurate, as of February 1, 1964, a program whereby chest X-rays will be taken of all ward patients fifteen (15) years of age or over, admitted on or after that date, who have not had a chest X-ray taken in the preceding six months."

Copies of the full report are available on request to the New York Tuberculosis and Health Association.

In 1963, a total of 56,351 persons were identified as having abnormalities other than tuberculosis. Among these 1,031, were presumed to have pulmonary neoplasms.

Table 60.
HOSPITAL ADMISSION CHEST X-RAY SURVEY
 Persons Examined by Age and Sex
 New York City, 1963

Age	Persons Examined					
	Number			% Distribution by Age		
	Total	Male	Female	Total	Male	Female
0-14	2,402	1,104	1,298	0.7	0.9	0.6
15-24	73,770	21,443	52,327	23.3	17.7	26.7
25-34	65,339	21,397	43,942	20.6	17.6	22.5
35-44	47,994	18,475	29,519	15.1	15.2	15.1
45-54	40,501	17,687	22,814	12.8	14.6	11.7
55-64	36,087	16,751	19,336	11.4	13.8	9.9
65+	44,334	21,815	22,519	14.0	18.0	11.5
Not stated ...	6,598	2,721	3,877	2.1	2.2	2.0
Total	317,025	121,393	195,632	100.0	100.0	100.0

Table 61.
HOSPITAL ADMISSION CHEST X-RAY EXAMINATIONS
 New York City, 1955 - 1963

Year	Number of Hospitals	Total Number X-rayed	Active Pulmonary Tuberculosis†			
			Total Cases Diagnosed		Not Previously Registered	
			Number	Rate‡	Number	Rate‡
1955*	5	17,264	131	7.6	--	--
1956	26	106,747	851	8.0	--	--
1957	39	246,630	1,644	6.7	1,083	4.4
1958	41	312,815	1,727	5.5	--	--
1959	41	299,389	1,589	5.3	1,040	3.4
1960	42	307,732	1,419	4.6	883	2.9
1961	40	311,477	1,599	5.1	976	3.1
1962	40	314,222	1,567	5.0	948	3.0
1963	39	317,025	1,892	6.0	1,114	3.5

*New York State plan started July 1, 1955 in New York City.

†X-ray diagnosis. ‡Active pulmonary tuberculosis cases per 1,000 examined.

Persons not previously registered compared to total cases diagnosed: 1959, 65 per cent; 1960, 62 per cent; 1961, 61 per cent; 1962, 61 per cent; and 1963, 59 per cent.

Table 62.
HOSPITAL ADMISSION CHEST X-RAY SURVEY
 New York City, 1960 - 1963

Year	Total Number X-rayed	Active Pulmonary Tuberculosis			
		Total Cases Diagnosed		Not Previously Registered	
		Number	Rate*	Number	Rate*
<u>1960</u>					
In-patients	112,966	819	7.2	489	4.3
Out-patients	157,519	564	3.6	368	2.3
Employees	31,760	25	0.8	17	0.5
Not reported	5,487	11	2.0	9	1.6
Total	307,732	1,419	4.6	883(a)	2.9
Municipal hospitals (17) ...	215,722	--	--	811	3.8
Voluntary hospitals (25) ...	92,010	--	--	72	0.8
<u>1961</u>					
In-patients	112,074	985	8.8	592	5.3
Out-patients	162,498	583	3.6	362	2.2
Employees	32,344	19	0.6	12	0.4
Not reported	4,561	12	2.6	10	2.2
Total	311,477	1,599	5.1	976(b)	3.1
Municipal hospitals (17) ...	223,276	--	--	925	4.1
Voluntary hospitals (23) ...	88,201	--	--	51	0.6
<u>1962</u>					
In-patients	112,727	1,051	9.3	630	5.6
Out-patients	164,264	492	3.0	297	1.8
Employees	31,476	9	0.3	8	0.3
Not reported	5,755	15	2.6	13	2.3
Total	314,222	1,567	5.0	948(c)	3.0
Municipal hospitals (19) ...	223,899	--	--	894	4.0
Voluntary hospitals (21) ...	90,323	--	--	54	0.6
<u>1963</u>					
In-patients	108,414	1,179	10.9	672	6.2
Out-patients	168,500	684	4.1	422	2.5
Employees	31,656	22	0.7	15	0.5
Not reported	8,455	7	0.8	5	0.6
Total	317,025	1,892	6.0	1,114(d)	3.5
Municipal hospitals (19) ...	234,241	--	--	1,058	4.5
Voluntary hospitals (20) ...	82,784	--	--	56	0.7

*Active pulmonary tuberculosis cases per 1,000 examined.

(a)1960=Minimal 197(22.3%), Moderately advanced 409(46.3%), Far advanced 277(31.4%); (b)1961=Minimal 201(20.6%), Moderately advanced 433(44.4%), Far advanced 342(35.0%); (c)1962=Minimal 160(16.9%), Moderately advanced 450(47.5%), Far advanced 338(35.6%); (d)1963=Minimal 278(25.0%), Moderately advanced 524(47.0%), Far advanced 312(28.0%).

Table 63.
HOSPITAL ADMISSION CHEST X-RAY SURVEY†
Newly Reported Active Pulmonary Tuberculosis, Numbers & Rate by Hospital
New York City, 1961 - 1963

HOSPITALS	Number of Patients X-rayed			Active Pulmonary Tuberculosis Cases Not Previously Registered					
				Number			Rate per 1000 X-rays		
	1961	1962	1963	1961	1962	1963	1961	1962	1963
MUNICIPAL:									
Bellevue	24,177	21,334	21,357	201	150	193	8.3	7.0	9.0
Bellevue Psychiatric	2,373	4,418	5,070	2	9	17	0.9	2.0	3.4
B.S. Coler	1,280	1,279	1,279	2	3	--	1.6	2.3	--
City Hospital Elmhurst ..	12,698	12,316	13,656	44	29	36	3.5	2.4	2.6
Coney Island	13,504	13,754	13,311	12	4	13	0.9	0.3	1.0
Cumberland	9,500	9,098	10,215	43	26	37	4.5	2.9	3.6
Fordham	12,179	12,229	10,608	50	70	46	4.1	5.7	4.3
Goldwater Memorial	1,794	1,792	1,643	1	--	--	0.6	--	--
Gouverneur	1,871	4,558	4,041	5	1	7	2.7	0.2	1.7
Greenpoint	7,682	6,639	7,633	19	18	15	2.5	2.7	2.0
Harlem	12,208	11,463	13,423	9	19	55	0.7	1.7	4.1
Jacobi	14,456	16,112	21,124	4	21	25	0.3	1.3	1.2
Kings County	23,550	21,597	25,493	285	347	301	12.1	16.1	11.8
Kings County Psychiatric.	2,450	5,854	6,625	13	11	28	5.3	1.9	4.2
Lincoln	13,178	12,770	13,576	45	25	118	3.4	2.0	8.7
Metropolitan	35,349	34,008	35,255	103	98	99	2.9	2.9	2.8
Morrisania	12,190	11,644	7,197	23	13	7	1.9	1.1	1.0
Queens General	18,318	17,828	17,358	47	37	37	2.6	2.1	2.1
Sydenham	4,569	5,206	5,377	17	13	24	3.7	2.5	4.5
Municipal Hospitals	223,276	223,899	234,241	925	894	1058	4.1	4.0	4.5
VOLUNTARY:									
Beth El	9,683	10,915	11,442	3	4	4	0.3	0.4	0.3
Booth Memorial	1,490	636	251	--	--	--	--	--	--
Bronx	6,911	7,025	6,983	3	8	7	0.4	1.1	1.0
Columbus	3,812	3,313	3,664	10	10	6	2.6	3.0	1.6
Flushing*	1,244	1,925	816	--	1	--	--	0.5	--
Grand Central*	1,872	1,539	54	--	1	--	--	0.6	--
Jewish Chronic	2,155	2,305	3,357	1	--	--	0.5	--	--
Joint Diseases*	2,127	1,785	600	1	1	--	0.5	0.6	--
Lebanon	1,446	2,251	1,591	1	1	--	0.7	0.4	--
Le Roy	--	514	774	--	1	1	--	1.9	1.3
Methodist*	2,179	2,109	1,996	--	--	--	--	--	--
Misericordia	2,212	2,068	1,970	1	1	1	0.5	0.5	0.5
Montefiore	17,602	21,904	20,702	--	2	13	--	0.1	0.6
Mother Cabrini	2,684	3,575	3,264	4	4	--	1.5	1.1	--
Presbyterian	12,801	11,096	12,123	15	13	16	1.2	1.2	1.3
St. Barnabas	1,498	1,791	2,304	1	2	3	0.7	1.1	1.3
St. Francis	5,410	5,073	4,473	4	2	4	0.7	0.4	0.9
St. John's Episcopal	4,726	4,420	3,249	1	--	1	0.2	--	0.3
St. John's, L.I.C.	1,364	2,425	1,869	2	2	--	1.5	0.8	--
St. Peter's	--	605	--	--	1	--	--	1.7	--
St. Vincent's, S.I.*	4,359	3,049	1,302	2	--	--	0.5	--	--
Staten Island	585	--	--	--	--	--	--	--	--
Voluntary Hospitals	88,201	90,323	82,784	51	54	56	0.6	0.6	0.7
ALL HOSPITALS	311,477	314,222	317,025	976	948	1114	3.1	3.0	3.5

*Hospitals withdrew from the program during 1963.

†State subsidized program.

HARLEM AREA TUBERCULOSIS CASEFINDING PROJECT
August 1962 - August 1964

Previous mass chest X-ray surveys conducted in New York City to detect tuberculosis indicated that between 3 and 4 per cent of all persons examined required further clinical study and that only 60 to 65 per cent of these presented themselves for further diagnostic examination.

The major objective of the Harlem Area Tuberculosis Casefinding Project is to determine why individuals who are suspected of having tuberculosis do not accept further medical examination. It has been found that by shortening the time gap between the initial X-ray and the follow-up clinic appointment, the importance of further examination is communicated to the suspect--helping to ensure his return. Those who fail to report are sought by personal phone calls and home visits, methods which succeed in bringing in most of the recalcitrants. In this way, approximately 22 per cent more tuberculosis suspects and their contacts have been protected.

Other objectives of this project are to conduct a chest X-ray program in the Harlem area, screening individuals over 15 years of age; to schedule and operate a mobile chest X-ray unit on a year-round basis; to intensify follow-up procedures in an attempt to bring in promptly for examination all persons whose initial film indicates evidence of tuberculosis, whether presumed to be active or inactive; and to bring in persons whose initial film shows evidence of adverse health conditions other than tuberculosis.

A specific area of the Central and East Harlem Health District was selected for the project because of its high prevalence of tuberculosis. The boundaries of the project area are from 110th Street in the south to 135th Street and from the Hudson River to the East River. Within this area approximately 350,000 individuals reside, 259,000 or 74 per cent of whom are estimated to be over 15 years of age and therefore eligible for chest X-ray.

The Harlem Area Tuberculosis Casefinding Project, which started on August 15, 1962 and is still in operation, is conducted jointly by the New York City Department of Health and the New York Tuberculosis and Health Association. The Department of Health supplies the X-ray bus, office quarters and clinical staff. The New York Tuberculosis and Health Association provides the project staff (two field representatives and a secretary) and promotional materials.

During the two years of the project, 78,283 chest X-rays were taken. Fifty-three per cent (53.0%) of all abnormal findings on survey chest X-rays were considered significant and designated as "call-in". Of these 2,547 "call-ins", 2,243 (88.1%) were re-examined; 174 (6.8%) refused re-examination and 130 (5.1%) of the "call-ins" were not located. In 145 (5.7%) of the "call-ins", newly reported tuberculosis was found.

Separate data for each year indicates the second year of the project to be more effective. In the second year of the project (55.5%) of all abnormal findings on survey chest X-rays were considered as significant and designated as "call-ins". One thousand one hundred eighteen (1,118) (89.8%) were re-examined; 80 (7.2%) refused re-examination and 47 (6.8%) of these "call-ins" were not located. In 82 (6.6%) of the "call-ins" newly reported tuberculosis was found.

During the first year of the project 50.7% of the abnormal findings on survey chest X-rays were considered significant and designated as "call-ins", 1,125 (86.4%) were re-examined; 94 (7.2%) refused re-examination and 83 (6.4%) of the "call-ins" were not located. In 63 (4.8%) of the "call-ins" newly reported tuberculosis was found.

VII - MORTALITY

TUBERCULOSIS MORTALITY

The number of deaths from tuberculosis recorded in New York City during 1963 was 683 a rate of 8.8 per 100,000 population, as compared to 740 deaths or a rate of 9.5 in 1962.

An increase in resident deaths from tuberculosis occurred only in the borough of Brooklyn (8.4%). There was a decrease in resident deaths from tuberculosis in the boroughs of Manhattan (14.1%), Bronx (33.3%), Queens (6.7%) and Richmond (42.9%). It should be noted that for Richmond the decrease in absolute numbers was from 7 to 4. The decrease for the City as a whole was 57 (7.7%).

A recent study, based on data from Upstate New York, has called attention to the relationship between the decrease in deaths from tuberculosis and the increase in deaths from emphysema.¹⁷ The following is a quote from this article.

"The use of antimicrobials has made possible the prolongation of life of tuberculous patients, particularly those with moderately and far-advanced disease, who previously contributed most to the mortality. Unfortunately, however, the drugs are unable to repair the damage done to the lungs by the tuberculous disease, so that, while the patients' lives are spared for the time being, their lungs become more susceptible to emphysematous changes".

This thesis gains support from a study of the tuberculous patients admitted to the Ohio Tuberculosis Hospital over a five-year period.¹⁸ The pulmonary function tests of the 386 tuberculous patients included in this study revealed that 50 per cent had evidence of emphysema and that there was a direct relationship between the stage of tuberculosis and the development of emphysema.

During the past few decades there has been a significant general decline in death rate from tuberculosis. The advent of antimicrobials may have also aided this decline and points to an emerging-possible causal-inverse relationship between the decline of deaths from tuberculosis and the increase in deaths from emphysema.

Table 64.
TUBERCULOSIS MORTALITY*
New York City, Since 1900

Year	Male		Female		Persons					
	Deaths *	Rate †	Deaths *	Rate †	Respiratory		Other Forms		Deaths *	Rate †
					Deaths *	Rate †	Deaths *	Rate †		
1900	5,783	338	3,847	222	8,154	237	1,476	43	9,630	280
1910	6,352	266	3,722	156	8,692	182	1,382	29	10,074	211
1920	4,211	149	2,924	103	6,165	109	970	17	7,135	126
1930	3,131	90	1,958	56	4,457	64	632	9	5,089	73
1940	2,394	65	1,233	33	3,323	45	304	4	3,627	49
1945	2,448	65	1,065	27	3,211	42	302	4	3,513	46
1950	1,718	45	603	15	2,154	27	167	2	2,321	29
1951	1,508	39	631	15	1,978	25	161	2	2,139	27
1952	1,209	31	389	9	1,460	18	138	2	1,598	20
1953	965	25	329	8	1,183	15	111	1	1,294	16
1954	826	21	301	7	1,048	13	79	1	1,127	14
1955	840	22	244	6	1,023	13.1	61	0.8	1,084	13.9
1956	719	19	255	6	916	11.7	58	0.7	974	12.4
1957	767	20	215	5	931	11.9	51	0.7	982	12.6
1958	632	17	201	5	772	9.9	61	0.8	833	10.7
1959	573	15	206	5	736	9.4	43	0.6	779	10.0
1960	615	17	195	5	763	9.8	47	0.6	810	10.4
1961	564	15	174	4	688	8.8	50	0.6	738	9.4
1962	544	15	150	4	694	8.9	46	0.6	740	9.5
1963	468	13	177	4	645	8.3	38	0.5	683	8.8

*Included are deaths occurring within New York City (residents, non-residents and persons of unknown address), exclusive of city residents who died out of town.

†Per 100,000 population.

Table 65.
TUBERCULOSIS MORTALITY BY DISTRICT OF RESIDENCE
New York City, 1962 - 1963

Health District	Estimated Population July 1, 1963	Resident Deaths in City*					
		Number		Change 1962-1963	Rate†		
		1962	1963		1962	1963	
NEW YORK CITY TOTAL	7,780,000	740	683	- 57	10	9	
NEW YORK CITY RESIDENTS	7,780,000	695	633	- 62	9	8	
MANHATTAN	1,650,000	276	237	- 39	17	14	
Central Harlem	228,000	85	72	- 13	37	32	
East Harlem	182,000	22	23	+ 1	12	13	
Kips Bay-Yorkville	212,000	16	14	- 2	8	7	
Lower East Side	258,000	34	32	- 2	13	12	
Lower West Side	253,000	57	39	- 18	23	15	
Riverside	250,000	40	35	- 5	16	14	
Washington Heights	267,000	22	22	---	8	8	
BRONX	1,430,000	93	62	- 31	7	4	
Fordham-Riverdale	241,000	16	6	- 10	7	3	
Morrisania	259,000	22	20	- 2	9	8	
Mott Haven	217,000	22	15	- 7	10	7	
Pelham Bay	181,000	6	2	- 4	3	1	
Tremont	265,000	14	13	- 1	5	5	
Westchester	267,000	13	6	- 7	5	2	
BROOKLYN	2,610,000	214	232	+ 18	8	9	
Bay Ridge	289,000	15	13	- 2	5	5	
Bedford	285,000	43	40	- 3	15	14	
Brownsville	318,000	11	24	+ 13	4	8	
Bushwick	211,000	23	24	+ 1	11	11	
Flatbush	468,000	17	20	+ 3	4	4	
Fort Greene	213,000	28	44	+ 16	13	21	
Gravesend	300,000	10	10	---	3	3	
Red Hook-Gowanus	157,000	28	23	- 5	18	15	
Sunset Park	185,000	11	16	+ 5	6	9	
Williamsburg-Greenpoint	184,000	28	18	- 10	15	10	
QUEENS	1,860,000	105	98	- 7	6	5	
Astoria-Long Island City	261,000	18	19	+ 1	7	7	
Corona	223,000	13	7	- 6	6	3	
Flushing	456,000	13	8	- 5	3	2	
Jamaica East	315,000	25	29	+ 4	8	9	
Jamaica West	320,000	21	19	- 2	7	6	
Maspeth-Forest Hills	285,000	15	16	+ 1	5	6	
RICHMOND	230,000	7	4	- 3	3	2	
NON-RESIDENTS	--	21	21	---	-	-	
RESIDENCE UNKNOWN	--	24	29	---	-	-	

*Excludes residents who died out of New York City. †Deaths per 100,000 population.

Table 66.
TUBERCULOSIS DEATHS BY RACE, AGE AND DISTRICT OF RESIDENCE
New York City, 1963

Health District	TOTAL	WHITE						NON-WHITE					
		Total	0-14	15-24	25-44	45-64	65+	Total	0-14	15-24	25-44	45-64	65+
NEW YORK CITY TOTAL	683	400	4	2	58	180	156	283	2	6	109	118	48
NEW YORK CITY RESIDENTS ...	633	365	4	2	53	159	147	268	2	6	104	113	43
MANHATTAN	237	114	1	1	15	56	41	123	1	5	44	53	20
Central Harlem	72	4	-	-	1	3	-	68	1	3	24	30	10
East Harlem	23	14	1	-	6	5	2	9	-	-	3	4	2
Kips Bay-Yorkville	14	13	-	-	-	9	4	1	-	-	1	-	-
Lower East Side	32	26	-	1	5	11	9	6	-	-	2	4	-
Lower West Side	39	30	-	-	-	17	13	9	-	-	1	4	4
Riverside	35	19	-	-	3	9	7	16	-	-	9	5	2
Washington Heights	22	8	-	-	-	2	6	14	-	2	4	6	2
BRONX	62	38	-	-	7	15	16	24	-	1	9	9	5
Fordham-Riverdale	6	6	-	-	-	2	4	-	-	-	-	-	-
Morrisania	20	7	-	-	3	1	3	13	-	-	7	4	2
Mott Haven	15	9	-	-	3	4	2	6	-	1	1	1	3
Pelham Bay	2	2	-	-	-	1	1	-	-	-	-	-	-
Tremont	13	8	-	-	1	3	4	-	-	-	1	4	-
Westchester	6	6	-	-	-	4	2	-	-	-	-	-	-
BROOKLYN	232	137	3	-	21	54	59	95	1	-	39	40	15
Bay Ridge	13	13	-	-	1	4	8	-	-	-	-	-	-
Bedford	40	9	-	-	1	5	3	31	-	-	11	15	5
Brownsville	24	15	1	-	4	5	5	9	-	-	5	3	1
Bushwick	24	12	1	-	2	6	3	12	-	-	3	7	2
Flatbush	20	19	-	-	2	8	9	1	-	-	-	1	-
Fort Greene	44	11	1	-	4	2	4	33	1	-	16	11	5
Gravesend	10	8	-	-	2	2	4	2	-	-	1	1	-
Red Hook-Gowanus	23	20	-	-	2	10	8	3	-	-	1	2	-
Sunset Park	16	16	-	-	1	7	8	-	-	-	-	-	-
Williamsburg-Greenpoint ...	18	14	-	-	2	5	7	4	-	-	2	-	2
QUEENS	98	73	-	1	10	32	30	25	-	-	11	11	3
Astoria-Long Island City ..	19	18	-	-	4	7	7	1	-	-	-	-	1
Corona	7	6	-	-	-	5	1	1	-	-	-	1	-
Flushing	8	6	-	-	-	2	4	2	-	-	-	2	-
Jamaica East	29	13	-	-	3	6	4	16	-	-	8	6	2
Jamaica West	19	14	-	-	1	6	7	5	-	-	3	2	-
Maspeth-Forest Hills	16	16	-	1	2	6	7	-	-	-	-	-	-
RICHMOND	4	3	-	-	-	2	1	1	-	-	1	-	-
NON-RESIDENTS	21	17	-	-	3	13	1	4	-	-	3	1	-
RESIDENCE UNKNOWN	29	18	-	-	2	8	8	11	-	-	2	4	5

TUBERCULOSIS DEATHS, PERCENTAGE DISTRIBUTION BY AGE

	Total	Age Group				
		0-14	15-24	25-44	45-64	65+
White	100.0	1.0	0.5	14.5	45.0	39.0
Non-white	100.0	0.7	2.1	38.5	41.7	17.0
Total	100.0	0.9	1.2	24.4	43.6	29.9

Table 67.
RECORDED TUBERCULOSIS DEATHS*
Mortality by Sex and Ethnic Group
New York City, 1953-1963

Year:-	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
WHITE											
Male	676	607	629	535	554	454	388	415	366	376	308
Female ..	200	188	124	136	123	118	105	108	100	89	92
Both Sexes.	876	795	753	671	677	572	493	523	466	465	400
NONWHITE											
Male	289	219	211	184	213	178	185	200	198	192	185
Female ..	129	113	120	119	92	83	101	87	74	83	98
Both Sexes.	418	332	331	303	305	261	286	287	272	275	283
ALL RACES											
Male	965	826	840	719	767	632	573	615	564	568	493
Female ..	329	301	244	255	215	201	206	195	174	172	190
Both Sexes.	1,294	1,127	1,084	974	982	833	779	810	738	740	683

*Included are deaths occurring within New York City (residents, non-residents and persons of unknown address), exclusive of city residents who died out of town. In the Nonwhite deaths were: Negro, Male=176, Female=98, Other races, Male=9, Female=0.

Table 68.
TUBERCULOSIS DEATHS AND DEATH RATES BY ETHNIC GROUP
New York City, 1953-1963

Year	Deaths*				Death Rate†			
	Total	White	Negro	Other	Total	White	Negro	Other
1953	1,294	876	392	26	16.4	12.6	46.6	85.8
1954	1,127	795	315	17	14.4	11.4	36.2	54.8
1955	1,084	753	312	19	13.9	10.9	34.7	59.8
1956	974	671	290	13	12.4	9.8	31.3	40.0
1957	982	677	282	23	12.6	10.0	29.4	66.2
1958	833	572	252	9	10.7	8.4	25.0	21.7
1959	779	493	272	14	10.0	7.4	25.8	29.0
1960	810	523	278	9	10.4	7.9	25.3	16.3
1961	738	466	259	13	9.4	7.0	23.8	24.3
1962	740	465	263	12	9.5	7.0	24.2	22.6
1963	683	400	274	9	8.8	6.0	25.2	17.0

*Deaths recorded within New York City (residents who died within city, non-residents, residence unknown), exclusive of city residents who died out of town.

†Per 100,000 population.

Table 69.
TUBERCULOSIS DEATHS, NEW YORK CITY 1958-1963
Residents, Non-Residents, Residence Unknown by Borough

Borough	Total Recorded Within City	Resident Deaths in City	Non-Residents	Residence Unknown
1958				
Manhattan	358	345	5	8
Bronx	120	114	3	3
Brooklyn	215	206	7	2
Queens	114	110	3	1
Richmond	26	13	4	9
NEW YORK CITY	833	788	22	23
1959				
Manhattan	340	320	11	9
Bronx	96	93	2	1
Brooklyn	234	226	5	3
Queens	95	87	6	2
Richmond	14	9	--	5
NEW YORK CITY	779	735	24	20
1960				
Manhattan	372	358	8	6
Bronx	101	93	5	3
Brooklyn	224	219	3	2
Queens	100	88	7	5
Richmond	13	9	1	3
NEW YORK CITY	810	767	24	19
1961				
Manhattan	321	299	9	13
Bronx	93	84	7	2
Brooklyn	205	198	1	6
Queens	105	93	7	5
Richmond	14	13	--	1
NEW YORK CITY	738	687	24	27
1962				
Manhattan	298	276	12	10
Bronx	100	93	4	3
Brooklyn	216	214	--	2
Queens	118	105	4	9
Richmond	8	7	1	--
NEW YORK CITY	740	695	21	24
1963				
Manhattan	259	237	12	10
Bronx	65	62	2	1
Brooklyn	236	232	1	3
Queens	117	98	5	14
Richmond	6	4	1	1
NEW YORK CITY	683	633	21	29

Note: Deaths of City residents occurring out of town are not included in above figures.

Table 70.
TUBERCULOSIS DEATHS[†] BY AGE AND SEX
New York City, 1952 - 1963

Year	All Ages	AGE																	
		0-4	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-		
MALES																			
1952 ..	1209	32	2	-	8	21	35	58	68	97	150	195	120	143	125	79	45	22	9
1953 ..	965	17	3	3	3	12	22	42	58	72	121	116	107	122	128	66	45	19	9
1954 ..	826	11	3	3	-	9	15	33	50	53	85	136	117	98	83	64	47	14	5
1955 ..	840	19	2	-	4	6	23	20	46	55	79	117	106	131	95	74	42	13	8
1956 ..	719	5	1	-	2	5	14	20	47	47	75	84	100	112	76	59	34	25	13
1957 ..	767	9	-	1	1	6	14	21	33	56	82	91	117	96	89	70	40	28	13
1958 ..	632	7	1	1	2	6	11	20	29	41	67	73	104	87	78	53	29	15	8
1959 ..	573	5	2	-	1	4	4	26	29	31	50	77	93	77	72	47	29	18	8
1960 ..	615	3	1	-	-	5	9	14	36	42	58	77	90	76	72	71	37	10	14
1961 ..	564	2	1	-	1	1	17	9	35	51	42	78	88	65	60	43	39	26	6
1962 ..	568	2	3	1	-	1	8	14	33	34	45	64	62	97	62	61	49	23	9
1963 ..	493	3	1	-	-	6	6	17	34	38	45	56	61	63	64	50	21	17	11
FEMALES																			
1952 ..	389	20	3	3	11	42	40	41	46	30	22	25	21	19	24	18	14	6	4
1953 ..	329	21	2	1	6	18	26	39	34	30	31	20	25	23	15	15	14	4	5
1954 ..	301	13	1	3	6	18	35	26	36	34	28	31	13	12	21	14	3	3	4
1955 ..	244	6	3	1	3	13	24	26	39	24	29	18	15	12	12	5	8	4	2
1956 ..	255	6	2	-	2	10	23	29	26	30	35	18	19	15	12	7	10	6	5
1957 ..	215	5	1	-	3	9	22	21	23	38	25	24	9	11	9	8	3	1	3
1958 ..	201	5	1	2	2	7	13	24	22	26	21	15	11	12	15	13	5	2	5
1959 ..	206	7	-	-	-	7	12	18	28	14	26	22	14	14	15	10	9	4	6
1960 ..	195	1	1	1	1	10	14	21	25	25	14	17	12	8	18	10	5	7	5
1961 ..	174	2	-	2	1	1	2	17	20	22	22	15	17	17	13	6	8	5	4
1962 ..	172	2	-	-	2	4	9	18	14	18	20	14	8	9	12	13	13	4	12
1963 ..	190	2	-	-	1	1	10	18	19	25	27	17	17	12	6	9	10	11	5
BOTH SEXES																			
1952 ..	1598	52	5	3	19	63	75	99	114	127	172	220	141	162	149	97	59	28	13
1953 ..	1294	38	5	4	9	30	48	81	92	102	152	136	132	145	143	81	59	23	14
1954 ..	1127	24	4	6	6	27	50	59	86	87	113	167	130	110	104	78	50	17	9
1955 ..	1084	25	5	1	7	19	47	46	85	79	108	135	121	143	107	79	50	17	10
1956 ..	974	11	3	-	4	15	37	49	73	77	110	102	119	127	88	66	44	31	18
1957 ..	982	14	1	1	4	15	36	42	56	94	107	115	126	107	98	78	43	29	16
1958 ..	833	12	2	3	4	13	24	44	51	67	88	88	115	99	93	66	34	17	13
1959 ..	779	12	2	-	1	11	16	44	57	45	76	99	107	91	87	57	38	22	14
1960 ..	810	4	2	1	1	15	23	35	61	67	72	94	102	84	90	81	42	17	19
1961 ..	738	4	1	2	2	2	19	26	55	73	64	93	105	82	73	49	47	31	10
1962 ..	740	4	3	1	2	5	17	32	47	52	65	78	70	106	74	74	62	27	21
1963 ..	683	5	1	-	1	7	16	35	53	63	72	73	78	75	70	59	31	28	16

[†]Total tuberculosis deaths recorded in New York City (residents who died within city, non-residents, residence unknown), exclusive of city residents who died out of town.

Table 71.
TUBERCULOSIS MORTALITY BY AGE
New York City, 1963

Age Group	All Forms		Respiratory System		Other Forms	
	Deaths	Death Rate*	Deaths	Death Rate*	Deaths	Death Rate*
0-14	6	0.3	3	0.2	3	0.2
15-24	8	0.8	2	0.2	6	0.6
25-44	167	7.9	154	7.2	13	0.6
45-64	298	14.8	288	14.3	10	0.5
65+	204	25.0	198	24.3	6	0.7
All ages ..	683	8.8	645	8.3	38	0.5

Table 72.
TUBERCULOSIS DEATHS AND DEATH RATES BY SEX AND ETHNIC GROUP
New York City, 1963

Ethnic Group	Total	Male	Female
Deaths Occurring Within City:			
White	400	308	92
Nonwhite	283	185	98
Negro	274	176	98
Other	9	9	--
Total	683	493	190
Death Rates Per 100,000 Population:			
White	6.0	10.0	2.7
Nonwhite	24.8	34.9	16.0
Negro	25.2	34.9	16.8
Other	17.0	35.5	--
Total	8.8	13.3	4.7

Table 73.
LEADING CAUSES OF DEATH
New York City, 1963

Rank	Cause of Death *	All Races		White		Non-white	
		Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
1	Diseases of the heart	38,227	491.3	34,725	523.0	3,502	307.2
2	Malignant neoplasms	17,254	221.8	15,433	232.4	1,821	159.7
3	Vascular lesions, cent. nerv. syst.	6,195	79.6	5,384	81.1	811	71.1
4	Influenza and pneumonia	3,697	47.5	2,925	44.1	772	67.7
5	Diseases of early infancy	2,759	35.5	1,675	25.2	1,084	95.1
6	Accidents	2,756	35.4	2,240	33.7	516	45.3
7	Cirrhosis of liver	2,298	29.5	1,703	25.6	595	52.2
8	Diabetes mellitus	1,848	23.8	1,568	23.6	280	24.6
9	General arteriosclerosis	1,138	14.6	1,034	15.6	104	9.1
10	Suicides	998	12.8	887	13.4	111	9.7
11	Congenital malformations	941	12.1	754	11.4	187	16.4
12	Diseases of stomach and duodenum ..	758	9.7	690	10.4	68	6.0
13	Other diseases of circulatory syst.	700	9.0	593	8.9	107	9.4
14	Tuberculosis	683	8.8	400	6.0	283	24.8
--	All other causes	8,369	--	6,418	--	1,951	--
	All Causes	88,621	1139.1	76,429	1151.0	12,192	1069.5

*Rank for all races. *Rates per 100,000 population.

*Causes of death, International List (7th rev.): (1)Diseases of the heart, 410-443; (2)Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues, 140-205; (3)Vascular lesions affecting central nervous system, 330-334; (4)Influenza and pneumonia, except pneumonia of newborn, 480-493; (5)Certain diseases of early infancy, 760-776; (6)Accidents, 800-962; (7)Cirrhosis of the liver, 581; (8)Diabetes mellitus, 260; (9)General arteriosclerosis, 450; (10)Congenital malformations, 750-759; (11)Suicides, 963; 970-979; (12)Diseases of stomach and duodenum, 540-545; (13)Tuberculosis, all forms, 001-019. (Numerals refer to category digits in international classification.)

Table 74.
ESTIMATED DEATH RATES FOR 10 LEADING CAUSES OF DEATH
United States, 1963

Rank	Cause of Death	Death Rate*	Percent of Total Deaths
1	Diseases of the heart	374.5	38.9
2	Malignant neoplasm, including neoplasms of lymphatic and hematopoietic tissues	152.3	15.8
3	Vascular lesions affecting central nervous system	106.7	11.1
4	Accidents	53.5	5.6
5	Influenza and pneumonia except pneumonia of newborn	36.9	3.8
6	Certain diseases of early infancy	32.9	3.4
7	General arteriosclerosis	19.7	2.0
8	Diabetes mellitus	17.6	1.8
9	Other diseases of circulatory system	13.0	1.4
10	Cirrhosis of liver	12.4	1.3
--	All other causes	142.2	14.8
	All Causes	961.6	100.0

*Rates per 100,000 population.

Note: The above data are based on a ten percent sample of deaths.

Deaths assigned to the 10 leading causes of death in the United States constituted 85 percent of all deaths. 19

SELECTED VITAL STATISTICS BY HEALTH CENTER DISTRICTS

New York City, 1963

Part A - Live Births, Infant Deaths, Leading Causes of Death

Health Center District	Live Births	Selected Causes of Death ^(†)						Deaths: All causes		
		Infant Deaths Under 1 year	Cardio- vascular	Malignant Neoplasms	Pneumonia	Accidents	Diabetes	Tuber- culosis	Total	White
					Influenza	All types	Mellitus			
NEW YORK CITY TOTAL	167,848	4,294	47,248	17,254	3,697	2,736	1,848	683	88,621	76,429
NEW YORK CITY RESIDENTS	155,967	4,047	45,313	15,905	3,536	2,488	1,793	633	83,621	71,911
MANHATTAN	29,625	904	10,774	3,870	929	706	350	237	21,005	15,924
Central Harlem	5,767	220	1,317	410	189	121	65	72	2,977	183
East Harlem	4,524	177	1,945	282	79	44	23	1,965	1,475	2,794
Kips Bay-Yorkville	2,312	43	1,687	597	135	72	31	14	2,967	2,654
Lower East Side	4,675	126	1,634	760	122	113	39	32	3,345	3,118
Lower West Side	3,236	102	1,895	651	167	112	61	39	3,618	3,320
Riverside	4,718	133	1,675	554	127	112	44	35	3,160	2,671
Washington Heights	4,393	103	1,621	616	110	97	66	22	3,013	2,303
BRONX	29,333	793	7,685	3,164	700	379	373	62	14,840	13,210
Fordham-Riverdale	3,908	72	1,587	537	95	61	46	6	2,680	2,644
Morrisania	6,810	264	1,228	442	180	74	47	20	2,580	1,813
Mott Haven	5,940	197	781	278	120	72	46	15	1,755	1,385
Pelham Bay	2,879	63	1,007	349	94	29	59	2	1,880	1,749
Fremont	5,057	114	1,633	1,011	118	74	91	13	3,405	3,153
Westchester	4,739	83	1,369	547	93	69	84	6	2,540	2,466
BROOKLYN	57,977	1,569	15,339	4,923	1,176	754	687	232	27,531	23,904
Bay Ridge	5,023	91	1,884	565	92	63	85	13	3,087	3,071
Bedford	8,028	297	1,416	480	145	103	92	40	2,942	1,317
Brownsville	8,436	263	1,707	496	167	90	88	24	3,133	2,674
Bushwick	5,661	157	1,278	362	95	72	69	24	2,315	1,995
Flatbush	7,878	143	3,165	1,113	178	110	115	20	2,366	2,257
Fort Greene	5,984	233	1,072	321	157	78	38	44	2,204	1,469
Gravesend	5,210	104	1,835	661	105	57	76	10	3,105	3,053
Red Hook-Brownus	3,645	102	873	261	72	55	31	23	1,609	1,430
Sunset Park	3,531	89	1,163	396	90	62	50	16	2,057	2,041
Williamsburg-Greenpoint	4,581	90	946	268	75	64	43	18	1,713	1,597
QUEENS	34,202	685	10,243	3,532	632	574	335	98	17,977	16,694
Astoria-Long Island City	4,462	93	1,462	524	95	79	46	19	2,627	2,562
Corona	4,716	99	1,288	447	96	75	43	7	2,314	2,113
Flushing	7,544	104	2,081	751	97	110	51	8	3,563	3,475
Jamaica East	6,267	164	1,532	522	101	112	53	29	2,810	2,025
Jamaica West	6,338	144	2,030	651	141	111	81	19	3,533	3,409
Maspeth-Forest Hills	4,875	81	1,850	637	102	87	61	16	3,130	3,110
RICHMOND	4,830	96	1,272	416	99	75	48	4	2,268	2,179
NON-RESIDENTS	10,426	248	1,651	1,296	116	146	51	21	4,208	3,954
RESIDENCE UNKNOWN	1,455	39	284	53	45	122	4	29	792	564

(†) According to rank for City.

Table 75 -continued
SELECTED VITAL STATISTICS BY HEALTH CENTER DISTRICTS
New York City, 1963
Part B - Rates for: Live Births, Infant Deaths, Leading Causes of Death

Health Center DISTRICT	Live Births ↑	Infant Deaths Under 1 year*	Selected Causes				Death Rate Per 100,000 Population			Deaths: All causes Crude Rate per 1000†		
			Cardio- vascular Renal	Malignant Neoplasms	Pneumonia, Influenza	Accidents All types	Diabetes Mellitus	Tuber- culosis	Total	White	Non-white	
NEW YORK CITY TOTAL	21.6	25.8	607.3	221.8	47.5	35.4	23.8	8.8	11.4	11.5	10.5	
MANHATTAN	18.0	30.5	653.0	234.5	56.3	42.8	21.2	14.4	12.7	13.3	11.2	
Central Harlem	25.3	38.1	577.6	179.8	82.9	53.1	28.5	31.6	13.1	22.9	12.7	
East Harlem	24.9	39.1	519.2	155.8	43.4	24.2	12.6	10.6	10.5	11.0		
Kips Bay-Yorkville	10.9	18.6	795.8	281.6	63.7	34.0	14.6	6.6	14.0	16.3	3.1	
Lower East Side	18.1	27.0	633.3	294.6	47.3	43.8	15.1	12.4	13.0	13.4	9.1	
Lower West Side	12.8	31.5	749.0	257.3	66.0	44.3	24.1	15.4	14.3	14.2	15.7	
Riverside	18.9	28.2	670.0	221.6	50.8	44.8	17.6	14.0	12.6	13.1	10.6	
Washington Heights	16.5	23.4	607.1	230.7	41.2	36.3	24.7	8.2	11.3	11.3	11.1	
BRONX	20.5	27.0	537.4	221.3	49.0	26.5	26.1	4.3	10.4	10.5	9.8	
Fordham-Riverdale	16.2	18.4	658.5	222.8	29.4	25.3	19.1	2.5	11.1	11.2	9.0	
Morrisania	26.3	38.8	474.1	170.7	69.5	28.6	18.1	7.7	10.0	9.8	10.4	
Mott Haven	27.4	33.2	360.0	128.1	55.3	33.2	21.2	6.9	8.1	7.9	9.0	
Pelham Bay	15.9	21.9	600.6	192.8	51.9	16.0	32.6	1.1	10.4	10.8	6.9	
Tremont	19.1	22.5	616.2	261.5	44.5	27.9	34.3	4.9	12.8	12.6	16.8	
Westchester	17.7	17.5	512.7	204.9	34.8	25.8	31.5	2.2	9.5	9.7	5.7	
BROOKLYN	22.2	27.1	587.7	188.6	45.1	28.9	26.3	8.9	10.5	10.7	9.6	
Bay Ridge	17.4	18.1	651.9	195.5	31.8	21.8	29.4	4.5	10.7	10.7	10.7	
Bedford	28.2	37.0	496.8	168.4	50.9	36.1	32.3	14.0	10.3	11.3	9.7	
Brownsville	26.5	31.2	536.8	156.0	52.5	28.3	27.7	7.5	9.9	9.7	10.9	
Bushwick	26.8	27.7	605.7	171.6	45.0	34.1	32.7	11.4	11.0	11.3	9.1	
Flatbush	16.8	18.2	676.3	237.8	38.0	23.5	24.6	4.3	11.5	11.4	15.6	
Fort Greene	28.1	38.9	503.3	150.7	73.7	36.6	27.8	20.7	10.3	11.3	8.9	
Gravesend	17.4	20.0	611.7	220.3	35.0	19.0	25.3	3.3	10.4	10.4	9.5	
Red Hook-Gowanus	23.2	28.0	556.1	166.2	45.9	35.0	19.7	14.6	10.2	10.4	9.0	
Sunset Park	19.1	25.2	628.6	214.1	48.6	33.5	27.0	8.6	11.1	11.1	17.8	
Williamsburg-Greenpoint	24.9	19.6	524.4	145.7	40.8	34.8	23.4	9.8	9.3	9.4	8.6	
QUEENS	18.4	20.0	550.7	189.9	34.0	30.9	18.0	5.3	9.7	9.8	8.3	
Astoria-Long Island City	17.1	20.8	560.2	200.8	36.4	30.3	17.6	7.3	10.1	10.3	5.7	
Corona	21.1	21.0	577.6	200.4	43.0	33.6	19.3	3.1	10.4	10.6	8.7	
Flushing	16.5	13.8	456.4	164.7	21.3	24.1	11.2	1.8	7.8	7.8	8.0	
Jamaica East	19.9	26.2	486.3	165.7	32.1	35.6	16.8	9.2	8.9	9.0	8.7	
Jamaica West	19.8	22.7	634.4	203.4	44.1	34.7	25.3	5.9	11.0	11.3	6.9	
Mapeth-Forest Hills	17.1	16.6	649.1	222.5	35.8	30.5	21.4	5.6	11.0	11.0	11.1	
RICHMOND	21.0	19.9	553.0	180.9	43.0	32.6	20.9	1.7	9.9	9.9	8.8	

*Rate per 1,000 population. †Rate per 1,000 live births.

Table 76.
DEATHS AND DEATH RATES FROM LEADING INFECTIOUS AND PARASITIC DISEASES,
PNEUMONIA AND INFLUENZA
New York City, 1962 - 1963

Disease	Deaths, 1962		Deaths, 1963		% Change in Rate 1962-1963
	Number	Rate†	Number	Rate†	
Pneumonia, bacterial and all other forms	3,158	40.59	3,642	46.81	+ 15.3
Tuberculosis, all forms	740	9.51	683	8.77	- 7.8
Syphilis and its sequelae	104	1.33	86	1.10	- 17.3
Influenza	34	0.43	55	0.70	+ 62.8
Infectious hepatitis	39	0.50	31	0.39	- 22.0
Meningococcal infections	34	0.43	29	0.37	- 14.0
Septicemia and pyemia	32	0.41	33	0.42	+ 2.4
Acute infectious encephalitis	17	0.21	11	0.14	- 33.3
Late effects of acute infectious encephalitis	4	0.05	2	0.03	- 40.0
Acute poliomyelitis	--	--	1	0.01	--
Late effects of acute poliomyelitis	4	0.05	2	0.03	- 40.0
Diseases attributable to viruses	93	1.20	58	0.74	- 28.3
Chickenpox	5	0.66	3	0.44	- 33.3
Streptococcal sore throat	3	0.04	3	0.04	--
Gonococcal infection	3	0.04	2	0.03	- 25.0
Paratyphoid fever, other salmonella infection	8	0.10	4	0.05	- 50.0
Other bacterial diseases	70	0.90	70	0.90	--
Whooping cough	--	--	1	0.01	--
Dysentery, all forms	--	--	1	0.01	--
Typhoid fever	--	--	--	--	--
Erysipelas	--	--	--	--	--
Other venereal diseases	--	--	--	--	--
Scarlet fever	--	--	--	--	--
Spirochetal diseases, except syphilis	--	--	--	--	--
Food poisoning	--	--	--	--	--
Diphtheria	--	--	--	--	--
Malaria	1	0.01	--	--	--
All other, infectious, parasitic	30	0.39	18	0.23	- 41.0

†Per 100,000 population.

Table 77.
TUBERCULOSIS MORTALITY IN THE UNITED STATES, 1963
(Estimated Deaths and Death Rates)

TUBERCULOSIS DEATHS AND DEATH RATES BY AGE

Age Group	Tuberculosis All Forms		Tuberculosis of the Respiratory System		Tuberculosis Other Forms	
	Number	Rate*	Number	Rate*	Number	Rate*
0 - 1	30	0.7	--	--	30	0.7
1 - 14	90	0.2	10	0.0	80	0.1
15 - 24	170	0.6	130	0.5	40	0.1
25 - 34	330	1.5	300	1.4	30	0.1
35 - 44	1,020	4.2	950	3.9	70	0.3
45 - 54	1,440	6.7	1,370	6.4	70	0.3
55 - 64	2,260	13.8	2,130	13.0	130	0.8
65 - 74	2,410	21.3	2,300	20.3	110	1.0
75 - 84	1,500	28.7	1,400	26.8	100	1.9
85+	410	40.9	400	39.9	10	1.0
Total	9,660	5.1	8,990	4.8	670	0.4

*Per 100,000 population. Included are deaths occurring within the United States, including Alaska and Hawaii, and excluded are deaths among the Armed Forces abroad, and deaths among American nationals visiting or stationed abroad. Deaths of foreign residents that occurred in the United States are included.

Table 78.
TUBERCULOSIS DEATHS AND DEATH RATES, BY COLOR AND SEX

Color Sex	Tuberculosis All Forms		Tuberculosis of the Respiratory System		Tuberculosis Other Forms	
	Number†	Rate*	Number†	Rate*	Number†	Rate*
WHITE						
Male	5,460	6.7	5,200	6.3	260	0.3
Female	1,740	2.1	1,560	1.8	170	0.2
Both Sexes	7,200	4.3	6,760	4.1	430	0.3
NONWHITE						
Male	1,770	16.5	1,620	15.1	140	1.3
Female	690	6.1	610	5.4	80	0.7
Both Sexes	2,460	11.2	2,240	10.1	230	1.0
ALL RACES						
Male	7,230	7.8	6,820	7.4	400	0.4
Female	2,430	2.5	2,180	2.3	250	0.3
Both Sexes	9,660	5.1	9,010	4.8	650	0.4

*Per 100,000 population. †Due to rounding estimates of deaths, figures do not add to totals.

Note: The above data are based on a 10 per cent systematic sample of the death certificates received monthly during 1961 in the vital statistics offices of the 50 States, the District of Columbia and 3 independent Registration cities (Baltimore, New Orleans, and New York).¹⁹

VIII. COST OF TUBERCULOSIS

Although the exact amount of money spent each year by public and private health and welfare agencies for tuberculosis care and control in New York City has never been fully ascertained, it is known that the figure runs into millions of dollars. In 1955 it was estimated that the annual cost of tuberculosis in New York City was 50 million dollars. The estimated total "cost" for 1962 was 25 million dollars, the major portion of the burden being direct expenditure for case detection, care and treatment by the official agencies.

1962-1963

In the 1962-1963 budget of the City of New York the appropriations for the control, care and treatment of tuberculosis amounted to almost 18 million dollars.²⁰ These municipal appropriations do not include the anticipated expenditures by the Department of Welfare for assistance to the tuberculous. The three Tuberculosis and Health Associations expended \$1,362,716.44 during the 1962-1963 fiscal period.

Therefore, the ascertainable cost of tuberculosis in New York City was well over 19 million dollars.

1963-1964

In the New York City Mayor's "Executive Budget for the Fiscal Year 1963-1964," there is an appropriation of \$1,709,801 to the Bureau of Tuberculosis, New York City Department of Health, for Tuberculosis Control Activities.

The Department of Health (Tuberculosis Control Activities) conducts programs for the control and prevention of tuberculosis; maintains a register for all known cases of tuberculosis in the City; operates chest clinics throughout the City, providing diagnostic service, and antibacterial treatment in cooperation with hospitals, for ambulatory patients, augments case-finding operations through clinic X-ray services and mass chest X-ray activities covering diverse groups, including community groups, workers in industrial organizations, government employees, and schools.

There is also an appropriation of \$14,072,908 to the Department of Hospitals for tuberculosis care hospitals for the fiscal year 1963-1964. This does not include appropriations for smaller tuberculosis units in the following hospitals: City Hospital at Elmhurst, Harlem, Metropolitan, and Sea View.

The City of New York provides payments on a per diem basis to voluntary hospitals and tuberculosis sanatoria for care, maintenance and treatment in general and special hospitals of medically indigent sick and infirm, including convalescent and chronic patients. The Executive Budget for the fiscal year 1963-1964 specifies a sum of \$1,849,905 for the care of tuberculous patients in voluntary hospitals and sanatoria.

In summary, the estimated calculable annual cost of tuberculosis in New York City (over 19 million dollars) would be increased markedly, if we were to take into account the additional monies expended on behalf of private patients in non-public hospitals, those under care of private physicians, services rendered by voluntary and official health and welfare agencies who in one way or another assist tuberculous persons, financial assistance by the Department of Welfare, the loss of personal income incurred by individuals and families and added expenditures due to tuberculosis.

Table 79.

Part A - SUMMARY, APPROPRIATIONS OF TAX FUNDS FOR TUBERCULOSIS CARE AND CONTROL
 New York City 1962-1963

Department of Health....	\$ 2,567,481
Department of Hospitals.	13,056,013
Charitable Institutions.	2,169,566
Total	\$17,793,060

Part B - SUMMARY, APPROPRIATIONS OF VOLUNTARY FUNDS FOR TUBERCULOSIS
 New York City, 1962-1963

Tuberculosis & Health Associations	Budget 1962-1963
Brooklyn Tuberculosis and Health Association	\$ 286,761.44
New York Tuberculosis and Health Association	667,658.00
Queensboro Tuberculosis and Health Association	408,297.00
Total	\$ 1,362,716.44

Part C - NEW YORK CITY DEPARTMENT OF HOSPITALS
 Tuberculosis Care Hospitals and Appropriations, 1963-1964

Hospital	Appropriations Authorized 1963-1964
Bellevue Tuberculosis Hospital	\$ 1,973,038
Nathan B. Van Etten Hospital	4,575,927
Kings County Tuberculosis and Chronic Disease Hospital	4,066,951
Triboro Hospital	3,456,992
Total	\$ 14,072,908

In the Mayor's "Executive Budget for the Fiscal Year 1963-1964," there is an appropriation of \$1,709,801 to the Bureau of Tuberculosis, New York City Department of Health, for Tuberculosis Control Activities.

Part D - SUMMARY, APPROPRIATIONS OF VOLUNTARY FUNDS FOR TUBERCULOSIS
 New York City, 1963-1964

Tuberculosis and Health Associations	1963-1964
Brooklyn Tuberculosis and Health Association	\$ 282,581.00
New York Tuberculosis and Health Association	716,930.00
Queensboro Tuberculosis and Health Association	460,614.00
Total	\$ 1,460,125.00

Table 79—continued
Part E - TUBERCULOSIS UNITS, DEPARTMENT OF HOSPITALS
 Gross Cost*
 New York City, 1963

Tuberculosis Units	Total Institutional Cost	In-Patient Cost	Out-Patient Cost
Bellevue TB Unit	\$3,045,454	\$2,857,398	\$188,056
City Hospital at Elmhurst TB Unit	175,874	175,874	--
Harlem TB Unit	725,867	725,867	--
Kings County TB Unit	5,546,694	5,457,865	88,829
Metropolitan TB Unit	1,244,702	1,244,702	--
Sea View TB Communicable Unit	453,391	453,391	--
Triboro Hospital	3,709,237	3,631,418	77,819
Nathan B. Van Etten Hospital	3,816,216	3,649,422	166,794
Total	\$18,717,435	\$18,195,937	\$521,498

*Gross cost rounded to nearest dollar, year ended December 31, 1963.

Part F - TUBERCULOSIS UNITS, DEPARTMENT OF HOSPITALS
 In-Patient Average Daily Cost and Out-Patient Average Cost
 Per Visit by Tuberculosis Unit²¹
 New York City, 1963

Tuberculosis Units	Bed Capacity	In-patient		Out-patient	
		Days	Average Daily Cost	Visits	Average Cost Per Visit
Bellevue TB Unit	326	98,091	\$29.13	27,079	\$6.95
City Hospital at Elmhurst TB Unit	20	5,974	29.44	--	--
Harlem TB Unit	50	24,627	29.47	--	--
Kings County TB Unit	675	203,833	26.78	5,613	15.83
Metropolitan TB Unit	105	35,172	35.39	--	--
Sea View TB Communicable Unit	34	7,682	59.02	--	--
Triboro Hospital	557	188,434	19.27	7,656	10.16
Nathan B. Van Etten Hospital	387	123,083	29.65	5,561	29.99
Total	2,154	686,896	\$26.49	45,909	\$11.36

The extent of care, services and assistance given by other agencies, is indicated by the following:

DEPARTMENT OF WELFARE. - The New York City Department of Welfare has indicated that it does not segregate the funds expended on behalf of families with tuberculosis from the funds expended for other families, but was able to provide the following estimates about the extent of and assistance given to tuberculous patients in 1962.²²

"The estimated cost of the special diet allowances, which are above and beyond the regular diet allowances in the client's or family's budget are as follows:-

1. For an estimated 2,225 unattached clients with tuberculosis, 1,855 who cook at home.....	\$19,597 per month
370 will full restaurant allowance.....	<u>\$14,000 per month</u>
Total	\$33,597 per month
2. For an estimated 1,450 families with 1,450 tuberculosis cases and 4,050 contacts, a total of \$41,000 per month.	

"This results in an estimated \$74,597 per month in diet allowances to clients and families with tuberculosis." Thus, for diet supplementation alone, the Department spends nearly \$900,000 per year for tuberculous patients and their families.

THE DIVISION OF VOCATIONAL REHABILITATION, State Education Department, New York City District Office. The Division of Vocational Rehabilitation served 343 individuals whose major disabling condition was pulmonary tuberculosis and who were rehabilitated in the New York City District (the five boroughs only) during the year ending June 30, 1963.²³

Tuberculous patients are eligible for service by the Division of Vocational Rehabilitation if their disease is classified as one of the following: arrested, inactive, active-improved, apparently cured, apparently arrested. Tuberculous patients ineligible for service are those with: active tuberculosis, positive sputum, no activity permitted.

In order to begin vocational rehabilitation, tuberculous patients are required to have a minimum of 4 hours employment activity permitted by a physician. Some exceptions to this are: if a patient is soon to move from 2 hours activity to 4 hours activity, or is hospitalized and has 2 hours activity permitted or, in very rare cases, a special program may be developed for an inpatient which Division of Vocational Rehabilitation will service with only 1 hour of activity.

Most tuberculous patients applying to the Division of Vocational Rehabilitation need to develop a skill. This may be either a completely new skill or brush-up of a skill acquired prior to illness, or may be "hardening" for training or employment. Tuberculous patients applying to the Division of Vocational Rehabilitation today are usually unskilled.

For the State of New York, a total of 442 individuals whose major disabling condition was pulmonary tuberculosis were rehabilitated under New York State's Rehabilitation Program.

Table 80.
**TYPES OF SERVICES PROVIDED TO 442 "REHABILITANTS"
AND THE COST OF THESE SERVICES**
New York State, July 1, 1962 – June 30, 1963

Type of Service	No. of Cases	No. of Cases*	Cost of Services**	
	without Cost	with Cost	Amount	Per cent
Diagnostic services	28	414	\$17,477	7.1
Surgery and treatment	1	14	3,443	1.4
Prosthetic appliances (including repairs)	--	57	1,821	0.7
Hospitalization	--	5	5,266	2.2
Training and training materials ..	5	360	159,969	65.1
Maintenance and transportation ...	--	203	56,275	22.9
Occupational tools, equipment and stocks, licenses	--	13	1,381	0.6
Other	--	2	22	***
Total	34	1,068	\$245,654	100.0

*Since many of the rehabilitants receive two or more types of services, the total number (34+1,068) of such "cases" reported in this table exceeds the number of persons rehabilitated.

**Excludes cost of administration, counseling, guidance and placement.

***Less than 0.05 per cent.

Table 81.
JOBs IN WHICH 422 "REHABILITANTS" WERE REHABILITATED
New York State, July 1, 1962 – June 30, 1963

Occupations After Rehabilitation	Rehabilitants	
	Number	Per cent
Professional	5	1.1
Semi-professional	26	5.9
Managerial and official	5	1.1
Clerical and kindred	75	17.0
Sales	8	1.8
Service	63	14.3
Agricultural and kindred	3	0.7
Skilled	51	11.5
Semi-skilled	91	20.6
Unskilled	22	5.0
Family workers*	4	0.9
Homemakers	89	20.1
Total	442	100.0

*The term "family workers" applies to persons who work - for maintenance only - on a family farm or in a family business operated by a relative living in the same household as the family worker.

THE SELECTIVE PLACEMENT DIVISION, New York State Department of Labor, Division of Employment, New York City. -- This division indicated that during one week in October 1963, 104 individuals with pulmonary tuberculosis were receiving service. The age distribution of 104 persons mentioned above was: under 20 years, 1; 2-44 age group, 64; 45 years and over, 39. There were 32 job placements of those individuals or approximately 1,664 during 1963. Approval by a physician for 8 hours in competitive employment is the single eligibility requirement for service by this agency. The Selective Placement Division of the New York State Department of Labor, Division of Employment, usually places one out of every four applicants with disabilities, regardless of the disability.

FEDERAL APPROPRIATIONS, PUBLIC HEALTH SERVICE, TUBERCULOSIS CONTROL, 1964-1965. -- The appropriation for the Tuberculosis Program of the Public Health Service for the 1964-1965 fiscal year has been acted on by Congress. The amount available for formula and project grants to States will be \$3,000,000 and \$5,000,000, respectively. (National Tuberculosis Association report: Legislation, 88th Congress, Second Session, September 4, 1964).

Table 82.
**FEDERAL APPROPRIATIONS TO THE UNITED STATES PUBLIC
HEALTH SERVICE FOR SUPPORT OF STATE TUBERCULOSIS PROGRAMS**

Year	Total Grants	Formula Grants	Project Grants
1960-1961	\$4,000,000	\$4,000,000	\$ ---
1961-1962	4,000,000	3,500,000	500,000
1962-1963	4,500,000	3,250,000	1,250,000
1963-1964	4,506,000	2,900,000	1,606,000
1964-1965	8,000,000	3,000,000	5,000,000

A Task Force report on tuberculosis control which was submitted to the Surgeon General of the Public Health Service estimated the cost of tuberculosis treatment and needed control services at approximately \$401,600,000 annually.²⁴ This total excludes other costs such as compensation which in the Veterans Administration alone totalled \$120,000,000 in 1962.

IX - ADDENDUM
Table 83.
Part A - POPULATION*, NEW YORK CITY

Borough	1950	1957	1960
Manhattan	1,960,101	1,794,069	1,698,281
Bronx	1,451,277	1,424,367	1,424,815
Brooklyn	2,738,175	2,602,433	2,627,319
Queens	1,550,849	1,762,582	1,809,578
Richmond	191,555	212,020	221,991
New York City	7,891,957	7,795,471	7,781,984

Based on Federal Census. *As of April first.

Part B - POPULATION† ACCORDING TO ETHNIC GROUP, NEW YORK CITY

Year	White	Puerto Rican(‡)	Negro	Other Races	TOTAL
1900	3,369,898	...	60,666	6,638	3,437,202
1910	4,669,162	...	91,709	6,012	4,766,883
1920	5,459,463	...	152,467	8,118	5,620,048
1930	6,587,225	(44,908)	327,706	15,515	6,930,446
1940	6,977,501	(61,403)	458,444	19,050	7,454,995
1950	7,116,428	(246,306)	747,620	27,909	7,891,957
1957	6,814,220	...	948,196	33,055	7,795,471
1960	6,640,662	(612,574)	1,087,931	53,391	7,781,984

†As reported by the U. S. Bureau of the Census: June 1, 1900, April 15, 1910, January 1, 1920, April 1, 1930, April 1, 1940, April 1, 1950, April 1, 1957, April 1, 1960. ‡Included in white and Negro totals. (...) = Not stated.

Part C - CHANGE IN POPULATION BY ETHNIC GROUP, NEW YORK CITY

Period	White	Puerto Rican†	Negro	Other Races	TOTAL
1900 to 1910	+ 1,299,264 = 38.6%	...	+ 31,043 = 51.2%	- 626 = 9.4%	+ 1,329,681 = 38.7%
1910 to 1920	+ 790,301 = 16.9%	...	+ 60,758 = 66.3%	+ 2,106 = 35.0%	+ 853,165 = 17.9%
1920 to 1930	+ 1,127,762 = 20.7%	...	+ 175,239 = 114.9%	+ 7,397 = 91.1%	+ 1,310,398 = 23.3%
1930 to 1940	+ 390,276 = 5.9%	(+ 16,495) = 36.7%	+ 130,738 = 39.9%	+ 3,535 = 22.8%	+ 524,549 = 7.6%
1940 to 1950	+ 138,927 = 2.0%	(+ 184,903) = 301.1%	+ 289,176 = 63.1%	+ 8,859 = 46.5%	+ 436,962 = 5.9%
1950 to 1960	- 475,766 = 6.7%	(+ 366,268) = 148.7%	+ 340,311 = 45.5%	+ 25,482 = 91.3%	- 109,973 = 1.4%

†Included in white and Negro totals.

Table 83—continued
Part D—POPULATION, NEW YORK CITY, APRIL 1, 1960

Age Group	ALL RACES			WHITE			NON-WHITE			PUERTO RICAN(†)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0- 4 ...	347,721	338,996	686,717	277,751	268,590	546,341	69,970	70,406	140,376	46,964	46,188	93,152
5- 9 ...	301,648	294,199	595,847	243,521	235,548	479,069	58,127	58,651	116,778	37,359	36,230	73,589
10-14 ...	290,330	284,991	575,321	244,560	237,758	482,318	45,770	47,233	93,003	30,949	31,244	62,193
15-19 ...	234,746	252,105	486,851	202,816	214,823	417,639	31,930	37,282	69,212	25,580	28,716	54,296
20-24 ...	222,238	260,284	482,522	187,605	213,242	400,847	34,633	47,042	81,675	28,663	32,157	60,820
25-29 ...	250,455	263,174	513,629	210,541	212,769	423,310	39,914	50,405	90,319	30,000	32,946	62,946
30-34 ...	262,584	280,185	542,769	218,857	224,536	443,393	43,727	55,649	99,376	26,025	28,032	54,057
35-39 ...	257,498	289,468	546,966	212,252	235,040	447,292	45,246	54,428	99,647	21,321	21,653	42,974
40-44 ...	239,550	284,831	524,381	202,187	239,099	441,286	37,363	45,732	83,095	14,681	15,907	30,588
45-49 ...	252,224	298,086	550,310	219,735	259,156	478,891	32,489	38,930	71,419	12,076	13,203	25,279
50-54 ...	252,415	282,111	534,526	225,570	251,152	476,722	26,845	30,959	57,804	8,367	8,905	17,272
55-59 ...	239,484	260,009	499,493	215,999	233,793	449,792	23,485	26,216	49,701	6,137	7,390	13,529
60-64 ...	202,238	226,587	428,825	185,715	208,648	394,363	16,523	17,939	34,462	4,058	5,192	9,250
65-69 ...	159,119	184,944	344,063	147,819	171,937	319,756	11,300	13,007	24,307	2,240	3,486	5,726
70-74 ...	109,623	130,478	240,101	102,762	121,724	224,486	6,861	8,754	15,615	1,289	2,284	3,573
75+	97,384	132,279	229,663	91,539	123,618	215,157	5,845	8,661	14,506	990	2,340	3,330
TOTAL ...	3,719,257	4,062,727	7,781,984	3,189,229	3,451,433	6,640,662	530,028	611,294	1,141,322	296,701	315,873	612,574

Based on reports of United States Bureau of the Census.

(†) Puerto Ricans distributed among white and non-white population.

Table 83.—continued

Part E - POPULATION, ACCORDING TO ETHNIC GROUP BY BOROUGHS, NEW YORK CITY

Ethnic Group	New York City	Manhattan	Bronx	Brooklyn	Queens	Richmond
MALE						
White	3,189,229	602,924	603,011	1,087,314	791,203	104,777
Negro	498,167	180,100	76,104	170,433	66,853	4,677
Indian	1,555	458	176	600	305	16
Japanese	3,169	1,777	268	223	856	45
Chinese	20,658	13,824	1,532	2,742	2,447	113
Filipino	2,744	1,021	215	936	465	107
Other Races	3,735	1,675	390	1,101	514	55
Total Male	3,719,257	801,779	681,696	1,263,349	862,643	109,790
FEMALE						
White	3,451,433	668,898	653,273	1,158,545	863,756	106,961
Negro	589,764	217,001	87,792	200,972	79,002	4,997
Indian	1,707	486	204	691	308	18
Japanese	2,822	1,277	292	331	854	68
Chinese	12,173	6,937	1,135	1,894	2,138	69
Filipino	1,537	651	102	414	324	46
Other Races	3,291	1,252	321	1,123	553	42
Total Female	4,062,727	896,502	743,119	1,363,970	946,935	112,201
BOTH SEXES						
White	6,640,662	1,271,822	1,256,284	2,245,859	1,654,959	211,738
Negro	1,087,931	397,101	163,896	371,405	145,855	9,674
Indian	3,262	944	380	1,291	613	34
Japanese	5,991	3,054	560	554	1,710	113
Chinese	32,831	20,761	2,667	4,636	4,585	182
Filipino	4,281	1,672	317	1,350	789	153
Other Races	7,026	2,927	711	2,224	1,067	97
TOTAL	7,781,984	1,698,281	1,424,815	2,627,319	1,809,578	221,991

Part F - PUERTO RICAN POPULATION, NEW YORK CITY, APRIL 1, 1960

Borough	Born in Puerto Rico	Puerto Rican Parentage	White	Non-white	Total Puerto Ricans
Manhattan	161,371	64,268	213,233	12,406	225,639
Bronx	130,184	56,701	180,955	5,930	186,885
Brooklyn	126,223	53,891	174,547	5,567	180,114
Queens	10,508	6,924	16,570	862	17,432
Richmond	1,424	1,080	2,398	106	2,504
New York City ..	429,710	182,864	587,703	24,871	612,574

Source: U.S. Bureau of the Census.

Table 84.
CHILDREN ATTENDING NEW YORK CITY SCHOOLS
 By Ethnic Group, Borough and Type of School
 October 31, 1963

Borough Type of School	Number of Pupils				Per cent of Total Register			
	Total	White and "Other"	Negro	Puerto Rican	Total	White and "Other"	Negro	Puerto Rican
BOROUGHS								
Manhattan	178,290	53,267	68,792	56,231	100.0	29.9	38.6	31.5
Bronx	196,068	94,668	46,297	55,103	100.0	48.3	23.6	28.1
Brooklyn	389,366	223,924	105,176	60,266	100.0	57.5	27.0	15.5
Queens	239,972	193,233	41,784	4,955	100.0	80.5	17.4	2.1
Richmond	35,224	31,753	2,736	735	100.0	90.1	7.8	2.1
New York City*..	1,045,554	598,987	267,344	179,223	100.0	57.3	25.6	17.1
TYPE OF SCHOOL								
Elementary	586,046	301,683	168,136	116,227	100.0	51.5	28.7	19.8
Junior High	208,177	114,931	56,057	37,189	100.0	55.2	26.9	17.9
Academic High ..	204,075	159,268	30,080	14,727	100.0	78.1	14.7	7.2
Vocational High.	40,622	20,963	10,512	9,147	100.0	51.6	25.9	22.5
Special Schools.	6,634	2,142	2,559	1,933	100.0	32.3	38.6	29.1
Total	1,045,554	598,987	267,344	179,223	100.0	57.3	25.6	17.1
TOTAL, NEW YORK CITY								
1957	952,617	650,680	172,957	128,980	100.0	68.3	18.2	13.5
1958	967,865	645,806	184,985	137,074	100.0	66.8	19.0	14.2
1959	977,531	633,582	197,517	146,432	100.0	64.8	20.2	15.0
1960	986,679	620,976	212,006	153,697	100.0	62.9	21.5	15.6
1961	1,004,265	613,438	228,592	162,235	100.0	61.1	22.8	16.1
1962	1,027,428	611,599	246,336	169,493	100.0	59.5	24.0	16.5
1963	1,045,554	598,987	267,344	179,223	100.0	57.3	25.6	17.1

*Including special school.

Source: Special Census of School Population, October 31, 1963, Bureau of Educational Program Research and Statistics, Board of Education of the City of New York. (March, 1964)

As pointed out in the introduction to the statistics in the above census report, the special census of the New York City school population had as its purpose the collection of data relative to the composition of the registration in the schools of the City of New York.

"In collecting these data, schools are instructed to obtain the count of Negro children by inspection only -- pupils were not questioned. In enumerating the numbers of Puerto Rican children, schools were instructed to include all children born in Puerto Rico as well as those born in the U.S. mainland, one or both of whose parents were Puerto Rican. All other pupils, irrespective of ethnic or national origins, were to be classified as 'Other'."

TUBERCULOSIS IN THE UNITED STATES

Tuberculosis, all forms, once a leading cause of death in the United States has dropped out of the list of the 10 principal causes. In 1960, it had dropped to the sixteenth place. Since 1900, when the annual mortality data were first compiled for the death-registration area, mortality from tuberculosis has decreased almost without interruption. For 1920 and for each succeeding 10th year to 1960 the declining death rate for tuberculosis was 113, 71, 46, 22 and 6 respectively. The accelerated decline in the tuberculosis death rate started in 1946. The average annual decrease between 1939 and 1945 was approximately 3 per cent; between 1945 and 1951 the rate dropped 10 per cent per year; and between 1951 and 1953 the decline was most rapid, when the average annual decrease was 22 per cent per year. Since 1953, reduction in tuberculosis mortality has been less rapid, the decline in rate from 1953 to 1954 was 17 per cent and from 1954 to 1962 about 8 per cent per year. The provisional tuberculosis death rate for 1963 was 5.1 per 100,000 population, the same as the final death rate for 1962.

In 1961 the Public Health Service revised its recommendations on the reporting of tuberculosis. The major recommendation was that only active cases should be counted in assessing the incidence of tuberculosis. The definition of an active case now includes primary tuberculosis if there is either laboratory or X-ray evidence of active disease, but excludes tuberculin converters and infant reactors without laboratory or X-ray evidence. Another one of the 1961 recommendations specifies that cases with disease activity undetermined or not stated should not be counted as active cases unless and until supplemental evidence is received which is sufficient to justify classifying them as active.

Provisional reports from State Health Departments reveal that approximately 54,062 new cases of active tuberculosis were reported in the United States during the calendar year 1963 compared to 53,351 in 1962. The rate of 28.7 in 1963 for new active tuberculosis cases is the same as the 1962 final rate.

Table 85.
TUBERCULOSIS IN THE UNITED STATES
Newly Reported Cases and Deaths, 1947-1963

Year	Total New Cases Reported		Active and Probably Active New Cases		Deaths	
	Number	Rate†	Number	Rate†	Number	Rate†
CONTINENTAL UNITED STATES						
1947	134,946	94.1	...	...	48,064	33.5
1948	137,006	93.8	...	...	43,833	30.0
1949	134,865	90.7	...	...	39,108	26.3
1950	121,742	80.4	...	...	33,959	22.4
1951	118,491	77.3	...	...	30,863	20.1
1952	109,837	70.5	85,607	55.0	24,621	15.8
1953	106,925	67.5	83,250	52.6	19,544	12.3
1954	100,540	62.4	78,592	48.8	16,392	10.2
1955	98,860	60.2	76,245	46.4	14,940	9.1
1956	90,465	54.1	68,866	41.2	14,061	8.4
1957	86,861	51.0	66,437	39.0	13,324	7.8
1958	82,266	47.2	63,000	36.4	12,361	7.1
1959	75,108‡	42.6	56,951	32.3	11,429	6.5
1960 .....	...	...	54,977	30.7	...	...
1961‡ .....	...	...	53,064	29.1	...	...
TOTAL UNITED STATES (x)						
1959 .....	...	...	57,535	32.5	11,474	6.5
1960 .....	...	...	55,494	30.8	10,866	6.1
1961 .....	...	...	53,726	29.4	9,938	5.4
1962 .....	...	...	53,315	28.7	9,506	5.1
1963‡ .....	...	...	54,062	28.7	9,660	5.1

†Per 100,000 population residing in United States, excluding Armed Forces overseas. ‡Provisional. (x)50 states and the District of Columbia (including Alaska and Hawaii). (...)=Not available.

TUBERCULOSIS PREVALENCE IN THE UNITED STATES

An estimated 330,000 cases were on tuberculosis registers in the United States on December 31, 1962, the same total that was estimated for 1960.¹ The following quotes are taken from this report:

"A full assessment of the extent of tuberculosis in a community should take into account not only the new active cases reported in one year but all active cases that need treatment or supervision as well as others who are high risks of developing tuberculosis. These would include persons in whom the disease has reactivated, inactive cases at special risk, young children who have recently been infected and others in the community who for a variety of reasons are considered to be at special risk. Even tuberculosis death statistics, as usually published, represent only the number of persons who have died from tuberculosis but do not show how many persons may have died with tuberculosis as a contributing cause.

"An estimated 35 million people in the United States today have been infected with the tubercle bacillus. Of these, if present conditions prevail, approximately one person in twenty can be expected to develop active tuberculosis during his lifetime and will need medical care and continuing supervision".

Table 86.
Part A - CASES ON CURRENT TUBERCULOSIS REGISTERS
United States†, December 31, 1960 and 1962

Type	1960	1962
Hospitalized active cases	58,000	46,000
Unhospitalized active cases	62,000	64,000
Total active disease cases	120,000	110,000
All other cases on current registers*	210,000	220,000
Total cases on registers	330,000	330,000

†Estimated.

‡Including Alaska and Hawaii, excluding Puerto Rico.

*Cases with activity undetermined and inactive cases under current supervision. It is estimated that in 1960 of the 210,000 "other" cases about 50,000 are under drug therapy; in 1962 of the 220,000 "other" cases approximately 90,000 are under drug therapy.

Part B - CASES ON TUBERCULOSIS REGISTERS^f

United States, 1952, 1956, 1960 and 1962

Type	1952	1956	1960	1962
Active	200,000	160,000	120,000	110,000
Other cases	250,000	240,000	210,000	220,000
Total	450,000	400,000	330,000	330,000

^fEstimated.

Note: The Public Health Service states that "Tuberculosis registers usually include records of the active cases currently under care, the cases for which disease activity has not been determined, and inactive cases under supervision. In many instances, cases are carried on registers for a considerable length of time before disease activity is established. For a number of reasons, other cases are also retained on the Health Department rolls. These include records of people who fail to respond to treatment, or who have received inadequate or interrupted treatment".

Based on reports of Tuberculosis Program, Communicable Disease Center, Public Health Service (1964).

Table 87.
TUBERCULOSIS MORTALITY BY RACE AND SEX
United States, 1963 (Provisional)¹⁹

Race	Both Sexes		Male		Female	
	Number	Rate ^f	Number	Rate ^f	Number	Rate ^f
White	7,200	4.3	5,460	6.7	1,740	2.1
Non-white	2,460	11.2	1,770	16.5	690	6.1
Total	9,660	5.1	7,230	7.8	2,430	2.5

^fPer 100,000 population.

Table 88.
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part A - NEW CASES OF TUBERCULOSIS REGISTERED
AND RATE PER 100,000 POPULATION
 1962 - 1963 (Provisional)

City or County	Population 1963 ↑	Total New Cases Reported(x)		Active and Probably Active			
		1962	1963	1962	1963	Case Rate*	1963
New York, N. Y.	7,780,000	4,572	5,029	4,437	4,891	57.0	62.9
Chicago, Ill.	3,534,000	2,699	2,322	2,699	2,322	78.2	65.7
Los Angeles, Calif.	2,537,000	1,121	1,010	..	..	..	..
Philadelphia, Pa.	2,049,000	1,222	1,113	1,184	1,109	58.5	54.1
Detroit, Mich.	1,615,000	1,096	1,143	1,096	1,143	67.3	70.8
Harris Co. (Houston), Texas† ..	1,356,000	368	447	197	172	15.2	12.7
San Diego Co. (San Diego), Calif.	1,164,100	155	180	155	180	25.1	15.5
Dade Co. (Miami), Fla.† ..	1,149,970	332	361	332	361	30.8	31.4
Baltimore, Md.	924,000	745	757	745	757	79.9	81.9
Cleveland, Ohio	876,050	435	413	412	413	47.0	47.1
Maricopa Co. (Phoenix), Ariz.†.	850,000	304	330	304	330	40.1	38.8
Washington, D. C.	791,900	759	514	759	514	95.8	64.9
Milwaukee, Wis.	758,000	269	228	241	216	31.8	28.5
Dallas, Texas	755,000	191	266	191	266	25.8	35.2
San Francisco, Calif.	749,900	481	514	481	514	64.6	68.5
St. Louis, Mo.	736,400	397	381	342	381	46.2	51.7
Indianapolis, Ind.† ..	723,000	303	342	303	316	63.6	43.7
Boston, Mass.	705,027	404	413	402	401	57.2	56.9
Shelby Co. (Memphis), Tenn.† ..	682,050	219	192	219	192	32.9	28.2
Jefferson Co. (Louisville), Ky.† ..	658,500	286	254	286	254	45.1	38.6
New Orleans, La.	645,243	294	300	284	248	43.7	38.4
Jefferson Co. (Birmingham), Ala.† ..	644,356	268	270	233	251	36.2	41.9
San Antonio, Texas	641,506	407	387	407	373	62.1	58.1
Pittsburgh, Pa.	590,949	411	333	391	283	64.7	47.9
Fulton Co. (Atlanta), Ga.	588,891	248	270	248	251	44.2	42.6
Seattle, Wash.	565,000	203	205	203	205	36.1	36.3
Kansas City, Mo.	543,000	217	193	217	193	40.9	35.5
Buffalo, N. Y.	515,000	256	242	256	242	48.1	47.0
Cincinnati, Ohio	503,000	265	255	265	246	52.0	48.9
Denver, Colo.	500,000	110	104	104	103	20.8	20.6
Columbus, Ohio	483,243	196	169	..	135	..	27.9
Minneapolis, Minn.	474,243	115	94	115	94	24.2	19.8
Oklahoma Co., Okla.† ..	465,190	75	96	75	96	15.4	20.6
Hillsborough Co. (Tampa), Fla.†.	413,000	109	137	..	..	..	..
Newark, N. J.	410,000	332	341	332	341	82.8	83.2
Fort Worth, Texas	390,000	90	116	90	116	24.3	29.7
Portland, Ore.	376,807	192	159	192	159	51.8	42.2
Oakland, Calif.	375,000	112	114	89	89	24.2	23.7
Douglas Co. (Omaha), Neb.† ..	363,361	89	84	73	80	20.8	22.0
Long Beach, Calif.	358,634	149	131	149	116	42.0	32.3
Toledo, Ohio	352,500	93	96	..	..	..	..
Honolulu, Hawaii	330,800	165	113	165	113	49.9	34.2
Pima Co. (Tucson), Ariz.† ..	315,000	245	209	120	113	40.0	35.9
Norfolk, Va.	314,971	52	60	52	60	16.5	17.6
St. Paul, Minn.	313,000	106	98	106	98	33.7	31.1
Rochester, N. Y.	311,000	166	146	166	146	53.0	46.9
El Paso, Texas	305,000	110	108	110	108	36.7	35.4

(continued on next page)

Table 88—continued
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part A—NEW CASES OF TUBERCULOSIS REGISTERED
AND RATE PER 100,000 POPULATION
 1962–1963 (Provisional)

City or County	Population 1963 †	Total New Cases Reported(x)		Active and Probably Active			
		1962	1963	1962	1963	1962	1963
Charlotte, N.C.	296,508	72	53	45	40	20.6	13.5
Akron, Ohio	292,455	75	79	56	67	19.1	22.9
San Jose, Calif.	288,800	68	80	55	72	21.3	24.9
Tulsa, Okla.	280,000	65	73	74	73	26.7	26.0
Jersey City, N. J.	271,600	127	140	127	140	46.8	50.7
Wichita, Kan.	263,595	33	41	33	41	13.3	15.6
Dayton, Ohio	260,000	136	129	132	91	50.6	35.0
Mobile, Ala.	228,599	89	100	80	98	36.7	42.9
Richmond, Va.	221,150	249	237	206	186	93.4	84.1
Des Moines, Iowa	216,000	..	..	34	45	15.7	20.8
Syracuse, N. Y.	214,022	82	81	82	81	38.2	37.8
Providence, R.I.	200,000	90	95	58	49	28.0	24.5
Paterson, N.J.	145,000	102	110	64	75	44.1	51.7
Camden City, N.J.	115,000	104	78	52	56	45.2	48.7
Berkeley, Calif.	111,268	37	60	34	32	30.6	28.8
Trenton, N.J.	110,000	105	81	41	57	36.9	51.8
Elizabeth, N.J.	106,000	103	103	61	53	55.7	50.0

*Per 100,000 population. †Estimated by public health authorities of respective areas.

Data shown are for county when separate details for principal city are not available.

(..)Data unavailable or not reported by local authorities. (x)Including active, arrested, inactive, etc.

Note: It is recommended by the Public Health Service that all health departments require, as a minimum, the reporting of active cases of tuberculosis. Some health departments may wish to require more than this but it is recommended that in such circumstances record keeping be set up so that the health department can identify the active cases among the total that are reported.²⁵

The populations of large American cities still suffer from a disproportionate amount of tuberculosis. In general both morbidity and mortality rates for urban centers exceed those for the rest of the country. However, the new cases in the large cities make up less than half of all new cases reported last year.

Provisional reports for 50 cities and 10 counties, which included large cities, indicate that during the year 1963 an estimated 20,247 persons were registered as having newly active tuberculosis. These new cases made up 37.5 per cent of the United States total, but the population of the areas studied was 22.6 per cent that of the United States.

New York City, with 4,891 newly reported active cases, contributed 24.2 per cent of the cases included in the survey (see table above), and 9.0 per cent of all new cases registered in the United States. The New York City population is 4.2 per cent of the United States total.

Of the cities for which details were available 67.9 per cent had higher new case rates than the average for the country.

Table 88 - continued
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part B - TUBERCULOSIS DEATHS AND DEATH RATES
 1962 - 1963 (Provisional)

City or County	Total Recorded Within City				Residents of City			
	Deaths		Death Rate*		Deaths		Death Rate*	
	1962	1963	1962	1963	1962	1963	1962	1963
New York, N.Y.	740	683	9.5	8.8	695	633	8.9	8.1
Chicago, Ill.	281	..	8.1	..	270	..	7.8	..
Los Angeles, Calif. ....	..	..	..	..	..	..	..	..
Philadelphia, Pa.	207	188	10.2	9.2	245	205	12.1	10.0
Detroit, Mich.	153	140	9.4	8.7	157	147	9.6	9.1
Harris Co. (Houston), Texas*....	73	66	5.6	4.9	..	..	..	..
San Diego Co. (San Diego), Calif.*....	27	25	4.4	2.2	31	25	5.0	2.2
Dade Co. (Miami), Fla.*....	46	56	4.3	4.9	50	69	4.6	6.0
Baltimore, Md.	96	94	10.3	10.2	134	129a	14.4	14.0
Cleveland, Ohio	50	40	5.7	4.6	88	67	9.7	7.6
Maricopa Co. (Phoenix), Ariz.*....	51	..	6.6	..	43	60	5.7	7.1
Washington, D.C.	80	93	10.1	11.7	92	109	11.6	13.7
Milwaukee, Wis.	34	31	4.5	4.1	31	29	4.1	3.8
Dallas, Texas	35	38	4.7	5.0	26	25	3.5	3.3
San Francisco, Calif.	44	65	5.9	8.7	58	74	7.9	9.9
St. Louis, Mo.	92	88	12.4	12.0	81	75	10.9	10.2
Indianapolis, Ind.*....	65	46	13.6	6.4	41	33	8.6	4.6
Boston, Mass.	77	87	11.0	12.3	77	87	11.0	12.3
Shelby Co. (Memphis), Tenn.*....	35	32	5.3	4.6	29	30	4.4	4.4
Jefferson Co. (Louisville), Ky.*....	148	163	23.3	24.8	..	..	..	..
New Orleans, La. ....	..	..	..	..	56	46	8.6	7.1
Jefferson Co. (Birmingham), Ala.*....	26	22	4.0	3.4	33	32	5.1	5.0
San Antonio, Texas	109	114	16.6	17.8	52	66	7.9	10.3
Pittsburgh, Pa. ....	..	..	..	..	70	72	11.6	12.2
Fulton Co. (Atlanta), Ga.	20	10	3.6	1.7	32	23	5.7	3.9
Seattle, Wash.	21	21	3.7	3.7	15	16	2.7	2.8
Kansas City, Mo.	52	58	9.8	10.7	49	54	9.2	9.9
Buffalo, N.Y. ....	..	..	..	..	35	18	6.5	3.5
Cincinnati, Ohio	47	50	9.2	9.9	..	..	..	..
Denver, Colo. ....	..	..	..	..	32	32	6.4	6.4
Columbus, Ohio ....	..	18	..	3.7	..	18	..	3.7
Minneapolis, Minn.	13	10	2.7	2.1	19	23	4.0	4.8
Oklahoma Co., Okla.*....	31	26	6.4	5.6	31	26	6.4	5.6
Hillsborough Co. (Tampa), Fla.*....	..	..	..	..	..	..	..	..
Newark, N.J.	52	46	13.0	11.2	52	46	13.0	11.2
Fort Worth, Texas	16	19	4.3	4.9	16	19	4.3	4.9
Portland, Ore.	26	27	7.0	7.2	21	18	5.7	11.8
Oakland, Calif. ....	..	20	..	5.3	..	15	..	4.0
Douglas Co. (Omaha), Neb.*....	11	6	3.1	1.7	13	9	3.7	2.5
Long Beach, Calif. ....	..	..	..	..	4	19	1.1	5.3
Toledo, Ohio	7	15	2.1	4.3	7	14	2.1	4.3
Honolulu, Hawaii	18	11	5.4	3.3	13	10	3.9	3.0
Pima Co. (Tucson), Ariz.*....	..	..	..	..	33	34	11.0	10.8
Norfolk, Va. ....	..	..	..	..	15	13	4.8	4.1
St. Paul, Minn.	15	22	4.8	7.0	15	21	4.8	6.7
Rochester, N.Y.	17	30	5.4	9.6	15	26	4.8	8.4
El Paso, Texas	18	13	6.0	4.3	18	2	6.0	0.7

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Table 88 - continued
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part B - TUBERCULOSIS DEATHS AND DEATH RATES
 1962 - 1963 (Provisional)

City or County	Total Recorded Within City				Residents of City			
	Deaths		Death Rate*		Deaths		Death Rate*	
	1962	1963	1962	1963	1962	1963	1962	1963
Charlotte, N.C.	12b	6b	5.5	2.0	9	5	4.1	2.0
Akron, Ohio	6	4	2.1	1.4	5	4	1.7	1.4
San Jose, Calif.	0	4	--	1.4	10	7	3.9	2.4
Tulsa, Okla. ....	..	..	..	..	13	14	4.7	5.0
Jersey City, N.J.	23	17	8.5	6.3	43	36	15.8	13.3
Wichita, Kan.	21	27	8.5	10.2	21	27	8.5	10.2
Dayton, Ohio	33	18	12.6	6.9	33	18	12.6	6.9
Mobile, Ala.	36	27	16.5	9.6	22	12	10.1	4.2
Richmond, Va.	27	26	12.2	11.8	22	23	10.0	10.4
Des Moines, Iowa	1	1	0.5	0.5	1	1	0.5	0.5
Syracuse, N.Y.	20	35	9.3	16.4	5	19	2.3	8.9
Providence, R.I.	9	7	4.3	3.5	3	1	1.4	0.5
Paterson, N.J.	13	8	9.0	5.5	13	..	9.0	..
Camden City, N.J.	14	14	12.2	12.2	..	..	..	..
Berkeley, Calif.	1	..	0.9	..	2	..	1.8	..
Trenton, N.J.	15	16	13.5	14.5	..	..	..	..
Elizabeth, N.J.	8	16	7.3	15.1	..	..	..	..

*Per 100,000 population. (..)Data unavailable or not reported by local authorities.

#Data shown are for county when separated details for principal city are not available.

(a)Corrected for residence. Many of the city tuberculous patients are hospitalized in institutions outside the city limits.

(b)Includes county.

In 1963, 48.1% of these large cities had tuberculosis death rates which exceeded the average for the United States.

New York City alone accounted for 25.3 per cent of the deaths in these cities, or 7.1 per cent of all tuberculosis deaths in the United States.

Table 88—continued
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part C—CASES IN TUBERCULOSIS REGISTER, DECEMBER 31, 1963

City or County	Total in Register	Type of Care			
		Hospitals or Sanatoria	Under Clinic Care	Private Physicians Care	Other
New York, N. Y.	6,588	3,106	2,364	385	733
Chicago, Ill. ....	..	..	..	..	..
Los Angeles, Calif. ....	..	..	..	..	..
Philadelphia, Pa.	3,010	1,076	1,321	249	364
Detroit, Mich.	2,634	1,056	1,435	143	..
Harris Co. (Houston), Texas* ...	1,256	429	827	..	..
San Diego Co. (San Diego), Calif.	384	98	..	..	286f
Dade Co. (Miami), Fla.*	530	256	261a	13b	0
Baltimore, Md. (June 31, 1963)...	1,159	587	473	47	52c
Cleveland, Ohio	373b	265	72	28	8
Maricopa Co. (Phoenix), Ariz.*. ....	..	..	..	..	..
Washington, D.C.	914	551	323	40	..
Milwaukee, Wis.	161	121	..	32	8
Dallas, Texas	499	131	319	49	..
San Francisco, Calif.	521	325	138	55	3d
St. Louis, Mo.	434	274	66	71	23
Indianapolis, Ind.*	2,098	220	1,097	504	277
Boston, Mass.	2,268	518	1,624	120	6
Shelby Co. (Memphis), Tenn.* ..	4,328	259	4,053	16	..
Jefferson Co. (Louisville), Ky.* ..	397r	176	128	40	14
New Orleans, La.	279	203	76	..	..
Jefferson Co. (Birmingham), Ala.* ..	560	219	292	26	23
San Antonio, Texas	831	294	533e	..	4
Pittsburgh, Pa.	2,398	343	1,411	156	488
Fulton Co. (Atlanta), Ga.	504	211	256	37	..
Seattle, Wash.	1,414	195	897	141	181g
Kansas City, Mo. ....	..	205	150j	..	..
Buffalo, N.Y.	496	162	..	..	334h
Cincinnati, Ohio	197	88	63	43	3
Denver, Colo.	703	61	642f	..	..
Columbus, Ohio ....	..	..	..	..	..
Minneapolis, Minn.	603	72	432	94	5
Oklahoma Co., Okla.* (Apr. 1, 1964)	168	79	..	..	99
Hillsborough Co. (Tampa), Fla.* ..	..	..	..	..	..
Newark, N.J.	1,883	346	1,520	363	..
Fort Worth, Texas	125	67	11	18	29
Portland, Ore.	549	109	121	15	304
Oakland, Calif. k	98	53	22	14	9
Douglas Co. (Omaha), Neb.* ....	..	60	..	5	8
Long Beach, Calif.	304	96	122	82	4
Toledo, Ohio	1,649	..	..	..	..
Honolulu, Hawaii	191	116	55	17	3
Pima Co. (Tucson), Ariz.*	338	123	124	39	52L
Norfolk, Va.	851	75	452	104	220
St. Paul, Minn.	79	43	25	11	..
Rochester, N.Y.
El Paso, Texas	572	94	446	32	0

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Table 88 - continued
TUBERCULOSIS IN LARGE AMERICAN CITIES
Part C - CASES IN TUBERCULOSIS REGISTER, DECEMBER 31, 1963

City or County	Total in Register	Type of Care			
		Hospitals or Sanatoria	Under Clinic Care	Private Physicians Care	Other
Charlotte, N.C.	59	58 ^m	1	..	..
Akron, Ohio	296	67	217	..	12n
San Jose, Calif.	91	47	..	..	..
Tulsa, Okla. ....	..	..	..	..	..
Jersey City, N.J.	301o	167	101	25	8
Wichita, Kan.	344	30	97	195	22
Dayton, Ohio p	1,102	126	51	925	..
Mobile, Ala.	342	100	100	76	66
Richmond, Va.	209	88	40	21	60q
Des Moines, Iowa	39	23	16j	..	..
Syracuse, N.Y.	174	46	83	18	27
Providence, R.I.	43	37	1	5	..

Note: Data were requested of the various authorities for known active cases. In some instances this information was incomplete so that figures as shown in this table may not be comparable. However, the data although limited may be of interest as to the present known prevalence of tuberculosis in these urban centers. (...)Details not available or not reported.

(a) Includes 170 quiescent. (b) Includes 3 quiescent. (c) Under no known medical supervision. (d) (V.A.) (e) All cases under private physicians care are included in the total under clinic care. (f) Includes "Private Physicians Care". (g) Known active, communicable cases of tuberculosis at home number less than 10, as of December 31, 1963. (V.A. - U.S.P.H.S. - Mental Hospital) (h) "Patients at home". (j) Includes "Private Physicians Care" and "Other". (k) These figures are estimates only, as data are not ordinarily gathered for Oakland City only, but includes entire Alameda County, except Berkeley City. (L) (Veterans Hospital O.P. - Indian Service). (m) Including one in mental hospital. (n) In other institutions. (o) Includes 3 probably active, 5 undetermined and 46 quiescent. (p) Includes Dayton (City) and Montgomery County. (q) "Other" category in Register includes 51 cases under supervision of Child Chest Clinic of the Medical College of Virginia (not a Health Department Clinic). (r) Includes 15 in an institution and 24 with no supervision or supervision unknown.

It should be pointed out that the above data do not show the total amount of care being given to the tuberculous. As noted the figures refer mainly to persons with active disease. In most places many other people with arrested or inactive disease are receiving treatment and care. For example in New York City, in the Department of Health clinics alone, 8,758 individuals were under antibacterial drug treatment at the end of 1963. There were 1,702 persons with active disease under clinic supervision; in addition, 17,278 with arrested, inactive or apparently cured disease, and 1,451 with other conditions. Therefore it is obvious that Tuberculosis Register figures do not always reflect the full extent or volume of antituberculosis work in the community.

Table 89.

TUBERCULOSIS: NEWLY REPORTED CASES, DEATHS AND RATES PER 100,000 POPULATION
 New York State (Exclusive of New York City) by County - 1963

County*	Population Estimate July 1, 1963	Newly Reported Tuberculosis Cases§		Tuberculosis Deaths§	
		Number	Rate†	Number	Rate†
Albany	283,984	114	40.1	18	6.3
Allegany	43,934	2	4.6	1	2.3
Broome	220,161	26	11.8	6	2.7
Cattaraugus	80,465	10	12.4	--	--
Cayuga	73,500	10	13.6	3	4.1
Chautauqua	148,313	19	12.8	6	4.0
Chemung	100,532	21	20.9	6	6.0
Chenango	44,651	2	4.5	1	2.2
Clinton	76,567	11	14.4	1	1.3
Columbia	48,374	9	18.6	2	4.1
Cortland	42,852	1	2.3	1	2.3
Delaware	43,271	3	6.9	1	2.3
Dutchess	171,380	43	25.1	4	2.3
Erie	1,111,257	325	29.2	38	3.4
Essex	35,166	4	11.4	6	17.1
Franklin	44,391	7	15.8	3	6.8
Fulton	51,268	5	9.8	--	--
Genesee	56,006	7	12.5	1	1.8
Greene	31,736	8	25.2	3	9.5
Hamilton	4,301	2	46.5	1	23.3
Herkimer	68,374	9	13.2	--	--
Jefferson	88,792	12	13.5	--	--
Lewis	23,543	2	8.5	--	--
Livingston	43,392	8	18.4	2	4.6
Madison	57,693	9	15.6	4	6.9
Monroe	614,133	149	24.3	33	5.4
Montgomery	56,046	5	8.9	1	1.8
Nassau	1,387,426	207	14.9	30	2.2
Nieagara	256,249	21	8.2	9	3.5
Oneida	270,714	60	22.2	7	2.6
Onondaga	452,632	109	24.1	25	5.5
Ontario	69,233	8	11.6	2	2.9
Orange	191,188	36	18.8	10	5.2
Orleans	35,771	6	16.8	2	5.6
Oswego	89,508	15	16.8	6	6.7
Otsego	52,079	11	21.1	1	1.9
Putnam	35,886	3	8.4	--	--
Rensselaer	145,527	38	26.1	2	1.4
Rockland	152,689	27	17.7	3	2.0
St. Lawrence	113,709	9	7.9	3	2.6
Saratoga	94,368	13	13.8	4	4.2
Schenectady	155,066	31	20.0	1	0.6
Schoharie	22,457	4	17.8	2	8.9
Schuyler	15,283	1	6.5	--	--
Seneca	30,309	5	16.5	--	--
Steuben	98,197	23	23.4	1	1.0
Suffolk	789,993	158	20.0	18	2.3
Sullivan	46,154	27	58.5	--	--
Tioga	40,962	1	2.4	1	2.4
Tompkins	68,745	7	10.2	1	1.5

continued on next page.

Table 89 - continued

TUBERCULOSIS: NEWLY REPORTED CASES, DEATHS AND RATES PER 100,000 POPULATION
 New York State (Exclusive of New York City) by County - 1963

County*	Population Estimate July 1, 1963	Newly Reported Tuberculosis Cases§		Tuberculosis Deaths§	
		Number	Rate†	Number	Rate†
Ulster	127,148	39	30.7	7	5.5
Warren	45,764	5	10.9	2	4.4
Washington	48,081	6	12.5	5	10.4
Wayne	68,602	12	17.5	--	--
Westchester	843,616	138	16.4	20	2.4
Wyoming	33,604	1	3.0	--	--
Yates	18,905	1	5.3	--	--
Institutional Districts	121,435	20	16.5	12	**
Upstate New York Total***	9,585,382	1,865	19.5	317	3.3

*County data exclusive of institutional districts, which comprise 50 State institutions and 10 Veterans Administration Hospitals. **Deaths occurring in these districts are allocated whenever possible to place of former residence. ***Includes cases which are not included in counties or institutional population. §Provisional. †Rate per 100,000 population.

Table 90.
TUBERCULOSIS: NEWLY REPORTED CASES, DEATHS AND RATES
 Twenty-Six Cities, each with over 25,000 Population,
 in Upstate New York - 1963

City	Population Estimate July 1, 1963	Newly Reported Tuberculosis Cases§		Tuberculosis Deaths§	
		Number	Rate†	Number	Rate†
Albany	127,013	74	58.3	15	11.8
Amsterdam	27,183	4	14.7	1	3.7
Auburn	32,905	7	21.3	3	9.1
Binghamton	70,952	18	25.4	6	8.5
Buffalo	510,838	239	46.8	34	6.7
Elmira	43,352	14	32.3	5	11.5
Ithaca	28,581	1	3.5	1	3.5
Jamestown	41,262	2	4.8	2	4.8
Kingston	29,370	11	37.5	1	3.4
Lackawanna	30,086	12	39.9	--	--
Lockport	27,061	3	11.1	1	3.7
Mt. Vernon	76,602	30	39.2	2	2.6
Newburgh	30,744	10	32.5	4	13.0
New Rochelle	80,541	11	13.7	3	3.7
Niagara Falls	105,176	10	9.5	6	5.7
No. Tonawanda	38,182	3	7.9	--	--
Poughkeepsie	37,426	16	42.8	1	2.7
Rochester	304,929	129	42.3	31	10.2
Rome	51,342	9	17.5	1	1.9
Schenectady	77,354	18	23.3	1	1.3
Syracuse	214,022	77	36.0	19	8.9
Troy	65,331	16	24.5	2	3.1
Utica	97,699	27	27.6	4	4.1
Watertown	32,922	7	21.3	--	--
White Plains	52,439	11	21.0	--	--
Yonkers	200,126	32	16.0	4	2.0
Total 26 Large Cities	2,433,438	791	32.5	147	6.0
Remainder Upstate New York	7,151,944	1,074	15.0	170	2.4

*Rate per 100,000 population. §Provisional.

NEW YORK STATE

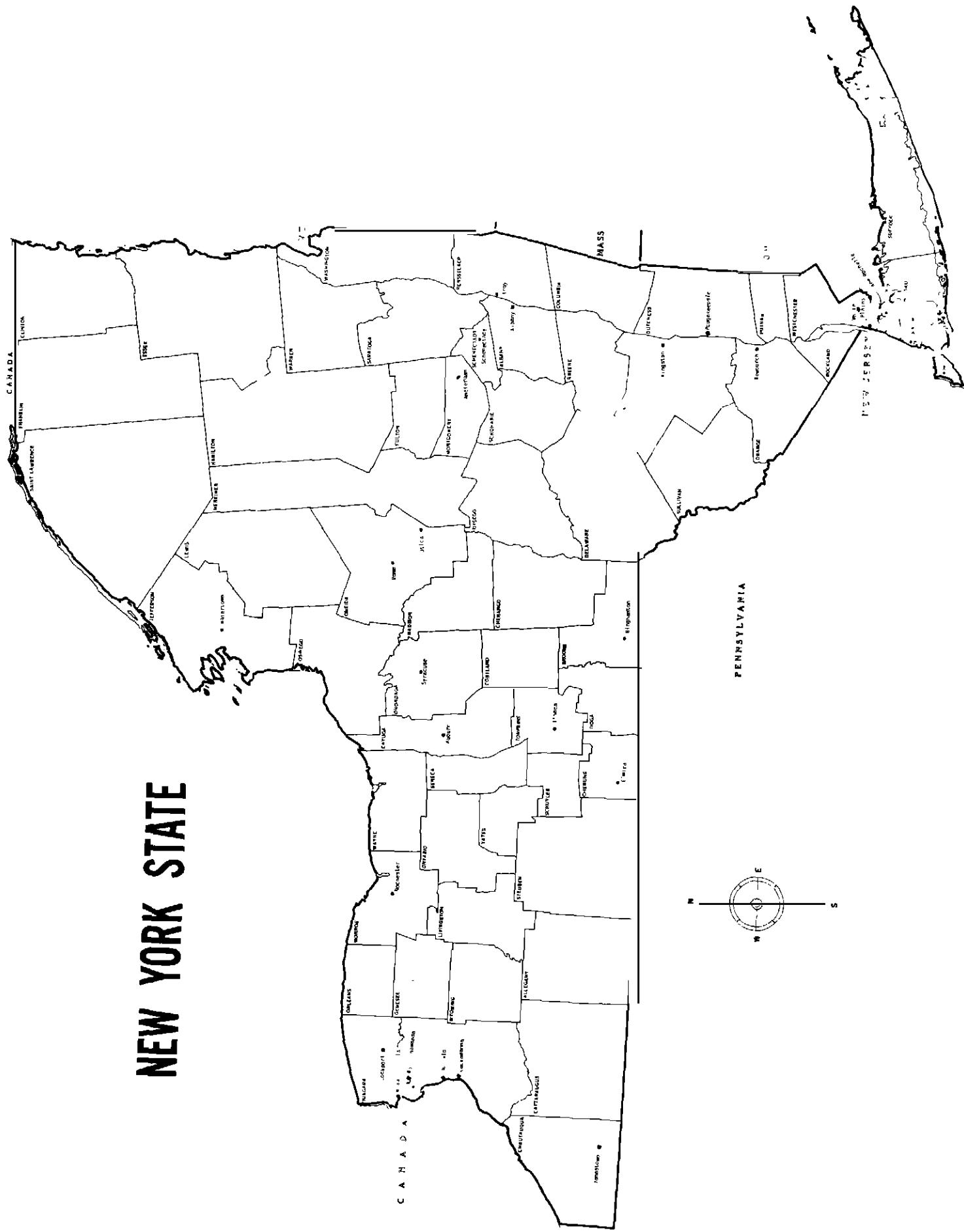


Table 91.
TUBERCULOSIS IN SELECTED COUNTRIES
Part A - New Cases of Tuberculosis Registered and Rates
1961 - 1963

Country	Population †	New Cases			New Rate*		
		1961	1962	1963	1961	1962	1963
Australia	10,706,516	3,570	3,825	..	34.0	35.7	..
Belgium (a)	9,251,414‡	4,706	4,127	4,427	51.3	44.6	47.9
Canada	18,896,000	5,966	6,284	5,705	32.7	33.4	30.2
Ceylon	10,167,000	8,411	8,543	..	82.7	84.0	..
Chile	8,222,000	(b)	(b)	(b)	..	..	..
Czechoslovakia	13,951,473p	14,291	13,747	12,257	103.7	99.2	87.9
Denmark	4,685,000	1,039	953	..	22.5	20.7	..
Ecuador	4,868,678p	5,660	5,115	5,375	125.1	112.7	110.4
Eire	2,818,341§	3,010	2,820	2,503p	106.9	100.1	88.8
England and Wales (h)	47,023,000	22,783	21,535	19,902	49.4	46.1	42.3
Fiji (Colony)	441,301	566	560	529	141.1	139.6	119.9
Finland	4,523,000‡	8,182	8,536	..	182.2	188.7	..
France (g)	47,600,000	34,606	32,912p	..	76.3	70.7	..
German Federal Republic (k) ..	57,588,000	65,040	60,664	..	120.9	110.3	..
Hong Kong	3,592,100	12,584	14,263	13,031	396.0	448.8	410.1
India .....	..	..	..	..	..	..	..
Iraq	7,031,207	4,578	5,476	4,110	65.3	79.2	58.5
Italy	50,463,762	..	..	..	..	..	..
Japan	96,156,000	420,460	387,767	380,603	445.9	407.4	395.8
Luxembourg	327,000p	214	226	194	67.6	70.2	59.3
Malta	328,116	146	103	86	44.4	31.3	26.2
Mexico	38,416,043	13,501	15,739	18,181	39.0	42.3	47.3
Netherlands	11,965,962p	5,465	4,998	..	47.0	42.3	..
New Zealand	2,543,164	1,332	1,283	1,195p	56.0	54.0	47.0
Northern Ireland	1,446,000	835	730	619	58.6	50.9	42.8
Norway	3,638,919‡	1,606c	1,437d	..	44.8	39.5	..
Peru	(e)	21,503	24,011	21,460	366.7	466.0	445.7
Portugal	9,011,412	17,478	15,372	14,241	194.0	170.6	158.0
Puerto Rico	2,513,000p	1,985	1,994	1,852p	82.6	81.2	73.7
Republic of South Africa	16,680,000	58,491	63,450	..	360.7	380.4	..
Whites	3,185,000	1,224	1,261	..	39.1	39.6	..
Coloureds	1,597,000	6,979	7,419	..	451.7	464.6	..
Asiatics	506,000	1,055	969	..	216.6	191.5	..
Bantu	11,392,000	49,233	53,801	..	445.3	472.3	..
Scotland	5,204,500	3,593	3,364	3,024	69.3	64.7	58.1
Spain	31,068,750	20,892	15,753	15,950f	68.4	51.1	51.3
State of Singapore	1,775,000	6,299	5,773	4,654p	373.4	333.1	262.2
Sweden	7,604,108	3,996	3,777	3,533	53.4	49.9	46.5
Switzerland	5,770,000	4,755	4,261	4,320	86.9	75.3	74.9
United States (j)	188,531,000	53,726	53,315p	54,062	29.4	28.7	28.7
West Berlin (g)	2,177,281	3,932	3,534	3,530	178.4	162.1	162.1

*Rate per 100,000 population. p=provisional. (...)=data unavailable or not reported as of September 1963. †Population is for latest year for which tuberculosis data are shown. ‡Population for 1962. (a)New cases notified to government officers (inspecteurs d'hygiène); only cases of respiratory tuberculosis (notification of other forms not compulsory and thus not notified). (b)No national statistics on new cases are available. (c)Of which 964 are bacillary tbc. (d)Of which 805 are bacillary tbc. (e)1963 new case reporting area=4,814,900; 1962 death registration=4,409,300. (f)Registered in the central file of "Patronato". (g)New cases registered by TB dispensaries. (h)New cases include in 1963=18,937 "formal notifications" and 965 persons first reported at time of death. (j)50 States and District of Columbia, excluding Armed Forces abroad. (k)West Berlin included. §1961 Census.

Table 91 - continued
TUBERCULOSIS IN SELECTED COUNTRIES
Part B - Tuberculosis Deaths and Death Rates
1961 - 1963

Country	Deaths			Death Rate*		
	1961	1962	1963	1961	1962	1963
Australia	447	475	..	4.3	4.4	..
Austria .....	..	..	..	..	..	..
Belgium	1,334	1,335	..	14.5	14.4	..
Canada (a)	769	785	756	4.2	4.2	4.0
Ceylon	1,523	..	..	15.0	..	..
Chile	4,112	3,906	4,407	53.9	48.8	53.6
Czechoslovakia	2,989	3,220	2,654p	21.6	23.2	19.0
Denmark	176	182	144	3.8	3.9	3.1
Ecuador	1,080	1,177	1,303p	23.9	25.9	26.8
Eire	420	426	432	14.9	15.1	15.3
England and Wales	3,334	3,090	2,962	7.2	6.6	6.3
Fiji (Colony) (b)	42	44	31	10.5	11.0	7.0
Finland	970	920p	..	21.6c	20.3	..
France	9,342	8,998	8,486p	20.6	19.3	17.8
German Federal Republic	8,190	8,003	..	15.2	14.6	..
Hong Kong	1,907	1,881	1,762	60.0	59.2	49.1
Hungary .....	..	..	..	..	..	..
India .....	..	..	..	..	..	..
Iraq .....	..	..	175	..	..	2.5
Italy	7,866	7,820	7,345	15.6	15.5	14.6
Japan	27,916	27,852	23,259	29.6	29.3	24.2
Luxembourg	37	46	..	11.7	14.3	..
Malta	17	14	11	5.2	4.3	3.4
Mexico	9,369	9,941	10,447	27.1	26.7	27.2
Netherlands	316	296	253p	2.7	2.5	2.1
New Zealand	134	135	93p	5.6	5.7	3.7
Northern Ireland	105	102	113p	7.4	7.1	7.8
Norway	216	202	..	6.0	5.6	..
Peru	3,137	3,164	..	77.5	78.1	..
Portugal	3,622	3,291	3,235p	40.2	36.5	35.9
Puerto Rico	633	582	522p	26.3	23.7	20.8
Republic of South Africa	1,784	..	..	11.0	..	..
Whites	208	..	..	6.6	..	..
Coloureds	1,475	..	..	95.5	..	..
Asiatics	101	..	..	20.7	..	..
Bantu .....	..	..	..	..	..	..
Scotland	481	434	496p	9.3	8.4	9.5
Spain	7,474	7,278	..	24.5	23.6	..
State of Singapore	645	654	669p	38.2	37.7	37.7
Sweden	382	306	315	5.1	4.0	4.1
Switzerland	613	624	578	11.2	11.0	10.0
United States	9,938	9,506	9,660p	5.4	5.1	5.1
West Berlin	497	517	548	22.6	23.7	25.2

*Rate per 100,000 population. p=provisional. (...)=data unavailable or not reported, see footnotes in Part A.

(a) A new method of classification of tuberculosis deaths went into effect January 1, 1962, in that deaths for which the underlying cause was reported as "active," "healed," or "arrested" pulmonary tuberculosis are now classified as tuberculosis; formerly such deaths were classified to the resulting pulmonary condition. Of the 785 deaths in 1962, classified to tuberculosis, there were 75 such deaths, in addition to 710 classified to this disease under the same system which was in effect in previous years. Of the 756 deaths in 1963, classified to tuberculosis, there were 81 such deaths. (b) Tuberculosis deaths given are from 5 main hospitals only. (c) Respiratory tuberculosis.

Note: Care should be taken in making international comparisons of tuberculosis morbidity and mortality rates. Reporting of new cases is not done with the same degree of completeness or accuracy in each place. Also criteria used as to what constitutes a "new case" differ. However, for a particular country the local practice is probably fairly consistent and the annual records within the same country, for a relatively short period, may be comparable.

Table 91 continued
KNOWN CASES OF TUBERCULOSIS IN SELECTED COUNTRIES
 Part C - Prevalence of Tuberculosis as of Last Day of Year

Country	Known Cases at End of Year		
	Respiratory	Other Forms	Total
Australia (1962)	5,421	55	5,476
Canada (1962) (a)	5,387	446	5,833
Ceylon (1961)	40,451	..	..
Czechoslovakia	74,788	13,547	88,335
Denmark (1962)	5,912	..	..
Ecuador (1963)	5,336	39	5,375
England and Wales (1963) (b)	322,280	24,091	346,371
Eire (1962)	10,732	2,328	13,060
Fiji (Colony) (1963)	492	37	529
Finland (1961)	41,274	7,303	48,577
German Republic (1963)	244,821	41,800	286,621
Hong Kong (1963) .....	..	..	72,469
Iraq (1963)	3,235	875	4,110
Japan (1963)	933,606	60,286	993,892
Luxembourg (1963) .....	..	..	..
Malta (1963) (c)	57	29	86
Mexico (1963) .....	..	..	..
Netherlands (1962)	7,158	1,611	8,769
New Zealand (1963)	7,946	784	8,730
Northern Ireland (1963)	7,971	1,417	9,388
Norway (1962) (d)	16,511	1,928	18,339
Puerto Rico (1963)	11,825	905	12,730
Scotland (1963)	39,266	4,591	43,857
Spain (1963) (e)	24,850	..	..
State of Singapore (1963)	25,432	236	25,668
Sweden (1963)	35,881	7,309	43,190
West Berlin (1963)	22,365	1,772	24,137

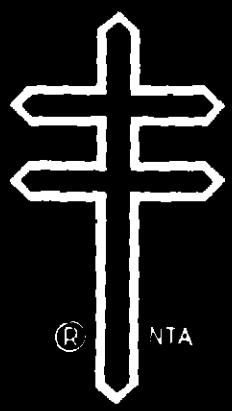
(..)Data not available.

(a)Tuberculous patients in institutions only, December, 1962. (b)In previous years received information concerning notified cases under supervision. Now receiving chest clinic returns under supervision whether notified officially or not. (c)These figures are those of newly reported cases during the year. (d)Of which 12,967 are bacillary tuberculosis. (e)File began September 30, 1962. Figures for 1963 refer only to the patients of the Sanatoria and Dispensaries of the "Patronato".

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