Annual Report

of the

Department of Health

of

The City of New York

for the

Calendar Year, 1913

ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

OF

THE CITY OF NEW YORK

FOR THE

CALENDAR YEAR 1913

NEW YORK CITY
1914

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BOARD OF HEALTH.

Commissioner of Health and President of the Board.
ERNST J. LEDERLE, PH. D.

Health Officer of the Port,
JOSEPH J. O'CONNELL, M. D.

Police Commissioner,
RHINELANDER WALDO.

HERMANN M. BIGGS, M. D.,
General Medical Officer.

DIRECTORY OF THE DEPARTMENT OF HEALTH

OFFICES

Headquarters: S. W. Corner Centre and Walker Streets, Borough of Manhattan
Telephone, 6280 Franklin.

Borough of The Bronx, 3731 Third Avenue.....Telephone, 1975 Tremont.
Borough of Brooklyn, Flatbush Avenue and Willoughby Street.....Telephone, 4720 Main.
Borough of Queens, 372-374 Fulton Street, Jamaica, L. I.....Telephone, 1200 Jamaica.
Borough of Richmond, 514-516 Bay Street, Stapleton, S. I.....Telephone, 440 Tompkinsville.
Office Hours—9 a.m. to 5 p.m.; Saturdays, 9 a.m. to 12 m.

HOSPITALS FOR CONTAGIOUS DISEASES

Manhattan—Willard Parker Hospital, foot of East 16th Street. Telephone, 1600 Stuyvesant.
The Bronx—Riverside Hospital, North Brother Island. Telephone, 4000 Melrose.
Brooklyn—Kingston Avenue Hospital, Kingston Avenue and Fenimore Street. Telephone, 4400 Flatbush.

LABORATORIES

Diagnosis Laboratory, Centre and Walker Streets. Telephone, 6280 Franklin.
Serological Laboratory, Centre and Walker Streets. Telephone, 6280 Franklin.
Research Laboratory. Chemical Laboratory. Vaccine Laboratory. Drug Laboratory.
Foot of East Sixteenth Street. Telephone, 1600 Stuyvesant.

INFANTS' MILK STATIONS

Manhattan

1. 172 East 3d St.
2. 513 East 11th St.
3. 281 Avenue A.
4. 240 East 28th St.
5. 225 East 107th St.
6. 241 East 40th St.
7. 174 Eldridge St.
8. Vanderbilt Clinic.
9. 326 East 11th St.
10. 114 Thompson St.
11. 315 East 112th St.
12. 244 Mulberry St.
13. 508 West 47th St.
14. 78 Ninth Ave.
15. 421 East 74th St.
16. 205 East 96th St.
17. 209 Stanton St.
18. 2287 First Ave.
19. 108 Cherry St.
20. 122 Mulberry St.
21. 27 Suffolk St.
22. 73 Cannon St.
23. 110 Suffolk St.
24. 96 Monroe St.
25. 251 Monroe St.
26. 289 Tenth Ave.
27. 74 Allen St.

Brooklyn

1. 268 South 2d St.
2. 660 Fourth Ave.
3. 208 Hoyt St.
4. 176 Hudson Ave.
5. 2346 Pacific St.
6. 184 Fourth Ave.
7. 359 Manhattan Ave.
8. 49 Carroll St.
9. 69 Johnson Ave.
10. 233 Suydam St.
11. 329 Osborn St.
12. 126 Dupont St.
13. 651 Manhattan Ave.
14. 185 Bedford Ave.
15. 296 Bushwick Ave.
16. 994 Flushing Ave.
17. 176 Nassau St.
18. 129 Osborn St.
19. 698 Henry St.
20. 552 Sutter Ave.
21. 167 Hopkins St.
22. 604 Park Ave.
23. 239 Graham Ave.
24. 49 Amboy St.

The Bronx—1. 511 East 149th Street. 2. 1354 Webster Avenue.
Queens—1. 114 Fulton Avenue, Astoria, L. I. **Richmond**—1. 689 Bay Street, Stapleton, S. I.

CLINICS FOR SCHOOL CHILDREN

Hours: 2-5 p.m. Saturdays, 9-12 m.

Manhattan—Gouverneur Slip..... Refraction eye work only.
Pleasant Avenue and 118th St.. Refraction eye work. Nose and throat clinic, including operation. Trachoma operative treatment.
164 Second Avenue..... Dental work only.
449 East 121st Street..... Dental work and treatment of contagious eye disease.
P. S. 144, Hester and Allen Sts. Clinic and classes for chronic contagious eye diseases.
P. S. 21, 222 Mott Street..... Clinic and classes for chronic contagious eye diseases.
The Bronx—580 East 169th Street... Nose and throat clinic including operative treatment. Treatment of contagious eye disease. Refraction eye work. Dental work.
Brooklyn—330 Throop Avenue..... Nose and throat clinic including operative treatment. Treatment of contagious eye disease. Refraction eye work. Dental work.
1249 Herkimer Street..... Nose and throat clinic including operative treatment. Contagious eye disease treatment. Refraction eye work. Dental work.
124 Lawrence Street..... Nose and throat clinic including operative treatment. Contagious eye disease treatment. Refraction eye work. Dental work.
Richmond—689 Bay Street, Stapleton. Dental work only.

DIAGNOSTIC CLINICS FOR VENEREAL DISEASES

Manhattan—Centre and Walker Streets. Week days, 9 to 10 a.m.
307 West 33d Street. Wednesdays, 8 to 9 p.m.
Brooklyn—29 Third Avenue. Week days, 9 to 11 a.m. Tuesdays and Fridays, 8 to 9 p.m.

CLINICS FOR THE PASTEUR TREATMENT OF RABIES

Manhattan—Centre and Walker Streets. Week days, 1 to 4 p.m.
Brooklyn—29 Third Avenue. Week days, 11 a.m. to 2 p.m.
Sundays and Holidays (for Manhattan cases only), 10 a.m. to 12 m.
The Bronx—Third Avenue and St. Paul's Place. Daily including Sundays and Holidays, 11 a.m. to 1 p.m.
Queens—Cases attend Manhattan Clinic.
Richmond—Cases attend Manhattan Clinic.

TUBERCULOSIS CLINICS

Manhattan—West Side Clinic, 307 West 33d Street. Telephone, 3471 Murray Hill.
Lower East Side Clinic, 111 East 10th Street.
Middle East Side Clinic, 229 East 57th Street.
Harlem Italian Clinic, 420 East 116th Street. Telephone, 2375 Harlem.
Southern Italian Clinic, 22 Van Dam Street. Telephone, 412 Spring.
Day Camp, Ferryboat " Middletown," foot of East 91st Street. Telephone, 2957 Lenox.
The Bronx—Northern Clinic, St. Pauls Place and Third Avenue. Telephone, 1975 Tremont.
Southern Clinic, 493 East 139th Street. Telephone, 5702 Melrose.
Brooklyn—Main Clinic, Fleet and Willoughby Streets. Telephone, 4720 Main.
Germantown Clinic, 55 Sumner Avenue. Telephone, 3228 Williamsburg.
Brownsville Clinic, 64 Pennsylvania Avenue. Telephone, 2732 East New York.
Eastern District Clinic, 306 South 5th Street, Williamsburg. Telephone, 1293 Williamsburg.
Bay Ridge Clinic, 215 60th Street. Telephone, 2434 Sunset.
Parkville Clinic, 974 West Street. Telephone, 1866 Bath Beach.
Day Camp, Ferryboat " Rutherford," foot of Fulton St. Telephone, 1530 Main.
Queens—Jamaica Clinic, 10 Union Avenue, Jamaica. Telephone, 1386 Jamaica.
Flushing, 112 Broadway, Flushing. Telephone, 731 Flushing.
Richmond—Richmond Clinic, Bay and Elizabeth Streets, Stapleton. Mon., Wed. and Fri., 2 to 4 p.m.

SANATORIUM FOR TUBERCULOSIS

Otisville, Orange County, N. Y. (via Erie Railroad from Jersey City). Telephone, 13 Otisville.

TUBERCULOSIS HOSPITAL ADMISSION BUREAU

Maintained by the Department of Health, the Department of Public Charities, and Bellevue and Allied Hospitals, 426 First Avenue. Telephone, 8667 Madison Square. Hours, 9 a.m. to 5 p.m.

HONORARY AND CONSULTING OFFICERS.

Medical Advisory Board.

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* Deceased.

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The Sanitary Superintendent.
The Chairman of the Board of Governors of the Hospital for Diphtheria and Scarlet Fever.

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Assistant Attending Laryngologist, Riverside Hospital.

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DEPARTMENT OF HEALTH,
CITY OF NEW YORK,
149 Centre Street, Borough of Manhattan.

New York, January 31, 1914.

To His Honor

The Mayor of the City of New York:

Sir: On behalf of the Board of Health I have the honor to transmit herewith, as required by Section 1168 of the Charter of the City of New York, a report of all the operations of the Department of Health of the City of New York for the year ending December 31, 1913.

Very respectfully,

ERNST J. LEDERLE, PH. D.,
Commissioner of Health.

INTRODUCTION.

The Municipal Year Book of the City of New York, 1913, the first issued, states:

> "The Mayor's Office has recently undertaken another phase of standardization—that of standardizing the annual and quarterly reports of the several municipal departments. The lack of selection and organization of data has in the past made municipal reports of little or no value to the citizen.
>
> "As there has been no central supervision or control over the data to be contained in these records, their character has varied greatly from year to year, the data included one year have been modified or eliminated the next. A comparative study of one year with another is therefore difficult, if not impossible."

It is therefore probable that in the immediate future the Department of Health's annual report will be considerably modified along lines which it is hoped, while tending to statistical perfection and comprehensiveness, will increase its interest—both to students of public sanitation, municipal welfare and progress, and to the general public.

Still, I do not wish to apologize for the attached for in reading it over the enthusiasm and earnestness of the many workers with whom I have been associated so long appeals from every page and, vividly recalling all the good work effected, especially during the year in question (1913), I believe that the bureau chiefs and others of the staff have shown in their several reports the same excellence which has so characterized their work.

The reports of the various bureaus give in detail the various innovations and modifications of procedure introduced during the year so that I shall but call attention to the more prominent changes in each bureau, trusting that the reader will not fail to turn to the particular report for further information.

The general administrative arrangement was reorganized by taking from the Sanitary Bureau four of its constituent divisions—those of Contagious Diseases, Communicable Diseases, Child Hygiene and Food Inspection—and creating three new bureaus (combining the Contagious and Communicable into Infectious). The work so classified had long since reached such dimensions and importance as to require the undivided attention of an especially qualified chief and staff.

In regard to the work of the last named bureau, an important decision of the Appellate Division of the Supreme Court was handed down December 5, 1913, sustaining the constitutionality of section 181 of the Sanitary Code, which prohibits the discharge of dense smoke, and reversing the decision of the Court of Special Sessions, rendered in June, 1913, as a result of which the control of the smoke nuisance in New York City was for the time being seriously crippled. As a direct consequence of this ruling this matter is now well in hand.

In connection with the work of the Bureau of Food Inspection, an event notable in the history of the work of the Department was the examination of the employees of bakeries, which was instituted in September, 1913, under the provisions of a new State law. The importance of this work can be readily seen when it is mentioned that an approximate total of 15,000 persons are employed in the 4,250 bakeries which range all the way from a little one-room shop beneath a tenement to a huge factory occupying several city blocks. So many workers must harbor a certain number of sufferers from communicable disease, especially tuberculosis and syphilis. The detention and removal of these persons from such occupations is necessary to the public welfare and can alone be effected by skillful and regularly repeated examination.

This year also brought into full operation the gradually perfected plans for the control of the city's milk supply by substantially universal pasteurization and by the adoption of a system of grading.

In the Bureau of Child Hygiene the midwife supervision work was put upon a new basis by the adoption of a rule which requires all who obtain a permit, after January 1, 1914, for the practice of this profession, to be graduates of a recognized school. Hereafter a midwife in New York must consequently possess the same qualifications as in Europe.

The Bureau of Infectious Diseases made marked progress in typhoid supervision and prophylaxis. It especially watched convalescents who by occupation were public food handlers and allowed none to return to their vocation till excreta examinations failed to show the characteristic bacillus.

From the first of the year typhoid vaccine inoculation was offered to all exposed to the disease and as the statistics given show it was extensively taken.

In the Bureau of Laboratories a notable change was the transfer to the grounds of the Department's Otisville Sanatorium of the Department antitoxin and vaccine stables and the establishment there of a branch laboratory.

A vexatious question long hampering the work of the Bureau of Hospitals was finally brought near solution by the adoption by the Board of Estimate on March 27th of the following:

> "Report of the Corporate Stock Budget Committee, recommending that the resolution adopted June 17, 1910, which recommended to the Board of Health the abandonment of the 'Haacke Farm property' in the Borough of Queens as a site for a contagious disease hospital, and further, that another site or sites be selected, be rescinded, for the reason that in a matter so vital as the preservation of the public health, the advice of those who are charged with the duty of protecting the public health should be followed."

This marked the termination of efforts to prevent the establishment of the badly needed hospital for contagious diseases in the Borough of Queens, at the site selected by the Department of Health, and arrangements for construction of the building are being rapidly pushed.

The work of the Bureau of Records shows that the death rate, both of the general population and of infants, is still on the decline and that reports of births have reached the gratifying per cent. of 98 of all occurring.

When the exploitation of the so-called Friedmann cure for tuberculosis in this country was imminent, in the early part of 1913, the Board became convinced, after due investigation of the story and claims of the discoverer, that, while the presumption and the existing evidence were largely against the fulfillment of the promises which were so freely made, it was still not wise or practicable, in view of the widespread hope of benefit which had been aroused among the victims of this disease, to interfere at the moment with the use of the vaccine provided no evidence was forthcoming of injurious effects from the living cultures of which it was constituted.

Such evidence was not at the time at hand, and, while the testimony as to the efficacy of the remedy from German observers was not at all encouraging, it was felt that a fair scientific test might wisely be given to the method. Under these conditions, although the Board felt that it would not be wise or practicable for it to assume the supervision of such a series of tests, it welcomed the assumption of this task by the Federal authorities who had placed the matter in the hands of accomplished and experienced officials.

The unusual publicity which accompanied the introduction of this particular remedy and the large number of patients who applied for treatment threatened to bring about a general pilgrimage of sufferers from tuberculosis to New York City,

and thus presented a new and acute problem to the Board which already had grave doubts whether the department charged with the protection of public health should permit the general use of treatments by new and untried vaccines until evidence of their entire harmlessness had been produced.

Later, on May 29, 1913, owing to accumulating adverse evidence, the Board adopted the following resolution in form approved by the Medical Advisory Board:

Whereas, In the judgment of the Board of Health, the use of living cultures of bacteria in the inoculation of human beings, for the prevention or the treatment of disease, may be fraught with serious danger to the individuals and to the public health, and

Whereas, The necessity and the harmlessness of such a procedure can be safely determined only by carefully planned and controlled and unbiased scientific measures and observations, and

Whereas, Certain tests of the efficiency and safety of an alleged cure for tuberculosis now being made in this City are being rendered unsatisfactory, unscientific and practically futile through the insistence of the originator of the alleged remedy, on conditions which involve inadequate observation, inaccurate methods of administration and the insistence on secrecy regarding the substance employed in some phases of the treatment, and

Whereas, Evidence is already at hand to show that the so-called remedy not only does not fulfill the promises of efficiency and safety under which its use was at first permitted in this City, but, on the contrary, during its administration many patients have suffered serious and unduly rapid progress of their diseases; therefore, be it

Resolved, That the use of living bacterial organisms in the inoculation of human beings for the prevention or treatment of disease shall be and is hereby prohibited in New York City, until after full and complete data regarding the method of use, including a specimen of the culture and other agents employed therewith, and a full account of the details of preparation, dosage and administration shall have been submitted to the Board of Health, and until permission shall have been granted in writing by the Board for the use of the same.

A short time before this, a company had purchased the rights to use the Friedmann vaccine and had opened an institution in this city for the treatment of tuberculosis thereby. But as a result of the resolution this institution was closed pending decision on an application for a permit under the new rule. A number of persons had already been treated at various hospitals and at the Friedmann Institute and permission was requested by the institute to continue treatment of these cases.

On June 27th, the Board of Health adopted a resolution forbidding the employment of the method except in cases already treated, and prescribed very minutely the conditions under which such reinjections would be made. These resolutions and decisions later reached thereunder had the effect of denying the application of the Friedmann Institute, and thus closed a chapter in the history of tuberculosis cures in New York City.

ERNST J. LEDERLE.

BUREAU OF GENERAL ADMINISTRATION.

ADMINISTRATION.

Staff.

	No. of Each.
Secretary to Board and Director of Bureau	1
Secretary to Commissioner	1
Auditor	1
Chief Clerk	1
Assistant Chief Clerks	4
Medical Inspector	1
Bacteriologist	1
Sanitary Inspectors	5
Food Inspector	1
Bookkeepers	6
Clerks	51
Stenographers and Typists	20
Telephone Operators	7
Laboratory Assistants	2
Messengers	2
Automobile Enginemen	3
Janitor	1
Elevator Attendants	3
Foreman of Laborers	1
Laborers	24
Cleaners	29
Fire Expert	1
Stationary Engineer	1
Stationary Firemen	3
Total	171

Communications and Permits.

The following official reports, communications and applications, summarized and classified as to the subject matter, were submitted to the Board through the Secretary, for consideration and final action:

Table

Special reports and communications	867
Premises declared a public nuisance	101
Premises ordered vacated	192
Permits granted	25,269
Permits denied	2,732
Permits revoked	12,736

Board orders extended or modified	16
Extension or modification of Board orders denied	51
Delayed and imperfect certificates of births, marriages and deaths approved and ordered filed	96
Corrected certificates of births, marriages and deaths approved and ordered filed	1,340

Orders Issued.

Orders of the Board for the abatement of nuisances are issued under the supervision of the Assistant Sanitary Superintendents in the various boroughs, upon the facts and evidence contained in written reports of the Sanitary Inspectors, the result of personal inspection of premises complained of. These orders call the attention of owners, lessees and agents to violations of the Sanitary Code and Health Laws in each case, and require the necessary alteration, repairs, cleaning and improvement of the premises named within three days from the receipt of the order. If upon reinspection, it is found that the requirements of the order have not been complied with, a suit for penalty may be commenced against the delinquents under sections 1172 and 1222, chapter 466, Laws of 1901.

Summary of clerical work performed in the various boroughs in connection with the issuance of Board Orders, negative reports filed, and fees paid and certificates issued, the result of searching for sanitary violations against premises; also written references forwarded to other city departments is as follows:

Table

Borough.	Board Orders Issued.	Negative Reports Filed.	References to other Departments.	Searches Made and Certificates Issued.	Communications Received and Answered.	Fees Received.
Manhattan	8,644	10,778	4,813	1,670	290	$833 30
Brooklyn	4,814	7,240	2,930	590	26	295 00
The Bronx	2,602	2,782	372	265	24	132 00
Queens	4,138	3,804	467	113	8	56 50
Richmond	1,374	808	124	30	.....	15 00
Total	21,572	25,412	8,706	2,668	348	$1,331 80

Searches and Transcripts.

Certified copies of the records of Vital Statistics as may be found to be on file in the Bureau of Records are furnished to applicants authorized to receive same, namely, interested parties, next of kin, legal representatives, etc., upon payment of the fee in such cases prescribed by the Board of Health. Written orders are signed by the Assistant Chief Clerk in the various boroughs and issued to the Assistant Registrar of Records, authorizing the search and issuance of a transcript of the record, which, in accordance with the regulations of the Board is authenticated by affixing the seal of the Department of Health, and attested by the signature of the Assistant Chief Clerk of the borough. When search is made and the record is not found to be on file, an official certificate is issued to that effect.

Summary of applications for searches made to the Assistant Chief Clerks in the various boroughs, showing fees received and work performed in connection with

searches and transcripts of the records of births, marriages and deaths on file in the Bureau of Records in the Department:

TABLE

Borough.	Applications for Searches.	Transcripts Signed and Authenticated.			Not Found Certificates Issued.	Communications Received and Answered.	Fees Received.
		Births.	Marriages.	Deaths.			
Manhattan	32,410	6,309	3,269	24,361	4,360	3,993	$15,817 30
Brooklyn	19,234	4,247	2,092	14,955	3,388	2,560	9,644 90
The Bronx	5,638	425	84	4,939	204	296	2,064 20
Queens	2,541	368	92	2,943	168	594	1,293 30
Richmond	748	193	29	604	40	115	379 10
Total	60,571	11,542	5,566	47,802	8,160	7,558	$29,198 80

ACKNOWLEDGMENT OF COMPLAINTS.

All mail matter addressed to the Department of Health is carefully scrutinized, and that in which complaints are made relative to matters within the jurisdiction of the Department, and which gives the name and address of the author, is promptly acknowledged. It is then distributed among the various bureaus in accordance with its purport. That requiring the attention of other city departments is acknowledged and immediately forwarded thereto.

Statement of the number of written complaints received and answered in the various boroughs:

TABLE

Manhattan	6,080
Brooklyn	6,338
The Bronx	1,150
Queens	1,365
Richmond	492
Total	15,425

SANITARY BUREAU.

ADMINISTRATION.

Staff.

Sanitary Superintendent	1
Assistant Sanitary Superintendents	5
Medical Inspectors	5
Sanitary Engineer	1
Sanitary Inspectors	69
Clerks	23
Stenographers and Typists	4
Typewriting Copyists	6
Driver	1
Foreman of Laborers	3
Laborers	16
Automobile Engineman	1
Lieutenant of Police	1
Sergeants	2
Patrolmen	50
Total	188

Reorganization.

At the beginning of the year the Sanitary Bureau of the Department of Health included the following divisions all under the supervision of the Sanitary Superintendent, as the chief executive officer of the bureau:

1. Division of Inspections
2. Division of Contagious Diseases
3. Division of Communicable Diseases
4. Division of Child Hygiene
5. Division of Food Inspection.

Later all except the first were taken from under the supervision of the Sanitary Superintendent and made independent bureaus.

The Sanitary Bureau under this reorganization comprises the former Division of Inspections, with the Sanitary Superintendent as the chief of the bureau.

Office Changes.

A new form of complaint book was adopted January 1, 1913, known as the Book of Complaints, Reports, Notices and Orders, and the following procedure inaugurated: All complaints received in each Borough are promptly referred to the Complaint Clerk of the Borough and entered in the complaint book under a serial number. The number given to a complaint remains the same irrespective of whether the return be for an "order," "notice," "no cause for action," "for reference" or "abated by personal effort."

This complaint book records for each complaint the date received, premises complained of, nature of complaint, name and address of the complainant, and the division or bureau to which the complaint was referred for investigation and report; also,

the date report was returned and the result of investigation; if an order or notice was issued, date of same and dates of reinspections and result of each. If the report on complaint is returned "for reference to another department," "no cause for action" or "abated by personal effort," that fact is also noted in complaint book. (Note—Reports formerly returned as "duplicate" are now returned as "no cause for action as notice or order now pending, which, when complied with, will abate the nuisance"). Report is made to complainant only on special request.

The Complaint Clerk keeps a card index record arranged according to addresses thus showing the number of complaints and reports against individual premises for the year.

When a complaint is received in the Sanitary Bureau, a card record is made showing the serial number of the complaint and the street address of premises complained of. On this card is noted the name of the Inspector to whom the complaint is referred and the date. This card is kept in a file by the Clerk until the complaint and report on same is returned by the Inspector and then this card is placed in one of the following files:

A. *Pending Final Report File.*

If the premises are held under observation by the Inspector—until final report on complaint is received from the Inspector—filed according to address.

B. *Pending Order Clerk File.*

If report is to be forwarded to Order Clerk for order, or notice—kept in this file until order or notice is returned from the Order Clerk—filed according to complaint number.

C. *Final Disposition Complaint File.*

If the Inspector returns a report on complaint as "no cause for action," or "for reference to another city department," the card is placed in this file according to address.

When premises have been held under observation and the final report is received from the Inspector as (1) "no cause for action," (2) "abated by personal effort," or (3) "for reference to another city department," the card is also placed in this file.

D. *Pending Order File.*

When the copy of the order or notice is received from the order clerk, the card record, which was held by the clerk in file B, is placed in this file and remains there until the order, or notice, has been terminated and the card record is then placed in the "Order Complied With" file.

While in this file the dates on which the order, or notice, was referred to, and received from, the Sanitary Inspector, and the results of each inspection are noted on the card which is filed according to complaint number which now becomes the order number.

E. *Order Complied With File.*

When the order, or notice, has been complied with, the card record is transferred from the "Pending Order" file and placed in this file, and the date on which the same is complied with is placed on the card record.

F. *Complaint Record File.*

In this file a record is kept according to address of all complaints made and, as it is continuous, each card shows all complaints that have been made against a given premises.

The Inspector in charge of the Borough division is held responsible for the dates

on which premises are to be reinspected by the District Sanitary Inspector. He reviews the report of each reinspection on the office copy of the order, or notice, by the District Sanitary Inspector, and notes on same, for the guidance of the Clerk, the date upon which premises shall be reinspected. The Clerk enters this date on the card record and refers the order, or notice, to the District Sanitary Inspector accordingly.

All original reports by the Sanitary Inspectors for orders, or notices, are referred to the Complaint Clerk to be entered in the complaint book, and they then take the same course as detailed above.

The District Sanitary Inspectors must return reports on complaints within twenty-four hours, and must return orders, or notices, assigned for reinspection, within forty-eight hours.

When a report on a complaint is returned with the statement that premises will be kept under observation, this report is forwarded to the Order Clerk for filing, and slips properly headed with complaint number, address of premises, etc., are forwarded by the District Sanitary Inspector giving report of subsequent reinspections. These slips are forwarded to the Order Clerk and attached to the original report.

IMPORTANT ACTIVITIES.

Smoke Nuisance.

Section 181 of the Sanitary Code is as follows:

> "No person shall cause, suffer or allow dense smoke to be discharged from any building, vessel, stationary or locomotive engine or motor vehicle, place or premises within The City of New York or upon the waters adjacent thereto, within the jurisdiction of said City. All persons participating in any violation of this provision, either as proprietors, owners, tenants, managers, superintendents, captains, engineers, firemen or motor vehicle operators or otherwise, shall be severally liable therefor."

In the Borough of Manhattan, twenty-eight separate actions were commenced about April 1, 1913, by the Department of Health against the New York Edison Company on account of the discharge of dense smoke and cinders from its plant at 39th street and the East River.

These actions, begun in the Magistrates' Court, came before the Court of Special Sessions on demurrer, and in June, 1913, the Court of Special Sessions in an opinion rendered by Chief Justice Russell, held that section 181 of the Sanitary Code, in so far as it prohibited the discharge of dense smoke was unreasonable and therefore unconstitutional. Following this decision of the Court of Special Sessions, there was some increase in the smoke nuisance in New York City. Small offenders were prosecuted, and in many instances engineers and firemen were held personally responsible. These cases could be disposed of by the Magistrates' Courts and the decision of the Court of Special Sessions did not bind the Magistrates, since appeal from these courts lies in the Court of General Sessions in the First Division and in the County Court in the Second Division. Actions, however, could not be brought against corporations as the Magistrates had no jurisdiction to try such cases which are referred to the Court of Special Sessions. An appeal was taken to the Appellate Division of the Supreme Court, First Department, and an important decision was handed down December 5, 1913, sustaining the constitutionality of section 181 of the Sanitary Code and reversing the decision of the Court of Special Sessions, rendered in June previous. After this decision in the department's favor, the campaign against smoke nuisance was resumed in The City of New York. Those violating section 181 were warned,

and if the violation continued, a summons was issued, and in the majority of cases, fines were imposed by the magistrates and the nuisances abated.

Summonses Issued by Sanitary Inspectors.

Previous to the latter part of 1913, when an Inspector required a summons, it was necessary for him to apply to a Magistrate for the same, presenting at the time all of the papers connected with the case. The summons was then served by a Patrolman of the Health Squad.

Under section 1264 of the Greater New York Charter as amended by the Laws of 1913, the Sanitary Inspectors of the Department of Health are constituted peace officers and empowered to issue summonses under regulations of the Board of Health in the same manner as a police officer under the inferior court's law (chapter 659, Laws of 1910, sections 83, 84, 85, 86 and 87).

Following this amendment to the Charter, a resolution making this method operative was adopted by the Board of Health of the Department of Health at a meeting held August 26, 1913. The summons books are prepared by the Board of City Magistrates in each division of the City and are attested in the name of the Chief City Magistrate. The summons bears the name of the supposed violator and also the name of the Inspector issuing it. When a summons is prepared and served upon the party therein named and charged with the offense, it shall not under any circumstances be withdrawn by the Inspector and must be made returnable within twenty-four hours after its issuance. Summonses are issued only in connection with the prosecution of cases arising under the Sanitary Code and health laws. An Inspector cannot issue a summons for violation of any ordinance or law with the enforcement of which this department is not charged. Summonses are made returnable in the district in which the offense is committed and the Inspector must appear in court at the time and place mentioned. These regulations do not apply to summonses against corporations which in all instances must, as formerly, be issued by a magistrate.

The summons books for the first division are used in the Boroughs of Manhattan and The Bronx only. The summons books for the second division are used in the Boroughs of Brooklyn, Queens and Richmond only. A summons from a book for the first division can be served only on a person living in said division; a summons from a book in the second division can be served only on a person living in said division. If it is necessary to serve a summons on a person living out of the division, said summons must be obtained from a Magistrate.

Motion Picture Theatre Ordinance.

An ordinance relative to motion picture theatres, City of New York, was adopted by the Board of Aldermen July 1, 1913, approved by the Mayor on July 8, 1913, effective August 7, 1913. Under this ordinance, the Bureau of Licenses shall request the Fire Department, Bureau of Buildings, Department of Water Supply, Gas and Electricity, and Department of Health, to inspect said theatres, and the said departments shall file in the Bureau of Licenses within ten days detailed written reports which shall include a statement of any violation of law, ordinances, rules and regulations, or of any dangerous conditions. Upon failure of any of the said departments, excepting the Fire Department, to file detailed written reports, said bureau may disregard said department and in its discretion may issue a license.

On August 14 and 28, conferences were held at the Mayor's office, at which representatives of the above mentioned departments were present, and it was agreed that the Department of Health should report on those portions of the ordinance relating to ventilation, toilets and the sanitary condition of premises. The Sanitary Bureau in each Borough was furnished with copies of the ordinance and the Sanitary In-

spectors were requested to furnish in their reports of inspection of the motion picture theatres, special information which would show whether or not the conditions found conformed with the requirements of the ordinance referred to this department.

Applications for licenses are sent from the Bureau of Licenses to the Secretary of this department and referred through proper channels to the Borough District Inspectors. Their reports are returned through the office of the Assistant Sanitary Superintendent in charge to the Secretary who mails an official report from this department to the Bureau of Licenses.

The first application was received August 11 and up to and including December 31, 1913, 479 applications were received as follows:

Manhattan	127
Brooklyn	206
The Bronx	85
Queens	44
Richmond	17
Total	479

Abolishment of Privy Vaults and Cesspools.

Section 37 of the Sanitary Code requires that

> "No privy vault or cesspool shall be allowed to remain on any premises, or shall be built in the City of New York, unless when unavoidable. The sides and bottom of every privy vault, cesspool or school sink in the City of New York must be impermeable and secure against any saturation of the walls or the ground above the same, unless otherwise allowed by a permit in writing from the Board of Health. No watercloset or privy vault shall be constructed without adequate provision for the effectual and proper ventilation and cleansing thereof."

In recent years large areas in Brooklyn, The Bronx, Queens and Richmond have been built up in districts where public sewers had not been installed, and many privy vaults and cesspools were constructed in these sections. Many of these unavoidable fixtures have for years been the subject of complaint, and notices have been issued to abate nuisances caused by these conditions.

During 1913 the Sewer Department of each Borough sent to the Sanitary Bureau of the Department of Health a report of all trunk sewer extensions installed from time to time, and a list of all owners of adjoining property that had made application for permits to connect with same. On receipt of this information Sanitary Inspectors visited all adjoining premises, and wherever privy vaults or cesspools were found an order, or notice, was issued requiring that they be emptied, cleaned, filled with fresh earth and replaced by sewer-connected fixtures.

By these means a large number of privy vaults and cesspools have been abolished. In districts where it has been impossible to abolish privy vaults, notices, or orders, have been issued to place same in sanitary condition and to properly ventilate and screen the privy houses. In these districts, the establishment of additional disposal points to which contents of privy vaults and cesspools can be more conveniently conveyed, has resulted in reduced expense for scavanger work.

Permits.

Permits were issued under various sections of the Sanitary Code. The rule, recently adopted (1912), requiring that all permits must be renewed annually necessitates

at least one thorough inspection of vehicle or premises each year before the application may be returned by the Inspector for final action; frequently several inspections are necessary before the regulations are found complied with.

Over 20,000 permits were issued through this bureau during the year, and the number issued through each Borough office and the classification of these permits is shown in the following table:

Permits in Force, 1913.

	Manhattan.	Brooklyn.	The Bronx.	Queens.	Richmond.	New York City.
To transport refuse material	1,559	487	292	602	375	3,315
To maintain cellar stables	431	101	35	5	.....	572
To sell birds and small animals	121	54	30	15	.....	220
To keep chickens (fowl)	94	2,587	1,448	2,676	783	7,588
To maintain lodging houses	104	30	1	.....	.....	135
To maintain bathing establishments	114	70	5	56	19	264
To maintain camps	.....	154	10	24	23	211
To maintain houseboats	.....	25	.....	.....	.....	25
To maintain leaching cesspools	.....	975	.....	280	.....	1,255
To maintain refuse dump	1	.....	.....	.....	.....	1
To maintain manure dumps	15	19	2	14	.....	50
To maintain ash dumps	1	15	.....	3	.....	19
To keep pigeons	53	228	79	202	31	593
To keep goats	38	97	112	130	20	397
To keep pigs	.....	4	3	13	4	24
To manufacture soap	1	1	.....	.....	.....	2
To manufacture fertilizers	1	.....	.....	5	.....	6
To store and dress skins	35	25	.....	.....	.....	60
To keep salt hides	3	.....	.....	.....	.....	3
Issued to scavengers	.....	984	350	3,624	977	5,935
Total	2,571	5,856	2,367	7,649	2,232	20,675

Before a permit is issued to transport refuse material, the vehicle must, on inspection, be found to conform to all the requirements of the rules and regulations adopted by the Board of Health on April 9, 1912. A copy of these rules is given to the owner of the vehicle when a permit is issued and contains specific requirements for the transportation of ashes, garbage, swill, grease, shop fat and bones, offal, manure, rotten eggs and sweepings; the permit, made of enameled metal fourteen inches long and five inches high, must be securely fastened in a conspicuous place on the right side of the vehicle near the front.

When vehicles are found transporting refuse material in violation of the requirements of the permit, a warning is given or a summons issued; continued violation of the permit requirements may result in revocation of permit.

Each of the 572 cellar-stables, for which permits were issued, has a minimum of 800 cubic feet of air space for each horse and is adequately lighted and ventilated. The manure must be removed daily unless pressed into bales, boxes or barrels and properly screened against the entrance of flies.

During the year stables have been kept under the observation of the Sanitary Inspectors and kept in sanitary condition by their personal efforts. Whenever the address of a case of typhoid fever was referred to the Sanitary Bureau by the Bureau

of Infectious Diseases all stables in the vicinity were promptly inspected and, if insanitary conditions were found (especially those due to manure), notices, or Board orders, were issued to forthwith abate the nuisance.

A permit to sell birds and small animals requires that the premises must be adequately lighted and ventilated; have a water-supplied and sewer-connected sink; all cages kept thoroughly cleaned at all times; and the floor and sidewalls kept clean. As a rule, nuisances seldom occur in these places, and very few complaints are received in relation to them.

A permit is issued to keep live chickens if the place where they are kept (especially the coop and runway) is maintained in a sanitary condition; if they are not allowed to run at large; no roosters kept; and no valid objections made by neighbors. Over 7,500 permits were issued during the year, and many complaints were received concerning noise, odors and insanitary conditions due to the keeping of these fowl.

The constantly increasing number of applications for this class of permits the large number of complaints received, the amount of time required to investigate same, and the increased frequency of violations of the terms of the permits will, in the near future, cause the adoption of a rule that no application for a permit will be considered unless the premises are in a sparsely built up portion of the city and of ample size for the purpose.

Permits are issued to maintain lodging houses, if all the rules adopted by the Board of Health on July 11, 1911, are complied with. These permits expire on November 30 of each year. A Sanitary Inspector is detailed to keep them under constant surveillance, as there is a tendency in many instances to violate the rules of the department, and many of the patrons are of the lowest type of humanity and liable to develop and spread various forms of disease.

About 500 permits were issued to maintain bathing establishments (including bathing beaches, floating baths and indoor stationary pools), camps and houseboats. During the summer season many inspections of the premises were necessary before the numerous applications for permits to maintain beaches, camps and houseboats could be endorsed and forwarded to the Board. In order to enforce the regulations and rules relative to drinking water, toilet accommodations, garbage and refuse disposal, it was necessary to keep these places under constant surveillance during the entire season. Frequent inspections were also made at the beaches for violation of section 46 of the Sanitary Code (exposure of foodstuffs).

Permits are issued to maintain leaching cesspools, and refuse, ash and manure dumps when the rules and regulations of the department relating to them are complied with. Frequent inspections of the dumps are necessary to abate nuisances.

Nearly 400 permits were issued to keep goats. The majority are kept for their milk, and a few are kept in stables under the old fashioned idea that horses are healthier if a goat is kept in the stable. Many goats are kept without a permit and allowed to roam at large because their owners are unknown and there are no public pounds to which they could be taken and held for ransom.

Complaints and Orders.

The following table shows, by Boroughs, the number of citizens' complaints received during the year and the result of the investigations of same; also the number of notices, or orders, issued, and the number complied with:

COMPLAINTS.

	New York.	Manhattan.	Brooklyn.	The Bronx.	Queens.	Richmond.
COMPLAINTS.						
Complaints pending at beginning of year	.....	.....	.....	.....	.....	.....
Citizens' complaints received	38,972	16,824	11,854	4,318	4,422	1,554
Complaints filed by Inspectors	7,523	3,228	1,176	1,178	1,139	802
Total complaints	46,495	20,052	13,030	5,496	5,561	2,356
No cause for action*	17,172	7,583	5,008	2,042	1,801	738
Nuisance abated by personal effort	6,250	1,530	2,287	985	1,223	225
Referred to other departments or bureaus	9,185	5,403	2,862	372	424	124
Returned for notice or order	13,685	5,458	2,851	2,029	2,082	1,265
Complaints pending at end of year	203	78	22	68	31	4
Total	46,495	20,052	13,030	5,496	5,561	2,356
ORDERS.						
Notices and orders pending at beginning of year	779	192	231	116	120	120
Notices and orders issued during the year	13,791	5,546	2,880	1,988	2,115	1,262
Total	14,570	5,738	3,111	2,104	2,235	1,382
Complied with before legal action	12,943	5,419	2,798	1,680	1,902	1,144
Complied with after legal action	722	130	131	218	146	97
Rescinded	142	23	43	29	34	13
Notices and orders pending at end of year	763	166	139	177	153	128
Total	14,570	5,738	3,111	2,104	2,235	1,382
Number of civil actions during year	8	7	.....	1	.....	.....
Number of criminal actions during year	1,038	346	404	17	178	93

*When a complaint was a duplicate, and a notice or order was pending on the previous complaint the report was returned as "no cause for action" and the reason stated.

INSPECTIONS.

Sixty-eight Sanitary Inspectors were on duty during 1913, compared to sixty-one during 1912.

The following chart shows the total number of inspections made (by Boroughs) during 1913, and the increase or decrease from the total number during 1912:

Borough.	Inspections, 1913.	Compared with 1912.
Manhattan	88,953	1,261 less
Brooklyn	82,478	3,191 more
The Bronx	25,512	4,898 more
Queens	38,805	3,772 more
Richmond	15,863	3,578 less
Total	251,611	7,022 more

Nature of Inspections.	Number of Inspections.		Prosecutions.									
General—Specific.	By Sanitary inspectors.	By Sanitary Police.	Cases Pending Beginning of Year.	New Arrests During Year.	Total.	Discharged.	Fined.	Sentence Suspended.	Cases Dropped	Imprisoned.	Cases Pending End of Year.	Amount of Fines Imposed.
Buildings—Ventilation, plumbing, overcrowding, cleaning, leaky roofs and heating:												
Dwelling	73,247	20,553	9	325	334	281	22	14	....	....	17	$60.50
Factory	19,377	5,384	....	53	53	29	16	8	....	....	....	104.00
Boarding or furnished rooms	4,912	614	....	12	12	12	....	....	....	....	....	.....
Hotel	1,114	285	....	3	3	2	....	1	....	....	....	.....
Lodging house	2,587	58	....	62	62	58	4	....	....	....	....	55.00
Privies, school sinks or cesspools	2,729	1,170	18	42	60	55	1	2	....	....	2	10.00
Stable	18,385	7,292	2	61	63	49	6	3	....	....	5	28.00
Store	7,055	7,369	....	9	9	8	....	1	....	....	....	.....
Tenement	14,879	8,129	....	35	35	35	....	....	....	....	....	.....
Theatre	3,842	434	....	2	2	2	....	....	....	....	....	.....
Office building	2,717	5,650	....	10	10	10	....	....	....	....	....	.....
Business Pursuits under regulations or permit:												
Barber shop	7,188	376	....	4	4	1	....	3	....	....	....	.....
Baths	1,944	338	....	8	8	6	1	1	....	....	....	10.00
Bottling works or bottled water	33	16	....	....	....	....	....	....	....	....	....	.....
Fat rendering	333	2	....	....	....	....	....	....	....	....	....	.....
Fertilizer	726	....	....	....	....	....	....	....	....	....	....	.....
Live Poultry	6,026	110	1	55	56	33	5	17	....	....	1	6.50
Lodging house	586	115	....	....	....	....	....	....	....	....	....	.....
Miscellaneous permits	11,051	486	....	15	15	13	1	1	....	....	....	1.00
Slaughter houses: cattle	78	38	....	....	....	....	....	....	....	....	....	.....
Slaughter houses: poultry	77	292	....	....	....	....	....	....	....	....	....	.....
Stables: cellar	2,182	41	....	1	1	1	....	....	....	....	....	.....
Stables: cow	72	33	....	33	33	2	23	8	....	....	....	97.00
Smoke house	41	114	....	....	....	....	....	....	....	....	....	.....
Cleaning, Grading and Draining:												
Air-shafts	109	113	....	....	....	....	....	....	....	....	....	.....
Alleyways	84	226	....	....	....	....	....	....	....	....	....	.....
Areas	227	1,343	....	....	....	....	....	....	....	....	....	.....
Excavations	513	59	....	....	....	....	....	....	....	....	....	.....
Ice boxes	69	54	....	....	....	....	....	....	....	....	....	.....
Lots—vacant	14,119	6,380	4	42	46	39	3	....	1	....	3	15.00
Roofs	207	256	....	3	3	3	....	....	....	....	....	.....
Streets	707	946	....	....	....	....	....	....	....	....	....	.....
Yards	1,169	1,984	....	....	....	....	....	....	....	....	....	.....
Foodstuffs prepared or sold:												
Bakery	415	2,462	....	3	3	2	1	....	....	....	....	5.00
Butcher	100	2,145	....	....	....	....	....	....	....	....	....	.....
Dairy or milk	20	263	....	....	....	....	....	....	....	....	....	.....
Delicatessen	22	173	....	....	....	....	....	....	....	....	....	.....
Grocery	112	2,323	....	....	....	....	....	....	....	....	....	.....
Miscellaneous	732	4,710	....	1,555	1,555	60	1,344	151	....	....	....	2,027.00
Packing house	17	96	....	....	....	....	....	....	....	....	....	.....
Restaurant	529	1,328	....	1	1	1	....	....	....	....	....	.....

SUMMARY OF INSPECTION WORK—Continued.

Nature of Inspections.	Number of Inspections.		Prosecutions.									
General—Specific.	By Sanitary Inspection.	By Sanitary Police.	Cases Pending Beginning of Year.	New Arrests During Year.	Total.	Discharged.	Fined.	Sentence Suspended.	Cases Dropped	Imprisoned.	Cases Pending End of Year.	Amount of Fines Imposed.
General Nuisances:												
Animals kept without a permit	4,531	363	....	235	235	80	84	70	....	....	1	$177.00
Cinders	294	4	....	32	32	15	1	....	....	....	16	500.00
Dance halls	83	11	....	....	....	....	....	....	....	....	....	.....
Dust	1,571	716	....	16	16	4	12	....	....	....	....	20.00
Garage	534	156	....	1	1	1	....	....	....	....	....	.....
Gas mains or pipes	101	7	....	....	....	....	....	....	....	....	....	.....
Gases and fumes from chimneys	1,498	70	....	4	4	4	....	....	....	....	....	.....
Lighting	6	2	....	....	....	....	....	....	....	....	....	.....
Mosquitoes	19	....	....	....	....	....	....	....	....	....	....	.....
Noises from machinery, motor boats, pumps	2,341	114	....	1	1	....	....	....	....	....	....	.....
Noises from dogs, horses, other animals	2,425	984	....	....	....	....	....	....	....	....	....	.....
Odors from chemical factory	218	25	....	1	1	1	....	....	....	....	....	.....
Odors from rendering plants	908	....	....	....	....	....	....	....	....	....	....	.....
Odors from restaurant or cooking	390	7	....	....	....	....	....	....	....	....	....	.....
Power house	729	5	....	2	2	....	2	....	....	....	....	10.00
Public conveyances	2,091	572	....	....	....	....	....	....	....	....	....	.....
Pigeons (flying)	2,075	432	....	4	4	3	....	....	....	1*	....	.....
Rag shops	435	221	....	1	1	1	....	....	....	....	....	.....
Smoke power	12,490	1,064	13	340	353	60	156	41	....	....	96	878.00
Smoke automobile	37	157	....	56	56	2	48	6	....	....	....	149.00
Smoking in subway	2	1,514	....	414	414	38	374	2	....	....	....	532.00
Spitting	48	1,732	....	637	637	68	472	97	....	....	....	655.00
Swampland—ditches, etc	150	53	....	....	....	....	....	....	....	....	....	.....
Unclassified	11,487	11,866	18	189	207	43	98	65	1	....	....	153.50
Removal of Refuse:												
Ashes and rubbish	1,915	819	....	118	118	19	97	2	....	....	....	150.00
Dead animals	856	316	....	....	....	....	....	....	....	....	....	.....
Fat and bones	221	285	....	7	7	1	6	....	....	....	....	9.00
Garbage	1,675	4,999	....	875	875	93	541	241	....	....	....	687.50
Manure	1,165	6,832	....	113	113	19	70	24	....	....	....	123.50
Swill	101	144	....	6	6	....	4	2	....	....	....	14.00
Water:												
Public water supply	184	11	....	....	....	....	....	....	....	....	....	.....
Water tank or cistern	335	7	....	....	....	....	....	....	....	....	....	.....
Watering troughs	30	3	....	....	....	....	....	....	....	....	....	.....
Wells, springs, etc	334	66	....	....	....	....	....	....	....	....	....	.....
Total	251,611	117,317	65	5,386	5,451	1,155	3,392	760	2	1	141	$6,477.50

* Imprisoned for three days.

SANITARY BUREAU.

Mosquito Extermination.

Borough of Manhattan.

During the year 1913 an unusually large number of complaints were received and the wide area and period covered by them was remarkable. These complaints referred to the territory lying between Canal street and Washington Heights and covered a period from early in the spring until late in December, the last complaint having been received on December 24, and larvae found on December 26. All of the complaints received were found on inspection to be justified and the breeding places were promptly located and the nuisance abated. Larvae were found in all sorts of places, including floor drains, obstructed sewers, yard drains, vacant lots, abandoned excavations, neglected fire pails, flower pots and subcellars.

Central Park has for many years caused considerable annoyance and some malarial illness. This year, under an agreement with the Park Commissioner, inspections were made at regular intervals commencing early in April and continuing late in November. Whenever a breeding place was discovered a report was immediately forwarded to the Park Commissioner, who promptly caused the nuisance to be abated. Early in August a number of complaints were received relative to breeding in the lake at 59th street. These complaints were investigated and found justified and immediately steps were taken to correct this condition. Arrangements were made with the Park Commissioner to furnish a pump and laborers, and the lake was thoroughly sprayed, under the personal direction of the Sanitary Engineer and his assistant, on August 11, 12 and 13. So effective was this work that no more complaints were received from this section and no more mosquitoes found for the balance of the year. The hearty cooperation of the Park Commissioner with the Sanitary Engineer resulted in a marked diminution of the number of mosquitoes and the annoyance therefrom as compared with previous years was negligible.

Borough of the Bronx.

Salt meadows—comprising Hunt's Point, Kingsbridge, Clason's Point, Castle Hill, Unionport, Westchester, Eastchester, Baychester, Throgg's Neck, Locust Point and Pelham Bay Park.

No work has been done in the section of Hunt's Point during the past year, owing to the fact that the owners of the acreage still undrained could not be located. Efforts are now being made to ascertain the ownership of said properties.

The inland breeding places in this section have been practically eliminated by the filling-in of the sunken lots and swamps.

The filling-in of the marshes between the old and new Clason's Point roads, adjacent to Westchester avenue, has continued steadily and is rapidly nearing completion. It was necessary to keep constant supervision over the filling operations as the material was often dumped in the creek, thereby obstructing the drainage system previously provided by the Department's orders.

The section south of the old Clason's Point road and the Street Cleaning Department Dump is very badly drained, there being only a 12-inch pipe provided to carry off the water from this section. On the westerly side of Westchester avenue on the Astor estate is a large body of stagnant water. This entire section was formerly drained by order of this Department, but owing to the obstruction of boxes, cans, etc., thrown into the outlet under Westchester avenue from the dump, the flow is now greatly retarded and conditions are far from satisfactory. At present, two large sewers are in course of construction, one along the line of Metcalf avenue and the other along Gleason avenue. When these sewers are completed, conditions will be improved, for

the sewage which is now flowing into the open swamp will be carried into the new sewers.

All the salt marshes in the sections of Castle Hill and Eastchester were drained, but they are now rapidly reverting to former conditions through lack of maintenance.

In Baychester there still remain forty acres undrained due to the fact that the owners thereof cannot be located and the work will have to be done by the City.

On April 3, 1913, a contract for the drainage of the marsh lands in Pelham Bay Park was let by the Park Department and the work was completed May 28, 1913. The result of this work was that for the first time since it had been a park thorough enjoyment of its beauties could be had. Heretofore the hordes of mosquitoes which infected it made a visit thereto a painful experience. The most pleasing feature in connection with this work is that the Park Department, when letting the contract, included a maintenance clause which provides for keeping the park free from mosquito breeding for a period of five years.

The fifty acres which remained undrained lying between Pelham parkway and the new extension of Westchester avenue, were drained in the early spring, clearing up 85 per cent. of the salt marsh west of Westchester avenue. There remain fifty acres still undrained between Westchester Creek and Unionport, and one hundred and thirty acres between Pugsley's Creek and Bronx River, all of which belong to unknown owners.

In Kingsbridge the storm sewer in Van Cortlandt Park which serves as an overflow from the lake has not furnished the relief expected. It was hoped that when this sewer was completed the swamp area extending from the foot of the lake to the City line would be greatly relieved. This, however, has not been accomplished and conditions, so far as mosquito breeding is concerned, are not improved.

As stated in previous reports, malaria is prevalent in the vicinity of this swamp and many of the park employees suffer from the disease.

A very large amount of filling has been done in that section north of 238th street and extending east to Bailey avenue. The work is still progressing and it is expected that by next summer the entire area, long a source of trouble will be in excellent sanitary condition. In the section north of 225th street and extending to 230th street, east of Exterior street, orders are now pending on all owners to abate the nuisance of stagnant water, and some of the owners are already at work.

A large inland swamp adjacent to Pelham parkway, between Williamsbridge road and Eastchester road, was filled during the spring and summer months under the direction of the Sanitary Engineer, which resulted in eliminating a prolific breeding place for inland mosquitoes. Generally the local conditions throughout The Bronx have been greatly improved, partly due to the rapidity with which the Borough is being built up and partly due to the filling-in of sunken lots.

Borough of Queens.

Salt meadows—Comprising Little Neck, Douglaston, Bayside, Flushing, Mill Creek, Kissena Park, College Point, Powell's Cove, Corona, Elmhurst, Head of the Vleigh, Maspeth or Newtown Creek, Woodside or Trains Meadow, North Beach, Fort Totten, Jamaica and Far Rockaway.

The salt marshes of Little Neck have been drained to the city line and the work is well maintained by a contractor employed by the Douglaston Civic Association. If the twenty acres adjacent to city line, located in Nassau County, were drained, this section would be in excellent condition.

At Bayside and Douglaston the conditions on the meadows east and west of Alley Creek are excellent. In the spring a thorough inspection was made by the Department and all the breeding places were noted. A report on the conditions was

made to the Secretary of the Civic Association of the Borough, and this association promptly let a contract for the maintenance of the work. A number of inspections were made during the breeding season and this section was found free from such places.

Inland the local conditions are fairly good. The swamp on Crocheron avenue and Whitestone boulevard was kept oiled during the breeding season and underbrush cut off, and there was little trouble. As drainage is impracticable to obviate all nuisances it would be well if these swamps were filled and, as they are not large, the work could be done at comparatively small expense.

Fort Totten meadow is in satisfactory condition.

The Flushing salt meadow is drained, with the exception or thirty acres between Jackson avenue and Flushing Creek, owned by the Flushing Bay Development Company. A civil action is pending in this case.

The section of Flushing known as Mill Creek is still in poor shape, owing to the bad drainage conditions. For years the waters of the Creek were held back by the dam at Brown's Mill, and as a result the Creek became badly congested with sludge. The salt-hay meadows rotted out and were succeeded by swamp grasses and cat-tails. A canal was cut from Jamaica avenue to the Creek and for a time it proved very efficient. At present the washings from the hills have partially filled it and its effectiveness is much impaired at present.

The filling of the meadows of Newtown Creek, near Maspeth, is being continued and all nuisance is in a fair way to early termination.

The section around College Point continues to be a troublesome problem. The supposed owners of the salt marsh property north and west of the causeway have been trying for the past year to locate their correct boundaries and some progress has been made. Until the ownership is determined, it is useless to place orders against the property, as they would be unenforcible.

The filling in of the salt marsh between Flushing Creek and Corona, known as the Corona Meadows, is proceeding as rapidly as possible. At present, of the two hundred and ninety-three acres owned by the Borough Development Company, one hundred and ninety-three acres have been filled. At the request of the Sanitary Engineer, the Company constructed a drainage canal 4 feet wide 3 feet deep from Flushing Creek to Corona Highlands to carry off congested water. The effect of this canal was most beneficial during the past breeding season.

North of and adjacent to the Mill Creek swamp is the swamp owned by the City, in Kissena Park. Myriads of mosquitoes breed therein unmolested year after year and nothing has been done by the park authorities to remedy the conditions, as the appropriation for park purposes has not been sufficient to enable the Commissioner to do any drainage work.

Early this year, in response to a number of complaints concerning the park from citizens of Flushing, a careful investigation was made of the conditions and a comparatively inexpensive plan to abate the mosquito nuisance was submitted to, and approved by, the Park Commissioner.

It is hoped that an appropriation may be obtained by the Park Department to have this work performed during the coming year.

The Queens Borough Bridge swamp is located in a section known as Dutch Kills and Ravenswood. The portion situated between the bridge and Harris avenue, south of bridge is filled-in and the section is being sewered. The section north of the bridge is being filled-in, but work is proceeding very slowly.

The great problems in the Jamaica section are still the difficulty of finding the owners of the marshes to be drained and when found inducing them to do the work. Most of the titles to these marshes date back many years, some of them to grants of

Queen Anne, and great stretches are held by titles so cloudy that it would be impossible to prove ownership for prosecution.

No work has been done in the section of Far Rockaway for the reason that up to the present it has not been possible to secure the co-operation of the authorities of Nassau County. In said county there are fifteen thousand three hundred and sixty acres of undrained salt marsh, while the marsh adjoining this area within the corporate limits of New York City contains less than two thousand five hundred acres. It was therefore thought useless to expend much time and labor on this section until the co-operation of Nassau County officials could be obtained.

Borough of Brooklyn.

Here the salt meadows around Canarsie, Sheepshead Bay, Brighton Beach, Bath Beach and Coney Island comprise an area of approximately four thousand acres.

No drainage work was done on this area during the year 1913. The legal status of a vast part of this marsh is in doubt and it is useless to try and enforce orders by prosecution as there is no way to prove title.

The bad conditions which existed at Dyker Beach Park was the cause of numerous complaints early in the year, and a new flume to re-establish tidal conditions was built from the mouth of the Creek across the beach to low water. The result was most beneficial.

Inspections were made at Bath Beach and it has been recommended that the Department of Public Works make certain improvements in that section to relieve the congestion caused by the building of certain streets and sewers in that section.

Borough of Richmond.

At the beginning of the year, after the discharge of twenty-two laborers, who had been employed during the previous summer and fall months, the force consisted of one Foreman and sixteen Laborers. On February 26 the new automobile truck, which had been purchased, was placed in commission. By the use of this truck the time of transportation was reduced more than one-half, thus increasing the actual working time of the men so much that the actual labor of maintaining and extending the work on the salt marshes was practically equal to that performed by the greater working force of 1912.

On April 3 the oiling of the inland swamps was commenced, and again the value of the truck was demonstrated. The barrels of oil and spraying cans, together with the men, were loaded into the truck. The drainage men were carried to their work on the marsh, and then the oiling squad used the truck during the day, covering much more ground than was heretofore possible by the horse trucks. At the close of the day a quick run to the marsh was made and the drainage men picked up and carried to the nearest point of transportation to their homes.

Owing to the fact that the Engineer could have only general supervision of the work in Richmond, because of his work in the other Boroughs of the City, the actual charge of the men naturally fell upon the Foreman, and the necessities of the work frequently required that the men be employed in small squads at different locations. The employment of an additional Foreman was long seen to be desirable. This year the necessary appropriation was made for the employment of an additional Foreman and on May 13, he reported for duty.

Careful inspections made by the Engineer showed that there were several places which heretofore had been controlled by oiling that could not, owing to the construction of sewers in the vicinity, be made permanently immune by draining, and during the Fall two very large inland swamp areas were drained and work on others is now being carried on. This work will be continued during the winter months,

and by spring the number of inland breeding places requiring oiling will be materially reduced. There is no time of the year more favorable for permanent work on inland breeding places than the fall and spring. In fact, during the entire period from late November until early in April the laboring force can be used to best advantage on this work for the reason that during this period there is no obstruction from rank vegetation, which proves a severe handicap to rapid and efficient work.

Whenever requested, the various bureaus under the Borough President of Richmond have rendered efficient help. Particularly is this true of the Sewer and Highway Bureaus. The Bureau of Sewers has laid pipe when required and has cleaned out several of the natural water courses and dug a canal, thus providing effective outlets for the drainage trenches installed by the Department. The Bureau of Highways has assisted by lowering culverts at Great Kills and Amboy road.

A comprehensive sewerage plan for the entire borough has been devised by the Borough officials, and work on various sections is progressing rapidly. This is especially true of the section lying on the south shore, and will greatly aid in the drainage work of this Department. There are a score of pools and ponds in this section that can be eliminated by drainage into the sewerage system as soon as it is completed.

In order to facilitate the mosquito work in this Borough, the assistant to the Sanitary Engineer has prepared sectional maps of the entire Borough, which show the location of all inland breeding places and all places on the salt marsh that, owing to natural conditions, are apt to prove recurrent. These maps will be of service during the Spring of 1914.

The period covered by the actual breeding season on inland swamps was unusually long this year. The first larvae were noticed during the last week in March, and the last were found on the 29th of October. Doubtless larvae could have been found even later than this if carefully searched for. This long breeding season emphasizes the necessity of starting the oiling early and continuing it until all danger is past, and then, as soon as the rank vegetation has disappeared, to start the work of draining.

Summary of Operations for the Year.

Summary of Orders.

Complied with	30
Rescinded	4
Pending—	
Work in progress	1
In hands of Corporation Counsel for prosecution	9
Total issued	44

Work Accomplished.

Lineal feet of ditches dug in compliance with orders	28,700
Acreage drained	1,560
Acreage in process of fill	400
Acreage remaining undrained	5,591

BUREAU OF FOOD INSPECTION.

ADMINISTRATION.

Staff.

	No. of Each
Director	1
Chiefs of Division	4
Clerk-in-Charge	1
Supervisors	2
Supervising Field Inspectors	4
Food Inspectors	85
Sanitary Inspectors	18
Veterinarians	6
Clerks	12
Stenographers and Typists	16
Total	149

Change in Routine.

A general survey of the condition of the Bureau was made in July, and certain changes found necessary in the forms used and records kept effected.

It was found necessary to have all official documents initialed by the individual stamping same in order to place responsibility for any laxity occurring in a proper transmission of same through the office.

The permanent detail of inspectors by supervisors was not allowed to continue, and supervisors were notified to the effect that only upon the approval of the Director of the Bureau would permanent details be made.

Written weekly reports covering changes in service, new procedures, amendments and adoption of rules and regulations were submitted for the purpose of publication in the "Staff News."

A great change for the better was made in simplifying the work for the inspectors in the field by the use of individual summons books by means of which the enormous loss of time previously experienced by them in obtaining summons from court clerks was entirely eliminated, making it possible for the inspectors to deliver summons directly to the individual committing the offense, and having him appear in court without unnecessary delay.

The condition of the slaughter houses supervised by the municipality of New York was investigated, and special orders were issued to the veterinarians to forward more complete reports as regards

(*a*) condition of the stock killed;

(*b*) condition of the carcasses subsequent to killing;

(*c*) condition of the establishment;

(*d*) methods employed in slaughtering in each and every establishment of which they were in charge.

A new stand was taken as regards the issuance of permits for poultry-slaughter houses, it being held that repeated offenses for violation of the Sanitary Code, showing manifest irresponsibility on the part of the individual holding the permit, should disqualify that individual for holding further permits. A test case was made of an

instance of this class and tried before the Supreme Court in the City of New York with the result that the action of the Department was upheld.

As regards substances used in denaturing eggs final decision was reached "that where eggs are properly denatured in such a way as to make them absolutely unfit for food, or for human consumption, it will not be necessary to insist upon their being broken."

To further advance the work of the Department by more rapidly disposing of minor cases, which unnecessarily had previously been taken to the Court of Special Sessions, this bureau decreed that violations (first offense) of section 42 (*re* unwholesome food) of the Sanitary Code be disposed of in the Magistrates' Courts, with the exception that where the defendant was charged with selling unwholesome meats, regardless of the quantity sold or held for sale and whether the offense was the first or second, the case be referred to the Court of Special Sessions for trial. Where other foodstuffs were involved, amounting to 5 lbs. or less, the case was to be disposed of in the Magistrates' Courts. It was further decided that violations of section 45 should be tried in the Magistrates' Courts irrespective as to whether the defendant was charged with a second offense, as few, if any, of these cases come to the notice of the Department of Health. All violations of section 46 (protection of food from dust, etc.) were ordered tried before the Magistrates' Courts as well as violations for sections 59 (*re* manufacture of mineral waters), 73 (yarding of animals), and 81 (keeping of pigeons) of the Sanitary Code.

The supervision of all the bakeries in the City of New York was turned over to the Department of Health this year through an act of the legislature, known as article 8, chapter 463, Laws of 1913, effective May 9, 1913, said act making the Department of Health in the City of New York responsible for the sanitary condition of bakeries and confectioneries in the city. Extra men were asked for with which to perform the necessary work contingent to the supervision of this industry. These men were subsequently refused, and the department had to continue with the same personnel to do what supervisory work was possible under the circumstances. The Bureau of Infectious Diseases was requested to make physical examination of the bakery employees and reported a finding of twelve cases of "open" pulmonary tuberculosis among 12,000 examined.

There was instituted in the office a new system of keeping records of arrests, fines, etc., a new system of furnishing inspectors with information regarding the legal history of cases, and a new system of forwarding reports (all reports of the bureau being made on 5 by 8-inch cards). The envelope system for keeping all records was instituted, new score cards for city milk stores and country milk inspections made, new rules and regulations for the conduct of poultry slaughter houses, cattle slaughter houses, establishments for preparing and preserving meats, manufacturing sausages and maintaining smoke-houses; new regulations promulgated for the care and sale of milk, and new regulations concerning the use of saccharin, copper sulphate and wood alcohol. This Bureau instituted the first prosecutions brought in The City of New York on account of the adulteration of food with saccharin. Also in cases where foodstuffs were found to be preserved with fluorides.

In order to show at a glance the work, actual and comparative, of the men in the field, weekly charts were kept showing per each inspector the number of arrests, number of hours on duty and the number of samples taken.

DIVISIONS OF FOOD AND SANITARY INSPECTION.

Routine.

In this line the work performed and results achieved far surpassed that of any previous year.

It is a well known fact that the various sections of this City present many different phases of not only insanitary conditions, but also of the work demanded of a food inspector. For these reasons the plan adopted three years ago by which food inspectors were, at frequent periods, transferred from one district to another, was continued with excellent effect, as it broadens the view of the inspector and makes him familiar with every conceivable situation under which foodstuffs may be handled. Hence the inspector has become a much more valuable employee.

The food inspectors are distributed throughout the City of Greater New York; at the large terminals along the water fronts, in clearly circumscribed districts, or detailed to special squads, of which two exist at the present time, for the purpose of carrying on expedient and concentrated action in some particular field or to be utilized for the purpose of conducting raids.

A food inspector is required to be on duty at all times, day or night. As a rule, night work is not resorted to, except where special reason for the same appears.

General Statistics.

Number of Inspectors assigned to inspection of food	42
Total number of inspections	376,808
Foodstuffs condemned, pounds	12,893,832
Prosecutions (636 carried over from previous year)	3,325
Disposition—	
Discharged	293
Found guilty	2,838
Pending	194
Fines imposed	$29,795

Meat Inspection.

Number of inspections	69,933
Meat condemned—	
	Pounds.
Beef	579,209
Veal	181,077
Sheep	22,421
Hogs	82,227
Poultry	319,339
Game	89,094
Fish	485,878
Assorted meats	234,042
Total	1,993,287

Fruit and Other Food Inspections.

Number of inspections	306,875
Food condemned—	
	Pounds.
Fruit	5,803,627
Vegetables	2,004,923

Canned goods	2,399,528
Confectionery	73,356
Groceries	138,852
Eggs	78,764
Miscellaneous	401,495
Total	10,900,545

*General Sanitation of Premises Holding Food.**

Number of inspectors	19
Number of inspections	58,431
Prosecutions	387
Disposition—	
Discharged	249
Fined	46
Sentence suspended	13
Held on bail	79
Fines imposed	$198

While the above statistics show the activities and achievements en masse during the year, it might be well to call especial attention to some of the more noticeable results accomplished:

IMPORTANT ACTIVITIES.

Sulphate of Copper Coloring.

Early in 1913 a vigorous warfare was waged on merchants who persisted, in spite of repeated warnings, in offering for sale vegetables artificially colored with sulphate of copper. Seventy-eight arrests were made for this violation of the Sanitary Code, and those in charge of this adulterated foodstuff were ordered to destroy all material of this character in their possession.

Convictions were few, the courts holding, in general, that until a now long pending case was decided in the Federal courts no penalties would be imposed. The crusade of this division has nevertheless borne fruit, for to-day it is practically impossible to buy within New York City any foodstuffs artificially colored with sulphate of copper. The merchant evidently reasons that, though the courts have not convicted, it is more convenient for him to cease the traffic in such foodstuffs than to be constantly haled to court. Therefore, by what may be called "indirect methods" the hygienic end sought for has been accomplished.

Use of Methyl Alcohol.

During the year a crusade was begun against the sale of toilet preparations containing undeclared methyl (wood) alcohol. It was found that a large percentage of toilet preparations contained this dangerous substance instead of the more expensive ethyl (grain) alcohol.

This was especially true in "Barbers' Supplies." Many arrests for this violation (Sanitary Code, Sec. 66a) were made of both wholesalers and retailers, and in the beginning the courts imposed substantial fines for the offense. The results have been excellent. Numerous recently purchased samples do not show the presence therein of wood alcohol.

Those dealers who still persist in using wood alcohol in the manufacture of toilet

* See report of Sanitary Bureau for other inspections of this character.

preparations, are conscientiously placing labels on the containers, declaring the presence of such alcohol therein.

In this connection, it might be mentioned that recently the attitude of the courts has considerably changed where prosecutions for the above offense have been brought before them, and offenders are as a rule discharged with suspended sentences.

Sulphites in Meats.

Whereas in some previous years the greatest number of convictions procured by this Division were for the presence of "preservatives" in meat, the number during the past year has been exceedingly small. This is due to the constant and well-founded fear of the dishonest food dealer (gained by experience) that an Inspector may at any time take a sample of his meat for analysis, and if the result shows adulteration, he will surely suffer the penalty of a fine.

It may well be said, therefore, that the practice of preserving meat with "Sulphites" has disappeared from The City of New York, due entirely to the efforts of the Food Inspector and the assistance of the Courts.

Contamination from Dust, etc.

During the past year efforts were made to educate food dealers into better methods of preserving their merchandise from contamination by dust, dirt and insects. Where in past years the warfare against contamination was directed almost entirely against exposures *out-of-doors,* they were now directed also against exposures within-doors. (Under Sanitary Code, Section 46).

Many prosecutions were instituted for this offense, and a resulting improvement is now apparent. Especially is this true in the larger "Quick Lunch Restaurants," and in many bakeries, where glass cases or protectors made of other material have been installed.

Marked improvements are evident in the care of foodstuffs sold on "Stands" and from "Push Carts" in certain quarters of the City, and it may be fairly stated that 75 per cent. of the "Push Carts" selling candy, sliced melons and merchandise of like character, are to-day provided with acceptable covers to protect such material from contamination.

For violations of Section 46 of the Sanitary Code during the year there were 1,988 arrests made, resulting in the assessment of $3,133 in fines.

Unsound Eggs.

Inspections in the egg industry were vigorously pushed. The early part of the year disclosed a considerable number of violations of the Sanitary Code, but the latter part exceedingly few. There can be no doubt that the present healthy state of the egg market is in a great measure due to the efforts of the Department of Health.

Use of Saccharin.

It may be said that in the beginning of 1913 saccharin as a substitute for sugar was in common use throughout the City, in the manufacturing of what are known as "soft drinks." Samples were taken liberally, prosecutions were instituted, and to-day this offense has been much minimized.

Unwholesome Canned Goods.

When the system of segregating and destroying these goods was first promulgated in the City a loud cry arose from the canners that under such conditions they would

no longer ship their products to New York City. Despite these ominous warnings the citizens of New York are still able to purchase all of the canned foodstuffs they require, and the Department of Health is now quite sure that fully 95 per cent. of the unwholesome canned foodstuffs reaching the City meet destruction at the Offal Dock.

The good understanding long existing between wholesale dealers in these goods and the Department of Health still continues, and the former evil of shipping unwholesome canned foodstuffs out of New York is now seldom met with, and, when detected, is vigorously prosecuted.

Habit-forming Drugs.

A number of prosecutions have been instituted for violations of those sections of the Sanitary Code relating to drugs, especially undeclared habit-forming drugs found in so-called "headache powders." These cases are of so recent an origin that the courts have not yet passed upon their merits.

Sanitary Inspectors.

The duties of the Sanitary Inspectors of the Bureau are:

To cause to be maintained satisfactory conditions in premises where foodstuffs are prepared, manufactured, sold or offered for sale.

To report on all applications for permits to conduct any business for which a permit is required by this Department other than for the sale of milk.

To report upon the advisability of proposed sites for slaughter houses, and for rendering plants; and to supervise the construction of such buildings within the City.

To otherwise safeguard the health of the inhabitants by causing all foodstuffs to be manufactured and sold under sanitary conditions and free from possible sources of contamination, and to prevent the operation of such places from becoming a nuisance.

The work at present is performed by eighteen field Inspectors and one Supervising Sanitary Inspector, and covers the entire City of New York. The City is divided into districts according to the volume of the work in the various sections and Inspectors are held responsible for the conditions therein.

The greater part of the work originates from complaints of citizens, references from other bureaus and departments, and requests for permits to conduct certain forms of business. It includes the supervision of all bakeshops of the City. The volume of the work has been so large that the Inspectors have been able to devote little time to original investigations.

For the purpose of this report all premises where foodstuffs are manufactured, stored or sold, will be classed under two headings: Wholesale and retail.

Retail Store Inspections.

Bakeries.	Groceries.
Butchers.	Hotels
Confectioneries.	Markets.
Delicatessen.	Restaurants.

When making inspections of retail stores the Inspectors are chiefly concerned with the sanitary conditions. They do not make examination of foodstuffs, but in all cases where milk is being sold without a permit, or when foodstuffs are apparently unwholesome or of a suspicious character, a reference is made to the proper Inspector of Foods. Further mention of the work in retail stores would be of no value in this place except to say that a very small percentage of retail stores in the City are main-

tained so as to meet with the entire approval of the Inspector. The most prevalent insanitary conditions found in retail stores are:

Water-closet apartments in direct communication with rooms where foodstuffs are prepared, stored or handled; thereby exposing said foodstuffs to possible contamination. Water-closet apartments not ventilated.

The waste pipe of refrigerator is directly sewer connected so as to allow foul drain air to enter refrigerators, affording a possible means of contamination of foodstuffs therein.

Plumbing fixtures out of repair, not trapped, and insufficient number provided; water-closet tanks not water supplied, allowing seals of traps to evaporate; openings in the waste, soil, vent and drainage system throughout buildings, permitting foul odors and drain air to enter premises. Disused branches of soil, waste and vent lines, and house drain, which are not plugged gas tight.

Insanitary wooden sinks saturated and offensive, especially in hotels and restaurants.

Lack of screens for window and door openings. Lack of proper receptacles for holding garbage and refuse, which consequently is exposed to flies.

Lack of proper appliances to dispose of smoke and cooking odors, especially in restaurants and hotels. These odors escape in such a manner as to create a nuisance.

Generally unclean and untidy conditions due, chiefly, to neglect on the part of the occupants.

Miscellaneous nuisances, such as plucking fowls in butcher shops, where meats are exposed to contamination by poultry filth; allowing waste water to discharge on wooden floors, making the premises damp, or allowing it to discharge in places where it accumulates and creates offensive conditions.

Wholesale Store Inspection.

2. (a) Breaking out egg-yolk for food or other purposes.

(b) Manufacture of confectionery.

(c) Manufacture of carbonated and artificial mineral waters.

(d) Preparing and preserving meats, fish; manufacturing sausages, and maintaining smoke-houses.

(e) Rendering edible and inedible fats, utilizing slaughterhouse waste, and the manufacturing of fertilizers.

(f) Slaughterhouses for cattle, calves, sheep, lambs, hogs, horses, poultry.

The most important class of business from the standpoint of this division is the factory. This is so, not because the importance of causing retail dealers to maintain sanitary establishments is underestimated, but for the reason that the greater part of the factory's output is consumed by the inhabitants of The City of New York, and that the contaminated foodstuffs would, therefore, be liable to affect a larger portion of the population. The possibility of insanitary conditions arising therein is greater and requires constant care to prevent same from becoming a nuisance.

It is not the intention of this report to enter into any detailed account of these inspections, but an effort will be made to outline briefly the more important things which are taken into consideration.

(a) *Breaking-out Egg-Yolk Factories.*

This class of factory, as a rule, uses the yolks of eggs which, for various reasons, are considered unfit for human consumption in their raw state. Some of the raw material is invariably offensive to the smell, and is of such a nature as to easily create extremely insanitary conditions. It, therefore, becomes a duty not only to cause the

premises to be placed in a clean and sanitary condition, but also to demand that the equipment and procedure be such as to prevent the development of offensive conditions or anything like a nuisance to the neighborhood. Provision must also be required to keep those portions of the product which are to be used for foodstuffs entirely separate from those which are to be used for other purposes. Adequate ventilation of the work rooms must also be secured.

(b) *Confectionery Factories.*

This class of factory is one that requires constant supervision by this Department. Manufacture of confectionery, as is well known, tends to create conditions which are dangerous to health inasmuch as the materials used are extensively handled and the product consumed as issued from the factory (*i. e.,* not heated), and therefore liable to transmit infectious matter acquired either by contract with unclean hands or flies.

(c) *Carbonated and Artificial Mineral Water Factories.*

The manufacture of carbonated and mineral waters is regulated under permits issued by this Department. As a basis for the issuance of such permit, premises must conform to general sanitary conditions which embrace: First—The use of uncontaminated water for this purpose, and if other than the City supply be used the water is subjected to chemical analysis and a bacteriological examination. Second—That the floor of such factories shall be concreted, graded to a sewer connected drain, that the premises be adequately ventilated and separate and unconnected with any living room, stable or water-closet apartment; and that the walls, ceilings, the floors be maintained in a good condition as regards repair and thoroughly clean. The premises must be equipped with proper facilities for washing and sterilizing bottles and containers, and all plumbing fixtures must be properly sewer connected and water supplied.

Where mineral waters are manufactured a formula showing the ingredients (qualitatively and quantitatively) must be submitted and approved by the Department before permits are issued.

(d) *Meat Preserving Factories.*

This class of factory is one that requires constant and careful supervision, chiefly because it is conducted upon a small scale and generally in cellars, and as the use of smoke houses is liable to create a nuisance in the adjoining buildings.

The requirments of the Department are outlined briefly as follows:

The floors of all such establishments must be of cement, properly graded to sewer-connected drains.

The side walls must be of smooth cement or other non-absorbent material.

The floors, walls and ceilings must be maintained in a clean condition at all times.

Tables must be so constructed that they may be readily cleaned.

Windows and doors must be screened against the entrance of flies and rooms properly lighted and ventilated.

Toilet-room must be provided with lavatories, water-closets and individual towels.

Washable outer clothing must be worn by workmen.

Notices must be posted prohibiting promiscuous expectoration, and cuspidors provided.

Machinery, tools, etc., must be kept clean.

The use of preservatives or other improper constituents are forbidden.

(e) *Utilization of Slaughterhouse Waste Factories.*

This class of business is most often conducted in conjunction with slaughterhouses, but in some instances this is not the case. For that reason, it will be stated here that the interior arrangements must be such as to permit of thorough and easy cleaning of all portions of the premises, and that the fats which are rendered for food purposes must be kept entirely separate from the other fats, and that the rendering shall be done in separate portions of the building. A more detailed description of the problems which confront us in regulating these fat rendering plants will be set forth in the description of slaughterhouses.

(f) *Slaughterhouses.*

(1) Poultry.

This class of slaughterhouse is required to be located in buildings which are not used for dwelling purposes and within the lines of zones laid down by the Sanitary Code. In this connection the character of the neighborhood is taken into consideration, and where the religious beliefs of the people do not make it necessary to have fowl killed in any particular manner, the requirements as to location are more severe. These slaughter houses are the cause of many complaints, due chiefly to the character of the animals handled and, as this business is carried on on a small scale with a few irresponsible employees who do not seem to realize the importance of scrupulous cleanliness, offensive odors escape unless the greatest care is exercised. In order to maintain good sanitary conditions these places are required to have concrete floors, properly graded to sewer-connected drains, and proper valley drains in front of all cages which are used for the fowl. The side walls of the salesrooms must be of some non-absorbant material with a smooth surface and must be whitewashed or painted with a light colored paint. All cages must be of metal construction, so arranged as to be easily and thoroughly cleaned, and must be provided with proper feeding troughs, gutters and leaders. The cages must be set away from the walls, and the bottom tier must be raised from the floor, so arranged as to be movable. All crates must be immediately emptied and be removed from the premises daily, and while kept on the premises must be stored in a part of the building which is set apart for that purpose and approved by this Department. All killing of fowl must be done in the special rooms provided, or else in metal cans of approved design. These killing rooms must be entirely separate from other portions of the slaughterhouse and provided with metal killing troughs. The side walls must be of enameled brick or metal sheathed. The floors must be drained and proper water supply must be provided. The killing and salesroom must also be provided with all other arrangements and facilities for thorough and easy cleaning.

The Sanitary Inspectors are required to visit all poultry slaughterhouses within their districts at least once each week, and in the event of finding conditions in violation of the rules and regulations, they must immediately forward reports, through the proper channels, to the Law Clerk for the institution of a suit or a criminal action under the Sanitary Code.

(2) *Cattle, Calves, Sheep, Lambs and Hogs.*

These slaughterhouses besides requiring supervision as to their food element are liable at any time to become a nuisance to the neighborhood in which they are located. The possibility of a nuisance arising is not so much due to the methods of slaughtering now in vogue in these places, or to the lack of precautions to maintain cleanliness, as to the process of reduction of slaughterhouse waste which is carried on as a side line. For this reason one inspector, who is thoroughly conversant with all methods now

employed, is permanently detailed to slaughterhouses. An outline of the requirements for this class follows:

The business of slaughtering cattle, calves, sheep, lambs and hogs, may be carried on only in those portions of the City prescribed by law, and at the present time the area in the Borough of Manhattan where such business may be conducted is very small. There is only one slaughterhouse in the Borough of The Bronx, and none in the Boroughs of Queens and Richmond, while those in Brooklyn are so situated that they cannot be materially increased without violation of the Charter of Restrictions.

Cattle pens must be located on the same premises as the slaughterhouses and shall be properly fenced so as to prevent the escape of cattle. The use of galvanized or other non-corrosive, non-absorbent metal rods, vertically arranged, are required for this purpose. Pens must be graded to sewer-connected drains and be maintained in a clean condition at all times; the manure must be removed from the premises at least twice each day.

The floors of the killing rooms must be water-tight, properly graded and drained; blood must not be allowed to discharge into the sewer, but arrangements must be made for catching it in separate receptacles and removing it from the premises at the close of each day's work, except when it is disposed of by reduction, in which event the blood shall not be allowed to accumulate but shall be reduced as soon as possible. The walls shall be non-absorbent with smooth surface and, where paint is required, covered with not less than two coats of oil paint of a light color. Premises must be provided with running hot and cold water.

The requirements for dressing and cooling rooms are the same as for the Killing Rooms, with the addition that proper racks must be provided so that a carcass shall at all times be off the floor, and that proper metallic containers must be provided so that no part of the intestines be allowed to fall upon the floor.

Among the various by-products which are stored in slaughterhouses are:

Fats (edible).
Fats (non-edible).
Hides (salted).
Horns (dry).
By-products from the intestines (dry or salted).
Fertilizers (dry).

All these materials are liable to cause offensive odors, especially during the process of curing, if they are not carefully watched. The requirements for the rooms used for storage and curing are that the floors must be water-tight, properly graded and drained, that the walls must be of some non-absorbent material, that all proper arrangements must be made for easy and thorough cleaning, and that they be provided with proper appliances for the disposal of all odors.

The requirements for rendering-rooms and tank-houses can be summed up as proper and adequate provision for maintaining cleanliness. Proper appliances for the disposal of room and cooking odors must be provided. The tank-houses are the greatest source of offensive odors and are, therefore, under almost constant observation.

(3) *Horses.*

There is but one slaughterhouse for horses within the City of New York at the present time. It is located in the Zoological Park, in the Borough of the Bronx, and the product is used entirely to feed various animals in the park. This slaughterhouse, however, is required to observe all the rules and regulations which govern cattle slaughterhouses.

Some important points to be considered when making inspections of various enterprises not previously discussed are as follows:

Cow Barns.

This Division supervises the cow barns which are located within the City of New York. The following regulations are enforced:

All floors must be of cement, properly graded to sewer-connected drains.

Proper valley drains and troughs must be provided at the rear of cow platforms.

Walls of barns must be impervious to moisture and have a smooth surface.

Stables must be well ventilated to external air. They must have sufficient area to allow six hundred (600) cubic feet of air space for each cow therein, if said cows are kept in pasture, otherwise eight hundred (800) cubic feet.

The ceilings must be constructed so as to be dust-proof. Barns must be adequately and naturally lighted. The manure shall be stored, pending removal, in tightly-covered receptacles, and shall not be kept nearer than one hundred feet to any milk house.

Parts of barn used for other live stock must be kept entirely separate from that allotted to the cows.

The yards, where provided, shall be properly drained, graded and sheltered from the weather, and maintained thoroughly clean, free from all manure.

Suitable and separate compartments must be provided for sick cows.

The water to be used by cows for drinking purposes must be from the city supply. No well water must be used without a permit from the Board. In no case shall the water of running streams or ponds be used for this purpose.

Live Poultry, Sale of, in Crate Lots.

This form of business is conducted under permit from the Department of Health, and it is intended that where these permits are issued the premises are merely to be used for the storage of fowl which are removed from trains or boats, and which must be stored in some place until finally disposed of to slaughterhouses. The fowl, when in these premises, are at all times confined in crates, and no such fowl are sold at retail, nor is any slaughtering permitted on the premises. The regulations governing these places are as follows:

The floor shall be of cement, properly graded to sewer-connected drains.

The walls shall be of some non-absorbent material with a smooth surface and painted with a light colored paint.

All proper arrangements shall be maintained so that the premises may be easily and thoroughly cleaned.

Carting of Fats and Bones (Out-of-Town).

There is a large amount of fats and bones imported into this City for the purposes of reduction. The requirements of this Department regulating these importations are that the vehicles and other apparatus used to transport them shall be so constructed as to prevent leakage or the escape of offensive odors. The fats and bones, while in transportation, shall be packed in barrels, boxes, or other receptacles which shall be water-tight, and each fitted with a sufficiently tight cover to prevent the escape of offensive odors. Fats and bones shall be thus transported only from the ferries or other ports of entry to reduction plants holding permits from the Board. All vehicles used in transporting this material shall be unloaded within the building to which it is consigned. These vehicles shall not remain standing in any other place except when absolutely unavoidable.

Use of Well Water.

Well water, as a possible means of spreading disease, is known to be very dangerous, especially in thickly populated or rapidly growing sections where improperly constructed cesspools, privy vaults, or broken sewers are liable to cause the wells to become dangerously polluted, and because of the popular belief that all well waters are pure. Persons who would hesitate to use the city or other water without filtration or boiling, will drink well water without fear. The use of well water within the City of New York, except under permit from this Department, is prohibited, and this Division makes the necessary inspections in connection with the issuance of said permits, and obtains samples of water for bacteriological and chemical analyses. In obtaining these samples the inspector does not merely confine himself to the actual collecting of the water but makes an inspection of the surroundings, paying particular attention to the topography of the land.

Oysters.

As regards permits for the sale of oysters, no special equipment is required by regulation. The purpose of the permit is more to determine the purity of the product. Oysters grown in localities outside the City of New York may be sold within the City under permit issued by this Department.

As a basis for the issuance of such permit, satisfactory proof must be submitted that the oysters are free from pollution, and also, in cases where the oysters have been "drinked," or "freshened," that the waters in which they have been immersed show by chemical analysis and bacteriological examination freedom from pollution, especially as to the presence of bacteria of the B. Coli group.

The drastic measures adopted in forbidding the sale of oysters in New York City from localities where the waters have been found to be polluted has had a most salutary effect, having caused the growers and shippers at even unaffected points to take every sanitary precaution against the pollution of the waters under their control. So effective has this been that, for several years back, no case of typhoid fever has been even remotely traceable to the oyster.

From January 1st, 1914, bakeries are to operate under sanitary certificates issued by this Department and from June 1st, 1914, all ice cream manufactories to operate under like sanitary certificates.

Permit Office.

The work performed by this office was commenced on April 1st, 1913, when a supervising inspector of foods was detailed to check all applications and to censor all reports relative to permit matters. The work has developed so as to include not only the censoring and checking up of endorsements, but the taking of applications and supervising in a general way all recording in connection with the work.

The greatest advantage so far gained is the uniformity that has been established in procedure. Next in importance comes the check on possible errors in applications. For general distribution a supply of printed regulations regarding foodstuffs are kept on hand in this office which supplies general information.

The number of applications for permits investigated during the year will serve to show the importance of the work performed by this branch of the Bureau.

Permits.

Total applications	16,107
Granted	14,529
Denied	1,578
Revoked	3,010

General Results

The early part of the year saw an imposition by the Courts of many heavy fines for violations of Section 42, Sanitary Code, *re* unwholesome foodstuffs, which resulted in a marked decrease in the number of offenses. The Division is credibly informed that one large western house has warned its employees here that a conviction by the Health Department will cost them their positions. Hence these employees have themselves become inspectors of their own material, which is of great assistance to the small force available in the Health Department service. This same feeling is noticeable elsewhere and to-day the Department is in receipt of many and frequent requests to inspect arriving foodstuffs, the dealer wishing to assure himself that no goods considered contraband by the Department of Health are entering his premises.

Such a condition of affairs is extremely different from the tone which prevailed several years ago at which time the Department of Health was considered by this class of people to be a sort of "necessary nuisance," not much to be feared.

The crying need in this work is, more inspectors. As at present constituted, 61 men comprise the entire inspectorial and administrative force, which supervises all foodstuffs, except liquid milk, trafficked in within the City of New York.

With such an incomplete force it is an absolute impossibility to give the subject of food inspection the attention which it should have.

DIVISION OF CITY MILK INSPECTION.

The City is laid off in districts and the inspectors are required to cover each district at a specified time. Every district in the City is covered approximately every six weeks.

General Statistics.

Number of inspectors assigned	36
Total number of inspections	179,129
Quarts of milk destroyed	57,214½
Arrests made	2,580
Disposition—	
Discharged	147
Found guilty	2,446
Pending	46
Fines imposed	$15,606.00

Change in Organization.

The only change made in the organization of this division during 1913 was that in the early part of the year one inspector was detailed as a field supervisor to supervise the work of the inspectors in the field, and to report results obtained by the various inspectors. The need of this character of work was so great and so important that in the fall another inspector was detailed as supervisor, thereby making one supervisor for the Boroughs of Manhattan and Bronx, and one for the Boroughs of Brooklyn, Richmond and Queens.

Dipped Milk.

The sale of dipped milk in stores was given particular attention. In the early part of the year the Department endeavored to restrict the sale of dipped milk in certain stores, but after a careful and thorough investigation it was found that the enforcement of such a regulation would work material hardship on the poorer people of the City. The Board, therefore, adopted very stringent rules and regulations governing the sale of such milk in stores. Inspections were made and storekeepers were notified of the new regulations and the changes to be made if they desired to

continue the sale of dipped milk. Reinspections were then made and, after repeated warnings, offenders were served with summonses.

After continued and determined effort a marked improvement was effected in all stores where dipped milk was sold.

A new system of "scoring" stores selling dipped milk was adopted and a more comprehensive card showing all conditions likely to be found in stores was devised. These cards, in duplicate, are filled out at each inspection, and the duplicate is left with the storekeeper, all violations being marked with a cross, thus giving him a written note of each inspection.

During the past year, 1,211 prosecutions were made of storekeepers for violations of the rules and regulations, and $3,179.50 in fines collected.

Chemical Analysis.

As in former years, a number of samples of milk, cream and condensed milk were taken for chemical analysis, and whenever the milk, cream or condensed milk was found to be below standard, criminal proceedings were instituted. For the purpose of securing information in regard to the general quality of the milk, special examinations of milk brought into the city were made, for which samples were taken at the various terminals.

For chemical analysis, 10,294 samples of milk were taken, 401 prosecutions for adulteration were brought and $8,610.00 was collected in fines. There were 44 prosecutions for selling adulterated cream and $270.00 collected in fines; 4 prosecutions for selling adulterated condensed milk, and $225.00 in fines.

During the year three inspectors were detailed to take samples of milk for bacteriological examination who collected 27,732 samples.

Considerable time and attention was also given to the temperature at which milk was handled and sold. During the year 57,210 quarts of milk were destroyed for being above the temperature limit allowed.

During the year two inspectors were detailed each night to the examination of empty containers being returned to the country. As a result of their effort, 504 prosecutions were made and $1,943.50 in fines was collected.

Grading.

The enforcement of the grading of milk was continued. In the early part of the year a number of prosecutions were brought for failure to label milk in accordance with the provisions of permits, but before the close of the year practically all of the milk sold in the city was sold under grades and designations required by the Sanitary Code.

At a meeting of the Board of Health held April 8th, 1913, a change, to become effective July 15th, 1913, was made in the definition of milk formerly included as "Grade C, raw milk not conforming to the requirements of Grade A or B, for cooking and manufacturing purposes only," to read as follows:

> "Milk not conforming to the requirements of any of the subdivisions of Grade A or Grade B and which has been *heated* according to the rules and regulations of the Board of Health."

At a meeting of the Board of Health held July 30th, 1913, the following amendment to the rules and regulations of the Department of Health, relating to the sale of the milk defined as above, "Grade C, for cooking and manufacturing purposes only," was adopted, to take effect on and after August 26th, 1913:

Rules and regulations for the heating of *Grade C Milk.*

Not less than 160 degrees Fahrenheit for at least 2 minutes.
Not less than 158 degrees Fahrenheit for at least 3 minutes.
Not less than 155 degrees Fahrenheit for at least 5 minutes.

Not less than 152 degrees Fahrenheit for at least 10 minutes.
Not less than 148 degrees Fahrenheit for at least 15 minutes.
Not less than 145 degrees Fahrenheit for at least 18 minutes.
Not less than 140 degrees Fahrenheit for at least 20 minutes.

1. The caps of all bottles containing milk of Grade C shall be white, and shall contain in red the words "Grade C" in large type, and "for cooking" in plainly visible type.

2. Cans containing milk of Grade C shall be painted red on necks, or shall have properly sealed metal collars, painted red, on necks, and shall have affixed to them white tags with the words "Grade C, for cooking," printed thereon in red letters in large type.

Active enforcement of these rules was started August 26th, and until the close of the year only 50,000 quarts of milk was sold under the designation "Grade C, for cooking," the remainder (1,750,000 quarts), being sold as "Grade A" or "Grade B."

DIVISION OF COUNTRY MILK INSPECTION.

The large unit cost per inspection in this work is on account of transportation charges over the enormous field comprising 44,000 dairies, 1,600 creameries, and something like 250 pasteurizing plants. Naturally the men are unable to entirely cover this field and are now being concentrated upon the creameries, shipping points and pasteurizing plants.

General Statistics.

Number of inspectors	20
Unit cost per inspector	$2,801.05
Total number of inspections	29,211
Unit cost per inspection	$1.91

Dairies.

Average score 62.29 per cent.

Inspections of dairies	27,063
Dairies excluded	394
Dairies notified to resume	85

Creameries.

Average score 78.81 per cent.

Inspections of creameries	2,148
Creameries excluded	3
Creameries notified to resume	3

Infectious Diseases.

Cases investigated at dairies	81
Cases investigated at creameries	19

Inspections.

Throughout the entire year the routine inspectorial activities were chiefly devoted to inspection and reinspection of those dairies producing *"Grade B, Selected Milk, Raw."* In order to avoid pasteurizing, many creameries made unusual efforts to induce their several dairies to comply with the requirements of the Department for this grade of milk. As an inducement practically every company offered a premium to such dairies as scored sufficiently high for the purpose, and, as a logical consequence of the offer, numerous requests were received for inspection in order to officially verify the status of dairies which had made effort to conform with the requirements.

The dairies located within the City limits were all capable of designation as suit-

able for producing "*Grade B, Selected Milk, Raw,*" and were under frequent inspection, but as it was found that these dairies were not being maintained as carefully or in as cleanly a manner as was desired the inspectorial force was materially increased. It was even found necessary to revoke many of the permits which had been issued to these City dairies and to institute criminal action in the lower courts for violation of rules and regulations and various sections of the Sanitary Code.

Typhoid Outbreak.

The sharp outbreak of typhoid fever which occurred on the lower East Side in September provided proof of the necessity for pasteurization. From the very beginning of the outbreak, attention was directed toward the supply of a certain wholesale milk company, which supplied milk in cans to grocery stores, delicatessens, restaurants, etc., within the affected district. The milk in question was of the grade known as "*Grade B, Selected Milk, Raw,*" and came from a creamery which had always been found to be conducted with a high degree of excellence. However, the village in which it was located had a significant typhoid history, there having been within it and upon farms within a short distance thereof, approximately twenty-four different cases of known typhoid fever within the last four years. It is, of course, impossible to point definitely to the actual original cause of infection so far as the local outbreak was concerned, but a close study of the village history and topographical condition leaves but little doubt that the village water supply is subjected to recurrent typhoid infection. This infection may be ascribed, with good reason, to the probable existence upon the water-shed of one or more typhoid carriers, and this belief is borne out by the fact that the main feeder of the water supply has its origin upon the farm on which the earliest case of typhoid occurred, and is bordered on both sides of its entire course by some eight or ten other farms on which there were cases of typhoid fever during 1909, '10, '11, '12 and '13. The water supply in question was used for creamery purposes within the creamery in which the milk was prepared for shipment.

Two other outbreaks of typhoid fever, induced probably by infected milk, engaged the attention of the Division during the year; one of these was undoubtedly caused by the use of a polluted water supply. Its origin was readily traced to the company and creamery held responsible by the coincidence of simultaneous cases in Brooklyn and Manhattan in districts and households supplied only with milk from the creamery in question. This milk, in contradistinction to that noted as being responsible for the larger outbreak, was all supplied in bottles to families better able to understand the necessity for due precautions and in better position to observe the requisite care in treatment of the disease. To this is probably due, in a large measure, the comparatively small extent of the outbreak, there being few or no secondary cases.

DIVISION OF PASTEURIZING PLANTS.

Number and Location of Plants.

During the year the work performed by this Division has involved the inspection and control of all plants located either within or without the city limits where milk and cream is pasteurized and afterwards sold in the city. The fact that the Department strongly favored pasteurization, in line with most experts all over the country, has tended to greatly increase the amount which has been so treated for the city market.

At the beginning of the year there were located within the City and territory closely adjoining it twenty-five pasteurizing plants. This number was increased by the end of the year to thirty-two, in addition to which there were about forty small

pasteurizing outfits installed in restaurants where milk was prepared for use therein. In the territory outside of the City there were in January about seventy plants, which number was very largely added to so that in December there were about two hundred and fifty, making in all over two hundred places where milk was being pasteurized. These plants, both in the City and outside, are scattered over a wide range of territory, some being located near the Canadian border, and some of them as far west as Buffalo, with several scattered throughout Pennsylvania. This fact has made their supervision rather difficult, as but a comparatively small number of inspections could be made in a given time.

The largest pasteurizing plants are in the City itself, where raw milk is received from many shipping stations and creameries and is pasteurized and re-canned and bottled for local trade. Some of these City plants handle as much as fifteen hundred and forty quart cans of milk daily. The plants in the country pasteurize, as a rule, not more than from fifty to two hundred cans daily, and some of them handle as few as thirty.

Inspection Work.

The force available for making inspections of these plants at the first of the year consisted of three men—one who inspected the City plants and two men who made inspection of plants outside of the City. This outside territory was divided into two large districts, comprising, respectively, the northern and the southern parts of the milk producing area, the Mohawk Valley being taken roughly as a dividing line. One inspector was assigned to each district, and inspections were made as frequently as possible. Since the plants were mostly located some distance apart, and it was desirable to make inspections while milk was being actually handled, it can be readily seen that only one or two inspections could be made in a day by each man.

The rapid increase in the number of pasteurizing plants, especially outside the City, made it necessary that a larger force be detailed to this work, so in August, two additional men were assigned to the Division. The country districts were redivided, so that there were four instead of two districts, one man being assigned to each. There were so many calls for inspections of new plants, where permits were desired for the pasteurization of milk, that it was not possible to make as many reinspections of plants already equipped as was desired. The requirement that cream as well as milk be pasteurized has resulted in the equipment of many small plants scattered throughout the country where cream alone is so treated.

In making inspections, inspectors write a detailed report upon cards prepared for the purpose, upon which are noted all the important features connected with the plant and the method of operation. These reports are not score cards, however, since no score is accorded; they are more in the nature of information cards. All objectionable features are carefully noted and when the reports reach the office the owners of plants are notified by letter of the changes which are necessary to be made in order that the plants be placed in a satisfactory condition. It has been the policy of the Department to withhold permits for the pasteurization of milk, and not to allow milk to be pasteurized and shipped until the plant has been finally approved by the inspector. Frequently, upon request, inspections have been made of plants which were under process of being equipped, before the equipment was completed, in order that the owner might be given advice which might be of value to him.

In at least one instance during the year, investigation of an epidemic of typhoid fever in the City indicated that the milk from a certain creamery was responsible for the sickness. The milk company was immediately notified that the milk from this particular creamery must be pasteurized and, as a result, a complete pasteurizing equipment was installed within a very short time. Special inspections were made of this plant to ascertain if milk was being properly handled.

It has been the practice during the year to take, as frequently as possible, samples of milk from that which was being pasteurized for bacteriological examination.

These samples were taken in order to ascertain whether the process, as carried on, was efficient and, if not, to find the points at which defective methods were being employed. Samples were taken from the raw milk, before being pasteurized, as well as from that which left the pasteurizing apparatus; also from the filled containers ready for shipment or sale. In this way it has frequently been possible to find defective methods either as to improper heating, insufficient holding time, or the improper sterilization of apparatus or containers. As a rule, however, it may be said that these investigations have indicated that the milk was being satisfactorily handled. One of the greatest defects has been in the washing and sterilizing of the cans, and a special effort has been directed towards securing more effective methods.

During the year there were made 980 inspections at pasteurizing plants, and about 4,800 samples of milk were taken for bacteriological examination.

BUREAU OF CHILD HYGIENE.

ADMINISTRATION.

TABLE I—STAFF.

Director	1
Assistant Director	1
Superintendent of Nurses	1
Borough Chiefs	5
Chiefs of Division	4
Supervising Inspectors	15
Supervising Nurses	17
Medical Inspectors—	
School medical inspection	96
Vaccination	8
Issuance of employment certificates	8
Inspection of midwives and foundlings	5
Clinics for school children	15
Infants' milk stations	18
Inspection of institutions and nurseries	7
Special detail	1
Nurses—	
School medical inspection	191
Issuance of employment certificates	4
Inspection of midwives and foundlings	9
Clinics for school children	22
Trachoma clinic	2
Infants' milk stations	56
Infants' milk stations (for 5 months)	55
Dentists—	
Supervising dentist	1
Operating dentists	9
Nurses' assistants	55
Cleaners	32
Domestics	6
Orderlies	2
Helpers	3
Watchmen	2
Laborer	1
Automobile enginemen	1
Clerks	29
Stenographers and typists	11
Hospital clerks	4
Total	697

Owing to departmental reorganization, and depending largely upon the growth of the activities of the Division of Child Hygiene, the Board on October 28th, designated this Division, which had previously been a part of the Sanitary Bureau, the Bureau of Child Hygiene, and made its Chief, renamed Director, directly responsible to the Commissioner. This made it possible to reorganize the Bureau by the creation of

seven divisions, each dealing with some part of its work. The divisions and their activities were as follows:

DIVISION OF MIDWIVES AND FOUNDLINGS.

Midwives.

On October 14th, the Board of Health passed an amendment to the rules and regulations governing the practice of midwifery, providing as follows:

"Resolved, That the rules governing the practice of midwifery in the City of New York, adopted by the Board of Health November 8, 1907, be and the same hereby are amended so as to read as follows; the same to take effect on and after the first of January, 1914;

"Rule 3. The applicant must be twenty-one years of age or upwards, of good moral character, and able to read and write. She must be clean and constantly show evidence, in general appearance, of habits of cleanliness.

"The applicant must also present a diploma or certificate showing that she is a graduate of a school for midwives registered by the Board of Health of The City of New York as maintaining a satisfactory standard of preparation, instruction and course of study, but the requirement of a diploma shall not apply to any person who is now, or heretofore has been, authorized to practice midwifery by the said Board."

A survey of the history surrounding midwife regulations in the various countries of Europe shows that in practically no instance has legislation been retroactive. It is believed that this action by the Board is of great importance in that the increased requirements in the qualifications of a midwife will result in great benefits to mothers and be an important factor in the reduction of infant mortality and morbidity. The standard established in this City is now the same as maintains in England.

Table II.

Supervision of Midwifery.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Applications brought forward from previous year	228	48	27	127	18	8
Applications received during year	1,543	795	163	462	103	20
Total	1,771	843	190	589	121	28
Applications granted	1,684	832	176	536	115	25
Applications denied	11	5	1	4	.....	1
Applications pending at end of year	76	6	13	49	6	2
Total	1,771	843	190	589	121	28
Permits expired*	1,484	654	154	535	127	14
Permits revoked	105	91	2	7	5	.....
Total permits in force	1,488	765	135	475	88	25
First inspections (for a new permit)	1,928	1,035	195	489	172	37
Reinspections	8,329	3,631	542	3,401	615	140
Special investigations	6,159	3,448	541	2,052	117	1
Total visits	16,416	8,114	1,278	5,942	904	178

* All permits expire automatically a year after date of issue.

Supervision of Midwifery—Continued.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Stillbirths investigated	442	249	66	78	43	6
Cases of ophthalmia neonatorum reported	40	25	2	13	.....	.....
By physicians	6	2	2	2	.....	.....
By midwives	20	15	.....	5	.....	.....
By institutions	11	5	.....	6	.....	.....
By others	3	3	.....	.....	.....	.....
Deaths from puerperal septicaemia investigated	200	90	31	56	20	3
Attended at birth by						
Physician	164	68	27	49	17	3
Midwife	36	22	4	7	3	.....

Foundlings.

The boarding-out of foundling babies continues to be of distinct value in lessening what would otherwise be a high institutional infant mortality rate. A special staff of inspectors and nurses is now detailed, not only for inspection of the premises before the granting of permits to board babies, but, particularly, for the purpose of instructing the mothers in proper infant care and seeing that the needed supervision is maintained during the time that the child is boarded out.

A distinct advance has been made through the fact that the New York Foundling Hospital, which boards out more babies than any other single institution, has now instituted a system whereby each child, before being sent out to board, is tested for syphilis by the Wassermann technique, thus preventing possible infection of the foster-mother.

Table III.

Supervision of Foundling Babies Boarded Out in Private Homes.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Applications brought forward from previous year	467	168	63	171	51	14
Applications received during year	4,626	1,705	887	1,347	552	135
Total	5,093	1,873	950	1,518	603	149
Applications granted	4,731	1,809	858	1,380	548	136
Applications denied	138	43	23	63	7	2
Applications pending at end of year	224	21	69	75	48	11
Total	5,093	1,873	950	1,518	603	149
Permits expired*	1,881	600	301	603	255	122
Permits revoked	2,659	1,212	470	717	260	.....
Total permits in force	3,123	1,129	608	835	414	137
First inspections (for a new permit)	5,744	2,250	919	1,950	522	103
Reinspections	21,343	9,089	2,828	7,476	1,466	484
Special inspections	5,991	2,935	722	1,969	357	8
Total visits	33,078	14,274	4,469	11,395	2,345	595

* All permits expire automatically a year after date of issue.

BUREAU OF CHILD HYGIENE.

DIVISION OF INSTITUTIONS AND DAY NURSERIES.

Day Nurseries.

While the supervision of day nurseries and the yearly renewal of permits for their maintenance has provided a usually satisfactory system of general control, the Board of Health, on May 20, 1913, adopted rules for the definite guidance of the officials of the day nurseries, in order that there might be no misunderstanding in regard to the requirements.

(Rules—Form 185K.)

THIS CARD MUST BE HUNG IN A PROMINENT PLACE IN THE DAY NURSERY.

Department of Health.

City of New York.

Rules for the Conduct of Day Nurseries.

1. Each child must be inspected on admission and if suspicious signs of contagious disease are noted, the child must be placed in the isolation room and kept entirely apart from the other children and the Department of Health notified at once.
2. An isolation room for cases of suspected contagious disease shall be provided.
3. All rooms devoted to nursery or kindergarten purposes shall be above the street level, unless there is a cellar underneath the room so occupied.
4. The premises shall at all times be kept in a clean and sanitary condition. Dry dusting or sweeping is prohibited.
5. Adequate ventilation, lighting and heating shall be provided. Except in extremely cold weather, adequate ventilation must be maintained by means of open windows.
6. A well-ventilated room for children's outer garments shall be provided. In this room the clothing removed from the children in the morning must be placed.
7. A minimum of two hundred cubic feet of air space for each child shall be provided.
8. Each iron bed or crib shall be placed so that there will be a space of two feet on all sides except where the head or sides of a bed or crib may touch the wall.
9. Woven wire springs shall be provided, over which a folded blanket, protected by rubber or oilcloth sheeting, must be placed. Mattresses are not allowed.
10. The use of common washcloths, towels, combs and hair brushes is prohibited.
11. All diapers that have become soiled during the day shall be immediately placed in water and thereafter thoroughly washed and boiled. No diapers in an unclean condition shall be removed from the premises.
12. Unless the clothing worn by a child is thoroughly clean on admission, a suitable overapron (the property of the day nursery) shall be worn through the day, and each individual apron shall be marked for identification, unless a clean apron is provided daily.
13. Adequate care must be taken of the milk, bottles and nipples used in infant feeding.
14. No more children shall be admitted daily than are allowed by the permit of the Board of Health.

FAILURE TO OBSERVE THESE RULES MAY RESULT IN THE REVOCATION OF THE PERMIT.

TABLE IV.

Supervision of Day Nurseries.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Applications brought forward from previous year	2	2	...	...	...	...
Applications received during year	94	69	2	18	1	4
Total	96	71	2	18	1	4
Applications granted	95	70	2	18	1	4
Applications denied	1	1	...	...	...	...
Applications pending at end of year	...	...	...	...	...	...
Total	96	71	2	18	1	4
Permits expired*	26	12	...	13	...	1
Permits revoked	75	68	1	3	...	3
Total permits in force	93	66	2	20	1	4
First inspections (for a new permit)	100	81	...	12	1	6
Reinspections	924	647	13	235	1	28
Special investigations	8	7	...	1	...	...
Total visits	1,032	735	13	248	2	34

*All permits expire automatically a year after date of issue.

INSTITUTIONS.

In accordance with the provisions of Sections 313, 314 and 315 of the Public Health Law, monthly inspections have been made of each institution in the City harboring orphan, destitute, or vagrant children, or juvenile delinquents. A monthly medical report is received by the Board of Health from the physicians connected wtih each institution and the visit of the inspector of this department is for the purpose of verifying this report and of adjusting any conditions which are contrary to the general rules and regulations of this department.

On January 1, 1913, there became available for the use of the Bureau of Child Hygiene a special appropriation of ten thousand dollars, set aside by the Board of Estimate and Apportionment for the purpose of providing for each child in these institutions the same system of medical examination and after-care which had beetn provided for the children in the public schools. A staff of five inspectors was assigned to duty for this purpose.

Owing to necessary organization work, it was not found possible to begin these physical examinations until March. Table V will show the result of this work. Each child was carefully examined and the institution notified, in writing and by consultation with the department inspector, of the defects found in each case. Every effort was made to co-operate with the institution in obtaining proper treatment for the children found to have physical defects. In many instances the Department of Health Clinics for School Children were used for this purpose.

As soon as a child received treatment, it was re-examined by the inspector and record made as to whether the defective conditions were improved, cured, or unim-

proved. Considering the short space of time that has elapsed since the primary examinations were made of these children, the number found to be improved or cured, after treatment had been provided, is surprisingly large, and shows what may be expected when effort is made to secure proper treatment for children who are found to be in need of it.

TABLE V.

Supervision of Institutions—Inspections Made and Non-Contagious Physical Defects Found.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Number of institutions	81	22	14	33	7	5
Number of inspections	951	289	171	391	49	51
Number children in institutions	14,697	3,429	4,178	4,395	881	1,814
Number physical examinations made	19,445	5,369	5,183	5,344	1,735	1,814
Number found needing treatment	11,373	3,387	3,061	2,828	992	1,105
Defects found:						
Defective vision	2,424	731	869	408	155	261
Defective hearing	402	211	112	47	19	13
Defective nasal breathing	2,030	963	373	271	102	321
Hypertrophied tonsils	1,414	543	218	307	144	202
Pulmonary disease	624	359	54	70	4	137
Cardiac disease	392	164	93	42	23	70
Nervous disease	211	33	126	20	17	15
Malnutrition	434	276	31	63	30	34
Orthopedic defects	301	71	68	81	49	32
Defective teeth	7,790	1,941	2,285	2,209	707	648

Table VI.

Supervision of Institutions—Treatment Received for Physical Defects.

	Entire City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
Defective children found	7,380		1,742		2,206		1,790		572		1,070	
	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.
Defective children found after treatment	5,524	1,856	1,620	122	1,308	898	1,214	576	370	202	1,012	58
By Defects Found:												
Defective vision	811	978	258	219	239	431	152	118	72	45	90	165
Defective hearing	63	47	13	3	24	39	14	2	1	3	11	.....
Defective nasal breathing	937	79	397	9	151	21	52	24	23	23	314	2
Hypertrophied tonsils	667	189	258	35	71	63	116	52	31	27	191	12
Pulmonary disease	323	3	114	1	44	.....	35	2	1	.....	129	.....
Cardiac disease	189	38	61	1	39	34	23	2	2	1	64	.....
Nervous disease	89	34	15	.....	46	33	11	1	4	.....	13	.....
Malnutrition	176	6	91	4	18	1	24	.....	5	.....	38	1
Orthopedic defect	102	59	16	4	13	36	40	7	5	9	28	3
	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.
Defective teeth	3,740	1,359	1,022	41	893	753	883	406	306	158	636	1

DIVISION OF INFANTS' MILK STATIONS.

The year showed a reduction in the infant mortality rate of the City, it being 101.9 per 1,000 births, as compared with 105 in 1912. The total number of deaths under one year during 1913 was 13,780, as compared with 14,289 in 1913, a numerical decrease of 509.

TABLE

Infant Mortality—Deaths and Death-Rates

	ALL CAUSES.											
	New York City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1902.....	15,526	181	8,594	164	887	170	5,059	215	701	219	285	200
1903.....	14,413	152	8,181	146	741	122	4,601	169	634	167	256	167
1904.....	16,125	162	9,207	156	920	152	5,015	174	698	180	285	179
1905.....	16,522	159	9,401	156	917	138	5,150	166	760	175	294	174
1906.....	17,189	153	9,464	150	1,029	141	5,453	158	903	179	340	182
1907.....	17,437	144	9,602	146	1,044	123	5,503	142	936	161	352	176
1908.....	16,231	128	9,048	135	1,026	107	5,012	120	800	125	345	168
1909.....	15,976	129	8,914	140	991	104	4,923	119	851	135	297	149
1910.....	16,215	125	8,954	135	1,051	96	5,059	118	869	122	282	142
1911.....	15,053	112	8,223	124	1,095	88	4,628	101	830	110	277	121
1912.....	14,289	105	7,675	116	1,121	83	4,453	98	784	98	256	113
1913.....	13,780	102	7,123	111	1,166	79	4,384	95	866	107	242	106

TABLE

Infant Mortality—Deaths of Children

	DIARRHOEAL.						RESPIRATORY.						CONGENITAL DEBILITY.					
	New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
1902.	4,090	2,121	221	1,409	215	124	3,749	2,168	189	1,224	128	40	4,531	2,479	242	1,494	236	80
1903.	3,769	2,071	179	1,238	176	105	3,202	1,890	133	1,028	120	31	4,740	2,672	247	1,530	201	90
1904.	4,726	2,506	246	1,622	243	109	3,466	2,059	165	1,076	128	38	5,019	2,941	287	1,447	230	114
1905.	4,945	2,611	261	1,656	290	127	3,254	1,935	147	997	145	30	5,316	3,086	311	1,619	201	99
1906.	4,943	2,481	280	1,693	344	145	3,742	2,114	197	1,218	181	32	5,465	3,162	317	1,614	244	128
1907.	5,364	2,667	316	1,923	323	135	3,627	2,008	170	1,211	189	49	5,586	3,254	370	1,510	337	115
1908.	5,118	2,630	288	1,774	291	135	3,155	1,755	166	1,051	141	42	5,593	3,283	383	1,503	290	134
1909.	4,252	2,119	235	1,522	290	88	3,705	2,060	216	1,197	182	50	4,950	2,818	356	1,374	281	121
1910.	4,807	2,450	276	1,698	292	91	3,297	1,725	214	1,155	159	44	5,529	3,258	379	1,454	320	118
1911.	3,853	1,842	260	1,412	247	92	3,277	1,764	179	1,139	152	43	5,268	2,996	454	1,403	331	84
1912.	3,392	1,571	230	1,267	237	87	3,243	1,714	204	1,112	180	33	5,485	3,162	509	1,437	270	107
1913.	3,037	1,470	230	1,060	217	60	3,172	1,599	246	1,095	181	51	5,495	2,957	505	1,579	356	98

VII.

per One Thousand Children Born.

Diarrhoeal Diseases.											
New York City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
4,090	47.8	2,121	40.6	221	42.3	1,409	59.9	215	67.2	124	66.8
3,769	39.8	2,071	37.0	179	29.6	1,238	45.4	176	46.3	105	68.6
4,726	47.5	2,506	42.3	246	40.8	1,622	56.2	243	62.8	109	68.3
4,945	47.6	2,611	43.4	261	39.2	1,656	53.5	290	66.6	127	75.1
4,943	44.2	2,481	39.4	280	38.3	1,693	49.0	344	68.1	145	77.4
5,364	44.4	2,667	40.6	316	37.2	1,923	49.8	323	55.4	135	67.3
5,118	40.4	2,630	39.3	288	30.0	1,774	42.3	291	45.3	135	65.7
4,254	34.6	2,119	33.3	235	24.5	1,522	36.7	290	45.9	88	44.1
4,807	37.2	2,450	36.9	276	25.2	1,698	39.8	292	41.0	91	45.7
3,853	28.6	1,842	27.7	260	20.9	1,412	31.1	247	32.6	92	40.3
3,392	25.0	1,571	23.7	230	16.9	1,267	27.9	237	29.6	87	38.2
3,037	22.5	1,470	22.9	230	15.7	1,060	23.1	217	26.8	60	26.3

VIII.

Under One Year of Age—By Boroughs.

Contagious Diseases.						All Other Causes.						Total Deaths.					
New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
792	413	107	242	17	13	2,364	1,413	128	690	105	28	15,526	8,594	887	5,059	701	285
532	302	51	151	21	7	2,170	1,246	131	654	116	23	14,413	8,181	741	4,601	634	256
537	313	57	155	7	5	2,377	1,388	165	715	90	19	16,125	9,207	920	5,015	698	285
586	290	73	190	23	10	2,421	1,479	125	688	101	28	16,522	9,401	917	5,150	760	294
750	335	89	295	21	10	2,289	1,372	146	633	113	25	17,189	9,464	1,029	5,453	903	340
674	357	59	231	18	9	2,186	1,316	129	628	69	44	17,437	9,602	1,044	5,503	936	352
704	395	105	182	17	5	1,661	985	84	502	61	29	16,231	9,048	1,026	5,012	800	345
725	415	40	244	21	5	2,344	1,502	144	586	77	33	15,976	8,914	991	4,923	851	297
583	301	44	204	28	6	1,999	1,220	138	548	70	23	16,215	8,954	1,051	5,059	869	282
566	326	78	119	19	24	2,089	1,295	124	555	81	34	15,053	8,223	1,095	4,628	830	277
517	259	58	164	30	6	1,652	969	120	473	67	33	14,289	7,675	1,121	4,453	784	256
494	245	60	147	34	8	1,583	852	125	502	78	25	13,780	7,123	1,166	4,383	866	242

This reduction is all the more gratifying when compared with the infant mortality rates of other cities. The ten largest cities in the United States showed infant death rates for 1913 as follows:

St. Louis	99.5
New York	101.9
Boston	107.0
Philadelphia	112.7
Chicago	118.6
Pittsburgh	127.2
Detroit	132.7
Buffalo	137.4
Cleveland	145.7
Baltimore	159.6

London, England, which gave an infant death rate of 95 in 1912, at which time New York had an infant death rate of 105, reports for 1913 a death rate of 105 as compared with New York City's rate of 101.9.

The department carried on its work for the reduction of infant mortality during the year on the same broad general lines of the previous three years. In the fifty-five infants' milk stations maintained under the control of the Bureau, there was 40,610 babies registered during the year; 145 deaths of infants in attendance at the milk stations were recorded, of which 97 were due to diarrhoeal diseases and 48 to other causes. In all cases of sickness occurring in babies in attendance at the milk stations, every effort is made to induce the mother to consult the family physician. If unable to pay, reference is made to a dispensary or an hospital. The medical inspectors in attendance at the milk stations treat no cases of illness in babies other than those due to dietary errors, and those only in case the family is unable to employ a private physician.

TABLE IX.

Infant Mortality—Infants' Milk Stations.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Number of stations	56	27	3	24	1	1
Babies registered during year	40,610	20,360	3,166	16,131	595	358
Number on register at end of year	12,897	5,499	804	6,359	129	106
Number of quarts of milk dispensed	2,367,595	1,208,019	105,848	1,010,187	23,323	20,218
Number of deaths	145	55	4	84	1	1
Of which due to diarrhoea	97	31	2	63	.....	1
Of which due to other causes	48	24	2	21	1	.....
Visits to stations by mothers and babies	837,890	426,092	50,513	345,976	10,125	5,184
Home visits by nurses	131,904	67,653	4,489	56,826	1,788	1,148
Home visits by inspectors	390	191	16	179	1	3

There has been a broad development of the Infants' Milk Station work along educational lines, to eliminate the danger that they might render artificial feeding so easy that breast feeding would be discouraged. Special emphasis has been laid on questions of general hygiene, and the nurses on their home visits have done excellent work in improving such conditions through educational efforts.

It has become apparent that the milk station, as a means for the reduction of infant mortality, can be effective only in view of a full realization of the social aspects of the problem. Of all the babies in attendance at the milk stations during the last year, 54.5 per cent. were breast fed, 20.5 per cent. were bottle and breast fed, and 25 per cent. were exclusively bottle fed. Intentional premature weaning has been found

to be extremely rare among the mothers of milk station babies. When it occurs it is due to one of the following causes: (1) Insufficient milk, which may be due to ill-health or poverty, or (2) Employment which takes the mother away from the home.

In the first class, much has been accomplished in prevention by providing for material relief, by giving instruction in diet and personal hygiene, and by referring the mothers to appropriate institutions for necessary treatment. A remedy for the second class has been more difficult to find. Whenever possible, material relief has been obtained, but in a large number of instances the economic factors compel the mother to continue at work.

Pre-Natal Work.

During the latter part of 1912 the New York Milk Committee carried out an extensive experiment to test the value of instruction of expectant mothers during their period of pregnancy, or the so-called "pre-natal work." An appropriation for the purpose of continuing this work was asked for by the Bureau of Child Hygiene in its tentative budget for 1913, but was not granted. The New York Milk Committee discontinued its pre-natal work on December 31, 1912, and turned over to the Bureau of Child Hygiene 284 unterminated cases. In order to deal with the matter effectively and, so far as possible within the limits of the present budget appropriation to carry on additional work of this kind, the infants' milk stations have been made centers for pre-natal instruction, and women are being urged to place themselves under the care of the milk stations during their period of pregnancy.

It is too early to report upon the results of this work as regards the ultimate welfare of the babies concerned. During the year there were 2,476 pregnant women enrolled, of which 1,428 were confined during the year, and 1,046 were under observation at the end of the year.

Co-operation with Other Agencies in Infant Welfare Work.

A splendid spirit of co-operation has been manifested by all the agencies of the city who, directly or indirectly, are interested in the welfare of infants. The Babies' Welfare Association, which is a federation of these agencies, has continued to maintain an office at the Department of Health, with a central clearing house and an executive secretary. The department has furnished inspectors and nurses for fourteen Better Babies' Contests, which have been conducted under the auspices of settlements and other private agencies.

District Visiting for the Reduction of Infant Mortality.

In accordance with the custom of previous years, during the summer months, the doctors and nurses regularly performing school medical inspection work have beeen assigned to the so-called "district visiting" in the home, in a further effort to reduce infant mortality.

Each nurse has obtained, either from the birth records of the department or by canvassing, the names of one hundred and fifty babies as soon after birth as possible. Each nurse has been required to keep at least one hundred and fifty babies under her supervision during the entire summer, visiting them as frequently as might be necessary in order to instruct the mothers how to keep the babies well, and to see that they followed instructions.

Using the Infants' Milk Stations as centers, each day two or more nurses met one of the inspectors for consultation, and in every instance where a baby was reported as being delicate or ill in any way, the medical inspector visited it at once. During the year there were 18,609 babies under the supervision of these district nurses. Of these babies, a total of 182 died, 89 from diarrhoeal diseases, and 93 from other

causes. The nurses made a total of 119,465 visits to the homes, while the inspectors made 1,211 such visits.

Inspectors and nurses were assigned to the depots of the New York Diet Kitchen Association for service during the summer months, and also to the affairs of various outing organizations whenever an opportunity for intelligent preventive work was found to exist, with no other facilities for meeting the need provided.

TABLE X.

Infant Mortality—District Visiting.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Babies under supervision	18,609	7,117	1,652	7,958	1,418	464
Number of deaths	182	46	22	77	27	10
Of which due to diarrhoea	89	26	8	40	14	1
Of which due to other causes	93	20	14	37	13	9
Sick babies treated at home	1,211	172	200	64	765	10
Visits to babies—						
By nurse	119,465	44,404	11,010	56,750	5,191	2,110
By inspector	1,211	172	200	64	765	10

LITTLE MOTHERS' LEAGUES.

The Little Mothers' Leagues received a marked impetus during the year, owing to the donation by an interested friend of the sum of five hundred dollars which was used to purchase five banners, one for each borough, to be given to the league in that borough which excelled in the quality of work performed. These banners for 1913 were won as follows: Manhattan, P. S. 42; The Bronx, P. S. 4; Brooklyn, P. S. 148; Queens, P. S. 87; Richmond, P. S. 18. The surplus money was used to purchase gold and silver medallions, a gold one for the first, and a silver one for the second prize, given in each league to the two girls who had performed the most effective work during the season.

In all there was a total of 171 leagues formed, with 16,562 members. A regular course of twelve lessons was given to them, showing in detail all the methods of baby care, and requiring that the members of the leagues be made competent to carry out any of the instructions given. It is felt that these leagues have been a factor of great importance in the general reduction of the infant death rate.

TABLE XI.

Infant Mortality—Little Mothers Leagues.

	Total City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Number of Little Mothers Leagues formed	171	66	34	34	31	6
Number of members enrolled	16,562	8,752	2,300	4,182	857	471
Number of meetings held	1,450	469	282	455	190	54

DIVISION OF SCHOOL MEDICAL INSPECTION.

At the beginning of the year an extra appropriation made it possible to include in the system of school medical inspection all the parochial schools in the City, thus adding 124,574 to the number of children under supervision; making, with the public school registration of 753,007, a grand total of 877,581 children who are reached by the system of school medical inspection.

TABLE XIIA.

School Medical Inspection—Public Schools—Number and Registration of Schools Under Inspection.

	Number.	Registration.
Entire City	521	753,007
Manhattan Borough	160	294,261
The Bronx Borough	48	90,194
Brooklyn Borough	183	275,572
Queens Borough	96	79,480
Richmond Borough	34	13,500

TABLE XIIB.

School Medical Inspection—Parochial Schools—Number and Registration of Schools Under Inspection.

	Number.	Registration.
Entire City	236	124,574
Manhattan Borough	121	59,883
The Bronx Borough	27	9,909
Brooklyn Borough	58	43,614
Queens Borough	22	9,350
Richmond Borough	8	1,818

TABLE XIIC.

School Medical Inspection—All Schools—Number and Registration of Schools Under Inspection.

	Number.	Registration.
Entire City	757	877,581
Manhattan Borough	281	354,144
The Bronx Borough	75	100,103
Brooklyn Borough	241	319,186
Queens Borough	118	88,830
Richmond Borough	42	15,318

There has been general improvement in the quality of work performed, and a corresponding improvement in the results obtained. The number of general physical defects found shows a marked reduction as compared with previous years. In 1909, 13.1 per cent. of the children examined had defective vision, while in 1913 this rate was reduced to 8.5 per cent. The number of children suffering from defective nasal breathing has decreased from 18.7 per cent. in 1909 to 8.9 per cent. in 1913, while hypertrophied tonsils, though found in 22 per cent. of the cases in 1909, occurred in only 11.3 per cent. of the cases in 1913.

TABLE XIIIA.

School Medical Inspection—Public Schools—Physical Examination of School Children —Non-Contagious Physical Defects Found.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Physical examinations made	258,851	98,691	28,514	97,929	23,585	10,132
Found needing treatment	178,613	71,627	19,425	67,817	12,042	7,702
Number found with other defects than of teeth only	76,601	30,960	8,345	28,465	6,429	2,402
Number found with defects of teeth as only defect	102,012	40,667	11,080	39,352	5,613	5,300
Number reported treated*	47,614	20,599	5,655	16,742	3,529	1,089
Defects found:						
Defective vision	22,012	9,721	2,238	8,163	1,392	498
Defective hearing	1,302	392	205	518	124	63
Defective nasal breathing	23,031	9,297	2,968	8,920	1,584	262
Hypertrophied tonsils	29,155	10,865	3,073	11,620	2,333	822
Pulmonary disease	423	159	139	91	32	2
Cardiac disease	1,914	806	224	733	116	35
Nervous disease	1,079	511	206	281	66	15
Malnutrition	10,616	4,624	1,225	4,105	465	197
Orthopedic defects	1,094	343	142	468	68	73
Defective teeth	151,261	71,222	12,677	56,059	4,766	6,537

* These figures do not include children reported with defective teeth as the only defect when the treatment consisted only of instruction in oral hygiene.

TABLE XIIIB.

School Medical Inspection—Parochial Schools—Physical Examination of School Children—Non-Contagious Physical Defects Found.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Physical examinations made	71,328	31,955	6,855	28,714	2,593	1,211
Found needing treatment	51,819	24,011	4,999	20,102	1,669	1,038
Number found with other defects than of teeth only	21,014	9,992	1,987	8,027	747	261
Number found with defects of teeth as only defects	30,805	14,019	3,012	12,075	922	777
Number reported treated*	7,455	3,799	1,043	2,345	183	85
Defects found:						
Defective vision	5,617	2,807	435	1,856	169	350
Defective hearing	343	126	52	107	29	29
Defective nasal breathing	6,026	2,653	606	2,432	121	214
Hypertrophied tonsils	7,803	3,357	609	2,628	504	705
Pulmonary disease	167	99	22	38	6	2
Cardiac disease	642	342	55	213	13	19
Nervous disease	367	245	36	67	3	16
Malnutrition	3,375	1,632	186	1,322	65	170
Orthopedic defects	396	165	35	126	4	66
Defective teeth	42,946	19,120	3,779	15,301	1,755	2,991

* These figures do not include children reported with defective teeth as the only defect when the treatment consisted only of instruction in oral hygiene.

TABLE XIIIc.

School Medical Inspection—All Schools—Physical Examination of School Children—Non-Contagious Physical Defects Found.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Physical examinations made	330,179	130,646	35,369	126,643	26,178	11,343
Found needing treatment	230,432	95,638	24,424	87,919	13,711	8,740
Number found with other defects than of teeth only	97,615	40,952	10,332	36,472	7,176	2,663
Number found with defects of teeth as only defect	132,917	54,686	14,092	51,427	6,535	6,077
Number reported treated*	55,069	24,398	6,698	19,087	3,712	1,174
Defects found:						
Defective vision	27,629	12,528	2,673	10,019	1,561	848
Defective hearing	1,645	518	257	625	153	92
Defective nasal breathing	29,057	11,950	3,574	11,352	1,705	476
Hypertrophied tonsils	36,958	14,222	3,682	14,248	2,837	1,527
Pulmonary disease	590	258	161	129	38	4
Cardiac disease	2,556	1,148	279	946	129	54
Nervous disease	1,446	756	242	348	69	31
Malnutrition	13,991	6,256	1,411	5,427	530	367
Orthopedic defects	1,490	508	177	594	72	139
Defective teeth	194,207	90,342	16,456	71,360	6,521	9,528

* These figures do not include children reported with defective teeth as the only defect when the treatment consisted only of instruction in oral hygiene.

Definite improvement has been also made in the method of re-examination of children who have been found to have physical defects. As soon as a child has obtained treatment, the medical inspector makes a re-examination and notes whether or not, in his opinion, the child has been improved by the treatment provided. In case no improvement is shown, the case is referred to the nurse for continued observation.

TABLE XIVA.

School Medical Inspection—Public Schools—Treatment Received for Physical Defects.

	Entire City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.
Defective vision	13,561	4,954	6,837	1,629	1,606	285	3,994	2,855	878	130	246	55
Defective hearing	736	312	252	85	155	27	234	167	60	21	35	12
Defective nasal breathing	13,806	4,720	6,279	1,305	1,800	514	4,587	2,408	987	453	153	40
Hypertrophied tonsils	16,716	7,406	7,923	1,967	1,811	614	5,492	4,027	1,058	678	432	120
Pulmonary disease	276	45	114	14	91	11	50	17	20	3	1	.....
Cardiac disease	1,232	381	618	68	141	40	383	268	72	.....	18	5
Nervous disease	662	169	347	72	115	21	182	71	12	4	6	1
Malnutrition	6,165	1,706	3,032	306	708	104	2,131	1,255	216	26	78	15
Orthopedic defect	640	268	292	51	96	16	194	182	34	5	24	14
	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.
Defective teeth	7,536	5,016	2,663	2,779	1,106	393	2,942	1,585	665	130	160	129

TABLE XIVB.

School Medical Inspection—Parochial Schools—Treatment Received for Physical Defects.

	Entire City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.
Defective vision	2,219	538	1,239	383	257	78	652	67	56	6	15	4
Defective hearing	121	42	60	16	27	10	32	16	2	.....	.....	.....
Defective nasal breathing	2,215	529	1,029	234	348	158	777	120	55	17	6	.....
Hypertrophied tonsils	2,593	464	1,417	115	345	164	742	164	67	21	22	.....
Pulmonary disease	91	24	64	15	17	2	9	7	1	.....	.....	.....
Cardiac disease	300	68	187	25	30	15	81	28	2	.....	.....	.....
Nervous disease	164	40	120	24	24	6	20	10	.....	.....	.....	.....
Malnutrition	1,432	328	878	89	120	26	411	213	16	.....	7	.....
Orthopedic defect	121	26	76	11	.....	.....	39	15	.....	.....	6	.....
	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.
Defective teeth	1,060	1,004	450	690	209	95	348	188	31	6	22	25

TABLE XIVc.

School Medical Inspection—All Schools—Treatment Received for Physical Defects.

	Entire City.		Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.	
	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.	Improved or Cured.	Unimproved.
Defective vision	15,780	5,492	8,076	2,012	1,863	363	4,646	2,922	934	136	261	59
Defective hearing	857	354	312	101	182	37	266	183	62	21	35	12
Defective nasal breathing	16,021	5,249	7,308	1,539	2,148	672	5,364	2,528	1,042	470	159	40
Hypertrophied tonsils	19,309	7,870	9,340	2,082	2,156	778	6,234	4,191	1,125	699	454	120
Pulmonary disease	367	69	178	29	108	13	59	24	21	3	1	.....
Cardiac disease	1,532	449	805	93	171	55	464	296	74	.....	18	5
Nervous disease	826	209	467	96	139	27	202	81	12	4	6	1
Malnutrition	7,597	2,034	3,910	395	828	130	2,542	1,468	232	26	85	15
Orthopedic defect	761	294	368	62	96	16	233	197	34	5	30	14
	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.	Filling.	Extraction.
Defective teeth	8,596	6,020	3,113	3,469	1,315	488	3,290	1,773	696	136	182	154

Cases of contagious constitutional disease show little deviation from former years. Cases of contagious eye and skin disease of sufficient severity to warrant exclusion still show a gratifying decrease. During the year no public school in the city was closed on account of an epidemic of contagious disease, a procedure which has not been necessitated since the organization of the Bureau.

TABLE XVA.

School Medical Inspection—Public Schools—General Contagious Diseases.

	Diphtheria.	Scarlet Fever.	Measles.	Chicken pox.	Pertussis.	Mumps.	German Measles.	Tuberculosis.	Erysipelas.	Gonorrhoea.	Syphilis.	Total.
Entire City—												
Cases found in school and excluded	110	145	1,500	1,546	499	1,141	44	99	2	2	2	5,090
Unreported cases found in homes.	8	101	1,191	760	773	339	14	..	..	..	..	3,186
Manhattan—												
Cases found in school and excluded	38	39	561	506	158	530	5	76	2	2	2	1,919
Unreported cases found in homes.	2	23	506	290	332	174	2	..	..	..	..	1,329
The Bronx—												
Cases found in school and excluded	3	10	107	108	39	104	..	..	..	..	..	371
Unreported cases found in homes.	2	6	93	64	46	19	..	..	..	..	..	230
Brooklyn—												
Cases found in school and excluded	61	48	617	803	213	421	2	20	..	..	..	2,185
Unreported cases found in homes.	3	37	419	321	322	117	3	..	..	..	..	1,222
Queens—												
Cases found in school and excluded	7	32	169	99	43	56	1	3	..	..	..	410
Unreported cases found in homes.	..	4	8	..	..	..	..	..	..	..	..	12
Richmond—												
Cases found in school and excluded	1	16	46	30	46	30	36	..	..	..	..	205
Unreported cases found in homes.	1	31	165	85	73	29	9	..	..	..	..	393

Table XVb.

School Medical Inspection—Parochial Schools—General Contagious Diseases.

	Diphtheria.	Scarlet Fever.	Measles.	Chicken pox.	Pertussis.	Mumps.	German Measles.	Tuberculosis.	Erysipelas.	Gonorrhoea.	Syphilis.	Total.
Entire City—												
Cases found in school and excluded	5	17	56	89	9	50	..	18	1	..	..	245
Unreported cases found in homes.	..	6	35	31	25	18	1	1	..	..	..	117
Manhattan—												
Cases found in school and excluded	2	9	42	65	4	38	..	11	1	..	..	172
Unreported cases found in homes.	..	5	16	24	5	8	..	..	..	..	..	58
The Bronx—												
Cases found in school and excluded	..	4	3	1	..	8	..	..	..	..	..	16
Unreported cases found in homes.	..	..	1	3	1	2	..	..	..	..	..	7
Brooklyn—												
Cases found in school and excluded	2	1	6	13	5	2	..	7	..	..	..	36
Unreported cases found in homes.	..	1	15	1	18	1	1	1	..	..	..	38
Queens—												
Cases found in school and excluded	..	3	5	8	..	..	..	..	..	..	..	16
Unreported cases found in homes.	..	..	..	..	..	..	..	..	..	..	..	...
Richmond—												
Cases found in school and excluded	1	..	..	2	..	2	..	..	..	..	..	5
Unreported cases found in homes.	..	..	3	3	1	7	..	..	..	..	..	14

Table XVc.

School Medical Inspection—All Schools—General Contagious Diseases.

	Diphtheria.	Scarlet Fever.	Measles.	Chicken pox.	Pertussis.	Mumps.	German Measles.	Tuberculosis.	Erysipelas.	Gonorrhoea.	Syphilis.	Total.
Entire City—												
Cases found in school and excluded	115	162	1,556	1,635	508	1,191	44	117	3	2	2	5,335
Unreported cases found in homes.	8	107	1,226	791	798	357	15	1	..	..	..	3,303
Manhattan—												
Cases found in school and excluded	40	48	603	571	162	568	5	87	3	2	2	2,091
Unreported cases found in homes.	2	28	522	314	337	182	2	..	..	..	..	1,387
The Bronx—												
Cases found in school and excluded	3	14	110	109	39	112	..	..	..	..	..	387
Unreported cases found in homes.	2	6	94	67	47	21	..	..	..	..	..	237
Brooklyn—												
Cases found in school and excluded	63	49	623	816	218	423	2	27	..	..	..	3,221
Unreported cases found in homes.	3	38	434	322	340	118	4	1	..	..	..	1,260
Queens—												
Cases found in school and excluded	7	35	174	107	43	56	1	3	..	..	..	426
Unreported cases found in homes.	..	4	8	..	..	..	..	..	..	..	..	12
Richmond—												
Cases found in school and excluded	2	16	46	32	46	32	36	..	..	..	..	210
Unreported cases found in homes.	1	31	168	88	74	36	9	..	..	..	..	407

TABLE XVIA.

School Medical Inspection—Public Schools—Contagious Eye and Skin Diseases.

	Pediculosis.	Trachoma.	Conjunctivitis.	Ringworm.	Scabies.	Impetigo.	Favus.	Molluscum Contagiosum.	Total.
Entire City—									
Cases found in school	200,847	10,668	23,672	3,572	2,210	11,867	276	42	253,154
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	1,453,419
Cases excluded from school	3,562	103	834	63	120	128	19	.....	4,829
Manhattan—									
Cases found in school	97,099	7,451	5,865	1,676	1,086	2,889	58	37	116,161
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	555,936
Cases excluded from school	1,319	40	276	5	31	10	3	.....	1,684
The Bronx—									
Cases found in school	18,550	937	538	293	133	898	23	4	21,376
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	192,386
Cases excluded from school	252	3	115	6	9	7	.....	.....	392
Brooklyn—									
Cases found in school	70,565	1,845	10,988	1,322	805	5,176	154	.....	90,855
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	637,764
Cases excluded from school	1,722	57	384	52	66	101	16	.....	2,398
Queens—									
Cases found in school	12,589	398	5,946	236	121	2,608	41	1	21,940
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	63,136
Cases excluded from school	79	2	25	.....	13	9	.....	.....	128
Richmond—									
Cases found in school	2,044	37	335	45	65	296	.....	.....	2,822
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	4,197
Cases excluded from school	190	1	34	.....	1	1	.....	.....	227

TABLE XVIB.

School Medical Inspection—Parochial Schools—Contagious Eye and Skin Diseases.

	Pediculosis.	Trachoma.	Conjunctivitis.	Ringworm.	Scabies.	Impetigo.	Favus.	Molluscum Contagiosum.	Total.
Entire City—									
Cases found in school	31,240	2,360	4,331	428	324	1,655	46	14	40,408
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	195,164
Cases excluded from school	307	10	36	.....	11	15	5	.....	384
Manhattan—									
Cases found in school	19,436	1,840	1,345	236	173	548	22	8	23,608
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	89,947
Cases excluded from school	148	5	12	.....	6	4	3	.....	178
The Bronx—									
Cases found in school	1,683	111	60	23	13	106	1	.....	1,997
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	17,935
Cases excluded from school	11	.....	3	.....	1	.....	.....	.....	15
Brooklyn—									
Cases found in school	7,146	362	1,479	123	79	552	13	.....	9,754
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	70,553
Cases excluded from school	102	5	17	.....	3	10	1	.....	138
Queens—									
Cases found in school	2,608	47	1,421	42	51	427	9	4	4,609
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	12,840
Cases excluded from school	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond—									
Cases found in school	367	.....	26	4	8	22	1	2	430
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	3,891
Cases excluded from school	46	.....	4	.....	1	1	1	.....	53

TABLE XVIc.

School Medical Inspection—All Schools—Contagious Eye and Skin Diseases.

	Pediculosis.	Trachoma.	Conjunctivitis.	Ringworm.	Scabies.	Impetigo.	Favus.	Molluscum Contagiosum.	Total.
Entire City—									
Cases found in school	232,087	13,028	28,003	4,000	2,534	13,522	322	56	293,562
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	1,648,583
Cases excluded from school	3,869	113	870	63	131	143	24	.....	5,213
Manhattan—									
Cases found in school	116,535	9,291	7,210	1,912	1,259	3,437	80	45	139,769
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	645,883
Cases excluded from school	1,467	45	288	5	37	14	8	.....	1,862
The Bronx—									
Cases found in school	187,233	1,048	598	316	146	1,004	24	4	190.373
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	210,321
Cases excluded from school	263	3	118	6	10	7	.....	.....	407
Brooklyn—									
Cases found in school	77,711	2,207	12,467	1,445	884	5,728	167	.....	100,609
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	708,317
Cases excluded from school	1,824	62	401	52	69	111	17	.....	2,536
Queens—									
Cases found in school	15,197	445	7,367	278	172	3,035	50	5	26,549
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	75,976
Cases excluded from school	79	2	25	.....	13	9	.....	.....	128
Richmond—									
Cases found in school	2,411	37	361	49	73	318	1	2	3,252
Instructions and treatments in school	.....	.....	.....	.....	.....	.....	.....	.....	8,088
Cases excluded from school	236	1	38	.....	2	2	1	.....	280

The number of medical inspectors available at the present time allows for physical examination of each child approximately three times during the course of its school life. The force of nurses, however, is not sufficient to properly follow up by home visits the number of cases found defective among the number examined. This has resulted in an accumulation, effected partly in 1912 and partly in 1913, of over 42,000 unterminated cases of physical defects. All of these are children who were found to need treatment, and yet whose homes could not be visited by the nurses because of the insufficient size of the nursing staff. It is evident that if proper results are to be obtained in the future in this most important part of the work, it will be necessary to materially increase the staff of nurses.

TABLE XVIIA.

School Medical Inspection—Public Schools—Visits Made by Inspectors and Nurses.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Visits to Dispensaries (with Children):						
By inspectors	43	34	.....	.....	9	.....
By nurses	4,446	2,538	559	752	367	230
Visits to Cases of Contagious Eye and Skin Diseases:						
By inspectors	15,039	6,714	969	6,470	488	398
By nurses	11,587	2,984	1,588	5,613	587	815
Visits to Physically Defective Children:						
By inspectors	51,250	23,807	3,400	19,526	1,917	2,600
By nurses	169,990	65,334	20,997	63,849	12,942	6,868
Special Visits:						
By inspectors	12,923	7,445	675	4,569	228	6
By nurses	30,493	12,790	4,580	12,968	155	.....
Total Number of Visits:						
By inspectors	79,255	38,000	5,044	30,565	2,642	3,004
By nurses	216,516	83,646	27,724	83,182	14,051	7,913

TABLE XVIIB.

School Medical Inspection—Parochial Schools—Visits Made by Inspectors and Nurses.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Visits to Dispensaries (with Children):						
By inspectors	.....	.....	.....	.....	.....	.....
By nurses	384	258	39	45	20	22
Visits to Cases of Contagious Eye and Skin Diseases:						
By inspectors	813	393	33	355	10	22
By nurses	1,082	301	176	549	27	29
Visits to Physically Defective Children:						
By inspectors	6,759	3,427	253	2,938	112	29
By nurses	25,961	11,974	3,279	9,634	738	336
Special Visits:						
By inspectors	1,414	720	53	640	1	.....
By nurses	4,953	2,150	756	2,042	5	.....
Total Number of Visits:						
By inspectors	8,986	4,540	339	3,933	123	51
By nurses	32,380	14,683	4,250	12,270	790	387

TABLE XVIIc.

School Medical Inspection—All Schools—Visits Made by Inspectors and Nurses.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Visits to Dipsensaries (with Children):						
By inspectors	43	34	.....	.....	9	.....
By nurses	4,830	2,796	598	797	387	252
Visits to Cases of Contagious Eye and Skin Diseases:						
By inspectors	15,852	6,107	1,002	6,825	498	420
By nurses	12,669	3,285	1,764	6,162	614	844
Visits to Physically Defective Children:						
By inspectors	58,009	27,234	3,653	22,464	2,029	2,629
By nurses	195,951	77,308	24,276	73,483	13,680	7,204
Special Visits:						
By inspectors	14,337	8,165	728	5,209	229	6
By nurses	35,446	14,940	5,336	15,010	160	.....
Total Number of Visits:						
By inspectors	88,241	42,540	5,383	34,498	2,765	3,055
By nurses	248,896	98,329	31,974	95,452	14,841	8,300

In co-operation with the Department of Education, this Bureau made during 1913, 26,979 examinations of children who wished to participate in athletic contests, in each case reporting to the Department of Education whether or not, in the opinion of the inspector, the child was in fit physical condition.

TABLE XVIIIa.

School Medical Inspection—Public Schools—Special Physical Examinations of School Children.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
For athletic contests	26,979	10,805	1,388	10,201	3,736	849
For employment certificates	42,259	20,335	4,515	13,555	3,371	483
Re-examinations	80,427	31,945	9,218	29,059	7,621	2,584

TABLE XVIIIb.

School Medical Inspection—Parochial Schools—Special Physical Examinations of School Children.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
For athletic contests	149	57	.....	11	71	10
Re-examinations	11,097	5,293	1,570	3,819	341	74

TABLE XVIIIc.

School Medical Inspection—All Schools—Special Physical Examinations of School Children.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
For athletic contests	27,128	10,862	1,388	10,212	3,807	859
For employment certificates	42,259	20,335	4,515	13,555	3,371	483
Re-examinations	91,524	37,238	10,788	32,878	7,962	2,658

TABLE XIXa.

School Medical Inspection—Public Schools—Vaccinations.

Entire City	84,180
Manhattan	45,431
The Bronx	10,057
Brooklyn	24,109
Queens	3,544
Richmond	1,039

TABLE XIXb.

School Medical Inspection—Parochial Schools—Vaccinations.

Entire City	706
Manhattan	436
The Bronx	....
Brooklyn	90
Queens	79
Richmond	101

TABLE XIXc.

School Medical Inspection—All Schools—Vaccinations.

Entire City	84,886
Manhattan	45,867
The Bronx	10,057
Brooklyn	24,199
Queens	3,623
Richmond	1,140

DIVISION OF CHILDREN'S CLINICS.

The first dental clinics to be conducted under the authority of the Board of Health were opened early in the year 1913, in accordance with the budgetary provisions, which allowed for the employment of one supervising dentist and nine operating dentists. Dental clinics were established as follows:

Borough of Manhattan	2 clinics	4 dentists
Borough of The Bronx	1 clinic	1 dentist
Borough of Brooklyn	3 clinics	4 dentists

These clinics have been placed in parts of the city where it was felt that the most effective results might be obtained. They have been worked to capacity at all times, and the demands for extension of their facilities are pressing. The dental clinics

have all been established in independent buildings, not directly connected with any school. In this way it has been possible to reach the children of a larger number of schools in the vicinity of the clinics, rather than confining their work to those of one particular school.

The refraction and contagious-eye-disease services, and the operative service for the removal of adenoids and enlarged tonsils have been continued as during the previous year. The clinics are all utilized to capacity and, owing to their location in the parts of the city not otherwise provided with proper dispensary facilities, they have proved to be of great aid in affording the necessary treatment for children who are totally unable to afford private physicians.

TABLE XX.

School Medical Inspection—Clinics for School Children.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Richmond.
Eye Clinic—Refraction Service:					
Number registered	10,416	4,407	1,174	4,835	....
Number discharged	6,719	2,286	1,046	3,387	....
Cured	4,230	1,260	541	2,429	....
Dropped	2,489	1,026	505	958	....
Number refractions performed	22,109	8,788	2,492	10,829	....
Number of treatments	10,046	3,649	1,500	4,897	....
Contagious Eye Disease Service:					
Number registered	12,596	6,958	768	4,870	....
Number discharged	3,907	1,344	218	2,345	....
Cured	1,778	649	175	954	....
Dropped	2,129	695	43	1,391	....
Number of operations performed	98	98	....	....	....
Number of treatments	67,053	33,515	4,601	28,937	....
Nose and Throat Service:					
Number registered	6,806	1,988	1,017	3,801	....
Number discharged	5,085	1,111	1,002	2,972	....
Cured	4,053	1,009	735	2,309	....
Dropped	1,032	102	267	663	....
Number operations performed	3,991	1,009	701	2,281	....
Number treatments	22,201	5,281	1,981	14,939	....
Home visits made by nurses	171	....	157	14	....
Dental Clinic:					
Number registered	7,267	3,345	900	2,817	205
Number discharged	5,773	2,478	892	2,323	80
Cured	3,897	1,565	601	1,672	59
Dropped	1,876	913	291	651	21
Number of treatments	53,073	25,943	7,902	18,937	291
Number of fillings	21,889	10,691	2,698	8,341	159
Temporary	5,193	2,277	400	2,465	51
Permanent	16,696	8,414	2,298	5,876	108
Number of extractions	12,960	5,617	1,778	5,171	394
Temporary teeth	10,438	4,692	1,439	4,021	286
Permanent teeth	2,522	925	339	1,150	108
Number of cleanings	713	259	12	442	....
Number of abscesses lanced	87	42	38	7	....

DIVISION OF EMPLOYMENT CERTIFICATES.

Child Labor Law.

On October 1, 1913, the following amendment to the State Labor Law became effective: Art. VI, sec. 71, subdivision (e): . . . In every case, before an employment certificate is issued, such physical fitness shall be determined by a medical officer, of the department or board of heatlh, who shall make a thorough physical examination of the child and record the result thereof on a blank to be furnished for the purpose by the state commissioner of labor, and shall set forth thereon such facts concerning the physical condition and history of the child as the commissioner of labor may require."

Routine.

For the past three years the Bureau of Child Hygiene has made a physical examination of each child who applied for an employment certificate. These examinations had been made by the school inspectors, in connection with the issuance of the school record by the educational authorities. Since the passage of this law, however, offices have been maintained in each borough, with physicians in constant attendance to examine every child applying for such a certificate.

During 1913 there were 568 children who were refused employment certificates because of physical incapacity. In addition, a large number of other applicants were found to be suffering from some physical defect which might easily be remedied by appropriate treatment. In each such case the certificate was withheld temporarily, while the child was referred to the school nurse, who kept him under observation, making such arrangements as might be necessary for proper treatment or vacation, so that the child might regain his health as speedily and as thoroughly as possible. The New York Child Labor Committee also co-operated by furnishing regular weekly stipends to families whose children wished to go to work, but who were considered physically unfit to do so, and where the loss of the return for such employment meant an economic hardship to the family. In such instances the children are enabled to remain in school until sixteen years of age.

The provision of a thorough examination for each applicant has resulted in a much higher physical standard in children who go to work.

The number of refusals for insufficient education materially decreased during the year, owing to the action of the educational authorities requiring every child to pass a special test, in addition to its regular time in school, before a school record was issued. The latest amendment to the law, which provides that the child must have passed through the first six years of the elementary school before a school record may be issued, will undoubtedly tend to reduce the number of refusals for this reason still further.

TABLE XXI.

Issuance of Employment Certificates.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Applications brought forward from previous year	525	334	13	172	6	...
New applications received	43,198	21,113	4,503	13,800	3,299	483
Total applications	43,723	21,447	4,516	13,972	3,305	483
Employment Certificates:						
Granted	41,507	20,100	4,411	13,227	3,287	482
Refused	1,617	828	103	667	18	1
Pending at end of year	599	519	2	78	...	...
Total applications	43,723	21,447	4,516	13,972	3,305	483
Employment Certificates Refused for:						
Insufficient tuition	627	488	59	77	3	...
Insufficient education	192	57	4	126	5	...
Insufficient evidence of age	86	6	...	79	1	...
Under age	144	92	9	43	...	...
Physical incapacity	568	185	31	342	9	1
Duplicate certificates issued	1,884	1,124	227	502	21	10

DIVISION OF RESEARCH AND EFFICIENCY.

To the Chief of this Division has been committed all work having to do with methods for increasing the efficiency of the Bureau in its various activities and it is confidently expected that new and improved procedures will continue to result.

BUREAU OF INFECTIOUS DISEASES.

ADMINISTRATION.

Staff.

Director of Bureau	1
Assistant Director of Bureau	1
Chiefs of Divisions	7
Chief Diagnostician	1
Chief Veterinarian	1
Borough Chiefs	5
Physician-in-Charge of Hospital Admission Bureau	1
Physicians-in-Charge of District Units	19
Assistant Director, Bacteriological Laboratory	1
Superintendent of Nurses	1
Supervising Nurses	20
Medical Inspectors	51
Clinic Physicians	56
Dentist	1
Veterinarians	7
Bacteriologist	1
Bacteriological Diagnosticians	5
Laboratory Assistants	21
Nurses	197
Disinfectors	42
Drivers	20
Stablemen	8
Laborers	19
Watchmen	2
Automobile Engineman	1
Cleaners	16
Helpers	7
Domestics	3
Orderlies	6
Clerks	52
Hospital Clerks	8
Stenographers and Typists	17
Total	598

Prior to May 8, 1913, the work now done by the Bureau of Infectious Diseases was performed by the former Division of Communicable Diseases and the five separate Divisions of Contagious Diseases, the latter being under the direction of the Assistant Sanitary Superintendents of the five Boroughs. Consolidation of the work of these various divisions was authorized March 25, to take effect May 1.

A personal survey was made of the methods of sanitary supervision of infectious diseases in Washington, Baltimore, Philadelphia, Boston, Pittsburg, and Chicago. A plan of reorganization was drawn up and put into effect May 8, 1913. In October the Board of Health formally established the Bureau of Infectious Diseases.

BUREAU OF INFECTIOUS DISEASES.

The Bureau was organized as follows:

Executive Office.
Division of Contagious Diseases.
Division of Institution Inspection.
Division of Nursing.
Division of Tuberculosis.
Division of Typhoid Fever.
Division of Venereal and Veterinary Diseases.
Diagnosis Laboratory.

Each of these divisions was placed in the charge of a Chief of Division. Each Borough had its own Central Borough Office, in charge of a Borough Chief, and was divided into a number of districts, in each of which was located a Branch Registration Office and Tuberculosis Clinic. The records of all active cases of infectious diseases living in the district were filed in these Branch Offices. Attached to each Branch Office was a corps of physicians and nurses, under the direction of a Physician-in-Charge. Every district was further subdivided into subdistricts, to each of which a district nurse was assigned who supervised all cases residing within its boundaries.

This Branch Office system, which had proved so successful in the sanitary supervision of tuberculosis, gave equally satisfactory results when all infectious diseases were included. Among its advantages were the direct personal assignment of cases to investigators and the use of original records by the latter, thus doing away with duplication of work, and securing personal reports on assignments within twenty-four hours.

A new Branch Registration Office was opened at Broadway and 80th street, Borough of Manhattan.

A complete system of conferences of officers with their subordinates was arranged for, ranging from the monthly conferences of the Director with the Chiefs of Divisions and Borough Chiefs, to those of Supervising Nurses with their District Nurses. Eight series of these conferences were held at regular intervals.

A Bureau Committee on Efficiency Ratings was organized, consisting of representatives of the following branches of the service:

Medical Inspectors.
Clinic Physicians.
Nurses.
Clerks.
Laboratory Assistants.

This Committee systematized methods of efficiency rating and prepared record cards for general use. The system thus devised gave such good results that it was later adopted, with some modifications, by the Board of Promotions and Discipline of the Department of Health.

All stables and horse-drawn vehicles having come under the charge of the Bureau of Infectious Diseases, it organized an express and delivery service for the entire Department of Health. The motor truck, formerly attached to the office of the Chief Clerk, was transferred to this express service.

The stable and ambulance service in each borough was placed under the charge of the Borough Chief. All horses were rebranded and redescribed; a complete and accurate roster being prepared.

For two and a half years the Division of Communicable Diseases had maintained a printing office, and had issued a staff publication called "Communicable News." On August 1, 1913, it was merged with the newly established "Staff News."

DIVISION OF CONTAGIOUS DISEASES.

As previously stated, the system of sanitary supervision of the so-called contagious diseases was entirely reorganized, the same general procedure being followed as for tuberculosis. (A detailed description of the various procedures is given in the 1914 edition of the Hand Book of the Bureau of Infectious Diseases.) Among the more important changes may be mentioned the following:

Establishment of a house-record giving facts regarding the occurrence of all cases of infectious diseases at individual houses.

Simplified hanging cards of instruction regarding diphtheria, scarlet fever, and measles, printed in English, German, Italian, and Yiddish.

Susceptible children in families where cases of diphtheria, measles and scarlet fever had occurred, were not allowed to return to school at termination of case, but held for incubation period of disease in question.

Primary visits to cases of scarlet fever and diphtheria were extended to Sundays and holidays. Cases of measles were terminated and quarantine raised three days after disappearance of fever.

All cases of infectious diseases were divided into "supervision" and "observation" cases; the former were visited every few days, the latter only at infrequent intervals.

Visits to the minor contagious diseases: chicken-pox, German measles, whooping cough, and mumps were discontinued. New hanging cards of instruction regarding these diseases were printed in English, German, Italian, and Yiddish.

A whooping cough clinic was opened at 29 Third avenue, Brooklyn, where cases were treated with a special serum prepared at the Research Laboratory.

The administration of diphtheria-antitoxin by inspectors of the Department of Health was discontinued February 1, and the antitoxin inspectors assigned to duty elsewhere. Arrangements were made for the free delivery of antitoxin to physicians in the Borough of Manhattan. Antitoxin in syringe containers was supplied to a number of all-night drug stores for free distribution.

Disinfection: Although terminal disinfection had been discontinued after cases of measles and diphtheria, yet bedding was still removed for steam sterilization. The latter practice also, was discontinued beginning in July. As a result of its discontinuance the Department Disinfection Plants in the Boroughs of The Bronx, Queens and Richmond were temporarily closed. Goods from Queens and The Bronx were taken to the Disinfection Plant in Brooklyn and Manhattan respectively. When it became necessary to disinfect goods in Richmond, an engineer was sent from the Manhattan Disinfection Plant.

DIVISION OF INSTITUTION INSPECTION.

A corps of five institution inspectors was established, charged with the supervision of infectious diseases at the various institutions in New York City. A survey was made and information obtained regarding every institution. The system of supervision of infectious diseases in institutions was made to correspond with the general system of the Bureau.

DIVISION OF NURSING.

By the consolidation of the work of the former two divisions, the combined staff of nurses became one hundred and ninety-two. All nurses were instructed as to the sanitary supervision of infectious diseases, as well as tuberculosis, and late in the year the distinct staffs of tuberculosis and contagious disease nurses were discontinued, and to each nurse was assigned a small district and she was made responsible for all cases of infectious diseases occurring in that district. The staff of supervising nurses was

enlarged so as to provide one for each district unit, she having charge of the work of all nurses in the district.

The lectures to nurses, supervised by the School of Philanthropy, and the weekly classes conducted by supervisors, were continued throughout the year.

DIVISION OF TUBERCULOSIS.

The Branch Office system of sanitary supervision of tuberculosis was merged and unified with that for the other infectious diseases. The general procedure followed remained the same. Certain improvements were made, however, among them the introduction of an envelope system for tuberculosis records, the record envelope taking the place of the old white record card.

Central files for "not found" cases were established in the various Borough Offices, and a central file for all homeless cases, in the Executive Office.

Arrangements were made for posting signs on public buildings prohibiting spitting. These signs were delivered and have been put up in a number of places.

The usual tuberculosis moving picture exhibitions were given in the public parks throughout the summer.

The services of district nurses for the care of cases of surgical tuberculosis were offered to the Orthopædic Clinics in the City.

Physicians of the Bureau followed up and examined cases treated with Friedman's vaccine.

Hospital Admission Bureau.

In spite of certain drawbacks—unsatisfactory quarters, etc.—this Bureau did excellent work during 1913.

A dental clinic, with a salaried dentist in charge, was established to care for the teeth of applicants for admission to Otisville.

The Department of Charities opened a Tuberculosis Hospital Admission Bureau for Brooklyn and Queens at the Brooklyn Office of that Department. This Bureau did very little work, however, and so was discontinued by the Department of Charities shortly after January 1, 1914.

Male and female pavilions were set aside at Riverside Hospital for the reception of accepted cases for Otisville. During the winter months these pavilions were kept well filled, but during the spring and summer there was but little use for them, the waiting list for Otisville being very small at this time.

Tuberculosis Clinics.

The work of the tuberculosis clinics was largely extended during the year.

Weekly children's classes were opened in all Department Clinics, and all children were tested for the Von Pirquet reaction.

New, larger, and more satisfactory quarters were provided for two of the Brooklyn Clinics—the Brooklyn Eastern District Clinic, at 306 South Fifth street, and the Brooklyn Brownsville Clinic, at 64 Pennsylvania avenue.

St. Bartholomew's Clinic, Manhattan, closed February 1, and patients from its district were cared for by the Manhattan West Side Clinic of the Department of Health.

Daily sessions were held at the Queens Borough Clinic because of the increase of the work.

The authorities of the Bay Ridge Hospital and Dispensary gave an extra room to the Department of Health to be used as a Branch Office, thus giving more room for the clinic. Department drugs were furnished to this clinic.

Tuberculin was used in the treatment of a series of cases at the Manhattan East Side Clinic. The results have been published in the medical journals.

In connection with the supervision of bakeries by the Department of Health, nearly 12,000 bakers of New York City were examined at the tuberculosis clinics of the Department of Health. Twelve were found to be suffering from active pulmonary tuberculosis.

Day Camps.

Extensive changes and improvements were made on the Day Camp "Rutherford" (a moored ferryboat) by the Tuberculosis Committee of the Brooklyn Bureau of Charities. Though this was a single-deck boat, yet such good use was made of the roof that it now accommodates more patients than the "Middletown."

A night camp for men was opened on the "Rutherford" and proved quite successful, contrary to our former experience with such a camp on the "Middletown."

DIVISION OF TYPHOID FEVER.

The most important new procedure in connection with typhoid fever during 1913 was the free performance of immunization by the Department of Health. Beginning January 2, 1913, antityphoid immunization was offered to every member of every family in New York City in which a case of typhoid fever had occurred. Immunizations were performed by the typhoid inspectors either at the patients' homes or at the Borough Offices.

Special circulars of information were printed and distributed broadcast, but acceptances of the Department's offer were at first few and far between. In the late summer and fall there was a marked increase in the number of immunizations performed.

Six thousand injections were given during the year, with 1,710 completed immunizations (three injections each).

The prevalence of typhoid fever was remarkably restricted in all Boroughs during the first eight months of the year. But a sharp outbreak occurred on the east side of Manhattan, below 40th street, beginning September 1 and ending October 11. This was in all probability a milk-borne epidemic, although definite proof could not be obtained. There were a few other minor outbreaks in Manhattan and Brooklyn.

Special attention was given during the year to the supervision of typhoid convalescents whose work had to do with the handling of foodstuffs; the excreta of all such persons being examined for typhoid bacilli before they were permitted to return to work.

Important changes in registration were made; a record envelope was maintained in each Borough Office for every case of typhoid fever, in which the completed records were filed on termination of the case. Every case of typhoid fever was also entered in the Borough house file.

DIVISION OF VENEREAL AND VETERINARY DISEASES.

On June 30, 1913, the Bureau of Social Research (a private organization) gave the Department of Health $10,000 for its work on venereal diseases, it having proved impossible to obtain an appropriation for that purpose in the Budget for 1913. With this money were employed a Medical Advisor, a staff of laboratory workers, clerks, etc. A bacteriologist was loaned by the Bureau of Laboratories and several medical inspectors were detailed from the Bureau of Infectious Diseases.

From this nucleus the work went steadily ahead. The registration of cases of syphilis increased 156 per cent. over 1912, and that of gonorrhoea 49 per cent.

A circular of information regarding the work of the Department in venereal diseases was prepared and issued.

With the organization of the Bureau of Infectious Diseases the sanitary supervision of glanders and of rabid and vicious dogs was placed under the direction of a Bacteriologist-in-Charge.

Statistics as to the amount of work accomplished will be found in the tables attached to this report.

The Medical Advisor held a daily clinic at which he saw all applicants for information and advice regarding venereal diseases. He gave no treatment of any kind. He made a survey of the venereal clinics in Greater New York, and prepared an exhibit of the advertisements published by venereal quacks in the daily papers.

An advertisement was carried in an evening daily, warning sufferers against venereal quacks, and telling them that free advice could be obtained at the Department of Health. Preparations were made for the posting of signs giving similar advice in the lavatories of saloons, the subway, etc.

Diagnostic Clinics for Venereal Diseases.

With the organization of the work on venereal diseases in the Bureau of Infectious Diseases, the Diagnostic Clinic for venereal diseases, formerly held at the Department's Willard Parker Hospital, was transferred to the headquarters' building where daily clinics were held. A similar clinic, held once a week, at night, was opened at 307 West 33d street.

A day and night clinic was opened at 29 Third avenue, Brooklyn, classes being held every day and Tuesday and Friday nights. Attendance at these clinics was relatively large, and the majority of applicants were referred by private physicians.

Printed instructions regarding gonorrhoea and syphilis were issued.

Serological Laboratory.

It proved impossible to complete the new serological laboratory at headquarters before January 1, 1914. During the latter part of 1913, through the kindness of the Bellevue and University Medical College, the laboratory was housed in the Carnegie Laboratory.

In addition to examinations for the Wassermann reaction, examinations were made for the complement-fixation reaction in gonorrhoea and in glanders. Examination-for-gonococci work was transferred from the Diagnosis Laboratory to the Serological Laboratory.

A number of examinations were made of blood specimens from the inmates of various institutions to determine the prevalence among them of gonorrhoea and syphilis.

Wassermann outfits were distributed to the hospitals and clinics throughout the City, as well as to the clinics of the Department of Health.

Glanders.

With the organization of the Bureau of Infectious Diseases, the system of registration and supervision of glanders in horses was simplified, improved, and made uniform in all the Boroughs. Among the important steps taken were the following:

A special disinfection corps for stables, with its own wagons, etc., was organized. Close and friendly co-operation with the Veterinarians of the State Department of Agriculture was secured.

The complement-fixation test was made in the case of every horse in stables from which a case of glanders was reported.

Vicious and Rabid Dogs.

The system of handling dog cases was materially changed and simplified.

Visits by medical inspectors and medical diagnosticians were discontinued, and all reported cases were investigated by Sanitary Patrolmen. If the dog was found to be vicious or to show suspicious symptoms, the owner was required to deliver the dog to the nearest shelter of the American Society for the Prevention of Cruelty to Animals, where it was inspected by the Borough Veterinarian. Much time and better results were gained by this new method.

A large number of vicious dogs were destroyed during the year.

Pasteur Clinics.

The supervision of the Pasteur Clinics was transferred to the Bureau of Infectious Diseases late in the year. A new clinic was opened in the Borough of The Bronx, and the Manhattan Clinic was transferred to headquarters from the Willard Parker Hospital. For the number of cases treated, see statistical report.

DIAGNOSIS LABORATORY.

The alteration and finishing of the interior of the new Diagnosis Laboratory on the eighth floor of the headquarters building, and the installation of fittings and furniture therein, was finally completed by midsummer.

The work of the Laboratory has gone on smoothly and well, very few mistakes having been made or complaints received.

A change was made in the system of registration, all specimen-slips being forwarded to the Borough Offices to be filed with the other records of the cases, with the exception of those concerning diphtheria and typhoid which were held while cases were "active."

A motor cycle for the delivery of supplies was purchased in January, 1913, but did not give satisfaction and was replaced by a Department wagon.

A supply of white enamel cabinets for collecting stations was obtained and issued. These took up less room and were more useful and more ornamental than the old cabinets.

A water still was installed to furnish the distilled water required in the laboratory.

The examiners of diphtheria cultures were instructed in the Wesbrook classification of diphtheria bacilli.

Wooden applicators for diphtheria cultures to replace those made of galvanized iron wire that were formerly used, were introduced.

The antiformin method of sputum examination was introduced in January, 1913, and later certain improvements and safeguards, the most important being the handling of each slide separately.

A satisfactory method of cleaning used sputum jars by means of sulphuric acid and bichromate of potassium was introduced.

BUREAU OF INFECTIOUS DISEASES.

TABLE I.

DIVISION OF CONTAGIOUS DISEASES.

Statistical Table—1913.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Cases Reported—						
Diphtheria	14,535	6,113	2,035	5,226	1,003	158
Measles	29,163	12,157	4,879	9,124	1,718	1,285
Scarlet fever	10,719	4,138	1,067	4,344	839	331
Chickenpox	6,855	2,564	734	2,902	407	248
German measles	5,000	2,255	552	1,682	418	93
Mumps	2,252	1,042	228	839	53	90
Whooping cough	3,529	1,261	410	1,392	226	240
Smallpox	20	16	1	2	....	1
Total	72,073	29,546	9,906	25,511	4,664	2,446
Cases removed to hospitals	7,370	4,146	765	2,225	151	83
Visits to cases	201,649	84,471	20,274	72,450	15,931	8,523
Cultures	12,781	5,018	1,052	5,111	1,487	113
Immunizations	3,844	1,468	285	1,218	810	63
Injections	801	437	100	243	18	3
Intubations	44	21	3	16	4	....
Vaccinations performed	5,427	3,133	986	967	259	82
Vaccination certificates issued	1,729	477	345	672	197	38
Disinfection—						
Houses visited: Disinfection performed	27,338	14,024	2,981	8,220	1,576	537
Rooms disinfected	46,762	26,341	5,325	11,736	2,438	922
Goods Wagon Service—						
Visits: Removal of infected goods	22,788	9,468	3,340	8,544	1,060	376
Visits: Return of infected goods	19,621	8,367	2,945	7,055	935	319
Other visits	15,629	10,761	1,879	1,676	1,021	292
Total	58,038	28,596	8,164	17,275	3,016	987
Disinfecting Station—						
Lots of goods disinfected	35,079	12,211	3,193	18,383	975	317
Lots of goods destroyed	2,480	1,202	251	873	111	43
Lots of goods removed	37,559	13,413	3,444	19,256	1,086	360
Ambulance Service—						
Total calls for ambulance	7,020	3,341	1,387	2,184	26	82

COMMENTS.

The prevalence of diphtheria, measles, scarlet fever and whooping cough, as compared with former years, is given in Tables 2, 3, 4 and 5.

7,370 cases were removed to hospital, as compared with 6,816 in 1912.

22,788 visits were paid for the removal of infected goods, as against 29,000 in 1912. This was due to the discontinuance of the removal of bedding for steam sterilization.

Disinfection was performed in 27,000 premises, as compared with 56,000 during 1912. The decrease was due to the discontinuance of terminal disinfection after diphtheria and measles.

TABLE No. 2.

Diphtheria—General Figures, 1908 to 1913 Inclusive.

Year.	Cases Reported.	Cases per 1.000 of Population.	Deaths.	Deaths per 1,000 of Population.	Case Fatality Per Cent.	Immunized by Department Inspectors
Entire City—						
1908	16,431	3.71	1,758	.40	10.7	11,435
1909	15,097	3.31	1,714	.38	11.4	10,851
1910	16,940	3.52	1,715	.36	10.1	14,600
1911	13,485	2.71	1,281	.26	9.5	9,056
1912	13,533	2.61	1,125	.22	8.3	8,421
1913	14,535	2.70	1,333	.25	9.2	3,844
Manhattan—						
1908	8,263	3.60	939	.41	11.3	6,046
1909	7,933	3.37	963	.41	12.1	5,425
1910	8,990	3.83	898	.38	10.0	7,450
1911	6,511	2.73	657	.28	10.1	4,338
1912	6,246	2.56	529	.22	8.5	4,401
1913	6,113	2.46	635	.26	10.4	1,468
The Bronx—						
1908	1,648	5.04	158	.48	9.6	1,674
1909	1,335	3.84	102	.29	7.7	1,620
1910	1,696	3.86	136	.31	8.0	3,756
1911	1,496	3.10	144	.30	9.6	1,775
1912	1,679	3.14	125	.24	7.4	1,421
1913	2,035	3.49	148	.25	7.3	285
Brooklyn—						
1908	5,451	3.65	549	.42	10.0	2,780
1909	4,735	3.08	556	.36	11.7	2,915
1910	5,023	3.05	558	.34	11.1	2,654
1911	4,492	2.63	395	.23	8.8	2,311
1912	4,678	2.63	400	.23	8.6	2,108
1913	5,226	2.83	450	.24	8.6	1,218
Queens—						
1908	785	3.38	91	.39	11.6	664
1909	764	3.13	73	.30	9.6	548
1910	992	3.44	104	.36	10.5	426
1911	777	2.51	63	.20	8.1	499
1912	680	2.03	54	.16	7.1	324
1913	1,003	2.79	88	.25	8.8	810
Richmond—						
1908	284	3.73	21	.34	10.2	271
1909	330	4.29	20	.26	6.1	343
1910	239	2.80	19	.22	7.9	314
1911	209	2.34	22	.25	10.6	133
1912	250	2.71	17	.18	6.8	167
1913	158	1.66	12	.13	7.6	63

COMMENTS.

Just 1,000 more cases of diphtheria were registered during 1913 than during 1912. This may be accounted for in two ways: (*a*) all exposed persons, cultures from

whose throats showed diphtheria bacilli, were for the first time listed as cases of diphtheria, and (*b*) because of the discontinuance of the administration of diphtheria antitoxin by the Department of Health, more secondary cases of diphtheria developed.

The increase was absolutely greatest in Brooklyn, and relatively so in the Borough of Queens, where quite a sharp outbreak of diphtheria occurred.

The death rate per 1,000 for the whole City was larger than for 1912, but lower than for any year previous to that. The disease was somewhat more fatal; the case fatality rising from 8.3 per cent. in 1912 to 9.2 per cent. in 1913. The greatest fatality occurred in the Borough of Manhattan (10.4 per cent.).

TABLE No. 3.

Measles—General Figures, 1909 to 1913 Inclusive.

Year.	Cases Reported.	Cases per 1,000 of Population.	Deaths.	Deaths per 1,000 of Population.	Case Fatality Per Cent.
Entire City—					
1909	31,950	6.99	997	.21	3.1
1910	35,374	7.36	785	.16	2.2
1911	25,540	5.12	659	.13	2.5
1912	39,018	7.54	671	.12	1.7
1913	29,163	5.42	628	.12	2.1
Manhattan—					
1909	14,766	6.22	388	.16	2.6
1910	14,396	6.14	271	.11	1.8
1911	13,449	5.63	321	.13	2.3
1912	16,813	6.89	306	.12	1.0
1913	12,157	4.88	368	.15	3.0
The Bronx—					
1909	3,714	10.67	58	.16	1.5
1910	4,988	11.34	56	.15	1.1
1911	2,879	5.95	171	.35	5.9
1912	5,296	9.96	109	.20	2.0
1913	4,879	8.32	70	.12	1.4
Brooklyn—					
1909	9,881	6.41	509	.33	5.0
1910	12,630	7.66	422	.25	3.3
1911	7,728	4.51	128	.07	1.6
1912	12,188	6.84	203	.11	1.6
1913	9,124	4.94	144	.08	1.5
Queens—					
1909	2,118	8.63	30	.12	1.4
1910	2,580	8.94	30	.10	1.1
1911	1,013	3.26	10	.03	0.9
1912	3,627	10.84	41	.12	1.1
1913	1,718	4.77	29	.08	1.6
Richmond—					
1909	1,471	18.08	12	.15	0.8
1910	780	9.01	6	.06	0.7
1911	471	5.26	29	.32	6.1
1912	1,094	11.80	12	.12	1.0
1913	1,285	13.40	17	.18	1.3

COMMENTS.

Almost 10,000 fewer cases of measles occurred during 1913 than during 1912. The decrease being relatively greatest in the Borough of Queens.

The death rate (0.12 per thousand of population) remaining the same as for the preceding year, a slight rise in the case fatality occurred raising it to 2.1 per cent., it having been 1.7 per cent. in 1912.

TABLE No. 4.

Scarlet Fever—General Figures, 1909 to 1913 Inclusive.

Year.	Cases Reported.	Cases per 1,000 of Population.	Deaths.	Deaths per 1,000 of Population.	Case Fatality Per Cent.
Entire City—					
1909.....	12,479	2.73	786	.17	6.2
1910.....	18,924	3.93	953	.19	5.0
1911.....	15,793	3.16	741	.14	4.6
1912.....	12,716	2.45	615	.11	4.8
1913.....	10,719	1.99	507	.09	4.7
Manhattan—					
1909.....	5,909	2.46	358	.15	6.0
1910.....	8,722	3.81	448	.19	5.1
1911.....	6,799	2.84	360	.15	5.2
1912.....	6,023	2.51	314	.12	5.2
1913.....	4,138	1.66	206	.08	4.9
The Bronx—					
1909.....	1,161	3.33	50	.14	4.3
1910.....	2,264	5.15	75	.17	3.3
1911.....	1,663	3.44	55	.11	3.3
1912.....	1,618	3.04	54	.10	3.3
1913.....	1,067	1.40	48	.08	4.4
Brooklyn—					
1909.....	4,275	2.77	326	.21	7.6
1910.....	6,474	3.93	385	.23	5.9
1911.....	6,136	3.58	295	.17	4.8
1912.....	4,321	2.43	225	.12	5.2
1913.....	4,344	2.37	196	.11	4.4
Queens—					
1909.....	856	3.49	42	.17	4.9
1910.....	985	3.41	33	.11	3.7
1911.....	876	2.82	23	.07	2.6
1912.....	551	1.64	6	.01	1.0
1913.....	839	2.60	46	.13	5.4
Richmond—					
1909.....	278	3.56	10	.12	3.5
1910.....	479	5.53	12	.13	2.5
1911.....	319	3.67	8	.08	2.5
1912.....	203	2.19	6	.06	2.9
1913.....	331	3.45	11	.11	3.3

COMMENTS.

Scarlet fever was less prevalent and less fatal during 1913 than for a number of years previously. 2,000 fewer cases were reported. The decrease occurred chiefly in the Borough of Manhattan.

The case incidence rate fell from 2.45 per 1,000 of population in 1912 to 1.99 in 1913; the death rate per same from 0.11 to 0.09; while the case fatality remained about the same (4.7 per cent.).

TABLE No. 5.

Whooping Cough—General Figures, 1909 *to* 1913 *Inclusive.*

Year.	Cases Reported.	Cases per 1,000 of Population.	Deaths.	Deaths per 1,000 of Population.	Case Fatality Per Cent.
Entire City—					
1909.....	2,752	.60	401	.08	14.5
1910.....	2,018	.42	294	.06	14.5
1911.....	3,210	.64	384	.07	11.9
1912.....	2,132	.41	287	.05	13.4
1913.....	3,529	.65	420	.07	11.9
Manhattan—					
1909.....	951	.40	220	.09	23.1
1910.....	717	.30	154	.06	21.4
1911.....	1,546	.64	215	.08	13.2
1912.....	752	.30	164	.05	21.8
1913.....	1,261	.50	186	.07	14.7
The Bronx—					
1909.....	358	1.02	34	.09	9.4
1910.....	170	.38	23	.05	13.5
1911.....	240	.49	41	.08	17.0
1912.....	198	.37	12	.02	6.0
1913.....	410	.70	49	.08	11.9
Brooklyn—					
1909.....	1,105	.71	118	.07	10.5
1910.....	844	.51	92	.05	10.9
1911.....	939	.54	82	.04	8.7
1912.....	972	.54	86	.04	8.8
1913.....	1,392	.75	134	.07	9.6
Queens—					
1909.....	198	.80	23	.09	11.6
1910.....	88	.30	21	.07	23.8
1911.....	124	.39	27	.08	21.8
1912.....	114	.34	21	.06	18.4
1913.....	226	.63	40	.11	17.6
Richmond—					
1909.....	140	1.79	6	.07	4.2
1910.....	199	2.29	4	.04	2.0
1911.....	361	4.03	19	.21	5.2
1912.....	96	1.03	4	.04	4.1
1913.....	240	2.50	11	.11	4.5

COMMENTS.

The registration of whooping cough cases increased almost 50 per cent. during 1913. This was not due to any increased prevalence of the disease, but to the attempts

of the Department to secure better notification and registration, preparatory to its proposed campaign against this disease. At present only a fraction of the cases of whooping cough are reported, so that the figures for the death rate and case fatality are of very little value.

TABLE No. 6.

Pulmonary Tuberculosis—General Figures, 1908 *to* 1913 *Inclusive.*

Year.	New Living Cases Reported.*	Deaths, Cases not Previously Reported.	Total New Cases.	New Cases per 1,000 of Population.	Total Deaths.	Deaths per 1,000 of Population.
Entire City—						
1908	21,365	1,960	23,325	5.27	8,870	2.01
1909	23,570	2,097	25,667	5.62	8,643	1.89
1910	29,256	2,809	32,065	6.67	8,692	1.81
1911	22,396	2,117	24,513	4.92	8,790	1.76
1912	20,790	1,962	22,752	4.40	8,591	1.66
1913	20,751	1,920	22,671	4.22	8,601	1.60
Manhattan—						
1908	13,357	1,377	14,734	6.42	4,423	1.93
1909	15,399	1,478	16,877	7.17	4,205	1.78
1910	19,432	1,948	21,380	9.13	3,975	1.70
1911	14,153	1,348	15,501	6.49	4,221	1.77
1912	12,721	1,208	13,929	5.22	4,068	1.67
1913	11,770	1,201	12,971	5.22	4,555	1.83
The Bronx—						
1908	1,393	93	1,486	4.54	1,508	4.61
1909	1,437	164	1,601	4.60	1,623	4.66
1910	1,899	188	2,087	4.75	1,781	4.05
1911	1,688	171	1,859	3.85	1,573	3.26
1912	1,872	128	2,000	3.52	1,580	2.98
1913	2,150	165	2,315	3.97	883	1.51
Brooklyn—						
1908	5,824	409	6,233	4.17	2,484	1.66
1909	6,057	350	6,407	4.16	2,347	1.52
1910	7,068	524	7,592	4.61	2,430	1.48
1911	5,568	498	6,066	3.54	2,464	1.44
1912	5,336	492	5,828	3.00	2,441	1.37
1913	5,761	407	6,168	3.34	2,608	1.41
Queens—						
1908	561	37	598	2.57	283	1.22
1909	549	76	625	2.56	309	1.26
1910	682	118	800	2.78	358	1.24
1911	773	78	851	2.75	361	1.16
1912	651	98	749	1.95	357	1.07
1913	871	105	976	2.72	419	1.16
Richmond—						
1908	230	44	274	3.60	172	2.26
1909	128	29	157	2.04	159	2.04
1910	175	31	206	2.40	148	1.71
1911	214	22	236	2.65	171	1.92
1912	210	36	246	2.28	145	1.56
1913	199	42	241	2.54	136	1.42

*Excluding duplicates.

COMMENTS.

The number of new living cases of tuberculosis reported in New York City during 1913 was practically the same as for 1912. The number of deaths were also about the same. As the population of the City increases about 250,000 every year, a slight fall in the case rate and death rate resulted.

In the Borough of Manhattan 1,000 fewer cases were reported for 1913, and about 400 more deaths. In The Bronx, on the other hand, the number of deaths was reduced almost 50 per cent.; the death rate for that Borough being as low as 1.51 per thousand of population.

TABLE No. 7.

Tuberculosis—Living Cases, 1913.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Tuberculosis Register.						
Cases in file, January 1, 1913	31,212	19,110	2,575	8,394	850	283
Under care of private physicians	3,035	1,491	337	905	250	52
Under care non-department clinics	2,224	2,224	.....	.....	.....	.....
Cases in City institutions	4,716	3,420	308	843	74	71
City cases out of town and in sanatoria	2,580	1,688	249	542	60	41
Homeless—not found cases	8,169	5,610	520	1,907	113	19
Cases "At Home" and under supervision of Department of Health (through both clinics and district nurses)	10,488	4,677	1,161	4,197	353	100
New living cases reported in 1913	20,751	11,770	2,150	5,761	871	199
Total cases added to register in 1913	26,106	15,821	2,564	6,565	942	214
Total living cases enrolled in 1913	57,318	34,931	5,139	14,959	1,792	497
Cases removed from register in 1913	27,879	17,561	2,115	7,205	771	227
Cases in file December 31, 1913	29,439	17,370	3,024	7,754	1,021	270
Under care of private physicians	3,362	1,480	368	1,194	260	60
Under care of non-department clinics	1,941	1,941	.....	.....	.....	.....
Cases in City institutions	4 873	3,425	290	968	126	64
City cases out of town and in sanatoria	2,377	1,421	237	606	74	39
Homeless—not found cases	6,010	4,244	546	1,140	73	7
Cases "At Home" and under supervision of Department of Health (through both clinics and district nurses)	10,876	4,859	1,583	3,846	488	100
Visits and Inspections.						
Visits by physicians	6,856	3,811	651	1,996	241	157
Visits by nurses	210,613	122,829	18,427	61,443	5,689	2,225
Total Visits	217,469	126,640	19,078	63,439	5,930	2,382
Renovations compelled by nurses' complaints	251	56	8	184	3	.....
Renovations made voluntarily	9,368	4,618	1,133	3,312	253	52
Forcible removals	30	.....	.....	.....	.....	.....

COMMENTS.

29,439 cases of tuberculosis were registered at the Department of Health on December 31, 1913, as compared with 31,212 on January 1 of the same year. This decrease of almost 1,800 cases occurred principally in the Borough of Manhattan.

Of the total number of cases in the register, over one-third were under the supervision of the Department of Health. About one-fifth were in hospitals, homes and sanatoria.

The clinic physicians made almost 7,000 visits to clinic patients during the year; the nurses made 210,000 visits on account of cases of tuberculosis.

TABLE

Tuberculosis

Name of Clinic.	Under Observation for Diagnosis, January 1st, 1913.	New Patients Examined.	Readmitted for Diagnosis.	Total for Diagnosis.	Found Not Tuberculous and Transferred or Discharged.	Suspected Cases Transferred to Other Clinics.	Found Tuberculous.	Discontinuing, Not Coming for Diagnosis.	Under Observation for Diagnosis, December 31st, 1913.	Under Treatment January 1st, 1913.
Manhattan—										
West Side	198	1,028	202	1,428	446	90	360	328	204	378
East Side	98	2,016	302	2,416	1,202	30	739	351	94	648
Harlem Italian	183	1,356	495	2,034	636	153	276	385	584	384
Good Samaritan	24	838	141	1,003	529	73	261	103	37	139
Southern Italian	36	936	122	1,094	554	9	443	67	21	320
Total	539	6,174	1,262	7,975	3,367	355	2,079	1,234	940	1,869
Bronx—										
Northern	23	1,157	296	1,476	889	5	461	83	38	236
Southern	27	1,369	171	1,567	850	10	666	15	26	298
Total	50	2,526	467	3,043	1,739	15	1,127	98	64	534
Brooklyn—										
Main	30	1,289	156	1,475	831	9	544	6	85	386
Brownsville	83	1,079	215	1,377	621	5	561	162	28	568
Germantown	26	984	63	1,073	599	11	390	38	35	239
Eastern District	6	868	199	1,073	558	17	418	57	23	206
Long Island College	39	298	29	366	174	11	123	40	18	42
Bay Ridge	1	383	31	415	187	4	184	27	13	66
Total	185	4,901	693	5,779	2,970	57	2,220	330	202	1,507
Queens	6	443	28	477	86	1	320	61	9	91
Richmond	6	92	18	116	45	...	55	14	2	28
Entire City	786	14,136	2,468	17,390	8,207	428	5,801	1,737	1,217	4,029

No. 8.

Clinics, 1913.

New Cases Under Treatment.	Old Cases Readmitted.	Total Cases Under Treatment During Year.	Found Not Tuberculous and Discharged.	Deaths of Cases Attending Clinics.	Transferred to Other Clinics.	Entered Hospitals.	Entered Sanatoria.	Discontinuing, Not Found.	Discontinuing, Not Coming for Treatment.	Under Treatment, December 31st, 1913.	Total Visits of Patients.	Prescriptions Filled for Clinic Patients.	Home Visits by Clinic Physicians.
1,028	509	1,915	446	14	217	145	35	87	603	368	6,637	7,401	131
2,016	1,776	4,440	1,202	12	185	136	102	93	2,116	594	17,299	23,362	82
1,356	1,019	2,759	636	13	245	55	23	94	872	821	12,412	12,468	677
838	458	1,435	529	2	73	93	44	65	487	142	3,858	....	...
936	487	1,743	554	19	36	50	36	9	533	506	6,698	9,397	148
6,174	4,249	12,292	3,367	60	756	479	240	348	4,611	2,431	46,904	52,628	1,038
1,157	554	1,947	889	31	39	34	15	17	634	288	9,151	13,047	162
1,369	801	2,468	850	103	69	185	75	38	729	419	11,150	14,771	...
2,526	1,355	4,415	1,739	134	108	219	90	55	1,363	707	20,301	27,818	162
1,289	474	2,149	831	9	172	102	37	59	379	560	11,341	16,737	248
1,079	1,196	2,843	621	9	66	102	23	47	1,520	455	11,800	15,504	49
984	363	1,586	599	18	97	68	47	15	433	309	8,491	15,502	182
868	378	1,452	558	22	65	75	64	36	465	167	6,698	9,807	68
298	172	512	174	5	32	52	14	8	195	32	1,362	....	92
383	206	655	187	10	10	48	17	4	324	55	2,217	3,682	...
4,901	2,789	9,197	2,970	73	442	447	202	169	3,316	1,579	41,909	61,232	639
443	29	563	86	14	27	32	11	3	353	37	4,364	7,500	28
92	54	174	45	4	2	24	14	1	58	26	712	1,158	...
14,136	8,476	26,641	8,207	285	1,335	1,201	557	576	9,701	4,779	114,190	150,336	1,867

COMMENTS.

14,000 new patients were examined in the tuberculosis clinics of the Department of Health during 1913; of these nearly 9,000 were found to be suffering from pulmonary tuberculosis. 4,029 cases were under treatment the 1st of January, and 4,779 the 31st of December. 114,000 visits were paid to the clinics, and 150,000 prescriptions filled.

TABLE No. 9.

Typhoid Fever—General Figures and Inspection, 1913.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Cases reported	2,643	1,624	190	643	163	23
Cases per 1,000 of population	.49	.66	.33	.35	.45	.24
Deaths from typhoid	362	180	31	122	24	5
Case fatality, percent	13.7	11.2	16.3	19.0	14.7	21.7
Deaths per 1,000 of population	.07	.07	.05	.07	.07	.05
Cases inspected	2,643	1,624	190	643	163	23
Visits to cases	11,762	7,373	1,076	2,532	772	9
Immunizations	1,710	946	129	539	95	1

COMMENTS.

Had it not been for the outbreak on the middle east side of the Borough of Manhattan, during the late summer and early fall, the prevalence of typhoid fever in New York City would have been the lowest on record. As it was, the actual number of cases reported was about the same as for the previous year.

1,710 completed immunizations, each calling for three or more visits, were performed by the inspectors of the Department.

Supervision of Typhoid in Food Handlers (Other Than Housewives).

Total reported	38
Died	7
Final examination of excreta negative	19
Specimens declined (cases did not return to former occupation)	12

TABLE No. 10.

Cerebro-Spinal Meningitis—General Figures and Inspection, 1913.

The deaths in this table include a few deaths from other forms of meningitis, which could not be altered in the records of the Department.

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Cases reported	232	140	28	51	11	2
Cases per 1,000 of population	.05	.06	.05	.03	.03	.02
Deaths†	202	117	21	48	12	4
Deaths per 1,000 of population	.04	.05	.04	.03	.03	.04

† Deaths from all forms of meningitis are included.

Division of Venereal and Veterinary Diseases.

TABLE No. 11 (A).

	Entire City.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.
Venereal Section.						
New Cases Reported—						
Syphilis	10,623	8,439	733	1,252	119	80
Chancroid	557	439	14	101	3	.....
Gonorrhœa	6,883	5,707	246	882	37	11
Total new patients examined at Venereal Diseases' Clinics	7,054	6,771	.....	283	.....	.....
Diseased	2,971	2,871	.....	100	.....	.....
Not diseased	4,083	3,900	.....	183	.....	.....
Veterinary Section.						
Dogs examined	5,596	1,705	941	1,311	1,334	285
Dogs destroyed	542	151	55	108	213	15
Cases of rabies	149	57	19	13	57	3
Persons examined for dog bite	3,549	1,144	605	1,202	509	89
Patients examined at Pasteur Clinic	575	.....	.....	575	.....	.....
Pasteur injections	511	.....	.....	511	.....	.....
Tetanus injections	2	.....	.....	2	.....	.....
Cats examined	16	.....	6	.....	7	.....
Cats destroyed	1	.....	.....	.....	1	3
Horses examined	31,461	22,594	2,156	3,528	1,317	1,866
Horses tested with mallein	432	135	36	229	21	11
Horses vaccinated	199	189	1	5	2	2
Horses condemned	1,138	589	124	281	106	38
Post-mortem examinations of horses	153	24	15	75	20	19
Cows examined	44	.....	5	0	1	37
Cows tested with tuberculin	.....	.....	.....	.....	.....	.....
Serological Laboratory.						
Examinations for Wassermann reaction	1,227	1,227	.....	.....	.....	.....
Examinations for gonorrhœa complement-fixation reaction	306	306	.....	.....	.....	.....
Examinations for glanders complement-fixation reaction	533	533	.....	.....	.....	.....
Examinations for treponema-pallidum	.....	.....	.....	.....	.....	.....
Examinations for gonococcus	3,778	3,779	.....	.....	.....	.....
Total	5,844	5,844	.....	.....	.....	.....

TABLE No. 11(B).

Venereal Disease Tests Among Penal Institution Convicts.

Institution.	Wassermann Test.				Complement Fixation Test for Gonorrhœa.			
	Positive.	Negative.	Doubtful.	Per Cent. Positive.	Positive.	Negative.	Doubtful.	Per Cent. Positive.
City Pentientiary (men and women)	221	644	98	22.95	28	294	115	6.4
Bedford Reformatory (for young women)	65	88	9	40.12	70	34	61	42.42
Elmira Reformatory (for young men)	20	143	14	11.3	6	128	32	3.61

TABLE No. 12.

Diagnosis Laboratory—Specimens Examined and Results of Examinations, 1913.

	Entire City.	Manhattan.	Bronx.	Brooklyn.	Queens.	Richmond.
Diphtheria—						
Bacteriological examinations for diagnosis	42,694	21,777	6,466	11,934	2,005	512
Cultures showing diphtheria bacilli	10,731	5,095	1,486	3,461	578	111
Cultures showing no diphtheria bacilli	31,963	16,682	4,980	8,473	1,427	401
Cultures for clearance	34,846	15,288	2,616	15,151	1,472	319
Cultures from school suspects and children exposed	2,610	1,038	140	825	529	78
Total cultures	80,150	38,103	9,222	27,910	4,006	909
Tuberculosis Sputum—						
Specimens examined	41,644	23,123	4,377	12,213	1,498	433
Specimens showing tubercle bacilli	11,078	6,121	1,101	3,309	426	121
Specimens showing no tubercle bacilli	30,566	17,002	3,276	8,905	1,072	312
Typhoid—						
Widal reaction:						
Specimens of blood examined	9,064	4,544	1,104	2,625	561	230
Specimens of blood examined showing reaction	1,605	818	142	492	108	45
Specimens of blood examined showing no reaction	7,394	3,691	957	2,115	451	180
Indecisive	65	35	5	18	2	5
Diazo reaction:						
Specimens examined	2,105	994	313	678	106	14
Specimens examined showing Diazo reaction	459	225	57	140	34	3
Specimens examined showing no Diazo reaction	1,639	764	256	537	71	11
Specimens examined showing doubtful reaction	7	5	.....	1	1	.....
Malaria—						
Specimens examined	2,554	1,238	457	661	161	37
Specimens showing malaria plasmodia	262	136	48	55	12	11
Specimens showing no malaria plasmodia	2,292	1,102	409	606	149	26
Cerebro-Spinal-Meningitis—						
Specimens examined	39	15	6	14	3	1
Specimens examined showing meningococci	.....	.....	.....	.....	.....	.....
Specimens examined showing no meningococci	39	15	6	14	3	1
Miscellaneous—						
Average number of culture stations	565	281	78	144	50	12
Visits to collect specimens	65,936	24,440	6,812	24,232	7,545	2,912
Number of culture tubes prepared	184,610	.....	.....	.....	.....	.....
Number of swabs prepared	187,305	.....	.....	.....	.....	.....
Number of laboratory preparations made	138,071	.....	.....	.....	.....	.....
Number of Widal outfits prepared	12,401	.....	.....	.....	.....	.....
Number of Diazo outfits prepared	5,440	.....	.....	.....	.....	.....
Number of malaria outfits prepared	7,795	.....	.....	.....	.....	.....
Number of C. S. M. outfits prepared	1,470	.....	.....	.....	.....	.....
Number of glanders outfits prepared	100	.....	.....	.....	.....	.....
Number of sputum jars prepared	96,410	.....	.....	.....	.....	.....
Number of gonococcus outfits prepared	1,895	.....	.....	.....	.....	.....

COMMENTS.

Ten thousand more diphtheria cultures were examined during 1913 than during 1912, corresponding with the increased number of cases developing. The greatest increase took place in the Boroughs of The Bronx, Brooklyn and Queens.

About 1,000 more specimens of sputum were examined during 1913 than during 1912; 11,000 showing tubercle bacilli, as compared with 9,000 for the preceding year. There was quite a marked decrease in the number of specimens submitted for the reaction of the Widal and Diazo tests. This was due to the decreased prevalence of typhoid fever during the greater part of the year.

The number of supply stations was increased from 531 to 565 in 1913.

Eleven thousand more culture tubes and 10,000 more swabs were issued in 1913 than in 1912.

BUREAU OF LABORATORIES.

ADMINISTRATION.

Staff.

Director	1
Assistant Directors	6
Medical Inspector	1
Bacteriologists	23
Bacteriological Diagnostician	1
Pathologist	1
Chemists	11
Laboratory Assistants	43
Veterinarian	1
Librarian	1
Clerks	2
Stenographers and Typists	2
Laborers	13
Helpers	45
Total	151

Organization.

During the year 1913 the title "Division of Laboratories" was changed to that of "Bureau of Laboratories." This Bureau includes the following divisions: 1. The Division for the Production of Antiserums and Vaccines; 2. The Division of Applied Specific Therapy and Preventive Medicine; 3. The Division of Hygiene; 4. The Division of Chemistry; 5. The Division of Diagnosis; 6. The Division of Research. These divisions naturally overlap. The complete volume of work, so far as it can be indicated by figures, is recorded on special forms which are filed monthly and yearly in the central office.

DIVISION FOR THE PRODUCTION OF ANTISERUMS AND VACCINES.

All antiserums and vaccines are produced for free* distribution to citizens of the City. The following is a list of the products with the amounts produced and distributed during the year 1913:

Table I.

Cubic centimeters of Diphtheria Toxin produced	423,600
Cubic centimeters of Diphtheria Plasma produced	1,678,500
Units of Diphtheria Antitoxin (globulin) prepared	514,679,125
Units of Diphtheria Antitoxin (globulin) distributed	404,647,722
Cubic centimeters of Tetanus Toxin produced	158,685
Cubic centimeters of Tetanus Plasma produced	663,100
Units of Tetanus Antitoxin (globulin) prepared	49,333,375
Units of Tetanus Antitoxin (globulin) distributed	45,047,000
Cubic centimeters of Antimeningitis serum produced	209,500
Cubic centimeters of Antimeningitis serum prepared	114,740
Cubic centimeters of Antimeningitis serum distributed	101,960
Cubic centimeters of Antimeningitis serum (crude) distributed	900

*Diphtheria and Tetanus antitoxin are paid for by those who can afford it.

Cubic centimeters of Antistreptococcus serum produced	295,200
Cubic centimeters of Antistreptococcus serum prepared	244,950
Cubic centimeters of Antistreptococcus serum distributed	69,850
Cubic centimeters of Antipneumococcus serum produced	86,350
Cubic centimeters of Antipneumococcus serum prepared	74,650
Cubic centimeters of Antipneumococcus serum distributed	16,450
Cubic centimeters of Antigonococcus serum produced	15,850
Cubic centimeters of Antigonococcus serum prepared	13,400
Cubic centimeters of Antigonococcus serum distributed	5,200
Cubic centimeters of Normal Horse serum produced	112,500
Cubic centimeters of Normal Horse serum prepared	103,750
Cubic centimeters of Normal Horse serum distributed	65,470
Cubic centimeters of Normal Horse serum (crude) distributed	7,600
Cubic centimeters of Tuberculous serum produced	2,750
Cubic centimeters of Tuberculous serum prepared	2,550
Cubic centimeters of Tuberculous serum distributed	1,800
Cubic centimeters of Glanders serum produced	7,900
Cubic centimeters of Glanders serum prepared	6,000
Cubic centimeters of Glanders serum distributed	3,450
Cubic centimeters of Glanders serum (crude) distributed	900
Cubic centimeters of Mixed Antistreptococcus and Antipneumococcus serum produced	65,750
Cubic centimeters of Mixed Antistreptococcus and Antipneumococcus serum prepared	60,300
Cubic centimeters of Mixed Antistreptococcus and Antipneumococcus serum distributed	4,500
Cubic centimeters of Pertussis Vaccine prepared	13,230
Cubic centimeters of Pertussis Vaccine distributed	4,470
Cubic centimeters of Streptococcus Vaccine prepared	8,610
Cubic centimeters of Streptococcus Vaccine distributed	2,400
Cubic centimeters of Pneumococcus Vaccine prepared	4,590
Cubic centimeters of Pneumococcus Vaccine distributed	1,530
Cubic centimeters of Staphylococcus Vaccine prepared	8,750
Cubic centimeters of Staphylococcus Vaccine distributed	3,080
Cubic centimeters of Gonococcus Vaccine prepared	35,150
Cubic centimeters of Gonococcus Vaccine distributed	10,070
Cubic centimeters of Typhoid Vaccine prepared	30,490
Cubic centimeters of Typhoid Vaccine distributed	21,640
Cubic centimeters of Glanders Vaccine prepared	16,110
Cubic centimeters of Glanders Vaccine distributed	12,510
Cubic centimeters of Mallein Vaccine prepared	5,350
Cubic centimeters of Mallein Vaccine distributed	2,570
Cubic centimeters of Tuberculin Vaccine prepared	5,400
Cubic centimeters of Tuberculin Vaccine distributed	2,793
Cubic centimeters of Influenza Vaccine prepared	2,290
Cubic centimeters of Influenza Vaccine distributed	1,100
Cubic centimeters of Meningitis Vaccine prepared	.....
Cubic centimeters of Meningitis Vaccine distributed	200
Cubic centimeters of Gonococcus Antigen prepared	155
Cubic centimeters of Gonococcus Antigen distributed	20
Cubic centimeters of Rabies Vaccine prepared	81,782
Cubic centimeters of Rabies Vaccine distributed	69,832
Cubic centimeters of Bovine Vaccine (for smallpox) prepared	6,152

Cubic centimeters of Bovine Vaccine (for smallpox) distributed	5,909
Injections given to horses at Otisville stable	2,730
Bleedings from horses at Otisville stable	1,375

Transfer of Routine Work.

During the year 1913, the long-cherished plan of transferring to the Otisville Laboratory the routine work of purifying and concentrating diphtheria and tetanus antitoxin was carried out. Thus in the country, under ideal conditions of space and apparatus, all of the work of producing the antitoxin, as well as that of producing bovine vaccine for the prevention of smallpox, was done.

Production of Smallpox Vaccine.

A considerably larger amount of Vaccine Virus was issued to sales stations in the city in 1913 than in 1912. On the other hand less virus was used by the Department of Health; so that the total quantity of vaccine used was less than in 1912. Partly for this reason, and partly because of success in our efforts to increase the output of vaccine per calf, the vaccine required for the year was produced from twenty-one calves, as compared with forty-eight calves used in 1912.

New Package for Vaccine Virus.

On May 1, 1913, the old style of vaccine package was discontinued. This consisted of a glass capillary tube of virus, an uncovered needle, and an orangewood applicator; all packed in a grooved wooden block and enclosed in an envelope. The new style of package consists of a wooden cylindrical box containing one, five, or ten capillary tubes of virus, a rubber bulb for expelling the virus from the tube, and one, five, or ten needles enclosed in a paraffined paper container; the needles to be used both for scarifying and for rubbing in the virus. The wooden box is sealed with a gummed label upon which are printed the directions for use, and which is stamped with the Opus number of the virus enclosed and the date when it may be exchanged. The label is white on the package containing one tube of vaccine, pink on the package of five tubes, and blue on the package of ten tubes.

The package of one tube, for one vaccination, is the one in greatest demand. It costs a little more than the old-style package, but is so much neater that it is well worth the difference, and it can be made so that the retailer can sell it for ten cents.

The package of five tubes, for five vaccinations, costs less than five of the old-style outfits, so that it is sold by the retailer at thirty-five cents. It is issued only during the months of the spring and fall when most vaccinations are performed. We believe that physicians who do a good deal of vaccinating during these months will be pleased with this package because of its compactness and its low price.

The package of ten tubes is produced to retail for sixty cents. It is not sold in the city, but is made up on order for health officers and managers of public institutions outside of the city, who sometimes call upon us for vaccine.

When the new style of package came to be used on a large scale it was found that the sticking on of the label was too time-consuming to be economical. We have, therefore, substituted for the label a folding box of cardboard into which the wooden cylinder is slipped. This change has still further improved the appearance of the package and has very materially reduced the time required to put it up.

New Tests.

Two new laboratory tests for purity of the vaccine were introduced during the year 1913. In April we began to test for gas-forming organisms—inoculating the virus into 2 per cent. glucose-broth in fermentation tubes, and incubating for twenty-four

hours. When newly prepared the virus frequently causes some gas formation, but this reaction usually disappears after two or three weeks, and before the virus is issued.

In October, we added to the routine another test for tetanus organisms besides that already in use, so that we now employ two different tests for such on each lot of virus. This need not be described in detail. No tetanus spores have ever been found in our vaccine.

DIVISION OF APPLIED SPECIFIC THERAPY AND PREVENTIVE MEDICINE.

Pasteur Treatment.

The administration to all who wished it of the Pasteur treatment for those bitten by rabid dogs was continued by this Bureau during 1913. Plans to transfer its actual administration to the Bureau of Infectious Diseases were begun.

The amount of rabies vaccine produced is shown in Table I.

The growth of the work of rabies treatment is shown in the following table:

Table II.

Number of Patients Who Received Pasteur Antirabic Treatment from New York City Health Department.

Year.	Residents.	Non-Residents.	Total.	Partial Courses.	
				Residents.	Non-Residents.
1900	9	19	28	.....	.....
1901	22	15	37	.....	.....
1902	24	32	56	.....	.....
1903	30	47	77	.....	.....
1904	24	64	88	.....	.....
1905	33	83	116	.....	.....
1906	98	229	327	.....	.....
1907	170	430	600	.....	.....
1908	247	576	823	31	16
1909	178	566	744	18	7
1910	252	601	853	19	6
				Total.	
1911	486	597	1,083	26	
1912	452	501	953	87	
1913	528	447	975	64	
Totals	2,553	4,207	6,760	274	

The above figures do not include the many cases of dog bite which were investigated by the Research Laboratory, but which, for various reasons, did not receive Pasteur treatment.

It must be remembered that these figures represent only the cases treated by the Department of Health. From 1900 to 1912, inclusive, 2,780 patients were treated at the New York Pasteur Institute, and a considerable number must also have been treated by private physicians in the city who procured their antirabic vaccine from other sources than the Department of Health.

Omitting mention of the number of treatments sent to physicians outside of the

city, and confining ourselves to the City of New York, the startling increase in the number of cases treated during the past three years is an eloquent comment upon the ineffectiveness of existing measures for the prevention of rabies in animals. The City makes elaborate and expensive provision for the investigation of dog bites, for the examination of the brains of suspected animals, and for the treatment of its citizens *after they have been bitten.* It relegates to a private corporation, over which it exercises no control, functions which properly belong to the health authorities, viz., the licensing and registration of dogs, the destruction of ownerless dogs, and the maintenance of a dog-catching force and pound.

Until this City, through its Department of Health, assumes these functions, and enacts and enforces the few simple ordinances which have in other cities resulted in the suppression of rabies, the disease will continue to prevail widely among the dogs of the town, our Pasteur clinics will have a daily attendance of persons bitten by rabid animals, and each year a few unfortunate citizens will die of a disease which progresses through hideous suffering to an invariably fatal termination.

Treatment of Meningitis.

The work of treatment of meningitis is shown in the following table:

	Consultations.	New Cases.	L. P.	Total Treated.
Tubercular meningitis	49	43	49	43
Epidemic cerebro-spinal meningitis	108	25	66	25
Other meningitis	43	16	38	16
Poliomyelitis	8	4	4	4
Scarlet fever	2	2	1	2
Pneumonia	14	14	14	14
Typhoid	2	2	1	2
Other diseases	30	25	21	25
Total	256	131	194	131

Fluids examined, 271.

Serums and Other Vaccines.

A large number of consultations have been held with physicians in regard to the treatment of various infections by means of serums and vaccines. The patients were both private and hospital cases. In a number of instances they have been treated, at the request of the attending physician, by a member of the laboratory staff. Among the conditions in regard to which consultations were held may be mentioned sepsis (especially of the puerperal variety), gonococcus infections, pneumonia, scarlet fever, typhoid fever, malignant endocarditis, meningitis, pyelitis, and hemorrhage from various causes.

Special observations on series of cases—notably of pneumonia and of whooping cough—have been conducted in co-operation with hospitals and institutions, and to a certain extent among out-patients. Studies, clinical and experimental, in the treatment of tetanus with antitoxin are about to be published.

DIVISION OF HYGIENE.

The work in this division includes the routine bacteriological examination of milk, water, and food stuffs, and the making of disinfection tests, and now, additionally, the

estimation of the amount of dirt in milk (sediment test) (see report of the Division of Research).

Bacteriological Examination of Milk.

The total number of samples of milk received for bacteriological examination during the year 1913 was 54,379. These were taken from the following sources:

Country Creameries	10,462
Pasteurizing Plants	9,684
Infant Health Stations	2,444
Stores	4,320
Wagons	14,280
Hospitals	722
Milk Depots	4,638
Railroad Stations	4,046
Miscellaneous	3,783

As representative of the bacteriological examination of milk from country creameries we have selected the work of six months, March, May, June, August, October and November. The results are tabulated in Table III., which gives, within limits, the bacterial counts per cubic centimeter.

Table III.

1913. Month.	Totals.	Bacteria per C. C.									
		Less than 10,000.		10,000 to 50,000.		50,000 to 100,000.		100,000 to 1,000,000.		1,000,000 and over.	
		No.	%	No.	%	No.	%	No.	%	No.	%
March	820 and 9 broken	287	35.0	255	31.09	67	8.17	151	18.4	60	7.3
May	519 and 9 broken	117	22.54	133	25.6	51	9.8	120	23.1	98	18.8
June	770 and 11 broken	202	26.23	144	18.7	63	8.18	167	21.68	194	25.19
August	588 and 22 broken	165	28.0	223	37.9	74	12.5	72	12.4	54	9.0
October	812 and 9 broken	331	40.7	281	34.6	85	10.4	83	10.2	32	3.9
November	945 and 1 broken	473	50.05	313	33.12	77	8.14	75	7.93	7	0.74
Total	4,454 and 61 broken	1,575	35.4	1,349	30.3	417	9.4	668	14.9	445	9.9

In Table IV. are given the temperature of these samples.

Table IV.

1913. Month.	Totals.	Temperature—Fahrenheit.													
		Less than 45°.		45° to 50°.		50° to 55°.		55° to 60°.		60° to 70°.		70° to 80°.		80° and over.	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
March	829	68	8.20	120	14.47	200	24.10	151	18.20	165	19.9	101	12.18	24	2.89
May	528	11	2.08	42	7.95	101	19.1	97	18.3	81	15.3	129	24.4	67	12.69
June	781	3	0.38	4	0.51	11	1.42	50	6.40	264	46.60	267	34.19	82	10.49
August	610	4	0.65	14	2.29	81	13.27	136	22.29	334	54.75	37	6.06	4	0.65
October	821	4	0.48	20	2.42	140	17.05	301	36.66	347	42.26	9	1.09	....	.....
November	946	151	15.96	235	24.84	353	37.31	151	15.96	56	5.91	....	.....	....	.....
Total	4,515	241	5.33	435	9.63	886	19.6	886	19.16	1,347	29.8	543	12.09	177	3.9

In Table III it may be seen that November had the highest percentage of samples which contained less than ten thousand bacteria per cubic centimeter and that May had the lowest. In the second group, that is samples containing ten thousand to fifty thousand bacteria per cubic centimeter, August had the highest percentage and June the lowest. In the third group, from fifty thousand to one hundred thousand, August had the highest percentage and November the lowest. In the fourth group, from one hundred thousand to one million, May had the highest percentage and November the lowest. In the last group, including specimens having excessive numbers of bacteria, one million and over, June had the highest percentage and November the lowest.

As shown by Table IV, November had the highest percentage of samples which were less than 45 degrees Fahrenheit and June had the lowest. The same is true in the next two groups of temperatures. From 55 degrees to 60 degrees, October had the highest percentage and June the lowest, August had the highest from 60 degrees to 70 degrees and November the lowest. June had the highest in the group from 70 degrees to 80 degrees, and October the lowest for five months (November had none), May had the highest percentage over 80 degrees and August the lowest (October and November had none).

From the above results we draw the following conclusions:

During the winter, while the weather is cold, the farmers do not ice their samples and perhaps are not so careful in the handling of the milk. With the advent of spring and warmer weather, the practice of these bad habits continues and the results become apparent at once in the higher temperature of the milk and the consequent rapid rise of the bacterial content. In summer, on account of the hot weather, the precautions observed in handling milk are much greater; consequently in the fall, when the weather grows colder and the particular care in handling samples is continued, the bacterial content is lower.

For a study of milk, grade B, as offered for sale in New York City, 400 samples for every one of the months, January, April, July and October, were selected as representative of the year.

Results obtained are given in Table V.

Table V.

Milk Offered for Sale in New York City During 1913.

Date Taken.	All Grade B.	Number of Samples taken for examination.	Number of Dealers from which Samples were taken.	Number of Creameries Represented	Unknown Source.	Origin of Milk Stated.	Age of Milk.					Cooling.			Temperature.					Bacterial Count.				
							Stated.	Not Stated.	From 24 to 36 hours.	From 36 to 48 hours.	From 48 hours and over.	Well Iced.	Fairly Well or Poorly Iced.	Not Iced.	Under 45° F.	From 45° to 50° F.	From 50° to 55° F.	From 55° to 60° F.	From 60° to 70° F.	Less than 10,000.	From 10,000 to 50,000.	From 50,000 to 100,000.	From 100,000 to 1,000,000.	Over 1,000,000.
		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
January	Raw, cans	100	21	25	...	100	96	4	92	4	...	56	4	40	90	10	..	..	..	13	30	6	37	14
	Raw, bottles	100	19	25	...	100	100	...	88	12	...	84	8	8	88	12	..	..	..	6	28	15	35	16
	Past., cans	100	21	17	8	68	92	8	*76	4	...	84	..	16	76	24	..	..	..	42	19	8	29	2
	Past., bottles	100	24	13	12	52	100	...	†60	8	...	100	..	..	76	24	..	..	..	37	39	11	13	..
April	Raw, cans	100	24	25	...	100	80	40	‡76	...	...	56	4	40	58	30	8	4	..	6	31	14	31	18
	Raw, bottles	100	23	25	...	100	100	...	76	4	...	88	12	..	88	12	..	..	..	4	23	19	45	9
	Past., cans	100	17	12 duplicated 7 times	6	76	96	4	80	...	8	72	16	12	56	36	8	..	..	25	29	16	27	3
	Past., bottles	100	20	12	13	48	100	...	92	...	...	96	..	4	64	28	8	..	..	48	30	8	13	1
July	Raw, cans	100	25	25	...	100	100	...	88	...	...	80	16	4	48	36	5	5	6	1	15	20	29	35
	Raw, bottles	100	23	25	...	100	100	...	92	...	...	80	20	..	56	28	12	4	..	3	33	19	23	22
	Past., cans	100	23	18 duplicated 3 times	4	84	92	8	‡88	...	...	80	..	20	36	20	44	..	..	27	30	10	25	8
	Past., bottles	100	23	9	16	36	100	...	100	...	...	80	16	4	32	40	20	..	4	21	41	19	17	2
October	Raw, cans	100	20	25	...	100	100	...	‡96	...	...	88	4	8	48	44	8	..	..	12	34	15	22	17
	Raw, bottles	100	14	24	...	100	100	...	‡96	...	...	76	20	4	32	52	16	..	..	9	18	18	18	37
	Past., cans	100	19	17	6	76	...	3	97	...	...	46	35	19	36	48	16	..	..	41	26	11	19	3
	Past., bottles	100	23	7	18	28	100	...	91	...	...	68	28	4	16	28	48	8	..	29	23	23	20	5

*12 samples were taken less than 24 hours old.
†32 samples were less than 24 hours old.
‡ 4 samples were less than 24 hours old.
‡ 8 samples were less than 24 hours old.
‡20 samples were less than 24 hours old.
‡14 not stated.

As may be seen from Table III, out of a total of 4,454 samples of country milks examined 2,924 samples, or 65.7 per cent., contained less than 50,000 bacteria per cubic centimeter, and 4,009 samples, or 90 per cent., contained less than 1,000,000 bacteria per cubic centimeter.

Of the City samples in Table V, there were 400 samples of raw Grade B milk sold in bottles and 400 samples of raw Grade B sold in cans. One Hundred and twenty-four of the bottles, or 31 per cent., contained less than 50,000 bacteria per cubic centimeter. Three hundred and sixteen bottles, or 79 per cent., contained less than 1,000,000 bacteria per cubic centimeter. Of the samples taken from cans, 142, or 35.5 per cent., contained less than 50,000 bacteria per cubic centimeter and 316, or 79 per cent., contained less than 1,000,000 bacteria per cubic centimeter.

Bacteriological Examination of Water.

The following table gives the number of examinations made during the year and the results obtained:

Table VI.

Good.	Usable.	Susp.	Polluted.	Special.	Total.
416	155	141	164	227	1,103

Disinfection Tests—The method of disinfection by means of paraformaldehyde, potassium permanganate and water, which was adopted in 1911, is still employed in the department. The use of the pyocyaneous-threads to test the efficiency of the disinfection was applied to only a small proportion of the disinfections performed during the year. Owing to this we have to record, therefore, a much smaller number of efficiency tests.

Number of Disinfection Tests made..... 19,597

DIVISION OF CHEMISTRY.

General Work.

The analytic work of the laboratory was distributed as follows:

Executive: To the Chemist-in-Charge.

Milk: To one Chemist and one Laboratory Assistant.

Water: To one Chemist and one Helper.

Narcotic Drugs: To *one Chemist and one Laboratory Assistant.

General Food Analysis: To four Chemists and three Laboratory Assistants.

Laboratory Assistants are not allowed to do any work that might involve them in court procedure, and all samples delivered at the Chemical Laboratory are considered as forming a possible basis for such.

The average cost of each of the 77,000 determinations involved in making a total of 15,038 analyses was about $0.24. For the work accomplished all of these figures are very low as compared to the charges usually made by private laboratories.

It should be noted that the narcotic drug work is brought in by the Police Department, and that the results are used by the District Attorney in prosecution of violations of the criminal code. However, the Health Department pays all the expenses of the laboratory.

The amount of work done by the Chemical Laboratory showed a marked increase over the work of the previous year, according to the following general summary:

	1912.	1913.
Specimens analyzed	12,031	15,038**
Apparatus tested	272	258
Reports forwarded and filed	12,303	15,296
Milks analyzed	7,420	9,135
Creams analyzed	1,232	1,094
Waters analyzed	998	1,007
General analyses	2,381	3,802
Half days at court for Health Department prosecutions	202	385
Half days at court for Police Department prosecutions	396	409

*First eleven months, two chemists twelfth month.
**This involved a minimum of 77,000 determinations.

As in previous reports it is most convenient to consider the general summary of the year in detail under the groupings of the following tables:

Table VII.

Fluids.

Types of Samples Examined.	Number of Samples.	Methyl Alc.		Sanitary Purity.			Poisons.				Adulteration.		Benz. Soda.		Saccharin.		Copper.	
							Metallic.		Ptomaine.									
		Pos.	Neg.	Good.	Susp.	Pol.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Alcoholic	21	..	21	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..
Milk	9,135	..	..	..	..	..	..	..	..	..	475	8,660	..	..	..	..	..	..
Cream	1,094	..	..	..	..	..	..	..	..	..	113	981	..	..	..	..	..	..
Unsweetened Condensed Milk	11	..	..	..	..	..	..	..	..	3	6	2	..	..	..	..	..	..
Sweet Condensed Milk	35	..	..	..	..	..	..	..	..	12	..	23	..	..	..	..	..	..
Waters—																		
Public Supply	361	..	..	343	16	2	..	..	..	..	..	..	..	..	..	..	..	..
Wells	427	..	..	317	37	73	..	..	..	..	..	..	..	..	..	..	..	..
Baths	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springs	17	..	..	13	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Cisterns	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rivers	6	..	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Ice	4	..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Otisville	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Cellar	21 Sources	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bottled	58	..	..	3	3	..	..	19	..	..	..	..	..	..	..	..	24	9
Soft Drinks	274	..	..	..	..	..	..	..	..	..	..	..	13	..	157	104	..	..

TABLE

Foods and

Types of Samples Examined.	No. of Samples.	Purity.		Poisons.				Adulteration.		Preservatives.		Benz. Soda.	
				Metallic.		Ptomaine.							
		+	—	+	—	+	—	+	—	+	—	+	—
Carbo-Hydrates—Proteins:													
Meats	198	..	..	..	..	..	..	..	..	..	..	..	..
Sausages	9	..	..	..	..	..	..	..	..	..	9	..	..
Ham	2	..	..	..	..	..	2	..	..	..	..	..	..
Mince Meat	40	..	..	..	..	..	..	..	..	..	..	4	36
Fish	4	..	..	..	..	..	4	..	..	..	..	..	..
Soup	1	..	..	..	..	..	1	..	..	..	..	..	..
Eggs	4	..	..	..	..	..	..	..	..	..	4	..	..
Gelatin	9	..	..	..	..	..	..	..	..	..	..	..	..
Sugars	2	2	..	..	..	..	..	..	..	..	..	..	..
Honeys	2	2	..	..	..	..	..	..	..	..	..	..	..
Syrups	70	..	..	..	..	..	..	..	..	..	..	3	..
Jams	14	..	..	..	..	..	..	..	..	..	14	..	..
Jellies	10	..	..	..	..	..	..	..	..	..	10	..	..
Marmalade	5	..	..	..	..	..	..	..	..	..	..	..	..
Flour	17	..	..	..	..	..	..	..	..	..	..	..	..
Cakes, Pies	45	..	..	..	..	..	..	..	..	..	..	10	33
Fruits	14	..	..	..	..	..	..	..	..	1	7	2	..
Vegetables	224	..	..	..	..	..	..	..	..	..	..	..	..
Confectionery	163	..	..	..	35	..	..	..	..	6	68	..	..
Catsup, Pickles, etc	18	..	..	..	1	..	..	..	..	1	..	2	..
Chili Sauce, Relishes	20	..	..	..	..	..	..	..	20	..	..	..	..
Chow Chow and Pickles	21	..	..	..	..	..	..	..	21	..	..	..	..
Ice Cream and Ices	12	..	..	..	12	..	..	..	..	..	12	..	..
Spices and Seasoning	5	..	..	..	..	..	..	..	5	..	..	..	..
Flavoring Extracts	33	..	..	..	..	..	..	..	..	..	28	3	..
Edible Oils	8	..	..	..	..	..	..	..	8	..	..	..	..
Drugs and Medicines	178	..	..	..	..	..	..	..	..	..	..	..	..

VIII.

Drugs.

Coal Tar Dye.		Saccharin.		Bleaching.		Copper.		Fluorine.		Sulphites.		Paraffin.		Methyl Alc.		Strength.	
+	—	+	—	+	—	+	—	+	—	+	—	+	—	+	—	+	—
..	..	..	..	..	..	..	..	..	..	9	189	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	7	2	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	31	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	1	4	..	..	..	..	..	..
..	..	..	..	16	1	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
..	..	..	..	..	..	110	..	21	93	..	..	..	..	..	..	..	..
..	..	..	70	..	..	..	..	..	..	..	..	3	52	..	..	..	..
..	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	43	124	3	8

Narcotic Drugs Submitted by the Police Department.

The samples submitted for analysis were classified as follows:

Opiums	123	Stomach contents (for poison)	4	Snuff	1
Morphines	68	Clothing (for nature of stain)	5	Oats (for poison)	1
Heroin	858	Liquids (for composition)	97	Pills (for constituents)	1
Cocaine	1,130				

There were some noticeable changes in the yearly analytical results which are interesting, notable in the reduction, as compared to findings of previous years, of sulphurous acid in chopped meat, and wood-alcohol in alcoholic beverages. Wood-alcohol, used in preparations for external use, increased in the six months beginning July 1, 1913. Saccharin, an artificial sweetener, was found in 57 per cent. of the "soft drinks" examined, and saponin (a foam producer) in a few.

Comparative Table of Deleterious Findings.

	1911.	1912.	1913.
Sulphites in chopped meats	53	28	10
Candy containing paraffin	..	1	8
Candy containing sulphites	5	2	7
*Wood alcohol in beverages	7	347	..
Saccharin in soft drinks	30	..	157
Per cent. adulteration in milk	8.06	6.65	5.2
Per cent. adulteration in cream	4.48	10.5	11.5
Toilet preparations containing wood alcohol	..	1	43
Half days of attendance at court	232	202	385

*These samples were traced to one source and as a result of the analysis 55 cases of 12 bottles each were destroyed at the Chemical Laboratory.

In going over the results of these analyses it should be noted that examinations for adulterations are limited to cases where the addition of decidedly poisonous and injurious substances and improper labeling is suspected, except in the case of milk and cream where standards have been established. A complete set of food standards would give the Department of Health a much greater control of adulterated foods in New York City.

The number of narcotic drug examinations made and consequent appearances of the Chemist in court were very much increased over previous years, according to the following:

	1911.	1912.	1913.
Opium	66	70	123
Heroin	6	30	858
Cocaine	98	351	1,130
Other substances	40	107	109
Half days of attendance at court	199	396	409

BUREAU OF LABORATORIES.

DIVISION OF DIAGNOSIS.

Routine diagnostic work is done by the Diagnosis Laboratory of the Bureau of Infectious Diseases, but diagnostic work not conveniently carried on there, or work requiring special technic, is under the direction of this Division.

Diagnosis of Rabies.

The following table shows the number and kind of animals sent in for diagnosis during 1913 and the results of the diagnoses.

Table IX.

Rabies Diagnosis for 1913.

Total Specimens Examined, 3,249.

Borough.	Human.	Dogs.	Cats.	Horses.	Cows.	Total Positive.	Total Negative.	Total Animals Examined.
Manhattan	1	221	21	1	...	110	134	244
Brooklyn	1	168	16	...	...	71	114	185
Bronx	...	99	4	1	...	45	59	104
Queens	...	67	1	...	...	38	30	68
Richmond	...	15	1	...	...	4	12	16
Out of City	...	61	2	...	...	38	25	63
Totals—Positive...	2	289	14	1	...	306	...	...
" —Negative..	...	341	32	1	...	...	374	680

SEROLOGICAL LABORATORY.

On May 1, 1912, the Serological Laboratory came into official existence through the adoption of a resolution by the Department of Health in regard to the report of venereal disease cases.

Between May 1, 1912, and January 1, 1913, the Wassermann test was applied to 3,988 blood specimens; the complement-fixation test was applied to 384 specimens, and during the months of November and December, the complement-fixation-test-for-glanders was applied to 552 horse-bloods.

At the same time, May 1, 1912, the Venereal Diagnostic Clinic was established, where patients could be sent when private physicians did not care to collect the blood specimens themselves. At the end of December, 1912, the average attendance at this clinic was 15 a day, while the average at the close of 1913 was 38.

During the last nine months of 1912 the Wassermann test was applied to 16,734 blood specimens; the complement-fixation-test-for-gonorrhoea was applied to 3,075 blood specimens. and the complement-fixation-test-for-glanders was applied to 2,453 horse-blood specimens, showing a very substantial increase over the same period of 1912.

Most of the sera on which the complement-fixation-test-for-streptococcus infection was performed in 1913 were from joint cases, and were sent for differential diagnosis between syphilitic gonococcus and streptococcus infection. Streptococcus work was throughout the year experimental. In spite of the fact that the method of preparing the antigen and the technique of the test were far from perfected, the re-

sults were on the whole satisfactory to the clinicians and justify faith in the possibility of making this test a valuable aid in diagnosis.

On August 1, 1913, a Medical Advisor's Clinic was established, and up to the present time has been rapidly increasing in the amount and importance of its work.

The total figures for 1913 are given in the following table:

TABLE X.

Complement Fixation Tests.

Variety.	Positive.	Negative.	Doubtful.	Total.
Wassermann	7,602	9,301	1,847	18,750
Gonorrhœal	690	1,968	868	3,526
Glanders	637	1,641	423	2,701
Treponema pallidum	5	8	...	13
Streptococcal	60	69	28	157

REPORT OF THE LIBRARIAN.

The library contains 435 books (54 unbound) and 1,232 periodicals (354 unbound).

PERIODICALS.

We subscribe to 54 current medical journals: 9 English, 16 American, 5 French and 24 German.

For two years, as each issue was received, the important subjects in which the workers are interested, have been classified and filed by subjects. The cards record subjects, authors, where found, etc., and are filed by themselves.

REPRINTS.

All reprints are arranged by authors and put in folders and filed in cabinets. Each has an author and subject card which are filed separately.

EXCHANGES.

This Bureau's exchanges, for the "Collected Studies," are about 500. Each is listed on a card and filed.

COLLECTED STUDIES.

These studies, for which we have a mailing list of about 1,200, are sent all over the world to prominent workers interested in research work, bacteriology, pathology and in hygiene.

LABORATORY CONFERENCES.

The conferences are held every two weeks for a critical review of the different subjects of interest found in the current periodicals.

The journals are assigned to members, and each member refers subjects to special groups to abstract and discuss at the meetings.

DIVISION OF RESEARCH.

Research work is continually being carried on for the purpose of solving original problems and of testing the work of others. Those problems are first chosen for study that promise to give results of immediately practical worth.

During the past year several problems begun in former years were completed. A

brief statement of the more important practical studies carried on is given here. Full reports of all the problems are published in our Collected Studies, Volume VII.

Trachoma and Allied Diseases of the Conjunctiva.

An investigation concerning infectious eye diseases has been carried on for the past four years. The nature of the observations caused the time of study to be extended over so long a period. A full report of the results obtained is given in the Collected Studies for 1912-13. The conclusions reached are as follows:

1. Trachoma inclusions are nests of growing bacteria in epithelial cells—hemoglobinophilic bacilli, in certain cases of papillary conjunctivitis; gonococci, in certain cases of gonorrheal conjunctivitis; and possibly other bacteria in certain other cases of conjunctivitis.
2. Under careful hygienic and medicinal treatment, such as is outlined in some of the preceding articles published, the great majority, if not all, of the cases of conjunctival affections of children may run a benign course, resulting in normal conjunctivas.
3. Comparatively few, if any, cases of chronic conjunctivitis develop in individuals exposed, if the rules of general and personal hygiene are carried out.
4. If trachoma is present, or should be introduced, among our school children it may be controlled by methods which are within practical limits.

Purification of Antitoxin.

Continued studies on the purification of antitoxin resulted in developing additional improvements in methods which give a further purification of these antibodies. The improvements shorten the process to a matter of a few days, when formerly it was a matter of weeks, a great saving in time and cost of production.

Diphtheria Toxin.

A stable purified diphtheria toxin has been obtained in powder form.

Studies on the Schick Test.

These studies, which were begun in the latter part of 1913, have shown that the value of the test seems to lie in differentiating susceptible from non-susceptible individuals, and that therefore it may be used as a diagnostic measure in clinically doubtful cases, such as nasal discharges, that yet give a culture of diphtheria bacilli.

The test is made by injecting 1-50 of the minimum lethal dose for the guinea-pig, held in 0.1 c.c. saline, intracutaneously on the flexor surface of the forearm. A reaction depends on the irritant properties of diphtheria toxin in the absence of antitoxin. A postive reaction is characterized by a circumscribed area of redness, 1-2 c.m. in diameter, which appears within 24-48 hours and persists for 7-10 days. After fading a brownish pigmented area is left for a time, which generally shows superficial scalding.

Active Immunization Against Diphtheria.

These studies were begun in the latter part of 1913. Mixtures of toxin and antitoxin were prepared, which were either innocuous or only slightly toxic to the guinea-pig. Two and three injections were made, with intervals of several days, and the result of the vaccination tested by the Schick reaction, and by estimating the antitoxin content of the blood in the guinea-pig test.

Patients with natural antitoxin responded readily and in a short time (7 days), showed a fair production of antitoxin; those who had little or no natural antitoxin

gave rise to antitoxin production after the injection of toxin-antitoxin mixtures in less than one-fourth of the patients. Among the remaining patients about one-half showed a very slight antitoxin production, but not sufficient to protect against diphtheria.

New Method of Preventive Treatment of Rabies.

An investigation of a new method of antirabic vaccination, known as the Harris method, was carried on. This was begun by a study of the technique of the method in Dr. Harris' Laboratory in St. Louis. It is a radical departure from the old Pasteur method and consists in a rapid drying of the brain and cord material of rabbits dying from fixed virus infection. The drying is produced as follows: The tissue is frozen by means of carbon dioxide snow, and at the same time reduced to a powder by grinding in a mortar. This powder is then placed in a vacuum jar, in which a nearly perfect vacuum is produced, and the jar with contents kept at a temperature of 15-20 degrees Cent. below freezing. In from two to five days (depending on the amount in preparation) the nerve material is reduced to a fine dry powder which is then sealed in glass bulbs in vacuo. The advantages claimed for this method of treatment are: First, that it produces a more rapid and a stronger immunity than the old process after half the number of days of treatment formerly required. Second, that it is more saving of time, and of labor, and of animals, in that the virus may be kept for six months without loss of virulence of immunizing properties. This makes it possible to prepare at intervals of several months virus for the treatment of even large numbers of patients.

After investigation of Dr. Harris' results in some 200 or more cases which he has treated, it seemed advisable to try out the method in our laboratory at first on animals and, if the experiments proved the value of the treatment, to adopt it to the treatment of patients. To compare the efficiency of the Pasteur and the Harris methods, two lots of rabbits were tested, respectively, with a result which so far supports Dr. Harris' views as to the superiority of his method.

Testing Milk for Dirt Sediment.

The methods of examination of milk for the amount of sediment contained, which had been begun in an experimental way in 1910, were perfected. Up to the end of the year, about 2,000 samples from dairies were subjected to this test and the farms graded. An official gauge, or standard, showing the various grades of dirt-sediment in milk was also adopted and the score obtained by a dairyman was made part of his official dairy score.

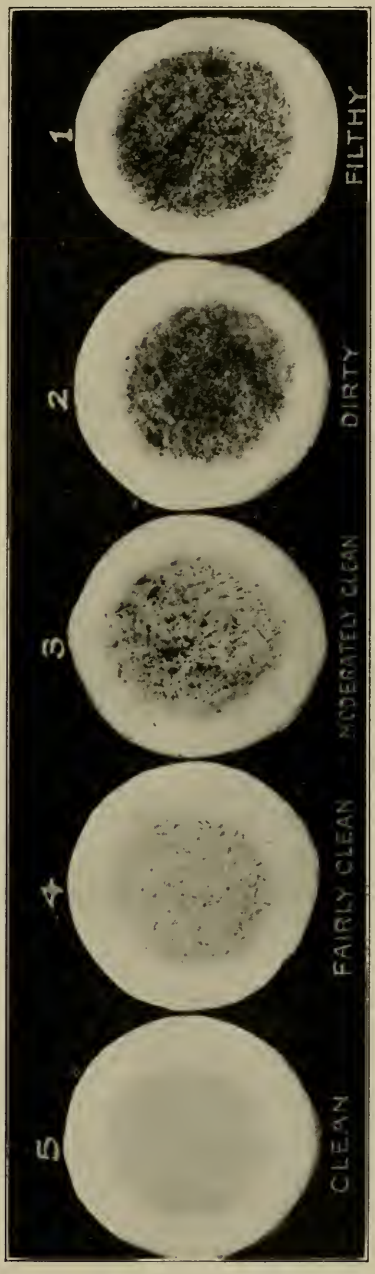
An ordinance making sediment testing compulsory for all creameries shipping milk into New York City was passed December 22, 1913. It is hoped that within a few months all farms, besides making their own weekly tests, will be graded by the inspectors according to this new standard. It is planned to regrade the dairies on this basis once each quarter, and so to enforce the ordinance passed by the Board.

Comparison of Methods for the Diagnosis of Glanders.

Over 1,000 macroscopic agglutination tests were made on the blood of 800 horses which were also being tested by the complement-fixation method. Comparison of results with clinical symptoms and autopsy findings were possible in the case of only 600 of the animals because of the lack of sufficient data in regard to 200 of them.

However, the results showed that neither the agglutination nor the complement-fixation method disclosed all the positive cases (agglutination about 84 per cent,

complement-fixation about 90 per cent. of the total). Only one case was missed by both tests and this was found by the use of mallein applied to the eye. It is therefore



OFFICIAL STANDARD.—EACH COTTON CIRCLE REPRESENTS THE AMOUNT OF DIRT FILTERED FROM ONE PINT OF MILK. THE TOTAL POINTS ALLOWED ARE FIVE. THE CLEAN COTTON CIRCLE RECEIVES FIVE POINTS, THE NEXT CLEANEST FOUR POINTS, ETC.

apparent that neither the agglutination nor the complement-fixation method should be relied upon exclusively; also that the following up and re-testing of cases giving doubtful reactions is very important.

Infectious-Abortion of Cattle.

Experimental work which was done, and which is now being continued, suggests the possibility that man may become infected by the organism of infectious-abortion of cattle.

Epidemiologic Research.

Epidemiologic investigations have been conducted on local outbreaks of typhoid fever, diphtheria, whooping cough and other diseases.

Bactericidal Proprieties of Aniline Dyes.

Systematic study of the bactericidal properties of the aniline dyes has resulted in an improved method for the isolation of typhoid bacilli from stools.

Comparative Study of Media to be Used for Routine Work.

A study was made of laboratory media, made according to new formulae, and by modification of formulae now in use, as compared with media made according to standard laboratory methods.

The work was begun by a series of tests made with used-agar (veal-agar which had already been used for the growth of different organisms). It was found that the previous use of the agar did not seem to affect its value as a culture medium for the ordinary bacteria. Typhoid, paratyphoid, coli communis, staphylococcus, diphtheria, gonococcus, streptococcus, pneumococcus and other varieties of organisms grew as vigorously on the used agar as on new.

Martin's-Broth and Martin's-Broth-Agar gave excellent results for general use, but did not show sufficient advantages over the ordinary culture media to compensate for the extra trouble in preparation while in the matter of economy other methods were found to be superior.

A large part of the work on media has been done with special reference to milk examinations. An extended series of tests has been made with Pancreatin Agar, made by Hottinger's method. By previous digestion with pancreatin sufficient nutriment is obtained from the meat so that no additional peptone is added. Excellent milk-plates are given by this medium and, as equally good nutrient agar can be made from the broth in high dilution, the cost of milk plating is much reduced by this method.

Many tests have been made with water-agar (contains no meat juice or peptone). Milk plates on this medium show a good proportion of colonies as compared with plain-agar, but are less desirable for counting purposes because of the small size of the colonies, On account of the low cost and ease of preparation of this agar, experiments have been continued in search of some modification which would make it practicable for use in milk work.

Over three thousand tests of different media were made up to the beginning of January, 1913.

Studies on Whooping Cough.

Studies on the etiology and vaccine treatment of pertussis begun in the latter part of the year have the following chief objects in view: (1) to determine the specificity of the Bordet-Gengou bacillus (*B. pertussis*); (2) to determine the specific lesions, if any, in pertussis; (3) to determine the efficacy of vaccine treatment.

Publications.

The last volume of the completed studies of the Bureau of Laboratories for 1912-13 was published under the title, "Collected Studies from the Bureau of Laboratories, Volume VII." This volume contains 55 articles.

BUREAU OF HOSPITALS.

ADMINISTRATION.

Staff.

	No. of Each.
Superintendent	1
Medical Inspectors	3
Hospital Physicians	18
Nurses	144
Matrons	3
Hospital Clerks	23
Disinfector	1
Internes	25
Orderlies	45
Typewriting Copyist	1
Telephone Operator	1
Laboratory Assistant	1
Elevatormen	4
Drivers	8
Butchers	3
Carpenters	6
Watchmen	3
Helpers	6
Gardeners	2
Laborers	76
Domestics	301
Chaplain	1
Captains	3
Boatmen	4
Deckhands	3
Marine Engineers	4
Marine Firemen	4
Stationary Engineers	11
Firemen	19
Electrician	1
Total	725

(At Otisville Sanatorium.)

Hospital Physicians	10
Clerks	4
Telephone Operators	3
Storekeeper	1
Laboratory Assistant	1
Dairyman	1
Sanitary Inspector	1
Architectural Draughtsman	1
Plumbers	3
Stationary Engineer	1
Blacksmith	1
Tinsmith	1
Firemen	2

	No. of Each.
Nurses	13
Orderlies	5
Domestics	30
Helpers	47
Dentist	1
Ministers of Religion	3
Carpenters	28
Laborers	122
Watchmen	2
Total	281

IMPROVEMENTS.

During the year issues of Corporate Stock aggregating $553,000 were authorized for the construction of new contagious disease hospital buildings and the extension and improvement of the existing plant and equipment. The most important items covered were:

Construction of Medical Staff House and of a bulkhead at water front at Willard Parker Hospital, of two concrete buildings at Riverside Hospital, of a Diphtheria Pavilion at Kingston Avenue Hospital.

Additional allowance for construction of Helps' Dormitory at Willard Parker.

Alterations in and additions to kitchen buildings at Riverside Hospital.

The Medical Boards of the Contagious Disease Hospitals underwent important reorganization which regulated term of appointments, periods of service, and provided uniform rules and regulations for their government.

STATISTICS.

The following tables give a summary of the work of the various institutions under the supervision of this Bureau during the year:

General Statement—All Hospitals.

All Services.	Willard Parker.	Kingston Avenue.	Riverside.
Total treated, 10,912	4,849	2,581	3,482
Diphtheria—			
Cases treated	2,055	1,055	587
Deaths	294	157	62
Died within 48 hours	100	81	19
Patients intubated	255	238	77
Intubations	752	537	184
Extubations, instrumental	397	165	116
Auto-extubations	236	51	49
Only one dose antitoxin	1,858	1,003	153
Patients receiving 10,000 units antitoxin	1,439	340	153
Antitoxin rashes	224	133	29
Scarlet Fever—			
Cases treated	1,558	1,071	433
Deaths	123	66	12
Died within 48 hours	20	22	1
Measles—			
Cases treated	801	277	1,096
Deaths	53	24	95
Died within 48 hours	24	3	1
Tuberculosis and Isolation Service—			
Cases treated	....	....	1,224
Deaths	....	....	210
Died within 48 hours	....	....	2

General Statement—Willard Parker—Reception Hospital.

Diseases.	Patients.									
	Remaining.	Admitted.			Total Treated.	Discharged	Died.	Transferred to		Remaining.
	Dec. 31, 1912.	New.	Transferred from					Hospital.	No.	Dec. 31, 1913.
			Hospital.	No.						
Diphtheria	3	95	Riverside	21	119	64	33	W. P. Diph.	9	6
								W. P. Sc.	6	
								Riverside	1	
Scarlet Fever	1	31	Riverside	5	37	17	8	W. P. Diph.	11	..
								Riverside	1	
Measles	12	787	W. P. Diph.	2	801	37	53	W. P. Diph.	1	5
								Kingston Ave.	1	
								Riverside	704	
Small Pox	..	3		..	3	3	..		..	..
Varicella	..	2		..	2	2	..		..	..
German Measles	..	9		..	9	9	..		..	..
Tuberculosis	..	65	Otisville	7	72	..	1	Riverside	71	..
Diphtheria and Scarlet Fever	..	1	Riverside	2	3	..	3		..	..
Diphtheria and Measles	..	54	W. P. Diph.	26	81	7	19	W. P. Diph.	1	..
			Riverside	1				Riverside	54	
Diphtheria and Varicella	..	3		..	3	2	1		..	..
Diphtheria and Pertussis	..	15	Riverside	3	18	12	5		..	1
Diphtheria and German Measles	..	1		..	1	1	..		..	..
Scarlet Fever and Measles	1	4	Riverside	1	6	4	..	W. P. Scarlet	2	..
Scarlet Fever and Varicella	..	4		..	4	1	..		..	3
Scarlet Fever and Pertussis	1	2	Riverside	1	4	4	..		..	..
Measles and Pertussis	1	10		..	11	9	2		..	..
Measles and Varicella	..	4		..	4	1	1	Riverside	2	..
Scarlet Fever and Mumps	1	..		..	1	..	..	W. P. Scarlet	1	..
Diphtheria, Scarlet Fever and Pertussis	..	..	Riverside	1	1	1	..		..	..
Measles and Erysipelas	..	1		..	1	..	..	Riverside	1	..
Scarlet Fever, Measles and Varicella	..	1		..	1	..	..		..	1
Total	20	1,092		70	1,182	174	126		866	16
Observation	20	13	Riverside	1	14	7	3	Riverside	3	1
Accompanying	..	8	Riverside	1	9	4	1	Riverside	4	..

General Statement—Willard Parker—Diphtheria Hospital.

Disease.	Patients.									
	Remaining.	Admitted.			Total Treated.	Discharged.	Died.	Transferred to	Remaining.	
	Dec. 31, 1912.	New.	Transferred from							
			Hospital.	No.				Hospital.	No.	Dec. 31, 1913.
Diphtheria	75	1,585	Riverside	384	2,055	1,607	294	W. P. Scarlet	5	120
			Reception	11				Reception	29	
Total	75	1,585	.....	395	2,055	1,607	294	.....	34	120

General Statement—Willard Parker—Scarlet Fever Hospital.

Diseases.	Patients.									
	Remaining.	Admitted.			Total Treated.	Discharged.	Died.	Transferred to		Remaining.
	Dec. 31, 1912.	New.	Transferred from							
			Hospital.	No.				Hospital.	No.	Dec. 31, 1913.
Scarlet Fever	166	967	Riverside	409	1,558	1,296	123	.....	..	139
			Reception	16						
Diphtheria and Scarlet Fever	1	10	Riverside	10	31	20	9	.....	..	2
Diphtheria and Measles			Reception	4						
			W. P. Diph.	6						
Total	167	977	.....	445	1,589	1,316	132	.....	..	141

General Statement—Kingston Avenue Hospital.

Diseases.	Remaining Dec. 31, 1912.	Patients. Admitted. New.	Transferred from Hospital.	Number.	Total Treated.	Disease. Transferred from other Contagious Diseases.	Total Diseases Treated.	Transferred to other Contagious Diseases.	Patients. Discharged.	Died.	Transferred to Hospital.	Number.	Remaining Dec. 31, 1913.
Diphtheria	41	1,014	.....	....	1,055	12	1,067	31	804	157	.....	....	75
Scarlet Fever	163	908	.....	....	1,071	48	1,119	30	957	66	.....	....	66
Measles	3	273	Reception	1	277	16	293	15	242	24	.....	....	12
Small pox	....	15	.....	....	15	1	16	....	16	....	.....	....	....
Varicella	....	12	.....	....	12	2	14	....	14	....	.....	....	....
Pertussis	....	4	.....	....	4	....	4	....	2	1	.....	....	1
German measles	....	13	.....	....	13	....	13	....	13	....	.....	....	....
Diphtheria and scarlet fever	1	41	.....	....	42	15	57	31	11	14	.....	....	1
Diphtheria and measles	....	34	.....	....	34	17	51	18	14	19	.....	....	....
Diphtheria and varicella	....	2	.....	....	2	....	2	2	....	....	.....	....	....
Diphtheria and pertussis	1	5	.....	....	6	6	12	4	7	1	.....	....	....
Scarlet fever and measles	....	1	.....	....	1	16	17	2	12	3	.....	....	....
Scarlet fever and varicella	1	1	.....	....	2	7	9	6	....	1	.....	....	2
Scarlet fever and pertussis	2	2	.....	....	4	6	10	6	4	....	.....	....	....
Measles and pertussis	....	11	.....	....	11	12	23	1	15	6	.....	....	1
Measles and varicella	....	1	.....	....	1	....	1	1	....	....	.....	....	....
Scarlet fever, measles and diphtheria	....	....	.....	....	....	1	1	1	....	....	.....	....	....
Measles, diphtheria and pertussis	....	....	.....	....	....	1	1	1	....	....	.....	....	....
Measles, diphtheria and mumps	....	1	.....	....	1	....	1	....	....	....	.....	....	1
Diphtheria, scarlet fever and varicella	....	1	.....	....	1	....	1	1	....	....	.....	....	....
German measles and scarlet fever	....	1	.....	....	1	....	1	1	....	....	.....	....	....
Total	212	2,340	Reception	1	2,553	160	2,713	151	2,111	292	.....	....	159
Observation	1	20	.....	....	21	....	21	9	11	1	.....	....	....
Accompanying	....	7	.....	....	7	....	7	....	7	....	.....	....	....

General Statement—Riverside Hospital.

Diseases.	Patients.									
	Remaining.	Admitted.			Total Treated.	Discharged.	Died.	Transferred to		Remaining.
	Dec. 31, 1912.	New.	Transferred from					Hospital.	No.	Dec. 31, 1913.
			Hospital.	No.						
Diphtheria	1	586	..	..	587	110	62	Willard Parker Reception	385 21	9
Scarlet Fever	..	433	..	..	433	5	12	Willard Parker Reception Scarlet Fever	309 5 101	1
Measles	49	335	Willard Parker Reception	539 173	1,096	955	95	..	..	..
Small Pox	..	..	..	..	..	..	..	..	..	..
Varicella	..	1	..	..	1	1	..	..	..	..
Pertussis	..	..	..	..	..	..	..	..	..	..
German Measles	..	..	..	..	..	..	..	..	..	..
Mumps	..	..	..	..	..	..	..	..	..	..
Tuberculosis	306	844	Willard Parker Otisville	68 6	1,224	507	210	Riverside Otisville	1 214	292
Cerebro-spinal Meningitis	..	..	..	..	..	..	..	..	..	..
Diphtheria and Scarlet Fever	..	14	..	..	14	1	1	Reception Willard Parker	2 10	..
Diphtheria and Measles	1	42	Willard Parker	53	96	71	22	Reception	1	2
Diphtheria and Varicella	..	1	..	..	1	1	..	..	..	..
Diphtheria and Pertussis	..	..	..	..	..	..	..	..	..	..
Diphtheria and German Measles	..	..	..	..	..	..	..	..	..	..
Scarlet Fever and Measles	..	4	..	..	4	2	..	Reception	2	..
Scarlet Fever and Varicella	..	..	..	..	..	..	..	..	..	..
Scarlet Fever and Pertussis	..	1	..	..	1	..	..	Reception	1	..
Measles and Pertussis	..	4	..	..	4	4	..	..	..	..
Measles and Varicella	..	6	..	..	6	4	1	..	..	1
Typhoid Fever	..	..	..	..	..	..	..	..	..	..
Scarlet Fever, Measles and Diphtheria	..	..	..	..	..	..	..	..	..	..
Measles, Scarlet Fever and Pertussis	..	..	..	..	..	..	..	..	..	..
Measles, Diphtheria and Pertussis	..	..	..	..	..	..	..	..	..	..
Scarlet Fever, Measles and Varicella	..	..	..	..	..	..	..	..	..	..
Measles, Diphtheria and Varicella	..	1	..	..	1	1	..	..	..	..
Scarlet Fever, Diphtheria and Pertussis	..	1	..	..	1	..	..	Reception	1	..
Tuberculosis and Varicella	..	1	..	..	1	..	..	..	..	1
Total	357	..	..	839	3,470	1,662	403	..	1,053	352
Accompanying	..	11	Willard Parker	1	12	11	..	Reception	1	..

BUREAU OF HOSPITALS.

OTISVILLE SANATORIUM FOR TUBERCULOSIS.

New Buildings and Improvements Projected.

During the year issues of corporate stock aggregating $155,000 have been authorized for new buildings and the extension and improvement of the present plant and equipment. The most important new buildings include an antitoxin-horse stable, a staff house and nurses' homes. Improvements projected are an additional water supply, equipment for laundry building, improvements to grounds and buildings.

Buildings Opened During Year.

Women's dining hall and kitchen, with dining room capacity for 230.
Shack No. 110
Hippodrome No. 2.
Incinerator Building.
Valve House.

Improvements Effected.

Electric light system extended to Antitoxin Laboratory.

During the year 220 acres of grain and 87 acres of orchards and truck garden were cultivated, producing forage, vegetables and fruits valued at $10,108.10.

A hennery, together with incubators, brooders and other necessary incidentals, has been in operation the greater part of the year.

A model dairy, fitted with sanitary appliances for the care and handling of milk has proved a successful undertaking. This dairy is equipped with a live steam sterilizer and a modern milk cooling system. The floors and walls are washed down daily, the cows are groomed and employees required to observe strict rules governing the cleanly care and handling of milk. During the year 179,936 quarts of milk were produced. It is hoped in the near future to be able to produce all the milk required at the Institution.

Increased Capacity.

The capacity of the institution has been increased 71 beds; on January 1, 1913, there were 512 beds, on December 31, 1913, 583.

General Statement.

	No.
Number of patients at January 1, 1913	502
Admitted during year	935
Total treated during the year	1,437
Discharged	921
Died	6
Remaining at end of year	510
Largest number of patients at one time	547
Smallest number at one time	489
Average patients per day	512.78

Duration of Patients' Stay.

Total patients discharged, died or transferred	927
Length of stay under one month	77
Over one month and under three months	149
Over three months and under six months	361
Over six months	340

Patients Treated and Condition When Discharged.

Condition.	Number.	Per Cent.
Incipient on admission	295	
Apparently cured	83	28.14
Arrested	177	60
Improved	33	11.19
Progressive	2	.67
Deaths	....	.....
Moderately advanced on admission	456	
Apparently cured	27	5.92
Arrested	256	56.14
Improved	117	25.66
Progressive	53	11.62
Deaths	3	.66
Far advanced on admission	99	
Apparently cured	1	1.01
Arrested	30	30.30
Improved	25	25.25
Progressive	40	40.41
Deaths	3	3.03

BUREAU OF RECORDS.

ADMINISTRATION.

Staff.

	No. of Each.
Registrar	1
Assistant Registrars	5
Medical Inspector	1
Medical Clerks	4
Clerks	16
Tabulator	1
Stenographers and Typists	20
Bookbinders	2
Bookbinder's Seamstress	1
Laborer	1
Total	52

POPULATION.

The estimated population of the Greater City of New York on July 1, 1913, was:

Manhattan	2,487,769
The Bronx	583,981
Brooklyn	1,845,443
Queens	359,891
Richmond	95,872
Greater City	5,372,983

The following table shows the percentage of increase of population in the different Boroughs between the years 1898 and 1913:

Estimated Population.

Year.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	City of New York.
1898	1,809,286	167,286	1,095,047	137,032	63,767	3,272,418
1899	1,830,462	183,868	1,131,805	145,143	65,444	3,356,722
1900	1,854,190	201,524	1,169,553	153,661	67,114	3,446,042
1901	1,904,070	214,139	1,205,796	161,832	68,242	3,554,079
1902	1,955,292	227,544	1,243,162	170,438	69,389	3,665,825
1903	2,007,892	241,778	1,281,686	179,501	70,556	3,781,423
1904	2,061,907	256,924	1,321,403	189,046	71,743	3,901,023
1905	2,116,260	273,781	1,363,186	199,464	73,051	4,025,742
1906	2,159,483	300,793	1,415,789	214,735	75,576	4,166,556
1907	2,203,588	330,866	1,470,420	231,175	78,188	4,314,237
1908	2,248,594	363,728	1,527,161	248,874	80,891	4,468,248
1909	2,294,520	399,853	1,586,090	267,928	83,687	4,632,078
1910	2,341,383	439,567	1,647,294	288,440	86,580	4,803,264
1911	2,389,204	283,224	1,710,861	310,523	89,573	4,983,385
1912	2,438,001	531,219	1,776,878	334,297	92,669	5,173,064
1913	2,487,796	583,981	1,845,443	359,891	95,872	5,372,983
Per cent. increase, 1898–1913	37.51%	249.1%	68.53%	126.2%	50.36%	64.19%

The immense growth of The Bronx and Queens has been due, in great measure, to the amount of land available for expansion and to improved transportation. The increase of The Bronx is larger because of earlier established and better transit facilities. In estimating the increase of the population in the intercensal periods, the Department of Health uses the geometric method on the ground that the approximations thus obtained more nearly approach the actual figures for the City than those obtained by the arithmetic method. The geometric method presupposes that the population has increased during the past year at the same rate as that at which it increased during the decennium 1900 to 1910, or during the quinquenium 1905 to 1910, using as the basis of our calculations in the first instance the Federal censuses of 1900 and of 1910, and in the second instance the State census of 1905 and the Federal census of 1910.

The age distribution of the population of the City has remained fairly constant during the past fifty years, certainly the variations from year to year, or in fact from one quinquenium to another, are so slight as to be negligible. This being true is it permissible to estimate the present age and sex distribution of the population by applying the percentages of the 1910 census to the estimated population of 1913, and it has been by this method that the age and sex distribution, used in the tables that follow, has been obtained.

The number of deaths credited to the year 1913 are those that were reported between December 31, 1912, at noon and December 31, 1913, at noon, thus the figures do not exactly tally with those published by the Bureau of the Census, which latter include only the deaths that actually occurred during the year.

The chief advantage of basing our calculations on the reported rather than on the actual number of deaths is that we are thereby enabled to commence work immediately on the various weekly, monthly, quarterly and yearly reports, whereas were we to reckon on the actual deaths we would be compelled to wait an indefinite time, because physicians are allowed thirty-six hours in which to report deaths, undertakers are allowed four days in which to secure a permit for burial, and certificates are not sent to the tabulating office until the final permit for burial has been issued; and again many morgue cases are held for identification or claim by relatives, and the certificates in these cases do not find their way to the statistical office for several days; and still again many deaths from drowning, violence, poisoning—accidental, suicidal or homicidal—are not discovered and reported until weeks after they occurred. Since the number of deaths occurring in one year and remaining unreported until the next remain fairly constant, one year balances the other, so that the advantages of basing our calculations on the reported rather than on the actual number of deaths outweigh the objections.

It is common knowledge that the statistics of the population under one year of age, collected at the census, are grossly inaccurate. It has been necessary, therefore, in the past to estimate this important grouping of population by methods that were little better than guess work. However, for several years the birth reports in this City have been sufficiently complete to warrant basing the death rate of infants under one year on the number of births.

BIRTHS.

The total number of births reported during the year 1913 were 135,134, distributed among the Boroughs as follows:

	Births.	Rate.
Manhattan	64,200	25.81
The Bronx	14,679	25.14
Brooklyn	45,888	24.87
Queens	8,086	22.47
Richmond	2,281	23.79

It may be claimed with reasonable certainty that not less than 98 per cent. or 99 per cent. of the total number of births occurring in the City are now reported. This most gratifying condition has been attained by waging a vigorous and persistent campaign against all violators of section 1237 of the Charter, which makes it mandatory for physicians and midwives to report to the Department of Health, within ten days, all births at which they may have attended, and prescribes a fine of one hundred dollars as the punishment for each violation. It may be worthy of note in this connection that this law is so precise in its phraseology and specific in its intent that proof of the violation having been submitted, and this as a rule is not difficult, the court is constrained to inflict the fine. It has been the experience of the Department that only by waging an unrelenting campaign against all violators that a complete report of all the births occurring in this City can be secured, thus insuring accurate statistics for the City, and at the same time protecting the interests of the children, upon whom, in view of the present universal demand for proof of birth in order to gain admission to school, to civil service examinations, to secure employment, insurance, etc., the failure of a physician or midwife to report a birth works a great and often an irreparable injury.

In the foregoing table it is noticeable that the birth rate of the Borough of Manhattan is larger than that of any of the other Boroughs, despite the fact that some of the other Boroughs are growing more rapidly, and that the percentage of unmarried persons between the ages of fifteen and forty-five is probably higher in Manhattan than in any other Borough. This is to be attributed to the following causes:

First—The presence in Manhattan of several maternity hospitals, which probably draw a certain small percentage of their patients from the other Boroughs.

Second, and most important reason, however, is the presence of a large number of newly arrived immigrants, among whom the birth rate is particularly high; whereas many of the people residing in the outlying Boroughs are those who have mounted the first rounds of the ladder of financial success and social progress, among whom the birth rate seems to decline in about an inverse proportion as they ascend.

It is to be noticed that there was a steady increase in the birth rate of The City of New York from 1880 to 1894, a decline from that year until 1901, an increase again until 1908, and another decrease from 1908 to date. Comparing the rates of New York with those of the important cities abroad it is seen that in all the cities of the Old World the birth rate has steadily declined from 1880 to 1909. The increase in the birth rate of The City of New York from 1901 to 1908 is to be attributed rather to an increase in the number of births reported than to an increase in the number of actual births. From 1908 to date the percentage of births reported has undoubtedly increased, but as the number of reports approaches the total number of births the increase becomes smaller, and is no longer sufficient to affect and hide the decrease that is occurring and which is but a reflection of the general decline in the birth rate of the world.

As the cost of living increases, especially when that increase is more rapid than the increase of wages, it is only to be expected that the birth rate will decline, because the average age at marriage is advanced and consequently the period of legitimate reproduction is shortened, as well as the probability of pregnancy lessened. Also, as the average age at marriage increases the probability of intentional restriction, if not avoidance altogether, of child bearing is increased, because as people grow older their standard of living is usually raised and they become less prone to expose themselves to the burdens, responsibilities and sacrifices of parenthood. Undoubtedly the one most important factor in the lowering of the birth rate is this intentional restriction of offspring, and the reason that the practice is increasing is to be found in the present mode of living, the struggle for wealth, the insatiable thirst for worldly amusements, and the seemingly growing distaste for home life. As has been aptly said it is the

cost of high living rather than the high cost of living that is in large measure responsible for the decline of the birth rate.

The total number of births credited to foreign parents are 85,158, and to native parents 34,270; a ratio of about 2½ to 1. To mixed and unknown parents 15,706 births are credited, of which 4,544 were born of foreign mothers, and 11,162 of native mothers, so that 89,702 children were born to foreign mothers, and 45,432 were born to native mothers. Using these totals the birth rate of the foreign population of the City is 40.94 per 1,000 against 14.28 for the native population.

It should be remembered, in stating these rates, that the age distribution of the foreign population is more favorable to a high crude rate than is the age distribution of the native population, because the minimum age of immigration is about fifteen years and the average age about twenty-five; therefore, there is a larger proportion of the foreign population at the child-bearing age than there is of the native population, which latter is, of course, made up of persons at all ages from infancy to old age.

It has been impossible to secure exact figures upon which to base a comparison of the fecundity of foreign and native mothers, as the birth tables of this Department include the negroes in the native population, whereas the census population tables do not.

An approximation of these percentages have, however, been arrived at, and the birth rates determined accordingly:

Combined Legitimate and Illegitimate Birth Rates Based Upon Native and Foreign Parents, and Native and Foreign Mothers.

I. Births of foreign parents	85,158	Rate 121.1 per 1,000 foreign females between ages 15 and 45.
II. Births of native parents	34,270	Rate 44.65 per 1,000 native females between ages 15 and 45.
III. Births of foreign parents and foreign mothers and native fathers	89,702	Rate 127.6 per 1,000 foreign females between ages 15 and 45.
IV. Births of native parents and native mother and foreign fathers	45,432	Rate 59.20 per 1,000 native females between ages 15 and 45.

The above table confirms what has been apparent for years past, to wit: That the birth rate among the foreigners has been far higher than among the native stock, and that the increase of the population is dependent in a very great measure upon the number of immigrants arriving in this city and the number of their offspring.

BIRTH RATE—FEMALES 15 TO 45 YEARS OF AGE.

Total births to all females 15 to 45 years of age.....74.8 per 1,000
Legitimate births to married females 15 to 45 years.....91.9 per 1,000
Illegitimate births to unmarried females 15 to 45 years..... 2.38 per 1,000

The rates just quoted compare favorably with the large cities both home and abroad.

The following table gives the birth rate of certain prominent foreign elements in the population of the City:

Foreign Births, According to Nativity of Both Parents, and of Mother Only.

Country.	Births.	Rate.*
England	1,504	17.09
Austria-Hungary	13,802	45.93
France	277	13.46
Germany	3,653	11.61
Ireland	7,671	26.95
Italy	29,976	78.12
Russia and Poland	25,412	46.62

*Rate based on total estimated population 1913 both sexes of each nationality.

Still-Births.

During 1913 there were reported 6,629 still-births; giving a crude rate of 1.23 per 1,000, and a rate of 8.69 per 1,000 females 15 to 45 years. These occurred during the different months of uterogestation as follows:

Month.	2	3	4	5	6	7	8	9	10	Not Stated.
Number of still births	32	113	328	636	806	920	781	2,757	214	40
Per cent	.5	1.7	4.9	9.6	12.2	13.9	11.8	41.6	3.2	.6

A new form of still birth certificate has been prepared, and will be placed in use in 1914. This calls for information as to the occupation of mother during pregnancy, number of previous pregnancies, number of these that resulted in the birth of living children, the number that resulted in the birth of still-born children—the latter with the cause and period of gestation—and the immediate cause of the still-birth, *e. g.* death of foetus in utero, anti partum hemmorrhage etc., and underlying cause, *e. g.*, syphilis, chronic endometritis, etc.

The collection of this additional information will permit of the compilation of statistics upon which to base prenatal work, to the necessity of which we have already awakened.

MARRIAGES.

There were 51,268 marriages reported as having occurred during the year, giving a crude rate of 9.54, and a rate of 28.54 per 1,000 unmarried persons between the ages of 15 and over.

The crude rate of 1913 is .45 of a point lower than that of 1912. The rates, respectively, being 9.54 and 9.99.

Marriages.

Year.	Total Reported.	Rate Per 1,000.	Year.	Total Reported.	Rate Per 1,000.
1898	28,885	8.83	1906	48,355	11.60
1899	30,474	9.08	1907	51,097	11.84
1900	32,247	9.36	1908	37,499	8.39
1901	33,447	9.41	1909	41,513	8.96
1902	36,207	9.88	1910	46,417	9.66
1903	38,174	10.10	1911	48,765	9.79
1904	39,436	10.11	1912	51,703	9.99
1905	42,675	10.60	1913	51,268	9.54

The Borough of Manhattan shows the highest rate, due probably to the fact that many people marry in this Borough and take up their residence in one of the others, as well as to the fact that many persons residing in the other Boroughs come to Manhattan to have the ceremony performed. There is a difference in favor of Manhattan of almost eight points in the marriage rate as compared with The Bronx, whereas the birth rates of the two Boroughs are almost identical.

According to the returns, 13 white women married negroes, and 12 white women married Chinese. 250 more bachelors married either widows or divorcees than spinisters married widowers or divorcees. 145 more divorced females remarried than divorced males, and 395 more widowers remarried than widows.

The marriages were distributed according to religious and civil ceremony as follows:

Catholic	14,563
Jewish	13,075
Protestant	12,996
Ethical Culture	30
Aldermanic	10,502
Judicial	102

DEATHS.

In General.

During the year there were reported 73,902 deaths in The City of New York, distributed among the Boroughs as follows: Manhattan, 36,147; Bronx, 7,042; Brooklyn, 24,550; Queens, 4,611; Richmond, 1,552; the death rate being 14.53, 12.06, 13.30, 12.81 and 16.19, respectively, while the rate for the entire City was 13.76, the lowest in its history, being a decrease of .35 as compared with the rate for 1912; and a decrease of 6.50 as compared with the rate of 1898. Had the rate of 1898 prevailed in 1913 there would have been 108,870 deaths instead of the 73,902 deaths that were actually reported, a saving of 34,968 lives; this in large measure offsets decline of the birth rate.

Infants.

The greatest percentage of this life-saving was among children under 5 years of age, particularly among those under 1 year. A worthy beginning in the conservation of human life; a mile post on the road to that millennium "where the child shall die a hundred years young."

The three headings under which were found the largest number of victims under 1 year of age were congenital debility, penumonia and gastro-enteritis.

City of New York.

Deaths and Rates Under One Year From Certain Causes—1903 *and* 1913.*

	Causes.							
	Broncho and Lobar Pneumonia.		Diarrhoea and Enteritis.		Congenital Debility.		All Causes.	
	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1903.....	2,293	24.06	3,765	39.51	3,473	36.45	14,402	151.1
1913.....	2,665	19.69	3,037	22.43	5,479	40.47	13,781	101.8
Gain or loss..	.....	— 4.37	.....	—17.08	.....	+ 4.02	.....	— 49.03

*1903 population under 1 year was estimated; 1913 rate is based on reported births.

Causes.

The above table shows the total number of deaths of children under 1 year from congenital causes, broncho-and lobar-pneumonia, and gastro-enteritis, together with the rates. While the deaths from gastro-enteritis show a splendid reduction, those from pneumonia and congenital debility show little or none. Perhaps the present status of our knowledge of pneumonia and its treatment can justly be advanced as an excuse for the lack of greater progress in combatting this harvester of death. But what can be said in excuse of the continued high rate from congenital debility? Of course

there are many elements that are responsible for this high rate, practically all of which are prenatal and capable of elimination. Not only were these 3,136 lives wasted, but the mothers of these children suffered in vain the discomforts of pregnancy and the pangs of labor; additional burden was uselessly placed upon each family, their savings or those of the City spent in the care of the mother during pregnancy and labor, and in the care and in the burial of the infants, to say nothing of the undermining of the mother's health, and all for no purpose. Is it not astounding that at this advanced age we are satisfied to permit such conditions to continue as regards our own species, when nothing like them would be tolerated in the case of domestic animals bred for commercial purposes? The cause of prenatal work requires no argument, the need is too apparent.

Is it not paradoxical that the world at large is alarmed because of the declining birth rate, but regards complacently the needless sacrifice of new-born infants? Of what advantage is a high birth rate if the new-born are permitted to die without a hand being raised to at least reduce the number of preventable deaths? Inasmuch, however, as a lowering of the infants' death rate has been effected by the reduction of mortality from certain diseases, it may be interesting to inquire to what extent this saving of lives under 1 year has offset the decline in the birth rate, and to what further extent it would be offset if the deaths from congenital debility, pneumonia and gastro-enteritis were further reduced, let us say, 50 per cent.?

The following table shows this:

	Estimated Population.	Total Births.	Birth Rate.	Deaths Under One Year.	Births Minus Deaths Under One Year.	Rate of Survivors Calculated on Population.
1898.....	3,272,418	*90,000	27.50	16,770	73,230	22.38
1913.....	5,372,983	135,134	25.15	13,781	121,353	22.59

Using the figures for 1913 and supposing that the deaths from 151, 152, 91, 92 and 104† reduced 50 per cent. further the following would be the result:

	Estimated Population.	Total Births.	Birth Rate.	Deaths Under One Year.	Births Minus Deaths Under One Year.	Rate of Survivors Calculated on Population.
	5,372,983	135,134	25.15	8,191	126,943	23.63

*In 1898 the birth returns were far from complete—90,000 is a low estimate of the total number of births—78,928 were reported.

†Numbers given represent respectively: Prematurity and congenital debility, other causes peculiar to early infancy, broncho-pneumonia, lobar-pneumonia, gastro-enteritis.

The corrected death rate from diarrhoeal diseases of children is highest in the Borough of Manhattan; this is to be explained on the ground of greater density of population, greater proportion of foreigners, lower average income of the masses, higher birth rate and poorer sanitary conditions.

Examination of the table of deaths of infants under 1 year by weeks reveals the fact that such deaths from all causes remain fairly constant throughout the year, and, as most of these deaths are from congenital conditions, this uniform distribution is to be expected.

Deaths from gastro-enteritis are seen to have increased during the summer months, and this is more noticeable in the case of infants over one month of age; evidently as

the percentage of breast-fed children decreases the deaths from gastro-enteritis increase.

During 1913, 3,368 children under five years of age died of diarrhoeal diseases, against 6,570 in 1898, 4,443 in 1903, 6,190 in 1908; the death rate, calculated on the population under five years, being 6.41 for 1913, and 17.3, 10.4 and 12.8, respectively, for the other years mentioned.

Typhoid Fever.

There were 362 deaths from typhoid fever in 1913, as compared with 653 in 1903. The case mortality for the entire City, based upon the number of cases reported, was 13.7; the largest number of deaths from this cause occurred in the Borough of Manhattan; the second largest in the Borough of Brooklyn, where the case mortality was almost 19 per hundred of the reported cases, against 11 in Manhattan. As compared with last year there were 137 fewer deaths. In view of the large number of residents of The City of New York who spend their holidays, week ends, and vacations in the country, the large transient population and the immense and varied milk supply of the City, it is a source of congratulation that the death rate from typhoid fever has been persistently lowered.

Typhus, Cholera, Smallpox.

There were no deaths from typhus, Asiatic cholera or smallpox reported in the City, though twenty cases of the last named disease were reported during the year.

Malarial Fever.

There were 13 deaths from malaria during 1913 as compared with 90 in 1903. Deaths from this cause have steadily declined, and this diminution has been both real and apparent; real as a result of the anti-mosquito work, and apparent because of the laboratory facilities for accurate diagnosis offered the medical profession by the Department of Health, which eliminated other fevers that heretofore had been classified as malarial.

Measles.

There were 628 deaths reported from measles, of which 596 were under 5 years of age. The total deaths show an actual decrease of 43 as compared with 1912.

Scarlet Fever.

Five hundred and seven deaths were credited to scarlet fever during the year; a decrease of 227 as compared with 1903, and 108 as compared with 1912, the respective rates being .19, .12 and .09.

Whooping Cough.

Whooping cough claimed 420 victims during the year, an apparent increase of 96 over 1903, and of 133 over 1912.

Diphtheria and Croup.

One thousand three hundred and thirty-three persons died of diphtheria and croup, 1,155 of whom were under 5 years of age, 608 of these being females and 547 males. This was an actual saving of 857 lives as compared with 1903, but an increase of 208 over 1912.

Influenza.

Three hundred and fifty deaths were reported as having been due to influenza, as against 418 in 1903, and 269 in 1912.

Pulmonary Tuberculosis.

Eight thousand six hundred and one deaths were credited to pulmonary tuberculosis during the year, as against 8,077 ten years ago, and 8,591 in 1912. While there was an apparent increase over both 1903 and 1912 the death rate was really lower, so that there was a saving of lives from this scourge. There were 1,430 deaths from all other forms of tuberculosis during the year, as compared with 1,227 in 1903, and 1,390 in 1912; the rates being 2.12, 1.66 and 1.60, respectively.

As might be expected, the corrected death rate from tuberculosis is highest in the Borough of Manhattan, where the congestion of the population is greatest, the sanitary conditions and the occupations of the residents least favorable, and the number of poor largest.

The tuberculosis death rate among the single males, 1,524, is higher than among the married males in the same age group; this difference increases between the 25th and 44th year, when it becomes more than 2½ times as great; while among the widowers at the same ages it is 4 times that of the married men. After 45 the rate increases among the single, married and widowed, but is by far the highest for the single males, being almost 4 times that of the married men's rate. The better regulated lives of the married males are responsible for the low rate they enjoy.

Among the females, the rate is highest for the widowed between 15 and 24, the next highest being recorded against the married women, and the lowest among the single. The low rate enjoyed by the single women between 15 and 24 is to be explained most probably on the ground of the unduly large number of females between 15 and 24, recorded owing to missstatements of ages, the mortality rate being reduced as the population is increased. The low rate of the spinsters cannot be due to better living conditions as compared with their married sisters, for were this the case the same relative positions of the respective rates would continue during the later periods of life, and this is not so. The rate of the widows is higher than that of the married females throughout, and lower than the single females after the 45th year, when that of the spinsters is highest.

The conclusion is that the death toll from tuberculosis is heaviest among the single and widowed males and females than amongst the married, and that among the single males it is particularly heavy.

The tuberculosis death rate of New York City compared very favorably with that of the larger foreign cities, being lower than the same rate of 13 out of 24 of them.

It is noteworthy that in the foreign cities credited with a high tuberculosis rate the rates of the other communicable diseases are also high.

Cancer.

No less than 4,223 deaths were returned as due to cancer against 2,488 in 1903.

		1903.	1913.
39	Cancer of mouth	127	151
40	Cancer of stomach and liver	1,013	1,646
41	Cancer of intestines	352	650
42	Cancer of female organs	424	610
43	Cancer of breast	253	360
44	Cancer of skin	78	62
45	Cancer of other parts	341	739

The death rate from cancer in 1898 was .61; 1903, .69; 1908, .73; and 1913, .78.

The preponderance of deaths from cancer of the alimentary tract is certainly suggestive. No doubt, part of the increase in the deaths from cancer can be accounted for

by improved methods of diagnosis, particularly since the greatest increase is to be noted in the cancers of the deeper tissues, where diagnosis is more difficult.

The decrease of other diseases of the stomach, 377 in 1903 and 183 in 1913, tends to confirm this opinion, as does also a slight decrease that is noticeable in deaths from certain other causes; but it is apparent that the increase of deaths from cancer is in very large measure real and unmistakably due to an increase of the disease itself.

It is of interest to note that the death rate from cancer among the married males between 25 and 45 is higher than among the single males at the same ages, whereas the rate is far higher among the single males at 45 and over than among the married males in the same age group; also, the rate among the widowers of the same ages is almost double that of either the single or the married. Combining all ages over 15, the rate is lowest among the single males; next highest among the married males, and highest among the widowers. This last phenomenon of course can be explained on the ground that the age average of the single males is lowest, and, therefore, the most favorable, since cancer most frequently attacks those past 40 years of age. The age average of the married males being next lowest one naturally expects their death rate to be second in point of lowness, and since the age constitution of the widowers is highest, their death rate is naturally also the highest. The same relative conditions are to be seen in the death rate from all causes, though of course the variations are not so great.

Among the females, 15 and over, the cancer rates hold about the same relative positions as among the males, and the same is true of the general death rate; but it is difficult to explain why the rates and the totals should be higher among the unmarried males and females, 45 and over, as compared to the married, particularly as regards the females, among whom it has been thought that child-bearing tends to increase the predisposition to cancer, unless it is that the population figures of spinsters and bachelors over 45 are incorrect because of the tendencies of single persons to understate their ages at the taking of the census, thus causing an unfair diminution of the single population over 45, which would, of course, increase any rates based upon such population. This really seems the most plausible explanation of the apparent anomaly.

A study of the death rate from pulmonary tuberculosis and from cancer among the different nationalities in the city is quite interesting, and while these rates are a means of comparing the prevalence of these diseases among the different nationalities, it must be remembered that a number of other elements exert an influence in raising or lowering each rate; for example, the sex and age distribution of each group in the city, their native environment as compared with that of the City, the occupations which they pursue, as well as the average scale of wages, are all conditions which exert a very marked influence upon the respective death rate and must be considered in drawing any comparisons.

It is noticeable that the death rates according to the nativity of the deceased and according to the nativity of the parents of the deceased are practically the same.

The highest death rate from tuberculosis is seen among the Chinese; the next highest among the Irish, whose death rate from cancer is the highest. The Russians enjoy the lowest death rate from tuberculosis, as well as a comparatively low rate from cancer. The lowest rate from cancer is seen among the Greeks; second lowest among the natives of the United States.

The high cancer rate among the Irish is probably due to age constitution. The largest number of immigrants from Ireland arrived in this City between the years 1850 and 1890, since then they have immigrated in but small numbers. Certainly the number of Irish immigrants reaching this City is not sufficient to replenish the younger age group, therefore, the average age of the Irish in this City is probably higher to-day than that of any other race.

Diseases of Circulatory System.

The deaths from cerebral hemorrhage (apoplexy) were 889, as compared with 2,497 in 1903. This difference, however, is due to more accurate assignment, which is apparent from the fact that in 1903 there were 310 deaths recorded as due to diseases of the arteries, whereas in 1913 there were 2,182 recorded as being due to the same cause. The deaths from chronic organic heart disease were double the number of deaths from this cause in 1903, the figures being 9,674 and 4,771, respectively, and the rates 1.80 and 1.26.

In comparing the deaths from diseases of the circulatory system it is more logical to use the combined deaths from organic heart disease, cerebral hemorrhage, diseases of the arteries and chronic nephritis than to take any group separately, because more than one of these diseases is usually given upon the statistical return as the cause of death, and often all of them, thus leading to confusion and honest differences of opinion in classifying deaths from these causes. If then we set out the deaths from these various causes, and compare the totals of one year with those of another, any conclusions drawn therefrom or comparisons made will be better founded and will more accurately reflect the conditions that exist.

	1903.			1913.		
	Male.	Female.	Total.	Male.	Female.	Total.
Apoplexy	1,265	1,241	2,497	445	444	889
Chronic organic heart disease	2,382	2,389	4,771	4,807	4,867	9,674
Angina pectoris	88	82	170	131	74	205
Diseases of arteries	200	110	310	1,160	1,022	2,182
Chronic nephritis	2,680	2,293	4,973	2,592	2,415	5,007
Total	6,606	6,115	12,721	9,135	8,822	17,957

There was an actual increase of 5,236 deaths from these diseases during 1913, as compared with 1903. It is also worthy of note that the deaths from these causes increased in a slightly greater degree among females than among males.

CITY OF NEW YORK.

Deaths at Certain Age Periods and Rates Per 1,000 *Population at Those Ages.*
1903 and 1913.

Age.	1903.		1913.	
	Deaths.	Rate.	Deaths.	Rate.
Under 5 years	22,044	50.26	20,711	36.37
5 to 9 years	1,975	5.07	1,855	3.75
10 to 14 years	932	2.80	1,008	2.11
15 to 24 years	4,048	5.61	4,084	3.65
25 to 34 years	7,185	9.55	6,423	6.16
35 to 44 years	7,825	14.47	8,534	10.95
45 to 54 years	7,032	22.14	9,491	19.20
55 to 64 years	7,067	39.77	8,810	35.65
65 to 74 years	5,812	73.18	7,763	68.82
75 years and over	3,944	149.0	5,223	138.9
	67,864	17.94	73,902	13.76

Comparing the deaths at different age groups, a large saving of lives is apparent in the early periods of life, while at the later periods there has also been an actual decrease in the rates. These last decreases have not been in proportion to the decrease of the general rate and are vastly less than decreases in the earlier ages of life. The conservation of life at the earlier ages has been accomplished by the decrease in the infectious diseases, which attack the young more frequently than those advanced in years. The increased mortality from the diseases of the circulatory system and cancer have prevented a better showing being made among the adults over forty-four. In our present state of knowledge of the cause of cancer but little can be accomplished in reducing its mortality. As regards the mortality from diseases of the circulatory system, much could be done to reduce it, as, apparently, improper modes of life are responsible in great measure for the immense death toll from these diseases. Frequent physical examinations by competent physicians, backed up with necessary laboratory analysis, would do much to lengthen the span of life by detecting the presence of these diseases in the stage of their incipience when it is possible to arrest their progress, if not cure them, by regulating the mode of life of the sufferers therefrom. Were any of the contagious and communicable diseases to reap yearly such harvests of deaths as do these of the circulatory system, the attention of the world would be immediately aroused and drastic measures taken to eliminate them as far as possible. The diseases of the circulatory system, however, continue to reap their yearly increasing harvest, and no word of protest is heard, though these diseases are as easy of elimination as those of communicable character. It is fervently to be hoped that in the very near future the public will be sufficiently interested to inform itself as to the nature and causation of these diseases, and to so regulate life as to avoid them, if not entirely, at least until a later period of life, thus increasing its span and prolonging the usefulness of the individual at the mature age when such usefulness is at its maximum.

Pneumonia.

During the year there were 10,042 deaths reported from broncho- and lobar-pneumonia, with a corresponding rate of 1.87, the lowest in the history of the City. In 1898 the death rate from pneumonia was 2.47.

Accidents.

The total deaths from accidents and negligence in the Greater City were 3,802; undoubtedly a large proportion of these deaths could have been avoided by reasonable care and thoughtfulness. The total number of persons who were killed by being run over by wagons, trucks, automobiles and other street vehicles, except electric and surface cars, were 486, as compared with 150 in 1898. The total number killed by surface cars were 130, as compared with 109 in 1898, a slight increase in the number of actual deaths reported, but a decrease in the rate.

There were 400 deaths in 1913 from burns and scalds; and there is no question but that reasonable care could have prevented practically every one of these deaths. Fifty-four children were burned to death as the result of playing with matches, surely a needless sacrifice of life. If we will but remember that the death rate from accidents is rather low, in other words, that but few accidents result in death of the individual, we can readily imagine the vast amount of suffering and loss of time and money occasioned every year through these unnecessary causes. It seems only logical that not only should the deaths due to preventable diseases be combated but that a consistent effort should be made to eliminate the deaths from avoidable accidents. Of course it is outside the province of the Department of Health to take any action in this matter.

In Institutions.

The deaths in institutions numbered 29,388, as compared with 14,944 in 1898. The following are the percentages of total deaths that occurred in institutions: 22.54 in 1898, 39.77 in 1913.

SEARCHES AND TRANSCRIPTS.

The number of searches made during the year in all Boroughs was 191,924, of which 68,577 were paid searches, the balance of 123,347 being free searches made for the purpose of issuing birth certificates to children applying for admission to school or for employment certificates.

There were 64,461 transcripts issued, and 7,958 statements that the records sought could not be found.

The table on page 196 shows the percentage of increase in this work of making searches and issuing transcripts over 1898. The percentage of searches made for the purpose of issuing certificates of birth to children seeking admission to school increased to such an extent that it became necessary to adopt some means of relieving the congestion of the office, and the consequent discomfort to the public and the employees during the periods just preceding the opening of the school term. Through the co-operation of the Board of Education a plan has been devised and will be put into operation during the year 1914, whereby the children will be admitted to school without a birth certificate, provided they are apparently the age at which children are admitted; the principal of the school will then enter upon a blank form, supplied by the Department of Education, the name of the child, date of birth, place of birth and the parents' names. These slips will be forwarded from each school, each day to the office of the Bureau of Records in the Borough in which the child was born; a search will be made by the employees of that office, and a statement of the result returned to the principal within forty-eight hours. Another innovation of this system is that the record furnished the principal in response to request will become a permanent record of the school and will be transferred with the child from one school to another until it has completed its education in the public schools, or until it applies for an employment certificate, when it will be given to the child to be presented to the Mercantile Bureau of the Department of Health as evidence of its age. Heretofore it has been the custom for a child to secure a certificate of birth for every time it was transferred from one school to another, and again when it applied for an employment permit, and, as the population of the City is continually moving, it can readily be seen that a large percentage of the children secured two, three, or perhaps more, certificates of birth during their school life thus unnecessarily increasing the work of the Bureau of Records. Under this new system each child will secure but one certificate of birth and a large saving of labor, and consequent economy, will be effected.

	Borough of—					City of New York.
	Manhattan.	*The Bronx.	Brooklyn.	Queens.	Richmond.	
Number of deaths	36,147	7,042	24,550	4,611	1,552	73,902
Death rate	14.53	12.06	13.30	12.81	16.19	13.76

* The death rate in the Borough of The Bronx is materially increased by the deaths in institutions, most of the inmates having been transferred from the Borough of Manhattan.

Borough.	Estimated Population.	Certificates Received and Tabulated.				Rate per 1,000.				Transit Permits Issued.	Coroners' Cases.	Searches Made.	Transcripts Issued.
		Marriages.	Births.	Deaths.	Still-births.	Marriages.	Births.	Deaths.	Still-births.				
Manhattan	2,487,796	31,430	64,200	36,147	3,140	12.63	25.81	14.53	1.26	1,294	5,476	103,027	33,912
The Bronx	583,981	2,822	14,679	7,042	663	4.83	25.14	12.06	1.14	38	959	15,563	5,438
Brooklyn	1,845,443	14,271	45,888	24,550	2,286	7.73	24.87	13.30	1.24	696	3,105	62,495	20,550
Queens	359,891	2,116	8,086	4,611	439	5.88	22.47	12.81	1.22	40	781	7,382	3,401
Richmond	95,872	629	2,281	1,552	101	6.56	23.79	16.19	1.05	23	310	2,023	803
City of New York	5,372,983	51,268	135,134	73,902	6,629	9.54	25.14	13.76	1.23	2,091	10,631	190,490	64,104

Report of Bureau of Records for Year Ending December 31, 1913—Continued.

	Borough of—					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Number of deaths in institutions	17,691	3,153	7,175	672	697	29,388
Number of deaths in tenements	16,174	2,764	10,103	1,095	142	30,278
Number of deaths in dwellings	1,257	1,363	6,091	2,255	700	11,666
Number of deaths in hotels and boarding-houses	513	11	124	40	21	709
Number of deaths in streets, rivers, etc	973	180	462	167	79	1,861

Corrected Interborough Deaths.	Residents of—					Totals.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Died in Manhattan	.....	875	799	189	58	1,921
Died in The Bronx	1,203	.....	99	22	8	1,332
Died in Brooklyn	114	15	.....	263	3	395
Died in Queens	43	7	48	.....	.....	98
Died in Richmond	100	6	44	6	.....	156
Net change	—461	—429	+595	+382	—87	3,902
Corrected actual borough death rates	14.34	11.33	13.63	13.87	15.28	.....

Particulars Regarding Births, Deaths, Marriages and Still-

CITY OF

	Total.	White.		Colored.		Chinese.		Native Parents.		Foreign Parents.		Parentage of Mixed Nativities.		Parentage Unknown or Not Stated.	
		M.	F.	M.	F.	M.	F.								
*Marriages.	51,268	50,017	50,042	1,236	1,223	15	3	.....	.....	.....	.....	.....	.....	.....	.....
*Births.....	135,134	67,926	64,773	1,236	1,176	11	12	17,526	16,744	43,481	41,677	7,706	7,088	460	452
Deaths.....	73,902	29,323	32,098	1,219	1,189	72	1	7,910	6,939	27,123	22,325	3,583	2,903	1,998	1,121
Still-births..	†6,629	3,635	2,643	160	108	1	...	1,043	768	2,201	1,616	340	241	212	126

*The Returns of Births and Marriages are incomplete. †Sex undetermined, 82.

BOROUGH OF

Marriages..	31,430	30,572	30,598	845	829	13	3	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	64,200	31,932	30,538	865	843	10	12	6,016	5,816	23,311	22,333	3,116	2,872	364	372
Deaths.....	36,147	19,303	15,139	842	797	65	1	3,353	2,879	13,853	11,001	1,526	1,208	1,478	849
Still-births..	†3,140	1,685	1,228	112	77	1	...	387	286	1,139	873	162	98	110	48

†Sex undetermined, 37.

BOROUGH OF

Marriages..	2,822	2,806	2,806	16	16	...	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	14,679	7,509	7,803	50	37	...	...	2,197	2,047	4,244	4,049	1,101	1,010	17	14
Deaths.....	7,042	3,746	3,183	51	62	...	...	672	609	2,644	2,274	382	303	99	59
Still-births..	†663	369	260	4	2	...	...	107	54	205	159	36	31	25	18

†Sex undetermined, 28.

BOROUGH OF

Marriages..	14,271	13,937	13,938	332	333	2	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	45,888	23,205	22,167	271	244	1	...	6,973	6,585	13,759	13,319	2,670	2,445	75	62
Deaths.....	24,550	12,860	11,135	277	272	6	...	2,990	2,709	8,562	7,407	1,302	1,125	289	166
Still-births..	†2,286	1,286	927	34	22	...	...	424	315	722	492	115	91	59	51

†Sex undetermined, 17.

BOROUGH OF

Marriages..	2,116	2,097	2,095	19	21	...	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	8,086	4,131	3,882	33	40	...	...	1,880	1,868	1,639	1,438	645	616	.....	.....
Deaths.....	4,611	2,472	2,060	30	48	1	...	625	572	1,545	1,311	288	200	45	25
Still-births..	†439	236	192	7	4	...	...	100	99	105	74	21	16	17	7

†Sex undetermined, 0.

BOROUGH OF

Marriages..	629	605	605	24	24	...	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	2,281	1,149	1,103	17	12	...	...	460	428	528	538	174	145	4	4
Deaths.....	1,552	942	581	19	10	...	...	270	170	519	332	85	67	87	22
Still-births..	†101	59	36	3	3	...	...	25	14	30	18	6	5	1	2

†Sex undetermined, 0.

births Reported During the Year Ending December 31, 1913.

NEW YORK.

Single.		Married.		Widowed.		Divorced.		Not Stated.		Month of Utero-gestation.										
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	1	2	3	4	5	6	7	8	9	10	Not Stated.
47,172	47,422	.....	.....	3,636	3,241	460	605	....	...											
20,989	14,841	14,578	10,037	4,551	8,276	62	54	448	80											
.....	.....	.....	.....	.....	.....	....	....	....	...	2	32	113	328	636	806	920	781	2,757	214	40

MANHATTAN.

29,019	29,063	.....	.....	2,092	1,934	319	433	....	...											
10,887	7,565	6,910	4,554	2,074	3,732	47	42	292	44											
.....	.....	.....	.....	.....	.....	....	....	....	...	1	17	71	170	320	415	426	342	1,164	194	20

THE BRONX.

2,602	2,654	.....	.....	204	145	16	23	....	...											
1,808	1,365	1,523	1,091	429	782	3	4	34	3											
.....	.....	.....	.....	.....	.....	....	....	....	...	1	12	14	30	64	71	89	76	289	4	13

BROOKLYN.

13,050	13,169	.....	.....	1,120	973	101	128	....	...											
6,601	4,823	4,856	3,487	1,588	3,059	10	6	88	32											
.....	.....	.....	.....	.....	.....	....	....	....	...	...	3	26	113	214	257	321	297	1,037	16	2

QUEENS.

1,924	1,958	.....	.....	175	143	17	15	....	...											
1,200	846	989	724	299	536	2	2	13	...											
.....	.....	.....	.....	.....	.....	....	....	....	...	...	...	2	10	34	50	70	55	213	...	5

RICHMOND.

577	578	.....	.....	45	46	7	5	....	...											
479	242	300	181	157	167	....	....	21	...											
....	.....	.....	.....	.....	.....	....	....	....	...	...	...	...	5	4	13	14	11	54	...	...

**Corrected Mortality From All Causes.*

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	875	799	189	58	1,921
The Bronx	1,203	.....	99	22	8	1,332
Brooklyn	114	15	.....	263	3	395
Queens	43	7	48	.....	.....	98
Richmond	100	6	44	6	.....	156
Plus	1,460	903	990	480	69	3,902
Minus	1,921	1,332	395	98	156	3,902
Net gain or loss	—461	—429	+595	+382	—87	.....
Deaths reported	36,608	7,471	23,955	4,229	1,639	73,902
Death rate	14.71	12.79	12.98	11.79	17.10	13.76
Corrected deaths	36,147	7,042	24,550	4,611	1,552	73,902
Corrected rate	14.53	12.06	13.30	12.81	16.19	.....

*Corrected death rate means that the death rate of each borough is corrected by the exclusion of the deaths of residents of other boroughs occurring within its limits and the inclusion of the deaths of residents of the borough occurring in other boroughs.

Corrected Mortality of Children Under Five Years of Age.

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	204	154	58	10	426
The Bronx	147	.....	5	1	.....	153
Brooklyn	18	2	.....	27	1	48
Queens	3	.....	5	.....	.....	8
Richmond	36	1	5	1	.....	43
Plus	204	207	169	87	11	678
Minus	426	153	48	8	43	678
Net gain or loss	—222	+54	+121	+79	—32	.....
Deaths reported	10,887	1,723	6,512	1,204	385	20,711
Death rate	43.33	27.32	31.51	29.87	38.99	36.25
Corrected deaths	10,665	1,777	6,633	1,283	353	20,711
Corrected rate	42.87	30.43	35.96	35.65	36.82	.....

Corrected Pulmonary Tuberculosis Mortality.

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	108	234	27	7	376
The Bronx	782	.....	71	16	8	877
Brooklyn	5	.....	.....	52	2	59
Queens	2	1	4	.....	.....	7
Richmond	21	2	8	.....	.....	31
Plus	810	111	317	95	17	1,350
Minus	376	877	59	7	31	1,350
Net gain or loss	+434	—766	+258	+88	—14	.....
Deaths reported	4,121	1,649	2,350	331	150	8,601
Death rate	1.65	2.82	1.27	.92	1.56	1.60
Corrected deaths	4,555	883	2,608	419	136	8,601
Corrected rate	1.83	1.51	1.41	1.16	1.42	.....

Corrected Diarrhoeal Disease Mortality Under Five Years.

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	32	21	6	2	61
The Bronx	4	.....	.....	.....	.....	4
Brooklyn	5	.....	.....	4	.....	9
Queens	1	1	2	.....	.....	4
Richmond	12	1	1	.....	.....	14
Plus	22	34	24	10	2	92
Minus	61	4	9	4	14	92
Net gain or loss	—39	+30	+15	+6	—12	.....
Deaths reported	1,830	261	1,284	260	83	3,718
Death rate	2.28	4.14	6.21	6.45	8.41	6.51
Corrected deaths	1,791	291	1,299	266	71	3,718
Corrected rate	7.13	4.61	6.28	6.60	7.19	.....

Corrected Measles Mortality.

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	1	.....	1	.....	2
The Bronx	79	.....	1	2	.....	82
Brooklyn	1	.....	.....	.....	.....	1
Queens	.....	.....	.....	.....	.....	.....
Richmond	.....	.....	.....	.....	.....	.....
Plus	80	1	1	3	.....	85
Minus	2	82	1	.....	.....	85
Net gain or loss	+78	—81	.....	+3	.....	.....
Deaths reported	290	151	144	26	17	628
Death rate	.12	.26	.08	.07	.18	.12
Corrected deaths	368	70	144	29	17	628
Corrected rate	.15	.12	.08	.08	.18	.....

Corrected Scarlet Fever Mortality.

Place of Death.	Residents of					Total.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Manhattan	.....	14	1	8	.....	23
The Bronx	11	.....	.....	.....	.....	11
Brooklyn	1	.....	.....	1	.....	2
Queens	.....	.....	.....	.....	.....	.....
Richmond	.....	.....	.....	.....	.....	.....
Plus	12	14	1	9	.....	36
Minus	23	11	2	.....	.....	36
Net gain or loss	—11	+3	—1	+9	.....	.....
Deaths reported	217	45	197	37	11	507
Death rate	.09	.08	.11	.10	.11	.09
Corrected deaths	206	48	196	46	11	507
Corrected rate	.08	.08	.11	.13	.11	.....

Deaths of Non-Residents from Certain Causes by Boroughs.

Cause of Death.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	City of New York.
Typhoid fever	7	.....	4	.....	1	12
Pulmonary tuberculosis	55	37	25	1	2	120
Other tuberculous diseases	30	.....	8	.....	2	40
Cancer	149	5	17	2	2	175
Alcoholism	11	.....	.....	1	.....	12
Heart diseases	88	12	31	11	4	146
Acute respiratory diseases	73	2	24	8	.....	107
Diarrhœal diseases	22	.....	9	1	.....	32
Appendicitis	21	.....	2	.....	.....	23
Cirrhosis of liver	8	.....	1	1	1	11
Diseases of women	16	.....	2	.....	.....	18
Congenital debility	47	.....	1	1	1	50
Accidents	92	5	26	7	6	136
Suicides	29	2	3	.....	2	36
Other causes	313	21	83	17	5	439
Total	961	84	236	50	26	1,357
Under 5 years	138	4	28	3	1	174
5 to 25 years	113	17	31	5	8	174
25 to 45 years	277	31	73	11	10	402
45 to 65 years	316	18	59	19	5	417
65 years and over	117	14	45	12	2	190
Deaths in institutions	716	66	131	26	14	953
Deaths in houses	167	12	78	17	4	278
Deaths in other places	78	6	27	7	8	126

Population, Deaths and Death Rates per 1,000 *Population, City*

Year.	1898.	1899.	1900.	1901.	1902.	1903.
Population	3,272,418	3,356,722	3,446,042	3,554,079	3,665,825	3,781,423
Total deaths	66,294	65,343	70,872	70,720	68,112	67,864
Death rate	20.26	19.47	20.57	19.90	18.58	17.95
Total deaths under 5 years	25,499	23,801	25,836	24,256	24,388	22,044
Rate on general population	7.79	7.09	7.49	6.82	6.65	5.83
Rate population under 5 years	67.2	61.1	64.6	59.3	58.4	51.6
Typhoid fever	676	546	718	727	764	653
Rate	.21	.16	.21	.20	.21	.17
Typhus fever	1	....	....	....	....	....
Rate	.0003	....	....	....	....	....
Malarial fever	250	167	216	195	125	90
Rate	.08	.05	.06	.05	.03	.02
Smallpox	1	18	12	410	310	5
Rate	.0003	.005	.003	.12	.08	.001
Measles	651	587	816	449	710	508
Rate	.20	.17	.24	.13	.19	.13
Scarlet fever	703	533	465	1,162	940	734
Rate	.21	.16	.13	.33	.26	.19
Diphtheria and croup	1,778	1,924	2,277	2,068	2,015	2,190
Rate	.54	.57	.66	.58	.55	.58
Whooping-cough	716	514	584	289	606	324
Rate	.22	.15	.17	.08	.17	.09
Cerebro-spinal meningitis	357	394	306	267	265	271
Rate	.11	.12	.09	.08	.07	.07
Pulmonary tuberculosis	7,724	8,015	8,154	8,135	7,569	8,020
Rate	2.36	2.39	2.37	2.29	2.07	2.12
Other tuberculous diseases	1,541	1,562	1,476	1,255	1,314	1,284
Rate	.47	.47	.43	.35	.36	.34
Bronchitis	1,923	1,988	1,964	1,683	1,898	1,560
Rate	.59	.59	.57	.47	.52	.41
Pneumonia	8,094	8,531	10,482	9,168	9,377	9,714
Rate	2.47	2.54	3.04	2.58	2.56	2.57
Diarrhoea under 5 years	6,570	5,569	5,978	6,071	5,190	4,443
Rate on whole population	2.01	1.66	1.73	1.71	1.42	1.17
Rate on population under 5 years.	17.3	14.3	15.0	14.9	12.4	10.4
Cancer	2,006	2,136	2,291	2,463	2,450	2,608
Rate	.61	.64	.66	.69	.63	.69
Bright's and nephritis	4,686	5,113	5,352	5,500	5,461	5,636
Rate	1.43	1.52	1.55	1.55	1.49	1.49
Heart disease	3,847	3,751	3,858	4,626	4,859	4,771
Rate	1.18	1.12	1.12	1.30	1.33	1.26
Puerperal diseases	568	558	711	648	642	637
Rate	.17	.17	.21	.18	.18	.17
Violence	3,677	3,385	3,913	4,636	3,752	4,068
Rate	1.12	1.01	1.14	1.30	1.02	1.08

of New York, Principal Causes, Years 1898 *to* 1913, *Inclusive.*

1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
3,901,023	4,025,742	4,166,556	4,314,237	4,469,248	4,632,078	4,803,264	4,983,385	5,173,064	5,372,983
78,060	73,714	76,203	79,205	73,072	74,105	76,742	75,423	73,008	73,902
20.01	18.31	18.29	18.36	16.35	16.00	15.98	15.13	14.11	13.76
25,542	24,539	25,777	25,794	24,141	24,519	24,268	22,242	20,978	20,711
6.55	6.09	6.19	5.98	5.40	5.29	5.05	4.46	4.05	3.85
58.5	54.9	56.2	54.9	50.0	49.5	47.7	42.1	38.3	36.22
661	649	639	740	536	564	558	545	499	362
.17	.16	.15	.17	.12	.12	.12	.11	.10	.07
....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....
91	53	64	69	34	40	27	38	20	13
.02	.01	.02	.02	.01	.01	.01	.01	.004	.002
7	9	6	9	1	2	5	3	2	....
.002	.002	.001	.002	.0002	.0004	.0010	.0006	.0004	....
895	520	1,145	728	972	997	785	659	671	628
.23	.13	.27	.17	.22	.22	.16	.13	.13	.12
851	473	491	796	1,333	786	953	741	615	507
.22	.12	.12	.19	.29	.17	.20	.15	.12	.09
2,048	1,544	1,898	1,740	1,758	1,714	1,715	1,281	1,125	1,333
.53	.38	.46	.40	.39	.37	.36	.26	.22	.25
197	408	367	393	188	401	294	384	287	420
.05	.10	.09	.09	.04	.09	.06	.08	.05	.08
1,403	2,025	812	642	351	326	294	203	196	202
.36	.50	.19	.15	.08	.07	.06	.04	.04	.04
8,512	8,535	8,955	8,999	8,869	8,643	8,692	8,790	8,591	8,601
2.18	2.12	2.16	2.09	1.98	1.87	1.81	1.76	1.66	1.60
1,257	1,123	1,239	1,263	1,288	1,268	1,382	1,460	1,390	1,430
.32	.28	.30	.29	.29	.27	.29	.29	.27	.26
1,735	1,417	1,319	1,048	819	1,051	928	877	732	693
.44	.35	.32	.24	.18	.23	.19	.18	.14	.13
12,369	9,783	10,868	11,806	9,508	10,614	10,519	10,055	9,979	10,042
3.17	2.43	2.61	2.74	2.13	2.29	2.19	2.02	1.93	1.87
5,647	6,136	6,016	6,611	6,190	5,380	5,918	4,696	4,149	3,668
1.45	1.52	1.44	1.53	1.38	1.16	1.23	.94	.80	.68
12.9	13.7	13.1	14.1	12.8	10.9	11.6	8.9	7.6	6.41
2,709	2,875	3,005	3,227	3,243	3,488	3,710	3,873	4,071	4,223
.69	.71	.72	.75	.73	.76	.77	.78	.79	.78
6,220	5,944	6,108	5,685	5,049	5,522	5,638	5,017	5,724	5,615
1.59	1.48	1.47	1.32	1.13	1.19	1.17	1.02	1.11	1.04
4,996	5,140	5,557	7,237	7,130	6,854	6,870	7,965	8,890	9,674
1.28	1.28	1.33	1.68	1.59	1.48	1.43	1.60	1.74	1.80
727	815	763	783	698	719	761	738	676	668
.19	.20	.18	.18	.16	.16	.16	.15	.13	.12
5,191	4,476	4,741	4,911	4,737	4,403	4,638	5,183	4,762	4,937
1.33	1.11	1.14	1.14	1.06	.95	1.00	1.04	.92	.92

Mortality from the Principal Causes,

Cause of Death.	MANHATTAN.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Total, all causes	3,337	3,303	3,702	3,336	3,399	2,730	2,672	2,765	2,573	2,685	2,723	2,922	36,147
1. Typhoid fever	4	7	8	4	3	5	11	18	29	50	27	14	180
2. Typhus fever	....	....	....	....	....	....	....	....	....	....	....	....	.....
3. Malarial fevers	....	1	....	1	....	....	1	....	....	....	....	1	4
4. Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	.....
5. Measles	26	23	58	47	80	41	22	19	7	7	10	28	368
6. Scarlet fever	22	17	36	28	34	22	7	5	3	8	8	16	206
7. Whooping-cough	7	17	9	23	17	18	23	20	21	19	10	2	186
8. Diphtheria and croup	50	63	80	83	72	76	44	31	23	31	35	47	635
9. Influenza	29	19	21	18	11	1	2	....	2	4	6	13	126
10. Asiatic cholera	....	....	....	....	....	....	....	....	....	....	....	....	.....
11. Cholera nostras	....	....	....	....	....	....	....	....	....	....	....	....	.....
12. Other epidemic diseases	30	28	24	17	15	14	7	8	9	9	11	14	186
13. TuberculosisPulmonalis	404	421	489	449	428	336	336	325	324	317	338	388	4,555
14. Tuberculous Meningitis	25	44	56	41	41	34	33	30	26	27	26	23	406
15. Other forms of Tuberculosis	39	38	38	40	25	35	28	23	20	17	17	21	341
16. Cancer, malignant tumors	178	187	194	171	179	154	163	162	162	168	175	188	2,081
17. Meningitis, simple	23	11	25	21	15	17	11	13	22	14	14	11	197
17a. (of which) Cerebro-spinal meningitis	12	5	11	15	6	11	6	9	17	9	10	6	117
18. Apoplexy and softening of brain	41	49	35	45	36	36	36	41	38	46	24	50	477
19. Organic heart disease	399	362	414	375	380	305	278	288	296	349	364	376	4,186
20. Acute bronchitis	28	31	36	32	39	24	12	23	13	20	28	21	307
21. Chronic bronchitis	1	5	4	2	2	..	4	1	1	2	2	6	30
22. Pneumonia (excluding broncho-pneumonia)	318	371	412	244	278	154	92	85	89	117	178	213	2,551
22a. Broncho-pneumonia	215	295	339	286	264	208	164	120	104	132	174	177	2,478
23. Other respiratory diseases	27	24	25	30	21	23	24	14	11	15	18	11	243
24. Diseases of stomach (cancer excepted)	17	22	16	13	23	18	12	12	13	17	15	24	202
25. Diarrhœal diseases (under 5 years)	73	69	96	112	92	79	236	390	284	182	104	74	1,791
26. Appendicitis and typhylitis	22	19	25	19	32	30	29	24	18	21	26	16	281
27. Hernia and intestinal obstruction	37	20	29	26	26	19	12	17	19	19	25	29	278
28. Cirrhosis of the liver	42	34	48	55	39	29	23	31	24	44	28	30	427
29. Bright's disease and acute nephritis	265	254	276	220	237	189	163	159	172	170	211	227	2,543
30. Diseases of women (not cancerous)	16	10	14	18	18	8	10	17	5	7	5	18	146
31. Puerperal septicæmia	11	15	15	7	5	2	6	5	3	3	3	5	80
32. Other puerperal diseases	14	15	24	19	19	17	11	15	17	14	20	14	199
33. Congenital debility and malformations	230	162	210	204	209	175	216	251	250	179	168	174	2,428
34. Old age	31	32	26	22	25	19	8	15	15	21	19	16	249
35. Violent deaths (suicide excepted)	168	163	151	167	197	197	250	188	151	188	180	181	2,181
a. Sunstroke	....	....	....	....	....	2	22	4	1	....	....	....	29
b. Other accidents	146	150	137	149	177	180	204	169	143	174	165	158	1,952
c. Homicides	22	13	14	18	20	15	24	15	7	14	15	23	200
36. Suicides	44	32	48	34	42	42	32	41	29	46	46	38	474
37. Other causes	498	439	418	460	492	403	364	370	368	418	405	452	5,087
38. Causes not known or ill-defined	3	4	3	3	3	....	2	4	5	4	3	4	38
Under 1 year	620	558	655	676	599	482	597	774	676	540	483	463	7,123
1 year, under 2 years	142	171	224	208	250	186	175	155	106	127	111	103	1,958
Total under 5 years	886	875	1,054	1,055	1,039	841	895	1,047	863	765	673	672	10,665
65 years and over	562	532	613	490	494	435	349	351	348	449	477	516	5,616
70 years and over	370	356	392	325	317	290	240	215	242	310	325	341	3,723
Males	1,863	1,819	2,066	1,890	1,892	1,531	1,522	1,538	1,429	1,463	1,563	1,634	20,210
Females	1,474	1,484	1,636	1,446	1,507	1,199	1,150	1,227	1,144	1,222	1,160	1,288	15,937
Colored	140	139	176	156	162	131	111	131	123	131	110	139	1,649
Chinese	10	8	3	7	12	2	7	4	1	6	4	3	67
Institutions	1,588	1,502	1,771	1,612	1,678	1,428	1,423	1,453	1,208	1,321	1,296	1,411	17,691
Tenements	1,521	1,536	1,680	1,491	1,493	1,136	1,143	1,197	1,277	1,173	1,215	1,312	16,174
Dwellings	138	136	132	118	116	86	57	75	71	93	128	107	1,257
Hotels, etc	56	63	58	43	33	30	21	24	33	45	46	61	513
Others	74	79	77	79	102	95	89	81	70	79	82	66	973
Non-residents	95	71	97	81	101	63	69	67	64	93	64	96	961

for Year Ending December 31, 1913.

THE BRONX.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
641	676	675	631	656	516	548	584	494	493	535	593	7,042
1	2	2	2	...	2	1	3	6	4	6	2	31
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	....
8	4	9	14	19	8	4	3	...	...	1	...	70
1	7	13	5	9	5	2	2	1	...	1	2	48
2	2	6	4	7	2	9	6	4	5	1	1	49
13	19	20	18	21	16	9	7	5	4	6	10	148
5	13	13	4	4	2	1	1	1	...	3	2	49
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
2	2	8	3	4	1	1	1	1	1	...	1	25
74	72	71	83	90	74	73	72	57	73	74	70	883
6	10	5	5	8	4	7	8	4	6	4	5	72
5	5	4	7	7	3	4	5	1	1	3	5	50
54	45	30	37	40	37	32	32	32	33	34	45	451
4	3	2	8	3	3	5	2	1	2	3	2	38
2	1	2	6	2	2	2	1	...	...	3	...	21
5	8	4	4	5	6	8	6	1	3	10	13	73
83	100	100	95	98	88	67	57	78	95	74	103	1,038
3	3	3	5	3	2	3	4	2	2	3	5	38
1	1	...	...	1	...	1	...	...	2	1	...	7
55	79	72	47	45	18	19	22	15	11	36	42	461
37	54	41	32	46	23	23	13	21	25	27	34	376
3	3	8	5	4	4	3	3	2	2	1	5	43
9	3	1	7	2	4	3	3	1	5	8	7	53
16	18	18	11	12	16	38	72	49	25	6	10	291
6	4	6	3	8	4	5	4	...	3	7	6	56
7	6	9	11	8	5	5	4	6	7	6	7	81
6	2	3	11	10	1	4	6	5	4	6	5	63
57	64	57	50	36	28	34	48	38	23	41	45	521
3	2	2	3	2	1	2	2	6	2	2	1	28
9	3	4	3	4	2	...	5	1	3	1	1	36
3	3	5	5	5	5	5	4	3	3	4	6	51
29	28	32	36	37	30	44	41	35	30	36	36	414
4	3	4	3	3	4	3	...	3	...	2	4	33
30	20	25	18	24	31	47	47	22	38	36	28	366
...	...	...	...	...	...	5	4	...	...	...	...	9
27	19	24	18	22	30	41	40	21	36	35	25	338
3	1	1	...	2	1	1	3	1	2	1	3	19
6	5	12	6	13	9	3	6	7	6	7	11	91
94	83	86	84	78	78	83	95	86	74	85	79	1,005
...	...	...	2	...	...	...	...	...	...	...	...	2
92	107	99	99	94	75	106	126	110	84	80	94	1,166
18	34	38	29	37	14	38	22	16	15	9	14	284
137	165	176	159	169	120	180	178	142	112	112	127	1,777
119	132	126	118	110	93	82	84	84	88	111	124	1,271
84	90	92	79	71	57	54	54	59	55	66	75	836
344	384	364	345	342	272	306	317	248	261	287	327	3,797
297	292	311	286	314	244	242	267	246	232	248	266	3,245
5	15	12	5	9	12	8	10	8	8	11	10	113
...	...	...	...	...	...	...	...	...	...	...	...	....
271	314	292	306	300	246	240	245	224	205	243	267	3,153
255	286	294	236	263	173	211	212	187	221	184	242	2,764
146	124	131	133	134	104	98	96	90	85	110	112	1,363
1	...	...	...	...	1	2	4	1	1	1	...	11
13	12	20	11	12	16	10	29	6	18	13	20	180
7	9	5	7	8	5	4	7	6	5	11	10	84

Mortality from the Principal Causes, for Year

Cause of Death.	Brooklyn.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Total, all causes	2,193	2,304	2,546	2,180	2,079	1,909	1,894	1,900	1,809	1,766	1,838	2,132	24,550
1. Typhoid fever	7	7	8	6	7	5	12	11	15	17	18	9	122
2. Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	....
3. Malarial fevers	1	1	...	...	...	1	1	...	...	1	...	...	5
4. Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	....
5. Measles	4	7	13	19	19	30	17	8	2	4	15	6	144
6. Scarlet fever	37	28	30	33	19	23	3	1	4	5	6	7	196
7. Whooping-cough	8	6	13	8	14	14	20	20	14	8	4	5	134
8. Diphtheria and croup	42	72	54	53	43	29	20	19	25	21	31	41	450
9. Influenza	33	33	34	17	4	4	...	2	2	...	8	12	149
10. Asiatic cholera	...	...	...	...	...	...	...	...	...	...	...	...	....
11. Cholera nostras	...	...	...	...	...	...	...	...	...	...	...	...	....
12. Other epidemic diseases	10	12	13	16	9	9	6	8	8	3	7	12	113
13. Tuberculosis pulmonalis	248	239	266	257	257	193	212	183	164	180	187	222	2,608
14. Tuberculous meningitis	16	23	31	36	29	23	27	18	13	15	15	19	265
15. Other forms of tuberculosis	15	17	13	16	10	11	20	19	14	8	16	20	179
16. Cancer, malignant tumors	84	100	130	101	118	113	120	103	131	127	113	106	1,346
17. Meningitis, simple	7	8	9	8	12	10	12	8	6	7	10	11	108
17a. (of which) Cerebro-spinal meningitis	5	3	5	4	3	4	3	5	4	2	5	5	48
18. Apoplexy and softening of brain	19	25	29	20	20	20	15	14	21	23	22	33	261
19. Organic heart disease	294	325	320	337	335	294	236	231	245	264	307	366	3,554
20. Acute bronchitis	29	43	39	23	32	20	14	11	9	19	25	39	303
21. Chronic bronchitis	9	7	12	8	10	4	2	3	6	3	4	10	78
22. Pneumonia (excluding broncho-pneumonia)	244	278	302	178	119	123	68	65	69	85	104	185	1,820
22a. Broncho-pneumonia	181	187	231	154	157	116	103	80	93	79	127	136	1,644
23. Other respiratory diseases	14	22	31	19	20	17	16	9	10	7	19	14	198
24. Diseases of stomach (cancer excepted)	14	9	14	12	13	19	12	9	12	13	14	19	160
25. Diarrhœal diseases (under 5 years)	44	42	62	46	54	86	250	325	184	110	56	40	1,299
26. Appendicitis and typhlitis	16	15	29	22	20	24	23	17	21	12	7	18	224
27. Hernia and intestinal obstruction	28	20	14	18	15	15	15	14	9	16	7	21	192
28. Cirrhosis of the liver	39	26	40	24	31	29	21	22	22	22	18	20	314
29. Bright's disease and acute nephritis	196	203	206	185	183	150	135	143	139	167	168	179	2,054
30. Diseases of women (not cancerous)	14	7	14	13	13	10	9	5	6	11	9	10	121
31. Puerperal septicæmia	7	10	9	9	6	9	5	5	4	6	7	4	81
32. Other puerperal diseases	9	13	15	11	13	13	11	17	9	22	9	7	149
33. Congenital debility and malformations	99	111	107	99	109	88	83	116	123	119	104	144	1,302
34. Old age	13	18	18	10	9	6	4	10	15	4	11	6	124
35. Violent deaths (suicide excepted)	87	103	86	78	85	98	115	103	99	93	98	94	1,139
a. Sunstroke	...	...	...	...	1	1	16	4	2	...	...	...	24
b. Other accidents	76	97	83	75	78	92	92	85	91	83	91	85	1,028
c. Homicides	11	6	3	3	6	5	7	14	6	10	7	9	87
36. Suicides	22	17	21	22	14	6	9	21	17	22	19	20	210
37. Other causes	303	270	332	320	278	298	276	279	296	270	270	297	3,489
38. Causes not known or ill-defined	...	...	...	2	2	...	2	1	2	3	3	...	15
Under 1 year	330	315	404	344	358	316	414	521	424	319	300	338	4,383
1 year, under 2 years	77	128	121	120	118	120	110	105	74	67	72	81	1,193
Total under 5 years	498	569	661	574	589	529	608	695	550	437	444	479	6,633
65 years and over	476	502	522	397	372	361	322	292	338	346	387	466	4,781
70 years and over	324	360	367	285	254	258	204	190	231	231	277	332	3,313
Males	1,207	1,232	1,353	1,179	1,116	1,058	968	1,031	946	973	967	1,114	13,144
Females	986	1,072	1,193	1,001	963	851	926	869	863	793	871	1,018	11,406
Colored	46	63	50	46	54	52	35	37	46	28	46	45	548
Chinese	...	1	...	...	...	1	...	2	1	...	...	1	6
Institutions	630	636	753	645	596	618	584	605	507	488	511	602	7,175
Tenements	919	949	1,049	860	842	737	812	844	714	736	756	885	10,103
Dwellings	548	624	666	577	525	480	404	366	451	442	463	545	6,091
Hotels, etc	19	18	8	6	6	6	9	7	9	10	15	11	124
Others	24	29	31	39	49	41	45	38	50	42	37	37	462
Non-residents	28	22	14	22	18	22	20	14	18	19	16	23	236

Ending December 31, 1913.—Continued.

QUEENS.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
342	394	475	391	359	383	386	447	368	335	333	398	4,611
1	1	3	2	1	1	1	4	3	4	2	1	24
...	...	...	...	...	...	...	...	...	...	...	...	.....
...	...	...	...	...	...	...	...	2	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	....
1	2	7	4	2	6	3	1	...	...	...	3	29
4	3	11	10	4	5	2	2	3	...	2	...	46
3	1	5	3	1	6	3	9	4	2	1	2	40
8	12	11	8	5	11	3	7	3	5	8	7	88
2	1	3	5	1	1	...	...	...	...	3	2	18
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	2	2	...	...	...	1	...	1	...	2	8
20	35	40	40	39	49	30	42	29	26	32	37	419
3	2	4	5	5	3	3	4	2	2	1	2	36
2	2	6	6	1	4	5	4	2	7	4	5	48
15	18	20	21	19	20	24	25	23	29	18	20	252
1	2	1	5	...	2	1	2	4	3	1	1	23
1	1	1	1	...	...	1	2	1	3	...	1	12
1	2	3	3	12	4	2	6	3	8	7	3	54
49	64	83	52	48	52	58	53	42	45	54	58	658
9	5	5	3	2	1	3	1	1	2	1	6	39
2	2	2	...	3	...	...	1	...	...	1	4	15
24	40	47	22	23	23	15	16	15	14	24	34	297
30	33	33	28	14	14	10	14	15	13	19	32	255
1	4	3	4	3	1	3	2	5	1	5	2	34
4	1	8	2	5	4	3	7	1	3	...	2	40
10	6	10	8	13	19	57	58	41	22	15	7	266
5	4	3	8	5	6	1	7	4	...	4	1	48
1	5	1	7	1	7	2	4	3	3	2	3	39
7	6	4	7	6	3	4	3	6	8	6	5	65
22	22	35	27	25	27	21	26	42	32	18	32	329
...	4	3	1	1	3	2	2	...	...	...	3	19
2	4	1	3	4	1	2	1	2	2	3	...	25
1	3	6	3	3	2	4	4	2	2	2	4	36
25	27	23	20	28	23	17	41	26	29	28	31	318
1	7	3	1	4	2	1	2	2	...	3	5	31
17	17	29	18	20	21	39	29	25	16	17	29	277
...	...	...	...	...	1	...	...	...	...	...	...	1
15	16	28	16	19	19	36	29	24	15	17	25	259
2	1	1	2	1	1	3	...	1	1	...	4	17
7	6	4	2	5	3	1	3	5	4	4	6	50
63	53	56	60	55	59	65	66	53	51	48	48	677
1	...	...	1	1	...	1	...	...	1	...	1	6
63	61	70	62	59	63	91	111	85	72	53	76	866
15	22	26	18	15	15	18	22	16	18	10	14	209
93	96	122	100	93	105	127	152	114	96	79	106	1,283
78	86	98	72	64	74	61	68	65	70	74	78	888
49	62	71	44	40	52	40	47	39	45	57	56	602
183	210	257	234	203	194	219	230	192	177	191	213	2,503
159	184	218	157	156	189	167	217	176	158	142	185	2,108
4	5	9	9	4	2	13	8	6	4	5	9	78
...	...	...	...	...	...	...	1	...	...	...	...	1
52	51	68	62	55	60	59	58	55	46	56	50	672
80	94	106	94	69	88	98	105	94	89	86	92	1,095
172	205	246	195	200	180	154	216	173	158	160	196	2,255
1	1	1	2	2	2	6	6	4	4	3	8	40
4	10	11	10	14	6	32	23	17	13	9	18	167
5	2	3	7	5	2	4	6	5	3	4	4	50

Mortality from the Principal Causes,

Cause of Death.	RICHMOND.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Total, all causes	142	121	149	133	124	117	123	145	110	102	123	163	1,552
1. Typhoid fever	1	...	...	...	1	...	...	1	...	...	1	1	5
2. Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	....
3. Malarial fevers	...	1	...	...	...	...	...	...	...	...	...	...	1
4. Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	....
5. Measles	3	6	3	3	1	1	...	...	...	...	...	...	17
6. Scarlet fever	2	...	1	1	3	2	1	1	...	...	...	...	11
7. Whooping-cough	...	...	...	...	1	2	2	1	2	2	...	1	11
8. Diphtheria and croup	...	1	...	1	...	1	1	2	...	1	1	4	12
9. Influenza	2	1	2	3	...	...	...	...	...	...	...	...	8
10. Asiatic cholera	...	...	...	...	...	...	...	...	...	...	...	...	....
11. Cholera nostras	...	...	...	...	...	...	...	...	...	...	...	...	....
12. Other epidemic diseases	...	...	...	...	...	1	...	...	1	...	...	1	3
13. Tuberculosis pulmonalis	13	9	16	18	19	10	9	9	3	8	11	11	136
14. Tuberculous meningitis	...	1	1	1	4	2	2	1	1	2	3	...	18
15. Other forms of tuberculosis	1	1	2	...	3	1	...	3	1	1	...	2	15
16. Cancer, malignant tumors	7	4	10	12	5	10	7	9	8	6	6	9	93
17. Meningitis, simple	...	...	...	1	...	1	2	1	1	1	...	...	7
17a. (of which) Cerebro-spinal meningitis	...	...	...	1	...	...	1	1	1	...	...	...	4
18. Apoplexy and softening of brain	1	4	3	3	2	1	3	4	3	4	5	6	39
19. Organic heart disease	23	28	23	19	12	13	20	15	18	12	24	31	238
20. Acute bronchitis	1	1	...	...	...	1	...	...	1	...	1	1	6
21. Chronic bronchitis	1	1	...	...	...	2	...	...	...	1	...	...	5
22. Pneumonia (excluding broncho-pneumonia)	12	9	17	3	4	6	2	3	3	3	3	14	79
22a. Broncho-pneumonia	16	11	10	7	6	5	2	6	1	2	6	9	81
23. Other respiratory diseases	...	...	3	...	...	...	...	...	...	1	...	...	4
24. Diseases of stomach (cancer excepted)	2	1	2	2	...	...	...	1	2	...	1	...	11
25. Diarrhœal diseases (under 5 years)	2	1	...	2	...	4	17	22	11	9	2	1	71
26. Appendicitis and typhilitis	...	...	1	2	1	...	3	1	...	...	...	1	9
27. Hernia and intestinal obstruction	2	...	1	...	2	3	1	2	...	...	2	2	15
28. Cirrhosis of the liver	...	1	2	1	...	2	...	3	2	...	...	3	14
29. Bright's disease and acute nephritis	12	8	20	14	11	9	14	12	9	14	21	24	168
30. Diseases of women (not cancerous)	1	1	...	1	1	...	1	...	...	...	2	...	7
31. Puerperal septicæmia	1	...	...	...	1	...	...	1	1	...	...	...	4
32. Other puerperal diseases	...	2	...	1	1	...	...	1	...	...	2	...	7
33. Congenital debility and malformations	8	6	7	2	11	5	11	7	11	8	10	6	92
34. Old age	1	2	2	2	2	1	2	1	...	...	...	...	13
35. Violent deaths (suicide excepted)	6	3	5	15	14	10	16	21	8	17	6	8	129
a. Sunstroke	...	...	...	...	...	...	1	...	...	...	...	...	1
b. Other accidents	6	2	5	14	14	10	14	21	8	17	6	8	125
c. Homicides	...	1	...	1	...	...	1	...	...	...	...	...	3
36. Suicides	1	2	...	4	2	...	1	2	...	3	1	4	20
37. Other causes	23	16	18	15	15	24	6	15	22	7	15	24	200
38. Causes not known or ill-defined	...	...	...	...	2	...	...	...	1	...	...	...	3
Under 1 year	23	19	16	13	17	20	30	31	24	19	14	16	242
1 year, under 2 years	7	8	6	6	6	4	4	5	3	4	3	3	59
Total under 5 years	34	29	25	23	27	31	39	46	29	28	19	23	353
65 years and over	40	32	49	33	32	35	27	27	32	22	43	54	426
70 years and over	26	31	40	26	17	31	16	22	25	19	31	39	323
Males	78	76	81	87	82	78	78	91	61	73	69	107	961
Females	64	45	68	46	42	39	45	54	49	29	54	56	591
Colored	2	1	...	1	4	1	2	3	4	1	4	6	29
Chinese	...	...	...	...	...	...	...	...	...	...	...	...	....
Institutions	46	57	61	64	57	60	57	76	42	43	65	69	697
Tenements	14	7	11	13	13	11	7	15	24	7	8	12	142
Dwellings	75	60	73	62	50	47	50	50	45	52	55	81	700
Hotels, etc	4	3	5	1	...	1	...	2	...	1	3	1	21
Others	4	2	3	11	8	4	12	14	2	9	7	3	79
Non-residents	3	2	2	1	1	...	...	3	5	2	4	3	26

Ending December 31, 1913.—Continued.

CITY OF NEW YORK.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
6,655	6,798	7,547	6,671	6,617	5,655	5,623	5,841	5,354	5,381	5,552	6,208	73,902
14	17	21	14	12	13	25	37	53	75	54	27	362
....	....	..	....	....	....	....	....	....	....	....	....	.....
1	3	....	1	....	1	2	....	2	2	....	1	13
....	....	....	....	....	....	....	....	....	....	....	....	.....
42	42	90	87	121	86	46	31	9	11	26	37	628
66	55	91	77	69	57	15	11	11	13	17	25	507
20	26	33	38	40	42	57	56	45	36	16	11	420
113	167	165	163	141	133	77	66	56	62	81	109	1,333
71	67	73	47	20	8	3	3	5	4	20	29	350
....	....	....	....	....	....	....	....	....	....	....	....	.....
....	....	....	....	....	....	....	....	....	....	....	....	.....
42	42	47	38	28	25	14	18	19	14	18	30	335
759	776	882	847	833	662	660	631	577	604	642	728	8,601
50	80	97	88	87	66	72	61	46	52	49	49	797
62	63	63	69	46	54	57	54	38	34	40	53	633
338	354	384	342	361	334	346	331	356	363	346	368	4,223
35	24	37	43	30	33	31	26	34	27	28	25	373
20	10	19	27	11	17	13	18	23	14	18	12	202
67	88	74	75	75	67	64	71	66	84	68	105	904
848	879	940	878	873	752	659	644	679	765	823	934	9,674
70	83	83	63	76	48	32	39	26	43	58	72	693
14	16	18	10	16	6	7	5	7	8	8	20	135
653	777	850	494	469	324	196	191	191	230	345	488	5,208
479	580	654	507	487	366	302	233	234	251	353	388	4,834
45	53	70	58	48	45	46	28	28	26	43	32	522
46	36	41	36	43	45	30	32	29	38	38	52	466
145	136	186	179	171	204	598	867	569	348	183	132	3,718
49	42	64	54	66	64	61	53	43	36	44	42	618
75	51	54	62	52	49	35	41	37	45	42	62	605
94	69	97	98	86	64	52	65	59	78	58	63	883
552	551	594	496	492	403	367	388	400	406	459	507	5,615
34	24	33	36	35	22	24	26	17	20	18	32	321
30	32	29	22	20	14	13	17	11	14	14	10	226
27	36	50	39	41	37	31	41	31	41	36	32	442
391	334	379	361	394	321	371	456	445	365	346	391	4,554
50	62	53	38	43	32	18	28	35	25	35	31	450
308	306	296	296	340	357	467	388	305	352	337	340	4,092
....	....	....	....	1	4	44	12	3	....	....	....	64
270	284	277	272	310	331	387	344	287	325	314	301	3,702
38	22	19	24	29	22	36	32	15	27	23	39	326
80	62	85	68	76	60	46	73	58	81	77	79	845
981	861	911	939	918	860	794	825	825	820	824	899	10,457
4	4	3	8	8	1	5	5	8	8	6	5	65
1,128	1,060	1,244	1,194	1,127	956	1,238	1,563	1,319	1,034	930	987	13,780
259	363	415	382	426	338	345	309	215	231	205	215	3,703
1,648	1,734	2,038	1,911	1,917	1,625	1,849	2,119	1,698	1,438	1,327	1,407	20,711
1,275	1,284	1,408	1,110	1,072	998	841	822	867	975	1,092	1,238	12,982
853	899	962	759	699	688	554	528	596	660	756	843	8,797
3,675	3,721	4,121	3,735	3,635	3,133	3,093	3,207	2,876	2,947	3,077	3,395	40,615
2,980	3,077	3,426	2,936	2,982	2,522	2,530	2,634	2,478	2,434	2,475	2,813	33,287
197	223	247	217	233	198	169	189	187	172	176	209	2,417
10	9	3	7	12	3	· 7	7	2	6	4	4	74
2,587	2,560	2,945	2,689	2,686	2,412	2,363	2,437	2,036	2,103	2,171	2,399	29,388
2,789	2,872	3,140	2,694	2,680	2,145	2,371	2,373	2,296	2,226	2,249	2,543	30,278
1,079	1,149	1,248	1,085	1,025	897	763	803	830	830	916	1,041	11;666
81	85	72	52	41	40	38	43	47	61	68	81	709
119	132	142	150	185	162	188	185	145	161	148	144	1,861
138	106	121	118	133	92	97	97	98	122	99	136	1,337

CITY OF

Deaths of Males by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
I. General Diseases.									
1. Typhoid fever	362	224	....	1	1	1	3	6	13
2. Typhus fever	....	....	....	....	....	...	...	....	....
3. Relapsing fever	....	....	....	....	....	...	...	....	....
4. Malarial fever	13	6	1	....	....	...	...	1	....
5. Smallpox	....	....	....	....	....	...	...	....	....
6. Measles	628	327	90	134	45	28	13	310	14
7. Scarlet fever	507	268	4	28	49	49	33	163	63
8. Whooping Cough	420	175	82	66	15	9	...	172	3
9. Diphtheria and Croup	1,333	725	69	174	136	92	76	547	137
10. Influenza	350	155	12	5	4	1	1	23	4
11. Miliary fever	....	....	....	....	....	...	...	....	....
12. Asiatic cholera	....	....	....	....	....	...	...	....	....
13. Cholera nostras	....	....	....	....	....	...	...	....	....
14. Dysentary	36	15	1	1	1	1	...	4	1
15. Plague	....	....	....	....	....	...	...	....	....
16. Yellow fever	....	....	....	....	....	...	...	....	....
17. Leprosy	1	1	....	....	....	...	...	....	....
18. Erysipelas	283	152	69	6	1	...	1	77	1
19. Other epidemic diseases	15	13	5	1	2	1	...	9	2
20. Pyaemia, septicaemia	80	42	1	1	1	2	...	5	....
21. Glanders	1	1	....	....	....	...	...	....	....
22. Malignant pustule	3	2	....	....	....	...	...	....	....
23. Hydrophobia	8	6	....	....	....	...	...	....	4
24. Tetanus, trismus	39	32	9	....	....	1	1	11	1
25. Mycoses	5	4	....	....	....	...	...	....	....
26. Pellagra	4	4	....	....	....	...	...	....	....
27. Beriberi	....	....	....	....	....	...	...	....	....
28. Tuberculosis of lungs	8,601	5,605	15	28	11	7	9	70	37
29. Acute miliary tuberculosis	169	95	9	7	3	...	2	21	1
30. Tuberculous meningitis	797	414	88	91	65	31	20	295	47
31. Abdominal tuberculosis	187	92	11	7	5	5	1	29	8
32. Pott's disease	71	42	1	....	2	2	3	8	3
33. White swelling	35	18	1	1	....	....	2	4	1
34. Tuberculosis of other organs	98	61	6	3	1	1	...	11	2
35. General tuberculosis	73	35	6	4	2	1	1	14	1
36. Rachitis	31	19	10	4	3	...	1	18	....
37. Syphilis	493	300	125	1	1	2	...	129	....
38a. Soft chancre	2	2	....	....	....	...	...	....	....
38b. Gonococcic infection	46	15	3	1	....	...	...	4	....
39. Cancers, etc., of the mouth	151	127	1	....	....	...	...	1	....
40. Cancer of stomach, liver	1,646	822	....	....	1	...	1	2	1
41. Cancer of intestines	650	274	....	....	....	...	...	....	....
42. Cancer of female genital organs	610	....	....	....	....	...	...	....	....
43. Cancer of the breast	365	6	....	....	....	...	...	....	....
44. Cancer of the skin	62	37	....	....	....	...	...	....	....
45. Cancer of other organs and unspecified	739	474	....	2	4	4	3	13	3
46. Other tumors (except of female genital organs)	22	7	....	....	....	1	...	1	....
47. Acute articular rheumatism	319	170	4	....	3	3	8	18	29
48. Chronic rheumatism and gout	64	22	....	....	....	...	1	1	....
49. Scurvy	8	5	3	1	....	...	...	4	....
50. Diabetes	884	366	1	2	....	...	...	3	6
51. Exophthalmic goitre	50	9	....	....	....	...	1	1	....
52. Addison's disease	9	6	....	....	....	...	...	....	....
53. Leukaemia	113	65	2	4	2	...	1	9	3
54. Anæmia chlorosis	173	67	2	1	2	...	...	5	3
55. Other general diseases	49	20	4	....	....	...	2	6	3
56. Alcoholism, acute and chronic	656	523	....	....	....	...	...	....	....
57. Lead poisoning	14	14	....	....	....	...	...	....	....
58. Other chronic poisonings of occupation	1	1	....	....	....	...	...	....	....
59. Other chronic poisonings	14	9	....	....	....	...	...	....	....
II. Diseases of Nervous System and Organs of Sense.									
60. Encephalitis	20	12	....	....	....	1	...	1	1
61. Simple meningitis (of which)	373	201	60	25	18	5	6	114	24
61a. Cerebro-spinal meningitis	202	108	36	10	9	4	5	64	17
62. Locomotor ataxia	123	103	....	....	....	...	...	....	....
63. Other diseases of spinal cord (of which)	228	121	4	8	5	6	3	26	4
63a. Acute anterio-poliomelitis	55	24	3	4	3	4	3	17	4

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
14	21	40	34	20	26	12	12	12	8	3	2	1	...	...	...	3	2	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
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...	...	...	3	...	...	...	...	1	...	...	1	...	...	...	...	...	..	..
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17	16	5	1	1	1	1	...	...	...	...	...	...	...	...	...	2	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	..	..
22	10	2	1	2	1	1	1	1	...	...	...	...	...	...	...	13	..	..
3	...	4	...	3	12	12	15	11	15	10	10	17	5	7	4	5	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
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...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
1	1	2	6	5	6	9	7	12	5	9	4	4	1	1	1	3	1	..
...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	..	..
4	6	1	3	3	6	5	2	2	...	4	...	1	...	...	...	...	..	..
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	..	..
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
3	1	4	2	3	...	2	1	2	...	2	...	...	...	...	...	2	..	..
...	...	1	...	...	1	...	1	1	...	...	...	...	...	...	...	...	..	..
...	...	...	...	1	1	...	...	2	...	...	...	...	...	...	...	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
37	232	512	659	635	797	783	644	501	332	179	93	53	28	7	6	270	32	3
1	6	9	10	9	14	10	5	2	2	4	1	...	...	...	...	8	..	..
10	15	12	8	6	8	6	2	1	...	2	1	1	...	...	...	18	..	..
3	4	5	11	4	7	6	4	4	2	2	3	...	...	...	...	6	1	..
4	7	2	4	4	3	3	1	...	...	...	3	...	...	...	...	2	..	..
2	1	1	1	1	...	2	...	2	1	2	...	...	...	...	...	1	..	..
3	4	4	6	8	9	6	3	2	...	2	...	1	...	...	...	7	..	..
1	1	4	2	...	6	2	1	3	...	...	...	...	...	...	...	1	..	..
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	..	..
...	3	7	10	23	29	20	34	14	17	4	6	3	1	...	...	17	2	..
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	..	..
...	1	2	1	2	2	...	1	...	...	1	1	...	...	...	...	...	..	..
1	3	...	...	3	1	13	14	19	23	20	11	8	7	2	1	...	..	..
...	...	1	3	18	22	53	105	124	124	128	106	79	38	13	5	9	2	..
2	1	2	8	5	24	13	23	39	41	34	27	34	10	8	3	3	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	1	1	...	1	1	...	2	...	...	...	..	..
...	...	...	...	1	2	...	4	6	...	5	5	5	6	2	1	...	..	..
4	6	7	9	13	27	33	44	49	59	59	62	40	29	11	6	6	2	..
...	...	...	...	...	...	...	...	1	1	2	2	...	...	...	...	...	..	..
18	20	13	10	7	10	6	11	10	8	6	3	...	1	...	...	4	..	..
1	...	...	1	...	...	1	1	1	3	1	2	6	3	...	1	...	..	..
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
3	4	5	4	13	20	21	40	37	54	57	50	31	13	4	1	2	4	..
...	...	1	1	2	...	...	2	2	...	...	...	...	...	...	...	...	..	.
...	...	...	...	2	1	1	...	...	...	1	...	1	...	...	...	...	..	..
4	9	6	3	3	8	5	4	3	1	1	2	2	2	...	...	1	..	..
...	3	...	2	2	6	8	6	8	11	5	2	1	4	1	...	...	..	..
2	3	1	2	1	1	...	...	...	...	...	...	...	...	...	1	1	..	..
...	...	8	36	57	95	92	80	71	31	21	24	5	2	1	...	5	1	..
...	...	1	4	...	...	1	4	1	1	...	...	...	2	...	...	...	..	..
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	.
...	...	3	2	...	...	2	...	1	...	...	...	1	...	...	...	1	..	.
...	...	1	1	1	4	2	...	1	...	...	...	...	...	...	...	1	..	.
9	4	7	9	6	7	8	4	7	...	...	1	...	1	...	...	5	..	.
5	3	4	3	4	1	1	1	3	...	...	1	...	1	...	...	2	..	.
...	...	...	1	2	4	13	12	24	12	15	10	6	3	...	1	1	..	..
5	2	3	3	3	6	7	12	9	5	11	11	8	4	2	...	...	..	..
1	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	..	..

CITY OF

Deaths of Males by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
64. Apoplexy, cerebral hæmorrhage	889	445	2	....	....	...	...	2	....
65. Softening of brain	15	9	....	....	....	...	...	....	....
66. Paralysis, unspecified	58	21	....	....	....	...	...	....	....
67. General paresis	259	199	....	....	....	...	...	....	....
68. Other forms of insanity	78	34	....	....	....	...	...	....	....
69. Epilepsy	115	68	3	....	1	1	1	6	3
70. Convulsions (not puerperal)	2	2	....	....	....	...	...	....	....
71. Convulsions of infants	201	114	88	20	5	1	...	114	....
72. Chorea	7	1	....	....	....	...	...	....	....
73a. Hysteria	10	2	....	....	....	...	...	....	....
73b. Neuralgia and neuritis	10	1	....	....	....	...	...	....	....
74. Other nervous diseases	154	83	11	5	2	2	...	20	5
75a. Follicular conjunctivitis	2	1	1	....	....	...	...	1	....
75b. Trachoma	....	....	....	....	....	...	...	....	....
75c. Other diseases of eye and appendages	1	1	....	....	....	...	...	....	....
76. Diseases of ear	269	158	27	11	7	2	4	51	13
III. Diseases of Circulatory System.									
77. Pericarditis	60	39	1	1	1	...	...	3	3
78. Acute endocarditis	535	278	11	11	7	5	6	40	19
79. Organic heart diseases	9,674	4,807	11	6	5	3	8	33	65
80. Angina pectoris	205	131	....	....	....	...	...	....	....
81. Diseases of arteries, aneurism, etc	2,182	1,160	1	....	....	...	...	1	....
82. Embolism, thrombosis	88	44	....	....	....	...	1	1	1
83. Diseases of veins (hæmorrhoids, varices, phlebitis, etc.)	33	9	1	....	....	...	...	1	....
84. Diseases of lymphatics (lymphangitis,etc.)	29	18	9	2	2	1	...	14	1
85. Hæmorrhage	7	4	....	....	....	...	...	....	....
IV. Diseases of Respiratory System.									
86. Diseases of nasal fossæ	4	4	1	1	....	...	...	2	....
87. Diseases of the larynx	33	22	2	1	3	1	5	12	3
88. Diseases of thyroid gland	18	2	1	....	....	...	...	1	....
89. Acute bronchitis	693	365	263	41	11	6	5	326	2
90. Chronic bronchitis	135	58	1	....	....	...	...	1	....
91. Broncho-pneumonia	4,834	2,478	1,165	588	147	71	25	1,996	48
92. Lobar pneumonia	5,208	3,091	294	240	93	43	28	698	57
93. Pleurisy	250	149	15	29	20	2	...	66	6
94. Congestion of lungs, pulmonary apoplexy	36	19	3	1	....	...	...	4	....
95. Gangrene of lung	5	5	....	....	....	...	...	....	....
96. Asthma	112	52	1	....	2	...	...	3	....
97. Pulmonary emphysema	27	17	....	....	....	...	...	....	....
98. Other diseases of respiratory system (tuberculosis excepted)	37	28	....	....	1	...	...	1	1
V. Diseases of Digestive System.									
99a. Diseases of teeth and gums	22	10	2	1	....	...	1	4	....
99b. Other diseases of mouth	8	4	1	....	1	...	...	2	....
100. Angina and other diseases of pharynx	106	70	20	6	5	2	2	35	4
101. Diseases of œsophagus	7	3	....	....	....	...	...	....	....
102. Ulcer of the stomach	283	193	1	....	....	1	...	2	....
103. Other diseases of stomach (cancer excepted)	183	87	32	6	....	...	...	38	1
104. Diarrhœa and enteritis (under two years)	3,554	1,902	1,641	261	....	...	...	1,902	....
105. Diarrhœa and enteritis (two years and over)	481	208	....	....	49	16	12	77	18
(of which) Due to alcoholism	....	....	....	....	....	...	...	....	....
106. Ankylostomiasis	1	1	....	....	....	...	...	....	....
107. Intestinal parasites	4	2	....	....	....	...	...	....	....
108. Appendicitis and typhlitis	618	343	2	1	3	4	4	14	30
109. Hernia, intestinal obstruction	605	287	52	8	3	3	5	71	6
110a. Diseases of anus and stercoral fistulæ	28	21	1	....	....	...	...	1	....
110b. Other diseases of intestines	62	26	....	....	....	...	...	....	1
111. Acute yellow atrophy of liver	16	10	....	....	....	...	1	1	....
112. Hydatid tumor of liver	4	3	....	....	....	...	...	....	....
113. Cirrhosis of liver	883	568	....	....	1	...	...	1	1
114. Biliary calculi	149	48	....	....	....	...	...	....	....
115. Other diseases of liver	168	77	3	....	....	2	...	5	....
116. Diseases of spleen	10	7	1	....	....	...	...	1	1
117. Simple peritonitis (non-puerperal)	28	15	2	....	....	...	...	2	1

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
...	1	4	4	6	9	12	30	58	56	80	53	59	42	16	13	16	1	..
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...	1	6	5	19	30	33	36	28	18	8	6	5	1	3	...	8	..	..
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4	6	5	9	3	6	6	4	6	5	1	2	1	...	...	1	2	..	..
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1	2	2	4	2	3	2	8	4	3	1	...	1	...	...	...	2	..	..
19	19	25	23	22	15	20	20	27	12	9	6	1	...	1	...	6	1	..
77	77	86	107	161	238	325	390	485	507	580	572	520	325	154	105	117	2	1
...	...	...	...	1	1	10	15	12	21	28	18	10	10	5	...	1	..	..
...	1	...	2	8	17	31	66	96	111	161	204	177	146	87	52	33	..	..
1	1	1	2	2	1	...	3	6	1	3	4	8	2	4	3	1	..	..
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1	9	9	13	17	15	25	18	46	42	52	55	34	51	25	22	107	1	..
26	58	103	157	207	261	246	265	254	203	160	146	123	68	34	25	111	8	3
...	5	9	6	5	4	5	11	12	1	7	6	3	...	2	1	3	..	..
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...	...	...	2	2	4	3	6	7	8	6	5	2	1	...	2	...	1	..
...	...	2	5	4	7	7	7	8	10	8	8	2	2	1	1	2	1	..
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CITY OF

Deaths of Males by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
118. Other diseases of digestive system (except tuberculosis and cancer)	42	25	1	....	....	...	...	1	....
VI. Diseases of Genito-Urinary System.									
119. Acute nephritis	608	313	29	14	6	5	5	59	16
120. Bright's disease	5,007	2,592	3	1	....	2	4	10	3
121. Chyluria	....	....	....	....	....	...	...	....	....
122. Other diseases of the kidneys and appendages	104	58	5	1	....	...	...	6	....
123. Calculi of the urinary tract	54	41	....	....	....	...	...	....	....
124. Diseases of bladder	41	24	1	....	....	...	...	1	....
125. Diseases of urethra, urinary abscess, etc.	32	31	....	....	....	...	...	....	....
126. Diseases of the prostrate	151	151	....	....	....	...	...	....	....
127. Non-venereal diseases of male genital organs	11	11	10	....	....	...	...	10	....
128. Uterine hæmorrhage (not puerperal)	2	....	....	....	....	...	...	....	....
129. Uterine tumor (not cancer)	109	....	....	....	....	...	...	....	....
130a. Metritis	22	....	....	....	....	...	...	....	....
130b. Other diseases of uterus	28	....	....	....	....	...	...	...	....
131. Ovarian cysts and tumors	45	....	....	....	....	...	...	....	....
132. Salpingitis and other diseases of female genital organs	113	....	....	....	....	...	...	....	....
133. Diseases of breast (not puerperal nor cancer)	2	....	....	....	....	...	...	....	....
VII. Puerperal Diseases.									
134. Accidents of pregnancy	104	....	....	....	....	...	...	....	....
135. Puerperal hæmorrhage	63	....	....	....	....	...	...	....	....
136. Other accidents of labor	75	....	....	....	....	...	...	....	....
137. Puerperal septicæmia	226	....	....	....	....	...	...	....	....
138. Puerperal albuminuria and convulsions	171	....	....	....	....	...	...	....	....
139a. Puerperal Phlegmasia alba dolens	15	....	....	....	....	...	...	....	....
139b. Puerperal embolism and sudden death	12	....	....	....	....	...	...	....	....
140a. Sequel of delivery	2	....	....	....	....	...	...	....	....
140b. Puerperal insanity	....	....	....	....	....	...	...	....	....
141. Puerperal diseases of breast	....	....	....	....	....	...	...	....	....
VIII. Diseases of Skin and Cellular Tissue.									
142. Gangrene	39	24	1	1	....	...	...	2	....
143. Carbuncle	36	23	5	1	....	...	...	6	....
144. Phlegmon, acute abscess	100	62	15	3	....	...	...	18	4
145. Other diseases of skin and adnexa	44	21	11	....	....	...	...	11	....
IX. Diseases of Locomotory System.									
146. Diseases of bones (non-tuberculous)	110	74	8	4	2	1	3	18	7
147. Arthritis, other diseases of joints (except tuberculosis and rheumatism)	9	4	....	1	....	...	...	1	1
148. Amputation	....	....	....	....	....	...	...	....	....
149. Other diseases of organs of locomotion	....	....	....	....	....	...	...	....	....
X. Malformations.									
150. Congenital malformations	784	463	429	17	5	1	4	456	3
XI. Diseases of Infancy.									
151. Congenital debility, icterus and sclerema	3,770	2,111	2,107	4	....	...	...	2,111	....
152. Other diseases peculiar to infancy (of which)	987	566	566	....	....	...	...	566	....
152a. Injury during birth	414	248	248	....	....	...	...	248	....
153. Neglect	4	....	....	....	....	...	...	....	....
XII. Diseases of Old Age.									
154. Senile debility	450	166	....	....	....	...	...	....	....
XIII. External Causes.									
155. Suicide by poison	121	77	....	....	....	...	...	....	....
156. Suicide by asphyxia	328	241	....	....	....	...	...	....	....
157. Suicide by hanging or strangulation	94	86	....	....	....	...	...	....	....
158. Suicide by submersion	11	8	....	....	....	...	...	....	....

NEW YORK.

the Year Ending December 31, 1913—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
...	...	3	3	5	1	1	3	5	...	1	2	...	...	...	...	...	..	..
3	9	12	21	21	30	35	21	18	17	16	11	7	5	11	1	7	..	..
9	13	27	54	102	140	179	266	306	326	304	291	243	159	103	57	80	2	1
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...	8	14	20	28	30	30	26	29	11	29	12	2	...	2	...	1	..	..
...	1	5	12	11	7	10	7	7	3	11	6	3	2	1	...	...	1	..
...	...	...	1	2	...	...	...	...	3	...	1	1	...	...	...	...	..	..

CITY OF

Deaths of Males by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
159. Suicide by firearms	172	162	....	....	....	...	...	....	....
160. Suicide by cutting instruments	43	42	....	....	....	...	...	....	....
161. Suicide by precipitation from height	71	45	....	....	....	...	...	....	....
162. Suicide by crushing	4	3	....	....	....	...	...	....	....
163. Suicide by other methods	1	....	....	....	....	...	...	....	....
164. Poisoning by food	24	10	....	1	1	...	...	2	....
165a. Bites of venomous animals	3	2	....	....	....	...	...	....	1
165b. Other acute poisonings	82	48	1	1	1	2	1	6	1
166. Conflagrations	56	26	1	....	2	1	...	4	1
167. Burns and scalds	410	188	10	24	31	30	30	125	14
168. Absorption of deleterious gases	309	199	12	....	2	2	1	17	....
169. Accidental submersion	493	462	2	....	2	1	4	9	28
170. Pistol and gunshot wounds	16	16	....	....	....	...	...	....	3
171. Cuts and stabs	4	4	....	....	....	...	...	....	1
172. Deaths by falls	1,054	772	7	13	14	15	20	69	40
173. Deaths in mines and quarries	....	....	....	....	....	...	...	....	....
174. Deaths by machinery	69	67	....	....	....	...	...	....	1
175. Deaths by other crushing agencies, wagons, etc	859	716	1	6	13	11	17	48	118
176. Deaths from injuries inflicted by animals (not snakebites, hydrophophia or stings)	15	14	....	....	....	...	1	1	1
177a. Physical exhaustion	2	1	....	....	....	...	...	....	....
177b. Hunger and thirst	1	....	....	....	....	...	...	....	....
178. Excessive cold	4	4	....	....	....	...	...	....	....
179. Sunstroke	64	45	6	....	....	1	1	8	....
180. Lightning	4	4	....	....	....	...	...	....	....
181. Other electrical accidents	25	24	....	....	....	...	...	....	....
182. Homicides by firearms	178	155	1	1	....	...	1	3	1
183. Homicides by cutting or piercing instruments	43	33	1	....	....	...	...	1	....
184. Homicides by other means	105	81	19	....	....	1	...	20	5
185. Dislocation and fractures	79	59	....	1	....	...	...	1	3
186a. Criminal abortion	56	....	....	....	....	...	...	....	....
186b. Foreign body in larynx	25	16	1	3	....	1	...	5	....
186c. Explosions	22	22	....	....	....	...	...	....	....
186d. Other external violences	90	71	1	1	....	2	...	4	2
XIV. Ill-defined or Not Specified Causes.									
187. Organic lesions not defined	....	....	....	....	....	...	...	....	....
188. Sudden death	....	....	....	....	....	...	...	....	....
189. Ill-defined or disease not specified	64	37	4	15	4	1	1	25	2
I. General diseases	21,290	11,874	635	574	360	242	184	1,995	391
a. Tuberculous diseases	10,031	6,362	137	141	89	47	38	452	100
b. Cancer	4,223	1,740	1	2	5	4	4	16	4
II.—Diseases of nervous system and organs of sense	2,814	1,576	196	69	38	18	14	335	50
III.—Diseases of circulatory system	12,813	6,490	34	20	15	9	15	93	89
IV.—Diseases of respiratory system	11,392	6,290	1,746	901	277	123	63	3,110	117
V.—Diseases of digestive system	7,262	3,910	1,759	283	62	28	25	2,157	63
VI.—Diseases of genito-urinary system	6,329	3,221	48	16	6	7	9	86	19
VII.—Puerperal diseases	668	....	....	....	....	...	...	....	....
VIII.—Diseases of skin and cellular tissue	219	130	32	5	....	...	...	37	4
IX.—Diseases of locomotory system	119	78	8	5	2	1	3	19	8
X.—Malformations	784	463	429	17	5	1	4	456	3
XI.—Diseases of infancy	4,761	2,677	2,673	4	....	...	...	2,677	....
XII.—Diseases of old age	450	166	....	....	....	...	...	....	....
XIII.—External causes	4,937	3,703	63	51	66	67	76	323	220
a. Suicide	845	664	....	....	....	...	...	....	....
b. Homicide	326	269	21	1	....	1	1	24	6
c. Accident	3,766	2,770	42	50	66	66	75	299	214
XIV.—Causes ill-defined	64	37	4	15	4	1	1	25	2
Total males	....	40,615	7,627	1,960	835	497	394	11,313	966
Total females	....	33,287	6,153	1,743	737	433	332	9,398	889
Total both sexes	....	73,902	13,780	3,703	1,572	930	726	20,711	1,855

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
...	8	16	25	13	14	12	25	14	14	9	7	1	3	...	1	1	..	..
...	...	2	4	5	5	5	9	2	3	2	2	1	1	1	...	1	..	..
...	2	...	8	8	3	8	3	5	...	2	3	2	...	1	...	...	..	..
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...	6	7	5	4	5	6	3	5	...	...	...	...	...	...	...	2	..	..
...	4	...	2	1	3	2	1	3	1	2	1	...	...	...	1	1	..	..
1	3	6	4	2	7	2	5	2	5	4	4	1	2	...	1	2	1	..
1	8	11	20	13	17	23	18	22	9	18	7	5	5	5	...	5	..	..
24	44	43	48	42	37	62	49	36	20	13	5	1	...	1	...	8	..	1
3	4	2	2	...	...	1	1	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	..	..
31	20	43	54	69	88	85	55	50	46	43	27	25	15	7	5	25	..	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
2	7	5	8	9	9	11	5	4	3	1	1	1	...	...	...	2	..	1
56	30	47	58	44	60	51	55	38	31	37	13	14	10	4	2	13	..	1
...	3	2	...	...	1	2	1	1	...	1	...	...	1	...	...	2	..	..
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...	...	2	1	5	3	7	3	2	1	3	3	2	5	...	...	...	..	..
...	1	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	..	..
1	1	4	7	2	4	3	...	2	...	...	...	...	...	...	...	...	..	..
2	17	28	33	28	24	11	2	1	1	2	1	...	...	...	1	7	1	..
...	...	8	8	4	3	6	2	...	...	...	...	1	...	...	...	3	..	..
3	2	7	5	5	6	7	9	5	2	2	1	2	...	...	...	...	..	..
1	2	4	6	3	2	9	8	7	2	6	2	2	...	...	1	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
1	1	...	...	...	...	2	2	1	3	...	...	1	...	...	...	1	..	..
...	1	3	5	5	2	2	1	2	1	...	...	...	...	...	...	...	..	..
6	7	3	7	3	13	8	6	3	2	4	1	2	...	...	...	4	..	..
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...	...	1	2	...	1	1	2	...	2	...	...	...	1	...	...	2	..	..
160	382	667	852	859	1,147	1,131	1,076	947	739	568	424	295	154	57	30	405	47	3
61	270	549	701	667	844	818	660	515	337	191	101	55	28	7	6	313	33	3
7	10	10	20	40	76	112	191	238	247	247	212	166	92	36	16	18	4	..
29	31	44	63	52	91	100	114	152	115	125	91	87	60	22	15	45	1	..
98	100	114	139	196	276	391	505	631	655	785	804	718	483	253	160	162	3	1
27	74	127	183	234	292	291	304	328	261	246	236	184	141	74	61	238	9	3
34	55	69	88	99	144	175	200	206	172	150	130	75	53	26	14	87	6	1
13	23	42	79	128	187	230	307	348	371	354	339	289	194	140	72	98	4	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
2	1	1	7	5	5	6	13	10	6	7	9	7	5	3	2	5	..	..
9	10	3	6	2	2	3	3	4	3	5	...	1	..	...	...	2	..	..
3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	97	..	1
...	...	...	...	...	...	...	...	...	...	3	8	26	29	34	66	1	..	..
133	183	270	353	319	358	376	307	251	167	194	99	69	46	23	12	81	3	4
...	22	43	80	77	72	73	80	65	38	57	33	11	7	5	1	5	1	..
5	19	43	46	37	33	24	13	6	3	4	2	3	...	...	1	10	1	..
128	142	184	227	205	253	279	214	180	126	133	64	55	39	18	10	66	1	4
...	...	1	2	...	1	1	2	...	2	...	...	...	1	...	...	2	..	..
508	860	1,338	1,772	1,894	2,503	2,704	2,831	2,877	2,491	2,437	2,140	1,751	1,166	632	432	1,228	73	14
500	698	1,185	1,381	1,380	1,694	1,632	1,778	2,004	1,868	2,019	2,045	1,821	1,387	954	654	1,189	1	2
1,008	1,558	2,523	3,153	3,274	4,197	4,336	4,609	4,881	4,359	4,456	4,185	3,572	2,553	1,586	1,086	2,417	74	16

CITY OF

Deaths of Females by Age, and Cause of Death,

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
I. General Diseases.									
1. Typhoid fever	....	138	....	2	2	...	2	6	6
2. Typhus fever	....	....	....	....	....	...	...	....	....
3. Relapsing fever	....	....	....	....	....	...	...	....	....
4. Malarial fever	....	7	....	....	....	...	...	....	....
5. Smallpox	....	....	....	....	....	...	...	....	....
6. Measles	....	301	70	138	49	22	7	286	10
7. Scarlet fever	....	239	8	30	45	39	22	144	58
8. Whooping cough	....	245	126	74	22	13	8	243	1
9. Diphtheria and croup	....	608	45	137	102	83	58	425	144
10. Influenza	....	195	8	7	1	2	...	18	4
11. Miliary fever	....	....	....	....	....	...	...	....	....
12. Asiatic cholera	....	....	....	....	....	...	...	....	....
13. Cholera nostras	....	....	....	....	....	...	...	....	....
14. Dysentery	....	21	5	2	1	3	...	11	....
15. Plague	....	....	....	....	....	...	...	....	....
16. Yellow fever	....	....	....	....	....	...	...	....	....
17. Leprosy	....	....	....	....	....	...	...	....	....
18. Erysipelas	....	131	67	4	....	...	...	71	2
19. Other epidemic diseases	....	2	....	1	....	...	...	1	1
20. Pyæmia, septicæmia	....	38	4	....	....	2	...	6	3
21. Glanders	....	....	....	....	....	...	...	....	....
22. Malignant pustule	....	1	....	....	....	...	...	....	....
23. Hydrophobia	....	2	....	....	....	...	...	....	....
24. Tetanus, trismus	....	7	2	1	....	...	...	3	....
25. Mycoses	....	1	....	....	....	...	...	....	....
26. Pellagra	....	....	....	....	....	...	...	....	....
27. Beriberi	....	....	....	....	....	...	...	....	....
28. Tuberculosis of lungs	....	2,996	25	22	16	8	11	82	36
29. Acute miliary tuberculosis	....	74	8	9	5	3	...	25	4
30. Tuberculous meningitis	....	383	81	76	66	28	28	279	50
31. Abdominal tuberculosis	....	95	16	5	4	3	2	30	3
32. Pott's disease	....	29	1	....	....	2	2	5	3
33. White swelling	....	17	....	....	1	2	2	5	3
34. Tuberculosis of other organs	....	37	4	....	1	3	...	8	2
35. General tuberculosis	....	38	6	5	5	2	2	20	3
36. Rachitis	....	12	7	3	1	...	...	11	....
37. Syphilis	....	193	102	4	1	2	...	109	1
38a. Soft chancre	....	....	....	....	....	...	...	....	....
38b. Gonococcic infection	....	31	7	....	1	1	...	9	2
39. Cancers, etc., of the mouth	....	24	....	....	....	...	...	....	....
40. Cancer of stomach, liver	....	824	....	....	....	2	1	3	1
41. Cancer of intestines, rectum	....	376	....	....	....	1	...	1	2
42. Cancer of female genital organs	....	610	....	....	....	...	...	....	....
43. Cancer of the breast	....	359	....	....	....	...	...	....	....
44. Cancer of the skin	....	25	....	....	....	...	...	....	....
45. Cancer of other organs and unspecified	....	265	2	2	1	1	1	7	....
46. Other tumors (except of female genital organs)	....	15	2	....	....	...	...	2	....
47. Acute articular rheumatism	....	149	1	2	4	3	5	15	29
48. Chronic rheumatism and gout	....	42	....	....	....	...	...	....	....
49. Scurvy	....	3	1	1	....	...	...	2	....
50. Diabetes	....	518	....	....	2	1	1	4	4
51. Exophthalmic goitre	....	41	....	....	....	...	...	....	....
52. Addison's disease	....	3	....	....	....	...	...	....	....
53. Leukæmia	....	48	....	....	....	...	...	....	3
54. Anæmia, chlorosis	....	106	1	2	....	...	...	3	2
55. Other general diseases	....	29	6	1	1	1	2	11	1
56. Alcoholism, acute and chronic	....	133	....	....	....	...	...	....	....
57. Lead poisoning	....	....	....	....	....	...	...	....	....
58. Other chronic poisonings of occupation	....	....	....	....	....	...	...	....	....
59. Other chronic poisonings	....	5	....	....	....	...	...	....	....
II. Diseases of Nervous System and Organs of Sense.									
60. Encephalitis	....	8	1	....	1	...	1	3	1
61. Simple meningitis (of which)	....	172	46	29	13	10	14	112	20
61a. Cerebro-spinal meningitis	....	94	25	18	9	4	7	63	13
62. Loocmotor ataxia	....	20	....	....	....	...	...	....	....
63. Other diseases of spinal cord (of which)	....	107	6	8	4	1	2	21	10
63a. Acute anterio-poliomyelitis	....	31	5	6	4	...	1	16	8

NEW YORK.

for the Year Ending December 31, 1913.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
12	18	19	18	18	10	9	9	4	4	3	2	...	...	...	...	3	..	..
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...	1	1	2	...	1	...	...	...	...	...	...	...	...	...	...	3	..	..
10	7	6	6	5	1	1	1	...	...	...	...	...	...	...	...	3	..	..
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22	5	1	3	2	2	1	2	1	...	...	...	...	...	...	...	10	..	..
4	4	6	7	6	7	6	12	8	16	17	15	20	19	16	10	5	..	..
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3	2	3	3	2	9	8	3	6	4	4	4	1	3	3	...	1	..	..
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2	3	3	1	1	2	4	4	...	...	2	2	2	2	...	1	...	..	..
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91	262	428	437	393	393	268	183	156	93	73	47	24	20	7	3	239	..	..
...	6	10	11	6	3	4	2	1	...	1	...	1	...	...	...	5	..	..
13	14	6	8	1	4	2	2	1	3	...	...	...	...	...	...	27	1	..
4	9	11	9	6	5	10	3	4	...	1	...	...	...	...	...	5	..	..
5	2	1	1	5	1	2	1	2	...	...	1	...	...	...	...	1	..	..
3	...	1	1	...	...	...	2	...	...	2	...	...	...	...	...	...	..	..
1	1	7	2	3	3	1	3	1	1	...	1	1	1	1	...	...	..	1
...	1	4	3	...	3	2	1	...	1	...	...	...	...	...	...	5	..	..
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1	2	4	8	10	20	17	8	4	6	...	3	...	...	...	...	17	..	..
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1	...	7	3	5	3	...	1	...	...	...	...	...	...	...	...	7	..	..
...	...	1	1	...	1	4	2	1	6	1	...	2	2	1	2	...	..	..
2	...	...	13	17	29	52	93	116	122	121	109	79	39	21	7	10	..	..
...	1	4	11	5	15	23	39	45	48	53	54	35	22	12	6	6	..	..
...	...	1	11	26	54	75	103	103	73	59	53	29	18	2	3	23	..	..
...	...	1	8	8	35	37	49	59	39	44	26	23	24	4	2	8	..	..
...	...	...	1	1	1	3	1	2	2	2	2	1	2	6	1	...	..	..
3	9	8	8	7	19	19	28	23	28	36	27	23	9	7	4	5	..	..
...	...	...	1	1	...	1	4	1	1	2	1	...	...	1	...	...	..	..
36	9	9	10	10	6	3	7	...	3	1	6	2	1	1	1	6	..	..
...	...	...	2	1	2	1	3	3	2	9	4	6	4	2	3	1	..	..
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	..	..
4	6	7	6	5	12	22	52	70	92	84	77	34	29	8	2	7	..	..
...	4	3	5	4	4	1	10	4	2	1	1	...	1	...	1	...	..	..
...	...	...	...	...	1	...	...	1	...	...	...	...	...	1	...	...	..	..
3	2	3	3	3	6	5	5	7	2	1	4	1	...	...	...	2	..	..
2	3	7	6	5	7	8	9	9	7	16	13	4	3	...	2	2	..	..
3	2	1	2	1	...	3	1	2	1	...	...	1	...	...	...	...	..	..
...	...	3	12	18	27	23	11	20	10	8	...	1	...	...	...	1	..	..
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1	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	2	..	..
10	2	4	2	8	3	2	2	1	2	1	1	1	1	...	...	5	..	..
6	2	...	...	5	1	2	...	...	2	...	...	...	...	...	...	...	..	..
...	...	...	...	1	2	3	5	2	2	2	1	1	1	...	...	1	..	..
3	2	2	4	3	4	6	5	7	9	8	7	8	3	2	3	2	..	..
3	1	1	...	1	1	...	...	...	...	...	...	...	...	...	...	1	..	..

CITY OF

Deaths of Females by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
64. Apoplexy, cerebral hæmorrhage	....	444	2	....	1	...	...	3	....
65. Softening of brain	....	6	....	....	....	...	...	....	....
66. Paralysis, unspecified	....	37	....	....	....	...	...	....	2
67. General paresis	....	60	....	....	....	...	...	....	....
68. Other forms of insanity	....	44	....	....	....	...	...	....	....
69. Epilepsy	....	47	2	....	....	...	2	4	3
70. Convulsions (not puerperal)	....	....	....	....	....	...	...	....	....
71. Convulsions of infants	....	87	74	9	3	1	...	87	....
72. Chorea	....	6	....	....	....	...	...	....	1
73a. Hysteria	....	8	....	....	....	...	...	....	....
73b. Neuralgia and neuritis	....	9	....	....	....	...	...	....	....
74. Other nervous diseases	....	71	5	8	....	...	2	15	3
75a. Follicular conjunctivitis	....	1	....	1	....	...	...	1	....
75b. Trachoma	....	....	....	....	....	...	...	....	....
75c. Other diseases of eye and appendages	....	....	....	....	....	...	...	....	....
76. Diseases of ear	....	111	26	4	4	2	1	37	19
III. Diseases of Circulatory System.									
77. Pericarditis	....	21	....	....	....	1	1	2	2
78. Acute endocarditis	....	257	16	4	1	5	4	30	29
79. Organic heart diseases	....	4,867	10	7	4	9	10	40	87
80. Angina pectoris	....	74	....	....	....	...	...	....	....
81. Diseases of arteries, aneurism, etc	....	1,022	....	....	....	...	...	....	1
82. Embolism, thrombosis	....	44	2	....	....	...	...	2	....
83. Diseases of veins (hæmorrhoids, varices, phlebitis, etc.)	....	24	1	....	....	...	...	1	....
84. Diseases of lymphatics (lymphangitis, etc.)	....	11	4	....	....	...	...	4	1
85. Hæmorrhage	....	3	....	....	....	...	...	....	....
IV. Diseases of Respiratory System.									
86. Diseases of nasal fossæ	....	....	....	....	....	...	...	....	....
87. Diseases of the larynx	....	11	1	1	1	1	1	5	3
88. Diseases of thyroid gland	....	16	....	....	....	...	...	....	....
89. Acute bronchitis	....	328	196	46	8	2	5	257	5
90. Chronic bronchitis	....	77	2	3	....	...	...	5	....
91. Broncho-pneumonia	....	2,356	995	525	156	62	31	1,769	65
92. Lobar pneumonia	....	2,117	211	188	70	24	18	511	61
93. Pleurisy	....	101	19	17	15	3	2	56	5
94. Congestion of lungs, pulmonary apoplexy	....	17	2	....	....	...	...	2	....
95. Gangrene of lung	....	....	....	....	....	...	...	....	....
96. Asthma	....	60	....	....	....	...	1	1	1
97. Pulmonary emphysema	....	10	....	....	....	...	...	....	....
98. Other diseases of respiratory system (tuberculosis excepted)	....	9	....	....	1	...	1	2	....
V. Diseases of Digestive System.									
99a. Diseases of teeth and gums	....	12	4	....	1	...	1	6	1
99b. Other diseases of mouth	....	4	1	1	....	...	...	2	....
100. Angina and other diseases of pharynx	....	36	4	3	2	2	1	12	4
101. Diseases of œsophagus	....	4	....	....	....	...	...	....	....
102. Ulcer of the stomach	....	90	1	....	....	...	...	1	....
103. Other diseases of stomach (cancer excepted)	....	96	23	4	4	4	...	35	3
104. Diarrhœa and enteritis (under two years)	....	1,652	1,396	256	....	...	...	1,652	....
105. Diarrhœa and enteritis (two years and over)	....	273	....	....	48	21	18	87	14
(of which) Due to alcoholism	....	....	....	....	....	...	...	....	....
106. Ankylostomiasis	....	....	....	....	....	...	...	....	....
107. Intestinal parasites	....	2	....	....	....	...	...	....	....
108. Appendicitis and typhlitis	....	275	....	3	1	3	6	13	21
109. Hernia, intestinal obstruction	....	318	19	6	3	2	2	32	4
110a. Diseases of anus and stercoral fistulæ	....	7	2	....	....	...	...	2	....
110b. Other diseases of intestines	....	36	4	....	....	...	...	4	....
111. Acute yellow atrophy of liver	....	6	....	....	....	...	...	....	....
112. Hydatid tumor of liver	....	1	....	....	....	...	...	....	....
113. Cirrhosis of liver	....	315	1	....	1	...	...	2	1
114. Biliary calculi	....	101	....	....	....	...	1	1	....
115. Other diseases of liver	....	91	2	1	....	...	1	4	1
116. Diseases of spleen	....	3	....	1	....	...	...	1	....

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
...	...	3	1	10	8	12	29	28	49	52	69	59	59	34	28	13	..	..
...	...	...	...	...	...	...	...	...	1	1	...	2	2	...	...	...	..	..
...	...	...	1	1	...	2	...	2	2	3	5	8	3	5	3	1	..	..
...	...	...	...	4	11	6	4	6	5	3	5	6	4	1	5	1	..	..
...	1	4	2	6	4	4	5	2	6	3	5	1	1	...	...	...	..	..
6	4	3	3	3	1	6	4	4	1	1	2	1	...	...	1	1	..	..
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2	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	..	..
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...	...	...	...	1	2	3	...	1	...	1	...	1	...	...	...	...	..	..
3	3	6	5	3	4	7	5	12	2	2	...	1	...	...	...	3	..	..
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13	4	6	8	2	...	5	5	4	1	1	2	3	...	1	...	4	..	..
3	2	2	...	1	1	1	2	...	1	1	...	2	...	1	...	1	..	..
20	16	18	23	23	18	16	14	13	11	7	7	7	4	...	1	7	..	..
76	82	93	130	154	246	255	326	438	438	513	569	551	414	283	172	161	..	..
...	...	...	...	2	2	1	5	4	13	6	9	14	8	8	2	2	..	..
...	...	...	2	2	5	9	37	82	77	136	164	180	132	127	68	23	..	..
...	1	1	2	3	...	2	8	2	3	5	6	3	3	1	2	...	..	..
1	...	...	1	1	...	3	3	3	3	1	1	2	4	...	...	...	..	..
2	...	1	...	...	...	1	...	...	2	...	...	...	...	...	...	1	..	..
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...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	..	..
...	...	2	4	...	...	...	4	2	1	2	...	1	...	...	...	...	..	..
2	1	1	...	...	1	2	1	2	2	6	11	8	13	8	8	12	..	..
...	...	1	1	...	1	2	1	...	5	7	7	9	8	12	18	1	..	..
13	8	16	12	5	17	11	25	34	44	46	58	69	75	50	39	83	..	..
29	40	62	80	88	140	120	131	138	128	153	149	121	90	44	32	93	..	..
2	...	2	3	2	5	6	...	4	4	2	4	4	1	...	1	1	..	..
...	...	...	...	...	1	...	...	...	...	...	...	2	2	5	5	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	2	2	9	4	9	9	9	7	5	2	1	..	..
...	...	1	...	...	...	1	...	...	...	2	2	2	1	1	...	...	..	..
1	...	...	...	...	1	1	...	...	...	...	1	1	1	...	1	...	..	..
...	...	2	...	...	1	1	...	...	1	...	...	...	...	...	...	1	..	..
1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	..	..
1	2	2	3	2	2	1	2	1	3	1	...	...	...	...	...	...	..	..
...	...	...	...	...	1	...	1	1	...	1	...	...	...	...	...	...	..	..
...	2	5	8	11	13	9	10	2	10	6	3	4	4	1	1	1	..	..
...	1	1	3	4	3	3	3	3	4	4	11	5	9	1	3	5	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44	..	..
3	4	8	2	6	13	8	4	14	14	11	21	25	14	13	12	9	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
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30	18	31	30	22	19	20	17	23	12	11	6	...	1	...	1	7	..	..
...	4	6	9	11	17	25	24	36	29	34	32	23	23	6	3	8	..	..
...	1	1	...	...	...	...	...	2	...	...	...	1	...	...	...	...	..	..
...	2	2	3	2	2	3	6	5	1	1	2	...	2	1	...	...	..	..
...	...	3	1	...	...	...	1	...	...	...	...	...	...	...	1	...	..	..
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
1	...	2	9	16	28	41	49	46	30	25	30	15	13	3	4	3	..	..
...	...	4	3	3	5	11	11	13	11	13	12	9	5	...	...	...	..	..
...	...	1	1	5	9	11	3	8	15	10	8	5	4	4	2	1	..	..
...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	..	..

CITY OF

Deaths of Females by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
117. Simple peritonitis (non-puerperal)	....	13	....	....	1	...	...	1	4
118. Other diseases of digestive system (except tuberculosis and cancer)	....	17	....	....	....	...	...	....	....
VI. Diseases of Genito-Urinary System.									
119. Acute nephritis	....	295	19	7	3	5	4	38	13
120. Bright's disease	....	2,415	....	2	3	1	...	6	14
121. Chyluria	....	....	....	....	....	...	...	....	....
122. Other diseases of the kidneys and appendages	....	46	3	1	....	...	...	4	1
123. Calculi of the urinary tract	....	13	....	....	....	...	...	....	....
124. Diseases of bladder	....	17	....	....	....	...	...	....	....
125. Diseases of urethra, urinary abscess, etc.	....	1	....	....	....	...	...	....	....
126. Diseases of the prostate	....	....	....	....	....	...	...	....	....
127. Non-venereal diseases of male genital organs	....	....	....	....	....	...	...	....	....
128. Uterine haemorrhage (not puerperal)	....	2	....	....	....	...	...	....	....
129. Uterine tumor (not cancer)	....	109	....	....	....	...	...	....	....
130a. Metritis	....	22	....	....	....	...	...	....	....
130b. Other diseases of uterus	....	28	....	....	....	...	...	....	....
131. Ovarian cysts and tumors	....	45	....	....	....	...	...	....	....
132. Salpingitis and other diseases of female genital organs	....	113	....	....	....	...	...	....	....
133. Diseases of breast (not puerperal nor cancer)	....	2	1	....	....	...	...	1	....
VII. Puerperal Diseases.									
134. Accidents of pregnancy	....	104	....	....	....	...	...	....	....
135. Puerperal haemorrhage	....	63	....	....	....	...	...	....	....
136. Other accidents of labor	....	75	....	....	....	...	...	....	....
137. Puerperal septicaemia	....	226	....	....	....	...	...	....	....
138. Puerperal albuminuria and convulsions	....	171	....	....	....	...	...	....	....
139a. Puerperal phlegmasia alba dolens	....	15	....	....	....	...	...	....	....
139b. Puerperal embolism and sudden death	....	12	....	....	....	...	...	....	....
140a. Sequel of delivery	....	2	....	....	....	...	...	....	....
140b. Puerperal insanity	....	....	....	....	....	...	...	....	....
141. Puerperal diseases of breast	....	....	....	....	....	...	...	....	....
VIII. Diseases of Skin and Cellular Tissue.									
142. Gangrene	....	15	....	1	1	...	...	2	....
143. Carbuncle	....	13	4	....	....	...	...	4	....
144. Phlegmon, acute abscess	....	38	10	2	1	...	...	13	2
145. Other diseases of skin and adnexa	....	23	4	2	1	...	...	7	....
IX. Diseases of Locomotory System.									
146. Diseases of bones (non-tuberculous)	....	36	2	1	1	1	...	5	6
147. Arthritis, other diseases of joints (except tuberculosis and rheumatism)	....	5	....	....	....	...	1	1	....
148. Amputation	....	....	....	....	....	...	...	....	....
149. Other diseases of organs of locomotion	....	....	....	....	....	...	...	....	....
X. Malformations.									
150. Congenital malformations	....	321	305	7	3	2	1	318	2
XI. Diseases of Infancy.									
151. Congenital debility, icterus and sclerema	....	1,659	1,653	6	....	...	...	1,659	....
152. Other diseases peculiar to infancy (of which)	....	421	419	2	....	...	...	421	....
152a. Injury during birth	....	166	165	1	....	...	...	166	....
153. Neglect	....	4	4	....	....	...	...	4	....
XII. Diseases of Old Age.									
154. Senile debility	....	284	....	....	....	...	...	....	....
XIII. External Causes.									
155. Suicide by poison	....	44	....	....	....	...	...	....	....
156. Suicide by asphyxia	....	87	....	....	....	...	...	....	....

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
2	...	1	2	1	1	...	...	...	...	...	...	1	...	...	...	...	..	..
...	...	1	1	1	2	1	5	2	1	2	...	1	...	...	...	...	...	..
6	9	9	22	29	25	28	22	20	21	19	8	10	7	6	3	21	..	..
6	16	33	58	82	131	186	219	264	242	282	279	243	165	119	70	77	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	4	2	2	5	3	8	4	3	5	3	1	...	1	...	4	..	..
...	...	...	...	...	5	1	1	2	1	...	1	...	...	...	2	...	..	..
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...	...	2	7	5	17	29	20	19	4	...	1	3	1	1	...	9	..	..
...	...	2	5	5	3	3	...	3	1	...	...	...	...	...	...	4	..	..
...	...	...	6	7	3	2	5	3	1	...	1	...	...	...	...	...	..	..
...	...	1	5	6	5	5	5	7	3	1	3	3	1	...	...	2	..	..
...	1	15	29	18	26	7	11	3	1	2	...	...	...	...	...	5	..	..
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	5	21	24	30	18	5	1	...	...	...	...	...	...	...	...	5	..	..
...	2	13	14	16	11	7	...	...	...	...	...	...	...	...	...	1	..	..
...	2	16	23	12	16	6	...	...	...	...	...	...	...	...	...	3	..	..
...	15	59	6	7	47	26	11	1	...	...	...	...	...	...	...	7	..	1
...	12	36	34	46	28	14	1	...	...	...	...	...	...	...	...	4	..	..
...	...	1	4	5	3	2	...	...	...	...	...	...	...	...	...	...	..	..
...	...	3	3	2	1	3	...	...	...	...	...	...	...	...	...	...	..	..
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3	2	2	1	2	...	1	3	3	1	1	1	3	...	...	...	...	..	..
...	...	...	...	1	...	...	4	2	3	1	2	2	...	...	1	1	..	..
3	3	3	4	1	3	1	1	2	2	2	...	...	...	...	...	3	..	..
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	...	...	3	8	18	32	57	85	81	8	..	..
...	5	9	9	4	7	2	3	1	1	1	1	1	...	...	...	1	..	..
...	4	11	10	6	9	8	8	6	7	6	4	5	1	...	2	1	..	..

CITY OF

Deaths of Females by Age, and Cause of Death, for

Cause of Death.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5
157. Suicide by hanging or strangulation	....	8	....	....	....	...	...	....	....
158. Suicide by submersion	....	3	....	....	....	...	...	....	....
159. Suicide by firearms	....	10	....	....	....	...	...	....	....
160. Suicide by cutting instruments	....	1	....	....	....	...	...	....	....
161. Suicide by precipitation from height	....	26	....	....	....	...	...	....	....
162. Suicide by crushing	....	1	....	....	....	...	...	....	....
163. Suicide by other methods	....	1	....	....	....	...	...	....	....
164. Poisoning by food	....	14	....	....	....	...	...	....	....
165a. Bites of venomous animals	....	1	1	....	....	...	...	1	....
165b. Other acute poisonings	....	34	3	2	1	...	...	6	5
166. Conflagrations	....	30	....	....	1	1	2	4	1
167. Burns and scalds	....	222	7	19	18	20	26	90	45
168. Absorption of deleterious gases	....	110	12	3	....	1	...	16	2
169. Accidental submersion	....	31	....	....	1	...	1	2	2
170. Pistol and gunshot wounds	....	....	....	....	....	...	...	....	....
171. Cuts and stabs	....	....	....	....	....	...	...	....	....
172. Deaths by falls	....	282	7	12	13	7	9	48	19
173. Deaths in mines and quarries	....	....	....	....	....	...	...	....	....
174. Deaths by machinery	....	2	....	....	....	...	...	....	....
175. Deaths by other crushing agencies, wagons, etc	....	143	1	2	11	15	8	37	22
176. Deaths from injuries inflicted by animals (not snakebites, hydrophobia or stings)	....	1	....	....	1	...	...	1	....
177a. Physical exhaustion	....	1	....	....	....	...	...	....	....
177b. Hunger and thirst	....	1	....	....	....	...	...	....	....
178. Excessive cold	....	....	....	....	....	...	...	....	....
179. Sunstroke	....	19	2	....	....	...	...	2	1
180. Lightning	....	....	....	....	....	...	...	....	....
181. Other electrical accidents	....	1	....	....	....	...	...	....	....
182. Homicides by firearms	....	23	....	1	....	...	...	1	1
183. Homicides by cutting or piercing instruments	....	10	....	....	....	...	...	....	....
184. Homicides by other means	....	24	8	1	2	...	...	11	....
185. Dislocation and fractures	....	20	1	....	....	...	...	1	2
186a. Criminal abortion	....	56	....	....	....	...	...	....	....
186b. Foreign body in larynx	....	9	2	2	1	...	...	5	....
186c. Explosions	....	....	....	....	....	...	...	....	....
186d. Other external violences	....	19	2	2	1	...	...	5	....
XIV. Ill-defined or Not Specified Causes.									
187. Organic-lesions not defined	....	....	....	....	....	...	...	....	....
188. Sudden death	....	....	....	....	....	...	...	....	....
189. Ill-defined or disease not specified	....	27	....	15	....	...	...	15	1
I.—General diseases	....	9,416	605	528	331	227	154	1,845	378
a. Tuberculous diseases	....	3,669	141	117	98	51	47	454	104
b. Cancer	....	2,483	2	2	1	4	2	11	3
II.—Diseases of nervous system and organs of sense	....	1,238	162	59	26	14	22	283	59
III.—Diseases of circulatory system	....	6,323	33	11	5	15	15	79	120
IV.—Diseases of respiratory system	....	5,102	1,426	780	251	92	59	2,608	140
V.—Diseases of digestive system	....	3,352	1,457	275	61	32	30	1,855	53
VI.—Diseases of genito-urinary system	....	3,108	23	10	6	6	4	49	28
VII.—Puerperal diseases	....	668	....	....	....	...	...	....	....
VIII.—Diseases of skin and cellular tissue	....	89	18	5	3	...	...	26	2
IX.—Diseases of locomotory system	....	41	2	1	1	1	1	6	6
X.—Malformations	....	321	305	7	3	2	1	318	2
XI.—Diseases of infancy	....	2,084	2,076	8	....	...	...	2,084	....
XII.—Diseases of old age	....	284	....	....	....	...	...	....	....
XIII.—External causes	....	1,234	46	44	50	44	46	230	100
a. Suicide	....	181	....	....	....	...	...	....	....
b. Homicide	....	57	8	2	2	...	...	12	1
c. Accident	.....	996	38	42	48	44	46	218	99
XIV.—Causes ill-defined	....	27	....	15	....	...	...	15	1
Total females	....	33,287	6,153	1,743	737	433	332	9,398	889

NEW YORK.

the Year Ending December 31, 1913.—Continued.

10.	15.	20.	25.	30.	35.	40.	45.	50.	55.	60.	65.	70.	75.	80.	85 and Over.	Colored.	Chinese.	Japanese.
...	...	2	...	...	...	1	1	1	...	1	...	2	...	...	...	...	..	..
...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	...	...	..	..
...	2	1	1	2	2	1	...	...	1	...	...	...	...	...	...	2	..	..
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	2	6	4	3	3	4	2	...	...	2	...	...	...	...	...	1	..	..
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	..	..
1	1	...	1	...	2	3	2	1	...	1	2	...	...	...	...	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	1	4	6	1	3	2	...	2	1	2	...	1	...	...	...	...	..	..
1	2	5	3	1	4	2	1	1	1	2	1	1	...	...	...	1	..	..
5	4	5	4	5	8	8	6	11	8	7	4	6	2	2	2	7	..	..
1	10	9	5	5	5	9	2	4	9	9	7	7	4	3	3	2	..	..
1	1	4	1	3	1	2	6	4	...	3	1	...	...	...	...	...	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
5	6	8	10	5	11	12	13	12	17	15	19	25	26	12	19	4	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	..	..
8	9	7	4	3	3	8	5	7	6	5	9	7	1	2	...	2	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	..	..
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	2	1	6	...	...	1	3	3	...	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
3	1	4	5	3	3	1	...	1	...	...	...	...	...	...	...	2	..	..
...	1	...	1	3	1	2	2	...	...	...	...	...	...	...	...	...	..	..
1	1	2	2	1	4	...	1	...	1	...	...	...	...	...	...	...	..	..
...	...	1	...	2	1	...	...	...	1	2	1	4	1	3	1	1	..	..
...	3	13	15	16	7	2	...	...	...	...	...	...	...	...	...	1	..	..
...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
1	...	...	2	1	1	1	2	2	1	1	2	...	...	...	...	1	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
...	...	...	...	2	2	2	...	2	1	2	...	...	...	...	...	2	..	..
227	374	569	626	579	689	619	656	657	569	542	453	290	201	94	48	416	1	1
117	295	468	472	414	412	289	197	145	94	77	49	26	21	8	3	282	1	1
5	10	15	53	64	154	213	315	349	318	316	271	192	116	53	25	52	...	..
38	18	30	26	45	40	57	65	70	80	79	98	92	74	43	41	34	..	..
102	101	115	158	186	272	288	395	542	548	669	757	759	567	420	245	195	..	..
47	49	86	100	96	166	145	165	189	188	227	241	226	198	125	106	192	..	..
38	34	71	76	85	116	135	137	156	132	119	125	89	75	29	27	79	..	..
13	26	67	135	156	221	265	292	325	280	310	297	264	174	129	77	124	..	..
...	36	149	170	159	103	48	3	...	...	...	...	...	...	...	...	20	..	1
3	3	2	1	4	3	1	8	7	5	4	3	9	2	4	2	2	..	..
4	3	3	4	1	3	3	1	2	2	2	1	...	...	...	...	3	..	..
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	..	..
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82	..	..
...	...	...	...	...	...	...	...	...	3	8	18	32	57	85	81	8	..	..
27	54	93	85	67	79	69	56	54	60	57	52	60	39	25	27	28	..	..
...	13	30	24	16	23	17	14	8	9	10	5	8	2	...	2	5	..	..
4	3	6	8	7	8	3	3	1	1	...	...	...	...	...	...	2	..	..
23	38	57	53	44	48	49	39	45	50	47	47	52	37	25	25	21	..	..
...	...	...	...	2	2	2	...	2	1	2	...	...	...	...	...	2	..	..
500	698	1,185	1,381	1,380	1,694	1,632	1,778	2,004	1,868	2,019	2,045	1,821	1,387	954	654	1,189	1	2

Total Deaths by

BOROUGH OF

	All Ages	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15	20	25
Total males.....	20,210	3,900	1,037	416	239	173	5,765	410	242	390	670	901
Total females.....	15,937	3,223	921	374	217	165	4,900	380	221	323	569	655
Total both sexes..	36,147	7,123	1,958	790	456	338	10,665	790	463	713	1,239	1,556

BOROUGH OF

Total males.....	3,797	652	146	81	53	38	970	100	54	87	158	173
Total females.....	3,245	514	138	81	41	33	807	111	74	83	132	142
Total both sexes..	7,042	1,166	284	162	94	71	1,777	211	128	170	290	315

BOROUGH OF

Total males.....	13,144	2,463	636	270	162	136	3,667	366	161	305	388	568
Total females.....	11,406	1,920	557	232	151	106	2,966	332	164	238	381	466
Total both sexes..	24,550	4,383	1,193	502	313	242	6,633	698	325	543	769	1,034

BOROUGH OF

Total males.....	2,503	468	106	58	32	38	702	70	39	58	9	
Total females.....	2,108	398	103	42	19	19	581	49	34	42	81	
Total both sexes..	4,611	866	209	100	51	57	1,283	119	73	100	175	192

BOROUGH OF

Total males.....	961	144	35	10	11	9	209	20	12	20	28	37
Total females.....	591	98	24	8	5	9	144	17	7	12	22	19
Total both sexes..	1,552	242	59	18	16	18	353	37	19	32	50	56

CITY OF

Total males.....	40,615	7,627	1,960	835	497	394	11,313	966	508	860	1,338	1,772
Total females.....	33,287	6,153	1,743	737	433	332	9,398	889	500	698	1,185	1,381
Total both sexes..	73,902	13,780	3,703	1,572	930	726	20,711	1,855	1,008	1,558	2,523	3,153

Age-Groups, Year 1913.

MANHATTAN.

30	35	40	45	50	55	60	65	70	75	80	85 and Over.	Colored.	Chinese.	Japanese.
993	1,326	1,426	1,447	1,465	1,277	1,193	995	787	506	248	169	852	66	10
678	868	826	869	926	865	946	898	777	574	381	281	797	1	..
1,671	2.194	2,252	2,316	2,391	2,142	2,139	1,893	1,564	1,080	629	450	1,649	67	10

THE BRONX.

180	222	242	256	279	250	206	209	168	118	74	51	51	..	1
165	161	168	179	181	186	205	226	162	121	91	51	62	..	..
345	383	410	435	460	436	411	435	330	239	165	102	113	..	1

BROOKLYN.

597	763	835	893	901	783	810	728	615	393	208	163	276	6	3
435	530	505	604	737	668	706	740	717	562	387	268	272	..	2
1,032	1,293	1,340	1,497	1,638	1,451	1,516	1,468	1,332	955	595	431	548	6	5

QUEENS.

95	138	140	179	173	130	155	146	118	82	61	30	30	1	..
87	107	102	93	124	131	127	140	125	94	60	32	48	..	..
182	245	242	272	297	261	282	286	243	176	121	62	78	1	..

RICHMOND.

29	54	61	56	59	51	73	62	63	67	41	19	19	..	..
15	28	31	33	36	18	35	41	40	36	35	22	10	..	..
44	82	92	89	95	69	108	103	103	103	76	41	29	..	..

NEW YORK.

1,894	2,503	2,704	2,831	2,877	2,491	2,437	2,140	1,751	1,166	632	432	1,228	73	14
1,380	1,694	1,632	1,778	2,004	1,868	2,019	2,045	1,821	1,387	954	654	1,189	1	2
3,274	4,197	4,336	4,609	4,881	4,359	4,456	4,185	3,572	2,553	1,586	1,086	2,417	74	16

Actual Number of Deaths from Zymotic and Certain other Preventable Diseases, by Wards.

BOROUGH OF MANHATTAN.

Wards.	Area in Acres.	Population by Census of 1910.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fevers.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	154.0	9,750	63.0	2	....	....	9	1	4	4	48	....	23	24	33	362	126
Second	81.0	933	11.5	....	....	....	....	....	....	....	5	....	1	....	....	31	....
Third	95.0	1,915	20.2	....	....	....	....	....	....	....	7	....	2	4	6	53	9
Fourth	83.0	21,336	257.1	4	....	....	11	1	....	11	81	2	41	66	30	465	188
Fifth	168.0	5,666	33.7	2	....	....	1	....	1	2	15	....	8	7	5	140	27
Sixth	86.0	19,670	228.7	6	....	....	4	4	2	9	105	3	37	42	22	457	134
Seventh	198.0	102,101	515.6	5	....	....	33	10	3	36	125	11	76	115	55	1,166	479
Eighth	183.0	33,182	181.4	5	....	....	16	6	4	11	102	1	55	72	41	648	235
Ninth	322.0	64,909	201.6	8	....	....	11	10	2	34	203	4	103	82	74	1,303	303
Tenth	110.0	66,439	604.0	3	....	....	6	11	10	15	103	9	59	50	33	743	256
Eleventh	196.0	136,548	696.7	1	....	....	13	13	4	21	102	7	78	76	59	995	372
Twelfth E	5504.0	205,130	201.3	8	....	....	55	11	36	92	334	9	222	359	258	3,100	1,356
Twelfth C		332,692	191.4	17	1	....	15	32	23	53	502	12	315	209	147	4,225	940
Twelfth W		103,532	93.6	17	1	....	4	5	6	29	234	3	166	87	62	2,468	367
Twelfth N		165,294	72.1	12	....	....	4	4	6	23	153	1	113	45	44	1,571	275
Thirteenth	107.0	64,651	604.3	3	1	....	19	8	5	19	56	6	53	64	41	682	261
Fourteenth	96.0	38,321	399.3	6	....	....	17	1	7	11	74	1	75	141	73	810	410
Fifteenth	198.0	30,584	154.5	1	....	....	4	1	....	6	60	....	39	25	16	377	82
Sixteenth	349.0	55,926	160.2	5	....	....	10	2	3	20	157	....	76	39	34	1,026	188
Seventeenth	331.0	172,334	520.6	15	....	....	28	16	8	42	207	10	125	192	83	1,927	706
Eighteenth	450.0	62,821	139.6	17	....	....	14	20	3	24	183	7	100	76	86	1,543	554
Nineteenth	1,481.0	292,950	197.7	22	....	....	41	19	33	91	722	12	304	366	426	5,383	1,842
Twentieth	444.0	73,308	165.1	6	....	....	13	15	9	25	291	3	99	78	78	1,546	350
Twenty-first	411.0	62,345	151.7	6	....	....	15	3	5	18	183	5	98	61	48	1,335	286
Twenty-second	1,529.0	209,154	136.8	10	1	....	25	13	12	39	503	11	283	188	169	3,789	919
Total	12,576.0	2,331,491	176.3	180	4	....	358	206	186	635	4,555	117	2,551	2,478	1,923	36,147	10,665

BOROUGH OF THE BRONX.

Twenty-third	4,267.0	268,880	63.0	18	....	....	33	27	33	86	542	10	275	208	176	3,991	1,016
Twenty-fourth	22,255.8	162,062	7.3	13	1	....	37	21	16	62	341	11	186	168	138	3,051	761
Total	26,522.8	430,942	16.2	31	1	....	70	48	49	148	883	21	461	376	314	7,042	1,777

Wards.	Area in Acres.	Population by Census of 1910.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	233.0	21,851	93.8	1	....	....	2	1	1	3	53	....	31	21	25	411	67
Second	97.7	6,894	70.6	....	....	....	....	....	....	2	32	....	11	16	10	171	37
Third	161.4	15,910	98.6	1	....	....	....	2	1	2	32	1	29	13	21	323	37
Fourth	111.3	10,477	94.1	1	....	....	2	....	....	2	52	....	22	14	14	247	56
Fifth	119.4	19,401	162.5	1	....	....	6	1	3	6	49	1	46	45	37	386	171
Sixth	302.9	46,437	153.3	10	....	....	11	2	3	15	105	1	71	94	48	862	296
Seventh	458.5	44,037	96.0	1	1	....	6	2	2	10	84	....	50	35	34	679	138
Eighth	1,843.2	82,687	44.9	6	....	....	8	21	10	28	176	6	104	89	102	1,399	450
Ninth	623.6	50,501	81.0	6	....	....	5	....	4	13	91	2	67	41	28	818	178
Tenth	318.7	41,238	129.4	1	....	....	7	5	4	10	103	1	57	59	67	755	234
Eleventh	252.6	21,659	85.7	2	....	....	3	2	1	3	57	2	41	27	23	465	128
Twelfth	663.1	29,262	44.1	11	....	....	2	1	5	14	75	3	68	52	40	614	166
Thirteenth	230.3	30,091	130.7	2	....	....	....	3	....	9	38	2	36	24	20	413	122
Fourteenth	282.6	33,329	117.9	2	....	....	6	2	3	25	64	2	49	78	70	616	285
Fifteenth	244.8	35,887	146.6	3	....	....	3	3	4	14	58	2	45	72	55	551	213
Sixteenth	244.8	68,244	278.7	2	....	....	6	7	5	18	72	1	63	68	51	702	244
Seventeenth	823.3	70,346	85.5	3	....	....	8	13	13	33	128	4	92	96	93	1,137	348
Eighteenth	873.0	35,708	40.9	2	....	....	3	5	5	13	61	1	31	53	40	555	183
Nineteenth	413.8	44,860	108.4	4	....	....	1	5	2	11	51	....	47	27	29	561	131
Twentieth	461.4	27,463	59.5	3	1	....	5	4	....	7	62	....	40	24	18	510	97
Twenty-first	483.2	78,741	163.0	2	....	....	2	24	2	18	117	2	67	69	44	983	263
Twenty-second	1,361.6	81,283	59.7	6	....	....	7	20	8	19	108	3	96	77	59	1,294	284
Twenty-third	736.0	65,561	89.1	8	1	....	3	3	2	14	88	1	66	38	28	1,022	123
Twenty-fourth	1,198.5	80,466	67.2	6	1	....	10	2	10	14	93	1	76	62	39	1,001	254
Twenty-fifth	567.8	63,597	112.0	9	....	....	2	6	4	10	99	1	68	52	47	923	209
Twenty-sixth	3,590.2	177,963	49.5	6	1	....	9	19	8	62	133	3	145	138	114	1,885	643
Twenty-seventh	400.7	76,000	189.6	3	....	....	3	15	4	11	95	2	46	73	41	785	218
Twenty-eighth	884.4	77,451	87.6	3	....	....	2	12	8	20	146	....	65	44	49	1,342	239
Twenty-ninth	3,800.0	72,351	19.0	6	....	....	11	8	8	15	102	1	74	54	55	1,150	278
Thirtieth	5,404.1	76,406	14.1	6	....	....	8	5	7	17	105	5	70	50	57	1,121	303
Thirty-first	6,312.3	30,988	4.9	3	....	....	2	2	4	10	60	....	30	25	38	5 88	138
Thirty-second	5,479.5	17,419	3.2	2	....	....	1	1	3	2	19	....	17	14	26	2 81	80
Total	38,977.8	1,634,508	41.9	122	5	....	144	196	134	450	2,608	48	1,820	1,644	1,422	24,550	6,633

BOROUGH OF QUEENS.

Wards.	Area in Acres.	Population by Census of 1910.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	4,650	61,763	13.3	8	....	....	8	17	10	18	93	2	92	77	69	1,079	307
Second	14,700	105,219	7.2	4	....	....	11	16	18	35	180	2	105	98	101	1,577	468
Third	22,000	37,171	1.7	1	....	....	2	2	6	8	39	4	26	18	37	574	148
Fourth	36,600	67,412	1.8	8	2	....	8	11	5	27	97	3	58	52	73	1,131	307
Fifth	3,770	12,476	3.3	3	....	....	....	....	1	....	10	1	16	10	14	250	53
Total	81,720	284,041	3.5	24	2	....	29	46	40	88	419	12	297	255	294	4,611	1,283

BOROUGH OF RICHMOND.

Wards.	Area in Acres.	Population by Census of 1910.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	3,340	27,201	8.1	2	....	....	7	3	3	3	47	1	40	25	28	673	116
Second	4,130	16,871	4.1	2	1	....	1	1	....	3	29	....	14	11	10	248	41
Third	10,050	19,812	2.0	....	....	....	6	3	4	1	27	1	15	28	22	305	94
Fourth	8,180	10,662	1.3	1	....	....	....	1	....	....	17	1	7	10	16	176	55
Fifth	10,900	11,423	1.0	....	....	....	3	3	4	5	16	1	3	7	6	150	47
Total	36,600	85,969	2.3	5	1	....	17	11	11	12	136	4	79	81	82	1,552	353

Deaths According to Nativity of Deceased and Parents of Deceased.

Country.	Nativity of Deceased.						Nativity of Parents of Deceased.					
	Borough of—					City of New York.	Borough of—					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.		Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
United States	21,081	4,040	15,420	2,937	969	44,447	6,231	1,281	5,699	1,197	440	14,848
Ireland	4,300	682	2,482	301	173	7,938	7,302	1,197	4,532	578	282	13,891
Germany	2,580	859	2,161	773	128	6,501	3,702	1,295	3,310	1,179	170	9,656
Italy	1,918	330	1,007	142	48	3,445	5,107	830	2,796	353	116	9,202
Russia	1,841	400	1,176	68	17	3,502	3,161	679	2,281	168	38	6,327
England	621	145	560	109	40	1,475	644	161	673	132	45	1,655
Austria-Hungary	1,446	228	361	69	26	2,130	2,449	366	658	125	52	3,650
Scotland	213	47	180	26	12	478	248	62	256	41	17	624
British America	201	47	171	20	24	463	147	32	120	14	13	326
Switzerland	102	22	42	18	3	187	102	28	41	21	3	195
France	192	22	56	22	6	298	201	25	72	26	10	334
Bohemia	200	17	4	19	1	241	285	19	6	30	2	342
Roumania	164	46	63	2	.....	275	232	60	101	3	.....	396
Poland	69	9	57	33	6	174	110	16	150	104	22	402
Syria	12	1	21	1	.....	35	39	.....	35	1	.....	75
Sweden	171	44	230	21	34	500	187	56	306	26	30	605
Norway	70	14	186	5	22	297	74	14	283	13	28	412
Denmark	43	10	67	10	6	136	46	9	68	11	6	140
Finland	41	14	27	9	3	94	59	19	41	11	4	134
Holland	38	12	20	2	5	77	41	15	28	4	5	93
Cuba	28	2	13	.....	.....	43	23	3	13	.....	.....	39
Other West Indies	172	4	68	5	4	253	252	6	94	3	3	358
Belgium	23	1	8	1	2	35	22	4	10	1	2	39
Spain	37	3	16	.....	1	57	60	3	22	1	1	87
Greece	77	1	3	3	.....	84	105	5	5	4	.....	119
China	64	.....	6	1	.....	71	62	.....	6	1	.....	69
Australia	9	1	1	.....	1	12	5	.....	2	.....	1	8
Other foreign	162	18	56	5	1	242	200	14	60	6	1	281
Unknown	272	23	88	9	20	412	2,327	158	455	70	109	3,119
Mixed nationalities	.....	.....	.....	.....	.....	.....	2,734	685	2,427	488	152	6,486
Total	36,147	7,042	24,550	4,611	1,552	73,902	36,147	7,042	24,550	4,611	1,552	73,902

Pulmonary Tuberculosis and Cancer.

Deaths and Death Rates Per 100,000 *Population According to Nativities of Deceased and Parents of Deceased—Death Rates Calculated on Returns of United States Census,* 1910.

CITY OF NEW YORK, YEAR 1913.

Country.	Nativity of Deceased.				Nativity of Parents of Deceased.			
	Pulmonary Tuberculosis.		Cancer.		Pulmonary Tuberculosis.		Cancer.	
	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.
Austria-Hungary	330	123.8	265	99.4	375	94.0	270	67.7
China	30	650.1	4	86.7	27	585.0	4	86.7
Denmark	22	275.4	14	175.2	25	234.0	13	121.7
England	147	188.0	133	170.1	147	131.8	150	134.5
Finland	28	378.4	6	81.1	30	310.5	6	62.1
France	36	197.1	37	202.6	40	161.8	38	153.7
Germany	479	171.5	668	239.2	1,065	175.7	881	145.4
Greece	28	349.8	2	25.0	26	298.9	1	11.5
Ireland	1,111	440.0	616	244.0	2,530	449.8	932	165.7
Italy	446	131.0	201	59.0	625	117.5	222	41.7
Norway	63	283.2	29	130.3	71	225.1	26	82.4
Roumania	48	149.0	30	93.1	52	114.2	32	70.3
Russia	448	92.7	457	94.5	510	70.7	467	64.7
Scotland	69	298.8	36	155.9	84	237.0	53	149.6
Sweden	97	277.6	41	117.3	109	210.6	39	75.3
Switzerland	17	163.2	19	182.4	22	161.1	17	124.5
United States	4,939	174.3	1,530	54.0	1,618	159.6	645	63.6
Other foreign	246	404.0	132	216.8	....	.....	....	.....
Unknown	17	.....	3	.....	160	.....	67	.....
Other foreign and mixed foreign	....	.....	....	.....	507	243.1	198	95.0
Nativity mother and nativity father	....	.....	....	.....	578	154.3	162	38.2
Total	8,601	180.5	4,223	88.6	8,601	180.5	4,223	88.6

Pulmonary Tuberculosis and Cancer Deaths, Fifteen Years and Over, by Sex, Age and Civil Condition, for Year 1913. *Death Rates Per* 100,000 *of Population at Various Age Groups.*

Pulmonary Tuberculosis.

Ages.	MALES.												FEMALES											
	Single.		Married.		Widowed.		Divorced.		Un known.		Total.		Single.		Married.		Widowed.		Divorced.		Un kown.		Total.	
	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
15 to 24 yrs....	657	142.7	67	129.8	2	422.0	..	..	..	..	744	141.2	493	109.5	191	141.8	6	238.0	..	..	..	..	690	117.2
25 to 44 yrs....	1485	530.8	1251	196.6	126	723.0	5	..	7	..	2874	307.1	330	166.3	976	155.3	179	355.4	3	..	3	..	1491	169.0
45 yrs. and over	509	1058.0	954	280.9	365	680.4	5	..	10	..	1843	415.6	92	195.0	276	113.3	233	149.8	3	..	2	..	606	135.2
Total.....	2669	332.2	2272	220.7	493	700.4	10	290.5	17	..	5461	285.6	915	131.4	1443	143.3	418	201.8	6	102.2	5	..	2787	145.3

Cancer.

15 to 24 yrs....	20	4.2	..	..	..	..	..	..	..	..	20	3.8	22	4.9	3	2.2	..	..	..	..	..	..	25	4.2
25 to 44 yrs....	64	22.9	172	27.0	8	49.7	1	..	3	..	248	26.5	79	39.8	333	53.0	68	135.0	4	..	..	..	484	54.9
45 yrs. and over	164	340.9	970	285.6	305	568.5	4	..	2	..	1445	325.9	221	468.3	837	343.5	892	573.2	3	..	2	..	1955	436.4
Total.....	248	30.9	1142	111.0	313	444.7	5	145.2	5	..	1713	89.6	322	46.2	1173	116.5	960	463.4	7	119.3	2	..	2464	128.5

All Causes—Fifteen Years and Over.

	8189	1019.4	14578	1416,3	4551	6465.9	62	1801.0	448	..	27828	1450.0	4053	582.0	10037	996.5	8276	3995.1	54	920.0	80	..	22500	1173.0

Deaths According to Cause—Annual Rate Per 1,000, *and Age, with Meteorology and Number of Deaths in Public Institutions, by Weeks,* 1913.

Week Ending—	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.	Feb. 1.	Feb. 8.	Feb. 15.	Feb. 22.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.	Mar. 29.	Apr. 5.	Apr. 12.	Apr. 19.	Apr. 26.	May 3.	May 10.	May 17.	May 24.	May 31.	June 7.	June 14.	June 21.	June 28.
Total deaths	1,519	1,512	1,546	1,461	1,440	1,568	1,732	1,836	1,699	1,723	1,848	1,685	1,660	1,512	1,460	1,567	1,677	1,532	1,543	1,531	1,572	1,323	1,447	1,303	1,370	1,182
Annual death rate	14.75	14.68	15.01	14.19	13.98	15.23	16.82	17.83	16.50	16.73	17.94	16.36	16.12	14.68	14.18	15.22	16.28	14.88	14.98	14.87	15.27	12.85	14.05	12.65	13.30	11.48
Typhoid fever	7	3	4	2	3	4	4	4	4	5	4	9	2	4	1	5	3	3	2	3	2	3	2	1	8	2
Malarial fevers	1	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	11	8	5	15	10	9	8	11	12	12	27	24	16	25	14	23	26	20	29	31	18	32	24	21	20	16
Scarlet fever	14	11	12	19	17	13	10	20	12	24	19	20	20	22	16	25	11	15	13	16	25	9	22	11	14	5
Whooping cough	3	3	5	6	6	8	8	6	3	8	11	5	8	5	9	7	11	10	10	9	8	10	6	12	14	7
Diphtheria and croup	22	26	25	25	33	38	38	38	41	39	39	36	35	38	38	36	42	32	24	45	31	29	24	34	28	40
Influenza	17	14	21	13	15	18	11	21	19	21	17	12	16	18	6	10	10	7	4	4	10	1	3	3	1	1
Cerebro-spinal meningitis	3	4	6	7	4	5	2	1	3	7	7	4	2	6	6	6	6	8	4	4	2	4	1	5	5	5
Tuberculosis pulmonalis	176	158	171	180	174	160	207	219	195	202	180	198	223	196	175	195	241	168	184	200	198	172	170	138	152	162
Other tuberculous	26	17	28	24	29	38	30	41	32	24	37	37	45	38	33	37	40	37	31	26	33	23	27	28	28	27
Acute bronchitis	20	19	18	11	15	17	28	17	20	20	17	16	23	13	14	9	23	14	22	17	13	20	13	11	12	5
Pneumonia	191	150	162	126	130	167	191	214	213	211	230	174	171	115	106	105	134	120	121	122	91	94	100	80	66	64
Broncho pneumonia	110	104	123	106	95	115	144	176	150	164	160	136	128	121	116	125	124	108	114	102	125	95	106	92	69	79
Violent deaths	81	77	74	60	63	81	87	82	60	67	68	56	80	67	71	54	89	89	110	94	94	55	81	92	94	70
Under one year	249	243	270	256	233	234	298	257	273	284	283	280	306	248	261	292	302	269	282	253	257	222	268	229	209	194
Under five years	363	366	383	363	357	393	458	451	439	457	474	462	471	433	416	457	484	444	461	448	432	383	429	392	356	342
Five to sixty-five	859	863	845	819	811	908	939	1,029	931	927	1,003	899	914	835	796	845	925	828	837	863	868	712	747	691	777	639
Sixty-five years & over	397	283	318	279	272	267	335	356	329	339	371	324	275	244	248	265	268	260	245	220	272	228	271	220	237	201
In institutions	586	590	608	571	553	604	637	689	648	661	713	664	679	610	606	625	673	611	634	617	629	543	615	564	596	520
Inquest cases	244	192	203	185	181	244	240	209	195	199	217	184	201	155	166	186	226	216	226	195	195	159	176	192	201	154
Mean barometer	29.69	30.16	30.19	30.04	29.84	29.91	30.01	29.89	29.81	29.95	29.93	30.18	30.05	29.83	30.10	29.74	30.09	29.80	30.08	29.90	29.87	29.77	29.88	30.00	29.89	29.89
Mean humidity	68.	74.6	71.9	66.7	63.1	56.7	52.	62.6	66.9	56.3	79.	64.1	70.0	57.3	65.	69.7	52.	51.9	58.3	55.7	70.9	66.7	69.4	57.9	63.4	73.9
Inches of rain or snow	2.33	.72	.78	.81	.62	3.06	.52	.40	1.37	0.26	1.90	1.98	2.29	.26	2.	...	.03	1.38	...	.08	2.25	.62	.56	...	1.34	.08
Mean temperature (Fahrenheit)	43.6°	39.9°	41.9°	41.°	39.4°	25.6°	27.°	40.°	33.7°	32.3°	48.6°	46.4°	50.9°	50.3°	44.7°	53.9°	58.6°	64.3°	58.7°	55.9°	60.7°	61.3°	69.1°	65.°	72.9°	73.4°
Maximum temperature (Fahrenheit)	59.°	58.°	63.°	60.°	61.°	35.°	49.°	62.°	59.°	50.°	65.°	66.°	77.°	64.°	60.°	69.°	82.°	89.°	82.°	81.°	71.°	80.°	84.°	90.°	93.°	87.°
Minimum temperature (Fahrenheit)	30.°	18.°	18.°	27.°	23.°	13.°	11.°	17.°	11.°	12.°	34.°	29.°	28.°	41.°	33.°	43.°	36.°	41.°	39.°	36.°	47.°	50.°	57.°	49.°	59.°	62.°

Deaths According to Cause—Annual Rate Per 1,000, *and Age, with Meteorology and Number of Deaths in Public Institutions, by Weeks,* 1913.—Continued.

Week Ending—	July 5.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Oct. 4.	Oct. 11.	Oct. 18.	Oct. 25.	Nov. 1.	Nov. 8.	Nov. 15.	Nov. 22.	Nov. 22.	Dec. 6.	Dec. 13.	Dec. 20.	Dec. 27.
Total deaths	1,291	1,270	1,250	1,249	1,310	1,390	1,250	1,324	1,274	1,253	1,184	1,359	1,237	1,248	1,301	1,153	1,160	1,183	1,281	1,250	1,388	1,288	1,372	1,343	1,439	1,357
Annual death rate	12.54	12.30	12.14	12.13	12.72	13.50	12.14	12.86	12.37	12.17	11.50	13.20	12.01	12.12	12.63	11.20	11.26	11.49	12.44	12.14	13.48	12.51	13.32	13.04	13.97	13.18
Typhoid fever	3	3	11	5	5	9	10	7	7	6	7	14	20	21	27	17	11	8	14	12	17	10	6	5	8	5
Malarial fevers	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	...	...	...	...	...	1	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	17	17	11	3	6	10	6	5	5	6	2	1	2	2	1	2	3	3	6	5	9	5	7	8	9	12
Scarlet fever	11	...	4	4	2	4	3	2	1	3	4	...	4	2	3	1	3	4	6	2	4	4	4	6	6	5
Whooping cough	13	10	12	16	12	9	16	16	13	10	16	6	11	7	7	6	10	8	2	3	6	5	3	2	3	2
Diphtheria and croup	22	19	23	11	14	12	15	15	18	9	16	7	14	20	9	15	13	18	19	26	20	14	16	21	32	22
Influenza	...	2	...	1	...	1	...	1	1	1	1	2	...	1	1	2	1	1	5	4	3	5	7	8	7	7
Cerebro-spinal meningitis	2	4	2	6	5	2	2	4	5	6	4	6	6	5	4	2	1	3	6	4	5	2	1	4	4	2
Tuberculosis pulmonalis	130	159	149	151	152	156	130	154	140	107	115	180	132	134	139	143	138	122	140	149	171	178	168	152	159	151
Other tuberculous	27	28	32	25	33	34	13	27	25	29	8	29	17	23	26	22	11	19	22	20	27	13	18	16	24	31
Acute bronchitis	9	11	12	3	9	11	7	8	7	2	3	12	7	10	7	11	9	10	13	13	11	18	10	20	13	18
Pneumonia	50	40	40	48	47	40	52	44	34	34	39	53	44	46	59	47	51	56	64	70	92	99	107	86	105	130
Broncho pneumonia	68	76	65	67	67	55	50	43	61	45	54	51	65	62	48	45	72	58	75	71	94	87	75	81	89	95
Violent deaths	121	137	90	76	93	99	102	110	80	81	61	85	80	96	109	63	72	86	93	74	81	91	89	75	86	57
Under one year	232	270	259	299	345	381	340	350	323	327	326	309	298	270	230	229	239	213	231	209	226	209	193	211	233	218
Under five years	391	407	406	417	482	505	463	482	443	433	412	389	380	367	334	319	328	295	324	299	326	294	292	305	341	305
Five to sixty-five	682	681	666	637	625	696	634	647	642	625	593	727	649	667	740	641	630	650	712	714	798	710	784	770	807	797
Sixty-five years & over	218	182	178	195	203	189	153	195	189	195	179	243	208	214	227	193	202	238	245	237	264	284	296	268	291	255
In institutions	559	523	542	525	550	578	539	527	573	544	498	569	492	457	522	448	457	445	502	504	557	490	547	499	570	522
Inquest cases	203	228	174	176	200	207	212	208	194	182	152	194	164	205	224	181	172	200	215	177	199	190	203	207	221	168
Mean barometer	29.89	29.76	29.80	29.88	29.93	29.91	29.99	29.99	29.86	30.06	30.01	30.08	29.98	29.73	30.01	29.86	29.85	29.89	30.07	29.83	29.98	0.13	29.97	29.85	29.93	29.87
Mean humidity	65.4	60.	59.	61.	71.	68.	65.4	62.	69.3	83.	62.7	72.	67.6	73.	86.3	64.	76.3	64.	63.7	60.	75.3	69.	69.	59.4	59.9	74.4
Inches of rain or snow	.67	.63	.45	1.17	3.64	1.08	.13	.49	.18	4.15	.47	1.18	1.20	5.28	1.13	1.	5.36	.20	.26	.62	.87	.41	...	.80	...	2.82
Mean temperature (Fahrenheit)	79.°	73.6°	75.9°	75.°	77.3°	74.9°	72.9°	75.1°	72.7°	71.9°	64.9°	61.°	63.7°	61.7°	66.3°	56.7°	55.1°	52.7°	51.°	45.3°	52.4°	44.1°	45.4°	37.6°	39.°	38.6°
Maximum temperature (Fahrenheit)	95.°	91.°	90.°	88.°	95.°	90.°	95.°	94.°	84.°	84.°	86.°	77.°	77.°	74.°	77.°	69.°	66.°	72.°	65.°	65.°	72.°	70.°	58.°	57.°	55.°	52.°
Minimum temperature (Fahrenheit)	66.°	58.°	62.°	60.°	64.°	63.°	60.°	61.°	60.°	61.°	49.°	45.°	48.°	56.°	56.°	42.°	39.°	33.°	38.°	30.°	36.°	31.°	38.°	19.°	24.°	20.°

Deaths from All Causes and Diarrhoeal Diseases Under One Year of Age, by Weeks, City of New York.

Week Ending.	All Causes.							Diarrhœal Diseases.						
	Under 1 Month.	1 Month and Under 2 Months.	2 Months and Under 3 Months.	3 Months and Under 6 Months.	6 Months and Under 9 Months.	9 Months and Under 12 Months.	Total Under 1 Year.	Under 1 Month.	1 Month and Under 2 Months.	2 Months and Under 3 Months.	3 Months and Under 6 Months.	6 Months and Under 9 Months.	9 Months and Under 12 Months.	Total Under 1 Years.
January 4	130	26	14	35	24	20	249	4	3	4	6	4	...	21
January 11	126	36	20	28	17	16	243	11	9	3	4	2	1	30
January 18	118	23	20	46	36	27	270	9	4	3	6	2	2	26
January 25	99	28	22	40	27	40	256	5	3	2	10	5	5	30
February 1	108	19	20	34	34	18	233	5	3	4	8	4	3	27
February 8	85	28	18	41	31	31	234	5	7	5	6	3	5	31
February 15	128	30	16	54	37	33	298	6	2	3	8	1	2	22
February 22	102	14	16	54	43	28	257	5	5	2	7	4	1	24
March 1	109	23	22	51	32	36	273	6	5	6	7	4	3	31
March 8	121	26	16	53	39	29	284	6	4	4	12	5	...	31
March 15	104	41	17	47	42	32	283	6	10	5	10	5	4	40
March 22	116	27	23	48	38	28	280	4	7	6	12	2	4	35
March 29	104	30	32	55	48	37	306	5	7	11	13	5	3	44
April 5	88	19	16	40	47	38	248	10	7	3	6	12	4	42
April 12	94	33	20	40	36	38	261	5	3	6	8	3	2	27
April 19	104	26	30	43	48	41	292	2	6	5	11	10	7	41
April 26	106	34	17	45	53	47	302	8	4	7	11	7	2	39
May 3	89	28	20	49	45	38	269	...	8	4	5	7	4	28
May 10	93	33	21	36	59	40	282	6	3	3	8	4	7	31
May 17	101	27	21	31	29	44	253	1	8	6	7	5	5	32
May 24	98	34	15	39	31	40	257	3	6	6	9	10	5	39
May 31	88	19	9	36	33	37	222	2	4	2	11	6	3	28
June 7	96	29	18	33	40	52	268	7	2	8	16	5	9	47
June 14	89	21	16	29	36	38	229	5	3	4	9	6	3	30
June 21	85	20	18	34	27	25	209	3	4	1	8	8	3	27
June 28	81	16	9	35	21	32	194	4	3	3	13	7	4	34
July 5	88	21	12	36	37	38	232	7	8	4	18	15	10	62
July 12	90	28	34	40	46	32	270	7	12	19	24	25	11	98
July 19	72	26	21	55	48	37	259	4	9	12	32	28	18	103
July 26	94	26	20	73	56	30	299	9	15	11	49	30	17	131
August 2	87	28	38	84	59	49	345	5	11	24	52	28	33	153
August 9	95	27	33	110	66	50	381	6	13	21	78	45	32	195
August 16	101	35	28	67	63	46	340	10	9	18	43	36	28	144
August 23	100	34	35	67	67	47	350	4	11	20	43	42	26	146
August 30	94	23	30	59	62	55	323	9	11	18	34	38	27	137
September 6	99	37	32	64	50	45	327	9	15	17	41	34	26	142
September 13	95	38	31	71	52	39	326	7	17	18	39	28	20	129
September 20	99	30	33	55	54	38	309	6	7	20	26	26	20	105
September 27	109	25	30	56	48	30	298	5	6	19	24	25	14	93
October 4	80	35	33	55	41	26	270	6	11	15	26	16	9	83
October 4	90	30	21	41	24	24	230	9	10	6	21	13	11	70
October 18	99	19	18	47	28	18	229	6	5	6	19	17	7	60
October 25	89	28	19	43	21	39	239	10	7	6	18	9	17	67
November 1	86	32	20	30	21	24	213	3	9	3	15	9	5	44
November 8	97	25	25	45	21	18	231	7	8	12	17	7	6	57
November 15	97	28	16	29	22	17	209	2	5	4	5	6	3	25
November 22	93	29	18	31	25	30	226	4	4	3	10	4	4	29
November 29	97	18	18	27	21	28	209	3	4	3	6	2	3	21
December 6	95	19	21	20	16	22	193	5	1	3	6	2	7	24
December 13	94	25	24	30	16	22	211	4	4	5	6	2	3	24
December 20	102	27	16	46	24	18	233	5	2	6	6	3	4	26
December 27	84	32	16	41	27	18	218	2	5	1	7	3	4	22
Total, 52 weeks	5,088	1,415	1,128	2,398	1,968	1,725	13,722	287	349	410	896	629	456	3,027

Deaths by Suicide in the Borough of Manhattan.

	Austro-Hungary.		Bohemia.		England.		France.		Germany.		Ireland.		Italy.		Russia.		Other Foreign Countries.		United States.		Unknown.		Total by Sexes.		Total both Sexes.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Cuts and stabs	..	..	..	..	3	..	..	..	4	..	..	..	2	..	..	..	2	..	10	..	..	..	21	..	21
Drowning	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	2	1	..	..	5	1	6
Gunshot	9	..	1	..	1	..	1	..	15	2	..	..	8	..	6	..	5	..	24	4	6	..	76	6	82
Hanging	5	..	..	1	2	..	..	..	14	..	1	1	1	..	2	..	8	1	14	1	3	..	50	4	54
Leaps	3	3	..	..	1	..	..	..	2	1	4	..	2	..	4	5	2	1	9	7	2	1	29	18	47
Railroads	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Arsenic (Paris green)	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..	..	2	3	5
Bichloride of Mercury	1	2	..	..	..	1	..	..	1	1	..	1	3	2	..	1	..	1	4	3	..	..	9	12	21
Carbolic acid	..	..	1	..	..	1	..	..	1	1	1	..	..	..	3	..	..	..	2	5	..	..	8	7	15
Cyanide of potassium	..	..	..	..	..	..	..	..	2	..	..	1	..	..	2	..	1	..	2	1	1	..	8	2	10
Opium (morphine)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	1	..	3	3	6
Oxalic acid	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other poison	1	..	..	..	..	..	..	..	2	..	..	1	..	..	..	1	1	..	4	..	2	..	10	2	12
Unknown poison	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	4	3	..	..	6	5	11
Illuminating gas	11	5	1	..	7	2	..	1	28	10	7	3	3	1	22	2	11	4	42	18	4	1	136	47	183
Total by sexes	30	11	3	1	15	4	1	1	69	15	15	10	20	4	40	10	31	8	120	45	19	2	363	111	474
Total both sexes	41		4		19		2		84		25		24		50		39		165		21		474		

** Deaths by Suicide in The City of New York.*

	Austria-Hungary		Bohemia.		England.		France.		Germany.		Ireland.		Italy.		Russia.		Other Foreign Countries.		United States.		Unknown.		Total by Sexes.		Total both Sexes.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Cuts and stabs	1	..	..	..	5	..	..	..	8	..	1	..	2	..	3	..	3	..	17	..	..	..	40	..	40
Drowning	..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	..	2	..	3	2	..	..	8	3	11
Gunshot	12	..	1	..	3	..	2	..	27	3	1	..	14	..	8	..	10	..	72	7	9	..	159	10	169
Hanging	8	..	..	1	3	..	1	..	27	1	1	1	3	..	4	..	10	2	26	3	6	..	89	8	97
Leaps	4	3	..	..	3	..	..	..	5	2	5	1	2	..	6	9	2	1	18	10	2	1	47	27	74
Railroads	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	1	..	3	1	4
Arsenic (Paris green)	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	2	1	..	..	3	4	7
Bichloride of mercury	2	2	..	..	..	1	..	..	2	2	..	1	3	2	..	1	..	1	11	6	..	..	18	16	34
Carbolic acid	..	1	1	..	..	1	..	..	3	3	1	..	..	..	5	..	..	..	7	5	..	..	17	10	27
Cyanide of potassium	1	..	..	..	..	..	..	..	2	..	..	1	..	..	2	..	2	..	2	1	1	..	10	2	12
Opium (morphine)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	6	2	1	..	7	3	10
Oxalic acid	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other poison	1	..	..	..	..	..	..	..	4	..	1	1	1	..	..	1	1	..	7	2	2	..	17	4	21
Unknown poison	1	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	3	3	..	..	6	5	11
Illuminating gas	15	7	1	..	..	..	2	1	50	17	8	5	7	3	35	5	16	10	85	36	6	2	240	88	328
Total by sexes	45	14	3	1	15	2	5	1	130	28	20	13	33	7	64	17	46	15	260	78	28	3	664	181	845
Total both sexes	59		4		17		6		158		33		40		81		61		338		31		845		

* The 845 suicides occurred in the boroughs as follows: Manhattan, 474; The Bronx, 91; Brooklyn, 210; Queens, 50: Richmond, 20.

Deaths by Accident and Negligence.

	Borough of					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Fractures and Contusions:						
Crushed by derricks, stones, etc	33	4	1	1	....	39
Crushed by falling bodies	22	11	16	6	2	57
Crushed by machinery	14	....	12	2	2	30
Crushed by elevators	31	....	7	1	1	40
Kicked by horses	6	1	2	3	1	13
Explosions	7	1	....	2	12	22
Others	....	6	5	3	....	14
Not specified by Coroners	56	13	19	3	6	97
Falls:						
Down shafts, holds of vessels, etc	54	3	14	2	1	74
Down stairs	96	17	49	6	3	171
From buildings	60	9	14	1	2	86
From fire escapes	40	9	6	1	....	56
From scaffolds	32	3	8	5	1	49
From windows	96	25	43	4	1	169
From wagons, cars, etc	32	5	36	4	4	81
On streets and sidewalks	53	4	17	4	1	79
Others	142	10	48	18	4	222
Not specified by Coroners	32	4	32	1	....	69
Street Vehicles:						
Run over by wagons, trucks, etc	121	9	47	6	3	186
Run over by automobiles	173	33	64	16	7	293
Others	5	1	1	....	....	7
Railroads:						
Electric surface	51	8	64	7	....	130
Steam	15	24	2	28	5	74
Elevated	13	1	4	....	....	18
Subways	20	1	1	....	....	22
Wounds:						
By firearms	8	1	3	3	1	16
By cutting and piercing instruments	....	....	....	2	1	3
Burns and Scalds:						
By stoves	32	4	39	4	2	81
By lamps	4	....	3	1	....	8
By fluids	64	9	32	8	3	116
By playing with matches	28	5	16	4	1	54
By steam	....	1	5	....	2	8
By others	32	15	32	13	1	93
Not specified by Coroners	42	3	9	2	1	57
Conflagrations	40	1	9	3	2	55
Electric current	7	10	5	4	1	27
Drownings	211	37	153	48	42	491
Freezing	1	....	2	1	....	4
Starvation	2	....	....	....	1	3
Illuminating gas	109	16	111	20	3	259
Chloroform and ether	6	1	3	....	1	11
Coal gas	1	1	2	....	....	4
Other gases	18	....	7	4	....	29
Poison:						
By snake or insect bite	1	1	1	....	1	4
By food	16	1	5	2	....	24
By bichloride of mercury	2	3	6	....	....	11
By carbolic acid	3	1	....	....	....	4
By cocaine	3	1	1	....	....	5
By lysol	....	1	....	....	....	1
By opium	4	1	4	....	....	9
By wood alcohol	1	....	1	1	....	3
By alcohol	1	1	....	....	....	2
By others	18	5	5	3	....	31
Not specified by Coroners	3	1	10	1	....	15
Foreign body in larynx	15	6	4	....	....	25
Criminal abortion	28	2	17	8	1	56
Sunstroke	29	9	24	1	1	64
Lightning	....	1	....	....	1	2
Other violence	48	7	31	3	4	93
Hydrophobia	2	2	2	2	....	8
Tetanus	13	2	10	2	1	28

Recapitulation.

	Borough of					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Fractures and contusions	169	36	62	21	24	312
Falls	637	89	267	46	17	1,056
Street vehicles	299	43	112	22	10	486
Railroads	99	34	71	35	5	244
Wounds	8	1	3	5	2	19
Burns and scalds	202	37	136	32	10	417
Conflagrations	40	1	9	3	2	55
Electric current	7	10	5	4	1	27
Drowning	211	37	153	48	42	491
Neglect and exposure	3	....	2	1	1	7
Illuminating gas	109	16	111	20	3	259
Other gases	25	2	12	4	1	44
Poison	52	16	33	7	1	109
Suffocation	15	6	4	....	....	25
Criminal abortion	28	2	17	8	1	56
Sunstroke	29	9	24	1	1	64
Lightning	....	1	....	....	1	2
Other violence	48	7	31	3	4	93
Tetanus	13	2	10	2	1	28
Hydrophobia	2	2	2	2	....	8
Total deaths from accidents and negligence.	1,996	351	1,064	264	127	3,802

Deaths in Institutions, Year 1913.

Borough of Manhattan.

Babies' Hospital	421	New York City School and Hospital	127
Bellevue Hospital	3,236	New York Nursery and Child's Hospital	114
Beth Israel Hospital	189	Nursery and Child's Hospital	4
City Hospital	495	New York Polyclinic Hospital	268
Columbus Hospital	58	Post Graduate Hospital	498
Flower Hospital	248	Presbyterian Hospital	288
Foundling Hospital	1,065	Reception Hospital	131
French Hospital	122	Red Cross Hospital	41
German Hospital	313	Roosevelt Hospital	270
Gouverneur Hospital	577	St. Francis' Home	56
Hahneman Hospital	59	St. Gregory's Hospital	31
Har Moriah Hospital	63	St. Luke's Hospital	407
Harlem Hospital	775	St. Mark's Hospital	70
Home for Aged, Little Sisters of Poor	114	St. Mary's Hospital	51
House of Relief	193	St. Vincent's Hospital	419
J. Hood Wright (Knickerbocker Hospital)	166	Skin and Cancer Hospital	34
Lying-In Hospital	218	Sloane Hospital for Women	96
Manhattan State Hospital	574	Sydenham Hospital	74
Metropolitan Hospital	1,814	Washington Heights Hospital	61
Misericordia Hospital	155	Willard Parker Hospital	428
Montefiore Hospital	81	Workhouse Hospital	54
Mt. Sinai Hospital	696	Other Institutions	1,308
New York City Home and Hospital (Central and Neurological)	787	Total	17,691
New York Hospital	442		

Borough of The Bronx.

Lebanon Hospital	386	Home for Incurables	87
Lincoln Hospital	352	Seton Hospital	349
Riverside Hospital	426	Montefiore Hospital	10
St. Francis' Hospital	282	Other Institutions	146
St. Joseph's Hospital	617	Total	3,153
Fordham Hospital	498		

Borough of Brooklyn.

Angel Guardian Home	37	Lutheran Hospital	46
Bethany Deaconess Hospital	26	Methodist Episcopal Hospital	248
Brooklyn Hospital	280	New York City Home for Aged and Infirm	338
Bushwick Hospital	101	Norwegian Hospital	149
Consumptive Home	67	Samaritan Hospital	32
Cumberland Street Hospital	210	St. Catharine's Hospital	329
Coney Island Hospital	199	St. Christopher's Hospital	72
Eastern District Hospital	85	St. John's Hospital	130
German Evangelical Hospital	49	St. Mary's Hospital	278
German Hospital	272	St. Peter's Hospital	535
Home for Aged, Little Sisters of Poor	92	Swedish Hospital	88
Infants' Hospital	17	Williamsburg Hospital	151
Jewish Hospital	386	Other Institutions	724
King's County Hospital	1,446	Total	7,175
Kingston Avenue Hospital	291		
Long Island College Hospital	309		
Long Island State Hospital	188		

Deaths in Institutions, Year 1913.—Continued.

BOROUGH OF QUEENS.

Flushing Hospital	122	St. Mary's Hospital	108
Jamaica Hospital	74	Other Institutions	76
St. John's Hospital	242		
St. Joseph's Hospital	50	Total	672

BOROUGH OF RICHMOND.

City Farm Colony	133	St. Vincent's Hospital	132
Marine Hospital	39	Other Institutions	87
S. R. Smith's Infirmary	209		
Sailor's Snug Harbor	97	Total	697

RECAPITULATIONS.

Manhattan	17,691	Richmond	697
The Bronx	3,153		
Brooklyn	7,175	City of New York	29,388
Queens	672		

Disposition of Human Remains, Including Still-born Infants, in The City of New York.

Cemeteries.	Number of Interments.	Cemeteries.	Number of Interments.
Borough of Manhattan—		Borough of Queens—Continued.	
Marble	3	Evergreen	3,419
Old St. Patrick's Vault	1	Flushing	314
Trinity	51	Grace Church	3
Total	55	Linden Hill	1,750
		Lutheran	5,367
Borough of The Bronx—		Machpelah	166
City	4,662	Maple Grove	387
Pelham Bay	11	Montefiore	1,111
Presbyterian	1	Mount Hebron	601
St. Peter's	36	Mount Carmel	533
St. Raymond's	2,889	Mount Judah	281
Woodlawn	2,228	Mount Nebo	211
Total	9,827	Mount Olivet	1,835
		Mount St. Mary's	330
Borough of Brooklyn—		Mount Zion	3,076
Canarsie	56	New Union Fields	3
County Farm	1,447	Prospect	35
Cypress Hills	614	Springfield	40
Evergreen	913	St. George's	1
Flatlands	3	St. James'	2
Friends	17	St. John's	1,912
Gravesend	14	St. Mary's	1
Greenwood	3,676	St. Michael's	2,182
Holy Cross	6,006	St. Monica's	67
Holy Trinity	1,796	Union Fields	499
Maimonides	117	United States Crematory	875
Mount Hope	112	Zion	17
National	99	Others	14
New Lotts	2	Total	47,142
New Utrecht	8		
Salem Fields	192	Borough of Richmond—	
United Jewish Congregation	63	Baron Hirsch	501
Washington	2,406	Bethel	72
Total	17,541	City Farm Colony	181
		Fairview	115
Borough of Queens—		Fountain	29
Acacia	255	Hillside	6
Aqueduct	3	Lake	67
Bayside	338	Merrill	2
Bethel El	118	Moravian	331
Calvary	19,553	Mount Loretto	11
Cedar Grove	517	Mount Richmond	1,072
Cypress Hills	1,326	New Springville	7
		Ocean View	40
		Reformed Church Yard	4
		Sailor's Snug Harbor	79
		St. Andrew's	7

Disposition of Human Remains, Including Still-born Infants, in The City of New York —Continued.

Cemeteries.	Number of Interments.
Borough of Richmond—Continued.	
St. John's Lutheran	7
St. Joseph's	28
St. Luke's	14
St. Mary's, Third Ward	89
St. Mary's, Fourth Ward	97
St. Peter's	300
Silver Lake	29
Silver Mount	89
Staten Island	25
Sylvan	4
United Hebrew	299
West Baptist	16
Woodland	152
Woodrow's Church	4
Others	9
Total	3,686
Summary—	
Borough of Manhattan	55
Borough of The Bronx	9,827
Borough of Brooklyn	17,541
Borough of Queens	47,142
Borough of Richmond	3,686
City	78,251

Deaths of Persons 100 *Years of Age and Over.*

Date of Death.	Name.	Age. Years.	Months.	Days.	Nativity.	Cause of Death.	Borough of Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	City of New York.
1913.												
Jan. 4	Jonas Kaplan	111	..	..	Russia	Old age	1	..	..	..	..	1
Feb. 12	Isaac Cohen	107	..	..	Germany	Senility	1	..	..	..	..	1
Feb. 13	Pauline Warlow	103	..	..	United States	Senility	1	..	..	..	..	1
Feb. 22	Wolf Jacobs	103	..	..	Germany	Broncho pneumonia	1	..	..	..	..	1
Mar. 12	Sarah Novinsky	104	3	..	Russia	Influenza	1	..	..	..	..	1
Mar. 15	Marie Speranza	100	8	1	Italy	Endocarditis	..	..	1	..	..	1
April 22	Catherine Negro	105	..	..	Italy	Arterio sclerosis	1	..	..	..	..	1
May 18	Bart. I. Zulzoski	103	2	14	Austria	Apoplexy	..	..	1	..	..	1
July 31	Gutten Schaefer	102	..	..	Russia	Senility	..	..	1	..	..	1
Aug. 30	Cano Laveglia	102	..	..	Italy	Nephritis	..	..	1	..	..	1
Dec. 10	Lemuel Coffin	101	..	..	United States	Nephritis	..	..	..	..	1	1
Dec. 29	Anna Wallerstein	103	..	..	Russia	Myocarditis	..	..	1	..	..	1
Dec. 30	Cath. Gallagher	100	..	..	Ireland	Nephritis	..	..	1	..	..	1
						Total	6	..	6	..	1	13

Deaths of Immigrants at Ellis Island Hospital, Year 1913.

Cause of Death.	Total.	Male.	Female.	White.	Colored.	Under 1 Yr.	1–4 Yrs.	5–14 Yrs.	15–34 Yrs.	35–54 Yrs	55–74 Yrs.	75 and Over.
Typhoid fever	2	1	1	2	...	....	1	...	1	...	...	...
Typhus fever	...	...	...	....	...	....	...	...	...	...	...	...
Malaria	1	1	...	1	...	....	...	...	1	...	...	...
Measles	101	50	51	101	...	38	59	4	...	...	...	...
Scarlet fever	58	28	30	58	...	6	39	11	2	...	...	...
Whooping cough	2	...	2	2	...	....	2	...	...	...	...	...
Diphtheria	22	13	9	22	...	5	17	...	...	...	...	...
Tuberculosis (all forms)	14	8	6	13	1	....	2	2	8	2	...	...
Pneumonia (lobar and broncho)	51	28	23	51	...	18	18	3	7	3	2	...
Other acute infectious diseases	13	11	2	11	2	2	1	3	7	...	...	...
All other causes	37	18	19	35	2	9	3	4	13	5	3	...

Vital Statistics of Principal Cities of the United States for the Year 1913.

(Rates based upon data gathered by Dr. F. C. Gram, Registrar of Vital Statistics, Buffalo, N. Y.)

City.	Estimated Population 1913.	Total Deaths From All Causes.	Death Rate Per 1,000.	Measles Death Rate Per 100,000.	Scarlet Fever Death Rate Per 100,000.	Whooping Cough Death Rate Per 100,000.	Diphtheria Death Rate Per 100,000.	Pulmonary Tuberculosis Death Rate Per 100,000.	Total Births.	Birth Rate Per 1,000.	Total Deaths Under One Year Rate Per 1,000 Births.
Seattle, Wash.	295,226	2,472	8.37	8.8	2.6	9.5	4.1	67.1	4,475	15.15	66.1
Boston	722,465	11,837	16.38	10.6	10.6	13.4	21.6	147.2	19,700	27.26	107.1
Buffalo	446,889	7,043	15.76	17.0	3.3	6.7	9.2	126.6	11,867	26.55	137.4
Chicago	2,344,018	35,298	15.06	12.4	38.7	4.3	40.7	140.7	.....	.....	.....
Cincinnati	398,452	6,733	16.89	16.8	5.0	12.5	13.3	222.8	8,000	20.07	99.9
Cleveland	622,699	8,842	14.19	16.5	18.9	11.1	36.9	109.8	13,687	21.98	145.8
Detroit	520,586	8,897	17.09	11.6	20.7	14.2	52.4	96.6	17,524	33.66	132.7
Indianapolis	253,668	4,002	15.77	5.1	4.7	13.8	19.3	186.5	5,378	21.20	97.9
Kansas City, Mo	273,943	4,089	14.92	20.8	2.2	11.3	12.0	129.2	5,046	18.41	130.2
Los Angeles	412,466	6,194	15.01	9.4	2.6	3.4	9.9	219.6	8,292	20.10	86.1
Louisville	233,216	3,800	16.29	4.2	2.5	12.4	10.7	175.8	4,327	18.55	129.2
Jersey City	291,616	4,198	14.39	4.4	11.6	6.2	25.7	132.0	5,662	19.41	144.6
Newark, N. J.	379,211	5,562	14.66	3.2	6.8	7.1	29.0	166.4	10,810	26.13	92.4
New Orleans	355,958	7,088	19.91	10.1	.56	3.4	31.4	230.6	7,821	21.97	120.3
*New York	5,198,888	73,902	14.21	12.1	9.7	8.1	26.0	165.3	135,134	25.99	102.0
Philadelphia	1,631,956	25,663	15.73	12.2	9.9	6.5	22.1	159.6	41,200	25.24	112.7
Providence	240,156	3,645	15.17	15.7	5.7	6.6	28.7	125.3	.....	.....	.....
Rochester	235,000	3,453	14.69	7.2	8.5	14.9	17.4	99.5	6,004	25.55	130.2
San Francisco	440,995	7,002	15.87	1.1	3.6	3.6	6.1	158.2	7,603	17.24	84.3
St. Louis	723,347	10,850	14.99	15.8	5.2	3.0	27.6	134.1	15,012	20.75	99.5
Washington, D. C.	348,077	6,006	17.25	7.2	3.7	4.9	7.4	194.5	6,903	19.83	119.9

*The estimated population of New York as calculated by the Department of Health is much higher than that of the Bureau of the Census at Washington, D. C., and in consequence the specific death rates given above are lower than stated.

Vital Statistics of Prominent European Cities and City of New York, Year 1913.

	Population Estimated.	Total Deaths Excluding Still births.	Death Rate per 1,000.	Smallpox, Deaths.	Typhoid Fever, Death Rate per 100,000.	Measles, Death Rate per 100,000.	Scarlet Fever, Death Rate per 100,000.	Whooping Cough, Death Rate per 100,000.	Diphtheria and Croup, Death Rate per 100,000.	Pulmonary Tuberculosis, Death Rate per 100,000.	Other Tuberculous, Death Rate per 100,000.	Pneumonia, Lobar and Broncho Death Rate per 100,000.	All Causes Under 1 Year, Rate per 1,000 Births.	Diarrhœal Deaths Under 1 Year, Rate per 1,000 Births.	Total Births, Excluding Still births.	Birth Rate.
Amsterdam	591,567	6,574	11.11	.....	4.9	23.2	1.9	17.2	9.8	118.2	44.5	100.8	66.8	11.1	13,736	23.22
Barcelona	600,000	14,661	24.43	.....	55.0	84.7	1.5	6.2	18.7	241.5	47.8	309.2	143.4	66.0	14,054	23.43
Belfast	396,000	7,453	18.82	.....	5.6	46.0	38.6	10.4	13.4	213.1	80.3	168.0	144.2	.....	10,996	27.76
Berlin	2,082,111	28,065	13.48	7	1.6	8.5	13.5	7.5	26.9	154.8	29.5	.....	137.3	.....	40,832	19.61
Birmingham	859,644	12,962	15.08	.....	2.3	46.3	20.8	19.0	19.7	121.1	34.9	114.9	128.9	28.8	23,812	27.70
Bradford	290,540	4,474	15.40	.....	6.2	12.4	3.4	7.8	18.2	106.3	39.0	90.9	127.5	26.5	5,811	20.00
Bremen	261,742	3,434	13.12	1	2.3	42.0	29.4	5.0	59.2	126.8	48.9	109.6	105.1	24.1	6,554	25.04
Breslau	539,605	9,735	18.04	.....	4.1	23.7	5.4	19.5	9.3	217.4	35.4	148.3	171.7	50.4	14,166	26.25
Bucharest	338,109	7,943	23.49	5	42.3	0.6	26.3	9.2	22.5	347.5	103.5	265.9	203.4	66.7	9,975	29.50
Budapest	930,660	17,353	18.64	1	8.7	21.4	70.9	3.3	23.1	307.9	51.9	139.2	149.6	42.1	23,236	24.97
Charlottenburg	325,300	3,493	10.74	.....	2.2	7.7	14.4	1.8	20.6	87.9	23.4	85.8	122.7	18.8	5,737	17.64
Copenhagen	483,000	6,487	13.43	.....	0.6	7.0	10.8	27.1	5.2	117.8	33.5	128.2	102.7	18.9	11,439	23.68
Dresden	561,500	7,329	13.05	.....	2.0	9.3	3.4	5.5	26.9	140.9	23.0	92.6	116.8	25.4	11,297	20.12
Dublin	403,000	8,657	21.48	.....	10.7	7.2	8.2	21.3	23.3	265.5	92.8	95.8	156.6	.....	11,224	27.85
Dusseldorf	402,300	4,572	11.36	.....	0.7	15.2	4.7	7.2	10.4	97.7	21.4	104.9	123.5	41.9	10,298	25.60
Edinburgh	321,645	4,630	14.39	.....	3.1	19.3	11.8	37.0	9.6	114.4	54.4	108.5	97.7	9.4	6,458	20.08
Florence	242,231	4,643	19.17	1	20.6	15.7	0.8	20.6	7.8	215.1	71.8	236.6	126.0	25.6	4,839	19.98
Glasgow	1,032,228	16,957	16.43	.....	3.6	55.4	12.7	71.6	19.6	132.0	64.8	153.4	128.3	21.0	28,674	27.78
Hamburg	1,022,900	13,024	12.74	1	5.5	13.4	13.5	12.8	41.5	112.4	29.0	87.5	113.6	31.7	21,914	21.43
Köln	544,400	7,622	14.00	.....	2.4	24.8	3.1	24.8	14.1	128.0	40.2	141.5	156.1	47.3	14,170	26.03
Leipzig	615,800	7,884	12.81	.....	1.5	11.2	8.9	4.7	18.3	149.6	31.8	88.7	142.9	57.5	13,300	21.60
Liverpool	756,553	13,658	18.05	1	4.4	42.6	7.5	30.5	10.5	156.4	51.7	176.3	132.6	41.7	22,555	29.81
London	4,518,191	65,030	14.39	.....	2.5	34.7	4.2	17.7	9.7	132.4	31.2	130.3	105.4	22.4	112,637	24.93
Lyons	523,796	8,767	16.74	.....	7.4	10.5	1.9	1.9	9.5	225.1	32.5	220.5	87.3	21.8	8,293	15.84
Manchester	731,556	11,718	16.02	.....	6.6	35.4	12.8	19.0	14.4	144.3	52.4	161.0	128.6	22.7	19,052	26.04
Milan	645,683	10,702	16.57	.....	36.9	15.9	4.0	6.4	6.4	139.2	52.8	206.9	130.4	37.3	13,990	21.67
Moscow	1,694,000	41,940	24.76	45	11.4	76.7	50.6	23.2	48.3	226.5	41.2	340.6	278.7	115.4	55,930	33.02
Munchen	636,000	9,160	14.40	.....	2.2	12.6	1.4	12.4	6.6	170.0	35.1	89.2	138.7	43.6	13,169	20.71
Paris	2,897,027	44,624	15.40	1	9.7	26.8	3.7	10.9	6.5	317.8	61.0	115.5	99.3	31.5	48,746	16.82
Prague	493,846	6,705	13.58	.....	5.1	7.7	10.9	6.9	15.2	252.7	45.6	75.9	113.1	.....	9,250	18.73
St. Petersburg	1,705,800	36,075	21.15	28	56.9	51.8	44.9	16.6	22.3	289.0	58.5	266.0	228.5	98.6	44,012	25.80
Stockholm	383,000	4,834	10.98	2	0.9	.....	2.7	5.7	5.7	177.5	41.6	.....	66.5	9.9	7,799	17.72
Vienna	2,115,254	32,314	15.28	.....	2.3	13.8	12.0	10.4	19.8	237.1	66.9	132.4	156.0	41.7	37,387	17.68
Zurich	201,000	2,239	11.14	.....	2.5	3.0	1.0	8.0	3.5	133.8	48.3	85.1	91.0	26.0	3,966	19.73
New York	5,372,983	73,902	13.76	.....	6.7	11.7	9.4	7.8	24.8	160.1	26.6	186.9	102.0	22.5	135,134	25.15

Births by Nativities of Parents.

Country.	Borough of—										City of New York.	
	Manhattan.		The Bronx.		Brooklyn.		Queens.		Richmond.			
	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.
Austria Hungary...	7,226	1,804	892	368	2,212	765	267	138	97	33	10,694	3,108
Bohemia.....	356	109	9	12	7	6	27	13	1	.....	450	140
British America....	464	241	11	41	106	115	17	25	8	12	556	434
England.....	238	397	71	126	149	344	65	77	21	16	544	960
France.....	109	99	2	17	3	28	7	9	2	1	123	154
Germany.....	820	525	306	231	694	481	294	214	53	35	2,167	1,486
Ireland.....	3,357	1,289	491	246	1,252	608	169	137	66	56	5,335	2,336
Italy.....	15,423	229	2,719	41	9,775	144	1,172	24	444	5	29,533	443
Russia and Poland.....	11,245	926	2,441	319	8,934	656	628	43	205	15	23,453	1,959
Scotland.....	67	158	46	44	99	98	28	28	5	8	245	336
Sweden.....	171	123	78	26	282	111	39	17	12	10	582	287
Switzerland...	32	50	3	7	4	26	1	16	.....	.....	40	99
United States.	11,816	4,115	4,244	1,367	13,558	3,585	3,749	781	888	197	34,255	10,045
Other foreign..	2,141	660	309	181	1,358	486	70	31	70	19	3,948	1,377
Unknown.....	7	3	31	.....	1	1	.....	.....	1	1	40	5
Total....	53,472	10,728	11,653	3,026	38,434	7,454	6,533	1,553	1,873	408	111,965	23,169

Marriages Reported During the

BOROUGH OF

Date.	Total.	White.		Black.		Chinese.		Single.		Widowed.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	2,895	2,818	2,819	77	76	..	..	2,692	2,713	184	149
February	2,473	2,396	2,397	77	76	..	..	2,284	2,264	163	176
March	2,106	2,066	2,067	40	39	..	..	1,937	1,935	150	134
April	2,473	2,435	2,439	35	34	3	..	2,268	2,259	179	172
May	2,393	2,319	2,322	73	71	1	..	2,193	2,193	182	172
June	3,207	3,130	3,131	76	75	1	1	2,985	3,011	179	154
July	2,849	2,765	2,766	84	83	..	..	2,645	2,649	174	158
August	2,057	2,001	2,002	56	55	..	..	1,869	1,866	170	163
September	2,827	2,759	2,763	65	64	3	..	2,602	2,605	202	187
October	2,484	2,416	2,416	67	68	1	..	2,284	2,273	161	174
November	3,007	2,919	2,923	85	82	3	2	2,796	2,807	179	164
December	2,659	2,548	2,553	110	106	1	..	2,464	2,488	169	131
Total	31,430	30,572	30,578	845	829	13	3	29,019	29,063	2,092	1,934

Report of Births for the Year

CITY OF

Month.	Total.	White.		Colored.		Chinese.		Native Parents.	
		M.	F.	M.	F.	M.	F.	M.	F.
January	12,107	6,196	5,700	119	91	..	1	1,565	1,451
February	10,351	5,165	4,993	101	92	..	..	1,318	1,310
March	11,738	5,795	5,728	102	111	1	1	1,500	1,480
April	10,987	5,519	5,253	109	104	2	..	1,475	1,395
May	11,012	5,556	5,264	94	96	..	2	1,510	1,366
June	10,718	5,375	5,171	83	88	..	1	1,411	1,370
July	11,837	6,085	5,514	126	109	1	2	1,586	1,439
August	11,327	5,733	5,375	112	105	1	1	1,556	1,395
September	11,392	5,709	5,481	108	90	3	1	1,443	1,440
October	11,658	5,859	5,593	89	116	1	..	1,412	1,377
November	10,434	5,220	5,026	96	88	2	2	1,325	1,314
December	11,573	5,714	5,675	97	86	..	1	1,425	1,407
Total	135,134	67,926	64,773	1,236	1,176	11	12	17,526	16,744

Year Ending December 31, 1913.

MANHATTAN.

Divorced.		Native.		Foreign.		Religious Marriages.				Civil Marriages.	
M.	F.	M.	F.	M.	F.	Catholic.	Protestant.	Jewish.	Ethical Culture.	Aldermanic.	Judicial.
19	33	901	1,017	1,994	1,878	605	581	1,027	3	675	4
26	33	754	875	1,719	1,598	580	539	673	1	674	6
19	37	640	697	1,466	1,409	382	422	716	2	578	6
26	42	710	805	1,763	1,668	706	457	640	1	665	4
18	28	778	830	1,615	1,563	633	435	612	5	701	7
43	42	1,070	1,225	2,137	1,982	901	532	1,060	4	706	4
30	42	966	1,104	1,883	1,745	887	515	757	2	687	1
18	28	701	782	1,356	1,275	526	315	460	1	754	1
23	35	947	1,050	1,880	1,777	795	421	840	2	768	1
39	37	853	926	1,631	1,558	830	520	395	3	734	2
32	36	1,037	1,086	1,970	1,921	795	494	903	3	810	2
26	40	832	960	1,827	1,699	735	394	834	2	689	5
319	433	10,189	11,357	21,241	20,073	8,375	5,625	8,917	29	8,441	43

Ending December 31, 1913.

NEW YORK.

Foreign Parents.		Mixed Parentage.		Unknown Parentage.		Attended by Physician.	Attended by Midwife.	Apparently Illegitimate.	Twins.	Triplets.
M.	F.	M.	F.	M.	F.					
3,955	3,616	743	681	52	44	7,777	4,330	161	121	1
3,367	3,235	550	505	31	35	6,395	3,956	128	102	..
3,742	3,706	621	620	35	34	7,170	4,568	148	115	1
3,445	3,356	661	560	49	44	6,805	4,182	163	87	1
3,440	3,361	649	593	51	42	6,772	4,240	144	104	2
3,389	3,257	622	589	36	44	6,743	3,975	151	90	1
3,910	3,538	671	606	45	42	7,216	4,621	165	106	1
3,614	3,491	643	558	33	37	7,055	4,272	139	106	3
3,729	3,514	615	585	33	33	7,002	4,390	117	82	1
3,854	3,662	653	628	30	42	7,292	4,366	129	106	..
3,347	3,244	613	533	33	25	6,436	3,998	109	95	1
3,689	3,695	665	630	32	30	7,107	4,466	134	121	2
43,481	41,677	7,706	7,088	460	452	83,770	50,364	1,688	1,235	14

Report of Births for the Year

BOROUGH OF

Month.	Total.	White.		Colored.		Chinese.		Native Parents.	
		M.	F.	M.	F.	M.	F.	M.	F.
January	5,661	2,881	2,627	82	70	..	1	545	484
February	5,018	2,485	2,400	68	65	..	..	478	438
March	5,806	2,864	2,794	69	77	1	1	526	541
April	5,195	2,592	2,459	66	76	2	..	510	491
May	5,134	2,555	2,434	77	66	..	2	508	482
June	5,083	2,501	2,458	64	59	..	1	478	480
July	5,681	2,894	2,604	92	88	1	2	566	520
August	5,399	2,671	2,577	71	78	1	1	523	490
September	5,325	2,649	2,531	75	66	3	1	470	477
October	5,512	2,771	2,598	65	77	1	..	473	459
November	4,864	2,381	2,350	70	60	1	2	436	451
December	5,522	2,688	2,706	66	61	..	1	503	503
Total	64,200	31,932	30,539	865	843	10	12	6,016	5,816

Marriages Reported During the

CITY OF

Date.	Total.	White.		Black.		Chinese.		Single.		Widowed.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	4,873	4,758	4,758	115	115	..	..	4,514	4,552	330	275
February	3,676	3,579	3,580	97	96	..	..	3,369	3,357	270	274
March	3,271	3,198	3,199	73	72	..	..	2,990	3,005	246	217
April	4,099	4,037	4,032	58	57	4	..	3,746	3,760	312	287
May	3,712	3,619	3,621	92	91	1	..	3,388	3,395	295	281
June	5,389	5,273	5,274	115	114	1	1	5,004	5,048	325	266
July	4,774	4,662	4,664	111	110	1	..	4,414	4,438	324	277
August	3,373	3,283	3,283	90	90	..	..	3,062	3,088	285	248
September	4,585	4,491	4,494	91	91	3	..	4,211	4,242	338	299
October	4,178	4,066	4,066	111	112	1	..	3,835	3,847	293	282
November	4,883	4,758	4,763	121	118	4	2	4,516	4,536	325	293
December	4,455	4,292	4,298	162	157	1	..	4,123	4,154	293	242
Total	51,268	50,016	50,042	1,236	1,223	16	3	47,172	47,422	3,636	3,241

Ending December 31, 1913.

MANHATTAN.

Foreign Parents.		Mixed Parentage.		Unknown Parentage.		Attended by Physician.	Attended by Midwife.	Apparently Illegitimate.	Twins.	Triplets.
M.	F.	M.	F.	M.	F.					
2,080	1,912	294	268	44	34	3,734	1,927	112	50	..
1,810	1,768	239	228	26	31	2,986	2,032	83	54	..
2,108	2,069	270	233	30	29	3,490	2,316	99	66	1
1,835	1,773	275	235	40	36	3,347	1,848	114	48	1
1,825	1,771	258	214	41	35	3,193	1,941	114	56	2
1,807	1,750	255	251	25	37	3,323	1,760	109	34	1
2,114	1,907	270	228	37	39	3,382	2,299	130	56	1
1,956	1,908	240	228	24	30	3,441	1,958	97	59	2
1,974	1,855	260	241	23	25	3,313	2,012	85	50	1
2,107	1,934	230	250	27	32	3,539	1,973	100	56	..
1,745	1,733	246	208	25	20	3,052	1,812	78	42	..
1,950	1,953	279	288	22	24	3,548	1,974	97	57	..
23,311	22,333	3,116	2,872	364	372	40,358	23,842	1,218	628	9

Year Ending December 31, 1913.

NEW YORK.

Divorced.		Native.		Foreign.		Religious Marriages.				Civil Marriages.	
M.	F.	M.	F.	M.	F.	Catholic.	Protestant.	Jewish.	Ethical Culture.	Aldermanic.	Judicial.
29	46	1,766	1,978	3,107	2,895	1,294	1,189	1,525	3	853	9
37	45	1,270	1,478	2,406	2,198	932	981	959	1	795	8
35	49	1,164	1,312	2 107	1,959	555	906	1,077	2	721	10
41	52	1,479	1,641	2,620	2,458	1,212	1,086	969	1	820	11
29	36	1,344	1,461	2,368	2,251	990	985	848	5	874	10
60	75	2,090	2.386	3,299	3,003	1,583	1,345	1,523	4	921	13
36	59	1,923	2,140	2,851	2,634	1,508	1,273	1,130	2	848	13
26	37	1,327	1,480	2,046	1,893	952	815	668	1	931	6
36	44	1,756	1,954	2,829	2,631	1,333	1,091	1,195	2	962	2
50	49	1,665	1,836	2,513	2,342	1,463	1,185	621	3	900	6
42	54	1,863	2,027	3,020	2,856	1,396	1,169	1,291	4	1,015	8
39	59	1,633	1,876	2,822	2,579	1,345	971	1,269	2	862	6
460	605	19,280	21,569	31,988	29,699	14,563	12,996	13,075	30	10,502	102

Searches and Transcripts, Year 1913.

	Free Searches.			Paid Searches.			Total paid searches.	Total searches free and paid.
	School.	Employ-ment.	Total.	Births.	Mar-riages.	Deaths.		
Manhattan—								
Searches	39,442	26,495	65,937	9,170	4,750	24,536	38,456	104,393
Transcripts	.....	.....	.....	6,486	3,300	24,490	34,276	.....
Not Founds	.....	.....	.....	.....	.....	.....	4,063	.....
The Bronx—								
Searches	6,993	4,048	11,041	511	135	4,018	4,664	15,705
Transcripts	.....	.....	.....	415	84	4,939	5,438	.....
Not Founds	.....	.....	.....	.....	.....	.....	236	.....
Brooklyn—								
Searches	25,037	15,540	40,577	5,156	2,214	14,468	21,838	62,415
Transcripts	.....	.....	.....	2,479	1,432	16,636	20,547	.....
Not Founds	.....	.....	.....	.....	.....	.....	3,398	.....
Queens—								
Searches	2,571	2,171	4,742	443	114	2,083	2,640	7,382
Transcripts	.....	.....	.....	368	92	2,941	3,401	.....
Not Founds	.....	.....	.....	.....	.....	.....	167	.....
Richmond—								
Searches	674	376	1,050	215	94	670	979	2,029
Transcripts	.....	.....	.....	177	19	603	799	.....
Not Founds	.....	.....	.....	.....	.....	.....	94	.....
City of New York—								
Searches	74,717	48,630	123,347	15,495	7,307	45,775	68,577	191,924
Transcripts	.....	.....	.....	9,925	4,927	49,609	64,461	.....
Not Founds	.....	.....	.....	.....	.....	.....	7,958	.....

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