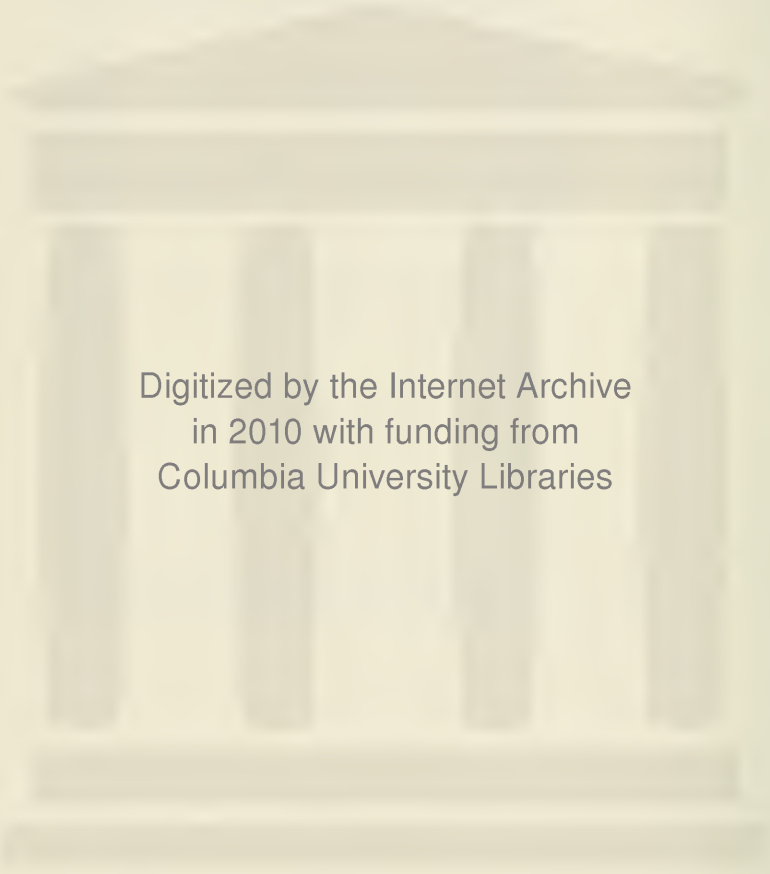


ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

OF

THE CITY OF NEW YORK

FOR THE

CALENDAR YEAR, 1916

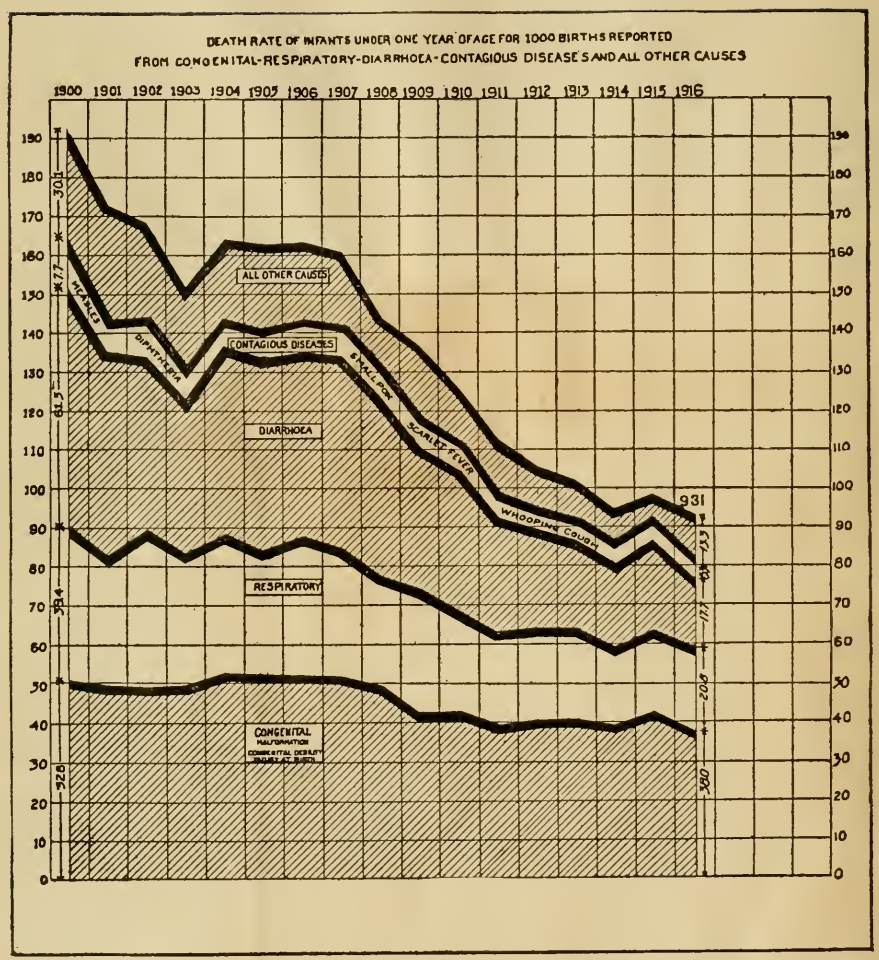
NEW YORK CITY
1917

ANNUAL REPORT, DEPT. OF HEALTH:

1916

DATE	ISSUED TO

CHART VIII.



The uppermost line of this chart represents the yearly death rate from all causes under one year. The rate of each of the principal disease groups is shown as a part of the whole rate; and the rate of each group taken separately is stated in the first and last columns. Because registration was not sufficiently complete prior to 1908 the rates for the earlier years have been computed upon the estimated population under one year. In the later years, however, the rates have been computed upon the number of births reported.

ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

OF

THE CITY OF NEW YORK

FOR THE

CALENDAR YEAR, 1916

NEW YORK CITY
1917

M. B
BROWN
PRINTING
&
BINDING
CO.
NEW YORK

25-5007-17-B

New York, January 31, 1917.

Hon. John Purroy Mitchel,
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 ended December 31, 1916.

Respectfully,

HAVEN EMERSON, M. D.,
Commissioner of Health.

BOARD OF HEALTH.

Commissioner of Health and President of the Board.

HAVEN EMERSON, M. D.

Health Officer of the Port.

LELAND E. COFER, M. D.

Police Commissioner.

ARTHUR WOODS.

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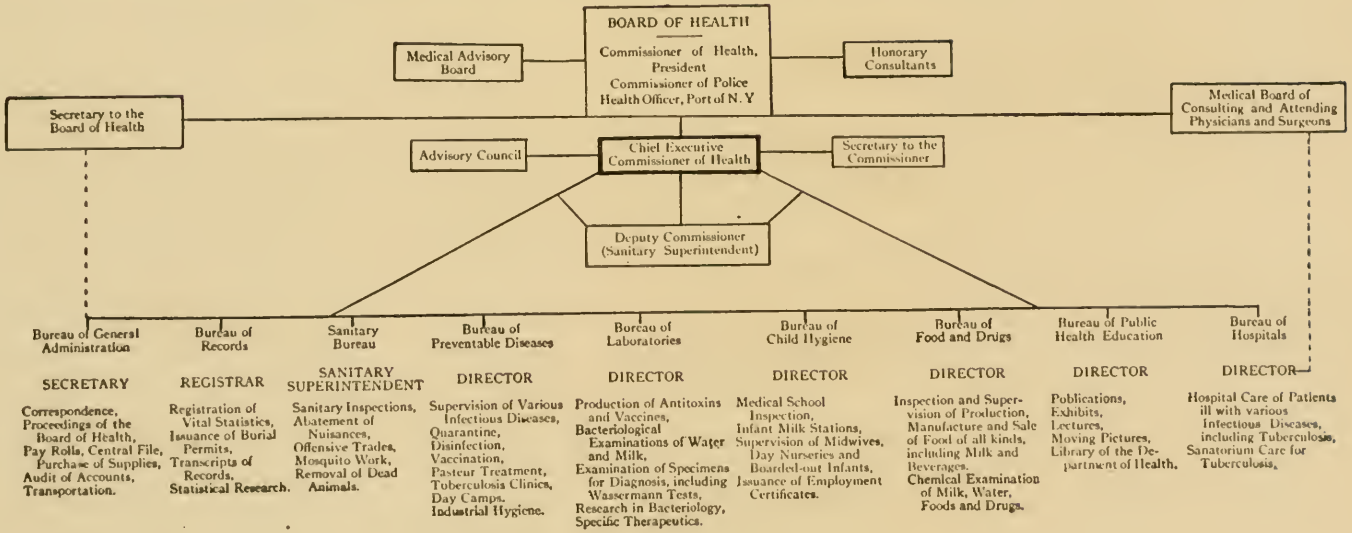
FRED B. TILNEY, M. D.

ORGANIZATION OF DEPARTMENT OF HEALTH IN 1916.



EXECUTIVE STAFF.

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JOHN S. BILLINGS, M. D.	*Deputy Commissioner.*
FLOYD W. FISKE (Jan.-July) . . .	*Secretary to the Commissioner.*
HUGH M. FOSTER (July-Dec.) . .	
EUGENE W. SCHEFFER (Jan.-June).	*Secretary of the Department and Director, Bureau of General Administration.*
ALFRED E. SHIPLEY, M. D. (July to Dec.)	*Acting Secretary of the Department and Acting Director, Bureau of General Administration.*
ALONZO BLAUVELT, M. D. . . .	*Assistant and Acting Sanitary Superintendent.*
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S. JOSEPHINE BAKER, M. D. . .	*Director, Bureau of Child Hygiene.*
BERTRAM H. WATERS, M. D. . .	*Acting Director, Bureau of Preventable Diseases.*
LUCIUS P. BROWN	*Director, Bureau of Food and Drugs.*
ROBERT J. WILSON, M. D. . . .	*Director, Bureau of Hospitals.*
CHARLES F. BOLDUAN, M. D. . .	*Director, Bureau of Public Health Education.*
WILLIAM H. PARK, M. D.	*Director, Bureau of Laboratories.*

EMPLOYES.

Bureau.	Physicians.	Nurses.	Laboratorians.	Inspectors.	Clerks.	Others.	Total.
General Administration...	3	...	2	7	78	155	245
Sanitary.....	10	...	...	61	19	77	167
Records.....	12	...	...	...	25	14	51
Child Hygiene.....	176	329	...	...	30	104	639
Preventable Diseases.....	174	225	...	1	51	107	558
Food and Drugs.....	...	...	17	127	22	21	187
Hospitals.....	64	152	2	1	26	720	965
Public Health Education..	3	...	...	...	5	1	9
Laboratories.....	9	...	111	1	15	110	266
Total.....	451	706	152	198	271	1,309	3,087

REPORT OF THE DEPARTMENT OF HEALTH, CITY OF NEW YORK, FOR THE YEAR 1916.

INTRODUCTION.

In addition to the transaction of the routine business required by the Charter, the Board of Health found it necessary during 1916 to add to or amend the Sanitary Code in respect to the following matters pertaining to public health.

Cyanide Fumigation Prohibited.

Owing to dangers and abuse of the modern commercial method of fumigating premises to rid them of vermin, the employment of cyanide for this purpose was forbidden, except at the discretion of the Board. (Section 104.)

Protecting Public Food Supply.

Extending the valuable principle of protecting the city food supply from contamination, it was found necessary to forbid the employment of persons suffering from infectious or venereal diseases in places where food is prepared or handled. (Section 146.) A further provision with the same object in view requires the proper cleansing of cooking, eating and drinking utensils after being used. (Section 144.)

After careful analysis of ice cream products and full consideration of the matter with representatives of the trade, regulations were established which have made it possible to exclude from public sale and use much inferior and contaminated food. (Section 170.)

A much needed regulation now requires the tuberculin testing of all cows brought into New York City. (Section 13.)

Control of Bathing Establishments.

A new industry in the form of so-called "bathing establishments," but without shore front property or responsibilities, was, at the request of the Board of Aldermen, brought under control in the interest of public decency and the prevention of communicable disease. (Section 340.)

Sanitary Control of Traffic Conveyances.

Various bacteria, particularly pneumococcus, streptococcus, influenza bacilli, tubercle bacilli and diphtheria bacilli, are generally spread directly from person to person during ordinary social intercourse. These pathogenic organisms commonly cause acute infections of the upper respiratory tract and of the lungs. The present regulation of the sanitary environment of public assemblages and of all premises where people gather within confined spaces for living, working, recreation, etc., is based upon this sound and fundamental principle of the obvious and demonstrated method of transmission of preventable diseases. The workshops, the theatres, dance halls and all variety of places of assembly in fixed premises in this City are controlled to some degree as to their cleanliness, light, heat, ventilation, and number of occupants by provisions of the Sanitary Code. The owners or operators of such premises recognize and accept the jurisdiction and regulations at present demanded.

There is no difference, from the point of view of sanitary control of preventable and communicable forms of respiratory disease, between the risks to which the public

is exposed in movable places of public assembly, such as public traffic conveyances, and the risks from which they are now in a measure protected in fixed premises.

The conditions of traffic in New York City have for many years been a matter of grave concern to the entire body of citizens, and in no small degree can the annual winter increase in certain types of disease be attributed to serious and insanitary overcrowding of our traffic conveyances at some time every day on most lines, and at all times and every day on some lines or parts of lines. The Department of Health has studied and can prove the increase in virulent infectious bacteria in the air of the cars of this City, in proportion to the degree of human overcrowding.

The remedy must be sought in the diminution of the number of passengers or in a sufficient increase in the amount of air per person to accomplish a practicable dilution of the human infection to a point of reasonable safety. An insignificant fraction of the cars at present in use are equipped to make adequate mechanical ventilation possible. Overcrowding can be prevented to a very great degree if the full track capacity of all lines is used as far as practicable to meet the demands of the traveling public.

The public, in allowing the public service companies to operate, puts upon the companies certain limitations and demands which cannot be ignored even in the interest of public health. These are the width of the streets, the conditions of general vehicular traffic, provision for switching, etc., and the social habits of work and recreation to which the community is accustomed. It is, therefore, proposed to accept these limitations as justifying an exemption from the proposed control of passengers per car in the interest of health protection. When the operating companies are using to the full all the available facilities which the public allows them, it would be unreasonable to demand that they exclude excess passengers from their cars. The orders of the Board of Health were therefore revoked and the following sections of the Sanitary Code were adopted:

> "Section 306. Cars not to be overcrowded. The carrying of passengers on railroad cars in the City of New York shall be so regulated at all times that the number of passengers on any such car at any time shall not exceed one and one-half times the seating capacity of the car; provided, however, that the foregoing provisions of this section shall not apply when the full number of cars which shall have been ordered by the Public Service Commission to be operated on any line or part of a line are so operated; and provided, further, that the foregoing provisions of this section shall not apply, in the absence of such an order of the Public Service Commission, when the maximum number of cars which can be practicably operated on any line or part of a line are so operated.
>
> "Section 307. Public vehicles not to be overcrowded. The carrying of passengers on all public vehicles in the City of New York other than railroad cars shall be so regulated at all times that the number of passengers on any such vehicle at any time shall not exceed one and oen-half times the seating capacity of such vehicle."

New Procedure in the Control of Poliomyelitis Authorized.

In order to meet the needs of the unusual situation presented by the unprecedented outbreak of poliomyelitis, various changes in procedure were authorized by the Board of Health. (Section 96.)

Removal of Typhoid Patients Authorized.

Recognizing the high incidence of secondary cases of typhoid fever in families where typhoid fever patients are cared for in crowded tenements without adequate

provision for isolation, the Board adopted regulations which have proved so far effective that the incidence of this disease has been reduced 33% in the past year (Section 86.)

Education and Co-operation with the Medical Profession and the General Public.

Recognizing that the Department of Health will accomplish its highest ends only when the medical profession especially, as well as the public at large, take an active part in the broad phases of community self-protection and in establishing education instead of restriction and prosecution as the proper basis of administrative work in public health, there has been, during the past year, special emphasis upon the initiation and organization of many co-operative agencies.

Associates in Public Health.

To enlist the co-operation of private physicians in health work, a plan was formulated to organize in each borough, groups of physicians who would be allowed to assume entire charge of their infectious disease cases. These physicians are known as "Associates in Public Health." This plan went into effect on June 3, 1916, in the Borough of Queens, and it has proved successful enough to warrant extending it to the other boroughs in 1917.

Examination of Food Handlers by Private Physicians.

The regulations governing the work of providing medical examinations of food handlers have been so modified that private physicians now need but to notify the Department of the number they intend to examine and proper forms are forthwith forwarded. These examinations by private physicians are encouraged in conformity with the policy of the Department, of availing itself of private physicians of the city as a part of the force used in the detection of disease and the protection of the public.

About fifty thousand (50,000) food handlers were examined by private physicians in 1916 and about thirty thousand (30,000) by the physicians of the Department of Health. Of this total, one hundred and eighty-three (183) were excluded from food handling pursuits. A follow-up system has been instituted, thereby giving assurance that these excluded workers will not return to lines of work requiring the handling of foods.

Examination of School Children by Private Physicians.

The plan of having school children examined by their private physicians before their first admission to school, which was begun in 1915, was considerably extended in 1916. Of the 195,953 children entering school for the first time in 1915 9,317 were examined and reports issued by their family physicians and in 1916 of 189,720 new admissions, 12,669 were examined by their family physicians.

Examination of School Children by Teachers.

For the purpose of more thoroughly eradicating pediculosis from the public schools, teachers were authorized to examine children for that particular ailment; they were also instructed in the detection of the early signs of infectious diseases of children in order that suspicious symptoms may be more promptly referred to the school medical inspection, and the sick child excluded from class. A beginning has also been made in the preliminary test of vision by teachers, in the first weeks of the school term, thus ensuring a much earlier correction of the common defects of the eyes, after reference to the school medical inspector.

Advisory Council.

The various Committees of the Advisory Council, corresponding to the several Bureaus of the Department, were reorganized, the number of members being reduced to a more effective working force, a uniform procedure of business adopted, and a schedule of regular meetings arranged.

Improved Co-operation of Social Agencies.

Special post cards for reporting conditions dangerous to health, found by field workers, were printed and distributed to the several social agencies of the City, whose co-operation had been promised. The field worker indicates on the card the condition found, and drops the card in the nearest post box. The Health Department forwards the card to the proper bureau, or to the proper City department, for attention. These complaints are of special value, because they are made by trained observers familiar with the general problem of disease prevention.

Public Health Education.

Special campaigns of publicity and education were directed against sneezing, spitting, unmuzzled dogs, mosquitoes and poliomyelitis. The Department co-operated with the various Baby Welfare organizations throughout the City in conducting a Baby Week during the month of May. The recent "Open Window" campaign was instituted in order to teach the value of fresh air.

Anti-Sneeze Campaign.

Owing to the sudden marked increase in deaths from respiratory diseases in January, chiefly infectious colds, grippe and pneumonia, an educational campaign of publicity was carried on to focus attention on sneezing, coughing and spitting as the main factors in the spread of these diseases. The campaign enlisted the interest of newspapers generally and secured the publication of a large number of health maxims, feature stories, cartoons, etc.

Spitting Crusade.

On January 12, as part of the campaign against respiratory diseases, a crusade against spitting was begun which resulted in 1,740 arrests and the levying of $2,549 in fines. But more important than the arrests and the fines was the salutary effect on the public, caused by the wide publicity given the crusade by the newspapers.

Muzzling of Dogs.

On April 20th, every employe of the Department of Health was ordered to count the unmuzzled dogs observed during the day, and report them on special blanks. The net result of this City-wide observation was that 1,365 owners were arrested and 1,339 of them fined $1,131. The newspapers of the City and elsewhere gave wide publicity to this census and to a general round-up of stray dogs, which followed it closely, with the result that very few unmuzzled dogs were to be found on the streets for some time thereafter.

Mosquito Week.

During the first week in May, a special publicity campaign of education was carried on to enlist public support for the anti-mosquito work planned by the Department of Health. Thousands of simple leaflets were distributed, explaining the life history of mosquitoes. In addition to this, jars of living mosquito larvae were collected and sent to all public schools throughout the City, where, following arrange-

ments made with the Department of Education, they were used in classroom instruction by the teachers. Moving pictures in all the "movie" theatres were also utilized extensively in this campaign.

Patent Medicine Campaign.

A vigorous campaign was conducted against patent medicines and medical quacks and a good beginning was made in the endeavor to stamp out the pernicious activities of these individuals. Where the Department was compelled to resort to legal proceedings, it received no reversals in the courts, but was successful in a large number of prosecutions.

ADVANCES IN DEPARTMENTAL PROCEDURE.

To secure more effective co-operation between the office of the Commissioner and the various Directors of the Bureaus of the Department, the following procedures have been instituted:

For the information of the Commissioner and for the preparation of health bulletins and press notices, weekly reports giving the "Important Activities and Events" in each Bureau, with condensed statistics, are now submitted by Directors of Bureaus.

Once a month the directors of the various bureaus have met in the Commissioner's office for the discussion of some problem or policy of the department. Some of the subjects have been: "The Cause of the Increase of Pulmonary Diseases in Cities, and the Means Available for Its Control and Diminution"; "The Department Procedure in the Control of Measles"; "The Publicity Campaign of the Department of Health"; "Procedure for More Intensive Control of Typhoid Fever"; "The Attitude of the Department of Health Toward Alcohol."

EXTENSION OF HEALTH DISTRICT PLAN.

The experiment of public health administration on the district plan, which was started in 1915 on the East Side of Manhattan, in what is known as "Health District No. 1," was extended on May 1, 1916, to the Borough of Queens. It is intended to further extend the operation of this plan during the next year in other boroughs.

Employes.

There were 3,206 persons connected with the Department on January 1st. Of these, 119 gave their services free in hospitals or clinics, 465 gave part-time service, the remainder, 2,622, being full-time employes. During the year, 423 full-time and 140 part-time employes were added to the roster, exclusive of the temporary appointments necessitated by the poliomyelitis epidemic; 525 resigned, 16 were retired on pension, and 27 were dismissed on charges, and 14 died. The number of paid employes at the end of the year was 3,068.

Ratings.

In co-operation with the Civil Service Commission, a new system of rating employes was adopted and special cards were prepared for recording such ratings. *The Civil Service Commission ruled that not more than 40% of the total number of employes in any bureau might be rated above standard.*

Physical Examination of City Employes.

The procedure which has been in operation during the past few years whereby the employes of this Department are periodically examined, has been extended in a small degree to city employes in other departments, through the examination and

treatment by Health Department physicians, of City employes, in accordance with the provisions of the Workman's Compensation Law. 372 men and 873 women employes of the Health Department received physical examinations and 486 re-examinations.

The result of 3,004 examinations showed among other ailments that 438 employes of the Department were over weight and 280 under weight; 161 were affected by some form of heart trouble; 162 pulmonary impairment; 191 suffered from nasal obstruction; 21 had hernias; enlarged thyroid was found in 83; defective hearing was found in 118.

The detailed results of these examinations are shown in the following table:

PHYSICAL EXAMINATION OF EMPLOYES.

Women.		Men.	
Overweight	285	Overweight	153
Underweight	245	Underweight	35
High blood pressure	66	High blood pressure	89
Low blood pressure	235	Low blood pressure	38
Cardiac impairment	92	Cardiac impairment	69
Pulmonary impairment	74	Pulmonary impairment	88
Indigestion	108	Indigestion	32
Constipation	233	Constipation	68
Gastroptosis	12	Pain on abdominal palpation, including pain at McBurney's point	6
Probable gastric ulcer	4	Defective teeth	147
Pain on abdominal palpation, including over McBurney's point	8	Insomnia	15
Defective teeth	66	Pyorrhoea alveolaris	3
Insomnia	36	Abnormal throat conditions	65
Pyorrhoea alveolaris	16	Nasal obstructions	53
Abnormal throat conditions	282	Hernia	16
Nasal obstructions	138	Palpable liver	3
Movable kidney	7	Anaemia	9
Enlarged thyroid	51	Flat, weak or painful arches	2
Disorders of menstruation	156	Defective hearing	59
Varicose veins	33	Defects of speech	3
Hernia	5	Exaggerated reflexes	4
Glycosuria	3	Movable kidney	2
Defective hearing	59	Enlarged thyroid	2
Anaemia	44	Varicose veins	4
Exaggerated reflexes	137	Varicocele	8
Fine tremor of hands	102		
Defects of speech	1		

Albuminuria (both sexes)	303
Albuminuria with high blood pressure	34

During the past year 19,879 days' work were lost on account of absence because of illness, or 1.8% of 1,112,842 possible days' work required of the employes of the Department.

Poliomyelitis Epidemic.

The poliomyelitis epidemic made a profound impression upon the public because of the severe and dramatic results seen in those attacked by the disease, and the policy of absolute frankness as to the limitations of scientific knowledge under which the Department of Health acted.

This important episode in the City's history will be the subject of a separate report now in preparation for early publication.

It is sufficient to say here that without any discoverable cause, the disease, which has been one of the uncommon reportable diseases for some years past, suddenly developed an epidemic character and showed a greatly increased virulence early in June. From this time until November 1 there were 8,991 cases and 2,448 deaths from poliomyelitis. During this period all the assistance which was found of practical value was enlisted through the United States Public Health Service and through the medical profession in this City and from all parts of the country.

The policies and acts of the Department of Health were endorsed at the time by the opinion and statement of the best informed medical authorities of the country and the principles upon which the preventive measures were instituted during the epidemic in New York City were based have been declared by the American Public Health Association to be the only ones which could be justified, until our knowledge is supplemented by certain fundamental facts as to the means of conveyance and the duration of infection by the disease.

To combat the epidemic funds were provided through special revenue bonds and expended as follows:

For Personal Service	$150,684 39
For Supplies and Equipment	104,068 86
For treatment of cases in other than Department of Health Hospitals	46,451 25
Total	$301,204 50

NOTABLE ACCOMPLISHMENTS AND NEW ACTIVITIES.

Drainage of Mosquito Marshes.

The marshes in the Boroughs of Brooklyn and Queens, including those of the Islands of Jamaica Bay, were ditched and drained.

Branch of Municipal Library Established in Department.

A branch of the Municipal Library has been established in the Centre Street Building of the Department, in which all books, monographs and periodicals relating to public health work are gathered for the use of Health Department officials and others.

Queensboro Hospital Opened.

On July 1, 1916, a Department Hospital for the Borough of Queens, with a capacity of 80 beds was opened. This building is a short distance outside of Jamaica. It has been of great service, there being as many as 112 patients at a time cared for during the epidemic of poliomyelitis last summer.

Restaurants Inspected and Graded.

During the summer some four hundred restaurants of the City were inspected to determine their compliance with sanitary regulations, with the object in view of grading according to the results of the inspection. Since then the question of placing these food-handling establishments under the permit plan has also been considered, but no conclusion regarding this method has yet been reached. Final decision is awaited at the hands of the Mayor and the Commissioner of Accounts.

Sanitary Survey of a Typical Business Block.

A sanitary survey of downtown office buildings undertaken late in 1915 was finished early in 1916, for the purpose of determining whether adequate lighting and

ventilating facilities were furnished to office workers, and whether the atmospheric conditions, particularly in regard to temperature and humidity, existing in these buildings were in any way detrimental. Inadequate provision for light and ventilation was found to be quite general. Further studies to determine reasonable interpretation of the terms "adequate light and ventilation" are nearing completion.

ACHIEVEMENTS IN HEALTH PROTECTION DURING 1916.

Reduction in Death Rate.

Despite the poliomyelitis epidemic, with its 2,448 deaths, the general death rate for the entire City is slightly less than in 1915. The death rate for the City in 1915 was 13.93 per 1,000 population; for 1916 this has been reduced to 13.89, the lowest rate so far recorded for New York City. It may be noted that in 1910 the rate was 16.00. If the poliomyelitis death rate were deducted, the general death rate would be .48 less than last year, equivalent to the saving of 2,689 lives.

Reduction in Infant Mortality.

The death rate of infants under one year decreases with but slight variation from year to year. In 1915 the rate was 98.2. The rate for 1916 is 93.1; in 1910 it was 125.6. The diminution of flies, the continued pasteurization of milk, the campaign of education of the public through the press, and the increased use of Baby Health Stations, have all contributed toward this reduction of infant mortality, which is properly considered to reflect most promptly improvements in the sanitation and hygiene of a community.

Reduction of Typhoid Fever.

The number of typhoid fever cases reported during the past year was 1,617 compared with 2,456 for the year preceding, showing a decrease of 839.

There were 215 deaths resulting from this disease in 1916 against 333 in 1915, a decrease of 118.

This is an excellent showing and is due largely, no doubt, to the following of individual cases to their source, to removing patients from their homes when conditions cannot be so maintained as to prevent infection of other members of the household, to the education of the public through the means of circulars and placards, to the increased use of anti-typhoid serum by inoculation (12,403 immunizations in 1916 as against 3,481 in 1915) and to a vigorous campaign against fly breeding.

Reduction in Tuberculosis.

Last year the city experienced the lowest death rate in tuberculosis which has been recorded, the rate being 1.50 per 1,000 population, while in 1915 the rate was 1.61, and in 1910 it was 1.81.

It is more than probable that this reduction is due to the fact that during the past year the department instituted a campaign to extend its control over tubercle bacilli carriers who are a menace to the public and to their families. Among other methods employed to secure better control of these carriers, are detention at Riverside and Metropolitan Hospitals of patients entering voluntarily, and at Bellevue Hospital of cases found in the Municipal Lodging House, and the removal from their homes of the positive sputum patients who failed to observe sanitary precautions to prevent the infection of others.

Reduction of Diphtheria.

The reduction in the total number of cases and of deaths and case fatality in diphtheria in 1916 was remarkable—

In 1915—15,572 cases,
1,278 deaths—and
8% case fatality,

while in 1916 there were:

13,521 cases,
1,031 deaths and
7.6% case fatality,

showing the lowest number of deaths and the lowest death rate so far recorded. This condition may be attributed to several important factors, the chief of which was the adoption on February 28, 1916, of a definite period of quarantine, a minimum period of twelve days, together with two consecutive negative cultures made twenty-four hours apart. In addition, the more intensive use in institutions and schools, of the Schick test for susceptibles and the active immunization of exposed susceptibles, has doubtless contributed to the reduction of diphtheria.

Reduction of Rabies.

The effectiveness of the campaign against unmuzzled dogs can be measured by the fact that in 1916 only 3,205 people were bitten by dogs, as compared with 3,648 in 1915, and but 23 rabid dogs were found, as compared with 113 in 1915.

Reduction of Glanders.

The control of public horse troughs, the sanitary supervision of blacksmith shops, the more general use of the diagnostic mallein test, have all contributed to the reduction of glanders among horses from *704* in 1915 to *403* in 1916. Human cases are so rare as not to serve as a safe index of the reduction of the disease—2 in 1915 and 2 in 1916.

Reduction in Per Capita Cost of the Department of Health.

The following figures show the per capita cost, based upon the estimated population and the appropriations for this department, for the years 1915 and 1916. It will be seen that there has been a considerable drop in the per capita cost during this time, yet the general death rate per 1,000 population, likewise the death rate of infants under one year of age per 1,000 births, shows a decided fall.

	1915.	1916.
Appropriation	$3,507,935 22	$3,310,361 60
Estimated Population	5,468,190	5,602,841
Per capita cost, all Department activities	.6415	.5908
Per capita cost of all except Hospital Service	.4369	.4079
General Death Rate	13 93	13 89
Infant Death Rate	98.2	93.1

GENERAL CONSIDERATIONS.

While there is a natural satisfaction in recording the improvements in the health of the community, it cannot be gainsaid that there is a shocking amount of preventable disease and death which bears as a heavy burden upon all classes.

Especial attention is called to the great annual increase in diseases of the respiratory tract, pneumonia, bronchitis and influenza during the months of housing, and congestion of traffic, and to the great numbers of permanently disabled and dependent sufferers from syphilis and the effects of gonorrhoea, and to the increase in the so-called degenerative diseases of later life, due in no small degree to unsuitable personal habits of occupation, diet and the use of alcohol.

It is obvious that until there is a marked and permanent improvement in the conditions of human transportation in public conveyances in this city, and until the education of the public has substantially reduced the per capita consumption of alcohol, the diseases of respiration and the degenerative diseases of the later decades of life cannot be expected to show a marked reduction.

Further efforts in the control of syphilis and gonorrhoea demand either the establishment of municipal hospitals and dispensaries sufficient to provide facilities approaching what is now available for the care and prevention of tuberculosis, or the organization and operation of the municipal and privately owned hospitals and dispensaries with a radically different point of view from the one now generally held.

The highest type of service for the prevention of disease can be obtained only when the administration and use of all hospitals and dispensaries is controlled by a board or commission convinced of the superior possibilities and advantages of a policy of prevention as compared with the belief at present generally held that a hospital's sole duty is the treatment and relief of the sick.

Division of Health Districts.

(Created in May, 1916, under the office of the Deputy Commissioner.)

Changes in Staff—The Chief of the Division of Health Districts was placed in charge of the four districts in the Borough of Queens when they were established on May 1st. The Bureaus of Child Hygiene and Preventable Diseases were represented by medical supervisors and supervising nurses. These were later in the year, detached from these Bureaus and assigned as subordinates of the Chief of the Division of Health Districts. At the end of the year, the staff consisted of a chief, who directed the work of all health districts, a medical supervisor and clerks in the administrative office; a health officer, a supervising nurse, a clerk, nurses, medical inspectors and clinic physicians in each Health District office.

Changes in Organization—On May 1st, the diagnostic work of the Borough was done by one Borough diagnostician. Later, in order to conform more thoroughly with the Health District idea, the diagnostic work was apportioned to the various health centres and was done by the medical inspectors attached to them.

Changes in Procedure—Weekly Reports. To supply information needed by the various Bureaus, weekly textual reports were adopted in addition to the regular reports required by the Health District plan.

Tuberculosis files—To conform to the Health District idea of having all services given any family group filed under that family's name, the system of filing records was changed from the alphabetical to the address system.

Central tuberculosis file—Owing to the abolition of the Borough Chiefs Office, the central tuberculosis file was transferred to the Borough Office of Brooklyn.

A new record card has been adopted for recording the examinations of pre-school children.

Employment certificates—On June 20th, the issuance of employment certificates and vaccinations was distributed to the Health Districts.

Dog bite hearings—The hearings on dog bites were held in the various Health Districts instead of in the Borough office.

Birth certificates—Instead of mailing copies of birth certificates to parents, nurses deliver them when they call to enroll the babies at Baby Health Stations.

Midwife and foundling inspections—Instead of having specially designated inspectors make these inspections, this work was distributed to the medical inspectors in the various Health Districts.

Consultations with parents—The custom of holding consultations with parents in the schools was extended to the Health District offices where the health officers now advise parents about the termination of the physical defects of their children.

Inspectors of the Sanitary Bureau and the Bureau of Food and Drugs were detached from the Central Borough Office and attached to the various Health District offices.

Important Activities—January 29th, Monthly Edition of the East Side Chronicle was enlarged from 5,000 to 15,000 copies. The Seward Park Public Library, the Educational Alliance, the Beth Israel Dispensary, the Henry Street Settlement, the Jacob A. Riis House and the Gouverneur Dispensary were induced to assist in its distribution.

February 12th, a special investigation was begun of breast fed and bottle fed babies. As this investigation will last about five years, no conclusions are yet possible.

A special study of city born children was also begun for the purpose of comparison with a similar study made at Johnstown, Pa., by the United States Public Health Service. The result of this study will be made the subject of a special report.

February 19th, a midwinter illness census was taken in Health District No. 1, 200 nurses being detailed for that purpose.

May 6th, "Baby Week" was observed by various activities, such as lectures in public and parochial schools, demonstrations at the milk stations and a large meeting at the Educational Alliance.

June 3d, a plan to enlist the co-operation of private physicians in health work was put into effect in the Borough of Queens. A group of physicians known as "Associates in Public Health" are now assuming entire charge of such of their infectious disease cases as remain at home.

June 17, conferences with food handlers in the Queens Health Districts was begun, the object being to teach them how to conduct their business in accordance with Health Department regulations, in order to reduce the number of violations usually found on inspection.

June 29th, a conference was held with police inspectors and captains in Queens for the purpose of securing larger co-operation by the Police Department in Health Department work. It was decided to utilize the patrolmen while on their beats, to perform certain Health Department functions, such as enforcing quarantine, placarding and making reinspections for the Bureau of Food and Drugs and Sanitary Bureau.

July 1st, the Health District idea of publishing local newspapers was extended to the Health Districts in Queens.

October 21st, arrangements were completed for a course of lectures in Yiddish for Health District No. 1 on popular health subjects, the lecturers being chosen from the Advisory Committee of that district.

November 20th, representatives of the Department of Charities were given permission to use the various Health District offices, and a record of their cases was

entered on the family record card of the district, this information being considered valuable addition to the economic history of the family.

Three dental clinics were established by private subscription, one at Flushing Hospital, one at P. S. No. 81 and one at St. John's Hospital.

November 25th, Advisory Committees were organized in all the Health Districts to assist the local health officer in spreading public health education and accomplishing charitable work in the district.

December 2d, the Health District plan was investigated and studied from all possible angles by the Public Health Committee of the Academy of Medicine, by the Association of Tuberculosis Clinics, by the School Community Centres and by 30 students of the Teachers College.

December 4th, "Open Window Week" was celebrated in schools, meeting halls, etc., 125 lectures being given to audiences aggregating over 34,000 people.

December 19th, the New Queens Plaza tuberculosis clinic, was opened.

Pre-school examinations—The examination of children of pre-school age for the purpose of correcting their physical defects before they enter school was undertaken on an extensive scale. This work will not curtail any other activities, as it will be done by the baby health inspectors and the clinic physicians while these employees are on their regular duty.

Opening of two tuberculosis clinics—By the establishment of Health District offices, the Department was enabled to open two additional tuberculosis clinics, making four in the Borough now, instead of two.

Boys Health Leagues—These leagues have been organized in all Health Districts, with a captain and three lieutenants in each sub-district. They are given lectures on the sanitary code, contagious diseases, personal hygiene, violations and abating nuisances by personal effort.

Achievements—Termination of physical defects—The correction of physical defects of school children, which is considered one of the most important activities of the Bureau of Child Hygiene, has been brought to a high grade of efficiency in Health District No. 1, where the Health District System has been in existence long enough to show results. In this district practically 100% were terminated at the end of the school year, including dental defects.

Infant mortality rate—The infant mortality rate may be said to be an index of the effect of Health Department activities in a district. In Health District No. 1, it has been progressively reduced as follows: 1914—77.86 per 1,000, 1915—72.32 per 1,000, 1916—71.91 per 1,000. In the Borough of Queens 102.6 per 1,000 in 1915 and 95.6 per 1,000 in 1916.

Co-operation of newspapers—That the Community spirit of the Borough of Queens has been enlisted in favor of the Health Department activities is very well shown in the commendatory items and special articles on Health Subjects that have appeared at intervals in the local newspapers.

Saving of time—That considerable time can be saved on nurses' service on account of a combination of functions is shown in Health District No. 1, where the congested conditions of the district lend themselves especially to a demonstration of this principle. The nurses of that district have been able to serve in the field 7 functions per nurse per hour, which under other conditions would necessitate a visit for every function served, and would necessarily reduce the work performed by them. In the Borough of Queens, a comparison of the work shows a large increase in every kind of work performed by an equal number of employees for the period May 1st to December 31st as compared with the same period in 1915.

WORK PERFORMED BY DIVISION OF HEALTH DISTRICTS—1916.

	Manhattan.	Queens Borough—Health Districts. From May 1st to December 31st, 1916.			
	H. D. No. 1. From Jan. 1st to Dec. 31st, 1916.	Queens.	Ridge-wood.	Flushing.	Jamaica.
Bureau of Child Hygiene:					
New babies enrolled	618	226	675	.....	.....
Total attendance of babies	9,469	4,150	9,201	.....	.....
Pre-natal cases enrolled	78	20	27	.....	.....
Pre-school children examined	204	12	3	.....	.....
Vaccinations	574	1,478	898	104	335
Employment certificates issued	.....	527	1,086	142	469
Employment certificates refused	.....	11	33	5	28
Physical examinations and re-examinations of school children	4,672	4,719	8,082	1,903	7,399
Inspections for contagion	38,587	56,980	149,505	25,924	97,910
Instructions of Pupils about physical defects	7,565	1,951	13,035	2,264	11,222
Consultations with parents about physical defects	235	1,068	2,596	195	2,574
Physical defect cases terminated	1,943	829	1,897	896	2,368
Little mothers and boys health league meetings	68	6	11	2	10
Total attendance	1,919	110	1,756	30	437
Total field visits	16,834	6,239	12,025	3,718	9,188
Bureau of Preventable Diseases:					
Visits to cases of tuberculosis	938	1,000	2,329	755	1,456
Visits to cases of infectious diseases	1,439	3,424	6,490	1,997	5,812
New patients enrolled at tuberculosis clinics	.....	40	280	154	122
Total attendance at tuberculosis clinics	.....	51	1,486	1,177	1,388
Bureau of Public Health Education:					
Public lectures, conferences and meetings	44	56	144	46	67
Total attendance	11,405	10,164	26,274	3,083	13,099
Literature distributed	218,900	48,840	39,800	36,955	17,450
Sanitary Bureau:					
Total number of inspections	886	4,071	6,698	2,610	12,760
Bureau of Food and Drugs:					
Total number of inspections	2,755	573	3,317	351	3,741

Reduction of Violations—The effect of an intensive public health educational campaign, such as has been carried on in Health District No. 1, is shown by the reduction in the percentage of the number of violations found by the Health Department inspectors as follows: Out of every 100 inspections made in 1914 there were 19 per cent. of violation, in 1915 there were 16 per cent. of violation and in 1916 there were 13 per cent. of violation.

DIVISION OF INSTITUTION INSPECTION.

(In the Office of the Deputy Commissioner.)

Changes in Staff—On January 1st the Division of Institution Inspection was formed by the amalgamation of the Divisions of Institution Inspection attached to the Bureau of Child Hygiene and Preventable Diseases.

Organization—Districts were established corresponding to those of the Bureau of Preventable Diseases in the five Boroughs. An inspector was assigned to each district.

Functions—The Division is charged with the inspection of all institutions in the city, the physical examination of children in child-caring institutions, semi-annually, diagnosis and sanitary supervision of infectious diseases in institutions of all classes, administration of sera, toxins, application of the Schick test, collection of cultures smears and blood for laboratory examination, medical examination of food handlers

in the institutions, the issuance of permits for day nurseries, child-caring institutions and private hospitals, vertification of the monthly medical reports of child-caring institutions required by the State Public Health Law, diagnosis of sickness among employees and performance of the field work for the Divisions of Epidemiology, Venereal Diseases and Industrial Hygiene, so far as it concerns institutions.

Important Activities—January 8th, inspection was begun of child-caring institutions outside of the City of New York to which New York City children are committed.

January 15th, 202 institutions were added to the total of those in the file, making a total of 760 institutions inspected by this Division.

January 22nd, a system of sanitary inspections for all institutions was inaugurated.

February 5th, co-operation was established with the Bureau of Fire Prevention relative to private hospitals.

February 12th, an effort was directed towards establishing small wards for children in hospitals to limit quarantine and lessen inconvenience.

February 19th, a crusade was begun in co-operation with the Police Department against violation of Mendicacy Act by day nursery collectors. Seven arrests—all guilty—sentence suspended.

February 26th, co-operation was established with the Charities Department in relation to the return of children from the Metropolitan Hospital whence they had been sent for minor contagious diseases, as soon as contagious period has passed instead of being kept there until cured as was the custom.

March 2nd, two night-shelters for babies were established. This is a much needed facility to help mothers who work at night and is similar in operation to the day nurseries.

April 1st, 750 food handlers in institutions were examined. This was done because of the refusal of employees to be examined by institution physician.

May 6th, 800 typhoid immunizations were made in the House of Refuge, on Randall's Island.

New York Hospital was induced to adopt rules relating to the admission of children, to wit: The large children's ward was subdivided into smaller wards, in which children, when admitted, were segregated according to past history of the disease. The entrance of an infectious disease was thus limited to one small room instead of a large ward.

The Children's Aid Society of Brooklyn, was induced to have the physical defects of children, placed in boarding homes by them, corrected, operations being performed at the headquarters of the Society.

May 13th, an investigation was begun to ascertain what factor visiting children to child-caring institutions play in the dissemination of diseases of a communicable nature. A tabulated result of this investigation will be ready in the spring of 1917.

May 20th, the Orphans' Home in Brooklyn was induced to limit their visiting days to two days a month instead of every day, as heretofore, and child visitors are to be excluded.

May 27th, the House of Refuge was induced to adopt typhoid immunization for every new admission.

Messiah Home was induced to assign two nurses to devote their entire time to the supervision of the physical welfare of the children.

Brooklyn Training School for Girls was induced to adopt a regulation of requiring negative smears before admission of applicants.

June 3rd, Nursery and Child's Hospital was induced to adopt the application of the Schick test as a matter of routine.

New York Hospital was induced to establish an educational class for syphilis in connection with social service.

June 10th, a census was taken of the cases of cerebrospinal meningitis, paresis and locomotor-ataxia of syphilitic origin in the institutions in Greater New York. There were 78 cases of cerebrospinal meningitis, 322 cases of paresis and 233 cases of locomtor-ataxia.

June 17th, the Colored Orphan Asylum was induced to maintain two separate isolating quarters, one for new admissions and one for permanent inmates.

July 8th, Convent of Mercy was induced to have every physical defect in their children corrected or improved.

October 7th, Brooklyn Orphan Asylum was induced to appoint an orthopedic surgeon to its staff.

November 11th, Fordham Hospital was required to erect mosquito net screens over each individual bed occupied by a typhoid fever patient.

November 25th, analysis of the cases of infectious diseases occurring in institutions during the first quarter of 1916, shows that institutions schooling their own children and prohibiting children visitors, there occurred 75 per cent. less cases of contagious diseases than in other institutions not so regulated. A recommendation was made that all institutions sending their children outside for schooling be required to provide for schooling their children within, but this was abandoned due to the great expense entailed. A majority of institutions are willing to exclude children under the age of 16 years as visitors and this policy will be urged on all child-caring institutions in the coming year.

The Greenpoint Hospital was induced to open a special ward in the isolation building for the care of vaginitis cases.

December 9th, on suggestion of this Division, the Nursery and Child's Hospital, Manhattan, divided up a large ward into stalls, 10 by 9 feet, by erecting glass partitions 7 feet high, thus making an admirable quarantine ward. This hospital, in the past, has been a heavy contributor to the contagious diseases, but since this improvement was made, no secondary cases have developed in this ward, so far, although there have been cases of measles, diphtheria, scarlet fever and poliomyelitis there.

Improvements Accomplished by Personal Effort—Through the personal efforts of inspectors of this Division, the following institutions made improvements during the year:

St. John's Home installed model facilities for children.

The Master's School Day Nursery expended over $4,000 for the improvement of sanitary conditions.

Messiah Home adopted a scientific dietary.

The Osanam Home for Friendless Women installed new hot water system.

New York Foundling Hospital painted the walls and halls throughout the entire building.

St. Cecelia's Day Nursery supplied paper towels and drinking cups, liquid soap and nipples kept in antiseptic solution in individual wide mouth bottles, and renovated and put the building in a sanitary condition throughout.

Friend in Need Day Nursery moved into new building.

Scalabrini Day Nursery completely renovated their premises.

French Maternal Day Nursery and Chelsea Day Nursery adopted the use of paper towels.

St. Columbkills Day Nursery moved into new quarters.

Ridgewood Day Nursery painted the day nursery for training work.

Messiah Home improved its grounds and utilized them as a place for recreation.

St. Mary's Home completely remodeled and renovated their premises.

Brooklyn Industrial Home for Destitute Children, Brooklyn Nursery and Infant Hospital and Dominican Convent made extensive improvements.

Sea Breeze House installed new plumbing and steam heat.

International Sunshine for Blind Babies renovated the entire building.

Industrial Home in Brooklyn erected new isolation building, following the condemnation of the old building by this Department.

Home of Our Sorrowful Mother built a new roof and a laundry building.

The Mission of the Immaculate Virgin converted two storage rooms into additional isolation rooms.

The Mission of the Immaculate Virgin on Staten Island installed a $1,000 pasteurizing plant.

All hospitals and several of the institutions in the Chelsea district established a social service department.

The Lincoln Hospital in The Bronx vacated the old isolation quarters and converted them into a laboratory.

The Kallman Home provided glass tops for all their dining-room tables.

The Colored Orphan Asylum at Riverdale prepared a scientific dietary with the result that considerable improvement in the physical condition of the children has been noted.

The German Hospital, Brooklyn, installed liquid soap and paper towels.

Brooklyn Nursery and Infant Hospital adopted the Schick test as a routine procedure.

St. Mary's, Manhattan, made extensive sanitary improvements.

St. Joseph's Female Orphan Asylum installed a new refrigerating plant.

Achievements—Schick Test: The Schick test has been adopted by nearly all of the child-caring institutions in this city through the efforts of this Division.

Improvements—Twenty-nine institutions in this city were induced to make extensive improvements to their premises.

Control of Whooping Cough—Through the prompt removal of 12 children and the injection of others with whooping cough vaccine, an outbreak of whooping cough at the New York Nursery and Child's Hospital was controlled.

DIVISION OF RESEARCH AND EFFICIENCY.

(In the Office of the Commissioner, January-July. In the Bureau of General Administration, July-December.)

Changes in Staff—One medical inspector, one clerk did the work of the Division until July 1st, when it was merged in the Bureau of General Administration.

Functions—This Division was charged with administrative research and the development of more efficient methods of operation in and between Bureaus.

Important Activities—January 8th, a study was begun of the follow-up system in vogue for discharged patients from hospitals with a view to improving it.

An investigation was made of the culture station service. Superfluous supply stations were eliminated and a better system established for furnishing supplies and the collection of culture outfits and other diagnostic material.

January 18th, an investigation of the printed forms in use in the various Bureaus resulted in changing many forms so as to conform to standard sizes.

An investigation of the laboring force in the Manhattan building was made.

January 22nd, co-operating with the Civil Service Commission, a new service record system was planned.

Analysis of the space used in the Brooklyn Borough building was made with a view to providing room for the Brooklyn branch of the Division of Stenography and Typewriting and securing space in the basement for storing stationery, which up to that time had taken valuable floor space in the Manhattan building. Analysis was made of the space used in the Manhattan building for the various Bureaus with a result that the entire third floor was vacated for the use of the Bureau of Preventable Diseases.

January 29th, plans were made for the establishment of branches of the Division of Stenography and Typewriting in the Boroughs of The Bronx and Queens. A report was made recommending that branches be established in these boroughs.

February 5th, an investigation was made of drug stores relative to prices charged for laboratory products. A revision of the Department prices for laboratory products followed, the prices generally being reduced and a more liberal commission given to druggists for distributing them.

An examination was made of the method of reporting transactions in laboratory products in the Division of Adults and Accounts.

February 19th, by request of City Chamberlain Bruere, assistance was given him in compiling a survey of the work performed by the various Bureaus of the Department for a report to the Mayor on "New York City's Administrative Progress, 1914-1916."

February 26th, an investigation was made of the correspondence filed in the Sanitary Bureau and of the use of forms in the Bureau of Child Hygiene.

March 11th, an investigation was made of the disposition of monies received from pay patients at Otisville.

March 18th, a study was made of the accounting system of the Department with a view to its improvement.

April 1st, the preparation of the annual budget was begun.

April 8th, an investigation was made of a new system of periodical reports to be used by the Bureau of Food and Drugs.

An investigation was made of the messenger service in the Boroughs of Brooklyn and Queens, and a better service planned without any additional cost to the Department.

April 15th, a study was made of the clerical service in the Bureau of Child Hygiene for the purpose of securing clerks for the new health centres in the Borough of Queens.

April 22nd, an investigation was made of the labor service in the Borough of The Bronx.

May 6th, a campaign known as baby week was directed by this Division, co-operating with the various baby welfare agencies throughout the city.

July 1st, a visible index was installed to be used in following up the personnel of the Department, the organization of Bureaus and keeping the information required by the Bureau of Standards and the Civil Service Commission as to the employees of the Department.

BUREAU OF GENERAL ADMINISTRATION.

Changes in Staff—On December 31, 1916, Mr. Eugene W. Scheffer, Secretary of the Department, retired. From July 1st to December 31st, Dr. A. E. Shipley was Acting Secretary.

Changes in Organization—Branches of the Division of Stenography and Typewriting were organized in the Boroughs of The Bronx, Queens and Richmond.

December 11th, the general transportation, janitorial and messenger service heretofore scattered in some of the Bureaus, was concentrated under the direction and control of this Bureau.

Plans have been prepared to reorganize this Bureau, to take effect January 1, 1917, by which the administration of the Bureau will be apportioned to the following divisions: (1) Division of Supplies (purchase and storage), (2) Division of Construction and Repairs (general transportation and janitorial service), (3) Division of Clerical Service (supervision of clerical work, telephone and messenger service and the sale of laboratory products at the various offices in the five boroughs), and (4) Division of Stenography and Typewriting (branches in each one of the boroughs).

Important Activities—January 29th, the rules and regulations for all employees of the Department of Health were revised and printed.

January 29th, regulations governing the registration of patent and proprietary medicines were amended.

March 4th, a new procedure was adopted for diphtheria, to wit: A minimum period of duration is to be 12 days and no later cultures are to be examined before the expiration of that period.

March 18th, the regulation governing the establishment and maintenance of hospitals was amended.

April 29th, the following sections of the Sanitary Code were amended:

Section 57—Schools, gymnasiums and places of public worship; duties and responsibilities of persons in charge.

Section 222—Schools, permits required.

Section 104—Cyanide used for fumigating purposes, use of, regulated.

Section 146—Employment of persons affected with infectious or venereal diseases prohibited.

Section 301—Public vehicles and other public places to be cleaned daily.

Section 170—Ice cream, manufacture in and bringing into the City of New York regulated.

Section 144—Cooking, eating and drinking utensils to be properly cleansed after being used.

May 31st, a resolution was adopted by the Board of Health, to wit: (1) that the Department of Health adopt a policy of compulsory detention of all vagrant consumptives (popularly known as "the lodging house type"), whose sputum is positive and who are a menace to the community. (2) That for this purpose Riverside Hospital so far as it makes provision for tuberculous patients, be used entirely as a detention hospital.

April 25th, rules were adopted to govern the employees at the Municipal Sanatorium at Otisville. The administration of the Sanatorium was organized into three divisions: (1) Hospitals, (2) Farm Industries and (3) Construction and Repairs.

July 1st, the following sections of the Sanitary Code were amended:

Section 340—Bathing establishments regulated.

Section 327—Slaughtering of horses and sale of horseflesh for food regulated.

January 29th, the following sections of the Sanitary Code were amended:

Section 352—Vessels from infected ports, or liable to quarantine, not to be brought within three hundred yards of docks or piers unless permitted.

Section 13—Tuberculin test of cows; certificate. Regulation 1—Manner of testing.

September 26th, a new form of agreement and price list was adopted for antitoxin and culture station supplies.

October 14th, a new procedure was adopted in relation to Departmental mail, with a view to eliminating, as far as possible, the receipt of personal letters by Department employees.

November 11th, an investigation was made of the janitorial, messenger and transportation service of the Department with the result that on December 1st these activities were transferred from the various Bureaus to the Bureau of General Administration.

December 16th, the following sections of the Sanitary Code were amended:

Section 301—Public vehicles and other public places to be cleaned daily.

Section 302—Railroad cars and other public vehicles, carrying or conveying soiled or dirty clothing restricted.

Section 303—Railroad cars and other public vehicles, to be adequately and sufficiently ventilated.

Section 304—Heating of railroad cars and other public vehicles.

Section 305—Lighting of railroad cars and other public vehicles.

Section 306—Cars not to be overcrowded.

Section 307—Public vehicles not to be overcrowded.

December 28th, the following sections of the Sanitary Code were amended:

Section 138—Possession of food or drugs, *prima facie*, deemed to be held for sale.

Section 136—Inspection of food and other substances authorized.

Section 129—Condemnation and destruction of drugs authorized.

Section 127—Room, factory, stall, place and appurtenances to be kept in a cleanly and wholesome condition; food, drugs and drink to be clean and wholesome, and not poisoned, infected, or rendered unsafe; personal responsibility of owner, lessee, occupant or person in charge.

Section 53—Nuisances, conditions dangerous and prejudicial to life or health; duties of owners, tenants, lessees, occupants and persons in charge of buildings and lots.

Regulation No. 3 governing the establishment and maintenance of hospitals was amended.

TABLE No. 1.

STATEMENT SHOWING EXPENSES OF THE DEPARTMENT OF HEALTH 1914, 1915 AND 1916.

	1914.	1915.	1916.*		
			From Budget Allowance.	Poliomyelitis Allowance.	Total.
Administration	$267,356 24	$287,568 36	$301,012 74	$2,814 64	$303,827 38
Public Health Education	.....	18,405 05	16,495 89	17 00	16,512 89
Vital Statistics	65,417 67	65,884 73	64,596 56	.....	64,596 56
Child Hygiene	657,965 58	671,809 99	650,362 07	.....	650,362 07
Preventable Diseases	571,396 77	536,611 58	508,987 88	39,341 14	548,329 02
Sanitary Inspection	277,276 39	293,393 63	314,417 67	33 67	314,451 34
Food and Drugs Inspection	214,710 16	248,710 65	241,040 25	.....	241,040 25
Laboratory Service	201,730 67	223,377 89	227,894 06	7,421 45	235,315 51
Hospital Service:					
Executive	4,236 90	12,059 32	17,473 01	.....	17,473 01
Drug Laboratory	9,236 92	11,160 58	.....	.....	.....
Willard Parker	253,468 07	253,495 79	274,307 65	133,752 97	408,060 62
Riverside	288,113 49	281,916 26	286,353 06	36,750 04	323,103 10
Kingston Avenue	186,840 40	194,276 92	204,373 77	30,864 37	235,238 14
Queensboro	.....	.....	30,161 53	6,225 09	36,386 62
Municipal Sanatorium, Otisville, New York	250,562 02	223,755 34	253,286 89	.....	253,286 89
Total	$3,248,311 28	$3,322,426 09	$3,390,763 03	$257,220 37	$3,647,983 40

*Note.—The reason that estimated figures are given for the year 1916, is that no reports of amounts expended for the last quarter of 1916 have been received from the Bureau of Hospitals and it will be some time before such reports are received, and all bills for purchases made in 1916, will not be in until April 1st, 1917.

TABLE No. 2.

COMPARATIVE STATEMENT OF RECEIPTS OF THE DEPARTMENT TURNED OVER TO THE GENERAL FUND.

	1915.	1916.
Laboratory Products—Total	$55,199 80	$79,764 19
Searches and transcripts	36,175 55	35,585 40
Care and Maintenance of Hospitals	.....	2,121 00
Auction Fat	883 83	402 63
Waste Paper	.....	117 24
Miscellaneous	112 14	218 43
Total	$92,371 32	$118,208 89

LAW DIVISION.

Changes in Organization—In order to fix more definitely the responsibility for carrying out the legal policy and court procedure of the Department, and provide a more effective administrative control, eliminate trivial and unnecessary prosecutions, and promote co-operation between Bureaus, a plan was adopted to centralize the legal work of the Department and place it under control of the Law Clerk.

Changes in Procedure—Municipal Term Court: A Municipal Term Court was established in the Boroughs of Manhattan and Brooklyn in the early part of the year. The purpose of this Court is to centralize all prosecutions based upon complaints of the various branches of the Municipal Government alleging violations of the Sanitary Code and the Ordinances of The City of New York.

Prior to this, a complaint had to be submitted to the District Magistrates' Court wherein the violation occurred. The cases were thus widely scattered throughout the city, much confusion resulted and adequate administrative control and legal representation was impossible.

Now a representative of the Corporation Counsel's Office is always present to protect the interests of the Department, the administrative control of the court procedure is definite and certain, and the confusion due to the scattering of cases throughout the whole city has been eliminated.

Important Activities—Food: As a result of the efforts of the Bureau of Foods and Drugs to eliminate the source of the supply of unwholesome and adulterated foods, the number of prosecutions against large dealers has materially increased during the past year and a number of heavy fines have been imposed.

Drugs—Four patent medicine fakers were convicted and received prison sentences and three paid heavy fines. Two druggists were convicted of substituting ingredients in prescriptions and heavy fines were imposed by the Court in each instance.

The question of the right of the Department to regulate the sale of patent and proprietary medicines in The City of New York is now pending before the Appellate Division, Second Department, for decision.

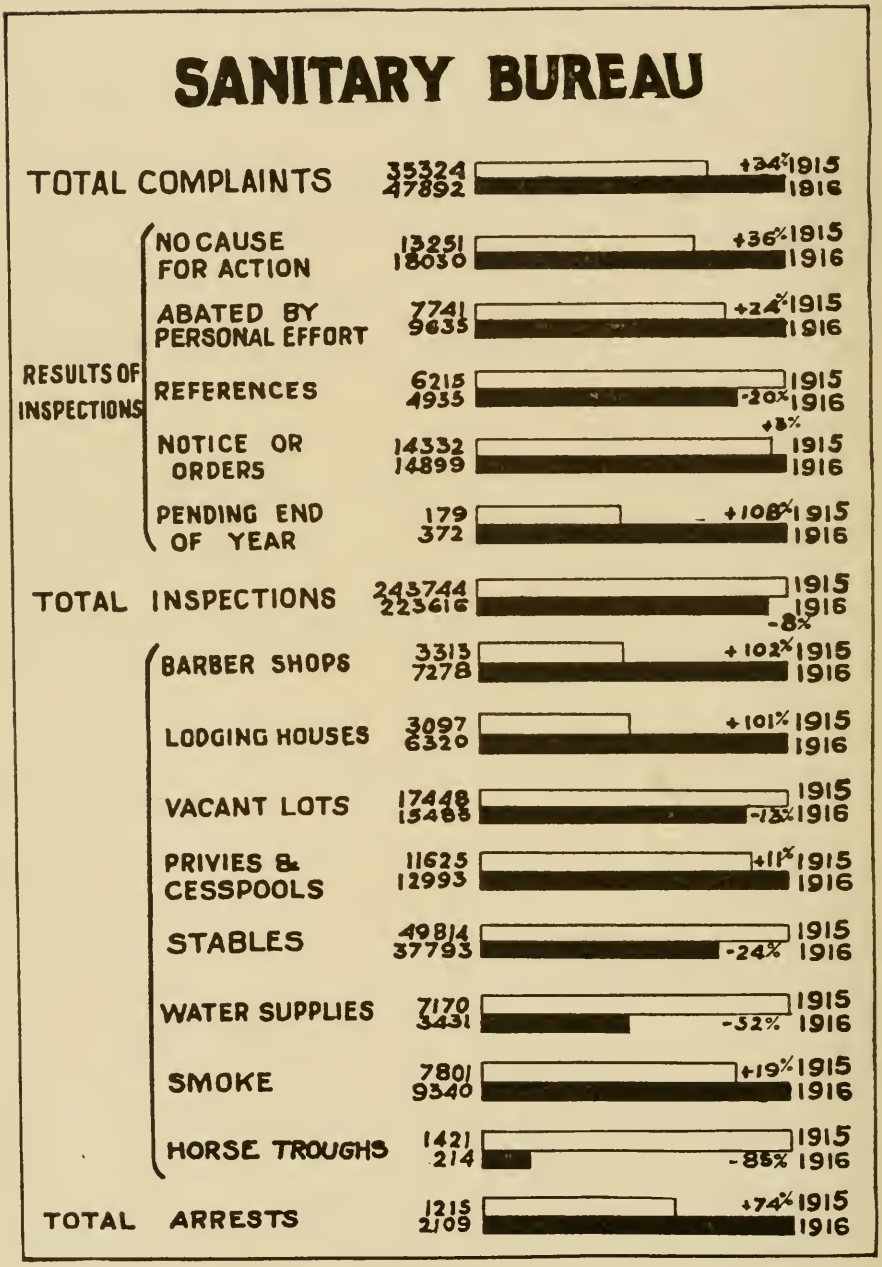
Births and Deaths—Two hundred and thirty-six physicians and midwives were prosecuted for their failure to report births within ten days. Civil actions were instituted and penalties collected amounting to $929.

A number of undertakers and cemetery keepers were prosecuted for their failure to comply with the regulations governing the transportation and burial or other disposition of the bodies of human beings.

Infectious Diseases—A number of persons were prosecuted for their failure to comply with the quarantine regulations. Severe penalties were imposed where the facts indicated a wanton disregard of law.

TABLE No. 1.

Civil Actions.	1915.	1916.
Violations received and notices sent	7,439	4,367
Violations complied with before suit	7,270	4,280
Civil Actions begun	123	242
Amount of penalties collected in civil actions	$918 00	$956 00
Criminal Actions—Magistrates' Courts		
New cases in Magistrates' Courts	12,346	11,567
Held for Special Sessions	2,192	345
Discharged	1,582	1,201
Fined	6,756	7,975
Sentence suspended	1,789	2,063
Jail sentence	17	12
Amount of fines imposed	$13,888 75	$23,933 00
Criminal Actions—Courts of Special Sessions		
Fined	1,241	1,658
Discharged	386	255
Sentence suspended	954	506
Jail sentences	15	10
Amount of fines imposed	$29,326 00	$34,170 86


SANITARY BUREAU
TOTAL COMPLAINTS
35324
47892
+34%
1915
1916
RESULTS OF INSPECTIONS
NO CAUSE FOR ACTION
13251
18030
+36%
1915
1916
ABATED BY PERSONAL EFFORT
7741
9635
+24%
1915
1916
REFERENCES
6215
4955
-20%
1915
1916
NOTICE OR ORDERS
14332
14899
+3%
1915
1916
PENDING END OF YEAR
179
372
+108%
1915
1916
TOTAL INSPECTIONS
243744
223616
-8%
1915
1916
BARBER SHOPS
3313
7278
+102%
1915
1916
LODGING HOUSES
3097
6320
+101%
1915
1916
VACANT LOTS
17448
15485
-12%
1915
1916
PRIVIES & CESSPOOLS
11625
12993
+11%
1915
1916
STABLES
49814
37793
-24%
1915
1916
WATER SUPPLIES
7170
3431
-52%
1915
1916
SMOKE
7801
9340
+19%
1915
1916
HORSE TROUGHS
1421
214
-85%
1915
1916
TOTAL ARRESTS
1215
2109
+74%
1915
1916

SANITARY BUREAU.

Changes in Staff—The Bureau lost an Assistant Sanitary Superintendent, Dr. T. R. Maxfield, and two sanitary inspectors, by death. Two sanitary inspectors were added to the staff.

Changes in Procedure—File: On January 1st, the house file system was instituted. Under the address visited, an envelope is filed containing all complaints and other papers with a record of all visits made to the premises.

Book of Recommendations—Each inspector was supplied with a book of instructions containing standardized recommendations pertaining to notices, orders, etc.

Municipal Term Court—The establishment of the new Municipal Term Court for handling violations of the Sanitary Code. The improvement in this change is that an inspector can now arraign a number of violators in one court where before he was compelled to spend considerable time traveling to the different courts having jurisdiction over the premises in which the violation occurred.

Seasonal Notices—Notices issued on seasonal nuisances are now filed as pending during the winter months and reinspections on these are made at the beginning of the spring. These notices were formerly filed as sufficiently complied with and only a tickler file or the memory of the inspector was depended upon to institute a spring inspection.

Important Activities—Stables: During the poliomyelitis epidemic, each stable in the vicinity of a case reported was at once inspected with a view to enforcing the stable regulations especially as regards the breeding of flies from manure heaps.

Manure—The transportation of manure was rigorously supervised, the proprietors of stables being compelled to use lime or borax on the manure before shipping and the railroad companies being required to cement, grade and drain the loading sidings.

Sanitary Surveys—Sanitary surveys were made in certain selected sections of the city. Insanitary conditions were corrected and the proper care and removal of refuse, garbage and other material were enforced.

Tenement House Nuisances—This Bureau took direct action in compelling owners of tenement houses in infected areas to remedy insanitary conditions instead of referring them to the Tenement House Department as was formerly done. This change in procedure was justified by the poliomyelitis epidemic.

Sewage—A study of the sewage system of the city is in progress for the purpose of formulating a definite program of sewage disposal which this Department can consistently demand. The removal of sewage from the ground surfaces and its disposal beyond fly contact, is one of the most important activities of this Bureau. A campaign has been conducted for the installation of sewers in unsewered areas and the submerging of sewer outlets when connection with a disposal plant has been impracticable.

Representatives of the Bureau appeared at the meetings of local boards in the different Boroughs and advocated the construction of sewers wherever possible. Where such personal efforts are unavailing, such as for example at South Beach and Midland Beach, where there are no sewers and where the sewage from all the concessions and from a large colony further inland finds its way through shallow ditches to the waters washing the beaches which are used by thousands of bathers, the Board of Health has declared the existing conditions to be a public nuisance and has called on the Board of Estimate and Apportionment to take steps to correct these conditions.

The County Jail and County Farm on Staten Island were induced to provide suitable sewers and disposal systems. These institutions have for years been discharging sewage either on the public highways or upon private and public land.

Orders were issued to owners of property on Beaver Creek to discontinue drains into the creek and provide suitable cesspools for their premises.

In various low-lying sections in the city, property owners were induced to build private sewers to connect with public sewers or with the waters around the city, so as to prevent the discharge of sewage into the streets.

Owners of private property along the banks of the Bronx River were compelled to discontinue discharging sewage into the river. The removal of the public sewers, however, has been a more difficult problem. The engineers of the Board of Estimate and Apportionment have been requested to change the outlet for the sewer now discharging into the Bronx River at 234th Street and carry this sewage by a siphon and line to one of the other sewers to the eastward.

Many old sewers and their connections have had to be altered or removed in excavating for the new subway which runs through the Boroughs of Manhattan, Brooklyn and The Bronx. There was a disposition on the part of some owners and contractors to allow house sewage to escape into the open cut or into uncovered box flumes, but by means of board orders, these contractors were compelled to provide suitable sewers and house connections.

Refuse Dumps—Regular periodic inspections have been made of refuse dumps and all the carts transporting refuse material. The regulations relative to the covering of carts, disinfection of dumps and prevention of fly breeding, the regular removal of salable material salvaged and the proper covering of any offensive materials, were rigidly enforced.

Spitting Crusade—In co-operation with the sanitary police and the Police Department, crusades have been carried on at different times during the year against spitting in public conveyances, railway stations, public buildings, etc. Numbers of arrests were made and most of those arrested were fined.

Labor Camps—Labor camps established by railroad companies during the recent strikes and by other large employers of labor, due to the shortage of laborers in the city, were inspected and those in charge were required to comply with the regulations governing camps of this character.

Anti-Mosquito Work—The owners of land along the meadows from Chelsea to Linoleumville, in the Borough of Richmond, in the Westchester section of The Bronx, in the Sunswick Creek section of Long Island City, in Corona, in the Rockaway section of Queens and in the Bath Beach, Bay Ridge, Bensonhurst and Brighton Beach sections of Brooklyn, have been compelled to ditch and drain sunken or swampy land or fill in the same with ashes, street sweepings, dirt from the subway and dirt pumped from the bed of waterways. Where filling or draining has been impracticable the stagnant water has been oiled. Over 5,000 gallons of oil have been spread by the mosquito squad under the supervision of the sanitary engineer.

To educate the public and especially school children in the method of mosquito propagation, 1,200 quarts of mosquito larvae were collected and distributed in pint bottles to all public and parochial schools and to public buildings throughout the city.

A special squad, known as the mosquito squad, has kept the ditches open in the swamp lands of the Borough of Richmond, and has cleaned up mosquito and fly-breeding places in other Boroughs. For example, the premises known as the new court house site, in Manhattan, found to be in an insanitary condition and breeding mosquitoes, were cleaned up and the mosquito-breeding water drained by drilling a

hole in a sidewalk vault. Thirteen loads of rubbish were burned and twenty-five loads of tin cans and other debris were removed by the Department of Street Cleaning.

The salt marshes from Coney Island to the city line, including the islands in Jamaica Bay and the marsh lands of Baychester, Eastchester and Westchester in the Borough of The Bronx, and of the College Point section of Queens, have been drained by means of ditching.

Public Conveyances—Frequent day and night inspections have been made of public conveyances to compel proper ventilation and thorough cleaning. The recent amendment to the Sanitary Code will permit this Bureau to compel the cleaning of cars at least once in every twenty-four hours. The heating of cars has been tested whenever the outside temperature has been below 40 degrees, and the transportation companies have been promptly notified of any violation of the heating regulation. Out of 910 cars tested in one day, 56 were found to have a temperature of less than 40 degrees, the standard set by the Public Service Commission. It is intended to begin court action against the companies if these violations are persisted in.

Private Schools—The inspection and supervision of private schools was begun early in the year as a result of an amendment to the Sanitary Code providing that no schools, other than those maintained by the Department of Education, shall be operated without a permit from the Department of Health.

Motion Picture Theatres—In co-operation with the Bureau of Licenses, inspections were made of motion picture theatres during night performances and nearly every one was found to be improperly ventilated. The Bureau of Licenses, under whose jurisdiction these houses are, disciplined the owners.

Noxious Weeds—During the spring and summer, through the personal efforts of sanitary inspectors, a great deal of poison ivy, rag weed and other noxious weeds were removed from highways and vacant lots.

Horseshoeing Shops—All the horseshoeing shops in the city have been brought under permit from this Department. Compliance with the regulations drawn up for the guidance of the owners of these shops has been secured. This will aid in the material reduction of glanders.

Dense Smoke—Several owners and captains of tugboats have been arrested and convicted and fined $25 on the charge of allowing dense smoke to issue from their boats.

The officers of railroad companies and the owners of factories have been repeatedly warned and the nuisances have always been abated. Several owners of factories have been advised as to the best methods of operating their plants with a view to the elimination of dense smoke.

Soot Fall Studies—To determine the amount of soot and dust in the air of the city, a number of jars containing about two inches of distilled water, and weighted to prevent tipping, were placed on the roofs of buildings in each Borough. It is intended to continue to collect, analyze and weigh this soot and dust falling into these containers at monthly intervals.

Lodging Houses—During cold weather each lodging house has been inspected at least twice weekly after 10 p. m. These night inspections are made with a view to determine the actual operation of these houses, their ventilation, sanitary condition and number of occupants. Conditions have improved to a marked degree and these houses are now maintained in a sanitary condition.

Pigs—Board orders have been issued against the owners of piggeries in the Borough of The Bronx because of the offensive conditions and the accumulated gar-

bage used to feed the pigs. A determined effort will be made to secure compliance with such orders or to compel abandonment of the business in the spring of 1917.

Summer Resorts—A crusade was begun early in the spring against the use of bathing establishments, houseboats, bungalows or tents without permits from this Department. These establishments were regularly inspected, and those proprietors who violated departmental regulations were arrested and in most instances fined by the Court.

Trial Block—A sanitary survey was made of a block in the office district of the Borough of Manhattan, to determine the conditions under which employees in these offices work. Tests were made of the quality and quantity of light and air and inspections were made of the sanitary conditions maintained. Practically all of the employees in the block worked eight hours or more daily. Only 50 per cent. of them were allowed an hour for lunch. Artificial light was used very generally, natural light being insufficient. Great varieties in the quantities of light were found, varying from one-half a foot-candle to 40 foot-candles of light. Eighteen per cent. of the office workers did not have a sufficient amount of cubic space allotted to them. Mechanical means of ventilation were used only in first floors and basements, of four buildings in this block. The air was filtered in only one of the buildings in the block. The average temperature of the buildings was found to be from two to three degrees too high (over 70 degrees). The humidity was found to be 20 degrees too low.

Dusty Trades—Orders have been issued to many manufacturers requiring that where dust, gases, fibres, etc., are released in quantities sufficient to injure health, suitable suction devices or other means to protect the workers must be provided.

Water Supply—Periodic sanitary surveys of the watershed supplying New York City with water have been made, and any cases of possible contamination in the vicinity of the streams have been investigated. Samples of the water have been collected, regularly, from the various reservoirs and submitted to the Department laboratory for analysis.

Bottled Waters—Inspectors have taken samples of bottled waters, other than medicinal waters, sold in the city and have submitted them to the laboratory for analysis. A number of these waters were found to be ordinary city water that had or had not been filtered. The facts in each case have been presented to the Assistant Corporation Counsel for prosecution.

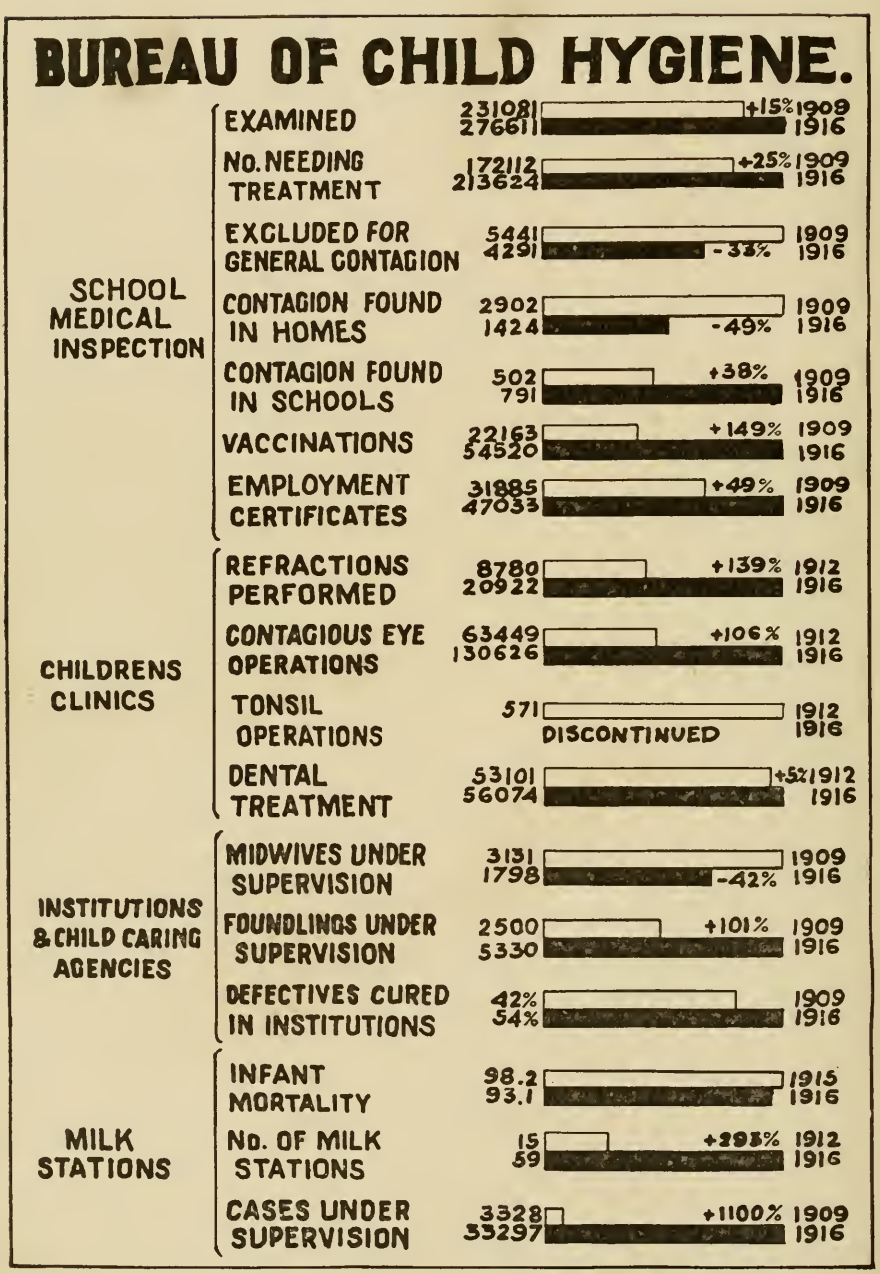
Dog Muzzling—Inspectors of this Bureau have served summonses on dog owners throughout the year for violation of the muzzling ordinance. In addition to this regular work, several dog-muzzling crusades have been participated in by this Bureau.

Achievements—Trades Regulated: Laundries, horseshoeing shops, barber shops, lodging houses and stables of the city, have been brought effectively under sanitary control and compliance with regulations is now uniformly maintained.

TABLE No. 1.

COMPLAINTS, NOTICES, INSPECTIONS, ETC.

	1915.	1916.
Complaints disposed of	35,324	47,892
No cause for action	13,251	18,030
Abated by personal effort	7,741	9,635
Notices or orders issued	14,332	14,899
Total Inspections	243,744	223,616
Cesspools and privies	11,625	12,993
Animals	14,299	9,794
Barber shops	3,313	7,278
Baths	2,826	1,862
Common towel—utensils	630	818
Dwellings	50,600	43,233
Horse trough	1,421	214
Lodging houses	3,069	6,320
Lots vacant	17,448	15,483
Odors	2,623	2,995
Smoke	7,801	9,340
Stables	49,814	37,793
Water	7,170	3,431
Miscellaneous	93,289	69,953
Arrests	1,215	2,109
Pounds offal removed	3,676,039	3,205,597
Dead cats and dogs removed	343,688	364,212
Other dead animals removed	15,202	15,590


BUREAU OF CHILD HYGIENE.
SCHOOL MEDICAL INSPECTION
EXAMINED
23108 1909
27661 1916
+15%
NO. NEEDING TREATMENT
172112 1909
213624 1916
+25%
EXCLUDED FOR GENERAL CONTAGION
5441 1909
4291 1916
-33%
CONTAGION FOUND IN HOMES
2902 1909
1424 1916
-49%
CONTAGION FOUND IN SCHOOLS
502 1909
791 1916
+38%
VACCINATIONS
22163 1909
54520 1916
+149%
EMPLOYMENT CERTIFICATES
31885 1909
47033 1916
+49%
CHILDRENS CLINICS
REFRACTIONS PERFORMED
8780 1912
20922 1916
+139%
CONTAGIOUS EYE OPERATIONS
63449 1912
130626 1916
+106%
TONSIL OPERATIONS
571 1912
DISCONTINUED 1916
DENTAL TREATMENT
53101 1912
56074 1916
+5%
INSTITUTIONS & CHILD CARING AGENCIES
MIDWIVES UNDER SUPERVISION
3131 1909
1798 1916
-42%
FOUNDLINGS UNDER SUPERVISION
2500 1909
5330 1916
+101%
DEFECTIVES CURED IN INSTITUTIONS
42% 1909
54% 1916
MILK STATIONS
INFANT MORTALITY
98.2 1915
93.1 1916
NO. OF MILK STATIONS
15 1912
59 1916
+293%
CASES UNDER SUPERVISION
3328 1909
33297 1916
+1100%

BUREAU OF CHILD HYGIENE.

Changes in Staff—The Bureau lost during 1916 one chief of division, one full time medical inspector, seven medical inspectors and thirty-one cleaners by transfer within the Department; seven medical inspectors, five cleaners, seven domestics, two orderlies, three hospital helpers, two watchmen, one laborer and four hospital clerks by the discontinuance of one of its functions.

The Bureau gained twelve inspectors and twenty-five nurses.

Changes in Organization—The clinics for school children were discontinued early in the year because of lack of provision for them in the budget. Some equipment was saved, however, and with this, dental and eye clinics were established in the public schools.

The Division of Institutions and Day Nurseries was combined with the Division of Institution Inspection of the Bureau of Preventable Diseases under the immediate supervision of the Deputy Commissioner.

The control of supplies was transferred to the Bureau of General Administration.

Changes in Procedure—On May 16th the district medical supervisors discontinued their visits to sick employees of the Bureau. This work was given over to the departmental diagnosticians.

The issuance of employment certificates in the Borough of Queens is no longer done by special employees in the borough offce, but has been distributed to the different Health Districts as a part of their regular functions.

In the matter of children boarded out, a notification is sent to the Bureau by the Children's Home Bureau of the Department of Public Charities; an inspection is made, and if same is satisfactory a permit is issued and the Home Bureau notified within thirty-six hours. The Home Bureau makes the subsequent social investigations, supplying the Division of Midwives and Foundlings with a monthly report on conditions found.

Teachers are now permitted to examine school children for pediculosis capitis. The adoption of this plan means a tremendous saving of work to the nurses, and so far no objections have arisen.

When a case of ophthalmia neonatorum is reported, an inspector is sent to the case to make a tentative diagnosis and take a smear, which he forwards to the laboratory. On receipt of the report of this smear an oculist is sent to the case. He leaves orders for the nurse and makes subsequent visits until he terminates the case.

Important Activities—March 11th, a conference was held with the President of the Board of Education on washing facilities in schools. Insufficient funds have so far prevented the Board of Education from supplying the necessary equipment.

May 13th, during Baby Week, lectures by inspectors and nurses were delivered in public schools of the City, literature was distributed, special activities were carried on in milk stations and baby contests held.

May 27th, a special examination of the eyes of all children placed in classes for the blind in the Borough of Manhattan was made by one of the oculists of the Bureau. He found that a number of cases were of luetic origin and recommended such children for salvarsan treatment. A number of others have been referred to suitable eye clinics for operations which have materially improved the sight. One particular case which had lost the sight of one eye, and in which the other eye could only count fingers, was by a suitable operation enabled to have the sight restored to 20/30 of normal.

A dental clinic was opened at the Flushing Hospital.

"Record of Weight" booklet was issued for recording the weight of children at the infant milk stations.

June 3rd, three cases were taken to court for persistent pediculosis. The parents were reprimanded for gross neglect and the children committed to an institution for six months.

A system of physical examination of truants was inaugurated. The truants were examined very thoroughly with special reference to their nervous history and previous habits, and tests were made to determine the blood pressure.

A volunteer dental clinic was established at P. S. No. 128, Brooklyn. The entire outfit was purchased by voluntary subscription and a small fee was charged for the purpose of buying dental materials.

Preliminary alcohol study of expectant mothers was begun with a view to determining the number of mothers giving birth to living and still-born children, who were addicted to the use of alcohol moderately, habitually or not at all. As the study is not yet completed, results and statistical figures are not available.

June 10th, court action was taken against parents failing to attend to the condition of their children. Through the co-operation of the Society for the Prevention of Cruelty to Children, four parents were warned that their children needed glasses. In three cases children were taken away from parents on account of head conditions and physical defects not treated. One parent was fined $5.00 for keeping a child out of school on account of pediculosis.

A volunteer dental clinic was established at P. S. No. 90, Brooklyn.

A special survey was made to determine the status of pediculosis in school children. During the study 83,697 children were examined and 13,654 were found to be suffering from pediculosis. Of these, 4,202 were cured and 9,241 remained pending at the completion of the study. This amounts to about 10% of the children examined.

June 17th, a volunteer dental clinic was established at P. S. No. 169, Brooklyn.

Court action was taken against a parent for refusing to cut the hair of his child suffering from persistent pediculosis. Parent was fined $5.00.

June 20th, 1,500 ice books donated by the Knickerbocker Ice Company and the Ice Publicity Company were distributed to the Baby Health Stations.

July 1st, a series of Schick Tests were made at a Baby Health Station by the Bureau of Laboratories in order to determine the susceptibility to diphtheria of the several children in different families. About 70 children were tested, of whom it was found necessary to immunize about 25. This study will be carried out more completely and to cover a greater number of cases during the next year.

The Children's Aid Society opened a camp for boys who are refused employment certificates because of malnutrition. This is called Camp Goodhue, and its purpose is that by out-of-door living and good food these cases will be speedily brought up to their required weight and condition. The work has been very successful, the large majority of boys referred there being granted their working papers upon their return to the City.

July 15th, a conference of the supervising nurse in the Brownsville Clinic, Brooklyn, with police officers, street cleaning men, boy scouts and boy police resulted in a general clean-up of all hallways, cellars, garbage cans and fire escapes.

On Barren Island, Boy Scouts and Camp Fire Girls made 71 home visits in a campaign of education on cleanliness.

In Schools No. 21 and 92, where free lunches are given to school children, an inspection resulted in having screens provided for an adjoining stable and new tubs for dish washing.

July 29th, the name of the infant milk stations was changed to baby health stations by order of the Commissioner. The reason for this change was to correct a wrong impression as to the object of the stations, which is to educate parents in baby care rather than the dispensing of milk.

August 12th, 400 slides, making short and pointed references to the various phases of infant diet, hygiene and care of infants, were distributed to moving picture houses located in the sections of the City where the infant mortality is highest.

Through the efforts of the Baby Welfare Association the New York Herald opened a station at Hughes avenue and 187th street, The Bronx, for the distribution of free ice.

A group of students from Teachers College visited the baby health station at 2287 First avenue and were instructed in the practical workings of the station, including prenatal instruction and milk modification.

August 26th, three midwives, arrested for attempting criminal operations, were held under $1,000.00 bail each.

Certificates of honorable mention were prepared for distribution to patrons of the baby health stations for faithful attendance and attention to the advice of doctors and nurses.

The Chief of the Division of Midwives and Foundlings began a personal supervision of still-birth reports. An inspector was sent to investigate each case. If conditions were satisfactory the case was at once referred to the suitable authorities for use as a wet nurse. If it was decided that the conditions found on investigation warranted the presumption that preventative measures would affect subsequent pregnancies, the case was referred to the baby health station for supervision.

A plan was adopted by which the Department of Health inspectors gave instruction to school teachers by means of lectures and talks regarding the new syllabus on Child Hygiene.

September 16th, the time between the scheduled opening of schools and the actual opening, on account of poliomyelitis, was used by the medical inspectors in delivering lectures to the teachers of the Teachers Institute, conducted by the Department of Education, on the work this Department is trying to do in the schools.

September 21st, several members of the Public Health Course visited the baby health station and were instructed in the practical workings of same.

Five talks were given to parents' clubs, reaching about 11,000 persons, on the subject of what the Department of Health is doing to safeguard the health of their children.

A school nurse gave a talk to 38 teachers as to how they could co-operate with her and help her in her work for school children.

A medical talk was given to over 12,000 teachers at the Morris High School in The Bronx, on the syllabus on child hygiene.

The Polish Times was induced to publish an article in relation to "The Expectant Mother."

October 7th, the dairymen's strike resulted in a diminished supply of milk for the City. Through the personal efforts of the Directors of the Bureau of Child Hygiene and the Bureau of Food and Drugs, sufficient milk was obtained for supplying the baby health stations. A statement was prepared for mothers explaining the various substitutes for cow's milk, which could be used as temporary measures for the feeding of infants. The list comprised condensed milk, infants' foods, cereal waters and gruels, egg water, broths, bread and crackers, vegetables, beef preparations, etc.

In P. S. No. 169, Manhattan, arrangements were made by the nurse for the provision of facilities for washing the hands of the children, since no provision is made for the purpose by the school itself. The children bring to the school a piece of

soap in a container. A piece of gauze is furnished to each child, for washing the hands each time after leaving the room. The child takes the gauze home every few days to be washed.

A special club for nervous children was organized in P. S. No. 30, The Bronx, the particular nervous habit to be corrected being biting of nails.

October 4th, seven girls were sent to Holiday Farm, Rhinebeck, New York, five of whom were applicants for employment certificates who had been refused because of malnutrition and who were under the standard weight for their ages. Arrangements had been made to keep these girls until they show definite improvement.

Six students of Teachers' College, who are taking a course in public health nursing, were instructed in the work of this Department and were supplied with a short synopsis of the work performed in the schools, milk stations and clinics. Arrangements and assignments were made for these students to visit schools, milk stations and clinics, and to observe the work of our nurses in the field.

October 14th, a baby health station was established in Bellevue Hospital Medical School Dispensary. Students of the College are visiting the station and are being afforded every opportunity to familiarize themselves with the details of infant feeding and care.

October 21st, a special study of nutrition was inaugurated in the Bowling Green District by the Department and the A. I. C. P. acting in co-operation. No results are as yet available.

A class was formed by a baby health station for the instruction of older children with disorders of nutrition and for the correction of physical defects which may be accomplished by gymnastics.

A school nurse organized a parents' club, calling it "Help Your Neighbor Club," and a "Welfare League" among the older boys of the school, whose meetings she attends. The members of this league visit cases in the neighborhood, both truant and charity, which require immediate attention, and report facts to the nurse.

November 4th, weekly lectures were begun at Baby Health Stations regarding measures for the prevention of respiratory diseases in infants and children. The points discussed were the value of fresh air, proper clothing, bathing, dangers of coughing, sneezing and kissing, isolation of children from adults and other children ill with coughs and colds, avoidance of large gatherings, proper breathing exercises, nasal and oral hygiene, home cleanliness, etc.

Three nurses from the Charity Settlement of Asheville, N. C., visited the baby health station and were instructed by the nurses in charge concerning the organization and work of the station.

A plan was prepared for a model system of school medical inspection to be located in P. S. No. 21, on Mott street, Manhattan. This will consist of the entire services of an inspector and nurse, the establishment of a dental clinic, contagious eye and refractive clinics for this school, which is already equipped with shower-baths for the pupils under the supervision of bath attendants, and a free school lunch for the children. Open-air classes for anaemic children are also contemplated.

November 11th, three midwives charged with attempted abortion were arrested One pleaded guilty and was released on bail. One was acquitted by direction of the Court. The third pleaded guilty, but sentence was suspended.

Efforts were made to promote cleanliness by having school children bring individual towels and soap to school. The teachers fear that the towels may be mislaid and the children infected from one another. In one school the children use toilet paper in place of towels and the results are fairly satisfactory. In another school, through the efforts of the nurse and teachers, old clothes have been gathered together, washed and cut up into squares for use as towels. In a number of the schools, the

teachers prefer to send the children home when they present themselves in a dirty condition. In one school the sewing teacher has given each child a large piece of muslin to be hemmed during the sewing lesson and then used as a towel. The teacher has taught the children to make soap boxes from cardboard taken from the backs of pads. The children bring the soap from home. In another school the children have brought towels and clothes from home and on the second day three of the towels were stolen.

Eleven children, who had been refused employment certificates, were sent to the country. The boys were sent to New Hamburg, New York, and the girls to Holiday Farm at Rhinebeck, New York. The children showed great improvement and in most instances were able to obtain their certificates on their return to the city.

November 18th, a large health league was organized in a public school in The Bronx, with all pupils enrolled as members, and a class officer for each class. These groups have been formed among the older children to assist one another in freeing their heads from nits. Gold stars are given to those who keep their heads clean for ten weeks.

A class for anaemic children was organized in P. S. No. 30 and thirty members were weighed once a month and given a prescribed diet with instruction as to general health care. Those who obey instructions and show a gain in weight are given a health league button with pink and blue ribbon.

Certificates of honorable mention were prepared and distributed to baby health stations to be given to mothers who have visited and will visit the stations regularly and who follow the advice and instructions given them.

Eleven physicians, enrolled in the Public Health Course, visited the baby health station at 112th street, Manhattan, where demonstrations of the various phases of the work and the methods of record-keeping and report-making were shown to them.

Visitors from Elizabeth, N. J., Newburgh, N. Y., and Australia were instructed in the regular work of the stations and in prenatal instruction and supervision.

November 25th, a midwife was arrested for attempted abortion and convicted, but sentence was suspended.

A study was made of the clerical efficiency in this Bureau which showed that there has been a definite increase in the amount of work performed, with a decrease in the amount of appropriation for clerical service for the years 1914, 1915 and 1916.

A crusade was begun for teaching mothers to give their children proper breakfasts. A cereal with milk was recommended to be added to the usual breakfast of coffee and bread.

Achievements: Reduction of Infant Mortality—There has been for the year 1916 a reduction of infant mortality to 93.1, which is below the previous low figure established in 1914 of 94.6.

TABLE No. 1.

PHYSICAL EXAMINATIONS—1916

	School Medical Inspection.						
		Re-examination 96813.					
	Regular Examinations.	Received Treatment—Improved				Refused Treatment.	Left School before Defect was Corrected.
		Glasses.	Medical.	Surgical.	Other.		
Regular examinations	276,611	....	....	....	....	....	....
Normal	62,987	....	....	....	....	....	....
Teeth defects only	116,146	....	....	....	....	....	....
General defects	97,478	....	....	....	....	....	....
Re-examined	96,813	....	....	....	....	....	....
Athletic contest	39,199	....	....	....	....	....	....
For charitable institution	18,811	....	....	....	....	....	....
Defective vision	27,769	14,108	1,419	34	32	1,418	1,191
Vision not tested	91,937	....	....	....	....	....	....
Defective hearing	2,145	....	1,070	47	6	85	102
Defective nasal breathing	32,765	....	7,038	6,045	28	2,182	1,366
Hypertrophied tonsils	39,731	....	6,767	6,810	42	2,955	1,685
Defective nutrition	28,989	....	13,244	66	2,198	280	914
Cardiac disease	5,404	....	2,516	5	6	72	299
Pulmonary disease	940	....	571	8	2	9	53
Orthopedic defects	2,785	....	899	65	17	96	105
Nervous defects	2,202	....	1,001	1	12	59	91
Defective teeth	183,572	....	....	....	22,655	....	....

TABLE No. 2.

CERTIFICATES AND PERMITS—1916.

	Employment Certificates.	Supervision of		
		Midwives.	Children Boarded Out.	Day Nurseries.
Applications brought forward	152	173	293	....
Applications received (first)	51,443	69	2,812	15
Applications received (renewal)	.....	993	3,358	51
Total	51,595	1,235	6,463	66
Applications granted	47,033	1,188	5,751	59
Applications denied	4,033	21	166	3
Applications pending	529	26	546	4
Applications expired	39,298	754	1,251	34
Applications revoked	.....	101	3,910	2
Applications in force	65,169	1,798	5,330	123
First inspections	.....	1,062	6,170	66
Re-inspections	.....	12,077	34,378	927
Special visits	.....	6,308	8,639	164
Total inspections	.....	19,447	49,187	1,157
Special inspections	.....	....	....	487
Children examined	.....	....	....	....

TABLE No. 3.

GENERAL SUPERVISION—1916.

	Reduction of Infant Mortality.	Schools.	Milk Stations.	Little Mothers' Leagues.
Number	.....	791	59	17
Under supervision (children and babies)	17,563	938,454	33,297	10,093 No. of members
Attendance of mothers total visits	.....	.....	577,034	41,676 att. of members
Diarrhoeal deaths	65	.....	127	.....
Deaths, other causes	134	.....	327	.....
Quarts of milk sold	.....	.....	3,885,813	.....

TABLE No. 4.

HOME VISITS—1916.

	School Medical Inspection.				Milk Stations.	Reduction Infant Mortality.
	Infectious Diseases.	Physical Defects.	Dispensaries.	Special Visits.		
Visits by Nurses	9,607	220,260	4,661	46,645	140,701	146,037
Visits by Inspectors	11,932	57,349	.....	11,878	706	934

TABLE No. 5.

GENERAL CONTAGION—1916.

	Found in Schools (Excluded).	Found in Homes (Unreported).
Diphtheria	85	1
Scarlet Fever	76	36
Measles	301	367
German Measles	268	54
Chicken Pox	1,932	451
Whooping Cough	276	306
Mumps	1,243	209
Tuberculosis	108	...
Gonorrhoea	1	...
Syphilis	1	...
Miscellaneous	....	...
Total	4,291	1,424

TABLE No. 6.

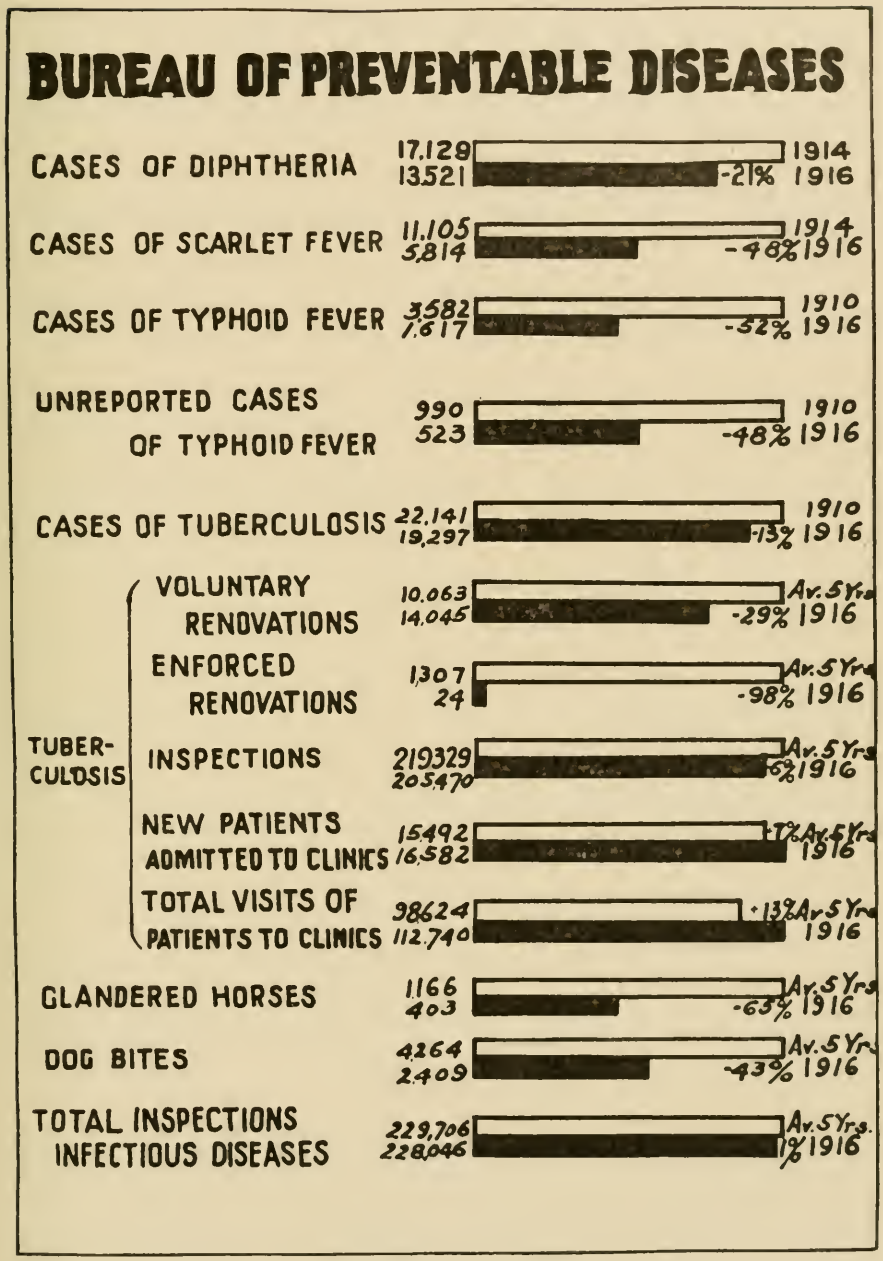
MINOR CONTAGION—1916.

	Found in School.	Excluded.
Pediculosis	288,096	8,203
Trachoma	8,798	98
Conjunctivitis	26,042	2,182
Ringworm	4,122	136
Scabies	2,428	237
Impetigo	16,264	349
Favus	318	4
Molluscum Contagiosum	62	2
Miscellaneous	2,109	....
Follicular conjunctivitis	6,640	28
Total	354,879	11,239

TABLE No. 7.

CLINICS FOR SCHOOL CHILDREN—1916.

	Refraction.	Contagious Eye.	Nose and Throat.	Dental.
Cases brought forward	9,132	14,324	Clinic	6,713
New cases received	9,132	14,334	abolished	6,713
Total registered	5,581	.....	Dec. 30th,	5,167
Cases discharged	4,634	.....	1915	4,902
Cured	947	.....		265
Dropped	3,551	.....		1,546
Pending	.....	130,626		.....
Operations	12,379	.....		56,074
Treatments	20,922	.....		.....
Refractions	.....	.....		11,916
Extraction teeth, deciduous	.....	.....		2,718
Extraction teeth, permanent	.....	.....		2,541
Fillings teeth, temporary	.....	.....		20,796
Fillings teeth, permanent	.....	.....		.....


BUREAU OF PREVENTABLE DISEASES
CASES OF DIPHTHERIA
17,129
1914
13,521
-21%
1916
CASES OF SCARLET FEVER
11,105
1914
5,814
-48%
1916
CASES OF TYPHOID FEVER
3582
1910
1,617
-32%
1916
UNREPORTED CASES OF TYPHOID FEVER
990
1910
523
-48%
1916
CASES OF TUBERCULOSIS
22,141
1910
19,297
-13%
1916
TUBERCULOSIS
VOLUNTARY RENOVATIONS
10,063
Av. 5 Yrs.
14,045
-29%
1916
ENFORCED RENOVATIONS
1,307
Av. 5 Yrs.
24
-98%
1916
INSPECTIONS
219,329
Av. 5 Yrs.
205,470
-6%
1916
NEW PATIENTS ADMITTED TO CLINICS
15,492
+7%
Av. 5 Yrs.
16,582
1916
TOTAL VISITS OF PATIENTS TO CLINICS
98,624
+13%
Av. 5 Yrs.
112,740
1916
GLANDERED HORSES
1166
Av. 5 Yrs.
403
-63%
1916
DOG BITES
4264
Av. 5 Yrs.
2,409
-43%
1916
TOTAL INSPECTIONS INFECTIOUS DISEASES
229,706
Av. 5 Yrs.
228,046
-1%
1916

BUREAU OF PREVENTABLE DISEASES.

Changes in Staff—On January 1st, the Bureau gained, by appointment, 7 nurses, 70 assistant clinic physicians, 3 clerks and 6 other employees. On the same date there were dropped from the service 35 assistant clinic physicians, 12 stenographers, 12 disinfectors and 11 other employees. On January 1st one clerk was added. On December 11th, there were transferred to the Bureau of General Administration 2 medical inspectors, 6 clerks and 30 other employees. On the same date there were transferred to the Bureau of Hospitals 1 hospital physician and 44 other employees. On December 31st, there were transferred to the Division of Institution Inspection 8 medical inspectors and 1 clerk.

Changes in Organization—On January 1st, the Division of Institution Inspection was transferred to the Deputy Commissioner's office.

On December 11th, the ambulance service was transferred to the Bureau of Hospital. On the same date the stable and transportation service was transferred to the Bureau of General Administration.

On August 1st, the supervision of the work of the Bureau in the Borough of Queens was assumed by the Division of Health Districts.

Changes in Procedure—A minimum period of quarantine was established for diphtheria, to wit: No later culture will be examined for release from quarantine which is made earlier than twelve days from the date of report of the disease.

A new procedure for terminating typhoid fever cases was adopted, to wit: The attending physician shall submit to the Department of Health specimens of feces and urine for examination for the presence of typhoid bacilli, at least ten days after the patient's temperature reaches normal, and before he or she shall resume their occupation. If typhoid bacilli are found in the excreta, such convalescent shall not resume his or her occupation without permission from the Department of Health.

On March 4th, forcible removal of typhoid fever cases was begun. Physicians were notified by letter that cases of typhoid fever would be removed to a hospital if the following regulations were not observed: (1) a Widal test of the blood must be made; (2) immunization must be offered to all members of the household; (3) the following quarantine rules must be observed: (*a*) the patient must be actually isolated; (*b*) stools and urine must be adequately disinfected; (*c*) all susceptibles must be immunized; (*d*) the attendant must have nothing to do with the family cooking, care of children, etc.; (*e*) there must be a separate toilet for the patient's family; (*f*) the family must be intelligent and willing to carry out the rules of the Department of Health; (4) typhoid fever cases will be terminated by bacteriological examination of feces and urine.

Infectious diseases in institutions. New rules were promulgated, to wit: (1) children having measles complicated with broncho-pneumonia would be sent to their homes in preference to a hospital, providing investigation of the home proved satisfactory; (2) no measles cases will be removed later than seven days after the appearance of the eruption, and (3) typhoid fever carriers need not be retained in hospitals or institutions if not desired. They will be sent home if home conditions are satisfactory or to a Department hospital.

Important Activities—On January 8th, a rule that all cases from the Society for the Prevention of Cruelty to Children recommended for admission to the Willard Parker or other Department hospitals be sent by a diagnostician, was adopted.

A morbidity census of old and new law tenements in Health District No. 1 was made. A large corps of nurses visited every family in the district and obtained information concerning every member of the household, those who were ill, the nature of the illness, etc. This information was tabulated by the Bureau of Records and was the subject of a special report.

January 10th, social service work in infectious diseases was begun. This work is the result of an experimental attempt made in April, 1914, to visit all cases of infectious diseases discharged from hospitals for the purpose of determining how many new cases of diseases were caused by such convalescents. The importance of continuing social service among these cases was recognized, but could not be continued on account of the inadequate number of nurses. Since the discontinuance of visits in cases of measles, however, this work became possible, and a special staff of nurses, under the direction of the supervisor attached to the Tuberculosis Hospital Admission Bureau, were assigned to such social service home visits. Special attention is paid to (*a*) cleanliness, (*b*) overcrowding, and (*c*) financial condition.

January 12th, a study of housing conditions in relation to tuberculosis was begun. This was made the subject of a special report and will be printed as a monograph.

January 14th, an investigation of anthrax infection was made following the report of a death from anthrax. The investigation showed that "wearers of fur are as free from the dangers of anthrax infection as any other members of the community."

A study of wood alcohol poisoning was made following two deaths of beer-vat varnishers. It was found that wood alcohol was used in the shellac with which the interior of the beer vats are varnished. This investigation culminated in a letter being sent to all the breweries in New York City, with the result that 37 New York brewers and 9 New Jersey brewers have pledged themselves to exclude methyl alcohol in their premises for varnishing purposes.

January 22d, the Evening Telegram was induced to refuse advertisements of medical specialists on venereal diseases.

January 26th, the work of the Division of Epidemiology was extended, to wit: new epidemiological history cards were prepared for typhoid fever, scarlet fever and diphtheria. Daily individual reports were submitted of infectious diseases, especially reports of school children, so that the "accumulation" of any disease in any school or in any area of the city might be noted at once. Information was obtained as to the location and occurrence of typhoid fever during recent years in the State of New York, and the relation of such occurrence in pasteurizing plants, ascertained and plotted upon a map; similar information is being obtained from all portions of the milk shed. This will enable any locality with excessive typhoid morbidity to be located. It was decided to exclude all typhoid carriers as food handlers and to supervise them.

February 26th, an outbreak of trichinosis occurred in the Borough of Queens. Twelve patients were treated at St. Joseph's Hospital, everything being done for them therapeutically that was possible, and yet four of the patients died, a mortality of 33⅓ per cent. The source of infection appears to have been a pig owned and slaughtered at Far Rockaway. The exact method of preparing the meat for food is not clear, but cooking played a very small part in it. The victims included all the members of the family, an employe, who afterwards died, a boarder, and some friends.

March 6th, the Division of Industrial Hygiene entered a new field of adult hygiene. Through the co-operation of the "American Museum of Safety," the services of a physician have been placed at the disposal of the occupational clinic for the purpose of giving advice to those industrial workers examined at the clinic by means of (1) timely medical and hygienic counsel; (2) distribution of educational booklets and leaflets, and (3) attempts to secure for them the aid of private physicians, hospitals or dispensaries.

An examination of children in trade schools was undertaken by the occupational clinic to determine their physical condition, their limitations, if any, for certain

employments, and with the end in view of connectng up the physical examination of school children with the examination of adults, by the examination of the intermediate group of children working under employment certificates or as trade school pupils.

March 18th, the treatment of Mary Mallon, "typhoid fever carrier," was begun by injecting her with typhoid vaccine and later with intravenous injections of antityphoid serum. So far she continues to be a dangerous "carrier."

March 31st, a circular letter was prepared urging physicians to have all members of the household of a typhoid fever case immunized, sending them blank forms for reporting such immunizations.

April 7th, a new dog circular was prepared consisting of a poster card 24 by 14 inches, containing pictures of muzzled and improperly muzzled dogs, Section 17 of the Sanitary Code, a reminder of the importance of the occurrence of hydrophobia (rabies) and a proper muzzle. This poster was widely distributed with a three-fold circular of information concerning rabies, provisions of the Sanitary Code with reference to muzzling, and the legislative action authorizing activities of the American Society for the Prevention of Cruelty to Animals.

A new typhoid poster was prepared calling attention to vacation typhoid and warning persons regarding the danger of using possibly infected water and foods during their vacation periods. These posters were distributed widely in shops, public places, schools, etc., and a considerable demand for them was received by employers generally following a description of them in the daily press.

April 20th, the examination of peddlers in Brooklyn was begun under the new arrangements of the Department of Licenses. A branch office for the examination of peddlers previous to the issuance of licenses by the Department of Licenses, was opened at 29 Third Avenue, Brooklyn, for Brooklyn and Queens applicants. This examination is entirely by inspection, applicants being stripped to the waist and only those held for later and more searching examination whose appearance suggests the presence of disease.

A census of unmuzzled dogs was taken by members of the Health Department, each employe reporting on a special blank those unmuzzled or improperly muzzled dogs seen during the day. Over 7,000 unmuzzled dogs were thus counted. This information was tabulated and through the co-operation of the Police Department 1,365 owners were arrested and $1,031 was collected in fines.

April 29th, the ferryboat "Stapleton" was exchanged for the ferryboat "Jersey City," to be used as a Day Camp.

A separate medical board for the tuberculosis hospitals was formed.

May 1st, a special study of "at home" cases of tuberculosis was begun. This study is not yet completed.

May 13th, a small outbreak of typhoid fever (13 cases) in the Borough of The Bronx was traced to an infected milk supply, which was immediately shut off, resulting in the subsidence of the outbreak.

May 20th, a supervising laryngologist was appointed for the tuberculosis clinics.

June 10th, dog circulars and posters were distributed to all dealers in muzzles, kennels, police precinct stations and branch offices of the Department.

Venereal disease signs were placed in Coney Island bath houses and saloons.

September 2d, during the month of August a slight increase of typhoid fever occurred in the Borough of Manhattan, 50 cases being reported. It was found that nine of these cases gave a definite history of contact and eight were clearly the result of out-of-town infection. The milk supply from some of these cases was traced to Gravesville, Herkimer County, New York, where there had been nine cases of typhoid fever since 1909. This milk supply was immediately excluded.

November 11th, a study was begun of tuberculous families, in which, because of

the financial and other burdens of caring for the patient, the family would be better off if the case were removed, with a view to extending and broadening the reasons for forcible removal.

Three cases of anthrax were carefully studied in relation to the brush-making industry. One of the fatal cases was a peddler who carried about his neck a string of feather dusters by which it is presumed he was infected. Owing to the shortage of bristle stalk, much use is now being made of Japanese horsehair, thus indicating, perhaps, a new source and route of this infection.

November 18th, a change of procedure in typhoid fever was made, to wit: physicians will be communicated with, by telephone, regarding all negative or doubtful widal reactions. Special inquiry will be made regarding the use of loose milk and the patrolman making loose milk investigation, or a nurse, will endeavor to obtain from neighboring loose milk shops the names and addresses of all persons buying of them. This information will be telephoned to the branch office and the inspection time of typhoid reports will, in this way, be shortened.

November 15th, the Night Camp Rutherford was discontinued for the reason that its administration presented unusual difficulties added considerably to the annual maintenance cost of the boat and has become of questionable value, since a few only of the men who took advantage of its opportunities were bona fide patients who were employed in the day time.

The Advisory Committee of the Hospital Admission Bureau modified the restrictions regarding the admission of children to preventoria, so as to admit those children whose mothers are about to enter a tuberculosis institution. This will facilitate the admission of mothers who frequently decline to enter a hospital if children be left alone at home.

November 25th, special exhibits were prepared, showing the proper muzzling of dogs, consisting of easels carrying a framed panel on which have been placed plaster-of-paris models of two dogs' heads showing proper and improper muzzles, together with the poster card "Muzzle Your Dog."

A citizen having reported the death of a number of mice which were affected with a cutaneous disease, an investigation was made by the Chief Veterinarian, who reports that one of the mice examined by him and by the Research Laboratory showed a lesion believed to be Favus, which is peculiar to mice. An inquiry regarding children in the house who might have a cutaneous disease failed to show any.

Following the return to the city of the National Guard regiments from the border, arrangements were made to control the soldiers who had had typhoid or para-typhoid while away.

December 9th, following correspondence on the subject, the Health Officer of the Port has agreed to report all cases of typhoid fever among alien immigrants, previous to their discharge if fecal examination shows the presence of bacilli.

December 21st, the Committee on Venereal Diseases of the Advisory Council approved and licensing of clinics for infectious diseases and appointed a committee to prepare supplementary regulations for proposed section of the Sanitary Code. A special committee was also appointed to consider the establishment of an Association of Venereal Clinics, similar to the Association of Tuberculosis Clinics. It also approved the licensing of diagnostic laboratories and the removal and detention of cases of venereal diseases and disapproved the sending of Wassermann examination reports direct to patients.

December 16th, 4 cases of small pox and 19 contacts were removed from the S. S. Herm, from Seville, Spain, Erie Basin, Brooklyn. The ship and its crew were immediately quarantined thereby preventing the entrance of small pox into the city.

December 23, physical examination of massage operators was begun in the Occupational Clinic in compliance with a new Aldermanic ordinance.

TABLE No. 1.

INFECTIOUS DISEASES—CASES AND DEATHS—1916.

	Diphtheria.	Measles.	Scarlet Fever.	Whooping Cough.	Typhoid Fever.	Cerebro-spinal Meningitis.	Acute Poliomyelitis.	Tuberculosis.	Small Pox.	Mumps.	Chicken Pox.	German Measles.	Syphilis.	Gonorrhoea.	Total.
January	1,572	1,242	680	465	66	11	4	1,613	1	228	956	86	1,361	646	8,931
February	1,485	1,894	753	526	63	16	3	1,638	1	351	874	113	1,505	604	9,826
March	1,570	3,281	948	930	66	33	2	2,053	....	617	1,439	225	1,715	560	13,439
April	1,329	4,208	842	1,094	86	28	4	1,749	....	730	1,623	346	1,622	534	14,195
May	1,715	4,579	791	1,140	116	25	5	1,602	3	766	1,747	475	2,435	664	16,063
June	1,570	3,393	489	1,033	115	37	313	1,800	2	746	1,331	395	1,831	590	13,645
July	1,064	1,813	300	968	120	37	3,457	1,423	....	240	430	132	1,400	481	11,865
August	511	417	78	755	258	20	3,927	1,505	....	114	70	29	1,428	413	9,525
September	433	119	72	246	281	8	985	1,531	....	28	44	14	1,735	428	5,924
October	608	74	159	121	223	23	258	1,322	....	53	141	11	1,652	613	5,258
November	734	127	267	97	133	15	47	1,475	....	190	325	17	1,727	392	5,546
December	930	456	435	85	90	10	18	1,586	....	196	637	26	1,717	296	6,482
Total	13,521	21,603	5,814	7,460	1,617	263	9,023	19,297	7	4,259	9,617	1,869	20,128	6,221	120,699
New cases per 1,000 population	2.41	3.85	1.03	1.33	.29	.04	1.60	3.44	.001	.76	1.71	.33	3.50	1.11	
Deaths for the year	1,031	491	96	359	215	173	2,448	*8,406	.....	.....	.....	.....	503	28	
Deaths per 1,000 population	.18	.09	.02	.06	.04	.03	.44	1.50	.....	.....	.....	.....	.09	.005	
Case Fatality per cent	7.16	2.27	1.65	4.81	13.30	65.70	27.13	43.57	.....	.....	.....	.....	2.50	00.4	

*Pulmonary tuberculosis.

TABLE No. 2.

INFECTIOUS DISEASES—GENERAL FIGURES.

	1915.	1916.
Cases Diphtheria and Scarlet Fever removed to Hospital	7,497	4,369
Visits to cases of Infectious Diseases	230,696	228,046
Cultures taken in Diphtheria	47,497	39,585
Diphtheria immunizations performed	7,546	3,764
Vaccinations performed	112	849
Houses visited—Disinfections performed	4,501	98
Houses visited—Disinfections postponed	533	.....
Rooms disinfected	6,833	247
Total calls for ambulance	7,189	9,692

TABLE No. 3.

TYPHOID FEVER—1916—1915.

	1916.	1915.
Cases reported	1,905	2,720
True cases	1,617	2,456
No cases	288	264
Deaths	215	333
Blood sent to Laboratory—		
Positive	1,189	1,847
Negative	15,073	16,567
Treated at home	565	992
Treated at hospital	1,052	1,464
Contact cases	260	161
Probably out of town infection	226	171
Additional cases with out of town history	56	201
Total with out of town history	282	372
Number of People Exposed to cases in families and institutions	7,443	11,711
Immunization refused	4,420	7,563
Immunization accepted	3,023	4,150

TABLE No. 4.

TUBERCULOSIS LIVING CASES—1916.

	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	Total.
Cases in file January 1st, 1916	22,993	3,782	9,805	1,474	366	38,420
Under care of private physician	1,545	461	1,274	271	56	3,607
Under care of non-department clinics	1,754	.....	.....	.....	.....	1,754
Cases in city institutions	4,340	597	1,052	169	110	6,268
City cases out of town and in sanatoria	1,521	381	689	119	55	2,765
Homeless—not found cases	7,629	772	2,720	188	30	11,339
Cases "at home" and under care of Department of Health Clinics	6,204	1,571	4,070	727	115	12,687
New cases report during 1916	11,113	1,660	5,493	828	203	19,297
Total cases added to register in 1916	15,947	2,076	6,790	2,568	238	27,619
Total cases enrolled in 1916	38,940	5,858	16,595	4,042	604	66,039
Cases removed from register in 1916	17,304	2,462	7,503	2,468	244	29,981
Cases in file December 31st, 1916	21,636	3,396	9,092	1,574	360	36,058
Under care of private physician	1,687	527	1,348	311	50	3,923
Under care of non-department clinics	1,455	.....	.....	.....	.....	1,455
Cases in city institutions	4,965	271	1,168	156	91	6,651
City cases out of town and in sanatoria	1,721	257	724	123	63	2,888
Homeless—not found cases	5,594	562	1,947	189	34	8,326
Cases "at home" and under supervision of Department of Health Clinics	6,214	1,779	3,905	795	122	12,815
Visits by physicians	2,771	225	479	40	97	3,612
Visits by nurses	104,448	19,530	50,130	7,925	2,691	184,724
Co-operative visits	10,040	911	5,335	481	367	17,134
Total visits	117,259	20,666	55,944	8,446	3,155	205,470
Renovations compelled by nurses	1	.....	14	6	3	24
Renovations made voluntarily	7,612	1,076	4,844	361	152	14,045

TUBERCULOSIS CLINICS—1916.

	1915.	1916.
Under observation for diagnosis January 1st	1,536	2,894
New Patients examined	19,225	16,582
Re-admitted for diagnosis	3,458	4,504
Total diagnosis	24,219	23,980
Found not tuberculous and transferred or discharged	11,996	12,534
Suspected cases transferred to other clinics	610	473
Found tuberculous	6,068	4,651
Discontinuing, not coming for diagnosis	2,651	3,463
Under observation for diagnosis December 31st	2,894	2,859
Under treatment January 1st	4,950	6,962
New cases under treatment	19,225	16,636
Old cases re-admitted	8,821	9,102
Total cases under treatment	32,996	32,700
Found not tuberculous and discharged	11,743	12,420
Deaths of cases attending clinics	277	276
Transferred to other clinics	1,740	1,252
Entered Hospitals	1,667	1,543
Entered Sanatoria	697	697
Arrested or cured	.....	1,556
Discontinuing, not found	517	550
Discontinuing, not coming for treatment	9,393	8,400
Under treatment, December 31st	6,962	6,006
Total visits of patients	127,522	112,740
Prescriptions filled for clinic patients	173,216	115,059
Number of clinic physicians	67	76
Number of volunteer physicians	41	20
Home visits by clinic physicians	2,853	2,312

TABLE No. 5.

DIVISION OF INDUSTRIAL HYGIENE.

	1915.	1916.
Factories investigated	248	765
Complaints investigated	59	112
Peddlers examined	6,682	2,583
Diseased	1,697	521
Bakers examined	5,755	5,193
Diseased	2,045	1,733
Food Handlers examined	10,633	18,502
Diseased	3,599	6,245

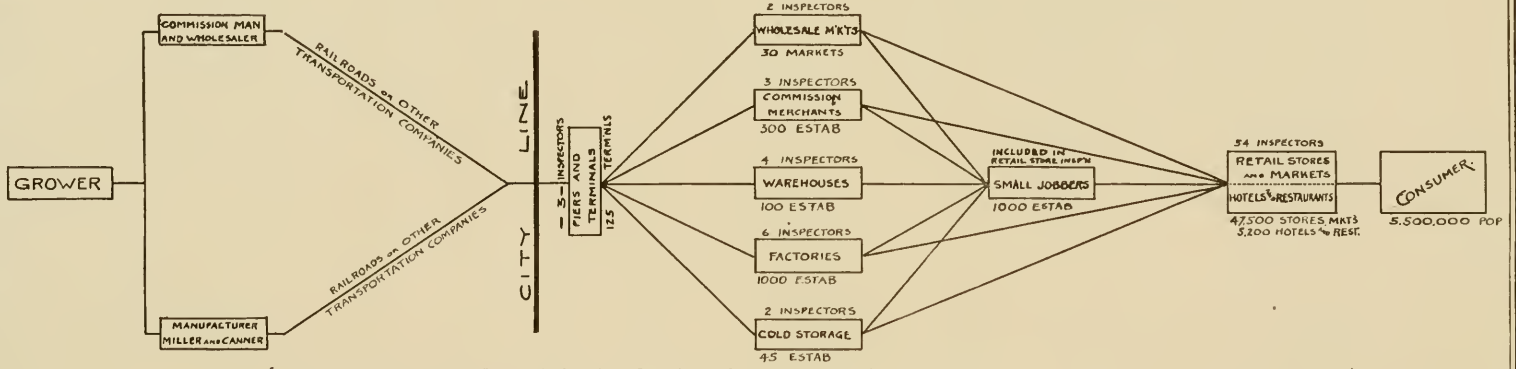
TABLE No. 6.

ANIMAL DISEASES.

	1915.	1916.
Horses examined	35,334	39,345
Horses tested with mallein	1,008	2,607
Horses vaccinated	39	53
Horses condemned	704	403
Post-mortem examination of horses	189	144
Cows examined	2	.....
Dogs examined	6,075	21,724
Dogs destroyed	786	620
Cases of rabies	103	27
Persons examined for dog bite	3,327	2,409
Cats examined	.....	215
Cats destroyed	.....	.....
Number of persons examined in anti-rabies clinics	1,389	778
Number of anti-rabies injections	4,887	1,854
Number of tetanus injections	84	88

MAIN LINES OF FLOW OF FOODSTUFFS

SECONDARY LINES ARE THROUGH HUCKSTER DIRECT SALES TO CONSUMER AND THE LIKE.



THE CENTRAL IDEA OF THE NEW YORK CITY FOOD CONTROL IS THE SAMPLING OF THE STREAM AT ALL PRACTICABLE POINTS

1 AS SUPPLY ENTERS CITY — THESE POINTS ARE.
- A PIERS & TERMINALS.
- B WHOLESALE MARKETS.
- C COMMISSION MERCHANTS HOUSES { ALL UNSOUND MATERIALS DISCOVERED ARE DIVERTED AT THESE ESTABLISHMENTS.

2 FACTORIES — HERE ARE CONTROLLED SOUNDNESS & ADULTERATIONS OF FOODS SANITARY CONDITIONS TO BE CONTROLLED HERE BY PERMITS TO DO BUSINESS & CLOSE INSPECTION

3 COLD STORAGE WAREHOUSES AND ORDINARY WAREHOUSES — HERE ARE CONTROLLED MATERIALS WHICH HAVE REACHED THIS POINT THROUGH CHANNELS ALREADY NAMED OR WHICH REACH CITY DIRECTLY THROUGH WAREHOUSES — ALL UNSOUND MATERIALS ARE DIVERTED HERE AND SANITARY CONDITIONS TO BE CONTROLLED BY PERMITS AND INSPECTION.

4 SMALL JOBBER — HERE ARE DIVERTED UNSOUND FOODSTUFFS REACHING THIS POINT UNSOUNDNESS ORIGINATING HERE AND SANITARY CONDITIONS CONTROLLED AS WITH LAST TWO ITEMS.

5 VARIOUS CLASSES OF RETAILERS ARE TO BE CONTROLLED BY PERMITS TO DO BUSINESS ISSUED ONLY AFTER APPROVAL OF SANITARY CONDITIONS AND METHODS — UNSOUND MATERIALS FOUND HERE WILL PROBABLY ORIGINATE WITHIN THE ESTABLISHMENT

6 HOTELS AND RESTAURANTS — CONTROLLED BY PERMITS TO DO BUSINESS ISSUED ONLY AFTER APPROVAL OF SANITARY CONDITIONS AND METHODS — AND BY INSPECTIONS FOR SOUNDNESS AND ADULTERATIONS OF FOODS —

MEATS AND MILK ARE BECAUSE OF THEIR GREAT IMPORTANCE FROM THE STANDPOINT OF HEALTH SUBJECTS OF SPECIAL TREATMENT NECESSARILY THEIR HANDLING HAS MANY POINTS OF CONTACT WITH THE GENERAL SCHEME AS OUTLINED ABOVE.

CHART No. 1.

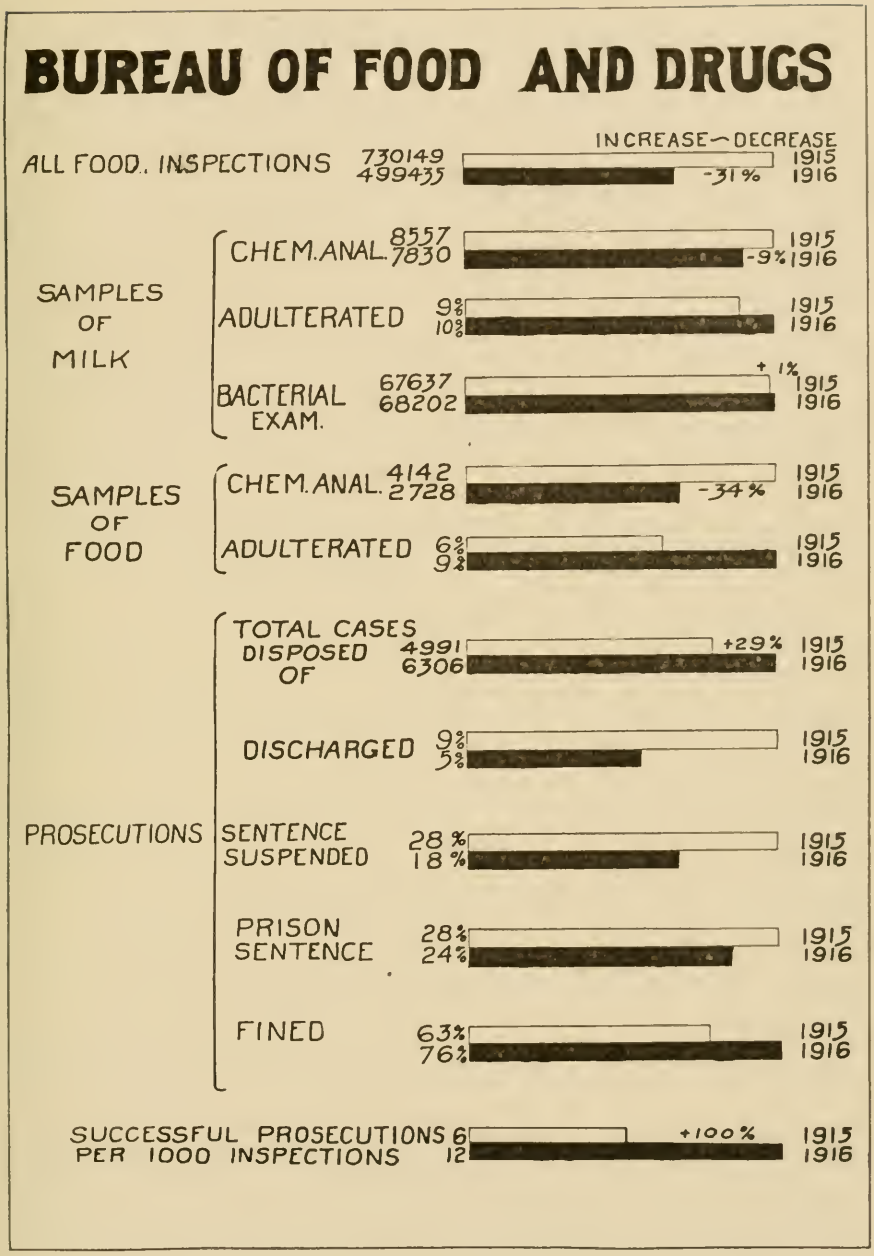


CHART No. 2.

ERRATUM—In Chart No. 2 the proportion of prison sentences should be 0.28 and 0.24 of one per cent. respectively, instead of 28 per cent. and 24 per cent.

Changes in staff—During the year, 5 inspectors were retired; 8 inspectors, 2 veterinarians, 2 chemists, 7 clerks and 4 laboratory assistants resigned; 6 inspectors, 7 veterinarians, 1 clerk and 1 laboratory assistant were dismissed on charges of receiving bribes, drunkenness and making false reports. Two inspectors died. These positions were filled by new appointments.

Changes in organization—May 1st, a Terminal Squad consisting of a supervisor and 7 inspectors, was organized to supervise, at the various railway and boat terminals, the entry of all foodstuffs into the city.

May 20th, the number of field inspection districts was reduced from 12 to 10 in order to better concentrate control.

August 26th, on suggestion of the New York Milk Committee, 4 men were detailed to try out a better systematized plan of milk inspection, which is designed to link in the most effective way, the control of the milk supply in both its country and city aspects.

September 15th, the number of field inspection districts was further reduced from 10 to 8.

A Factory Squad, consisting of a supervisor and 5 inspectors, was organized, with picked men to specialize in the sanitation and operation of food factories.

September 20th, a Warehouse Squad, consisting of a supervisor and 5 inspectors, was organized to specialize on storage problems and storage places.

October 1st, the country inspectors of milk were reorganized into two squads in charge of supervisors.

December 10th, various changes were made in the organization of the chemical laboratory: *e. g.,* primary chemical analysis is made by the laboratory assistant; if illegality is found, the results are confirmed for court purposes by assistant chemists. A distinct line has been drawn between purely routine and research work, and the chief of the laboratory has been relieved of much routine work.

Changes in Procedure—The practice of issuing certificates of condemnation for spoiled foodstuffs, was discontinued, the burden of knowing when foods are spoiled, being placed on the owners. The right to issue condemnation cards was withdrawn from inspectors. Certificates of condemnation are now issued only after application to the Office of the Chief Clerk of the Department, on reports coming from the inspector through the office of the Bureau.

In June, the Police Department was called upon for co-operation in enforcing the ordinance against the exposure to dust, dirt and flies of food on push carts and outdoor stands.

June 2d, the sale of food "as is" was ordered discontinued. This means the sale of food which contains some unsound material offered for sale at the risk of the purchaser.

June 15th, a plan was put into effect of sending laboratory assistants into the field for certain classes of field work for which a certain amount of scientific training is desirable such as investigations on oysters.

In July, the method of determining adulteration of milk by means of differences in freezing point in milk serum, was adopted as a routine procedure in the laboratory, former methods not being satisfactory for additions of small amounts of water.

July 28th, the Board of Health amended regulations governing the tuberculin testing of cattle so as to allow the completion of a tuberculin test at the end of the twentieth hour, except under certain specified conditions of reaction.

August 12th, the regulation of side walk stands and push carts was begun. These

push carts must be clean, and have tight body, which must, in certain cases, be metal-lined and drained to an underslung pail. The stands must be provided with properly drained and cleaned ice-boxes, the food must be sound and properly protected and raised two feet above the ground and there must be garbage cans easily accessible, properly covered and kept clean.

October 31st, regulations governing the sale of oysters were amended so as to require that oysters produced in the City of New York shall not be sold in the city, except at times of the year approved by the Board of Health, and oysters grown in the waters of Jamaica Bay shall not be sold between April 15th and December 1st, unless purified for seven days in unpolluted waters.

November 1st, to devise a more rapid method than the freezing point test, for the detection of milk watering, a study was begun on the electrical conductivity of milk serum.

Important Activities—Patent Medicines—January 7th, the stamping of patent medicines in stock in all retail drug stores, was completed.

Skim Milk—February 25th, out of 41 replies to a questionnaire, sent to cities of over 100,000 population, all cities allowed the sale of skim milk. The range of prices was from 3 to 5 cents per quart. Thus New York is the only large city in the country forbidding the sale of skim milk.

Cleaning of Glasses—March 6th, the campaign for the installation of running hot water, for washing glasses used in serving liquid refreshments, was pushed. A certain inspector on the lower east side secured the proper equipment of 184 stands without summoning a single owner to court.

Adulterated Escallops—March 18th, in co-operation with the U. S. Department of Agriculture, adulterated escallops shipped from Eastern and Southern States were seized and the shipper is being prosecuted by the U. S. Government.

Carbolic Acid and Bichloride of Mercury—March 25th, a special investigation regarding the sale of carbolic acid and bichloride of mercury was made. In 4 out of 36 drug stores tested, carbolic acid was purchased. In all of 30 drug stores, bichloride of mercury was purchased. At hearings held, the proprietors of all these places were warned that the next offense would mean prosecution, and publicity was given the investigation so that others of the trade might be warned.

Wood Alcohol in Toilet Articles—March 27th, a manufacturer of bay rum, witch hazel and a toilet water, all of which contained wood alcohol, was convicted and sentenced to 30 days in prison and fined $250.

The Cost of Living—April 4th, a survey was made of the relative cost of foodstuffs in various sections of the city. Certain selected goods were purchased and an analysis of the prices indicated that the current retail prices were practically the same, that the stores in poorer sections were in reality obtaining a greater profit than were those in the other sections and that the margin of profit in all cases was sufficient to permit the retail dealers to conduct business in an honest manner.

Inspection of Cattle—May 1st, an ante-mortem veterinary inspection of all cattle coming into the city was begun in co-operation with the federal authorities. The result has been a decided improvement in the class of cattle coming into the city.

Lead in Urine—As a result of the requirements of the Division of Industrial Hygiene, a new method for the determination of lead in urine was perfected.

Physical Examination of Milk Handlers—May 1st, the milk dealers of the city were notified that all persons handling milk sold raw, and all persons handling milk after pasteurization must be physically examined at an early date, so that employees with infectious diseases might be excluded.

Seashore Resorts—May 6th, a preliminary campaign was begun to put food establishments at seashore resorts in a sanitary condition before the regular opening for the summer season. A special oversight was kept throughout the summer, and as a result the conditions under which foods and beverages were sold were greatly improved over preceding years.

Oleomargarine vs. Butter—May 21st, an investigation of 123 hotels and restaurants showed that not in one instance was oleomargarine illegally served when butter was called for.

Bribery in Slaughter Houses—May 26th, as a result of an investigation requested by the Director of the Bureau and conducted jointly by this Department and the office of the Commissioner of Accounts, 7 veterinary inspectors were dismissed from the service on charges of accepting bribes from the operators of slaughter houses. As a result of the same work, indictments for bribery were brought against 12 of the operators and four of them have been convicted. At the same time permits for the operation of the slaughter houses were revoked.

Free Lunches—May 27th, an inspection of saloons serving free lunches, especially in the neighborhood of the Bowery and water front, was begun with a view to compelling sanitary conditions and proper handling of foods.

Hempstead Bay Oysters—May 29th, a sanitary survey showed that oysters coming from certain parts of the waters of Hempstead Bay, L. I., were dangerously polluted because the effluent from the Long Beach Sewage Disposal Plant was not sterilized and because the leaching cesspools were subject to tidal action. Such oysters were, therefore, barred from sale in this city.

Pasteurization of Butter—June 6th, a special committee of the Advisory Council on Food and Drugs reported that it would be inadvisable to make any recommendation as to bacterial standards for butter until exact information was available on the possible danger to health from butter as now offered for sale in this city and on the method of meeting the practical problems of enforcement of possible regulations. The collection of such information was at once begun and is still proceeding.

New Jersey Oysters—June 20th, an investigation of the conditions of oyster culture in the waters of Raritan Bay was conducted, with the New Jersey State Board of Health and the United States Department of Agriculture. The result was that oysters grown in Raritan Bay were admitted to this city unless they were floated, "drinked" or otherwise treated in the waters of Chesquake Creek, Matawan Creek or Luppatcong Creek.

Drug Substitution—July 6th, a druggist was fined $100 for substituting something else for panopeptone in a physician's prescription.

Condition of Drug Stores—July 8th, a survey was made of the sanitary condition of 62 drug stores in the city. Sixty-one were found in an insanitary condition. Owners were warned and improvement was noted on reinspection. In some of these places crude drugs were found, spoiled and dirty and were destroyed.

Patent Medicines on Push Carts—The sale of patent medicines by irresponsible dealers, from push carts, was ordered discontinued, it having been found that many of the preparations sold had lost any slight medicinal value they might have once possessed, and others contained opium or other habit-forming drugs.

Old Bottles—An investigation of the old bottle trade revealed the fact that about 40 dealers collected 400,000 weekly from the city dumps. These dealers were instructed that the bottles would have to be properly washed and sterilized before using.

Spot Eggs—July 27th, "The Spot Egg King" was caught receiving eggs from the New York Egg Yolk Company, who receives rotten eggs for the tanning trade.

He was arrested and taken to court and released on bail pending the filing of a revised "information affidavit" by the Corporation Counsel.

Ice Cream—August 1st, as a result of a campaign for the systematic bacteriological examination of ice cream begun June 1st, certain dealers whose ice cream showed high bacterial counts were warned that better sanitary conditions must prevail in their factories and that thorough sterilization of their utensils must be practised.

Exposure of Milk to Warm Weather—August 5th, an investigation was begun to determine why the bacterial content was found to be excessive in milk received at railway terminals in the city and it was found that the chief fault lay in the carelessness of dealers in allowing milk to stay on discharging platforms for several hours, without ice or poorly iced, thus becoming warmed and promoting bacterial growth. The destruction of such milk promptly resulted in lower counts thereafter.

Fake Poliomyelitis Preventive—August 25th, a man who sold a bag of cedarwood shavings perfumed with napthalene as a "protector" against infantile paralysis, was convicted and fined $250.

Saccharine—August 31st, the Court of Special Sessions upheld the Department in its contention that saccharine should not be used as a sweetener and all manufacturers of beverages were warned that this drug must not be used as a sweetener or prosecution would result.

Gravesville Creamery—August 31st, milk from Gravesville, New York, was excluded from sale in the city. It was found that the manager's son at the plant was ill with typhoid and that another employee had a typhoid history and that the water supply was contaminated. After five analyses, however, bacilli coli were noted in only 10 c.c. and the water was, thereupon, declared safe. The employees who were found to have a typhoid history were excluded from work in the plant and the milk supply was resumed on November 13th.

Poliomyelitis "Cure"—September 21st, a faker who sold, for $1 a 4-oz. bottle of a nostrum which he called "Sol" as a cure for infantile paralysis, tuberculosis, rheumatism and a few other ailments, was convicted and sent to the city prison for 30 days. Analysis of his nostrum showed that it consisted of red pepper, sassafras oil and alcohol.

Unripe Citrus Fruits—In September attention was concentrated on citrus fruits coming into the city from the West India Islands, particularly Porto Rico and Jamaica. The Federal Food and Drugs Act of June 30, 1906, while allowing the seizure of misbranded and adulterated fruits, does not allow the seizure of fruits or vegetables which are immature. The New York City Sanitary Code directs the seizure of such unwholesome material. This Bureau was informed by the U. S. Department of Agriculture, of all shipments of citrus fruits and as a result of careful inspection 500,000 pounds of such unripe fruit were destroyed.

Rotten Eggs—From October to December, inclusive, a special watch was kept on bakeries to detect the use of rotten eggs which at this time of the year are apt to be used on account of the high market price of eggs.

Physical Examination of Milk Handlers—October 1st, milk dealers were again advised that handlers must be physically examined at once. The work is proceeding slowly, and was much hampered by the milk strike.

Celery Tonics—October 2d, manufacturers of so-called celery tonics were notified the falsity of claims that such beverages have medicinal properties and that their labels must be so corrected as to tell only the truth.

Milk Strike—October 17th, the shortage of milk during the milk strike forced dealers to seek elsewhere for supplies, and from sources uninspected by this Bureau, such as the milk sheds of Boston, Philadelphia, Chicago, Cleveland and Pittsburg. All such milk was admitted only after the Board of Health of the city in question had certified to this Department the wholesomeness of the supply and only raw milk was admitted, which was subsequently pasteurized under the supervision of this Department.

Frozen Eggs—October 21st, an interstate shipment of some 21,000 pounds of frozen eggs, at a value of $4,000 was seized, condemned and destroyed as unfit for human consumption. This case indicates the close co-operation now existing between the U. S. Department of Agriculture and this Bureau.

Moving Pictures of Food Control—October 31st, the Universal Film Company made a number of pictures of the actual field and office work of this Bureau. The educational value of the display of such films at the thousands of moving-picture theatres in this city and the country can hardly be estimated. A copy of each film is to be furnished to the Department gratis.

Tuberculosis "Preventive"—October 31st, a faker was arrested for selling an inhaler containing menthol and oil of eucalyptus as a preventive of tuberculosis. Sentence was suspended after a warning was given to him not to repeat offense.

Soft Drinks—In November, the sale of so-called orange juice in the city was investigated. Analysis showed that the beverage was composed of ¼ juice of oranges and lemons and ¾ water and sugar. Dealers were notified to correct labels under penalty of prosecution.

Cold Storage Eggs—November 13th, an investigation was begun of the sale of eggs to determine whether cold storage eggs were being sold as fresh eggs. This was found to be rather a widespread practice, storage eggs actually being sold to inspectors under these false representations. One hundred and eighty-three violations were found, 50 dealers warned, 133 cases were taken to court, 62 of these have already been fined from $2 to $10.

Exhibit at Food Show—November 18th, a food exhibit was installed at the 22nd Regiment Armory as part of the food show of the New York Retail Grocers' Ass'n. This exhibit showed the method of work of the Bureau, the great waste of food stuffs due to poor handling and shipping and some samples of adulterated foods. An inspector acted as a demonstrator.

Clarifying Oysters—November 18th, the U. S. Bureau of Chemistry and this Bureau agreed that the waters of Hassock Creek in Jamaica Bay, are free of sewage contamination and are, therefore, suitable for the clarification of contaminated oysters. No oysters are allowed to be clarified, however, unless under the supervision of an inspector.

Drug Substitution—November 21st, a druggist was fined $100 for substituting asperin for phenacetin in a physician's prescription.

Tomato Catsup Fraud—In November, the Factory Squad discovered that much tomato catsup of a fraudulent character had, for a long time, been manufactured in the city. This stuff was often made by adding a large amount of cereals or flour and red dye to a small amount of pure catsup of tomato pulp, spices and vinegar and in some cases the tomato pulp was omitted entirely. The manufacturers of and wholesale dealers in such products were notified to discontinue this fraudulent labeling. It was ruled that products containing less than 50 per cent. tomato pulp must be labeled "imitation catsup." Those containing over 50 per cent. tomato pulp, but with a filler added such as cereal, flour, etc., are to be labeled "tomato compound" and only

products without fillers and consisting solely of tomato pulp with added spices, etc., are to be labeled "tomato catsup" and the presence of artificial color or benzoate of soda must be declared.

High Cost of Foods—December 1st, the Department being constantly called on to quote comparative prices of foodstuffs, investigation was made and it was found that, compared with the same period of 1915, the rise of prices on staples including vegetables and fruits was from 8 to 500 per cent., the majority being from 25 to 60 per cent.

Poliomyelitis "Cure"—December 5th, a faker selling a nostrum called "sumacyl," consisting essentially of malt extract and salicylic acid, as a cure for infantile paralysis, was sentenced to the city prison for 30 days.

"Ladle" Butter—December 6th, a special investigation was made of ladle butter and 2,000 pounds were seized and destroyed and warning given to all "ladlers" that acceptance and possession of such "packing stock" would result in prosecution, if found mouldy, dirty or otherwise unfit for use. Ladle butter is butter collected by peddlers and country stores from farmers and shipped in bulk to dealers in the city, who rework and soften it with the aim of producing a fairly good product for the use of bakers, pie-makers, etc.

Poliomyelitis Preventive and Remedy—December 12th, two fakers, one a doctor, were fined $500 and $300 each for manufacturing and selling a nostrum which they claimed was a preventive and remedy for infantile paralysis and which consists of water, alcohol and a very small amount of plant extract.

"Cure" for Tuberculosis, Diabetes, etc.—December 14th, a faker was fined $100 for selling an 8 oz. whiskey flask of a solution of chloride of tin in water for $2 as a preventive and cure for tuberculosis, diabetes, cancer, infantile paralysis, etc.

Oyster Adulteration—December 17th, an exhaustive investigation of commercial methods of freeing oysters of mud and sand demonstrated that without exception these resulted in an addition of water to the oysters with a consequent decrease of solids, thus constituting an adulteration. The increase in volume was from 5 to 20 per cent. in shucked stock, and from 20 to 25 per cent. in shell stock. Experiments showed that oysters could be cleansed by methods which would not thus increase the volume and dealers were accordingly notified that on and after January 10th, no method of cleansing must be used which will result of an increase of the volume of oysters on penalty of prosecution.

Old Egg Offender Heavily Fined—December 20th, Samuel Strudler, an egg dealer, who had been connected with various firms which have been convicted sixteen times, and fined an aggregate of $4,000 for violation of the code ordinances of the Department, was convicted and fined $1,000, in two cases, the heaviest possible fine under the law.

Wood Alcohol—December 21st, a druggist was sentenced to 30 days in the city prison for manufacturing and selling tincture of iodine, spirits of camphor and tincture of larkspur which were prepared with the poisonous and cheaper wood alcohol instead of the grain alcohol called for by law.

Wicks Committee—December 23rd, several members of this Bureau testified before the Wicks Committee, which was appointed by the legislature to inquire into conditions surrounding the sale of foodstuffs in this city, particularly of milk, eggs and poultry.

Drugs Below Standard—December 26th, a wholesale druggist was fined $500 for manufacturing and selling tablets of salol, salicylate of soda and other important drugs which were not only less than the declared weight, but below standard in the amount of drugs contained. Some contained less than 12 per cent. of the active drug.

Proprietary Medicines—December 30th, 998 manufacturers had registered 3,648 different preparations with this Bureau, in conformity with Section 117 of the Sanitary Code.

Achievements—Drug Stores—A plan has been perfected for controlling drug stores both as to the character of the product sold by them and their sanitary condition.

Milk Strike—During the milk strike, new supplies of milk were allowed to enter the city in such a way as not to endanger in any degree the health of the city.

Systematic Food Inspection—For the first time in the United States a plan of systematically handling the food control of a large city was put into effect. This plan controls the food at every place which it reaches, from the moment it enters the city until it gets to the consumer.

Wood Alcohol—This Bureau has at last succeeded in practically eliminating the sale of spurious liquors, drugs and barber's supplies, containing poisonous wood alcohol instead of grain alcohol and in enforcing the proper labeling of materials in which wood alcohol is allowed to be used.

Inspection of Hotels and Restaurants—Due to concentration during the summer on hotels and restaurants, a very marked improvement has been made in most of these establishments.

Oysters—As a result of systematic work in the inspection of oyster beds and the insistence of the effective clarification of oysters from polluted areas, both from within and without the city, it can be said that the oysters now sold in the city are wholesome and sound.

Agencies of U. S. Government—The establishment of more close relations with those agencies of the U. S. Government and of the States which have to do with the supervision of the food control, resulted in increased effectiveness in the work of all these agencies.

Co-operation with Tradesmen—The establishment of a constructive policy having in view close relations with every branch of the trade in foods and to the end that the Bureau may have effective co-operation with the reputable elements in these trades.

Explanation re Charts.

In reading the charts shown below, making comparisons of activities of this Bureau, it must be borne in mind that during the year 1916 a complete change has taken place in its methods of work, this change being designed to eliminate lost motion and to reduce comparative cost for results obtained.

The chart herewith designated as No. 1 shows the manner in which the problem is now attacked. Following out the above plan and in the interests of efficiency, inspections are made only where it is believed they are most needed. The large establishments handle the most foods. If they transmit the foods in good condition to the small men, such foods are much more likely to remain in good condition and the small dealers not only have the temptation to sell bad foods lessened but have an example which they are likely to follow.

Inspections of large places, have, likewise, been made much more exhaustive. All this means fewer inspections but better and more effective work. The inspection of a pushcart or sidewalk stand takes only a minute or two, of a large warehouse or hotel a half day. Thus there are 196,224 fewer inspection of pushcarts and stands and 1,255 more inspections of warehouses. The total number of inspections shown in Table No. 1 is therefore 31½ per cent. less than in 1915, but the successful prosecutions as shown by Chart No. 2, per 1,000 inspections, are double those in 1915. It must be borne in mind that the number of inspections made is absolutely no criterion

of the effectiveness of the work. This is to be sought rather in the improvement of the food supply in general and of the sanitary conditions surrounding its handling.

Reference is made in the body of the report to change of procedure in issuing certificates of condemnation. As a consequence of this and of the placing of inspectors at the points of entry of foods, less unsound food enters the city. Likewise, dealers themselves destroy unsound foods without waiting to get certificates of condemnation from the Health Department as they formerly did. It is a safe statement that the amounts of condemnations stated in former reports were no measure of the effectiveness of methods for the detection of unsound foods and represented in large degree a "padding" of returns. Even the figures for 1916 are no criterion for future years because the present system was not put into operation until about May 1st. Consequently, there is a reduction in the amount of food shown as condemned, of about one-half as compared with 1915, and it is to be expected that such figures will show further reduction as efficiency becomes greater.

TABLE No. 1.

INSPECTIONS OF FOOD ESTABLISHMENTS.

Character of Establishments.	Retail Establishments.		Wholesale Establishments.		Total Inspections.	
	1915.	1916.	1915.	1916.	1915.	1916.
Bakeries	23,985	27,168	.....	.....	23,985	27,168
Butchers	34,760	49,275	11,880	9,100	46,640	58,375
Cafes	9,681	3,837	.....	.....	9,681	3,837
Carbonated and Mineral Waters	.....	.....	1,467	2,327	1,467	2,327
Cold storage plants	.....	.....	898	271	898	271
Commission houses	.....	.....	32,921	29,745	32,921	29,745
Confectionery	22,472	25,660	703	1,342	23,175	27,002
Creameries	2,430	3,068	.....	.....	2,430	3,068
Dairies	24,067	18,081	.....	.....	24,067	18,081
Delicatessen	5,537	4,986	.....	.....	5,537	4,986
Drug stores	11,675	5,140	.....	.....	11,675	5,140
Eggs, wholesale	.....	.....	877	1,899	877	1,899
Egg breaking	.....	.....	532	484	532	484
Fat rendering	.....	.....	478	207	478	207
Fish	3,262	3,875	10,152	5,037	13,414	8,912
Frozen products	.....	.....	1,417	1,558	1,417	1,558
Groceries	50,468	46,752	.....	.....	50,468	46,752
Markets	4,586	3,157	282	1,171	4,868	4,328
Milk platforms	.....	.....	2,159	6,785	2,159	6,785
Miscellaneous	18,082	47,893	17,109	12,610	35,191	60,503
Pasteurizing plants—City	.....	.....	68	1,684	68	1,684
Pasteurizing plants—outside city	.....	.....	5,209	4,432	5,209	4,432
Piers and wharves	.....	.....	9,550	9,441	9,550	9,441
Push carts	202,618	83,837	.....	.....	202,618	83,837
R. R. terminals	.....	.....	5,645	2,033	5,645	2,033
Restaurants and hotels	20,951	21,400	.....	.....	20,951	21,400
Slaughter houses—cattle	.....	.....	1,925	2,205	1,925	2,205
Slaughter houses—poultry	.....	.....	6,108	4,740	6,108	4,740
Smoke house and meat preserving	.....	.....	1,194	1,895	1,194	1,895
Stands	129,633	52,190	.....	.....	129,633	52,190
Stock yards	.....	.....	92	.....	92	.....
Stores—general	53,216	1,330	.....	.....	53,216	1,330
Supply houses	.....	.....	495	.....	495	.....
Warehouses	.....	.....	1,565	2,820	1,565	2,820
Total	617,423	397,649	112,726	101,786	730,149	499,435

TABLE No. 2.

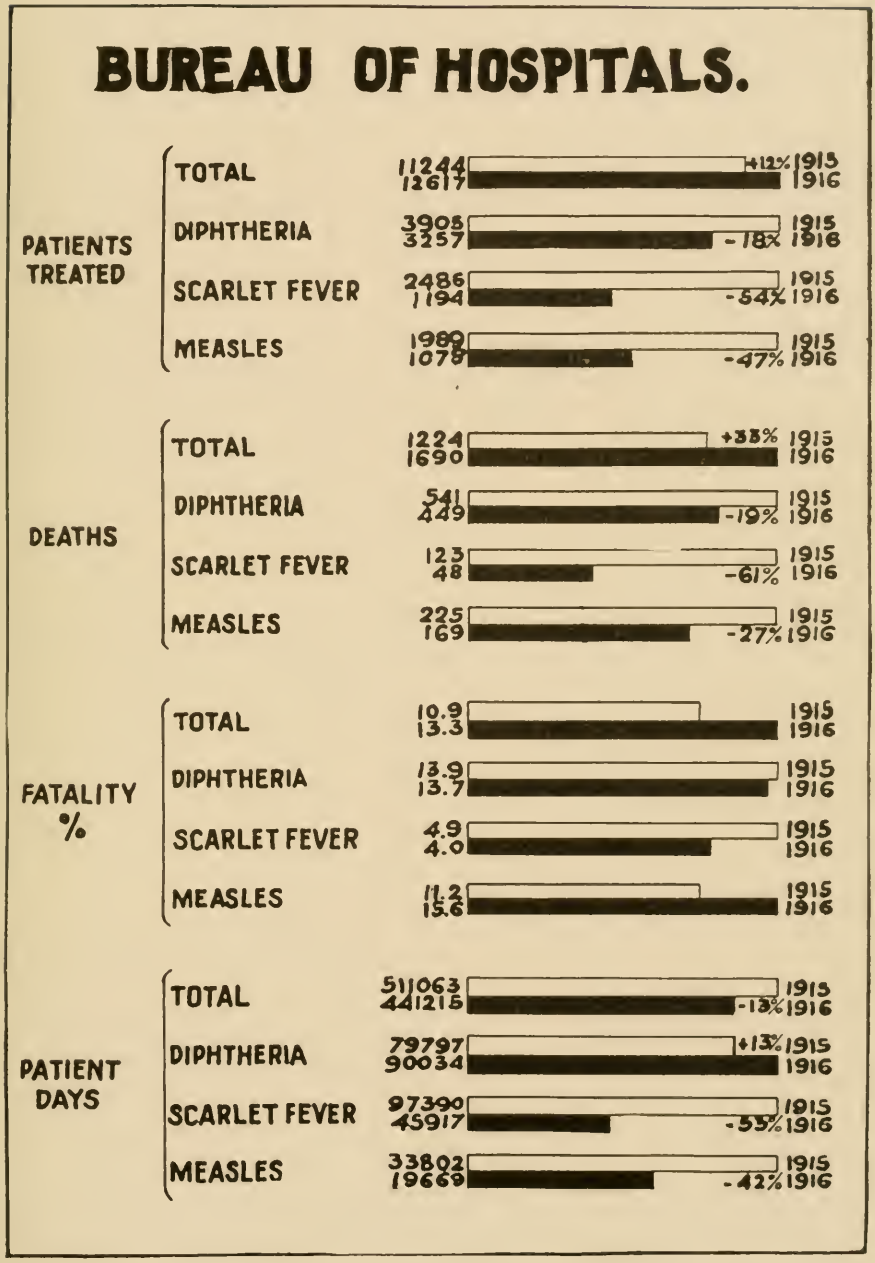
CONDEMNATION OF UNWHOLESOME FOODSTUFFS.

Character of Foodstuffs.	1915. Pounds.	1916. Pounds.	Character of Foodstuffs.	1915. Pounds.	1916. Pounds.
Fruit	10,827,745	6,909,915	Beef	563,416	73,534
Vegetable	3,134,637	1,656,418	Veal	170,250	28,906
Canned goods	1,108,246	766,263	Mutton or lamb	35,093	11,665
Groceries	137,607	.....	Pork	96,056	74,478
Drugs	1,216	.....	Poultry	386,388	97,465
Eggs	46,853	44,430	Game	15,400	
Milk	55,441	179,464	Fish	1,032,166	148,790
Cream	5,812	827	Shell Fish	9,786	
Condensed Milk	69,080	5,271	Assorted Meats	9,016	1,297,754
Butter	6,678	5,033	Miscellaneous	449,401	737,884
Cheese	2,483	.....			
Confectionery	46,173	36,884	Total	18,479,275	12,074,981

TABLE No. 3.

PROSECUTIONS—1916.

	1915.	1916.
New arrests	4,381	6,223
Held on bail	1,369	383
Discharged	446	341
Fined	3,133	4,792
Sentence suspended	1,402	1,158
Amount of fines	$33,221.	$44,402.
Prison sentence	14	15


BUREAU OF HOSPITALS.
PATIENTS TREATED
TOTAL
11244
12617
+12%
1915
1916
DIPHTHERIA
3905
3257
-18%
1915
1916
SCARLET FEVER
2486
1194
-54%
1915
1916
MEASLES
1989
1078
-47%
1915
1916
DEATHS
TOTAL
1224
1690
+38%
1915
1916
DIPHTHERIA
541
449
-19%
1915
1916
SCARLET FEVER
123
48
-61%
1915
1916
MEASLES
225
169
-27%
1915
1916
FATALITY %
TOTAL
10.9
13.3
1915
1916
DIPHTHERIA
13.9
13.7
1915
1916
SCARLET FEVER
4.9
4.0
1915
1916
MEASLES
11.2
15.6
1915
1916
PATIENT DAYS
TOTAL
511063
441215
-13%
1915
1916
DIPHTHERIA
79797
90034
+13%
1915
1916
SCARLET FEVER
97390
45917
-53%
1915
1916
MEASLES
33802
19669
-42%
1915
1916

Medical Progress—Twenty cases of chronic laryngeal stenosis spent the summer at the Municipal Sanatorium. The physical condition of all were much improved and six apparently recovered.

Cross infection with diphtheria has been minimized by the use of the Schick Test and active immunization.

Operative procedure for chronic laryngeal stenosis gives hope for cures in the chronic tubes cases.

The admission of anterior poliomyelitis demanded new methods of administrative and medical procedure and radical changes in the hospital personnel and equipment were required.

The whooping cough clinic operated in conjunction with the Research Laboratory, having furnished all information needed relative to vaccine therapy for this disease, has been closed.

The application of X-ray diagnosis to tuberculosis patients has added greatly to the statistical value of the medical histories.

The future patients of the Willard Parker Hospital will benefit by the addition of an X-Ray Laboratory to this institution, installed during 1916.

Research in the hospitals has been evidenced by the publication of 11 contributions to scientific literature.

Clinics for medical students, Department of Health Nurses and Institution Inspectors have been held throughout the year.

The Queensboro Hospital, capacity for 80 patients, was officially opened by the Department of Health, June 29th, 1916.

Buildings—The following buildings for patients are now under construction and should be ready for occupancy about July 1st, 1917:

Diphtheria Building, Kingston Avenue Hospital, Capacity 80.
Tuberculosis Pavilions, 8 and 9, Riverside Hospital, Capacity 160.
Venereal Building, Riverside Hospital, Capacity 80.
Pavilion No. 112, Municipal Sanatorium, Capacity 40.

The following administrative buildings were completed during the year:

Staff House, Willard Parker Hospital.
Antitoxin Horse Barn, Municipal Sanatorium.
Hennery, Municipal Sanatorium.
Silo, Municipal Sanatorium.

Menu Committee—The work of the Menu Committee has resulted in keeping the per capita costs of food below the standard of the Board of Estimate and Apportionment.

	Standard Figures.	Actual Cost.
Doctors	.58	.479
Nurses	.418	.345
Help	.22	.216
Patients	.165	.158

Committee on Fire and Fire Hazards—A committee consisting of the Resident Physicians, Chief Engineers and Sanitary Inspector, formerly a captain in the Fire Department, has been appointed to investigate fire hazards and fires for the protection of the patients and property of the Department Hospitals.

Employees—Six employees were dismissed from the City Service on charges; six died, two retired on pension and 1,740 resigned. Most of the latter were domestics and orderlies employed by the week, who were afraid to remain on account of the poliomyelitis epidemic. Others were patient help at Otisville and Riverside, who left when sufficiently well to leave the institution.

Seven employees were mobilized with the National Guard and entered the United States Army.

The establishment of dispensaries for employees has resulted in a decided saving to the city.

Twenty-seven employees of the Contagious Disease Hospitals developed contagious diseases as a result of their work.

Physicians—Diphtheria	1
Nurses, 15—	
Diphtheria	9
Scarlet Fever	3
German Measles	2
Chicken Pox	1
Domestics, 11—	
Diphtheria	9
Measles	2

At the request of the Municipal Civil Service Commission Resident Physicians were designated Institutional Examiners.

Nurse Service with Ambulance—Hospital care for patients to be transferred to contagious disease hospitals begins in the home by sending a nurse as well as a doctor on the ambulance that transports them.

Venereal Disease Admitted—Patients suffering from venereal diseases are now accepted in the hospital of the Department.

Legal Decision in Favor of Department—A legal decision of importance to hospital administrators was made by Justice Manning in the Supreme Court of the Kings County denying the petition of the plaintiff in the case of O'Brien *vs.* The City of New York where an attempt was made to oust nurses of this Department from the house rented for their use.

Experiments with Coal—Experiments to determine the efficiency of Buckwheat No. 3 coal as a fuel, are being carried out in the power houses of the hospitals.

Transfer of Drug Laboratory—The drug laboratory of the Department of Health was merged in that of the General Drug, Department of Charities.

Kings County Hospital to Furnish Electric Current—An agreement has been reached by the Department of Health and Charities to recommend that electric current be furnished from Kings County Hospital to furnish light and power for the Kingston Avenue Hospital.

TABLE No. 1.

PATIENTS TREATED, AND TERMINATIONS OF CASES.

	Census December, 1915.					Admissions.					Patients Treated.					Transferred from Other Contagious Diseases.					Total Diseases Treated.				
	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.
Scarlet fever and measles	....	....	....	....	....	....	1	1	....	2	....	1	1	....	2	....	5	....	....	5	....	6	1	....	7
Diphtheria	87	82	54	....	223	1,429	864	738	3	3,034	1,516	946	792	3	3,257	17	14	....	....	31	1,533	960	792	3	3,288
Diphtheria and scarlet fever	2	....	....	....	2	6	4	4	....	14	8	4	4	....	16	3	9	....	....	12	11	13	4	....	28
Diphtheria and measles	1	1	2	....	4	41	17	20	....	78	42	18	22	....	82	44	49	....	....	93	86	67	22	....	175
Diphtheria and minor diseases	2	....	....	....	2	12	3	3	....	18	14	3	3	....	20	2	9	....	....	21	26	12	3	....	41
Scarlet fever	57	51	26	....	134	456	393	174	39	1,062	513	444	200	39	1,196	7	18	....	....	25	520	462	200	39	1,221
Scarlet and minor diseases	2	....	....	....	2	8	4	1	....	13	10	4	1	....	15	6	2	....	....	8	16	6	1	....	23
Measles	47	7	3	....	57	676	180	165	....	1,021	723	187	168	....	1,078	15	26	....	....	41	738	213	168	....	1,119
Measles and minor diseases	1	....	....	....	1	15	2	10	....	27	16	2	10	....	28	3	5	....	....	8	19	7	10	....	36
Pertussis	11	12	....	....	23	181	55	15	....	251	192	67	15	....	274	11	7	....	....	18	203	74	15	....	292
Varicella, rubeola and other diseases	1	....	236	....	237	2,186	1,916	1,829	346	6,277	2,187	1,916	2,065	346	6,514	35	54	....	5	94	2,222	1,970	2,065	351	6,608
Total	211	153	321	....	685	5,010	3,439	2,960	388	11,797	5,221	3,592	3,281	388	12,482	153	198	....	5	356	5,374	3,790	3,281	393	12,838
Observation	....	1	1	....	2	48	40	8	1	97	48	41	9	1	99	10	....	....	2	12	58	41	9	3	111
Accompanying	....	....	....	....	....	7	18	12	....	37	7	18	12	....	37	....	71	....	....	71	7	89	12	....	108

TABLE No. 1—Continued.

PATIENTS TREATED, AND TERMINATIONS OF CASES—Continued.

	Transferred to Other Contagious Diseases.					Discharged.					Died.					Transferred to Other Hospitals.					Census, December 1916.				
	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.
Scarlet fever and measles	....	6	....	....	6	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Diphtheria	59	66	....	....	125	1,170	689	660	....	2,519	203	149	96	1	449	....	....	....	....	....	101	56	36	2	195
Diphtheria and scarlet fever	....	4	....	....	4	7	8	3	....	18	3	1	1	....	5	....	....	....	....	....	1	....	....	....	1
Diphtheria and measles	9	28	....	....	37	46	25	17	....	88	31	13	5	....	49	....	....	....	....	....	....	1	....	....	1
Diphtheria and minor diseases	4	3	....	....	7	20	7	3	....	30	2	2	....	....	4	....	....	....	....	....	....	....	....	....	....
Scarlet fever	14	16	....	....	30	440	384	173	1	998	24	17	7	....	48	....	....	1	....	1	42	45	19	38	144
Scarlet and minor diseases	4	5	....	....	9	11	1	1	....	13	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....
Measles	17	22	....	....	39	547	176	152	....	875	139	15	15	....	169	....	....	1	....	1	35	....	....	....	35
Measles and minor diseases	5	2	....	....	7	10	4	8	....	22	2	1	2	....	5	....	....	....	....	....	2	....	....	....	2
Pertussis	4	7	....	....	11	134	56	14	....	204	57	7	1	....	65	....	....	....	....	....	....	4	....	....	12
Varicella, rubeola and other diseases	34	93	....	7	134	1,849	873	1,469	153	4,344	322	281	230	42	875	....	716	143	149	1,008	17	7	223	....	247
Total	150	252	....	7	409	4,234	2,223	2,501	154	9,112	784	486	357	43	1,670	....	716	145	149	1,010	206	113	278	40	637
Observation	13	15	....	....	28	29	23	7	3	62	13	2	1	....	16	....	....	....	....	....	3	1	1	....	5
Accompanying	....	2	....	....	2	6	83	11	....	100	1	4	1	....	6	....	....	....	....	....	....	....	....	....	....

TABLE No. 2.

PATIENTS AND PATIENT DAYS—1916.

DISEASES.	Patients.					Patient Days.					Average Days Per Patient.					Largest Number of Patients at One Time.				Smallest Number of Patients at One Time.			
	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Total.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.	Willard Parker Hospital.	Kingston Avenue Hospital.	Riverside Hospital.	Queensboro Hospital.
*Diphtheria	1,516	946	792	3	3,257	44,773	26,345	18,901	15	90,034	29.5	27.8	21.3	5.	27.6	136	104	88	3	46	27	21	1
Diphtheria and scarlet fever	8	4	4	....	16	381	294	135	....	810	47.6	73.5	33.7	....	50.6	3	5	4	....	1	1	1	....
Diphtheria and measles	42	18	22	....	82	1,218	523	479	....	2,220	29.	29.	21.8	....	27.	15	17	6	....	1	1	1	....
Diphtheria and minor diseases	14	3	3	....	20	651	78	109	....	838	46.5	26.	36.3	....	41.9	10	3	2	....	1	1	1	....
Scarlet fever	513	444	200	39	1,196	19,802	16,907	8,704	504	45,917	38.6	38.	43.5	12.9	38.3	96	90	45	39	4	3	4	1
Scarlet fever and measles	....	1	1	....	2	.....	187	12	....	199	....	187.	12.	....	99.5	....	3	1	....	....	1	1	....
Scarlet fever and minor diseases	10	4	1	....	15	357	133	3	....	493	35.7	33.2	3.	....	32.8	3	1	1	....	1	1	1	....
Measles	723	187	168	....	1,078	11,295	5,130	3,244	....	19,669	15.6	27.	19.2	....	18.2	69	40	47	....	9	1	1	....
Measles and minor diseases	17	2	10	....	29	376	38	223	....	637	21.1	19.	22.3	....	21.9	2	4	4	....	1	1	1	....
Pertussis	192	67	15	....	274	6,113	2,810	416	....	9,339	31.8	41.9	27.7	....	34.	44	23	7	....	5	1	1	....
Varicella, rubeola and other diseases	2,186	1,916	2,065	344	6,511	91,010	54,790	112,502	9,421	267,723	41.1	28.5	54.4	27.3	41.1	1,008	654	778	114	1	1	1	1
Total	5,221	3,592	3,281	386	12,480	175,976	107,235	144,728	9,940	437,879	33.7	29.8	44.1	25.7	35.	1,169	717	820	114	170	271	184	1
Observation	48	41	9	3	101	755	849	857	33	2,494	15.7	20.7	95.2	11.	24.6	9	7	4	2	1	1	1	1
Accompanying	7	18	12	....	37	165	507	190	....	862	23.2	28.1	15.8	....	23.5	3	16	3	....	1	1	1	....

* Includes cases of chronic laryngeal stenosis.

TABLE No. 3.

TUBERCULOSIS—1916.

	Otisville.	Riverside.	Total.	
			1915.	1916.
Census, December 31st	566	212	803	778
Admissions	934	600	1,488	1,534
Total treated	1,501	836	2,288	2,337
Total died	13	117	213	130
Total discharged	922	507	1,272	1,429
Total discharged or died	935	624	1,485	1,559
After treatment of less than 1 month	76	169	234	245
1-3 months	205	253	383	458
3-6 months	236	135	378	371
Over 6 months	428	67	490	485
Discharged to home	922	364	1,248	1,286
Patient days	209,154	62,817	295,826	271,971
Average days per patient	223.48	73.08	129.3	296.56
Largest number at one time	601	260	875	861
Smallest number at one time	528	33	763	561
Average patients per day	571.4	172.01	810.5	743.41
Incipient cases	418	24	400	442
Arrested	69	.....	38	69
Apparently arrested	84	.....	94	84
Quiescent	112	.....	139	112
Improved	131	4	103	135
Unimproved	18	.....	12	18
Transferred	.....	20	22	20
Died	2	.....	....	2
Cured	1	.....	.....	1
Non-tubercular	1	.....	.....	1
Moderately advanced cases	443	293	519	736
Arrested	19	.....	10	19
Apparently arrested	23	.....	39	23
Quiescent	188	.....	174	188
Improved	146	90	196	236
Unimproved	60	20	92	80
Transferred	.....	70	1	70
Died	7	.....	7	7
Under treatment	.....	113	.....	113
Far advanced cases	74	519	566	593
Arrested	1	.....	1	1
Apparently arrested	3	.....	2	3
Quiescent	23	.....	20	23
Improved	26	80	150	106
Unimproved	17	170	186	187
Transferred	.....	53	1	53
Died	4	117	206	121
Under treatment	.....	99	.....	99

* Apparent decrease, due to closing tuberculosis wards 3 months.

TABLE No. 4.

INFECTIONS WITHIN HOSPITALS.

Hospital.	Total Cases of Infectious Diseases in Hospitals.		Total Cases of Diphtheria in Hospitals.		Diphtheria Developing More Than 7 Days After Admission.		Percentage.		Total Cases Scarlet Fever in Hospitals.		Scarlet Fever Developing More Than 10 Days After Admission.		Percentage.		Total Cases Measles in Hospitals.		Measles Developing More Than 14 Days After Admission.		Percentage.	
	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916
Willard Parker.....	4,678	5,276	2,121	1,516	97	24	3.9	1.5	1,289	513	2	1	0.06	0.1	1,290	723	39	19	1.1	2.6
Kingston Avenue...	2,813	3,651	1,303	946	51	3	3.5	0.3	891	444	6	12	0.3	2.7	615	187	23	20	1.0	10.6
Riverside.....	2,604	3,302	826	792	7	0	0.4	0.0	533	200	...	0	...	0.0	440	168	...	0	...	0
Queensboro.....	....	389	...	3	...	0	...	0.0	...	39	...	0	...	0.0	...	0	...	0	...	0
Total.....	10,095	12,618	4,250	3,257	155	27	2.00	0.82	2,713	1,196	8	13	0.1	1.08	2,345	1,078	62	39	0.8	3.6

BUREAU OF PUBLIC HEALTH EDUCATION.

Important Activities—January 8th, an extensive anti-sneeze campaign was conducted by the usual means of lectures, wide distribution of health leaflets and posters, issuance of press notices, etc., the incentive being an extraordinary prevalence of grip and infectious colds in the city, the object being to educate the public in the methods of preventing respiratory diseases.

In January, book marks were distributed to school children. These book marks consisted of cartoons with yellow and white printing on a black ground commenting on and illustrating some health aphorism, such as "Cover up each cough or sneeze, if you don't, you'll spread disease."

In February, courses were planned for the instruction of physicians in contagious diseases. On receipt of applications for enrollment in the courses, sections were organized comprising 8 physicians, for a period of bed side instruction, lasting two weeks.

In March, the semi-centennial of the Department of Health was celebrated and in connection therewith, a monograph was published giving the history of health administration in New York City, during the past 100 years.

In April, attempts were made to focus attention on mosquito extermination by distributing jars of live mosquito larvae to public schools throughout the city, with the request to the Department of Education to have teachers instruct the children on the life history of the mosquito. Moving pictures were made of the mosquito extermination activities and simply written leaflets giving important facts and life history of the mosquito and describing methods of their extermination were distributed to all public and parochial schools.

Two moving picture companies made special films showing the Department's anti-mosquito work. Through press bulletins, interviews, feature stories, etc., considerable newspaper publicity was given the mosquito campaign.

In May, mosquito exhibits were set up in various parts of the city. These exhibits consisted of panels of pictures (photographs and cartoons), a short text in large letters and a jar of mosquito larvae.

In connection with baby week, ten films of moving pictures were shown in large moving picture theatres throughout the city on baby subjects.

A press bulletin of feeding a family of five for $7.31 per week was issued which excited widespread favorable comment. Requests were received from almost all parts of the U. S. for copies of the bulletin or for additional information concerning it. This list of foodstuffs was designed to give the proper nourishment to a family of two adults and three children for one week.

June 10th, a plan was devised for establishing an anatomical exhibit to combat quackery in the treatment of venereal diseases, in conjunction with the New York State Social Hygiene Society and the Brooklyn Hospital Dispensary. The Department of Health contributed some photographs and supplied two different leaflets for distribution.

July 30th, a special patent medicine exhibit, disclosing the composition of 30 well-known patent medicines was set up in Coney Island.

August 27th, arrangements were made with the Motion Picture Exhibitors' Association of Brooklyn, to show three health reels in about 250 theatres in Brooklyn. The subject of these reels was (1) "Long Haul vs. Short Haul," a story depicting the advantages of breast feeding; (2) "The Life History of a Fly," an effective story in relation to the fly menace, and (3) "The Price of Human Lives," a stirring picture of the havoc wrought by tuberculosis. The Association arranged all

the details in connection with these films and at its own expense sent the films from theatre to theatre.

September 9th, arrangements were made for co-operation with the Department of Education in relation to teachers' institutes. Speakers were furnished for a number of the teachers' meetings. A health exhibit was maintained at the Washington Irving High School, where the meetings were conducted. This exhibit showed the various activities of the Department in relation to the care of infants, school children and the children in our hospitals.

November 4th, health mottoes were prepared for distribution to shops, factories, dispensaries, milk stations, etc. The mottoes will be issued monthly throughout the year, and will be seasonable.

November 11th, moving pictures were taken by the Universal Film Company of the work of the Bureau of Food and Drugs and the work of the Bureau of Laboratories in preparing anti-toxins at the anti-toxin farm at Otisville. These pictures will be released in magazine form and will be shown in thousands of moving picture theatres throughout the country during the next year or two.

December 2nd, 1,000 fresh air leaflets were sent to the different High Schools; 19,000 were sent to the Chief of the Division of Health Districts, and 10,750 were sent to the Tuberculosis Committee of the Charity Organization Society. 15,000 open window week placards were sent to the New York Car Advertising Company to be placed in all cars operated in New York. 400 of these cards were sent to the Interboro Rapid Transit Company to be placed in subway stations.

December 4th, in place of tuberculosis week, the Bureau of Public Health Education organized an educational campaign under the name of "Open Window Week." Several cards were prepared for display in street, elevated and surface cars, on railroad stations and in store windows. A large amount of favorable newspaper publicity resulted. Open Window Week ended in the Finley Hike, a walk from the stadium of the College of the City of New York to Yonkers. Nearly 1,000 walkers participated in the hike. Prizes were donated by President Finley and the New York World.

December 9th, special letters were written to all the clinics, through the co-operation of the Public Health Committee of the Academy of Medicine, arranging for physical examinations of all applicants presenting themselves, for such, in answer to the call issued by the Department for periodical medical examinations.

The work of the Department of Health was described to a representative of the Russian Government, the information to be used in the inauguration of our health methods in Russia.

Publications—There are seven regular publications issued by this Bureau, Weekly Bulletin, Monthly Bulletin, School Health News, Monthly Drug Bulletin, Staff News, Otisville Ray and Neighborhood Chronicles.

In addition to these, scientific papers are published in the form of reprints, averaging about 12 a year, and monographs averaging about 3 a year.

Summary of Some of the Bureau's Activities.	1916.	1915.
Public lectures arranged for and delivered under the auspices of the Bureau of Public Health Education	201	140
Moving pictures shown (number of different pictures)	431	270
Requests for health literature filled	1,978	No record
Number of Press Bulletins issued	200	79

A large number of occasional leaflets of great variety and dealing with many different phases of health work, are published, from time to time. Some of these have been, "Tuberculosis Leaflets," "Keep Well," "Anti Alcohol," "Fresh Air" and "Car Placards."

Lectures—Health lectures are given before schools, colleges, clubs, churches and settlements. Most of the lectures are illustrated with stereopticon pictures.

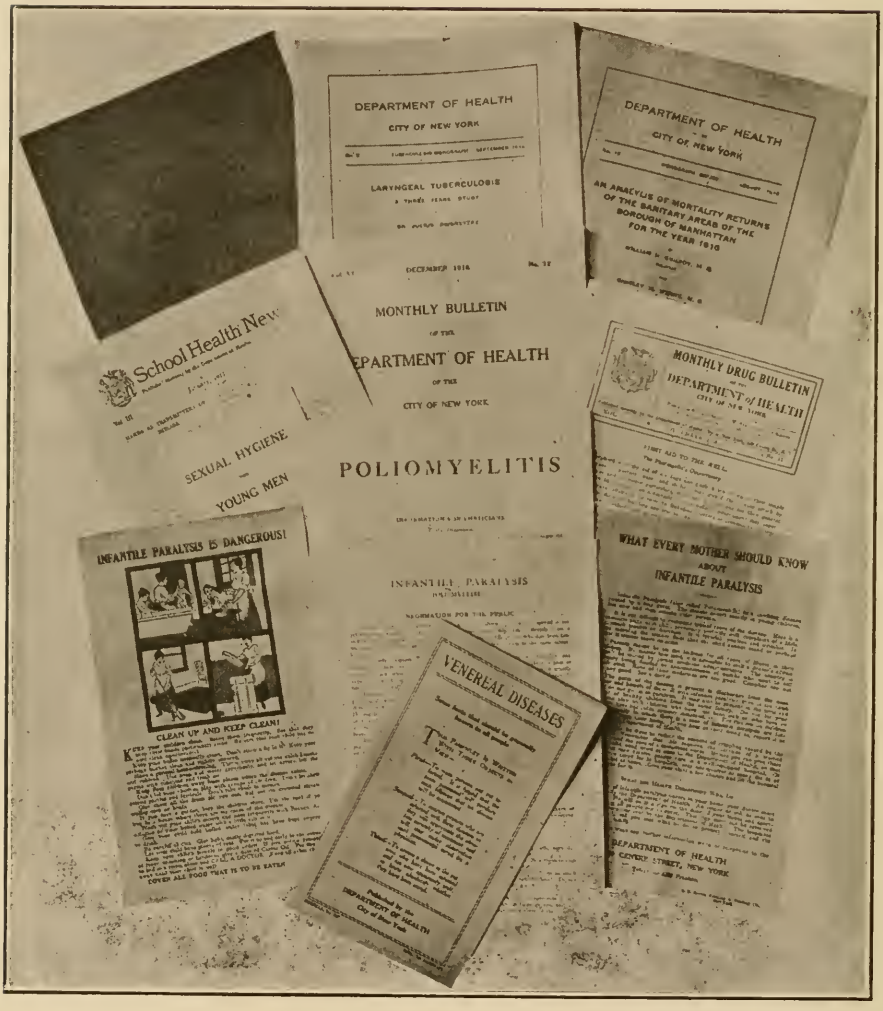
Noon-day talks have been given to factory workers.

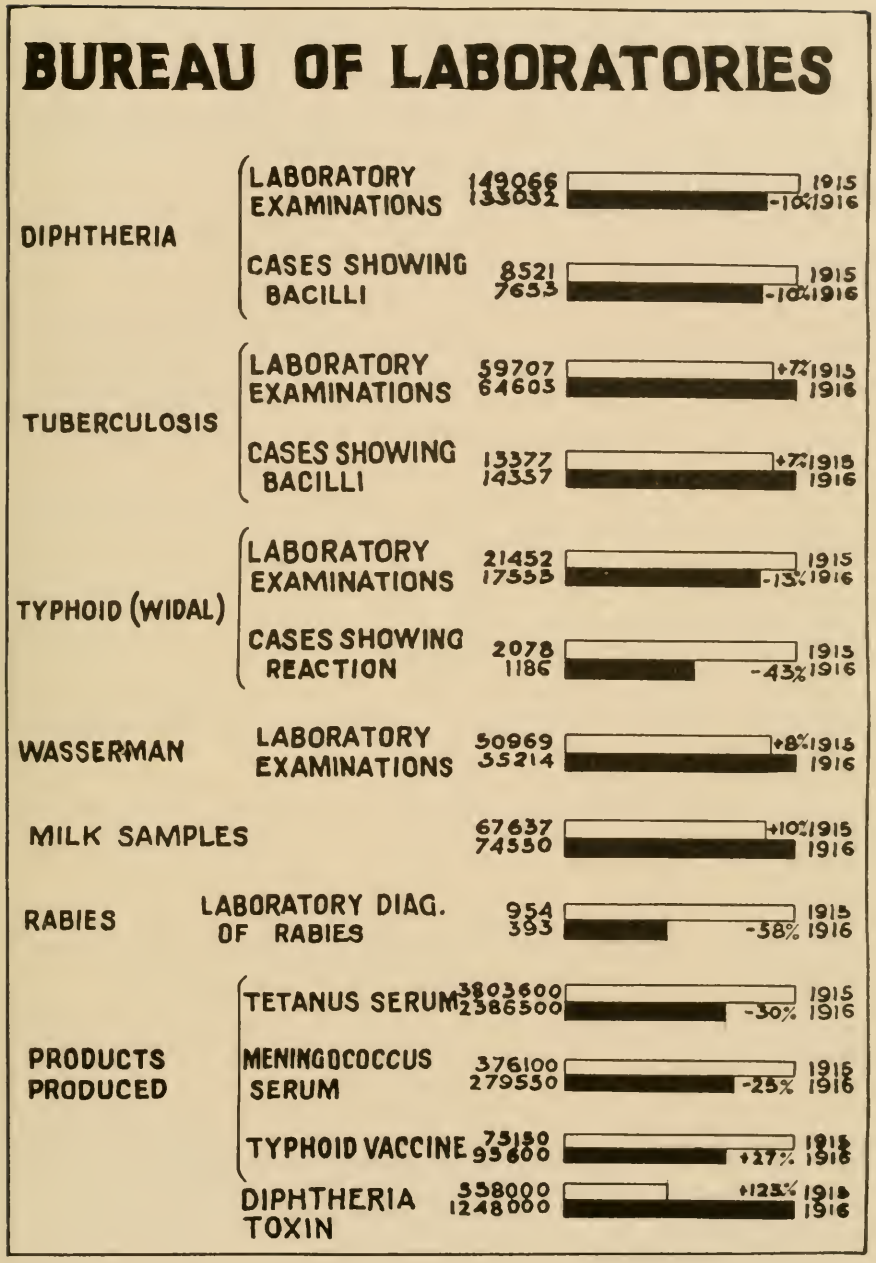
In its lecture work, the Bureau has had the assistance of qualified lecturers from the Bureaus of Child Hygiene, Bureau of Food and Drugs and the Bureau of Preventable Diseases.

Exhibits—In addition to the permanent exhibit at headquarters, traveling exhibits dealing with various phases of public health, have been shown in various parts of the city, usually in schools, settlement houses, etc. Among the more important of these were general health exhibits shown at the Y. W. C. A., Russell Sage Foundation, the Henry Meinhard Memorial and Zion A. M. Church, and at the Brooklyn Branch of the Y. M. C. A., a child welfare, including a food exhibit at the Washington Irving High School, a patent medicine exhibit at the Women's Municipal League, a child hygiene exhibit at the Lincoln House, a tuberculosis and patent medicine exhibit at the Julia Richmond High School, a food exhibit at the Grand Central Palace, in connection with the Bureau of Municipal Research, a tuberculosis and patent medicine exhibit at the John Hall Memorial, a food exhibit at the 22nd Regiment Armory and at the School of Modern Cookery, conducted by the "Forecast" Magazine.

Motion Pictures—Continuing its policy of the previous year, the Bureau has loaned motion picture reels to a large number of motion picture theatres in the city. The usual free moving picture shows given in the parks and playgrounds in past years were abandoned because of the epidemic of poliomyelitis.

Newspaper Publicity—A large part of the Bureau's educational work is carried on through articles published in the newspapers. The Department keeps a record of the amount of space accorded items relating to its activities. During 1916, there were published, 2,898 newspaper articles, representing approximately 170,000 square inches, or about 460 square inches of space daily. While much of this publicity resulted from interviews solicited by reporters of the various papers concerned, the major part of it came in response to the 126 press bulletins sent out in the form of multigraphed notes to all the newspapers. In 1915 the total space amounted to approximately 110,000 square inches or about 300 square inches of space daily.


DEPARTMENT OF HEALTH
CITY OF NEW YORK
LARYNGEAL TUBERCULOSIS
A THREE YEARS' STUDY
DEPARTMENT OF HEALTH
CITY OF NEW YORK
AN ANALYSIS OF MORTALITY RETURNS OF THE SANITARY AREAS OF THE BOROUGH OF MANHATTAN FOR THE YEAR 1915
School Health News
SEXUAL HYGIENE
YOUNG MEN
MONTHLY BULLETIN
EPARTMENT OF HEALTH
OF THE
CITY OF NEW YORK
POLIOMYELITIS
INFANTILE PARALYSIS
MONTHLY DRUG BULLETIN
DEPARTMENT of HEALTH
CITY OF NEW YORK
WHAT EVERY MOTHER SHOULD KNOW
ABOUT
INFANTILE PARALYSIS
DEPARTMENT OF HEALTH
CENTRE STREET, NEW YORK
INFANTILE PARALYSIS IS DANGEROUS!
CLEAN UP AND KEEP CLEAN!
COVER ALL FOOD THAT IS TO BE EATEN
VENEREAL DISEASES
Published by the
DEPARTMENT OF HEALTH
City of New York



ERRATA—In the above chart, the position of the bars representing Typhoid Vaccine, 1915 and 1916 should be reversed.

Diphtheria Serum was accidentally omitted.

Changes in Procedure—A card and letter system was substituted for the old system of office records at the serum production plant at Otisville. Its operation has reduced the necessary bookkeeping by at least one third. It has already been copied by several other laboratories. A new system of bookkeeping is also being instituted at both Otisville and the 16th Street Laboratories.

In April, simpler and cleaner methods, for injecting horses, were devised, resulting in a reduction of labor and mistakes. The horses under immunization at Otisville, were removed to the new stable where a larger number of horses can be handled.

A change has been made in the manner of collecting blood for antiserums. Instead of recording bleedings as so many bottles or flasks, the containers are now calibrated and the exact amount drawn noted. Not only is a more exact account kept, but this plan makes it possible to control the efficiency of the drawing-off process.

For determining units cost, the work was divided into 25 functions, appropriately among the different divisions.

Concentration Process—The problem of preventing the jellying of plasma and serum after separation from other blood constituents has been studied. Smaller quantities of blood are drawn in the containers, permitting of more thorough mixing of blood and citrate solution and the installation of a water still has made it possible to cleanse the containers more thoroughly and thus obviate the salt deposits which frequently followed the washing of glassware in the hard water. By systematizing the work, two men can now run three lots of plasma (about 85 liters in each lot). As soon as the concentration room in the new stable is ready, it is hoped that the procedure can be still further systematized, with an additional increase in the output. There were also economic improvements made in the technic with an appreciable reduction in the loss of antitoxic units entailed by the concentration process.

Forage for Horses—A study was made of the forage requirements of horses, with the result that a considerable economy has been effected. A new dietary was adopted and has resulted in an improvement in the physical condition of the horses, a less number of digestive disturbances as well as an appreciable saving of money.

Experimental Animals—A bookkeeping system has been installed in connection with the raising of experimental animals. Forage, labor and other expenses are recorded and this expense is divided by the number of animals produced.

Horse Immunizations—More careful observations have been made of the horses immunized with meningococci. Five horses have been treated according to three different plans of dosage. The results proved the superiority of the Amoss-Wollstein method in producing a more potent serum in a shorter period of immunization. A similar procedure is now being carried out with six horses under immunization with the pneumococcus. The results will be published when these studies are completed. One horse has been immunized with the gonococcus by the intravenous method. This proved that the intravenous method of inoculation is decidedly preferable to the subcutaneous method since abscesses are avoided and the physical condition of the horses remains far better.

Media for Meningococcus and Gonococcus—A study was made to find a better culture medium for the growth of meningococcus and gonococcus, which would insure good growths of these delicate organisms and obviate frequent transplanting. A liver medium has been perfected, based on a medium devised by Dopter, which seems satisfactory.

New Blood Media—An attempt is being made to utilize the blood clots and citrated blood sediments for media in the place of beef. Preliminary experiments seem to indicate that such a medium can be successfully prepared. The saving effected will be considerable.

Ammonium Sulphate—Experiments were made with a view to recovering the ammonium sulphate from the final filtrate in the antitoxin concentration process. A simple method has been devised and this ammonium sulphate is now being used at least four times and then sent to the Sanatorium farm for fertilizer.

Loeffler Serum Tubes—A new method of preparing Loeffler serum tubes, followed in the laboratory of the Boston Health Department, has been tried in the diagnosis laboratory. The tubes, containing broth and serum, are placed in the autoclave, and heated for an hour at 15 pounds pressure. Coagulation and sterilization are thus accomplished in one process.

Important Activities—Media Preparation—This division includes the media preparation and sterilization for the whole Bureau. The amount of work is indicated by the following table:

	1915. Liters.	1916. Liters.
Diphtheria toxin broth	916	1,927
Tetanus toxin broth	1,222	921
Tuberculin broth	180	112
Mallein broth	.....	108
Stock broth	2,448	2,015
Agar—for milk work	1,330	2,167
for typhoid carriers	291	803
antigens, vaccines, stock transplants and general use	2,271	1,810
Miscellaneous media	662	720
Total	9,320	10,583
An increase of	1,263	.....
Tubes and bottles filled	275,706	288,528
An increase of	12,822	.....
Glassware washed and sterilized	817,275	1,036,688
An increase of	219,413	.....

Oyster Examinations—A special investigation has been made of the oysters from Keyport, N. J., and vicinity, and from Jamaica Bay. Results of these examinations, follow:

Lots of Shell Fish.	Number of Shell Fish Examined.	Number of Fermentation Tubes Inoculated.	Samples Scoring					
			Below Fifty.		Fifty.		Above Fifty.	
			No.	%	No.	%	No.	%
299	1,445	4,335	222	76.8	16	5.5	51	17.6

Bacterial Diagnoses—Many special diagnoses were made for anthrax, whooping cough, blood poisoning, hookworm, etc., in addition to the following routine examinations:

Diagnoses.	Diphtheria.		Tuberculosis.		Widals.		Carriers.		Rabies.		Schick.		Syphilis.		Gonorrhoea.		Meningitis.		Miscellaneous.	
Year.....	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915
New positives.....	7,653	8,521	14,357	13,377	1,186	2,078	10	8	33	121	4,213	690	16,452	14,205	2,716	2,620	140	181	1,330	1,831
Total examinations...	133,032	149,066	64,603	59,707	17,555	21,452	81	53	393	945	23,445	2,400	55,214	50,969	18,817	17,834	213	407	20,454	21,436

SERA AND VACCINES PRODUCED.

	1915.	1916.
Diphtheria Serum in c. c. (average units estimated 300 per c. c.)	558,000	1,248,000
Tetanus Serum in c. c. (average units estimated 150 per c. c.)	3,803,600	2,386,500
Anti-Meningitis Serum	376,100	279,550
Other Sera	716,300	725,525
Rabies Vaccine	56,190	31,073
Smallpox Vaccine	4,522	8,550
Typhoid Vaccine (Average bacteria 1,000 to c. c.)	75,150	95,600
Bacterial Vaccine (Average bacteria 1,000 to c. c.)	229,620	205,956

Spinal Fluids examined—Due to the poliomyelitis epidemic, the number of fluids examined at the main laboratory was greatly increased:

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1915	26	18	64	73	67	58	52	58	27	43	20	32	538
1916	34	49	84	73	98	144	250	609	360	146	69	67	1,983

The Kingston Avenue Hospital Laboratory examined 678 fluids making the total for the year 2,661, as compared with 538 in 1915.

Poliomyelitis and Meningitis—Diagnostic and Preventive work: There was an increase of 68 per cent. in consultations with physicians in 1916.

Inflammation of Meninges and Diseases with Symptoms Simulating Meningitis.	Consultations.	New Cases.	Lumbar Punctures.	Inoculations.
Epidemic Cerebro Spinal Meningitis	348	74	263	255
Poliomyelitis	822	365	345	11
Tubercular Meningitis	81	80	80	3
Other Diseases Simulating Meningitis	164	175	167	7
Pneumonia Simulating Meningitis	14	28	11	0
Other Varieties of Meningitis	51	32	54	44
Total	1,480	754	920	320

Schick Test—Over 10,000 inmates of 12 institutions were tested with the Schick reaction and 1,200 were immunized and gave a positive test. So as to determine the efficiency and duration of the active immunization 95 per cent. of those who received the full treatment of three doses given a week apart, were found to have become protected. The immunity also was found to have lasted during the period of observation, *i. e.*, 12 months.

The Schick Test in Poliomyelitis—During the summer, 1,600 children, having poliomyelitis were tested with the Schick reaction and 85 to 90 per cent. showed a

positive reaction. This pointed to the probability that children susceptible to one of the less infectious diseases, like poliomyelitis, are also more apt to be susceptible to other infectious diseases. Those who gave a positive Schick reaction received a combined active and passive immunization against diphtheria.

Amebic Mouth Infections—The conclusion of the study of amebic mouth infections in school children showed (1) that children's mouths could be kept in good condition by school clinic supervision, and (2) that an emetin wash had no lasting effect upon the number of amebas present.

Anthrax—The examination for anthrax bacilli of many skins and bristle brushes from industries in which cases of anthrax had occurred, failed to show any anthrax bacilli.

Pertussis and Influenza Vaccines—Several thousand persons having whooping cough were injected with the pertussis vaccine. The results indicated that the vaccine had a slight favorable effect.

Unusual Sera—In addition to the production of diphtheria and tetanus antitoxic serum, anti-pneumococcic, anti-gonococcic, anti-meningococcic, anti-streptococcic, and normal serums, horses have been immunized against bacillus typhosus, various strains of para-typhoid B. and strains representing all the types of B. dysenteriæ. The immunizations have been successful, regular bleedings having been taken and the serum obtained has been stored anticipating possible emergencies.

Typhoid Antibodies Transmitted by Cows' Milk—An experimental study has been made of the possible transferrence of typhoid antibodies from an immune cow to human beings through the agency of milk. The results showed that no apparent immunity could thus be induced.

Tuberculin—In order to help standardize tuberculin, a study is being made of the varying conditions constituting the most favorable method for preparing old tuberculin.

Glycobacter—A detailed study is being made of the glycobacter peptolyticus, a bacillus advocated and used as an auxiliary to the bacillus bulgaricus in producing "lactic-acid milk." The data obtained show the extravagance of the promulgator's claims and have been communicated to the Society of American Bacteriologists.

Paratyphoid—Investigation of the paratyphoid group has led to results, especially in relation to identification of the types pathogenic for man. One result was a qualitative method for the differentiation of the "A" and "B" types found in human diseases.

Streptococcus Viridans—A study of the streptococcus viridans groups showed that cultures from various pathological conditions had no immunological relationship one to the other. Stock biological products, therefore, can not be applied for specific therapy.

Vaccine Virus—Work on the addition of brilliant green to vaccine virus, promises to give a method which will quickly reduce to a minimum or kill, all the bacteria in this product.

Pneumococci—Work on the pneumococci in common colds is strongly suggestive that they may be a source of contagion for lobar pneumonia.

Laundries—A study was made by means of microbiological tests of the laundries of the city, with a view to showing the possibility of the transmission of disease through the improper handling of clothes. The results showed that the conditions existing in the average laundry were poor and that there was a possibility that diseases might be transmitted through laundry contact and improper methods, and that new sanitary laws are necessary for the government of the laundries.

Condensed Milks—The study of condensed milks was completed and published. The survey covered the sanitary and manufacturing conditions and the chemical and microbiological analysis of the product. The unfinished problems are, direct microscopic examination of milk, the transmission of disease through butter and the effect of cold storage temperatures on butter, cream and ice cream.

Diphtheria Toxin—Tests made on diphtheria toxin after the method of Martin showed that French strain of No. 8 B. diphtheria to be far more toxigenic than our strain of No. 8, when grown according to this method. This test has confirmed all previous tests along the same line with the result that, for the present, when using Martin's peptone bouillon for diphtheria toxin, only the French strain will be used. When using Witté's peptone our strain still produces very strong toxin.

Tetanus—A test is being carried on by inoculating Martin's peptone bouillon with three different strains of B. tetani, one isolated in July, 1915, from a war case and obtained from Lister Institute, one used at Pasteur Institute for toxin production and one which has been used at the Research Laboratory for the last nine years and which, with Witté's peptone bouillon, has given an exceedingly high toxicity.

Goats Milk—The investigation of the value of goat's milk in infant feeding, is progressing favorably. Goat's milk, when used in the treatment of active and chronic pulmonary tuberculosis, was found to be apparently of little or no special value.

TABLE No. 1.

EXAMINATION OF WATERS.

	Total Examinations.		Good.		Usable.		Suspicious		Polluted		Special	
	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915
Drinking waters, supplies including special wells and springs	537	1,050	317	525	46	154	103	181	60	190	11	
Bath waters	480	182	203	33	36	10	31	22	210	117	0	
Before entering pool	342	110	37	28	9	6	58	14	235	62	3	
After entering pool	116	72	52	5	3	4	12	8	49	55	0	
Special Waters—												
Oyster beds and sea waters	241	80	...	29	...	22	...	21	...	8	241	
Bathing beaches	34	4	...	2	5	...	2	2	27	...	...	
River waters (dairy inspection)	9	11	...	4	...	4	...	0	...	3	9	
Wells (dairy inspection)	4	4	...	...	...	...	...	2	...	2	4	
Miscellaneous	4	...	...	...	...	...	...	...	...	...	4	

TABLE No. 2.

EXAMINATIONS OF RAW AND PASTEURIZED MILK, CREAM AND ICE CREAM AND CONDENSED MILK, 1915–16.

	Sample of Raw Milk Examined.		Samples of Pasteurized Milk Examined.		Samples Raw Cream Examined		Raw Pasteurized Cream Examined.		Samples Can Rinsings Examined.		Controls —Can Rinsings Examined.		Samples —Water From Farms		Samples of Condensed Milk.		Samples of Ice Cream.		Total Agar Plates Examined all Samples and Controls.		Fermentation Tubes Examined.	
	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915	1916	1915
First quarter...	7,846	4,222	11,046	10,953	174	47	3,141	1,210	32	222	6	94	140	119	98	...	...	...	35,176	23,794	868	4,008
Second quarter.	9,834	3,546	12,126	11,732	120	130	3,144	2,024	92	252	12	140	175	104	106	...	313	...	41,490	25,212	1,250	1,696
Third quarter..	7,938	3,707	9,166	8,913	32	69	1,982	1,343	9	138	4	77	95	66	43	...	312	...	31,107	20,219	510	1,223
Fourth quarter.	9,250	6,263	7,526	9,962	72	150	1,748	2,258	4	50	1	38	65	115	195	...	180	...	33,938	28,398	367	1,482
Total.....	34,868	17,738	39,864	41,560	398	396	10,015	6,835	137	662	23	349	475	404	442	93	805	202	141,711	97,623	2,995	8,409

TABLE No. 3.

ANTIRABIC TREATMENT.

Year.		Patients Treated.	Biting Animal Proved Rabid.	Percentage of Positive Cases.	Mortality.			
					Gross.		Corrected.	
					Human Rabies Deaths.	Percentage of Cases in which Biting Animal Was Rabid.	15 Days or More After End of Treatment.	Percentage of Cases in Which Biting Animal Was Rabid.
1913	In city.....	528	373	70.6	3	0.8	1	0.27
	Out of city.....	447	359	80.	1	0.28	0	0.
	Total.....	975	732	75.	4	0.55	1	0.13
1914	In city.....	509	355	69.7	2	0.56	1	0.28
	Out of city.....	343	258	75.2	1	0.39	0	0.
	Total.....	852	613	71.9	3	0.49	1	0.16
1915	In city.....	220	124	56.2	0	0.0	0	0.
	Out of city.....	206	164	76.6	1	0.6	0	0.
	Total.....	426	288	67.6	1	0.34	0	0.
1916	In city.....	115	40	34.8	0	0.	0	0.
	Out of city.....	131	114	87.8	0	0.	0	0.
	Total.....	246	154	63.0	0	0.	0	0.
	Grand Total.	2,499	1,787	71.5	8	0.44	2	0.11

BUREAU OF RECORDS.

Changes in Staff—With the establishment of the Division of Stenography and Typewriting, copyists who had become expert in the clerical work of the Bureau, were transferred to that Division and replaced by junior clerks.

Changes in Procedure—Copies of birth certificates were sent to parents, following the report of births by physicians.

Important Activities—The Division of Statistical Research improved and augmented its output during the year.

The Division of Searches and Transcripts increased its output by approximately 2,000.

Action was taken throughout the year against physicians, midwives and others who failed to report births within the ten day limit allowed by the regulations. During the year 415 physicians, 168 midwives and 35 undertakers were convicted and $929 in fines were levied.

Achievements—A monograph was prepared and published on mortality in specified sanitary areas in the Borough of Manhattan.

A report was prepared of the second illness census in health district No. 1.

Tabulation of births by an electric machine was started and has proved satisfactory.

STATISTICS.

Population.

The population of the Greater City of New York on July 1, 1916, was estimated as 5,602,841. This estimate was based on the Federal Census of 1900 and 1910, and was arrived at by the arithmetical method. The reasons that caused the Department of Health last year to abandon the geometrical method of estimating the population in favor of the arithmetical were detailed in the last yearly report. The estimated population of the Boroughs on July 1, 1916, was:

Manhattan.	Bronx.	Brooklyn.	Queens.	Richmond.	City.
2,634,223	575,877	1,928,432	366,426	97,883	5,602,841

Births.

137,664 births were reported during 1916, an actual decrease of 3,592 and a relative decrease of about 7,000. Had the rate for the year 1915 prevailed in 1916, there would have been about 144,700 births. The crude birth rate for 1916 was 24.57, as compared with 25.83 for last year.

Two causes are thought to be responsible for the lowering of the birth rate. The *first* was the decrease in the foreign element of the population of the City, brought about by the shutting off of immigration by the European War. The fact that foreigners are more prolific than natives has caused their loss in the population to have a pronounced effect upon the birth rate. That the loss of immigration was responsible in a very large measure for the decrease in the birth rate is borne out by the fact that the largest decrease in the birth rate was experienced in the Borough of Manhattan, where the rate dropped from 25.23 in 1915 to 23.17 in 1916. It is in the Borough of Manhattan that the great majority of immigrants make their home upon arrival in the city. The *second* cause was the low marriage rate experienced during the first year following the declaration of war, which in turn was probably caused by financial depression, and non-employment and also by the shutting off of immigration, which has lowered the number of marriageable persons in the population.

During the past year the births were tabulated by means of electric sorters, and the Bureau of Records hopes in the very near future to issue an interesting bulletin on birth statistics.

Marriages.

During the year 1916, 54,782 marriages were reported. In other words, 109,564 persons were married, an increase of almost 4,000 marriages over the number reported in 1915, when 50,997 marriages were performed, or 101,994 persons were married.

The marriage rate for 1916 was 9.78, as compared with 9.33 for 1915, an increase of .45. This increase in the marriage rate is a reflection of the increased prosperity during the past year, and is the highest rate recorded since 1912. It is interesting to note the close relation that the marriage rate of the City bears to the prosperity of the community. We find that the marriage rate rose continuously from 1898 to 1907, when the financial panic occurred, and when from the high rate of 11.84, it dropped to 8.39. The rate again gradually rose to 10.31 in 1912, which was the year of the Presidential election. In 1913—the first year of the new administration—the rate fell to 9.86. In the early part of 1914 the marriage rate continued to rise, but with the declaration of war in Europe and the consequent financial disturbance, the rate for the year was only 9.95. In 1915 the rate fell to 9.33.

During the past year, the highest marriage rate was recorded in the Borough of Manhattan, where 31,735 marriages were performed, equivalent to a rate of 12.05. The lowest rate was recorded in the Borough of Queens, where 2,352 marriages were performed, equivalent to a rate of 6.42.

The low marriage rate of 1915 is reflected in the low birth rate of 1916.

Deaths.

Notwithstanding the epidemic of influenza and infectious colds that visited the City in the early part of the year, and the epidemic of anterior poliomyelitis that visited the City during the summer, the death rate for the year was the lowest on record, to wit: 13.89, and is a reflection of the gradual and steady reduction of the general death rate that has been accomplished year after year, as shown in the following table:

Year.	Population.	Deaths.	Death Rate.
1900	3,446,042	70,872	20.57
1910	4,794,935	76,742	16.00
1911	4,929,586	75,423	15.30
1912	5,064,237	73,008	14.41
1913	5,198,888	73,902	14.21
1914	5,333,539	74,803	14.03
1915	5,468,190	76,193	13.93
1916	5,602,841	77,801	13.89

This gradual lowering of the death rate has been accomplished in great measure by the reduction of mortality in the early years of life. Not only has the incidence and the mortality of the acute infectious diseases been lowered, but the mortality of infants from the diarrhoeal diseases has been reduced tremendously, and a material decrease has been effected in the mortality of the other diseases of early life. This reduction in the mortality during the first year of life has in great measure compen-

sated for the lower birth rate, and it is logical to suppose that if the mortality of the first year of life has been reduced, the morbidity has also been reduced. Therefore, when the children of the City reach their second year of life, they are in more robust health than were the children of bygone years who had weathered the disease storms that harassed the infants of former years; and since every disease contracted, even though recovered from, leaves the human organism perceptibly weaker in some regard, we may further assume that the children of to-day who have escaped many of the ills that overtook their brothers of a few years ago, will grow into more robust womanhood and manhood and have a better chance of reaching their allotted "three-score and ten" years. The following table shows the reduction in the death rate of infants under one year of age since 1910:

Year.	Births Reported.	Deaths Under One Year.	Rate per 1,000 Births Reported.
1910	129,080	16,215	125.6
1911	134,544	15,053	111.9
1912	135,655	14,289	105.4
1913	135,134	13,780	102.0
1914	140,647	13,312	94.6
1915	141,256	13,866	98.2
1916	137,664	12,814	93.1

Typhoid Fever.

Since the mortality of typhoid fever serves as a very fair index of the sanitary condition of the City, the purity of our water supply and the safety of our milk supply, it is logical to present the following table, and it is encouraging to observe therein that the number of deaths and the death rate of this disease has steadily declined.

Year.	Number of Deaths.	Death Rate Per 1,000.
1910	558	.12
1911	545	.12
1912	499	.10
1913	362	.07
1914	334	.06
1915	332	.06
1916	215	.04

Pulmonary Tuberculosis.

Pulmonary tuberculosis is gradually being forced from its place amongst the "Captains of Death," not by spectacular methods or by specific cure, but by perseverance, ripened experience and increased efficiency in the control and treatment of this disease by the Department of Health and co-operating organizations.

Year.	Deaths From Pulmonary Tuberculosis.	Rate.
1900	8,154	2.37
1910	8,692	1.81
1915	8,825	1.61
1916	8,406	1.50

Acute Anterior Poliomyelitis.

The publicity given the epidemic of Poliomyelitis focused attention upon this disease. The fact that almost 2,500 persons, mostly children, died of this disease during the last epidemic, amply justifies the drastic measures that were taken to combat it. The disease is not a rare one in this City. Cases occur endemically, as is shown in the following table:

Year.	Number of deaths.
1912	70
1913	54
1914	34
1915	13
1916	2,448

A thorough-going and scientific study of this epidemic has been made by the Department, and the results will have been published before this report reaches the public. It is interesting to note the secondary effect of the publicity given the epidemic of Poliomyelitis. That effect was the lowering of the death rate from all causes of infants under one year of age, which may be attributed to the additional efforts of the parents, supported by those of the Department and co-operating organizations, to safeguard children from disease.

Respiratory Diseases.

While the mortality of the respiratory diseases has been lowered, the reduction in the death rate of this group has not kept pace with the reduction in the fatality of the other acute diseases. During the past year, the mortality of pneumonia and bronchitis was augmented by the epidemic of influenza and infectious colds which visited the City in the early part of the year.

Year.	Bronchitis.		Pneumonia—Lobar and Broncho Pneumonia.	
	Deaths.	Rate.	Deaths.	Rate.
1900	1,964	.57	10,482	3.04
1905	1,417	.37	9,783	2.43
1910	928	.20	10,519	2.19
1915	711	.13	10,922	2.00
1916	814	.14	10,663	1.90

Organic Heart and Kidney Diseases.

The one discouraging feature in the statistics of the year was the continued increase in the death rate of the degenerative diseases. The death rate of heart disease and nephritis, taken as a group, has steadily increased since 1900. It is evident that in the future, the Department of Health must direct its efforts against these diseases. The acute infectious diseases have been successfully combated, but the mortality of the chronic diseases of later life has received but scant attention from health officials. However, their increasing mortality has directed attention towards them, and already a struggle to reduce their mortality has begun.

Aside from the fact that there is no specific cure for these diseases, there are two important obstacles to their prevention and successful treatment. The *first* is the lack of public interest because of their continued presence among us. In other words, we have grown used to them. Were an infectious disease to become epidemic and claim as many victums in one year as heart disease and nephritis combined, or of either one alone, the population would be on edge, and the most drastic measures would be taken to combat the disease. The *second* is that these diseases are insidious in their onset, so that when their symptoms become sufficiently marked to cause the sufferer to seek medical advice, the disease has progressed beyond the stage when it is amenable to treatment.

Cancer.

Both the actual number of deaths from and the death rate of cancer have increased since 1900, and while it is true that this increase has been due in some measure to improved diagnosis, the fact remains that there has been a real increase in the mortality of this disease. But little has been accomplished during the past year in reducing the mortality of cancer. There are probably many reasons for this. The most important one is that the only treatment offering reasonable assurance of cure is radical operation. To be successful, the operation must be performed at the earliest possible moment before the disease has become disseminated. Operations are dreaded and consequently are postponed until all other methods of treatment have been tried without success. The possibilities of cure are accordingly diminished.

Year.	Heart Disease.		Nephritis.		Heart Disease and Nephritis.	Cancer.	
	Deaths.	Rate.	Deaths.	Rate.	Rate.	Deaths.	Rate.
1900.....	3,858	1.12	5,352	1.55	2.67	2,291	.66
1905.....	5,140	1.28	5,944	1.48	2.76	2,875	.71
1910.....	6,870	1.43	5,638	1.17	2.60	3,710	.77
1915.....	10,383	1.90	5,521	1.01	2.91	4,647	.85
1916.....	10,682	1.91	6,547	1.17	3.08	4,702	.84

Violent Deaths.

A preventable cause of death that has claimed more victims during the past year than during 1915 was violence. The deaths from the causes grouped under this heading rose from 3,819 during 1915 to 4,235 during 1916, the respective rates being 8.7 and 9.0 per 10,000. The majority of these deaths resulted from accidents that might have

been avoided. A large number of them were due to accidental burns, and of these the largest proportion occurred amongst children. Had the matches been placed out of their reach, or had they not been allowed to play where they could upset hot fluids or play with fire, the lives of the majority of these children would have been saved. If we but realize that less than 10 per cent. of the accidents prove fatal, we can get some idea of the enormous economic loss from this cause—thru disability that does not terminate fatally. It is encouraging to note that public opinion is gradually being aroused to aid in the reduction of deaths from accidents.

The mortality of the following diseases was lower during 1916 than during 1915: Typhoid fever, malaria, measles, scarlet fever, whooping cough, diphtheria, other epidemic diseases, pulmonary tuburculosis, tuberculous meningitis, other forms of tuberculosis, apoplexy, broncho pneumonia, other respiratory diseases, diarrhoeal diseases under five, appenditicis, cirrhosis of the liver, puerperal septicaemia, other puerperal diseases, congenital debility, old age and suicide.

The mortality of the following diseases was higher during 1916 than during 1915: influenza, poliomyelitis, cancer, simple meningitis, heart disease, acute and chronic bronchitis, lobar pneumonia, hernia, nephritis and violence (suicide excepted).

Note—Meteorological Summary.

The annual meteorological summary, formerly published with the Annual Report, can be obtained from the Weather Bureau of the United States Department of Agriculture, New York.

CHART 1.

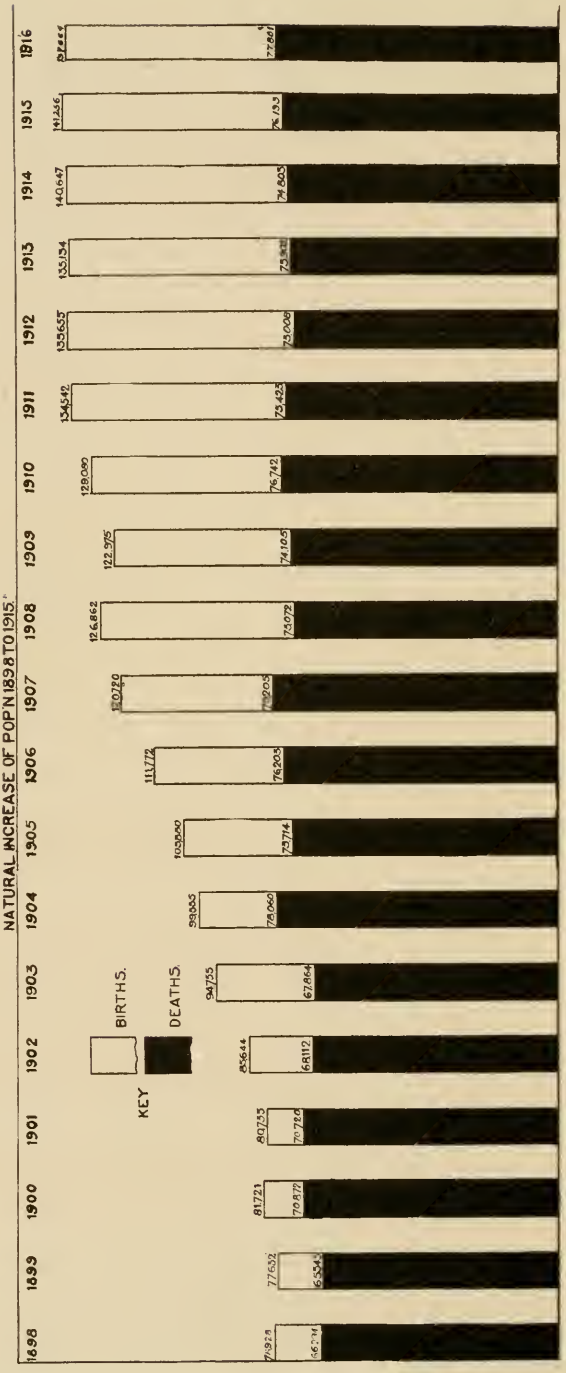

NATURAL INCREASE OF POP'N 1898 TO 1915.
KEY
BIRTHS.
DEATHS.
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
71928
46214
77632
65343
81721
70872
80735
70780
85644
68112
94755
67864
98503
78060
103800
73714
111772
76203
120780
79205
126862
73072
122975
74105
129090
76742
134542
75423
135655
73006
135134
73821
140647
74803
141256
74193
137849

CHART II.

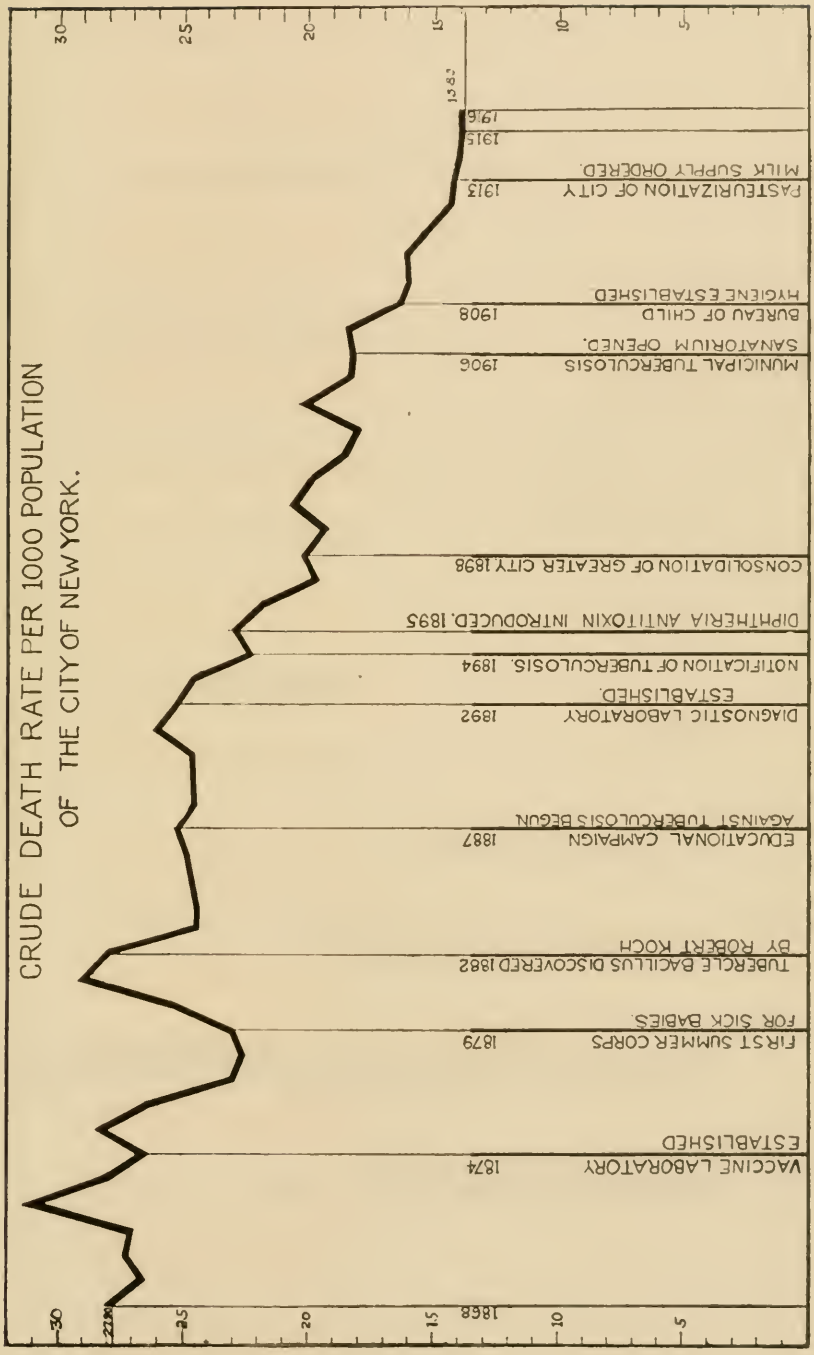

CRUDE DEATH RATE PER 1000 POPULATION
OF THE CITY OF NEW YORK.
1868
VACCINE LABORATORY ESTABLISHED 1874
FIRST SUMMER CORPS FOR SICK BABIES. 1879
TUBERCLE BACILLUS DISCOVERED BY ROBERT KOCH 1882
EDUCATIONAL CAMPAIGN AGAINST TUBERCULOSIS BEGUN 1887
DIAGNOSTIC LABORATORY ESTABLISHED. 1892
NOTIFICATION OF TUBERCULOSIS. 1894
DIPHTHERIA ANTITOXIN INTRODUCED. 1895
CONSOLIDATION OF GREATER CITY 1898
MUNICIPAL TUBERCULOSIS SANATORIUM OPENED. 1906
BUREAU OF CHILD HYGIENE ESTABLISHED 1908
PASTEURIZATION OF CITY MILK SUPPLY ORDERED. 1913
1915
1918
30
25
20
15
10
5

CHART III.

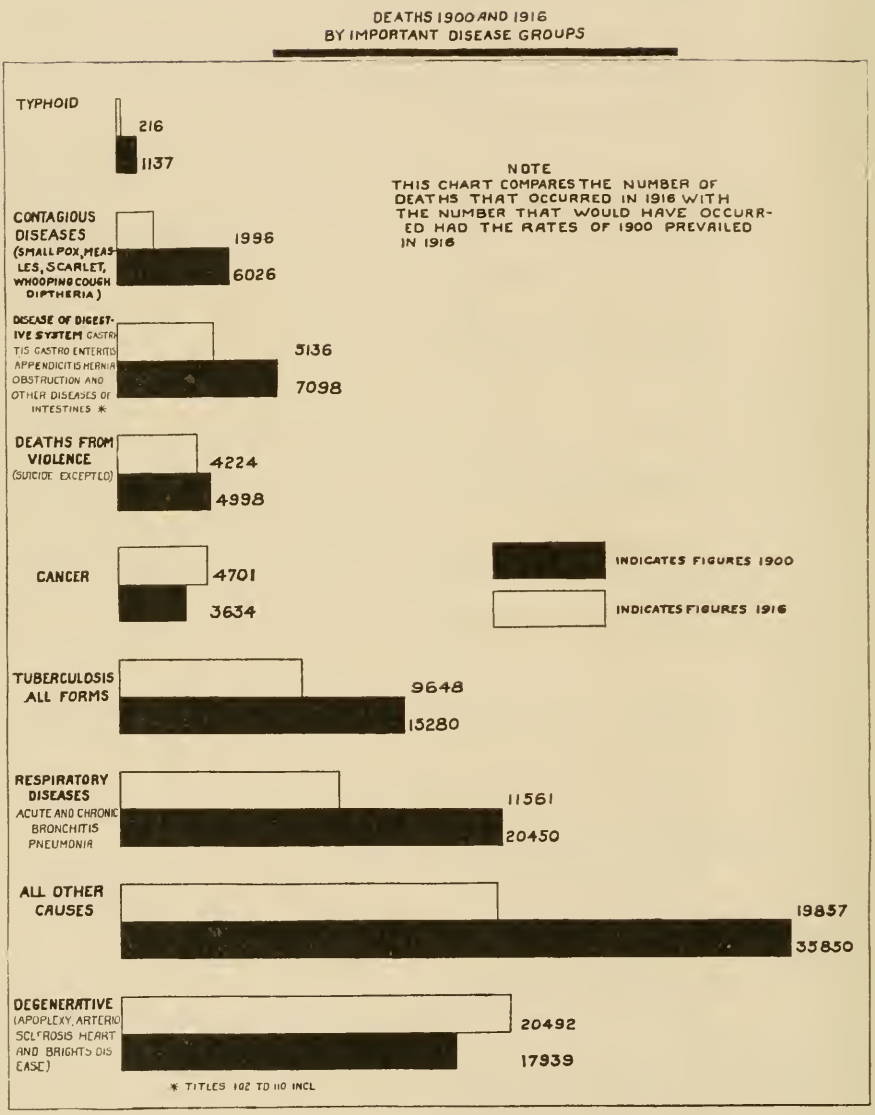

DEATHS 1900 AND 1916
BY IMPORTANT DISEASE GROUPS
TYPHOID
216
1137
NOTE
THIS CHART COMPARES THE NUMBER OF DEATHS THAT OCCURRED IN 1916 WITH THE NUMBER THAT WOULD HAVE OCCURRED HAD THE RATES OF 1900 PREVAILED IN 1916
CONTAGIOUS DISEASES (SMALL POX, MEASLES, SCARLET, WHOOPING COUGH DIPTHERIA)
1996
6026
DISEASE OF DIGESTIVE SYSTEM GASTRITIS GASTRO ENTERITIS APPENDICITIS HERNIA OBSTRUCTION AND OTHER DISEASES OF INTESTINES *
5136
7098
DEATHS FROM VIOLENCE (SUICIDE EXCEPTED)
4224
4998
CANCER
4701
3634
INDICATES FIGURES 1900
INDICATES FIGURES 1916
TUBERCULOSIS ALL FORMS
9648
15280
RESPIRATORY DISEASES ACUTE AND CHRONIC BRONCHITIS PNEUMONIA
11561
20450
ALL OTHER CAUSES
19857
35850
DEGENERATIVE (APOPLEXY, ARTERIO SCLEROSIS HEART AND BRIGHTS DISEASE)
20492
17939
* TITLES 102 TO 110 INCL

CHART IV.

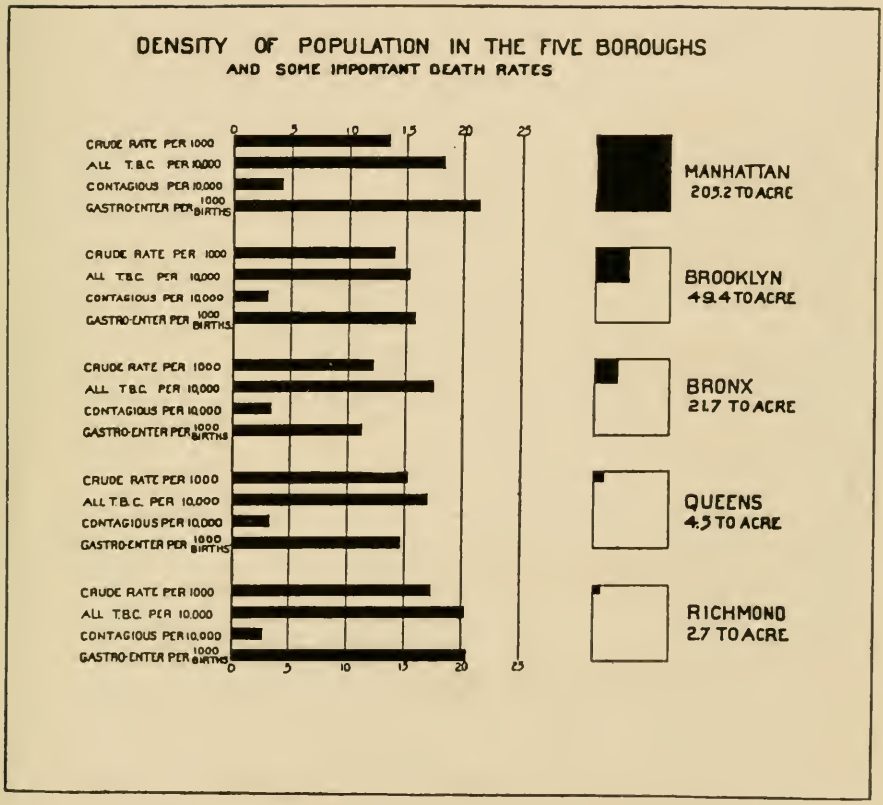
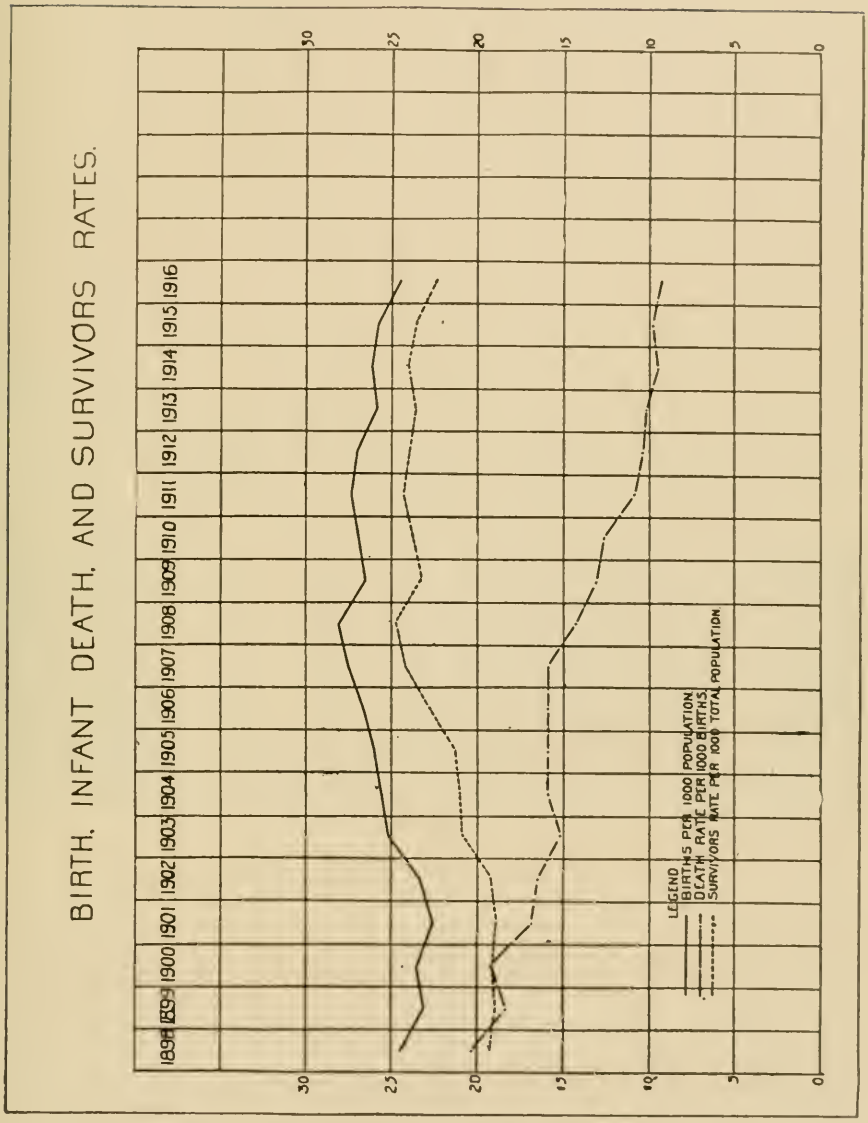

DENSITY OF POPULATION IN THE FIVE BOROUGHS
AND SOME IMPORTANT DEATH RATES
0
5
10
15
20
25
CRUDE RATE PER 1000
ALL T.B.C. PER 10,000
CONTAGIOUS PER 10,000
GASTRO-ENTER PER 1000 BIRTHS
MANHATTAN
205.2 TO ACRE
BROOKLYN
49.4 TO ACRE
BRONX
21.7 TO ACRE
QUEENS
4.5 TO ACRE
RICHMOND
2.7 TO ACRE

CHART V.

DEATH RATE PER 10,000 POPULATION.
FORMER CITY OF NEW YORK (MANHATTAN AND BRONX) AND FORMER CITY OF BROOKLYN (BO. OF BKLYN.)

CHART VI.


BIRTH, INFANT DEATH, AND SURVIVORS RATES.
1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916
30
25
20
15
10
5
0
LEGEND
BIRTHS PER 1000 POPULATION
DEATH RATE PER 1000 BIRTHS
SURVIVORS RATE PER 1000 TOTAL POPULATION

TABLE

BIRTHS

Month.	Total.	White.		Negro.		Others.		Native Parents.	
		M.	F.	M.	F.	M.	F.	M.	F.
January.....	11,226	5,664	5,378	83	98	2	1	1,594	1,455
February.....	11,478	5,687	5,581	113	93	3	1	1,539	1,485
March.....	12,475	6,220	6,002	139	110	2	2	1,782	1,592
April.....	11,152	5,608	5,356	87	95	3	3	1,572	1,501
May.....	11,295	5,714	5,397	102	79	1	2	1,705	1,588
June.....	11,180	5,588	5,394	110	85	2	1	1,571	1,539
July.....	11,126	5,583	5,304	119	112	4	4	1,685	1,495
August.....	12,311	6,170	5,924	118	96	2	1	1,738	1,644
September.....	10,997	5,548	5,235	102	110	..	2	1,526	1,460
October.....	11,734	5,940	5,567	115	109	2	1	1,778	1,508
November.....	11,029	5,514	5,279	136	91	5	4	1,591	1,458
December.....	11,661	5,753	5,689	123	93	2	1	1,682	1,864
Total.....	137,664	68,989	66,106	1,347	1,171	28	23	19,763	18,589

No. 1.

REPORTED—1916.

Foreign Parents.		Mixed Parentage.		Unknown Parentage.		At-tended by Mid-wives.	At-tended by Phy-sicians.	Appar-ently Illegi-timate.	Twins.	Trip-lets.
M.	F.	M.	F.	M.	F.					
3,502	3,418	619	585	34	19	4,053	7,173	142	121	1
3,496	3,513	730	650	38	27	4,200	7,278	136	108	1
3,695	3,721	827	770	57	31	4,308	8,167	173	103	2
3,379	3,257	700	667	47	29	3,696	7,456	126	90	1
3,333	3,180	735	685	44	25	3,867	7,428	136	103	1
3,403	3,281	683	637	43	23	3,707	7,473	118	108	2
3,292	3,231	695	669	34	25	3,901	7,225	105	96	..
3,747	3,654	761	700	44	23	4,175	8,135	140	105	2
3,397	3,209	684	658	43	20	3,754	7,244	91	103	1
3,480	3,439	763	703	36	27	3,305	8,429	101	94	..
3,365	3,249	675	647	24	20	3,959	7,070	92	109	2
3,436	3,245	740	656	20	18	3,562	8,099	101	106	..
41,525	40,397	8,612	8,027	464	287	46,487	91,177	1,461	1,230	13

TABLE No. 2.

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	6,880	1,993	1,071	488	2,204	903	375	146	83	37	10,613	3,567
Bohemia	186	86	6	12	.....	3	33	12	.....	.....	225	113
British America	47	121	11	45	32	73	6	32	5	12	101	283
England	184	408	56	125	138	321	53	69	12	22	443	945
France	61	126	3	12	5	37	13	13	.....	5	82	193
Germany	663	471	258	191	554	389	248	181	41	36	1,764	1,268
Ireland	2,873	1,157	512	219	1,011	536	204	135	62	36	4,662	2,083
Italy	13,859	259	2,810	44	10,581	183	1,320	30	441	14	29,011	530
Russia and Poland	9,642	1,045	3,009	382	9,356	830	795	64	214	23	23,016	2,344
Scotland	67	121	29	41	61	94	27	16	7	5	191	277
Sweden	107	108	65	28	232	108	44	16	15	9	463	269
Switzerland	21	47	7	7	1	9	9	16	.....	2	38	81
United States	12,692	4,482	4,558	1,565	14,729	4,062	4,583	901	1,028	253	37,590	11,263
Other foreign	2,665	659	359	231	1,591	547	70	42	67	18	3,852	1,497
Unknown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	49,947	11,083	12,754	3,390	40,495	8,095	7,780	1,673	1,975	472	112,951	24,713

TABLE

MARRIAGES

Date.	Total.	White.		Black.		Chinese.		Single.		Widowed.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	3,836	3,736	3,737	100	99	....	....	3,559	3,607	239	188
February	4,505	4,374	4,377	128	128	3	....	4,184	4,200	288	252
March	4,241	4,128	4,132	107	108	6	1	3,892	3,935	308	252
April	3,230	3,130	3,131	99	99	1	....	2,966	3,000	231	194
May	4,347	4,220	4,221	125	124	2	2	3,990	4,001	314	284
June	6,054	5,968	5,968	85	86	1	....	5,635	5,711	366	285
July	4,254	4,182	4,184	70	70	2	....	3,932	4,004	281	218
August	3,301	3,194	3,194	107	107	....	....	3,003	3,057	271	196
September	4,706	4,560	4,560	146	146	....	....	4,289	4,337	358	308
October	5,012	4,883	4,882	129	129	....	1	4,573	4,562	383	375
November	4,999	4,852	4,854	145	144	2	1	4,591	4,612	366	331
December	6,297	6,078	6,082	218	215	1	....	5,747	5,695	476	506
Total	54,782	53,305	53,322	1,459	1,455	18	5	50,361	50,721	3,881	3,389

No. 3.

REPORTED 1916.

Divorced.		Native.		Foreign.		Religious Marriages.				Civil Marriages.
M.	F.	M.	F.	M.	F.	Catholic.	Protestant.	Jewish.	Ethical Culture.	
38	41	1,594	1,825	2,242	2,011	1,297	762	1,209	1	567
33	53	1,861	2,062	2,644	2,443	1,470	916	1,020	.....	1,099
41	54	1,705	1,889	2,536	2,352	1,178	1,007	1,206	1	849
33	36	1,356	1,547	1,874	1,683	660	743	979	3	845
43	62	1,703	1,861	2,644	2,486	1,284	1,115	956	3	989
53	58	2,564	2,927	3,490	3,127	1,843	1,746	1,947	1	517
41	41	1,905	2,159	2,349	2,095	1,414	1,215	1,381	2	242
27	48	1,365	1,517	1,936	1,784	1,091	796	851	1	562
59	61	2,047	2,241	2,659	2,465	1,509	1,015	1,158	4	1,020
56	75	2,136	2,344	2,876	2,668	1,677	1,307	893	2	1,133
42	56	2,010	2,289	2,989	2,710	1,574	972	1,378	4	1,071
74	96	2,845	3,115	3,452	3,182	1,606	1,065	1,622	4	2,000
540	681	23,091	25,769	31,802	29,013	16,603	12,659	14,600	26	10,894

TABLE

PARTICULARS REGARDING MARRIAGES, BIRTHS,

CITY OF

	Total.	White.		Colored.		Other.		Native Parents.		Foreign Parents.		Parentage of Mixed Nativities.		Parentage Unknown or Not Stated.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Marriages..	54,782	53,305	53,322	1,459	1,455	18	5	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	137,664	68,983	66,112	1,347	1,171	28	23	19,761	18,591	41,521	40,301	8,612	8,027	464	287
Deaths.....	77,801	41,434	33,650	1,394	1,234	85	4	9,126	7,445	28,918	24,041	3,417	2,779	1,452	623
Stillbirths..	6,253	3,260	2,640	149	121	...	...	1,088	897	1,852	1,456	334	288	135	120

Sex undetermined, 83.

BOROUGH OF

Marriages..	31,735	30,580	30,595	1,139	1,135	16	5	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	61,030	30,277	28,856	985	862	28	22	6,712	6,077	20,797	20,160	3,436	3,248	345	255
Deaths.....	35,822	19,145	14,863	929	808	73	4	3,866	2,949	13,805	11,142	1,485	1,182	991	402
Stillbirths..	2,830	1,523	1,088	108	67	...	...	387	287	1,026	700	141	105	77	63

Sex undetermined, 44.

BOROUGH OF

Marriages..	4,080	4,041	4,041	39	39	...	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	16,144	8,365	7,663	57	59	...	...	2,372	2,186	4,817	4,453	1,217	1,059	16	24
Deaths.....	7,675	4,149	3,434	50	41	1	...	726	589	3,019	2,525	413	331	42	30
Stillbirths..	673	408	247	4	3	...	...	133	75	192	122	68	40	19	13

Sex undetermined, 11.

BOROUGH OF

Marriages..	15,920	15,678	15,679	241	241	1	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	48,590	24,384	23,753	253	199	...	1	7,815	7,579	13,672	13,445	3,052	2,927	98	2
Deaths.....	27,081	14,221	12,183	349	319	9	...	3,424	2,964	9,737	8,421	1,094	961	324	156
Stillbirths..	2,234	1,041	1,094	32	49	...	...	449	438	517	550	80	117	27	38

Sex undetermined, 18.

BOROUGH OF

Marriages..	2,352	2,328	2,329	23	23	1	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	9,453	4,729	4,654	38	32	...	...	2,356	2,227	1,715	1,833	696	626	.....	.....
Deaths.....	5,547	2,951	2,477	56	61	2	...	807	718	1,799	1,547	348	248	55	25
Stillbirths..	416	232	169	3	2	...	...	97	79	87	67	39	20	12	5

Sex undetermined, 10.

BOROUGH OF

Marriages..	695	678	678	17	17	...	...	.....	.....	.....	.....	.....	.....	.....	.....
Births.....	2,447	1,228	1,186	14	19	...	...	506	522	520	510	211	167	5	6
Deaths.....	1,676	968	693	10	5	...	...	303	225	558	406	77	57	40	10
Stillbirths..	100	56	42	2	.....	...	...	22	18	30	17	6	6	.....	1

Sex undetermined, 00.

No. 4.

DEATHS AND STILLBIRTHS REPORTED—1916.

NEW YORK.

Single.		Married.		Widowed.		Divorced.		Not Stated.		Months 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.
50,361	50,712	.....	.....	3,881	3,389	540	681	....	....											
21,484	14,730	15,923	10,493	5,008	9,559	79	54	419	52	6	26	105	317	470	557	773	718	2,685	271	307

MANHATTAN.

29,154	29,319	.....	.....	2,205	1,948	376	468	....	....											
10,416	7,026	7,242	4,535	2,175	4,049	44	32	270	33	6	17	67	165	241	267	327	314	1,043	252	131

THE BRONX.

3,799	3,848	.....	.....	252	192	29	40	....	....											
1,930	1,302	1,790	1,155	467	1,008	5	6	8	4	...	2	7	30	53	71	66	83	336	7	18

BROOKLYN.

14,612	14,697	.....	.....	1,202	1,082	106	141	....	....											
7,215	5,111	5,420	3,770	1,814	3,599	17	12	113	10	...	1	18	109	138	168	316	263	1,053	11	139

QUEENS.

2,150	2,197	.....	.....	179	133	23	22	....	....											
1,433	1,027	1,169	816	385	689	8	3	14	3	...	6	11	10	34	44	46	44	201	1	19

RICHMOND.

646	651	.....	.....	43	34	6	10	....	....											
490	264	302	217	167	214	5	1	14	2	...	...	2	3	4	7	18	14	52	...	.....

TABLE

MORTALITY FROM THE PRINCIPAL CAUSES

Cause of Death.	City of New York.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Total, all causes	7,966	6,723	7,077	6,791	6,661	5,723	6,209	7,011	5,578	5,605	5,792	6,665	77,801
1. Typhoid fever	16	13	7	10	9	11	16	24	32	36	21	21	216
2. Typhus fever (Brill's disease)	1	...	...	...	.	...	...	...	...	...	...	...	1
3. Malarial fevers	...	...	...	...	...	3	1	1	2	2	...	1	10
4. Small pox	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Measles	24	51	81	98	88	48	54	25	6	6	...	9	490
6. Scarlet fever	14	11	20	16	7	10	4	2	1	4	1	6	96
7. Whooping cough	24	25	39	40	48	48	48	42	16	7	10	2	349
8. Diphtheria and croup	120	122	123	115	123	105	77	41	35	36	58	76	1,031
9. Influenza	381	180	100	47	30	13	3	5	2	10	21	61	853
10a. Anterior poliomyelitis	2	...	1	2	1	64	777	1,078	364	122	25	12	2,448
10b. Asiatic cholera	...	...	...	...	...	...	...	...	...	...	...	...	....
11. Cholera nostras	...	...	...	...	...	...	...	...	...	...	...	...	....
12. Other epidemic diseases	35	41	57	52	32	28	12	13	11	16	16	13	326
13. Tuberculosis pulmonalis	793	730	805	837	819	671	581	591	584	613	661	726	8,411
14. Tuberculous meningitis	56	57	77	93	83	75	52	39	36	30	37	48	683
15. Other forms of tuberculosis	42	34	50	52	53	64	52	43	41	37	48	38	554
16. Cancer, malignant tumors	425	416	340	428	412	378	342	393	394	372	385	416	4,701
17. Meningitis, simple	32	20	37	32	34	40	36	41	21	20	25	26	364
17a. (of which) Cerebro-spinal meningitis	9	8	19	17	17	25	23	16	12	12	10	8	176
18. Apoplexy and softening o. bra n	93	76	75	63	56	72	67	64	68	57	65	62	818
19. Organic heart disease	1,125	953	1,037	926	958	788	687	713	707	873	899	1,021	10,687
20. Acute bronchitis	111	97	97	74	76	59	45	37	31	44	46	96	813
21. Chronic bronchitis	25	21	13	18	20	8	9	10	8	11	17	20	180
22. Pneumonia (excluding broncho-pneumonia)	1,131	648	718	591	529	339	237	221	210	334	458	714	6,130
22a. Broncho-pneumonia	594	467	478	437	439	322	308	316	221	234	232	390	4,438
23. Other respiratory diseases	46	42	45	49	40	28	35	25	21	22	37	57	447
24. Diseases of stomach (cancer excepted)	35	41	42	43	47	47	34	33	36	35	34	46	473
25. Diarrheal diseases (under 5 years)	124	139	145	131	168	173	394	782	444	279	171	103	3,053
26. Appendicitis and typhlitis	66	65	60	60	50	72	52	86	49	46	42	49	697
27. Hernia and intestinal obstruction	56	56	44	50	46	33	60	45	42	47	51	65	595
28. Cirrhosis of the liver	53	49	59	59	41	43	40	63	59	46	57	75	644
29. Bright's disease and acute nephritis	622	582	604	554	581	511	478	451	460	526	545	632	6,546
30. Diseases of women (not cancerous)	25	27	37	30	32	28	24	16	18	19	12	20	288
31. Puerperal septicaemia	20	27	33	24	23	20	17	6	13	8	13	17	221
32. Other puerperal diseases	51	37	44	32	39	33	29	39	40	27	26	35	432
33. Congenital debility and malformations	370	354	353	384	353	308	289	403	346	311	351	367	4,189
34. Old age	36	28	29	24	35	14	23	18	20	36	27	27	317
35. Violent deaths (suicide excepted)	331	309	307	307	312	350	429	399	390	379	367	344	4,224
a. Effects of heat	...	...	...	...	...	...	24	32	2	...	...	...	58
b. Other accidents	303	287	292	297	292	337	374	341	362	353	349	323	3,910
c. Homicides	28	22	15	10	20	13	31	26	26	26	18	21	256
36. Suicides	86	64	65	71	83	77	51	63	62	60	87	67	836
37. Other causes	995	938	1,050	1,038	992	839	844	876	782	893	945	1,002	11,194
38. Causes not known or ill-defined	6	3	5	4	2	1	2	7	6	7	2	1	46
Under 1 year	1,106	1,054	1,126	1,082	1,086	881	1,072	1,614	1,098	889	887	923	12,818
1 year, under 2 years	253	259	334	322	334	320	506	526	263	194	110	157	3,578
Total, under 5 years	1,578	1,533	1,688	1,659	1,687	1,509	2,199	2,823	1,647	1,260	1,127	1,257	19,967
65 years and over	1,904	1,391	1,433	1,330	1,249	993	881	923	912	1,157	1,292	1,449	14,914
70 years and over	1,310	996	989	910	838	685	595	643	591	830	888	1,023	10,298
Males	4,213	3,702	3,886	3,711	3,632	3,173	3,548	3,981	3,149	3,046	3,182	3,690	42,913
Females	3,753	3,021	3,191	3,080	3,029	2,550	2,661	3,030	2,429	2,559	2,610	2,975	34,888
Colored	256	197	259	220	236	209	203	230	209	184	202	223	2,628
Chinese	8	7	10	11	9	5	2	7	4	3	6	7	79
Institutions	3,167	2,758	2,978	2,883	2,804	2,533	2,582	3,109	2,535	2,416	2,500	2,766	33,031
Tenements	3,039	2,612	2,752	2,605	2,608	2,110	2,426	2,670	1,962	2,055	2,120	2,543	29,502
Dwellings	1,492	1,142	1,112	1,081	1,002	846	943	971	849	875	942	1,097	12,352
Hotels, etc	84	66	78	69	59	49	47	55	33	55	66	92	753
Others	184	145	157	153	188	185	211	206	199	204	164	167	2,163
Non-residents	180	161	158	166	161	139	138	141	120	145	165	174	1,848

No. 5.

WITH AGES OF DECEDENTS, YEAR 1916.

MANHATTAN.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
3,570	3,116	3,343	3,287	3,143	2,607	2,606	3,139	2,626	2,639	2,685	3,061	35,822
5	5	2	5	5	3	5	10	13	16	8	10	87
...	...	...	...	...	...	...	...	...	...	...	...	..
...	...	...	...	...	...	1	...	...	...	...	1	2
...	...	...	...	...	...	...	...	...	...	...	...	....
21	38	65	69	58	29	36	21	6	5	...	8	356
6	3	6	9	5	7	1	1	1	3	...	2	44
13	16	22	25	29	32	28	17	11	7	4	1	205
51	49	60	55	64	49	35	23	17	18	29	32	482
137	76	35	17	13	5	...	2	...	6	10	14	315
...	...	1	...	...	7	121	356	164	56	13	8	726
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
20	20	33	26	23	18	5	5	4	6	6	4	170
407	385	404	431	394	333	273	274	296	321	325	348	4,191
29	39	41	57	51	36	29	22	21	16	19	23	383
25	22	29	32	26	39	27	22	22	23	23	17	307
193	182	172	188	190	179	175	185	178	165	181	191	2,179
20	12	16	19	21	21	14	18	12	11	14	10	188
5	4	9	11	10	14	11	11	9	6	5	3	98
23	20	25	19	22	23	25	19	20	17	18	23	254
463	387	435	412	407	322	269	287	301	375	386	420	4,464
56	42	44	36	35	24	20	16	18	21	26	53	391
13	5	7	7	7	5	4	4	4	4	5	6	71
514	327	339	312	251	150	104	102	97	141	216	303	2,856
254	212	234	217	198	122	118	157	110	113	112	181	2,028
14	10	19	16	11	12	15	8	8	8	9	21	151
14	15	20	19	24	24	14	10	18	15	13	20	206
58	90	77	70	95	63	185	440	228	129	79	57	1,571
28	30	29	26	21	36	18	40	17	24	16	24	309
29	26	19	23	21	12	34	19	16	21	19	24	263
18	20	24	22	17	22	11	34	23	26	22	38	277
254	273	274	254	277	240	230	190	206	264	257	300	3,019
10	17	15	15	14	9	9	7	11	10	5	7	129
10	12	7	10	12	9	9	2	10	6	5	8	100
18	11	18	12	12	17	14	17	13	8	9	14	163
178	158	174	175	179	137	139	182	159	131	164	161	1,937
12	11	10	10	13	5	9	8	9	14	13	13	127
165	137	151	178	162	167	201	181	198	190	190	199	2,119
...	...	...	...	...	...	11	13	1	...	...	...	25
148	125	142	174	150	160	172	150	186	176	175	185	1,943
17	12	9	4	12	7	18	18	11	14	15	14	151
40	35	35	39	37	42	29	34	30	30	55	33	439
469	429	499	479	449	408	399	421	381	436	433	487	5,290
3	2	2	3	...	...	...	5	4	3	1	...	23
532	520	549	537	559	409	491	825	542	434	406	431	6,235
126	132	191	177	158	135	188	225	131	93	56	77	1,689
759	758	838	854	841	656	838	1,288	815	602	515	575	9,339
729	552	596	573	531	397	367	377	373	482	563	588	6,128
505	372	410	364	347	257	243	251	238	330	373	406	4,096
1,966	1,746	1,866	1,856	1,737	1,478	1,490	1,805	1,516	1,454	1,519	1,714	20,147
1,604	1,370	1,477	1,431	1,406	1,129	1,116	1,334	1,110	1,185	1,166	1,347	15,675
163	129	183	149	149	141	121	148	145	134	132	143	1,737
7	6	7	8	8	5	2	6	4	3	5	6	67
1,752	1,607	1,729	1,709	1,629	1,449	1,461	1,770	1,453	1,366	1,414	1,612	18,951
1,562	1,365	1,437	1,364	1,343	989	1,039	1,280	1,038	1,097	1,109	1,306	14,929
144	116	108	108	94	71	70	65	69	79	98	106	1,128
71	60	64	61	41	34	32	34	29	48	50	73	597
85	69	80	81	95	102	94	102	109	98	92	90	1,097
119	114	110	126	118	88	84	101	86	86	114	126	1,272

TABLE

MORTALITY FROM THE PRINCIPAL CAUSES

Cause of Death.	The Bronx.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Total, all causes	851	647	699	653	675	534	523	667	529	576	620	701	7,675
1. Typhoid fever	1	3	1	...	...	2	1	3	6	1	3	3	24
2. Typhus fever (Brill's disease)	1	...	...	...	...	...	...	...	...	...	...	...	1
3. Malarial fevers	...	...	...	...	...	...	...	...	...	...	...	...	....
4. Small pox	...	...	...	...	...	...	...	...	...	...	...	...	....
5. Measles	...	3	3	9	9	4	3	1	...	1	...	1	34
6. Scarlet fever	3	2	2	1	...	...	...	...	...	...	1	...	9
7. Whooping cough	2	1	6	5	6	4	6	4	1	...	2	...	37
8. Diphtheria and croup	17	15	14	7	12	11	7	1	...	3	4	14	105
9. Influenza	54	15	8	4	3	2	...	...	...	1	4	5	96
10a. Anterior poliomyelitis	1	...	...	1	...	...	31	76	36	24	3	1	173
10b. Asiatic cholera	...	...	...	...	...	...	...	...	...	...	...	...	....
11. Cholera nostras	...	...	...	...	...	...	...	...	...	...	...	...	....
12. Other epidemic diseases	3	4	8	8	2	5	...	3	3	1	4	...	41
13. Tuberculosis pulmonalis	91	71	84	85	101	70	66	69	52	64	57	81	891
14. Tuberculosis meningitis	7	2	9	10	6	8	4	4	3	1	4	8	66
15. Other forms of tuberculosis	2	...	1	8	4	5	9	2	5	2	5	3	46
16. Cancer, malignant tumors	46	52	37	46	45	34	36	46	47	45	56	57	547
17. Meningitis, simple	4	5	3	3	2	2	4	7	2	3	4	2	41
17a. (of which) Cerebro-Spinal Meningitis	1	2	3	1	2	...	2	...	1	3	2	1	18
18. Apoplexy and softening of brain	7	9	1	4	7	8	7	6	9	7	9	9	83
19. Organic heart disease	116	100	115	100	120	93	67	100	74	107	97	106	1,195
20. Acute bronchitis	1	1	3	5	...	...	3	...	1	1	1	3	19
21. Chronic bronchitis	3	3	1	5	4	1	1	1	...	3	1	2	25
22. Pneumonia (excluding broncho-pneumonia)	114	68	70	49	52	26	19	28	27	28	47	81	609
22a. Broncho-pneumonia	54	32	35	31	29	9	14	24	13	24	30	30	325
23. Other respiratory diseases	10	8	6	4	6	3	2	2	1	1	8	6	57
24. Diseases of stomach (cancer excepted)	6	2	6	5	6	4	2	2	3	3	2	6	47
25. Diarrheal diseases (under 5 years)	14	13	12	12	13	8	18	55	36	29	17	11	238
26. Appendicitis and Typhylitis	5	8	7	9	4	4	9	7	2	1	5	5	66
27. Hernia and intestinal obstruction	5	9	4	7	4	1	6	5	8	6	6	4	65
28. Cirrhosis of the liver	8	8	3	3	4	1	3	5	2	...	6	2	45
29. Bright's disease and acute nephritis	49	52	50	36	50	49	37	43	33	42	46	61	548
30. Diseases of women (not cancerous)	4	...	4	...	2	3	2	1	1	...	1	1	19
31. Puerperal septicaemia	4	3	6	4	1	1	1	2	1	2	5	3	33
32. Other puerpearl diseases	10	6	6	5	3	1	2	4	5	5	4	2	53
33. Congenital debility and malformations	44	37	37	28	40	39	40	45	35	37	46	52	480
34. Old age	2	3	3	3	4	1	2	1	2	4	1	4	30
35. Violent deaths (suicide excepted)	26	15	23	21	26	34	34	33	36	30	32	24	334
a. Effects of heat	...	...	...	...	...	...	1	1	...	...	...	...	2
b. Other accidents	21	15	22	21	25	33	31	32	32	30	32	24	318
c. Homicides	5	...	1	...	1	1	2	...	4	...	...	...	14
36. Suicides	13	8	10	10	12	12	4	8	11	6	6	6	106
37. Other causes	123	89	119	125	97	89	83	79	74	94	103	108	1,183
38. Causes not known or ill-defined	1	...	2	...	1	...	...	...	...	...	...	...	4
Under 1 year	121	89	106	91	105	83	89	123	94	89	112	95	1,197
1 year, under 2 years	17	15	32	27	23	20	17	36	26	20	13	23	269
Total under 5 years	165	132	170	142	165	118	140	217	141	134	143	143	1,810
65 years and over	189	147	135	128	120	106	93	106	96	121	129	160	1,530
70 years and over	131	113	92	93	77	71	56	69	56	81	98	109	1,046
Males	458	363	399	338	386	289	293	380	298	290	327	379	4,200
Females	393	284	300	315	289	245	230	287	231	286	293	322	3,475
Colored	11	9	7	8	5	8	14	7	5	6	4	7	91
Chinese	...	...	...	1	...	...	...	...	...	...	...	...	1
Institutions	376	302	317	313	312	273	276	349	271	262	260	282	3,593
Tenements	318	246	257	262	250	202	191	258	197	230	223	272	2,906
Dwellings	171	103	132	111	120	79	79	86	97	89	110	112	1,289
Hotels, etc	2	3	1	2	3	4	...	3	...	2	2	2	24
Others	10	9	9	7	16	14	15	13	12	19	14	16	154
Non-residents	7	7	7	9	7	11	15	4	7	8	10	9	101

No. 5—Continued.

WITH AGES OF DECEDENTS, YEAR 1916—Continued.

BROOKLYN.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2,800	2,335	2,411	2,273	2,293	2,082	2,455	2,461	1,846	1,874	1,950	2,301	27,081
8	4	2	4	2	4	8	7	11	12	7	7	76
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	3	...	...	1	1	...	1	6
...	...	...	...	...	...	...	...	...	...	...	...	....
3	7	12	19	17	10	14	3	...	...	...	...	85
3	5	8	4	1	2	2	...	...	1	...	4	30
5	5	6	8	11	10	11	14	3	...	4	1	78
36	50	41	48	44	38	29	14	11	11	17	22	361
158	66	49	20	14	6	3	3	2	2	6	37	366
1	...	...	1	1	36	498	451	112	30	3	3	1,156
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
10	16	11	17	7	4	7	4	3	8	4	7	98
226	216	249	247	256	208	188	202	179	182	217	229	2,599
17	14	20	23	22	25	13	10	9	11	12	12	188
11	7	18	10	17	16	15	16	11	11	13	16	161
143	139	103	160	135	128	112	135	124	127	118	128	1,552
8	2	14	9	6	16	15	11	7	4	6	11	109
3	2	5	5	4	11	9	4	2	2	2	3	52
46	41	38	30	22	29	23	32	26	28	29	25	369
438	374	368	320	340	302	282	254	266	311	337	399	3,991
45	50	47	31	38	33	20	19	11	18	17	33	362
9	12	4	5	7	2	4	5	4	3	11	11	77
388	198	245	189	196	145	97	69	66	136	163	270	2,162
232	175	172	160	175	170	154	106	79	82	67	143	1,715
21	22	18	28	18	10	15	13	10	12	14	23	204
8	16	12	12	15	15	13	15	13	14	15	13	161
41	28	47	41	55	78	144	222	144	95	64	29	988
22	23	20	23	19	28	20	33	22	16	15	20	261
16	15	19	18	14	15	15	17	13	18	22	26	208
22	15	25	26	13	15	21	19	26	13	22	25	242
248	201	210	206	207	165	172	179	173	172	188	220	2,341
9	9	14	13	14	14	12	7	5	9	4	10	120
5	10	19	9	8	8	4	1	2	...	1	5	72
21	18	13	12	19	9	10	14	18	9	11	14	168
113	123	114	134	99	99	84	136	110	108	98	112	1,330
13	8	12	3	12	6	6	6	4	12	8	6	96
112	129	112	92	108	114	147	129	119	114	124	94	1,394
...	...	...	...	...	...	10	14	1	...	...	...	25
107	119	109	86	102	110	126	112	108	105	122	89	1,295
5	10	3	6	6	4	11	3	10	9	2	5	74
27	16	16	16	20	14	10	11	13	18	19	21	201
335	320	353	334	360	284	286	302	249	284	314	323	3,744
...	1	...	1	1	1	1	2	...	2	...	1	10
335	356	386	360	347	310	385	514	365	291	285	318	4,272
91	92	90	107	139	150	249	197	75	69	27	50	1,336
518	519	561	550	577	627	980	1,002	518	419	355	427	7,053
776	534	548	472	478	386	327	339	341	428	469	545	5,643
520	392	378	341	320	275	231	252	218	318	322	387	3,954
1,384	1,255	1,279	1,208	1,221	1,133	1,403	1,368	1,003	1,020	1,046	1,259	14,579
1,416	1,080	1,132	1,065	1,072	949	1,052	1,093	843	854	904	1,042	12,502
67	48	53	56	69	54	55	65	50	36	52	63	668
...	1	3	1	1	...	...	1	...	...	1	1	9
807	662	698	656	666	626	638	749	618	589	607	684	8,000
1,012	888	949	879	910	828	1,071	976	621	658	698	851	10,341
815	624	575	572	526	450	509	487	416	452	496	590	6,512
8	2	5	4	8	6	11	5	3	4	12	14	82
69	46	60	48	54	42	68	55	48	53	44	45	632
43	25	31	22	26	27	26	26	16	33	27	26	328

TABLE

MORTALITY FROM THE PRINCIPAL CAUSES

Cause of Death.	Queens.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Total, all causes	578	466	458	439	424	364	470	609	450	379	420	490	5,547
1. Typhoid fever	2	...	1	...	2	1	1	3	2	6	2	1	21
2. Typhus fever (Brill's disease)	...	...	...	...	...	...	...	...	...	...	...	...	....
3. Malarial fevers	...	...	...	...	...	...	...	1	1	...	...	...	2
4. Small pox	...	...	...	...	...	...	...	...	...	...	...	...	....
5. Measles	...	3	1	1	3	5	1	...	...	...	...	...	14
6. Scarlet fever	2	1	4	2	1	1	1	...	...	...	...	...	12
7. Whooping cough	3	3	4	1	1	1	2	5	1	...	...	...	21
8. Diphtheria and croup	11	8	6	2	3	6	6	3	6	3	8	5	67
9. Influenza	26	18	5	6	...	...	...	...	...	1	...	3	59
10a. Anterior poliomyelitis	...	...	...	...	...	...	94	179	46	11	6	...	336
10b. Asiatic cholera	...	...	...	...	...	...	...	...	...	...	...	...	.....
11. Cholera nostras	...	...	...	...	...	...	...	...	...	...	...	...	....
12. Other epidemic diseases	2	1	3	...	...	1	...	1	1	...	2	1	12
13. Tuberculosis pulmonalis	54	42	44	58	53	42	38	31	46	32	47	59	546
14. Tuberculosis meningitis	1	1	5	3	4	5	6	1	3	2	2	5	38
15. Other forms of tuberculosis	4	4	2	1	5	3	1	2	3	1	6	2	34
16. Cancer, malignant tumors	35	32	22	24	37	29	16	24	33	27	23	34	336
17. Meningitis, simple	...	1	4	1	3	...	2	5	...	2	1	2	21
17a. (of which) Cerebro-spinal meningitis	...	...	2	...	1	...	1	1	...	1	1	1	8
18. Apoplexy and softening of brain	11	3	5	7	2	9	10	6	7	3	7	5	75
19. Organic heart disease	83	61	94	73	70	52	46	59	52	48	59	77	774
20. Acute bronchitis	7	4	2	2	2	2	2	2	1	3	2	6	35
21. Chronic bronchitis	...	1	1	1	2	...	...	...	...	...	...	1	6
22. Pneumonia (excluding broncho-pneumonia	84	42	46	32	23	12	14	17	15	19	25	46	375
22a. Broncho-pneumonia	42	36	23	22	29	17	16	24	16	10	18	28	281
23. Other respiratory diseases	1	1	2	1	4	2	2	1	1	1	6	7	29
24. Diseases of stomach (cancer excepted)	7	6	2	5	2	3	4	3	...	2	3	5	42
25. Diarrhoeal diseases (under 5 years)	6	7	7	7	4	16	38	54	26	21	10	5	201
26. Appendicitis and typhylitis	9	4	4	1	6	4	5	4	7	5	5	...	54
27. Hernia and intestinal obstruction	6	4	2	2	5	5	3	3	4	2	3	5	44
28. Cirrhosis of the liver	4	4	4	6	6	3	5	5	7	5	6	10	65
29. Bright's disease and acute nephritis	52	41	51	39	35	46	29	26	39	41	38	37	474
30. Diseases of women (not cancerous)	2	1	1	2	1	2	1	1	1	...	2	2	16
31. Puerperal septicaemia	1	2	1	...	1	1	2	1	.....	...	1	1	11
32. Other puerperal diseases	2	1	7	1	4	2	3	4	3	4	2	4	37
33. Congenital debility and malformations	29	26	24	37	29	24	21	31	32	20	35	38	346
34. Old age	5	3	3	5	2	...	4	3	3	6	4	1	39
35. Violent deaths (suicide excepted)	22	19	11	12	14	17	32	41	25	36	17	22	268
a. Sunstroke	...	...	...	...	...	...	2	4	...	...	...	...	6
b. Other accidents	21	19	9	12	14	16	30	33	24	33	16	20	247
c. Homicides	1	...	2	...	...	1	...	4	1	3	1	2	15
36. Suicides	6	3	4	5	11	8	6	9	6	4	4	7	73
37. Other causes	57	83	62	80	60	45	59	60	62	62	75	71	776
38. Causes not known or ill-defined	2	...	1	...	...	...	...	...	1	2	1	...	7
Under 1 year	80	72	62	76	61	56	85	125	75	54	71	68	885
1 year, under 2 years	15	18	16	10	11	9	41	59	26	12	13	5	235
Total under 5 years	110	102	88	91	84	76	189	273	138	81	95	94	1,421
65 years and over	151	106	102	115	81	82	62	67	79	85	94	114	1,138
70 years and over	108	79	71	86	64	63	41	48	61	67	65	87	840
Males	313	238	236	224	217	193	272	345	253	209	229	280	3,009
Females	265	228	222	215	207	171	198	264	197	170	191	210	2,538
Colored	15	11	14	6	11	6	8	9	8	7	12	10	117
Chinese	1	...	...	1	...	...	...	...	...	...	...	...	2
Institutions	138	92	116	110	103	95	116	138	115	115	149	119	1,406
Tenements	127	100	100	95	101	85	106	150	99	64	86	104	1,217
Dwellings	282	227	228	219	201	178	222	287	202	189	169	232	2,636
Hotels, etc	1	1	5	2	4	3	2	10	1	...	1	3	33
Others	14	14	1	13	18	15	25	26	21	25	10	14	196
Non-residents	5	10	9	6	4	3	6	3	5	12	3	6	72

No. 5—Continued.

WITH AGES OF DECEDENTS, YEAR 1916—Continued.

RICHMOND.

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
167	159	166	139	126	136	155	135	127	137	117	112	1,676
...	1	1	1	...	1	1	1	...	1	1	...	8
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	1	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	1	...	...	...	...	1
1	...	1	1	1	1	1	2	...	...	...	...	8
5	...	2	3	...	1	...	...	1	1	...	3	16
6	5	3	...	...	...	...	...	...	...	1	2	17
...	...	...	...	...	1	33	16	6	1	...	...	57
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	....
...	...	2	1	...	...	...	...	...	1	...	1	5
15	16	24	16	15	18	16	15	11	14	15	9	184
2	1	2	...	...	1	...	2	...	...	...	...	8
...	1	...	1	1	1	...	1	...	...	1	...	6
8	11	6	10	5	8	3	3	12	8	7	6	87
...	...	...	...	2	1	1	...	...	...	...	1	5
...	...	...	...	...	...	...	...	...	...	...	...	....
6	3	6	3	3	3	2	1	6	2	2	...	37
25	31	25	21	21	19	23	13	14	32	20	19	263
2	...	1	...	1	...	...	...	...	1	...	1	6
...	...	...	...	...	...	...	...	...	1	...	...	1
31	13	18	9	7	6	3	5	5	10	7	14	128
12	12	14	7	8	4	6	5	3	5	5	8	89
...	1	...	...	1	1	1	1	1	...	...	...	6
...	2	2	2	...	1	1	3	2	1	1	2	17
5	1	2	1	1	8	9	11	10	5	1	1	55
2	...	...	1	...	...	...	2	1	...	1	...	7
...	2	...	...	2	...	2	1	1	...	1	6	15
1	2	3	2	1	2	...	...	1	2	1	...	15
19	15	19	19	12	11	10	13	9	7	16	14	164
...	...	3	...	1	...	...	...	...	...	...	...	4
...	...	...	1	1	1	1	...	...	...	1	...	5
...	1	...	2	1	4	...	...	1	1	...	1	11
6	10	4	10	6	9	5	9	10	15	8	4	96
4	3	1	3	4	2	2	...	2	...	1	3	25
6	9	10	4	2	18	15	15	12	9	4	5	109
...	...	...	...	...	...	...	...	...	...	...	...	....
6	9	10	4	1	18	15	14	12	9	4	5	107
...	...	...	...	1	...	...	1	...	...	...	...	2
...	2	...	1	3	1	2	1	2	2	3	...	17
11	17	17	20	26	13	17	14	16	18	20	12	201
...	...	...	...	...	...	1	...	1	...	...	...	2
18	17	23	18	14	23	22	27	22	21	13	11	229
4	2	5	1	3	6	11	9	5	...	1	2	49
26	22	31	22	20	32	52	43	35	24	19	18	344
59	52	52	42	39	22	32	34	23	41	37	42	475
46	40	38	26	30	19	24	23	18	34	30	34	362
92	100	106	85	71	80	90	83	79	73	61	58	978
75	59	60	54	55	56	65	52	48	64	56	54	698
...	...	2	1	2	...	5	1	1	1	2	...	15
...	...	...	...	...	...	...	...	...	...	...	...	....
94	95	118	95	94	90	91	103	78	84	70	69	1,081
20	13	9	5	4	6	19	6	7	6	4	10	109
80	72	69	71	61	68	63	46	65	66	69	57	787
2	...	3	...	3	2	2	3	...	1	1	...	17
6	7	7	4	5	12	9	10	9	9	4	2	84
6	5	1	3	6	10	7	7	6	6	11	7	75

TABLE

VITAL STATISTICS

CITIES.	Estimated Population.	Total Deaths.	Death Rate per 1,000 Population.	Total Births.	Birth Rate per 1,000 Population.	Total Still-births.	Still-birth Rate per 1,000 Population.	Typhoid Fever—Death Rate per 100,000 Population.	Scarlet Fever—Death Rate per 100,000 Population.
Montclair, N. J.	25,029	245	9.79	535	20.90	14	.56	8	....
Duluth, Minn.	91,213	914	10.02	2,158	23.66	75	.82	11	2
Syracuse, N. Y.	152,534	2,013	13.20	3,577	23.45	175	1.15	6	..
New Haven, Conn.	156,500	2,307	14.74	4,417	28.22	193	1.23	17	2
Rochester, N. Y.	255,000	3,486	13.67	6,766	26.53	.....	....	6	3
Jersey City, N. J.	308,774	4,346	14.07	7,085	22.95	379	1.23	6	4
Buffalo, N. Y.	461,887	6,853	14.84	12,683	27.46	491	1.06	10	5
Los Angeles, Cal.	500,000	5,739	11.48	8,141	16.28	174	.35	7	2
San Francisco, Cal.	500,000	7,002	14.00	7,663	15.33	.....	....	9	1
Pittsburgh, Pa.	571,984	8,725	15.25	16,139	28.22	.....	....	10	9
Baltimore, Md.	584,609	10,002	17.10	13,634	23.32	.....	....	22	6
Cleveland, Ohio	657,300	8,841	13.45	16,623	25.29	693	1.05	8	11
Boston, Mass.	748,431	12,021	16.06	19,725	26.35	.....	....	5	11
Philadelphia, Pa.	1,683,664	26,287	15.61	40,849	24.25	1,971	1.17	6	2
Chicago, Ill.	2,447,845	34,894	14.25	54,425	22.24	.....	....	5	3
New York City—1915.	5,468,190	76,193	13.93	141,256	25.83	6,413	1.17	6	5
New York City—1916.	5,602,841	77,801	13.89	137,664	24.57	6,253	1.12	4	2
New York City—1917.	5,737,492	.....	.....	.....	.....	.....	....	..	..
STATES.									
Connecticut	1,223,583	18,247	14.91	32,734	26.76	1,190	.97	12	3
Minnesota	2,246,761	22,765	10.13	55,233	24.58	1,607	.72	7	6
North Carolina	2,371,095	31,324	13.21	75,545	31.86	....	....	31	1
Indiana	2,824,237	35,416	12.54	61,916	21.92	2,051	.73	15	4
California	2,854,727	39,026	13.67	48,075	16.84	1,255	.44	10	2
New Jersey	2,877,532	39,435	13.71	66,476	23.10	3,054	1.06	7	3
Missouri	3,293,335	39,409	11.97	69,749	21.17	.....	....	14	2
Pennsylvania	8,383,992	115,284	13.75	219,061	26.13	9,794	1.17	12	4
New York State	10,108,713	146,892	14.53	242,950	24.04	10,485	1.04	8	4

*Rate figured on total population all ages.
**Exclusive of hospitals.

No. 6.

YEAR 1915.

Diphtheria and Croup —Death Rate per 100,000 Population.	Pulmonary Tuberculosis—Death Rate per 100,000 Pop.	Lobar Pneumonia—Death Rate per 100,000 Population.	Cancer and Sarcoma —Death Rate per 100,000 Population.	Diarrhoeal Under 5 Yrs.—Death Rate per 100,000* Pop.	Organic Heart Dis.—Death Rate per 100,000 Population.	Ch. Bright's Disease—Death Rate per 100,000 Population.	Arterial Diseases—Death Rate per 100,000 Population.	Death Rate Under 1 Year per 1,000 Births.	Diarrhoea's Under 1 Year per 1,000 Births	Cost of Health Dept., Year 1915.	Per Capita Cost.	Number of Employees in Health Dept
..	108	40	80	8	172	60	56	65	4	$12,815	$0.51	7
8	91	59	66	57	60	45	21	87	19	21,833	.24	19
8	83	56	88	63	184	88	48	98	..	.....	...	....
22	77	210	88	55	193	130	49	88	17	44,081	.28	27
7	101	61	96	..	245	113	34	84	..	97,020	.62	46
19	142	129	70	..	98	127	..	107	..	.....	...	....
17	132	86	94	95	119	94	63	108	30	**214,174	.46	176
7	174	46	89	26	117	80	28	69	12	134,258	.27	117
23	159	...	117	..	192	115	..	84	16	.....	...	....
27	101	...	86	..	120	63	12	109	..	427,000	.75	278
13	187	...	106	85	189	153	28	120	..	247,510	.42	178
24	109	...	73	..	98	56	41	115	43	267,821	.41	230
29	138	...	114	63	203	105	30	104	..	480,882	.64	186
19	158	106	80	85	197	130	34	103	28	603,727	.36	....
28	148	...	85	..	159	87	35	114	..	1,327,918	.54	788
23	161	111	85	72	190	93	40	98	22	3,322,426	.61	3,056
18	150	109	84	55	191	109	47	93	18	3,275,841	.58	3,087
..	...	...	...	..	...	..	..	..	..	3,326,041	.58	3,068
16	120	...	88	..	...	..	..	104	..	.....	....	....
9	82	53	79	31	...	..	..	..	9	.....	....	....
22	141	58	40	73	68	68	6	90	13	.....	....	....
11	122	68	82	45	149	89	24	79	13	.....	....	....
11	166	69	97	31	168	87	50	74	14	.....	....	....
17	133	...	80	81	152	107	21	106	28	.....	....	....
19	128	...	63	..	102	..	..	..	..	.....	....	....
19	111	65	74	95	141	94	18	109	28	.....	....	....
17	144	99	92	64	198	105	39	99	23	.....	....	....

TABLE No. 7.

NUMBER OF DEATHS FROM INFECTIOUS AND CERTAIN OTHER PREVENTABLE DISEASES BY WARD OF RESIDENCE OF DECEASED FOR THE YEAR 1916.

BOROUGH OF MANHATTAN.

Wards.	Area in Acres.	Population, U. S. Census 1910.	Number of Persons to the Acre.	Typhoid Fever.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Lobar Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	154.0	9,750	63.0	....	....	7	2	7	45	26	23	23	354	99
Second	81.0	933	11.5	....	....	....	....	.....	4	5	1	.....	43	2
Third	95.0	1,915	20.2	....	....	1	....	.....	5	4	5	3	69	6
Fourth	83.0	21,336	257.1	2	....	12	....	4	57	48	54	35	486	201
Fifth	168.0	5,666	33.7	2	....	2	....	.....	18	12	6	3	129	15
Sixth	86.0	19,670	228.7	....	....	10	....	6	96	35	33	24	444	117
Seventh	198.0	102,101	515.6	2	....	12	3	17	110	81	99	56	1,108	399
Eighth	183.0	33,182	181.4	5	....	4	....	10	88	39	45	35	602	172
Ninth	322.0	64,099	201.6	2	....	7	1	16	169	99	60	79	1,258	294
Tenth	110.0	66,439	604.0	2	....	17	8	9	112	81	45	34	835	248
Eleventh	196.0	136,548	696.7	1	....	12	1	21	104	74	64	59	1,088	398
Twelfth	6,154.0	806,648	131.1	33	....	80	11	124	1,182	1,012	635	441	11,956	2,832
Thirteenth	107.0	64,651	604.3	2	....	6	3	9	45	43	30	29	530	173
Fourteenth	96.0	38,321	399.3	4	....	28	....	11	77	80	61	44	647	306
Fifteenth	198.0	30,584	154.5	3	....	3	....	5	76	38	20	15	438	102
Sixteenth	349.0	55,926	160.2	3	....	7	....	30	147	84	39	42	1,152	209
Seventeenth	331.0	172,334	520.6	3	....	31	2	34	200	162	163	121	1,904	711
Eighteenth	450.0	62,821	139.6	1	....	29	1	29	179	112	64	79	1,405	415
Nineteenth	1,481.0	292,950	197.7	7	....	52	9	83	568	314	268	237	4,708	1,230
Twentieth	444.0	73,308	165.1	3	....	8	....	13	257	120	73	61	1,568	355
Twenty-first	411.0	62,345	151.7	3	....	15	1	15	153	99	57	57	1,246	263
Twenty-second	1,529.0	209,154	136.8	9	....	13	2	39	499	288	183	174	3,852	792
Total	13,226.0	2,331,491	176.3	87	....	356	44	482	4,191	2,856	2,028	1,651	35,822	9,339

BOROUGH OF THE BRONX.

Twenty-third	4,267.0	268,880	63.0	11	....	15	6	62	505	323	168	155	4,068	972
Twenty-fourth	22,255.8	162,062	7.3	13	....	19	3	43	386	286	157	114	3,607	838
Total	26,522.8	430,942	16.2	24	....	34	9	105	891	609	325	269	7,675	1,810

Wards.	Area in Acres.	Population, U. S. Census 1910.	Number of Persons to the Acre.	Typhoid Fever.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Lobar Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	233.0	21,851	93.8	2	....	....	1	4	45	40	20	17	452	68
Second	97.7	6,894	70.6	....	....	3	....	2	22	15	15	10	153	53
Third	161.4	15,910	98.6	2	....	....	....	4	25	23	24	8	319	64
Fourth	111.3	10,477	94.1	1	....	2	3	3	62	17	14	5	278	55
Fifth	119.4	19,401	162.5	....	....	6	....	6	54	47	53	31	430	164
Sixth	302.9	46,437	153.3	4	....	7	1	15	75	111	77	41	939	313
Seventh	458.5	44,037	96.0	1	....	....	....	9	53	50	46	32	747	186
Eighth	1,843.2	82,687	44.9	11	....	14	1	28	199	138	133	76	1,793	561
Ninth	623.6	50,501	81.0	3	....	3	1	9	97	77	45	30	1,031	198
Tenth	318.7	41,238	129.4	4	....	4	1	13	124	66	69	38	817	236
Eleventh	252.6	21,659	85.7	....	....	7	2	4	49	45	50	24	532	163
Twelfth	663.1	29,262	44.1	....	....	....	....	7	55	70	36	32	584	154
Thirteenth	230.3	30,091	130.7	2	....	....	2	2	41	32	23	20	487	160
Fourteenth	282.6	33,329	117.9	1	....	....	....	11	61	34	77	51	564	266
Fifteenth	244.8	35,887	146.6	1	....	....	1	13	67	68	70	35	591	225
Sixteenth	244.8	68,244	278.7	3	....	4	1	17	60	55	58	32	749	263
Seventeenth	823.3	70,346	85.5	3	....	3	....	21	126	106	106	70	1,159	360
Eighteenth	873.0	35,708	40.9	....	....	....	....	14	65	43	43	34	566	185
Nineteenth	413.8	44,860	108.4	2	....	1	....	8	57	44	32	14	555	130
Twentieth	461.4	27,463	59.5	....	....	....	....	3	57	32	18	18	518	93
Twenty-first	483.2	78,741	163.0	1	....	2	1	11	104	88	59	40	948	264
Twenty-second	1,361.6	81,283	59.7	4	....	7	2	16	117	132	92	53	1,418	339
Twenty-third	736.0	65,561	89.1	5	....	1	....	8	89	92	43	29	1,217	162
Twenty-fourth	1,198.5	80,466	67.2	1	....	1	....	12	93	73	52	19	1,034	252
Twenty-fifth	567.8	63,597	112.0	5	....	2	....	17	107	61	37	33	1,006	203
Twenty-sixth	3,590.2	177,963	49.5	7	....	2	2	30	212	178	116	84	2,196	609
Twenty-seventh	400.7	76,000	189.6	1	....	1	1	17	87	67	67	41	822	255
Twenty-eighth	884.4	77,451	87.6	4	....	....	1	14	123	96	67	37	1,397	213
Twenty-ninth	3,800.0	72,351	19.0	2	....	6	5	20	110	100	57	50	1,485	268
Thirtieth	5,401.1	76,406	14.1	4	....	8	3	19	89	101	72	47	1,317	359
Thirty-first	6,312.3	30,988	4.9	1	....	1	1	3	50	46	25	26	674	158
Thirty-second	5,479.5	17,419	3.2	1	....	....	....	1	24	15	19	16	303	74
	38,977.8	1,634,508	41.9	76	....	85	30	361	2,599	2,162	1,715	1,093	27,081	7,053

BOROUGH OF QUEENS.

Wards.	Area in Acres.	Population, U. S. Census 1910.	Number of Persons to the Acre.	Typhoid Fever.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Lobar Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	4,650.0	61,763	13.3	1	....	4	4	10	101	94	93	67	1,244	365
Second	14,700.0	105,219	7.2	4	....	5	4	31	156	108	90	76	1,720	476
Third	22,000.0	37,171	1.7	2	....	1	2	3	57	53	24	28	729	167
Fourth	36,600.0	67,412	1.8	10	....	4	2	18	226	94	66	38	1,594	355
Fifth	3,770.0	12,476	3.3	4	....	....	....	5	6	26	8	8	260	58
Total	81,720.0	284,041	3.5	21	....	14	12	67	546	375	281	217	5,547	1,421

BOROUGH OF RICHMOND.

Wards.	Area in Acres.	Population, U. S. Census 1910.	Number of Persons to the Acre.	Typhoid Fever.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Lobar Pneumonia.	Broncho-Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths of Children Under 5 Years.
First	3,340.0	27,201	8.1	3	....	1	1	4	57	41	26	22	606	125
Second	4,130.0	16,871	4.1	3	....	....	....	5	56	22	20	9	311	70
Third	10,050.0	19,812	2.0	....	....	....	....	2	37	30	30	16	382	87
Fourth	8,180.0	10,662	1.3	1	....	....	....	2	14	14	9	14	202	56
Fifth	10,900.0	11,423	1.0	1	....	....	....	3	20	21	4	3	175	26
Total	36,600.0	85,969	2.3	8	....	1	1	16	184	128	89	64	1,676	344

TABLE No. 8.

DEATHS FROM ALL CAUSES ACCORDING TO NATIVITY OF DECEASED AND PARENTS OF DECEASED—YEAR 1916.

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	20,439	4,274	16,985	3,591	1,073	46,362	6,815	1,315	6,388	1,525	528	16,571
Ireland	4,305	667	2,563	390	155	8,080	7,243	1,252	4,870	713	286	14,364
Germany	2,518	900	2,156	829	152	6,555	3,610	1,357	3,528	1,302	218	10,015
Italy	1,878	330	1,490	174	56	3,628	4,712	773	3,287	420	132	9,324
Russia	2,095	619	1,539	56	19	4,328	3,382	1,019	2,807	175	42	7,425
England	594	146	581	119	54	1,494	644	159	757	157	66	1,783
Austria-Hungary	1,608	349	496	122	28	2,603	2,646	514	881	204	49	4,294
Scotland	207	44	164	44	19	478	273	64	249	52	27	665
British America	228	43	205	23	16	515	128	26	162	19	14	349
Switzerland	111	31	44	18	6	210	117	30	53	29	5	234
France	219	26	66	36	4	351	225	30	88	46	5	394
Bohemia	126	12	3	22	....	163	185	22	8	23	....	238
Roumania	151	68	72	3	....	294	196	88	106	11	....	401
Poland	55	19	78	27	10	189	90	29	177	91	26	413
Syria	16	8	37	1	....	62	21	....	68	6	....	95
Sweden	188	43	244	26	22	523	219	62	335	37	27	680
Norway	67	16	239	12	19	353	75	25	356	14	34	504
Denmark	36	9	62	10	5	122	36	8	84	9	6	143
Finland	50	19	42	7	6	124	69	32	60	8	4	173
Holland	30	7	31	7	2	77	41	10	47	8	2	108
Cuba	22	2	11	....	1	36	55	1	13	....	2	71
Other West Indies	218	7	68	3	7	303	345	11	106	7	8	477
Belgium	26	3	7	2	1	39	35	3	6	2	1	47
Spain	44	2	26	1	1	74	70	2	32	2	2	108
Greece	125	7	8	3	2	145	191	10	18	4	4	227
China	55	....	8	2	....	65	56	....	7	1	....	64
Australia	4	1	1	....	....	6	3	....	....	....	2	5
Other foreign	189	17	59	6	4	275	280	17	53	6	2	358
Unknown	218	6	96	13	14	347	1,393	72	480	80	50	2,075
Mixed nationalities	....	....	....	....	....	....	2,667	744	2,055	596	134	6,196
Total	35,822	7,675	27,081	5,547	1,676	77,801	35,822	7,675	27,081	5,547	1,676	77,801

TABLE No. 9.

DEATH ACCORDING TO CAUSE—ANNUAL RATE PER 1,000, AND AGE WITH METEOROLOGY AND NUMBER OF DEATHS IN INSTITUTIONS BY WEEKS—1916.

Week Ending—	Jan. 8.	Jan. 15.	Jan. 22.	Jan. 29.	Feb. 5.	Feb. 12.	Feb. 19.	Feb. 26.	Mar. 4.	Mar. 11.	Mar. 18.	Mar. 25.	Apr. 1.	Apr. 8.	Apr. 15.	Apr. 22.	Apr. 29.	May 6.	May 13.	May 20.	May 27.	June 3.	June 10.	June 17.	June 24.	July 1.
Total deaths.....	1,880	1,863	1,760	1,812	1,547	1,626	1,628	1,628	1,603	1,607	1,541	1,624	1,649	1,674	1,555	1,515	1,588	1,580	1,515	1,462	1,487	1,473	1,362	1,324	1,311	1,294
Annual death rate.	00.00	16.93	15.99	16.46	14.05	15.18	15.20	15.20	14.97	15.01	14.39	15.16	15.40	15.63	14.52	14.15	14.83	14.71	14.15	13.65	13.89	13.75	12.72	12.36	12.24	12.08
Typhoid fever.....	2	3	3	5	4	3	2	5	1	2	1	3	...	2	2	5	1	2	2	...	3	4	1	2	5	1
Malarial fevers....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
Smallpox.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles.....	5	5	9	5	10	10	13	10	19	9	16	22	27	21	29	19	20	22	20	22	22	12	12	16	10	6
Scarlet fever.....	4	6	1	3	3	3	2	2	6	2	3	7	5	4	3	2	5	1	1	2	2	3	...	5	3	2
Whooping cough...	6	6	9	5	3	7	8	4	7	12	3	12	8	8	5	14	12	12	14	8	12	10	13	7	10	13
Diphtheria and Croup.....	40	25	26	19	25	28	41	25	23	24	24	34	34	22	31	22	28	34	22	33	31	22	17	29	27	21
Influenza.....	85	109	87	81	46	50	42	33	32	29	32	12	16	14	7	8	11	11	2	7	6	7	5	6	2	...
Cerebro - Spinal Meningitis.....	5	...	3	1	2	1	1	3	2	4	6	3	5	7	1	3	3	2	2	6	4	4	7	6	4	8
Tuberculosis Pulmonalis.....	166	180	178	193	168	171	179	182	193	179	180	175	180	198	205	186	196	196	184	194	161	172	174	175	144	140
Other Tuberculosis	25	27	19	22	16	22	17	22	29	31	28	27	37	39	19	34	37	30	34	31	28	35	24	35	30	41
Acute Bronchitis..	25	28	32	15	22	24	23	27	22	28	19	18	20	16	12	22	19	19	13	18	11	21	11	10	22	15
Pneumonia.....	293	284	259	217	164	167	147	151	161	155	170	167	163	145	144	127	134	130	133	101	123	97	100	66	66	76
Broncho-Pneumonia	148	138	123	122	128	105	92	116	110	98	125	99	103	119	93	98	96	127	106	81	96	86	84	56	63	93
Violent deaths....	83	85	63	75	87	88	72	61	64	62	66	85	75	72	67	74	80	64	68	76	76	87	78	74	85	70
Under one year....	249	251	261	250	240	256	252	266	244	269	249	268	229	282	246	256	238	263	253	230	241	241	224	182	197	196
Under five years...	377	361	352	355	342	381	377	371	368	380	348	420	371	421	374	390	367	407	392	374	374	369	334	307	348	409
Five to sixty-five..	1,033	1,046	1,009	1,021	871	926	899	932	900	1,109	872	904	912	911	860	851	920	882	841	830	827	822	803	790	717	676
Sixty-five years and over.....	470	456	399	436	334	319	352	325	335	318	321	300	366	342	321	274	301	291	282	258	286	282	225	227	246	209
In institutions.....	722	735	726	748	582	662	693	668	650	683	644	676	714	717	622	648	713	623	664	636	622	634	593	602	579	539
Inquest cases.....	232	229	213	212	225	228	240	218	208	233	216	220	218	209	202	201	214	209	190	216	202	226	211	207	204	182
Mean barometer...	30.02	30.113	30.04	30.29	30.10	30.05	29.88	29.68	29.74	29.67	29.94	29.84	29.89	29.89	29.78	29.80	29.78	29.81	29.80	29.86	29.89	29.76	29.78	29.87	29.81	29.88
Mean humidity....	56.9	61.6	58.3	63.7	73.4	63.7	61.3	70.6	55.7	66.4	61.9	55.6	60.9	63.9	62.0	55.7	71.	63.	50.1	63.7	63.9	64.9	76.1	81.3	63.1	71.
Inches of rain or snow.....	.30	.76	.07	.02	1.28	.45	.76	.255	.28	1.64	.71	.79	.28	.71	2.37	.39	.26	.31	.52	3.	.30	.33	1.72	1.64	.60	.32
Mean temperature (Fahrenheit)....	33.°	31.4°	32.9°	46.3°	35.4°	30.6°	24.7°	30.3°	26.1°	28.1°	26.6°	33.1°	47.7°	4 .29°	46.7°	51.3°	49.7°	59.3°	61.9°	55.°	63.3°	68.3°	61.4°	63.7°	66.6°	72.1°
Max. temperature (Fahrenheit)....	58.°	52.°	61.°	69.°	63.°	46.°	43.°	48.°	36.°	42.°	49.°	58.°	61.°	60.°	61.°	62.°	70.°	78.°	79°.	68.°	81.°	81.°	79.°	79.°	81.°	86.°
Min. temperature (Fahrenheit)....	13.°	7.°	10.°	26.°	17.°	15.°	2.°	6.°	17.°	17.°	7.°	20.°	37.°	35.°	32.°	41.°	42.°	44.°	48.°	45.°	49.°	53.°	51.°	52.°	53.°	62.°

TABLE No. 9—Continued.

DEATHS ACCORDING TO CAUSE—ANNUAL RATE PER 1,000, AND AGE WITH METEOROLOGY AND NUMBER OF DEATHS IN INSTITUTIONS BY WEEKS—1916.

Week Ending—	July 8.	July 15.	July 22.	July 29.	Aug. 5.	Aug. 12.	Aug. 19.	Aug. 26.	Sept. 2.	Sept. 9.	Sept. 16.	Sept. 23.	Sept. 30.	Oct. 7.	Oct. 14.	Oct. 21.	Oct. 28.	Nov. 4.	Nov. 11.	Nov. 18.	Nov. 25.	Dec. 2.	Dec. 9.	Dec. 16.	Dec. 23.	Dec. 30
Total deaths.....	1,345	1,460	1,439	1,486	1,610	1,671	1,534	1,513	1,388	1,414	1,284	1,196	1,281	1,215	1,245	1,289	1,337	1,281	1,315	1,272	1,445	1,372	1,440	1,344	1,605	1,630
Annual death rate.	12.56	13.63	13.40	13.84	15.03	15.59	14.32	14.13	12.96	13.20	11.99	11.17	11.96	11.34	11.63	12.04	12.49	11.96	12.28	11.88	13.49	12.81	13.45	12.55	14.99	15.22
Typhoid fever.....	4	3	4	4	5	4	8	3	9	7	9	9	3	11	7	3	12	4	3	11	3	7	4	2	4	6
Malarial fevers....	1	...	...	...	...	1	...	...	...	...	1	...	1	...	1	1	...	...	...	1	...	...	...	1	...	...
Smallpox.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles.....	13	15	17	6	6	11	3	2	4	1	3	1	1	2	1	2	1	...	...	...	...	...	2	2	3	2
Scarlet fever.....	1	...	2	...	1	1	...	...	...	...	...	1	...	1	1	1	1	...	1	...	...	...	)	3	2	...
Whooping cough...	11	9	11	15	12	9	11	5	6	6	5	3	1	1	3	...	2	3	2	...	4	2	...	1	1	...
Diphtheria and croup.....	21	21	22	10	15	4	11	4	10	5	13	9	7	6	5	9	13	11	12	11	12	20	14	12	20	23
Influenza.....	1	...	2	...	...	...	2	1	3	...	...	1	...	...	2	3	1	6	1	5	6	8	7	12	15	21
Cerebro - Spinal meningitis.....	6	5	4	7	4	7	5	1	1	5	2	2	2	5	1	2	4	3	...	1	4	3	3	2	2	...
Tuberculosis pulmonalis.....	127	139	137	126	136	121	124	136	135	158	121	125	147	129	139	136	150	141	135	165	153	163	176	144	168	169
Other tuberculosis.	24	26	30	16	15	16	23	14	20	19	19	14	19	19	9	24	10	21	23	18	16	13	15	26	21	18
Acute bronchitis...	16	8	9	7	5	15	4	8	9	8	8	5	9	5	14	10	10	10	14	11	13	9	18	29	24	18
Pneumonia.....	53	64	52	51	54	53	48	47	46	47	50	47	48	59	60	77	88	96	103	109	107	126	124	124	181	208
Broncho-Pneumonia	78	63	67	80	83	63	65	69	52	77	39	34	58	56	52	44	56	53	56	50	55	58	89	89	87	93
Violent deaths.....	90	96	123	78	91	112	73	73	93	89	90	95	91	76	90	99	88	63	87	91	94	76	88	66	81	90
Under one year....	220	241	247	283	380	351	382	346	297	288	244	224	254	203	195	205	218	184	134	188	208	183	207	199	235	209
Under five years...	445	482	519	592	706	701	636	562	455	455	365	339	359	299	277	286	292	256	288	239	266	242	286	266	318	282
Five to sixty-five..	701	732	729	710	718	768	704	733	713	735	719	629	725	697	724	724	748	736	744	751	849	827	874	807	904	978
Sixty-five years and over.....	199	246	191	184	186	202	194	218	220	224	200	228	197	219	244	279	297	289	283	282	330	303	280	271	383	370
In institutions.....	564	600	597	632	650	734	677	722	634	657	575	541	573	547	534	579	563	563	562	534	625	558	626	558	692	648
Inquest cases.....	214	209	249	215	210	228	180	227	226	203	197	191	194	196	196	219	206	117	220	215	238	210	240	193	244	243
Mean barometer...	29.76	29.96	29.87	30.01	29.93	29.84	29.89	29.75	29.96	29.93	30.05	29.95	29.87	30.16	29.97	29.93	30.09	30.01	30.12	29.97	29.89	30.03	29.85	29.72	29.72	30.08
Mean humidity....	60.9	77.4	80.	81.4	70.1	76.1	62.1	62.7	61.4	68.6	67.1	61.1	60.7	57.3	56.0	65.0	55.1	64.1	63.9	62.0	55.3	59.1	58.7	68.3	65.7	61.4
Inches of rain or snow.....	.20	1.15	.79	2.41	...	.48	...	.01	.10	.87	.69	.97	.88	...	.18	.86	...	.12	.32	.01	1.09	.60	.60	14.73	2.52	.80
Mean temperature (Fahrenheit)....	74.3°	75.4°	75.4°	73.9°	76.4°	76.1°	72.7°	77.9°	71.7°	72.°	68.6°	64.3°	63.°	62.1°	58.3°	57.9°	52.6°	55.0°	51.4°	41.7°	41.3°	44.6°	46.7°	30.3°	29.1°	31.°
Max. temperature (Fahrenheit)....	92°	94°	88°	85°	94°	94°	87°	95°	88°	93°	87°	78°	82°	80°	86°	77°	64°	66°	71°	57°	61°	63°	63°	41°	42°	42°
Min. temperature (Fahrenheit)....	60°	63°	64°	61°	65°	61°	50°	64°	56°	54°	56°	50°	44°	41°	41°	40°	42°	43°	40°	28°	28°	25°	35°	17°	17°	19°

TABLE No. 10.

*DEATHS BY SUICIDE—1916.

	Austria-Hungary.		Bohemia.		England.		France.		Germany.		Ireland.		Italy.		Russia.		Other Foreign.		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	..	1	..	2	..	1	..	6	1	3	..	3	..	5	1	4	..	25	2	..	..	53	4	57
Drowning	1	1	..	..	..	..	..	..	5	1	1	..	1	..	..	1	1	..	8	3	..	..	17	6	23
Gunshot	1	2	1	..	1	1	2	..	18	1	4	..	8	..	6	..	4	1	53	8	4	..	102	13	115
Hanging	5	..	1	..	..	1	..	..	21	1	5	..	4	..	5	1	7	2	26	5	..	..	74	10	84
Leaps	3	8	..	..	2	3	..	..	6	8	5	5	2	2	9	7	5	2	28	14	2	1	62	50	112
Railroads	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	2	2	..	..	5	3	8
Arsenic	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	3	..	..	1	4	5
Bichloride of mercury	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	3	1	..	4	..	..	3	6	9
Carbolic acid	..	1	..	..	..	..	1	..	..	2	..	..	1	..	3	..	2	..	7	4	..	..	14	7	21
Cyanide of potassium	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	7	2	..	..	11	2	13
Opium	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	..	..	4	1	5
Oxalic acid	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	3
Other poisons	..	..	..	..	..	..	..	..	5	1	1	..	1	..	1	1	2	1	5	6	1	..	16	9	25
Other methods	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	2	2	4
Illuminating gas	13	10	1	1	5	2	2	2	53	29	10	5	14	..	27	11	23	8	70	60	5	2	223	130	353
Total by sexes	26	24	4	1	10	8	6	2	117	45	29	10	35	3	59	23	53	15	236	116	12	3	587	250	
Total both sexes	50		5		18		8		162		39		38		82		68		352		15				837

*The 837 suicides occurred in the Boroughs as follows: Manhattan, 440; The Bronx, 106; Brooklyn, 201; Queens, 73; Richmond, 17.

TABLE No. 11.

DEATHS IN INSTITUTIONS, YEAR ENDING DECEMBER 31, 1916.

Borough of Manhattan.

Babies Hospital	443	New York Infirmary for Women and Children	34
Bellevue Hospital	3,870	New York Nursery and Child's Hospital	197
Beth Israel Hospital	225	New York Polyclinic Hospital	382
Central and Neurological Hospital	826	Park Hospital	41
City Hospital	600	Post-Graduate Hospital	414
Columbus Hospital	53	Presbyterian Hospital	312
Flower Hospital	271	Reception Hospital	4
Foundling Hospital	700	Roosevelt Hospital	265
French Hospital	104	St. Francis Home	51
German Hospital	362	St. Gregory's Hospital	79
Gouverneur Hospital	533	St. Luke's Hospital	352
Hahnemann Hospital	67	St. Mark's Hospital	78
Har Moriah Hospital	50	St. Mary's Hospital	66
Harlem Hospital	941	St. Vincent's Hospital	490
Home for Aged (Little Sisters of Poor)	130	Skin and Cancer Hospital	22
House of Relief	105	Sloane Hospital for Women	89
Jewish Maternity Hospital	34	Sydenham Hospital	69
Kniekerbocker Hospital	230	Washington Heights Hospital	34
Lying-in-Hospital	234	Willard Parker Hospital	800
Manhattan Maternity Hospital	6	Women's Hospital	54
Manhattan State Hospital	655	Workhouse Hospital	60
Metropolitan Hospital	1,830	Other Institutions	1,451
Misericordia Hospital	175		
Mount Sinai Hospital	643	Total	18,951
New York Hospital	382		
New York City School and Hospital	138		

Borough of The Bronx.

Fordham Hospital	532	St. Francis Hospital	268
Home for Incurables	95	St. Joseph's Hospital	605
House of Calvary	98	Seton Hospital	318
Lebanon Hospital	390	Other Institutions	149
Lincoln Hospital	541		
Montefiore Hospital	233	Total	3,593
Riverside Hospital	364		

Borough of Brooklyn.

Angel Guardian Home	14	Long Island State Hospital	240
Bethany Deaconess Hospital	24	Lutheran Hospital	49
Brooklyn Hospital	317	Methodist Episcopal Hospital	286
Bushwick Hospital	160	New York City Home for Aged and Infirm	329
Consumptive Home	42	Norwegian Hospital	166
Cumberland Street Hospital	218	Samaritan Hospital	37
Coney Island Hospital	175	St. Catherine's Hospital	370
Eastern District Hospital	98	St. Christopher's Hospital	75
German Evangelical Hospital	47	St. John's Hospital	139
German Hospital	278	St. Mary's Hospital	352
Home for Aged (Little Sisters of the Poor)	45	St. Peter's Hospital	216
Infants' Hospital	7	Swedish Hospital	68
Jewish Hospital	388	Williamsburg Hospital	166
Kings County Hospital	1,802	Other Institutions	945
Kingston Avenue Hospital	432		
Long Island College Hospital	515	Total	8,000

Borough of Queens.

Flushing Hospital	175	St. Anthony's Hospital	566
Jamaica Hospital	89	Other Institutions	174
St. John's Hospital	233		
St. Joseph's Hospital	56	Total	1,406
St. Mary's Hospital	113		

Borough of Richmond.

City Farm Colony	60	St. Vincent's Hospital	149
Marine Hospital	50	Other Institutions	134
Sailors' Snug Harbor	108		
Sea View Hospital	382	Total	1,081
S. R. Smith Infirmary	198		

Recapitulations.

Borough of Manhattan	18,951	Borough of Richmond	1,081
Borough of The Bronx	3,593		
Borough of Brooklyn	8,000	City of New York	33,031
Borough of Queens	1,406		

TABLE No. 12.

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 U. S. Census, 1910.

City of New York—Year 1916.

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	439	164	260	97	486	121	270	68
China	21	455	2	433	24	520	3	65
Denmark	17	213	10	125	18	168	10	93
England	118	151	155	198	138	124	181	162
Finland	32	432	8	108	33	340	7	72
France	28	153	44	241	28	113	58	234
Germany	424	152	754	271	1,005	166	1,054	174
Greece	44	547	8	994	44	506	8	920
Ireland	954	377	579	229	2,197	391	952	169
Italy	490	144	233	68	680	127	250	469
Norway	54	242	25	112	75	238	28	89
Roumania	43	128	40	119	47	103	43	94
Russia	540	111	501	103	641	88	522	72
Scotland	51	221	51	221	68	192	54	152
Sweden	83	237	53	152	116	224	56	108
Switzerland	20	191	32	306	27	197	32	234
United States	4,743	167	1,797	63	1,625	160	722	71
Other foreign	298	201	146	98	....	....	....	....
Unknown	12	....	3	....	127	....	53	....
Other foreign and mixed foreign	....	....	....	....	530	350	203	134
Native mother or native father	....	....	....	....	502	146	195	52
Total	8,411	175	4,701	98	8,411	175	4,701	98

TABLE No. 13.

PULMONARY TUBERCULOSIS AND CANCER DEATHS, FIFTEEN YEARS AND OVER, BY SEX, AGE AND CIVIL CONDITION. FOR YEAR 1916.

Death Rate Per 100,000 of Population at Various Age Groups.

Pulmonary Tuberculosis.

Age Groups.	Males.												Females.											
	Single.		Married.		Widowed.		Divorced.		Unknown.		Total.		Single.		Married.		Widowed.		Divorced.		Unknown.		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 years..	608	123.0	55	100.3	2	404.9	...	.....	....	....	665	121.1	524	111.6	198	140.9	7	380.2	...	....	...	....	729	118.7
25 to 44 years..	1,391	480.0	1,309	197.3	108	643.6	8	381.5	6	....	2,822	289.2	318	153.7	984	150.4	150	285.6	4	95.1	...	....	1,456	158.3
45 yrs. and over	552	1118.0	947	268.3	377	673.8	7	488.5	20	....	1,903	411.6	83	172.2	254	99.9	242	149.2	1	69.0	1	....	581	124.3
Total 15 yrs. and over..	2,551	304.0	2,311	215.3	487	663.4	15	417.9	26	....	5,390	270.3	925	127.4	1,436	136.7	399	138.4	5	81.7	1	....	2,766	138.6

Cancer.

15 to 24 years..	35	7.09	10	18.2	....	.....	...	.....	....	....	45	8.2	13	2.7	5	3.5	2	108.1	...	....	...	....	20	3.2
25 to 44 years..	78	26.9	191	28.8	12	71.5	3	143.0	1	....	285	29.2	87	42.0	385	58.7	52	99.0	1	23.8	1	....	526	57.1
45 yrs. and over	202	409.0	1,087	307.9	356	636.3	4	279.1	6	....	1,655	358.0	269	558.2	859	338.0	991	610.8	1	69.0	3	....	2,123	454.3
Total 15 yrs. and over..	315	37.6	1,288	120.0	368	501.4	7	195.0	7	....	1,985	99.5	369	50.8	1,249	118.9	1,045	483.4	2	32.6	4	....	2,669	133.4

All Causes—Fifteen Years and Over.

	8,797	1050.0	15,923	1483.8	5,038	6811.0	79	2201.0	419	....	30,226	1515.3	4,494	618.2	10,493	999.1	9,559	4425.0	54	882.2	52	....	24,652	1232.4

TABLE No. 14.
DEATHS FROM ACCIDENTS AND NEGLIGENCE, 1916.

	Borough of					
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	City of New York.
Fractures and Contusions:						
Crushed by elevator	23	....	3	....	....	26
Crushed by machinery	12	4	7	....	....	23
Crushed by derrick, stones, etc	5	1	13	6	2	27
Crushed by falling bodies	35	5	19	4	2	65
Not specified by coroners	48	9	43	3	3	106
Falls:						
Down shaft, hold of vessel, etc	53	2	41	2	1	99
Down stairs	107	14	62	7	4	194
From buildings	88	8	25	1	....	122
From fire-escapes	37	6	11	....	....	54
From scaffolds	21	6	18	2	1	48
From windows	81	14	38	4	....	137
From wagons, cars, etc	32	5	20	4	3	64
On streets and sidewalks	56	5	31	4	1	97
Other falls	133	25	92	14	5	269
Not specified by coroners	33	....	24	4	2	63
Street Vehicles:						
Wagons, trucks, etc	95	4	34	10	1	144
Automobiles	217	45	111	20	14	407
Other vehicles	5	3	12	4	....	24
Railroads:						
Electric surface	50	13	40	6	1	110
Steam	15	12	10	17	8	62
Elevated	9	5	12	2	....	28
Subways	13	2	6	....	....	21
Burns and Scalds:						
By stoves	32	9	30	4	1	76
By lamps	4	....	6	3	....	13
By fluids	82	15	45	10	3	155
By steam	2	....	2	....	....	4
By playing with matches	32	5	15	2	4	58
By other methods	16	9	37	2	3	67
Not specified by coroners	37	....	14	2	2	55
Conflagration	41	....	22	12	1	76
Wounds:						
By firearms	6	2	1	1	....	10
By cutting and piercing instruments	12	....	7	....	1	20
Drowning	220	26	161	40	35	482
Poison:						
By food	12	2	5	4	....	23
By alcohol	1	....	....	....	....	1
By wood alcohol	....	....	2	....	....	2
By carbolic	....	....	2	....	....	2
By cocaine	1	1	....	....	....	2
By mercury (bichloride)	3	1	5	2	....	11
By opium	6	1	4	....	....	11
By other poisons	12	3	7	5	....	27
By unknown poisons	6	....	2	....	....	8
Illuminating gas	134	21	165	20	5	345
Chloroform or ether	9	2	1	1	....	13
Coal gas	9	....	2	2	1	14
Not specified by coroners	24	8	23	2	....	57
Explosions	4	....	20	1	....	25
Freezing	3	....	2	....	1	6
Lightning	....	....	....	2	1	3
Electric current	5	10	10	3	1	29
Foreign body in larynx	14	3	6	1	....	24
Sunstroke	25	2	25	6	....	58
Criminal abortion	24	5	8	5	....	42
Animals, injury by (not snake bites or hydrophobia)	7	5	5	2	....	19
Other violence	17	2	14	7	....	40
Tetanus	6	2	10	4	1	23
Hydrophobia	....	....	1	....	....	1

RECAPITULATION.

	Borough of					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Fractures and contusions	123	19	85	13	7	347
Falls	641	85	362	42	17	1,147
Street vehicles	317	52	157	34	15	575
Railroads	87	32	68	25	9	221
Wounds	18	2	8	1	1	30
Burns and scalds	205	38	149	23	13	428
Conflagration	41	....	22	12	1	76
Drowning	220	26	161	40	35	482
Poison	41	8	27	11	....	87
Illuminating gas	134	21	165	20	5	345
Other gases	42	10	26	5	1	84
Criminal abortion	24	5	8	5	....	42
Sunstroke	25	2	25	6	....	58
Hydrophobia	.....	....	1	....	....	1
Tetanus	6	2	10	4	1	23
Electric current	5	10	10	3	1	29
Foreign body in larynx	14	3	6	1	....	24
Other violence	31	7	41	12	2	93
Total	1,974	322	1,331	257	108	3,992

TABLE No. 15.

CITY OF NEW YORK.

DEATHS FROM CERTAIN DISEASES WITH CONTRIBUTING CAUSES—1916.

Determining Cause of Death.	Contributing Causes.																								
	Total Number of Deaths.	Typhoid Fever.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Septicaemia.	Pulmonary Tuberculosis.	Other Tuberculous Diseases.	Syphilis.	Cancer.	Acute Rheumatism.	Chronic Rheumatism.	Diabetes.	Alcoholism.	Meningitis.	Locomotor Ataxia.	Anterior Poliomyelitis.	Apoplexy.	Paralysis.	General Paresis.	Other Forms of Mental Alienation.	Epilepsy.
		...	67	7	32	14	83	62	38	71	314	95	404	86	285	148	429	179	25	4	2,369	145	20	128	33
Typhoid Fever	216	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...
Measles	490	...	...	...	11	3	...	...	...	...	6	1	...	...	...	...	...	2	...	...	...	...	...	...	1
Scarlet Fever	96	...	...	...	1	5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping cough	349	...	2	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	2	...	...	...	...
Diphtheria and croup	1,031	...	63	5	3	...	2	1	1	6	...	2	...	...	...	...	...	3	...	...	...	...	...	...	...
Influenza	853	...	...	...	...	1	...	2	...	...	...	...	...	1	1	1	1	25	2	...	6	...	1	...	...
Pulmonary tuberculosis	8,411	...	...	...	...	1	10	3	...	...	193	12	2	2	12	44	53	3	1	...	9	1	2	53	2
Other tuberculous diseases	1,237	...	...	...	1	...	3	4	3	7	85	...	...	2	1	...	4	1	...	...	2	...	...	1	...
Cancer	4,701	...	...	...	...	...	1	3	2	25	...	3	396	...	2	24	2	1	1	...	15	3	2	3	...
Acute rheumatism	280	...	...	...	1	...	1	...	1	1	...	...	...	...	3	1	2	...	...	...	1	...	...	...	...
Diabetes	1,119	...	...	...	...	...	7	2	1	13	...	1	...	1	...	...	3	...	1	...	24	3	...	1	...
Alcoholism	687	...	...	...	...	...	...	4	...	...	...	9	...	1	...	...	...	1	2	...	8	...	...	2	2
Locomotor ataxia	79	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	1	...	...	...	8	...	1	2	2
Anterior poliomyelitis	2,448	...	1	1	9	2	...	...	...	3	2	...	...	...	...	...	1	5	...	...	...	8	...	...	...
Pericarditis	44	...	...	...	...	...	...	...	...	...	1	...	...	1	5	...	...	...	...	...	...	...	...	...	...
Acute endocarditis	400	...	...	...	...	...	2	4	10	...	...	...	...	4	6	...	2	1	1	...	4	1	...	...	...
Organic heart disease	10,687	...	...	1	1	1	14	9	1	4	6	25	2	50	215	13	77	...	7	...	165	28	3	24	6
Angina Pectoris	228	...	...	...	...	...	1	...	...	...	...	...	...	1	...	3	...	...	...	...	2	...	...	...	...
Diseases of arteries	2,661	...	...	...	...	...	1	1	...	1	...	8	...	...	6	...	4	12	...	...	1,690	49	...	8	1
Broncho pneumonia	4,438	...	...	...	...	...	5	7	1	1	6	12	2	1	5	6	32	44	2	2	17	9	6	8	10
Lobar pneumonia	6,130	...	1	...	2	...	23	9	5	5	5	1	1	14	3	22	141	57	3	2	22	16	4	15	4
Diarrhoea (under 2 yrs.)	2,851	...	...	...	3	...	4	1	1	...	...	7	...	2	...	...	5	17	...	...	...	...	...	2	...
Appendicitis	697	...	...	...	...	...	1	1	5	3	2	...	...	...	...	4	1	...	...	...	...	...	...	...	...
Cirrhosis of liver	644	...	...	...	...	...	1	2	...	...	...	3	...	...	...	1	30	...	...	...	5	2	...	...	...
Acute nephritis	434	...	...	...	...	...	2	...	1	1	1	...	...	3	4	1	9	...	1	...	11	1	...	1	1
Chronic nephritis	6,112	...	...	...	...	...	3	8	5	1	4	9	1	3	22	28	61	5	4	...	378	24	1	8	4

DEATHS FROM CERTAIN DISEASES WITH CONTRIBUTING CAUSES—1916.—Continued.

Determining Cause of Death.	Contributing Causes.																								
	Neuritis.	Other Nervous.	Diseases of Ear.	Pericarditis.	Acute Endocarditis.	Organic Heart Disease.	Angina Pectoris.	Diseases of Arteries.	Embolism and Thrombosis.	Acute Bronchitis.	Broncho Pneumonia.	Lobar Pneumonia.	Pleurisy.	Asthma.	Emphysema.	Diarrhoea.	Hernia.	Cirrhosis of Liver.	Peritonitis.	Acute Nephritis.	Chronic Nephritis.	Congenital Debility.	Senility.	Operations (Surgical).
	97	65	75	115	481	2,628	97	2,881	375	286	1,379	725	444	153	74	393	73	392	299	376	3,195	154	149	745
Typhoid fever	...	...	...	...	8	3	...	...	1	...	8	26	1	...	...	...	...	...	2	2	1	...	...	2
Measles	...	...	4	...	1	1	...	...	...	5	373	33	2	...	1	7	...	...	...	...	...	4	...	...
Scarlet fever	...	...	...	...	3	1	...	...	...	...	9	4	1	...	...	...	...	...	...	10	...	...	...	...
Whooping cough	...	2	...	...	1	1	...	...	...	...	225	16	...	...	...	8	...	...	...	2	1	3	...	...
Diphtheria and croup	...	...	1	...	49	5	...	1	...	9	203	22	...	...	...	8	...	...	...	13	4	1	...	...
Influenza	1	...	6	1	27	84	2	18	4	32	148	265	15	6	...	4	...	4	1	19	23	...	6	...
Pulmonary tuberculosis	5	6	1	4	23	200	...	17	2	2	10	21	16	2	2	15	4	26	1	27	149	...	1	5
Other tuberculous diseases	...	2	8	1	3	18	...	1	2	2	21	8	4	...	...	16	2	1	1	3	16	4	...	20
Cancer	1	...	...	2	11	158	...	31	14	3	28	30	13	1	1	7	30	13	18	13	114	...	1	473
Acute rheumatism	...	...	...	7	77	21	...	4	5	1	2	2	3	...	...	...	...	...	1	5	2	1	2	2
Diabetes	1	...	4	2	5	100	4	44	3	6	11	21	3	...	1	2	3	8	...	5	138	...	...	12
Alcoholism	33	...	...	...	1	49	...	4	1	2	9	62	3	...	...	2	2	17	...	5	27	...	...	1
Locomotor ataxia	30	...	...	...	1	47	...	4	1	2	9	59	2	...	...	1	2	13	...	2	25	...	...	1
Anterior poliomyelitis	...	1	...	...	6	1	...	...	...	1	86	14	1	...	...	52	1	...	...	...	...	2	...	...
Pericarditis	...	...	...	...	...	5	...	...	1	...	2	1	4	...	...	1	...	...	...	1	6	...	...	...
Acute endocarditis	...	...	2	13	1	3	...	15	25	10	6	7	2	4	...	11	...	6	...	37	15	...	...	...
Organic heart disease	11	12	3	41	12	...	75	1,600	165	86	75	34	59	84	41	55	9	156	...	96	2,286	...	52	3
Angina pectoris	...	...	...	...	1	23	...	118	1	...	...	...	...	2	...	...	...	...	...	4	12	...	...	...
Diseases of arteries	...	2	...	...	3	37	7	...	90	10	8	2	2	3	1	4	...	2	...	2	14	...	40	4
Broncho pneumonia	2	22	19	2	36	216	...	85	1	19	...	2	68	10	5	121	1	1	1	30	70	66	17	4
Lobar pneumonia	1	10	12	20	92	418	3	113	11	7	4	...	223	14	6	48	1	23	2	56	200	13	12	6
Diarrhoea (under 2 years)	...	4	13	..	2	13	...	4	...	53	101	21	7	...	...	1	5	1	...	12	4	57	1	1
Appendicitis	...	...	...	...	3	12	...	2	12	...	6	29	2	...	...	...	10	...	272	7	7	...	...	203
Cirrhosis of the liver	4	...	...	3	13	57	...	26	3	1	4	3	...	...	2	4	1	1	...	14	72	1	...	5
Acute nephritis	1	...	...	1	20	46	...	15	...	8	5	5	3	2	1	5	...	3	...	...	9	1	2	...
Chronic nephritis	7	4	2	18	82	1,109	6	779	33	25	26	38	10	25	13	21	2	117	...	11	...	1	15	3

TABLE No. 16.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE ACCORDING TO NATIVITIES OF BOTH PARENTS—DEATH RATES PER 1,000 BIRTHS REPORTED BY NATIVITIES OF BOTH PARENTS—1916.

	Births Reported by Nativities of Both Parents.	Deaths Under One Year by Nativities of Both Parents.	Death Rate 1,000 Births Reported by Nativities of Both Parents.
Austria-Hungary	10,613	881	92.4
Bohemia	225	21	93.3
England	443	44	99.3
France	82	8	97.5
Germany	1,764	192	108.8
Ireland	4,662	534	114.5
Italy	29,011	2,924	100.6
Russia-Poland	23,016	1,734	75.3
Scotland	191	13	68.1
Sweden	463	46	99.4
United States	37,590	3,976	105.7
Other foreign, Mixed native and foreign, Unknown	29,604	2,445	82.6
Total	137,664	12,818	93.0

TABLE No. 17.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE ACCORDING TO NATIVITY OF PARENTS FOR YEAR 1916.

Country.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York City.
United States	1,612	344	1,484	434	102	3,976
Ireland	366	38	110	13	7	534
Germany	71	28	74	15	4	192
Italy	1,475	250	1,042	127	30	2,924
Russia	690	185	640	75	11	1,601
England	27	4	9	3	1	44
Austria-Hungary	586	70	177	31	17	881
Scotland	4	2	6	1	....	13
British America	9	....	5	1	1	16
Switzerland	1	....	....	....	....	1
France	5	....	1	1	1	8
Bohemia	16	3	2	....	....	21
Roumania	20	10	14	1	....	45
Poland	24	3	57	38	11	133
Syria	3	....	22	....	2	27
Sweden	10	8	23	4	1	46
Norway	5	5	33	....	3	46
Denmark	3	....	7	1	....	11
Finland	15	6	6	1	....	28
Holland	....	....	....	....	....	....
Cuba	4	....	....	....	....	4
Other West Indies	99	3	22	3	2	129
Belgium	2	....	....	....	....	2
Spain	11	....	3	1	1	16
Greece	53	3	6	....	2	64
China	....	....	....	....	....	....
Australia	....	....	....	....	....	....
Other Foreign	64	2	5	....	....	71
Mixed Foreign	191	59	89	22	3	364
Native Father (Foreign Mother)	226	56	131	34	8	455
Native Mother (Foreign Father)	372	102	245	72	16	807
Unknown	271	16	59	7	6	359
Total	6,235	1,197	4,272	885	229	12,818

TABLE No. 18.

DEATHS FROM ALL CAUSES AND DIARRHOEAL DISEASES UNDER ONE YEAR OF AGE, BY WEEKS.

CITY OF NEW YORK—YEAR 1916.

WEEK ENDING	ALL CAUSES.							DIARRHOEAL 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 Year.
January 1	94	24	19	49	23	24	233	3	3	...	7	5	1	19
January 8	114	27	16	36	29	27	249	3	3	2	6	2	3	19
January 15	110	28	20	39	21	33	251	6	4	4	7	2	2	25
January 22	119	29	19	28	30	36	261	8	4	4	6	2	1	25
January 29	107	29	16	43	34	21	250	12	4	3	10	6	2	37
February 5	123	18	16	33	31	19	240	4	1	3	2	1	5	16
February 12	109	26	23	45	31	22	256	7	4	4	8	5	1	29
February 19	111	31	13	38	33	26	252	3	8	3	13	5	3	35
February 26	105	31	27	36	32	35	266	5	12	7	5	3	4	36
March 4	104	20	16	38	36	30	244	4	3	2	11	6	...	26
March 11	120	21	16	43	35	34	269	6	3	7	7	3	1	27
March 18	102	25	16	30	44	32	249	5	3	2	5	6	2	23
March 25	112	36	19	36	37	28	268	2	7	1	9	5	3	27
April 1	92	14	14	41	36	32	229	7	3	2	12	4	7	35
April 8	120	28	21	52	34	27	282	4	6	5	11	5	1	32
April 15	113	16	10	20	50	36	245	2	5	2	3	7	5	24
April 22	113	17	23	42	40	21	256	6	1	4	8	8	...	27
April 29	102	24	10	36	38	28	238	1	4	2	11	6	1	25
May 6	99	29	18	39	41	37	263	6	8	3	8	4	3	32
May 13	104	20	11	44	42	32	253	4	6	3	7	7	2	29
May 20	94	21	15	28	28	44	230	4	4	5	6	3	4	26
May 27	101	18	16	28	44	34	241	8	3	3	6	5	5	30
June 3	94	14	18	42	33	40	241	5	3	10	14	6	2	40
June 10	93	18	27	32	26	28	224	3	5	7	7	7	3	32
June 17	73	15	17	24	29	24	182	6	8	1	4	5	1	25
June 24	78	19	13	28	28	31	197	1	5	4	5	5	4	24
July 1	71	24	13	24	30	34	196	5	8	2	1	6	7	29
July 8	71	15	14	47	29	44	220	4	3	4	19	3	5	38
July 15	89	13	17	30	37	55	241	3	...	8	14	12	11	48
July 22	84	14	17	58	45	29	247	4	3	8	24	15	8	62
July 29	59	25	18	66	60	55	283	1	7	8	40	29	24	109
August 5	87	24	22	76	84	87	380	7	10	6	41	41	41	146
August 12	81	31	20	73	94	52	351	3	11	12	49	43	20	138
August 19	109	27	23	80	82	61	382	7	11	6	51	43	24	142
August 26	89	30	23	68	79	57	346	6	11	6	38	41	24	126
September 2	80	25	17	60	67	48	297	4	11	8	25	34	13	95
September 9	92	20	22	50	50	54	288	8	6	7	29	25	21	96
September 16	75	20	20	46	42	41	244	8	9	9	23	22	19	90
September 23	90	26	21	34	29	24	224	5	10	11	15	16	6	63
September 30	84	25	20	59	30	38	256	4	5	7	34	15	16	81
October 7	89	13	12	36	28	25	203	2	3	6	17	14	9	51
October 14	97	19	13	23	23	21	196	4	4	6	14	9	6	43
October 21	75	18	18	34	33	27	205	3	7	5	20	20	12	67
October 28	88	20	11	43	33	23	218	5	4	4	19	18	10	60
November 4	79	11	22	34	20	18	184	4	5	5	13	6	3	36
November 11	105	26	19	34	30	20	234	5	5	8	15	8	5	46
November 18	86	17	14	27	24	20	188	4	4	5	13	7	5	38
November 25	107	23	24	26	14	14	208	5	2	4	6	5	1	23
December 2	94	18	17	23	18	13	183	3	3	4	5	8	3	26
December 9	106	19	19	31	20	12	207	1	3	5	5	1	2	17
December 16	92	25	15	32	17	18	199	...	1	4	6	5	2	18
December 23	120	36	20	35	15	9	235	3	9	5	4	2	1	24
December 30	118	17	10	31	18	15	209	1	1	3	6	2	1	14
Total, 53 weeks	5,123	1,179	930	2,130	1,936	1,695	12,993	234	276	259	744	573	365	2,451
Year 1916	5,061	1,158	916	2,093	1,919	1,671	12,818	231	273	259	738	570	364	2,435

TABLE No. 19.

DISPOSITION OF THE DEAD AND STILL BORN INFANTS—1916.

Cemeteries.	Number of Interments.
Borough of Manhattan—	
Marble	10
Marble Vault	1
St. Marks	1
St. Marks Vault	1
Trinity Church	85
St. John the Divine (Crypt)	1
Total	99
Borough of The Bronx—	
City	5,848
Pelham Bay	23
St. Peters	29
St. Raymonds	3,098
West Farms	9
Woodlawn	2,549
Total	11,556
Borough of Brooklyn—	
Canarsie	59
Cypress Hills	681
Evergreens	823
Flatlands	22
Friends	25
Gravesend	13
Greenwood	4,002
Holy Cross	6,320
Holy Trinity	1,724
Maimonidea	132
Mount Hope	122
National	117
New Lots	8
New Utrecht	6
Salem Fields	201
United Jewish	69
Washington	2,060
Total	16,384
Borough of Queens—	
Acacia	259
Bayside	338
Bethel	127
Calvary	19,816
Cedar Grove	536
Cypress Hills	911
Evergreen	3,199
Flushing	342
Fresh Pond	906
Linden Hill	1,813
Lutheran	5,436
Macpelah	125
Maple Grove	613
Montefiore	1,401
Mount Carmel	1,075
Mount Hebron	1,041

Cemeteries.	Number of Interments.
Borough of Queens—Continued.	
Highland View	569
Mount Neboh	213
Mount Olivet	2,247
Mount St. Mary	407
Mount Zion	2,795
Prospect	9
Springfield	42
St. Johns	2,668
St. Michaels	2,593
St. Monica	17
Union Fields	418
Ahawath Chesed	49
Mount Lebanon	281
Hungarian	82
Grace Church Yard (Jamaica)	5
Total	50,333
Borough of Richmond—	
A. M. E. Zion	6
Baron Hirsch	508
Bethel	45
City Farm Colony	3
Fairview	100
Fountain	2
Hillside	12
Lake	46
Moravian	404
Mount Loretto	6
Mount Richmond	1,191
New Springville	6
Ocean View	70
S. S. Harbor	126
St. John's Lutheran	1
St. Luke's	5
St. Mary's, 3d Ward	44
St. Mary's, 4th Ward	113
St. Peter's	363
Silver Lake	23
Silver Mount	90
Staten Island	46
Sylvan	4
West Baptist	1
Woodland	144
United Hebrew	369
Sacred Heart	1
Total	3,729
Summary—	
Borough of Manhattan	99
Borough of The Bronx	11,556
Borough of Brooklyn	16,384
Borough of Queens	50,333
Borough of Richmond	3,729
City of New York	82,101

TABLE

DEATHS FROM ALL CAUSES

DEATH RATE PER 1,000 POPULATION

CITY OF

	Estimated Population 1916.						Total Deaths All Causes.		
	White.			Negro.			White.		
	Males.	Females.	Both Sexes.	Males.	Fe-males.	Both Sexes.	Males.	Fe-males.	Both Sexes.
Under 1 year.....	*68,990	*66,105	*135,095	*1,347	*1,171	*2,518	6,922	5,404	12,326
Under 5 years.....	296,300	291,600	587,900	3,816	4,080	7,896	10,726	8,537	19,263
5 to 9 years.....	254,900	253,750	508,650	2,825	3,206	6,031	1,027	864	1,891
10 to 14 years.....	245,000	245,500	490,500	2,627	3,089	5,716	506	462	968
15 to 19 years.....	250,500	279,800	530,300	3,122	4,255	7,377	780	726	1,506
20 to 29 years.....	577,500	599,950	1,174,450	14,075	18,477	32,552	2,782	2,416	5,198
30 to 39 years.....	474,100	442,200	916,300	12,737	13,232	25,959	4,356	2,809	7,165
40 to 49 years.....	331,170	306,950	648,120	6,344	6,706	13,050	5,650	3,541	9,191
50 to 59 years.....	184,370	178,200	362,570	2,527	3,030	5,557	6,037	4,171	10,208
60 years and over..	122,930	142,840	265,770	1,336	2,039	3,375	9,570	10,124	19,694
Total.....	2,744,700	2,743,392	5,488,092	49,560	58,290	107,850	41,434	33,648	75,082

* Total births reported.

No. 20.

BY SEX, AGE AND COLOR.

ESTIMATED AT DIFFERENT AGE GROUPS

NEW YORK.

Total Deaths All Causes.			Death Rate per 1,000 Population Estimated at Different Age Groups.						Increase in Mortality of Negroes Over White.		
Negro.			White.			Negro.					
Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
271	218	489	100.3	81.7	90.9	201.0	186.1	194.2	+100.7	+104.4	+103.3
375	325	700	36.1	29.3	32.7	98.3	79.6	88.5	+62.2	+50.3	+55.8
29	28	57	4.0	3.4	3.7	10.3	8.7	9.5	+ 6.3	+ 5.3	+ 5.8
22	17	39	2.0	1.9	2.0	8.4	5.5	6.8	+ 6.4	+ 3.6	+ 4.8
29	30	59	3.1	2.6	2.8	9.3	7.0	8.0	+ 6.2	+ 4.4	+ 5.2
177	163	340	4.8	4.0	4.4	12.6	8.8	10.4	+ 7.8	+ 4.8	+ 6.0
250	203	453	9.2	6.3	7.8	19.6	15.3	17.4	+10.4	+ 9.0	+ 9.6
210	160	370	17.0	11.5	14.2	33.1	23.8	28.3	+16.1	+12.3	+14.1
151	127	278	32.7	23.4	28.1	59.7	41.9	50.0	+27.0	+18.5	+21.9
151	181	332	77.9	70.8	74.1	113.0	88.8	98.4	+35.1	+18.0	+24.3
1,394	1,234	2,628	15.1	12.2	13.7	28.1	21.2	24.4	+13.0	+ 9.0	+10.7

TABLE No. 21.

DEATHS OF NON-RESIDENTS FROM CERTAIN CAUSES FOR THE YEAR 1916.

Cause of Death.	Manhattan.	Bronx.	Brooklyn.	Queens.	Richmond.	City of New York.
Typhoid fever	4	....	3	3	2	12
Pulmonary tuberculosis	66	41	17	18	15	157
Other tubercular diseases	25	....	6	1	....	32
Cancer	172	9	22	3	4	210
Alcoholism	8	....	1	....	....	9
Heart diseases	135	11	44	8	9	207
Acute respiratory diseases	111	6	29	7	3	156
Diarrhoeal diseases	55	....	5	1	1	62
Appendicitis	25	....	4	2	1	32
Cirrhosis of liver	7	....	1	....	....	8
Diseases of women	18	....	5	....	....	23
Congenital debility	116	....	4	1	1	122
Accidents	77	5	88	1	10	181
Suicides	18	2	2	....	3	25
Other causes	435	27	97	27	26	612
Total	1,272	101	328	72	75	1,848
Under 5 years	261	2	24	3	1	291
5 to 25 years	89	16	38	8	7	158
25 to 45 years	319	34	119	31	26	529
45 to 65 years	422	31	87	19	19	578
65 years and over	181	18	60	11	22	292
Total	1,272	101	328	72	75	1,848
Institutions	940	78	161	53	62	1,294
Houses	243	13	86	17	6	365
Other places	89	10	81	2	7	189
Total	1,272	101	328	72	75	1,848

TABLE

REPORT OF

FOR YEAR ENDING

	Borough of—	
	Manhattan.	The Bronx.
Number of deaths	36,702	7,966
Death rate	13.93	13.83
*Corrected death rate	13.60	13.33

* Corrected by redistributing deaths according to borough of residence.

	Estimated Population.	Certificates Received and Tabulated.			
		Marriages.	Births.	Deaths.	Stillbirths.
Manhattan	2,634,223	31,735	61,030	36,702	2,830
The Bronx	575,877	4,080	16,144	7,966	673
Brooklyn	1,928,432	15,920	48,590	25,567	2,234
Queens	366,426	2,352	9,453	5,488	416
Richmond	97,883	695	2,447	2,078	100
City of New York	5,602,841	54,782	137,664	77,801	6,253

	Borough of—	
	Manhattan.	The Bronx.
Number of deaths in institutions	18,949	3,593
Number of deaths in tenements	14,931	2,906
Number of deaths in dwellings	1,128	1,289
Number of deaths in hotels	597	24
Number of deaths in streets, rivers, etc	1,097	154

No. 22.

BUREAU OF RECORDS

DECEMBER 31, 1916.

Borough of—			City of New York.
Brooklyn.	Queens.	Richmond.	
25,567	5,488	2,078	77,801
13.26	14.98	21.23	13.89
14.04	15.14	17.12	.....

Rate Per 1,000.				Transit and Disinterment Permits Issued.	Coroners' Cases.	Searches Made.	Transcripts Issued.
Marriages.	Births.	Deaths.	Stillbirths.				
12.05	23.17	13.93	1.07	1,404	5,987	110,817	35,971
7.08	28.03	13.83	1.17	105	1,032	14,788	6,443
8.26	25.20	13.26	1.16	1,299	3,530	66,215	22,974
6.42	25.80	14.98	1.14	1,298	806	7,639	4,364
7.10	25.00	21.23	1.02	84	255	3,397	1,167
9.78	24.57	13.89	1.12	4,190	11,610	202,856	70,919

Borough of—			City of New York.
Brooklyn.	Queens.	Richmond.	
8,002	1,406	1,081	33,031
10,339	1,217	109	29,502
6,512	2,636	787	12,352
82	33	17	753
632	196	84	2,163

TABLE No. 23.

SEARCHES MADE AND TRANSCRIPTS ISSUED—YEAR 1916.

	Borough of					City of New York.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Free searches of birth records for school and mercantile purposes, etc.	66,553	9,184	42,594	4,084	2,273	124,688
Paid searches of birth records.....	11,005	405	4,218	276	170	16,074
Paid searches of marriage records....	5,147	143	2,502	77	41	7,910
Paid searches of death records.....	28,112	5,056	16,901	3,202	913	54,184
Total free and paid searches....	110,817	14,788	66,215	7,639	3,397	202,856
Transcripts.						
Paid transcripts of births issued.....	6,532	360	2,123	225	135	9,375
Paid transcripts of marriages issued..	2,676	71	1,607	52	19	4,425
Paid transcripts of deaths issued....	26,763	6,012	19,244	4,087	1,013	57,119
Total transcripts issued.....	35,971	6,443	22,974	4,364	1,167	70,919

TABLE No. 24.

POPULATION, DEATHS AND DEATH RATES PER 1,000 POPULATION, CITY OF NEW YORK, PRINCIPAL CAUSES, YEARS 1898 TO 1916, INCLUSIVE.

Year	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
Population	3,272,418	3,356,722	3,446,042	3,554,079	3,665,825	3,781,423	3,901,023	4,025,742	4,166,556	4,311,237	4,469,248	4,632,078	4,794,935	4,929,586	5,064,237	5,198,888	5,333,539	5,468,190	5,602,841
Total deaths	66,294	65,343	70,872	70,720	68,112	67,864	78,060	73,714	76,203	79,205	73,072	74,105	76,742	75,423	73,008	73,902	74,803	76,193	77,801
Death rate	20.26	19.47	20.57	19.90	18.58	17.95	20.01	18.31	18.29	18.36	16.35	16.00	16.01	15.30	14.41	14.21	14.03	13.93	13.89
Total deaths under 5 years	25,499	23,801	25,836	24,256	24,388	22,044	25,542	24,539	25,777	25,794	24,141	24,519	24,268	22,242	20,978	20,711	19,530	20,291	19,967
Rate on general population	7.79	7.09	7.49	6.82	6.65	5.83	6.55	6.09	6.19	5.98	5.40	5.29	5.06	4.51	4.14	3.98	3.66	3.71	3.56
Rate population under 5 years	67.2	61.1	64.6	59.3	58.4	51.6	58.5	51.9	56.2	54.9	50.0	49.5	47.7	42.6	39.1	37.6	34.5	35.0	33.6
Typhoid fever	676	516	718	727	764	653	661	649	639	740	536	564	558	545	499	362	334	332	216
Rate	.21	.16	.21	.20	.21	.17	.17	.16	.15	.17	.12	.12	.12	.11	.10	.07	.06	.06	.04
Typhus fever	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Rate	.0003	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.0002	.....	.0002
Malarial fever	250	167	216	195	125	90	91	53	64	69	34	40	27	38	20	13	20	11	10
Rate	.08	.05	.06	.05	.03	.02	.02	.01	.02	.02	.01	.01	.006	.008	.004	.003	.004	.002	.0002
Smallpox	1	18	12	410	310	5	7	9	6	9	1	2	5	3	2	.....	.....	.....	.....
Rate	.0003	.005	.003	.12	.08	.001	.002	.002	.001	.002	.0002	.0004	.0010	.0006	.0004	.....	.....	.....	.....
Measles	651	587	816	449	710	508	895	520	1,145	728	972	997	785	659	671	628	560	630	490
Rate	.20	.17	.24	.13	.19	.13	.23	.13	.27	.17	.22	.22	.16	.13	.13	.12	.11	.12	.09
Scarlet fever	703	533	465	1,162	940	734	851	473	491	796	1,333	786	953	741	615	507	452	294	96
Rate	.21	.16	.13	.33	.26	.19	.22	.12	.12	.19	.29	.17	.20	.15	.12	.10	.08	.05	.02
Diphtheria and croup	1,778	1,924	2,277	2,068	2,015	2,190	2,018	1,544	1,898	1,740	1,758	1,714	1,715	1,281	1,125	1,333	1,491	1,278	1,031
Rate	.54	.57	.66	.58	.55	.58	.53	.38	.46	.40	.39	.37	.36	.26	.22	.26	.28	.23	.18
Whooping-cough	716	514	584	289	606	324	197	408	367	393	188	401	294	384	287	420	279	397	349
Rate	.22	.15	.17	.08	.17	.09	.05	.10	.09	.09	.04	.09	.06	.08	.06	.08	.05	.07	.06
Cerebrospinal meningitis	357	394	306	267	265	271	1,403	2,025	812	643	351	326	294	203	196	202	207	119	176
Rate	.11	.12	.09	.08	.07	.07	.36	.50	.19	.15	.08	.07	.06	.04	.04	.04	.04	.02	.03
Pulmonary tuberculosis	7,724	8,015	8,154	8,135	7,569	8,020	8,512	8,535	8,955	8,999	8,869	8,643	8,692	8,790	8,591	8,601	8,918	8,825	8,411
Rate	2.36	2.39	2.37	2.29	2.07	2.12	2.18	2.12	2.16	2.09	1.98	1.87	1.81	1.78	1.70	1.65	1.67	1.61	1.50
Other tuberculosis diseases	1,541	1,562	1,476	1,255	1,314	1,284	1,257	1,123	1,239	1,263	1,288	1,268	1,382	1,460	1,390	1,430	1,372	1,424	1,237
Rate	.47	.47	.43	.35	.36	.34	.32	.28	.30	.29	.29	.27	.29	.29	.27	.27	.26	.26	.22
Bronchitis	1,923	1,988	1,964	1,683	1,898	1,560	1,735	1,417	1,319	1,048	819	1,051	928	877	732	693	601	711	813
Rate	.59	.59	.57	.47	.52	.41	.44	.35	.32	.24	.18	.23	.20	.18	.15	.13	.11	.13	.14
Pneumonia	8,094	8,531	10,482	9,168	9,377	9,714	12,369	9,783	10,868	11,806	9,508	10,614	10,519	10,055	9,979	10,042	9,678	10,922	10,568
Rate	2.47	2.54	3.04	2.58	2.56	2.57	3.17	2.43	2.61	2.74	2.13	2.29	2.19	2.04	1.97	1.93	1.81	2.00	1.89
Diarrhœa under 5 years	6,570	5,569	5,978	6,071	5,190	4,443	5,647	6,136	6,016	6,611	6,190	5,380	5,918	4,696	4,149	3,668	3,579	3,924	3,054
Rate on whole population	2.01	1.66	1.73	1.71	1.42	.117	1.45	1.52	1.44	1.53	1.38	1.16	1.23	.95	.82	.71	.67	.72	.55
Rate on population under 5 years	17.3	14.3	15.0	14.9	12.4	10.4	12.9	13.7	13.1	14.1	12.8	10.9	11.6	9.0	7.7	6.7	6.3	6.8	5.1
Cancer	2,006	2,136	2,291	2,463	2,450	2,608	2,709	2,875	3,005	3,227	3,243	3,488	3,710	3,873	4,071	4,223	4,467	4,647	4,701
Rate	.61	.64	.66	.69	.63	.69	.69	.71	.72	.75	.73	.76	.77	.78	.80	.78	.84	.85	.84
Bright's and nephritis	4,686	5,113	5,352	5,500	5,461	5,636	6,220	5,944	6,108	5,685	5,049	5,522	5,638	5,017	5,724	5,615	5,647	5,521	6,546
Rate	1.43	1.52	1.55	1.55	1.49	1.49	1.59	1.48	1.47	1.32	1.13	1.19	1.17	1.02	1.13	1.08	1.05	1.01	1.17
Heart disease	3,847	3,751	3,858	4,626	4,859	4,771	4,996	5,140	5,557	7,237	7,130	6,854	6,870	7,965	8,890	9,674	10,058	10,383	10,687
Rate	1.18	1.12	1.12	1.30	1.33	1.26	1.28	1.28	1.33	1.68	1.59	1.48	1.43	1.62	1.76	1.86	1.89	1.90	1.91
Puerperal diseases	568	558	711	648	642	637	727	815	763	783	698	719	761	738	676	668	679	710	653
Rate	.17	.17	.21	.18	.18	.17	.19	.20	.18	.18	.16	.16	.16	.15	.13	.13	.13	.13	.12
Violence	3,677	3,385	3,913	4,636	3,752	4,068	5,191	4,476	4,741	4,911	4,737	4,403	4,638	5,183	4,762	4,937	4,985	4,777	5,060
Rate	1.12	1.01	1.14	1.30	1.02	1.08	1.33	1.11	1.11	1.14	1.06	.95	1.00	1.05	.94	.95	.93	.87	.90

TABLE No. 25.

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.

	General Diseases.																					
	1 Typhoid Fever.		2 Typhus Fever.		3 Relapsing Fever.		4 Malarial Fever.		5 Smallpox.		6 Measles.		7 Scarlet Fever.		8 Whooping Cough.		9 Diphtheria and Croup.		10 Influenza.		11 Miliary Fever.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	216		1		1		10		....		490		96		349		1,031		853		....	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F
Total, by sexes.	130	86	1	....	1	....	5	5	....	....	259	231	45	51	161	188	547	484	410	443	....	....
Under 1 year...	1	....	....	....	....	....	1	1	....	....	77	71	2	4	86	90	75	53	29	11	....	....
1 year.....	....	1	....	....	....	....	....	....	....	....	110	110	6	8	43	55	138	109	15	14	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	35	33	9	7	13	16	98	88	10	5	....	....
3 years.....	....	2	....	....	....	....	....	....	....	....	18	7	8	8	10	12	70	61	4	6	....	....
4 years.....	2	1	....	....	....	....	....	....	....	....	6	3	3	5	1	3	54	49	2	1	....	....
T't'l under 5 y'rs	3	4	....	....	....	....	1	1	....	....	246	224	28	32	153	176	435	360	60	37	....	....
5 to 9 years....	5	6	....	....	....	....	....	1	....	....	11	6	14	12	8	11	91	90	5	7	....	....
10 to 14 years..	6	8	....	....	....	....	....	....	....	....	1	....	....	2	....	1	8	14	6	5	....	....
15 to 19 years..	15	12	....	....	....	....	....	....	....	....	....	....	1	2	....	....	1	8	10	7	....	....
20 to 24 years..	28	12	....	....	....	....	....	....	....	....	....	....	....	1	....	....	2	3	13	11	....	....
25 to 29 years..	20	10	....	....	....	....	2	....	....	....	....	....	....	1	....	....	....	2	8	16	....	....
30 to 34 years..	10	6	....	....	....	....	....	....	....	....	....	....	1	....	....	....	3	1	16	14	....	....
35 to 39 years..	18	4	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	1	20	13	....	....
40 to 44 years..	11	4	1	....	....	....	1	....	....	....	1	1	....	....	....	....	1	....	20	16	....	....
45 to 49 years..	6	3	....	....	....	....	....	1	....	....	....	....	1	....	....	....	1	2	26	26	....	....
50 to 54 years..	2	9	....	....	....	....	....	1	....	....	....	....	....	....	....	....	3	....	37	26	....	....
55 to 59 years..	3	6	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	1	35	52	....	....
60 to 64 years..	2	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	35	38	....	....
65 to 69 years..	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	39	43	....	....
70 to 74 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	29	48	....	....
75 to 79 years..	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	28	27	....	....
80 to 84 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15	33	....	....
85 y'rs and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8	24	....	....
Colored.....	5	3	....	....	....	....	1	....	....	....	2	5	1	....	7	9	10	17	18	13	....	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916—Continued.

GENERAL DISEASES—*Continued.*

	12 Asiatic Cholera.		13 Cholera Nostras.		14 Dysentery.		15 Plague.		16 Yellow Fever		17 Leprosy.		18 Erysipelas.		19 Other Epidemic Diseases.		20 Pyaemia, Septicaemia.		21 Glanders.		22 Malignant Pustule.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	....		....		23		....		....		4		282		17		52		3		3	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	....	....	....	....	12	11	....	....	....	....	3	1	159	123	6	11	28	24	3	....	2	1
Under 1 year...	....	....	....	....	1	....	....	....	....	....	....	....	61	56	1	4	5	3	....	....	....	....
1 year.....	....	....	....	....	1	2	....	....	....	....	....	....	4	4	2	2	....	2	....	....	....	....
2 years.....	....	....	....	....	1	....	....	....	....	....	....	....	1	2	....	1	1	....	....	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....
4 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....
T't'l under 5 y'rs	....	....	....	....	3	2	....	....	....	....	....	....	66	62	5	9	8	7	....	....	....	....
5 to 9 years....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....
10 to 14 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	3	....	....	....	....	....
15 to 19 years..	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	2	1	....	....	1	....
20 to 24 years..	....	....	....	....	1	....	....	....	....	....	....	....	4	2	....	....	2	3	....	....	....	....
25 to 29 years..	....	....	....	....	1	....	....	....	....	....	....	....	5	2	1	....	1	2	....	....	....	1
30 to 34 years..	....	....	....	....	....	....	....	....	....	....	....	....	6	3	....	....	....	3	....	....	....	....
35 to 39 years..	....	....	....	....	....	....	....	....	....	....	3	....	11	3	....	1	1	1	1	....	....	....
40 to 44 years..	....	....	....	....	....	1	....	....	....	....	....	....	9	7	....	....	2	3	1	....	....	....
45 to 49 years..	....	....	....	....	1	....	....	....	....	....	....	....	15	6	....	....	1	....	1	....	....	....
50 to 54 years..	....	....	....	....	1	2	....	....	....	....	....	....	14	4	....	....	4	2	....	....	1	....
55 to 59 years..	....	....	....	....	1	2	....	....	....	....	....	....	7	6	....	....	1	....	....	....	....	....
60 to 64 years..	....	....	....	....	2	....	....	....	....	....	....	....	6	3	....	....	1	....	....	....	....	....
65 to 69 years..	....	....	....	....	....	3	....	....	....	....	....	....	4	9	....	....	1	1	....	....	....	....
70 to 74 years..	....	....	....	....	1	....	....	....	....	....	....	....	6	4	....	....	....	....	....	....	....	....
75 to 79 years..	....	....	....	....	....	....	....	....	....	....	....	....	5	4	....	....	....	....	....	....	....	....
80 to 84 years..	....	....	....	....	....	....	....	....	....	....	....	....	1	6	....	....	....	....	....	....	....	....
85 y'rs and over	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Colored.....	....	....	....	....	1	....	....	....	....	....	1	....	2	2	1	....	2	....	....	....	....	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	1	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

General Diseases—*Continued.*

	23 Hydrophobia.		24 Tetanus, Trismus.		25 Mycoses.		26 Pellagra.		27 Beriberi.		28 Tuberculosis of Lungs.		29 Acute Miliary Tuberculosis.		30 Tuberculosis Meningitis.		31 Abdominal Tuberculosis.		32 Pott's Disease.		33 White Swelling.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	1		23		7		15		....		8,411		257		683		128		48		34	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	1	....	14	9	5	2	1	14	....	....	5,498	2,913	155	102	375	308	57	71	25	23	21	13
Under 1 year...	....	....	1	6	....	....	....	....	....	....	22	20	11	12	87	66	8	3	....	....	1	2
1 year.....	....	....	....	....	....	....	....	....	....	....	17	11	11	11	70	57	3	2	....	....	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	5	8	8	5	45	45	4	1	1	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	7	10	4	2	29	20	4	1	....	....	....	1
4 years.....	....	....	....	....	....	....	....	....	....	....	3	2	3	1	14	12	1	3	1	....	1	....
T't'l under 5 y'rs	....	....	1	6	....	....	....	....	....	....	54	51	37	31	245	200	20	10	2	....	2	3
5 to 9 years....	....	....	1	2	1	....	....	....	....	....	23	22	1	5	49	36	3	7	3	7	2	1
10 to 14 years..	....	....	1	....	....	....	....	....	....	....	31	75	2	5	18	20	2	2	2	2	1	....
15 to 19 years..	....	....	3	....	....	....	....	1	....	....	209	292	16	15	14	14	1	4	4	2	2	....
20 to 24 years..	....	....	2	....	....	....	....	1	....	....	456	436	21	14	8	11	6	9	2	3	....	1
25 to 29 years..	....	....	3	....	....	1	....	2	....	....	591	458	14	5	12	7	1	11	4	....	2	1
30 to 34 years..	....	....	....	....	....	....	....	3	....	....	717	380	13	8	11	5	5	8	3	2	3	1
35 to 39 years..	....	....	1	....	....	....	1	....	....	....	829	336	14	8	7	5	3	3	1	1	....	....
40 to 44 years..	....	....	1	....	1	....	....	1	....	....	686	282	16	2	2	2	4	7	1	2	2	....
45 to 49 years..	....	....	1	....	....	1	....	....	....	....	666	206	8	2	4	5	5	2	....	1	3	2
50 to 54 years..	1	....	....	1	3	....	....	2	....	....	495	125	6	1	1	1	3	1	2	....	1	1
55 to 59 years..	....	....	....	....	....	....	....	2	....	....	347	80	1	4	2	1	2	1	....	....	1	1
60 to 64 years..	....	....	....	....	....	....	....	2	....	....	216	72	3	1	....	1	1	4	....	1	....	....
65 to 69 years..	....	....	....	....	....	....	....	....	....	....	111	50	3	....	2	....	....	1	....	....	....	2
70 to 74 years..	....	....	....	....	....	....	....	....	....	....	41	28	....	1	....	....	....	....	1	2	1	....
75 to 79 years..	....	....	....	....	....	....	....	....	....	....	24	14	....	....	....	....	1	1	....	....	....	....
80 to 84 years..	....	....	....	....	....	....	....	....	....	....	2	3	....	....	....	....	....	....	....	....	....	....
85 y'rs and over	....	....	....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....	....	....	1	....
Colored.....	....	....	....	....	....	....	....	1	....	....	307	189	10	14	15	24	3	8	1	2	....	1
Chinese.....	....	....	....	....	....	....	....	....	....	....	27	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	General Diseases—*Continued.*																					
	34 Tuberculosis of Other Organs.		35 General Tuberculosis.		36 Rachitis.		37 Syphilis.		38A Soft Chancre.		38B Gonococcic Infection.		39 Cancers, &c., of the Mouth.		40 Cancer of Stomach, Liver.		41 Cancer of Intestines Rectum.		42 Cancer of Female Genital Organs.		43 Cancer of Breast.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	68		19		45		503		9		18		162		1,751		754		596		458	
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	43	25	11	8	27	18	325	178	4	5	1	17	138	24	891	860	334	420	....	596	8	450
Under 1 year...	5	3	2	3	15	11	106	84	....	....	....	1	....	....	....	....	....	....	....	....	....	....
1 year.....	2	2	1	....	8	5	4	1	....	....	....	....	....	....	1	1	....	....	....	....	....	....
2 years.....	....	3	....	....	1	....	....	2	....	....	....	....	....	....	....	2	....	....	....	....	....	....
3 years.....	....	....	....	1	2	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4 years.....	1	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....
T'l under 5 y'rs	8	9	3	4	26	17	113	87	....	....	....	1	....	....	1	3	....	1	....	1	....	....
5 to 9 years....	3	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....
10 to 14 years..	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....
15 to 19 years..	4	1	1	....	....	....	3	1	....	....	....	3	1	....	....	....	....	2	....	1	....	....
20 to 24 years..	1	1	....	....	....	....	5	3	....	1	....	....	....	....	5	4	8	1	....	1	....	2
25 to 29 years..	5	2	1	2	....	....	14	6	2	1	....	3	1	....	11	9	10	4	....	11	....	3
30 to 34 years..	7	....	1	....	....	....	11	13	....	1	1	5	1	1	11	16	13	11	....	27	....	14
35 to 39 years..	3	3	2	....	....	1	34	12	....	....	....	3	3	1	33	33	10	17	....	54	....	34
40 to 44 years..	2	3	1	....	....	....	40	19	....	1	....	1	11	1	65	61	27	38	....	73	....	56
45 to 49 years..	1	2	2	1	....	....	36	13	1	1	....	1	9	1	92	96	27	48	....	102	1	61
50 to 54 years..	4	1	....	....	....	....	27	12	....	....	....	....	19	3	138	113	48	41	....	78	2	61
55 to 59 years..	3	2	....	....	1	....	21	7	....	....	....	....	26	5	136	123	50	60	....	81	....	64
60 to 64 years..	....	1	....	....	....	....	7	2	1	....	....	....	22	4	160	132	36	60	....	57	....	47
65 to 69 years..	1	....	....	....	....	....	8	2	....	....	....	....	21	4	103	117	48	46	....	51	1	42
70 to 74 years..	....	....	....	....	....	....	2	1	....	....	....	....	11	2	75	82	32	50	....	38	3	35
75 to 79 years..	....	....	....	....	....	....	2	....	....	....	....	....	5	1	45	43	16	28	....	11	1	14
80 to 84 years..	....	....	....	....	....	....	1	....	....	....	....	....	5	1	9	23	6	8	....	5	....	11
85 y'rs and over	....	....	....	....	....	....	....	....	....	....	....	....	1	....	6	5	2	2	....	4	....	6
Colored.....	1	2	....	1	3	2	25	20	....	....	....	4	....	....	15	9	2	7	....	27	....	8
Chinese.....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....
Japanese....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR YEAR 1916.—Continued.

	General Diseases—*Continued.*																					
	44 Cancer of Skin.		45 Cancer of Other Organs.		46 Other Tumors (except of Female Genital Organs).		47 Acute Articular Rheumatism		48 Chronic Rheumatism and Gout.		49 Scurvy.		50 Diabetes.		51 Exophthalmic Goitre.		52 Addison's Disease.		53 Leukaemia		54 Anaemia Chlorosis.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	83		897		19		280		44		12		1,119		49		24		165		183	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.
Total, by sexes.	56	27	577	320	8	11	118	162	11	33	3	9	470	649	6	43	13	11	97	68	69	114
Under 1 year...	....	....	....	5	....	2	3	1	....	....	2	5	....	....	....	....	....	....	3	2	1	2
1 year.....	....	....	1	2	2	....	1	2	1	....	....	2	3	1	....	....	....	....	6	....	....	2
2 years.....	....	....	1	6	....	....	3	1	....	....	....	1	....	1	....	....	....	....	....	2	2	....
3 years.....	....	....	3	1	....	....	1	3	....	....	....	....	....	....	....	....	....	....	4	....	....	....
4 years.....	....	....	2	....	....	....	2	5	....	....	....	....	....	....	....	....	....	....	....	1	....	1
T't'l under 5 y'rs	....	....	7	14	2	2	10	12	1	....	2	8	3	2	....	....	....	....	13	5	3	5
5 to 9 years....	1	....	1	3	....	....	28	34	....	....	....	....	5	1	....	....	....	....	5	4	3	2
10 to 14 years..	....	....	4	5	1	....	14	23	....	1	....	....	4	5	....	....	....	....	5	2	3	2
15 to 19 years..	....	....	10	4	....	....	5	14	1	....	....	....	3	6	....	3	1	....	5	2	....	4
20 to 24 years..	1	....	13	4	....	....	10	11	....	....	....	....	8	8	....	5	....	2	4	8	3	6
25 to 29 years..	....	....	13	7	....	....	10	6	....	....	....	....	6	11	1	2	2	1	4	6	7	5
30 to 34 years..	1	1	17	10	....	1	8	14	1	2	....	....	16	8	1	3	2	1	6	3	2	1
35 to 39 years..	1	....	19	17	....	....	6	7	....	1	....	....	18	16	1	3	1	....	9	4	6	7
40 to 44 years..	7	....	39	28	1	1	4	6	....	1	....	....	27	38	....	10	1	2	5	9	5	11
45 to 49 years..	5	3	62	36	1	....	8	6	....	3	....	....	41	46	1	7	....	....	8	6	7	15
50 to 54 years..	5	1	79	41	2	4	3	6	....	3	....	....	62	70	1	1	1	3	14	10	4	12
55 to 59 years..	9	1	73	49	....	1	3	4	1	3	....	....	72	116	1	4	1	....	8	3	11	6
60 to 64 years..	8	4	83	33	1	....	3	8	3	3	....	1	65	117	....	3	1	1	5	4	9	14
65 to 69 years..	3	3	61	25	....	1	3	5	....	1	1	....	63	90	....	2	2	....	3	....	3	12
70 to 74 years..	7	7	55	17	....	....	1	4	2	3	....	....	40	50	....	....	....	1	3	1	3	6
75 to 79 years..	3	4	21	11	....	1	1	....	....	7	....	....	27	48	....	....	....	....	....	1	....	4
80 to 84 years..	2	....	13	11	....	....	1	2	1	4	....	....	7	12	....	....	....	....	....	....	....	2
85 yrs. and over	3	3	7	5	....	....	....	....	1	1	....	....	3	5	....	....	1	....	....	....	....	....
Colored.....	....	....	3	6	....	....	3	9	....	....	....	....	5	7	....	1	....	....	1	....	2	1
Chinese.....	....	....	1	....	....	....	....	....	....	....	....	....	3	....	....	....	1	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR YEAR 1916.—Continued.

	General Diseases—*Continued.*										Diseases of Nervous System and Organs of Sense.											
	55 Other General Diseases.		56 Alcoholism Acute and Chronic.		57 Lead Poisoning.		58 Other Chronic Poisonings of Occupation.		59 Other Chronic Poisonings.		60 Encephalitis.		61 Simple Meningitis (of which)		61A Cerebro-Spinal Meningitis.		62 Locomotor Ataxia.		63 Other Diseases of Spinal Cord (of which)		63A Anterior Poliomyelitis.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	50		687		10		1		25		22		364		176		79		2,606		2,448	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	22	28	556	131	10	....	1	....	15	10	12	10	212	152	108	68	66	13	1,502	1,104	1,429	1,019
Under 1 year...	9	5	....	....	....	....	....	....	....	....	2	....	54	26	27	10	1	....	247	187	246	186
1 year.....	2	3	....	....	....	....	....	....	....	....	1	....	20	17	9	8	....	....	318	218	318	217
2 years.....	....	2	....	....	....	....	....	....	....	....	....	....	12	12	9	6	....	....	259	184	257	183
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	10	14	9	10	....	....	186	128	185	127
4 years.....	1	....	....	....	....	....	....	....	....	....	1	1	9	5	5	4	....	....	138	71	138	71
T'tl, under 5 y'rs	12	10	....	....	....	....	....	....	....	....	4	1	105	74	59	38	1	....	1,148	788	1,144	784
5 to 9 years....	2	3	....	....	....	....	....	....	....	....	1	....	23	19	15	9	....	....	214	174	213	174
10 to 14 years..	....	1	....	....	....	....	....	....	....	....	....	1	12	10	7	4	....	....	32	30	31	29
15 to 19 years..	2	....	....	....	....	....	....	....	2	....	1	....	6	7	3	4	....	....	16	17	15	14
20 to 24 years..	....	1	12	1	....	....	....	....	1	4	....	1	7	7	2	4	....	....	10	5	8	4
25 to 29 years..	1	....	41	5	....	....	....	....	2	2	1	2	11	5	5	2	....	....	14	8	10	6
30 to 34 years..	....	2	63	23	2	....	....	....	5	1	2	....	7	1	3	1	....	....	6	9	3	6
35 to 39 years..	1	1	86	28	1	....	1	....	3	3	....	2	7	8	3	4	3	....	5	3	3	1
40 to 44 years..	1	3	96	21	1	....	....	....	1	....	1	2	8	2	3	....	8	1	4	8	2	1
45 to 49 years..	....	....	99	20	2	....	....	....	1	....	....	....	9	7	4	....	7	....	7	9	....	....
50 to 54 years..	....	2	67	12	3	....	....	....	....	....	....	....	8	3	4	1	13	3	12	8	....	....
55 to 59 years..	1	2	40	6	1	....	....	....	....	....	1	1	6	3	....	1	6	1	14	10	....	....
60 to 64 years..	2	....	22	6	....	....	....	....	....	....	....	....	2	4	....	....	9	4	7	15	....	....
65 to 69 years..	....	....	20	5	....	....	....	....	....	....	....	....	....	2	....	....	9	....	5	7	....	....
70 to 74 years..	....	1	3	2	....	....	....	....	....	....	1	....	1	....	....	....	6	3	4	4	....	....
75 to 79 years..	....	1	6	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	2	5	....	....
80 to 84 years..	....	1	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	4	....	....
85 yrs. and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
Colored.....	....	....	13	7	....	....	....	....	1	1	1	1	9	6	1	1	3	1	23	14	23	11
Chinese.....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Diseases of Nervous System and Organs of Sense—*Continued.*																					
	64 Apoplexy Cerebral Hemorrhage.		65 Softening of Brain.		66 Paralysis Unspecified.		67 General Paresis.		68 Other Forms of Insanity.		69 Epilepsy.		70 Convulsions (not Puerperal).		71 Convulsions of Infants.		72 Chorea.		73A Hysteria.		73B Neuralgia and Neuritis.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	804		14		41		285		85		119		2		70		13		3		29	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	421	383	8	6	16	25	211	74	40	45	69	50	....	2	35	35	4	9	....	3	13	16
Under 1 year...	....	2	....	....	....	....	....	....	....	....	1	....	....	1	27	30	....	....	....	....	....	....
1 year.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8	4	....	....	....	....	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
4 years.....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	1	....	....	....	....
T't'l, under 5 yrs	....	2	....	....	....	....	....	....	....	....	3	....	....	1	35	35	....	1	....	....	....	1
5 to 9 years....	....	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....	2	2	....	....	1	....
10 to 14 years..	....	1	....	....	....	....	....	....	....	....	5	4	....	....	....	....	1	1	....	....	....	....
15 to 19 years..	....	....	....	....	....	....	1	2	3	4	6	7	....	....	....	....	1	1	....	....	....	....
20 to 24 years..	2	....	....	....	....	....	....	....	7	3	14	8	....	....	....	....	....	1	....	....	....	1
25 to 29 years..	3	3	....	....	....	....	5	3	1	5	5	4	....	....	....	....	....	....	....	....	3	....
30 to 34 years..	11	7	....	....	....	....	25	4	7	4	8	8	....	....	....	....	....	....	....	....	1	2
35 to 39 years..	18	7	1	....	....	....	36	5	4	6	11	4	....	....	....	....	....	....	....	2	....	4
40 to 44 years..	27	18	1	....	1	....	30	11	3	4	2	4	....	....	....	....	....	2	....	....	2	5
45 to 49 years..	31	16	....	1	1	....	35	8	3	5	5	....	....	....	....	....	....	....	....	1	2	....
50 to 54 years..	48	26	....	....	....	1	28	6	4	5	4	3	....	1	....	....	....	....	....	....	....	3
55 to 59 years..	60	50	1	....	1	5	18	15	3	2	1	1	....	....	....	....	....	....	....	....	2	....
60 to 64 years..	51	48	1	1	3	1	14	3	2	4	1	5	....	....	....	....	....	1	....	....	....	....
65 to 69 years..	50	55	....	1	1	2	4	7	1	1	1	2	....	....	....	....	....	....	....	....	....	....
70 to 74 years..	46	56	....	....	4	4	9	3	1	2	....	....	....	....	....	....	....	....	....	....	1	....
75 to 79 years..	39	44	1	....	2	4	4	3	1	....	1	....	....	....	....	....	....	....	....	....	1	....
80 to 84 years..	27	30	2	1	2	5	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....
85 yrs. and over	8	20	1	2	1	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colored.....	13	13	....	....	1	....	6	4	1	....	3	2	....	....	....	4	....	....	....	....	....	....
Chinese.....	2	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Diseases of Nervous System and Organs of Sense.										Diseases of Circulatory System.											
	74 Other Nervous Diseases.		75A Follicular Conjunctivitis.		75B Trachoma		75C Other Diseases of Eye and Appendages.		76 Diseases of Ear.		77 Pericarditis.		78 Acute Endocarditis		79 Organic Heart Disease		80 Angina Pectoris.		81 Diseases of of Arteries Aneurism, etc.		82 Embolism Thrombosis.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	196		3		..		2		184		44		400		10,687		228		2.661		86	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	116	80	1	2	....	....	1	1	173	111	26	18	211	189	5,280	5,407	150	78	1,344	1 317	41	42
Under 1 year...	14	4	....	....	....	....	....	....	31	21	....	....	7	8	18	12	....	....	....	....	....	....
1 year.....	9	11	....	....	....	....	....	....	15	8	1	1	4	2	3	5	....	....	....	....	....	....
2 years.....	8	6	....	....	....	....	....	1	7	4	....	....	5	1	6	5	....	....	....	....	....	....
3 years.....	6	4	....	....	....	....	....	....	4	2	....	....	7	3	6	9	....	....	....	....	....	....
4 years.....	3	3	....	....	....	....	1	....	3	2	....	....	3	3	11	9	....	....	....	....	1	....
T'tl,under5y'rs.	37	28	....	....	....	....	1	1	60	37	1	1	26	17	44	40	....	....	....	....	1	....
5 to 9 years....	11	2	....	....	....	....	....	....	6	12	2	3	14	9	66	99	....	....	....	....	1	....
10 to 14 years..	6	2	....	....	....	....	....	....	7	11	1	1	12	13	71	107	....	....	....	....	1	1
15 to 19 years..	6	5	....	....	....	....	....	....	16	6	1	1	17	10	95	89	....	....	....	1	....	....
20 to 24 years ..	2	3	....	....	....	....	....	....	12	6	....	....	21	18	102	109	1	....	3	2	1	3
25 to 29 years..	6	4	....	....	....	....	....	....	10	3	2	3	23	10	116	136	....	1	7	2	4	2
30 to 34 years..	5	3	....	....	....	....	....	....	9	2	....	....	12	12	153	165	1	1	6	7	2	1
35 to 39 years..	5	7	....	1	....	....	....	....	8	8	3	1	8	16	229	208	2	2	15	10	....	1
40 to 44 years..	9	12	....	....	....	....	....	....	9	2	3	1	11	15	307	279	9	3	40	23	2	4
45 to 49 years..	9	5	....	....	....	....	....	....	10	7	3	....	16	15	443	338	9	1	80	58	3	2
50 to 54 years..	6	7	....	....	....	....	....	....	8	4	3	3	17	12	567	420	18	6	109	92	6	4
55 to 59 years..	6	1	....	....	....	....	....	....	8	1	3	1	13	11	571	497	23	11	146	114	5	3
60 to 64 years..	4	1	....	....	....	....	....	....	3	5	2	1	9	5	618	598	23	11	204	164	1	4
65 to 69 years..	1	....	....	1	....	....	....	....	6	2	....	....	5	11	579	632	20	13	203	183	6	6
70 to 74 years..	3	....	....	....	....	....	....	....	1	3	2	2	6	4	564	641	22	15	206	204	3	5
75 to 79 years..	....	....	1	....	....	....	....	....	....	1	....	....	1	6	385	508	13	7	152	190	4	2
80 to 84 years..	....	....	....	....	....	....	....	....	....	1	....	....	....	5	235	327	8	4	86	162	1	4
85 yrs. and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	135	214	1	3	87	105	3	....
Colored.....	1	1	....	....	....	....	....	....	7	1	3	....	5	4	153	191	1	....	26	34	1	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	4	1	....	....	3	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Circulatory System—*Continued.*						Diseases of Respiratory System.															
	83 Diseases of Veins (Hæmorrhoids, Varices, Phlebitis, etc.)		84 Diseases of Lymphatics (Lymphangitis, etc.)		85 Hæmorrhage.		86 Diseases of Nasal Fossæ.		87 Diseases of Larynx.		88 Diseases of Thyroid Glands.		89 Acute Bronchitis.		90 Chronic Bronchitis.		91 Broncho Pneumonia.		92 Lobar Pneumonia.		93 Pleurisy.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	59		39		6		12		29		20		813		181		4,438		6,130		188	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	33	26	24	15	4	2	9	3	16	13	3	17	406	407	85	96	2,323	2,115	3,672	2,458	122	66
Under 1 year...	....	....	14	7	1	....	1	....	1	2	....	....	276	215	2	1	978	811	353	231	9	6
1 year.....	....	....	2	2	....	....	1	....	2	2	....	....	48	57	4	....	466	376	218	189	19	7
2 years.....	....	....	....	....	....	....	....	1	1	....	....	1	13	10	....	....	118	140	94	78	3	5
3 years.....	....	....	....	1	....	....	....	....	....	....	....	....	6	6	....	....	45	45	50	35	5	2
4 years.....	....	....	....	....	....	....	....	....	2	....	....	....	....	1	....	....	28	22	22	33	1	....
T'tl, under 5 y'rs.	....	....	16	10	1	....	2	1	6	4	....	1	343	289	6	1	1,635	1,394	737	566	37	20
5 to 9 years....	....	....	....	....	....	....	....	1	3	2	....	....	3	6	....	....	37	52	58	65	5	2
10 to 14 years..	....	....	....	1	....	....	....	....	....	....	....	....	....	2	....	....	13	9	24	31	1	2
15 to 19 years..	1	....	....	1	....	....	1	....	....	1	....	....	....	1	....	....	13	7	77	40	3	1
20 to 24 years..	1	....	....	....	1	....	....	....	....	....	1	2	....	2	....	....	6	11	100	71	2	1
25 to 29 years..	2	2	5	....	....	....	2	....	....	1	....	2	....	1	1	1	13	19	161	98	5	3
30 to 34 years..	3	....	....	....	....	....	1	1	....	1	....	1	1	2	1	1	23	10	218	104	1	2
35 to 39 years..	....	3	1	....	....	....	....	....	....	1	....	4	....	1	1	....	33	27	299	119	8	2
40 to 44 years..	6	1	1	....	....	1	....	....	....	1	1	2	1	1	2	1	29	24	299	146	9	3
45 to 49 years..	3	4	....	....	....	....	....	....	1	2	....	....	3	2	5	4	39	29	336	142	15	2
50 to 54 years..	3	5	1	1	....	....	1	....	1	....	1	2	4	1	8	3	57	56	337	164	15	7
55 to 59 years..	2	3	....	....	....	1	1	....	1	....	....	1	4	6	8	3	66	51	274	167	9	4
60 to 64 years..	6	2	....	....	....	....	1	....	1	....	....	1	6	12	14	15	71	86	231	174	6	5
65 to 69 years..	2	4	....	1	2	....	....	....	2	....	....	....	6	14	10	11	87	72	199	190	4	3
70 to 74 years..	1	....	....	1	....	....	....	....	1	....	....	....	7	12	11	18	81	88	149	154	1	3
75 to 79 years..	1	1	....	....	....	....	....	....	....	....	....	1	18	15	8	18	56	74	100	128	1	3
80 to 84 years..	....	1	....	....	....	....	....	....	....	....	....	....	7	20	5	12	33	58	48	63	....	3
85 yrs. and over	2	....	....	....	....	....	....	....	....	....	....	....	3	20	5	8	31	48	25	36	....	....
Colored.....	1	1	1	....	....	....	....	....	....	1	....	....	16	14	1	1	86	74	156	87	3	1
Chinese.....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Diseases of Respiratory System.										Diseases of Digestive System.											
	94 Congestion of Lungs Pulmonary Apoplexy.		95 Gangrene of Lung.		96 Asthma.		97 Pulmonary Emphysaemia.		98 Other Diseases of Respiratory System.		99A Diseases of Teeth and Gums.		99B Other Diseases of Mouth.		100 Angina and Other Diseases of Pharynx.		101 Diseases of Œsophagus.		102 Ulcer of the Stomach.		103 Other Diseases of Stomach (Cancer excepted).	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	39		6		94		21		37		26		8		137		6		343		130	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.
Total, by sexes.	15	24	6	....	46	48	11	10	29	8	12	14	5	3	81	53	2	4	233	110	71	59
Under 1 year...	1	4	....	....	....	....	....	....	....	....	1	3	2	....	16	11	....	....	2	3	23	12
1 year.....	....	....	....	....	1	1	....	1	....	....	1	....	....	....	5	4	....	....	....	....	2	5
2 years.....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	7	4	....	1	....	....	3	2
3 years.....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	7	2	....	....	....	....	3	....
4 years.....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	3	1	....	....	....	....	1	....
T'tl, under 5 y'rs.	1	4	....	....	2	2	....	1	1	....	3	4	2	....	38	22	....	1	2	3	32	19
5 to 9 years....	....	....	....	....	1	....	....	....	1	1	....	....	....	....	5	3	....	....	....	....	2	....
10 to 14 years..	....	....	1	....	....	....	....	....	1	....	....	....	....	....	4	3	....	....	....	2	....	....
15 to 19 years..	1	....	....	....	....	....	....	....	1	....	....	....	....	1	4	1	....	....	4	1	1	....
20 to 24 years..	2	....	2	....	....	....	....	....	....	1	....	....	....	....	5	6	....	....	5	5	3	1
25 to 29 years..	....	1	....	....	1	2	....	....	3	....	1	2	....	....	....	5	....	....	29	5	1	1
30 to 34 years..	1	....	....	....	....	5	....	....	3	....	....	1	....	....	3	....	....	....	23	10	1	1
35 to 39 years..	....	....	....	....	....	1	....	1	3	1	....	....	....	....	6	1	....	....	24	11	1	1
40 to 44 years..	2	....	1	....	5	4	....	....	3	2	2	2	....	....	5	....	....	....	45	16	3	5
45 to 49 years..	....	1	....	....	2	2	1	....	4	1	....	3	2	....	5	1	....	....	27	11	7	2
50 to 54 years..	....	....	1	....	4	2	....	2	2	....	3	....	....	....	2	2	1	1	31	13	4	1
55 to 59 years..	....	1	....	....	10	5	2	2	3	1	....	1	....	....	....	2	....	....	15	10	....	5
60 to 64 years..	1	1	....	....	1	7	2	1	1	....	....	....	....	....	4	3	....	....	13	10	3	6
65 to 69 years..	....	1	1	....	2	3	2	1	....	1	3	....	1	1	1	....	1	1	8	6	4	1
70 to 74 years..	2	5	....	....	3	8	2	1	....	....	....	....	....	1	....	3	....	1	3	2	4	2
75 to 79 years..	1	2	....	....	7	3	1	....	1	....	....	1	....	....	....	1	....	....	2	2	3	5
80 to 84 years..	1	3	....	....	5	3	....	1	....	....	....	....	....	....	2	....	....	....	2	2	2	4
85 yrs. and over	3	5	....	....	3	1	1	....	2	....	....	....	....	....	....	....	....	....	....	1	....	5
Colored.....	2	1	....	....	1	1	....	....	3	....	....	....	1	....	6	1	....	....	4	5	1	1
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH 1916.—Continued.

	Diseases of Digestive System—*Continued.*																					
	104 Diarrhoea and Enteritis (under 2 years).		105 Diarrhoea and Enteritis (2 years and over).		106 Ankylostomiasis.		107 Intestinal Parasites.		108 Appendicitis and Typhlitis.		109 Hernia, Intestinal Obstruction.		110A Diseases of Anus and Stercoral Fistulae.		110B Other Diseases of Intestines.		111 Acute Yellow Atrophy of Liver.		112 Hydatid Tumor of Liver.		113 Cirrhosis of Liver.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	2,851		443		1		6		697		595		25		55		7		3		644	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	1,555	1,296	236	207	1	....	3	3	423	274	280	315	17	8	31	24	3	4	3	....	424	220
Under 1 year...	1,349	1,086	....	....	....	....	....	....	....	1	46	22	....	1	3	1	1	....	....	....	....	2
1 year.....	206	210	....	....	....	....	....	1	1	2	7	3	1	....	3	....	....	....	....	....	....	....
2 years.....	....	....	68	58	....	....	....	....	8	4	3	1	....	....	2	....	....	....	....	....	....	....
3 years.....	....	....	31	18	....	....	....	....	7	7	1	4	....	....	....	....	....	....	....	....	1	....
4 years.....	....	....	16	11	....	....	....	....	9	5	1	1	....	....	1	....	....	....	....	....	....	1
T't'l, under 5 y'rs	1,555	1,296	115	87	....	....	....	1	25	19	58	31	1	1	9	1	1	....	....	....	1	3
5 to 9 years....	....	....	17	19	....	....	....	1	31	20	3	3	....	....	....	....	....	....	....	....	....	....
10 to 14 years..	....	....	4	5	....	....	....	....	46	19	1	....	....	....	....	....	....	....	....	....	....	....
15 to 19 years..	....	....	2	3	....	....	....	....	33	27	4	2	....	....	....	1	1	1	....	....	1	2
20 to 24 years..	....	....	3	4	....	....	....	....	28	31	8	1	....	....	....	....	....	2	....	....	3	....
25 to 29 years..	....	....	6	1	1	....	....	....	37	28	7	8	2	1	2	1	....	....	....	....	6	5
30 to 34 years..	....	....	6	7	....	....	2	....	34	28	11	10	1	1	1	1	....	....	....	....	12	14
35 to 39 years..	....	....	4	2	....	....	1	1	32	26	15	15	....	....	2	4	....	....	1	....	19	21
40 to 44 years..	....	....	10	5	....	....	....	....	38	14	16	18	1	1	3	....	....	1	....	....	46	24
45 to 49 years..	....	....	4	9	....	....	....	....	33	15	24	27	2	2	1	1	....	....	1	....	67	43
50 to 54 years..	....	....	4	8	....	....	....	....	30	15	27	29	2	....	5	2	1	....	....	....	72	23
55 to 59 years..	....	....	8	4	....	....	....	....	23	10	15	37	1	1	....	2	....	....	....	....	69	27
60 to 64 years..	....	....	8	8	....	....	....	....	16	9	20	39	2	1	3	2	....	....	....	....	52	20
65 to 69 years..	....	....	7	11	....	....	....	....	6	5	17	29	1	....	1	1	....	....	1	....	31	19
70 to 74 years..	....	....	19	12	....	....	....	....	8	3	27	32	2	....	1	2	....	....	....	....	24	9
75 to 79 years..	....	....	5	8	....	....	....	....	3	1	15	12	1	....	2	4	....	....	....	....	14	5
80 to 84 years..	....	....	10	9	....	....	....	....	....	3	9	14	1	....	1	2	....	....	....	....	6	4
85 yrs. and over	....	....	4	5	....	....	....	....	....	1	3	8	....	....	....	....	....	....	....	....	1	1
Colored.....	59	45	5	9	....	....	....	....	11	10	8	....	....	1	1	1	1	....	....	....	2	2
Chinese.....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916—Continued.

	Diseases of Digestive System—*Continued.*										Diseases of Genito Urinary System.											
	114 Biliary Calculi.		115 Other Diseases of Liver.		116 Diseases of Spleen.		117 Simple Peritonitis (Non-Puerperal).		118 Other Diseases of Digestive System (except Tuberculosis and Cancer).		119 Acute Nephritis.		120 Bright's Disease.		121 Chyluria.		122 Other Diseases of the Kidneys and Appendages.		123 Calculi of Urinary Tract.		124 Diseases of Bladder.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	110		205		8		47		62		434		6,112		1		119		49		51	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F
Total, by sexes	39	101	87	118	4	4	17	30	31	31	218	216	3,163	2,949	....	1	70	49	37	12	40	14
Under 1 year...	....	....	3	1	1	....	6	2	....	....	16	22	2	3	....	....	4	5	....	....	1	....
1 year.....	....	....	....	....	....	....	1	....	....	1	5	4	1	2	....	....	1	1	....	....	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	4	2	....	2	....	....	....	1	....	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	2	1	2	2	....	....	....	1	....	....	....	....
4 years.....	....	....	....	....	....	....	....	....	....	....	1	....	2	3	....	....	....	....	....	....	....	....
T'tl, under 5 y'rs.	....	....	3	1	1	....	7	2	....	1	28	29	7	12	....	....	5	8	....	....	1	....
5 to 9 years....	....	....	..	....	....	....	....	3	....	1	9	7	9	10	....	1	....	....	....	....	....	....
10 to 14 years..	....	....	1	....	1	....	....	....	2	....	3	7	5	12	....	....	....	....	....	....	....	....
15 to 19 years	....	....	..	....	....	....	....	1	....	....	9	7	11	12	....	....	4	1	1	....	....	1
20 to 24 years..	....	1	3	3	....	....	1	5	....	3	9	17	34	36	....	....	4	5	1	1	1	....
25 to 29 years..	1	1	4	3	..	....	..	3	1	2	7	13	63	64	....	....	3	2	2	1	1	..
30 to 34 years..	3	5	11	8	1	1	1	4	1	4	22	16	113	87	....	....	8	1	1	1	....	1
35 to 39 years..	2	14	7	10	....	1	1	4	9	1	21	17	146	144	....	....	4	6	6	3	....	1
40 to 44 years..	5	6	5	18	..	1	2	1	4	3	11	12	266	190	....	....	3	3	6	2	1	1
45 to 49 years..	1	13	12	8	....	1	....	1	5	6	24	13	306	249	....	....	9	3	2	2	4	..
50 to 54 years..	5	15	10	11	1	....	4	1	4	3	13	15	363	306	....	....	6	4	5	1	1	..
55 to 59 years..	7	22	5	16	..	....	....	....	2	2	23	15	399	316	....	....	7	6	4	....	2	2
60 to 64 years..	4	7	13	7	....	....	....	1	1	2	14	13	422	329	....	....	6	1	3	....	2	1
65 to 69 years..	3	8	6	16	....	....	1	2	....	2	10	17	328	337	....	....	4	4	2	....	10	2
70 to 74 years..	3	5	2	8	....	....	....	1	1	1	5	7	292	327	....	....	2	4	4	....	2	3
75 to 79 years..	5	3	3	4	....	....	....	1	....	....	5	7	213	254	....	....	3	....	....	1	6	....
80 to 84 years..	....	1	2	3	....	....	....	....	1	....	2	2	123	163	....	....	2	1	....	....	5	2
85 yrs. and over	....	....	....	2	....	....	....	....	....	....	3	2	63	101	....	....	....	....	....	....	4	....
Colored.....	....	....	1	2	....	....	1	3	3	....	12	8	74	105	....	....	2	2	1	....	....	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	12	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Diseases of Genito Urinary System—*Continued.*																				Puerperal Diseases.	
	125 Diseases of Urethra, Urinary Abscess, &c.		126 Diseases of the Prostate.		127 Non-Venereal Diseases of Male Genital Organs.		128 Uterine Hæmorrhage (not Puerperal).		129 Uterine Tumor (not Cancer).		130A Metritis.		130B Other Diseases of Uterus.		131 Ovarian Cysts and Tumors.		132 Salpingitis and Other Diseases of Female Genital Organs.		133 Diseases of Breast (not Puerperal or Cancer).		134 Accidents of Pregnancy.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes	
Total. all ages..	31		176		15		....		131		17		17		41		82		3		78	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	31	....	176	....	15	....	....	....	....	131	....	17	....	17	....	41	....	82	1	2	....	78
Under 1 year...	....	....	....	....	11	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	....	....
1 year.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
T't'l under 5 y'rs	....	....	....	....	11	....	....	....	....	....	....	....	....	....	....	1	....	1	1	1	....	....
5 to 9 years....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....
10 to 14 years..	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	2	....	....	....	3
15 to 19 years..	....	....	....	....	....	....	....	....	1	....	....	2	....	3	....	3	....	13	....	1	....	11
20 to 24 years..	1	....	....	....	1	....	....	....	1	....	....	....	....	2	....	1	....	22	....	....	....	27
25 to 29 years..	....	....	1	....	....	....	....	....	6	....	....	3	....	1	....	6	....	16	....	....	....	21
30 to 34 years..	2	....	....	....	....	....	....	....	10	....	3	2	....	4	....	7	....	14	....	....	....	12
35 to 39 years..	2	....	....	....	....	....	....	....	27	....	2	2	....	2	....	4	....	10	....	....	....	4
40 to 44 years..	4	....	....	....	....	....	....	....	38	....	2	1	....	2	....	3	....	3	....	....	....	....
45 to 49 years..	5	....	4	....	....	....	....	....	27	....	2	1	....	1	....	4	....	....	....	....	....	....
50 to 54 years..	4	....	11	....	1	....	....	....	11	....	1	1	....	....	....	7	....	....	....	....	....	....
55 to 59 years..	6	....	11	....	....	....	....	....	6	....	1	....	....	1	....	1	....	....	....	....	....	....
60 to 64 years..	2	....	28	....	....	....	....	....	2	....	1	....	....	....	....	1	....	....	....	....	....	....
65 to 69 years..	4	....	35	....	1	....	....	....	1	....	....	....	....	1	....	2	....	....	....	....	....	....
70 to 74 years..	1	....	30	....	....	....	....	....	1	....	1	....	....	....	....	1	....	....	....	....	....	....
75 to 79 years..	....	....	29	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
80 to 84 years..	....	....	16	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
85 y'rs and over	....	....	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colored.....	2	....	1	....	....	....	....	....	....	13	....	....	....	1	....	3	....	8	....	....	....	4
Chinese.....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	..	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Puerperal Diseases—*Continued.*																		Diseases of Skin and Cellular Tissue.			
	135 Puerperal Hæmorrhage.		136 Other Accidents of Labor.		137 Puerperal Septicæmia.		138 Puerperal Albuminuria and Convulsions.		139A Puerperal Phelgmasia Alba Dolens.		139B Puerperal Embolism and Sudden Death.		140A Sequel of Delivery.		140B Puerperal Insanity.		141 Puerperal Diseases of Breast.		142 Gangrene.		143 Carbuncle.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	85		69		221		158		26		14		14		....		1		74		47	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	....	85	....	69	....	221	....	158	....	26	....	14	....	1	....	....	....	1	39	35	33	14
Under 1 year...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	3
1 year.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....
2 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
T't'l under 5 y'rs	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	1	3
5 to 9 years....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....
10 to 14 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
15 to 19 years..	....	1	....	2	....	19	....	14	....	2	....	....	....	....	....	....	....	....	1	....	1	....
20 to 24 years..	....	12	....	10	....	48	....	49	....	7	....	4	....	....	....	....	....	....	....	....	2	1
25 to 29 years..	....	22	....	20	....	70	....	35	....	6	....	7	....	....	....	....	....	....	....	....	2	....
30 to 34 years..	....	24	....	18	....	47	....	31	....	2	....	3	....	1	....	....	....	1	....	....	3	2
35 to 39 years..	....	19	....	12	....	24	....	20	....	7	....	....	....	....	....	....	....	....	....	....	5	....
40 to 44 years..	....	7	....	7	....	12	....	6	....	1	....	....	....	....	....	....	....	....	2	1	3	2
45 to 49 years..	....	....	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	....	1	1	7	1
50 to 54 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5	....	1	....
55 to 59 years..	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	4	3	2	1
60 to 64 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	2	....	1
65 to 69 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	2	2	....
70 to 74 years .	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10	6	2	1
75 to 79 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	7	1	....
80 to 84 years..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	8	....	1
85 y'rs and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	3	1	1
Colored.....	....	1	....	1	....	12	....	6	....	....	....	1	....	....	....	....	....	1	1	....	....	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Diseases of Skin and Cellular Tissue—*Cont.*				Diseases of Locomotory System.						Malformations.		Diseases of Infancy.							
	144 Phlegmon, Acute Abscess.		145 Other Diseases of Skin and Adnexa.		146 Diseases of Bones (Non-Tuberculous).		147 Arthritis. Other Diseases of Joints (except Tuberculosis and Rheumatism)		148 Amputation.		149 Other Diseases of Organs of Locomotion.		150 Congenital Malformations		151 Congenital Debility. Icterus and Sclerema.		152 Other Diseases Peculiar to Infancy (of which)		152A Injury During Birth.		153 Neglect.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes	
Total. all ages..	126		43		86		21		....		4		707		3,482		1,105		432		1	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes..	83	43	20	23	60	26	12	9	....	....	3	1	390	317	1,948	1,534	656	449	251	181	1	....
Under 1 year...	15	16	9	8	3	....	2	1	....	....	....	....	353	289	1,948	1,534	656	449	251	181	....	....
1 year.....	4	3	1	1	....	2	....	....	....	....	....	....	18	9	....	....	....	....	....	....	1	....
2 years.....	1	1	....	....	5	5	....	....	....	....	....	....	5	4	....	....	....	....	....	....	....	....
3 years.....	....	1	....	....	5	....	....	....	....	....	....	....	3	2	....	....	....	....	....	....	....	....
4 years.....	1	1	....	....	2	3	1	....	....	....	....	....	1	3	....	....	....	....	....	....	....	....
T'tl under 5 y'rs	21	22	10	9	15	10	3	1	....	....	....	....	380	307	1,948	1,534	656	449	251	181	1	....
5 to 9 years....	....	1	....	....	8	1	1	1	....	....	....	....	6	7	....	....	....	....	....	....	....	....
10 to 14 years..	....	....	....	....	5	1	1	....	....	....	....	....	2	1	....	....	....	....	....	....	....	....
15 to 19 years..	2	....	....	....	7	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
20 to 24 years..	4	2	2	....	4	2	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....
25 to 29 years..	1	....	....	1	1	3	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
30 to 34 years..	8	2	1	....	....	3	1	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....
35 to 39 years..	7	....	1	....	3	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....
40 to 44 years..	8	2	1	2	4	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
45 to 49 years..	7	5	1	....	2	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
50 to 54 years..	4	....	....	3	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
55 to 59 years..	1	3	1	1	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
60 to 64 years..	9	....	1	2	....	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....
65 to 69 years..	3	1	....	2	5	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
70 to 74 years..	2	2	....	....	1	....	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....
75 to 79 years..	2	1	2	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
80 to 84 years..	3	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
85 y'rs and over	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colored.....	2	1	2	....	1	....	....	1	....	....	....	....	4	4	64	70	22	16	5	4	....	....
Chinese.....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Old Age.		External Causes.																			
	154		155		156		157		158		159		160		161		162		163		164	
	Senile Debility.		Suicide by Poison.		Suicide by Asphyxia.		Suicide by Hanging or Strangulation.		Suicide by Submersion.		Suicide by Firearms.		Suicide by Cutting Instruments.		Suicide by Precipitation from Height.		Suicide by Crushing.		Suicide by Other Methods.		Poisoning by Food.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	317		81		353		84		22		115		57		112		8		4		23	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total by sexes.	91	226	49	32	223	130	74	10	17	5	102	13	53	4	62	50	5	3	2	2	11	12
Under 1 year...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....
1 year.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
3 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4 years.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
T't'l under 5 y'rs	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	2
5 to 9 years....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1
10 to 14 years..	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
15 to 19 years ..	....	....	....	....	6	6	2	....	....	1	3	....	....	....	1	2	....	....	....	....	....	....
20 to 24 years..	....	....	6	7	6	9	3	....	2	....	6	1	1	....	2	9	1	....	....	....	1	....
25 to 29 years..	....	....	7	6	20	14	3	1	1	1	12	1	4	....	9	7	2	....	....	1	....	1
30 to 34 years ..	....	....	6	6	17	12	7	1	3	....	13	3	6	1	9	4	....	2	....	....	....	....
35 to 39 years..	....	....	5	4	26	16	7	1	....	....	12	1	12	1	9	9	....	....	....	....	2	4
40 to 44 years..	....	....	3	2	20	11	12	2	1	2	9	4	12	2	9	6	2	1	....	....	1	1
45 to 49 years ..	....	....	9	1	25	10	9	....	2	....	10	2	4	....	6	1	....	....	....	....	....	....
50 to 54 years..	....	....	4	2	29	12	6	1	....	....	9	....	3	....	6	5	....	....	....	1	1	2
55 to 59 years..	....	2	4	3	27	12	10	2	1	1	14	1	7	....	3	....	....	....	1	....	....	....
60 to 64 years..	4	2	4	....	21	14	4	....	2	....	8	....	1	....	2	2	....	....	....	....	....	1
65 to 69 years..	2	12	1	1	10	5	3	1	3	....	3	....	1	....	3	3	....	....	1	....	....	....
70 to 74 years..	15	27	....	....	9	3	7	1	....	....	1	....	....	....	3	1	....	....	....	....	1	....
75 to 79 years..	19	37	....	....	3	1	....	....	1	....	2	....	1	....	....	....	....	....	....	....	....	....
80 to 84 years..	24	66	....	....	2	2	1	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....
85 y'rs and over	27	80	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colored.....	1	2	1	....	....	1	....	....	....	....	2	....	....	....	1	2	....	....	....	....	1	1
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

EXTERNAL CAUSES—*Continued.*

	165A Bites of Venomous Animals.		165B Other Acute Poisonings.		166 Conflagrations.		167 Burns and Scalds.		168 Absorption of Deleterious Gases.		169 Accidental Submersion.		170 Pistol and Gunshot Wound.		171 Cuts and Stabs.		172 Deaths by Falls.		173 Deaths in Mines and Quarries.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	....		64		76		428		429		482		10		20		1,147		....	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	....	....	39	25	32	44	190	238	284	145	455	27	8	2	16	4	858	289	....	....
Under 1 year...	....	....	4	1	1	....	10	7	18	15	2	....	....	....	....	....	7	5	....	....
1 year.....	....	....	2	4	2	2	35	37	1	....	2	....	....	....	....	....	21	11	....	....
2 years.....	....	....	....	1	....	1	26	27	....	....	....	....	1	1	....	....	25	18	....	....
3 years.....	....	....	1	1	....	1	17	23	....	2	1	1	....	....	....	....	17	11	....	....
4 years.....	....	....	....	....	....	2	24	21	1	....	1	1	....	....	....	....	13	4	....	....
T't'l under 5 y'rs	....	....	7	7	3	6	112	115	20	17	6	2	1	1	....	....	83	49	....	....
5 to 9 years....	....	....	2	1	2	4	13	41	4	3	22	1	1	....	1	....	55	18	....	....
10 to 14 years..	....	....	....	1	1	....	2	5	2	2	37	1	1	1	2	....	36	4	....	....
15 to 19 years..	....	....	2	3	3	5	2	4	8	4	35	4	1	....	2	....	16	3	....	....
20 to 24 years..	....	....	12	....	2	5	6	1	15	7	50	2	1	....	....	....	35	5	....	....
25 to 29 years..	....	....	1	3	2	4	5	6	13	12	34	1	....	....	2	....	54	9	....	....
30 to 34 years..	....	....	3	2	6	3	8	6	24	10	40	5	2	....	2	....	71	9	....	....
35 to 39 years..	....	....	5	2	2	3	7	7	28	10	62	2	....	....	1	1	89	7	....	....
40 to 44 years..	....	....	1	2	1	1	8	3	24	10	50	4	....	....	2	....	78	16	....	....
45 to 49 years..	....	....	1	1	3	1	7	7	30	5	38	1	....	....	3	2	73	10	....	....
50 to 54 years..	....	....	....	1	2	1	6	10	30	8	35	3	....	....	....	....	78	16	....	....
55 to 59 years..	....	....	1	....	....	4	3	4	25	13	23	....	1	....	....	....	53	21	....	....
60 to 64 years..	....	....	2	1	1	2	4	12	17	12	12	....	....	....	1	1	39	21	....	....
65 to 69 years..	....	....	1	....	....	1	4	5	13	13	2	....	....	....	....	....	32	30	....	....
70 to 74 years..	....	....	1	1	1	2	1	8	13	5	5	1	....	....	....	....	28	22	....	....
75 to 79 years..	....	....	....	....	2	2	2	3	13	9	1	....	....	....	....	....	9	22	....	....
80 to 84 years..	....	....	....	....	1	....	....	1	4	3	1	....	....	....	....	....	20	17	....	....
85 y'rs and over	....	....	....	....	....	....	....	....	1	2	2	....	....	....	....	....	9	10	....	....
Colored.....	....	....	....	2	4	4	3	6	13	2	13	2	....	....	1	....	26	7	....	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	External Causes—*Continued.*																			
	174 Deaths by Machinery.		175 Deaths by Other Crushing Agencies, Wagons, &c.		176 Deaths by Animals not Snakebites, Hydrophobia or Stings.		177A Physical Exhaustion.		177B Hunger and Thirst.		178 Excessive Cold.		179 Sunstroke.		180 Lightning.		181 Other Electrical Accidents.		182 Homicides by Firearms.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	49		922		19		....		....		6		58		3		29		113	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	47	2	780	112	18	1	....	....	....	....	5	1	42	16	3	....	29	....	98	15
Under 1 year...	....	....	1	4	....	....	....	....	....	....	....	....	4	3	....	....	....	....	....	....
1 year.....	....	....	4	2	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....
2 years.....	....	....	3	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
3 years.....	....	....	13	15	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1
4 years.....	....	....	17	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
T't'l under 5 y'rs	....	....	38	29	1	....	....	....	....	....	....	....	7	4	....	....	....	....	....	....
5 to 9 years....	2	....	132	29	2	1	....	....	....	....	....	....	1	....	....	....	2	....	....	....
10 to 14 years..	....	....	52	7	1	....	....	....	....	....	....	....	1	....	3	....	3	....	1	....
15 to 19 years..	6	1	33	1	3	....	....	....	....	....	....	....	....	1	....	....	2	....	3	2
20 to 24 years..	6	....	61	8	2	....	....	....	....	....	....	....	1	....	....	....	1	....	18	4
25 to 29 years..	4	....	69	7	....	....	....	....	....	....	....	....	3	....	....	....	7	....	26	4
30 to 34 years..	3	1	51	2	2	....	....	....	....	....	....	....	5	1	....	....	4	....	19	1
35 to 39 years..	7	....	62	8	3	....	....	....	....	....	1	....	6	2	....	....	3	....	10	....
40 to 44 years..	4	....	76	6	....	....	....	....	....	....	....	....	3	....	....	....	1	....	14	2
45 to 49 years..	7	....	52	9	....	....	....	....	....	....	....	....	3	1	....	....	3	....	1	....
50 to 54 years..	2	....	48	11	....	....	....	....	....	....	....	....	5	3	....	....	2	....	5	1
55 to 59 years..	2	....	35	8	4	....	....	....	....	....	2	1	5	....	....	....	....	....	1	....
60 to 64 years..	4	....	20	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
65 to 69 years..	....	....	26	5	....	....	....	....	....	....	1	....	1	....	....	....	1	....	....	....
70 to 74 years..	....	....	14	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
75 to 79 years..	....	....	5	4	....	....	....	....	....	....	1	....	1	1	....	....	....	....	....	....
80 to 84 years..	....	....	5	1	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....
85 y rs and over	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
Colored.....	4	....	20	6	1	....	....	....	....	....	....	....	....	....	....	....	1	....	10	1
Chinese.....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	External Causes—*Continued.*														Ill Defined Causes.					
	183 Homicides by Cutting or Piercing Instruments.		184 Homicides by Other Methods.		185 Dislocation and Fractures.		186A Criminal Abortion.		186B Foreign Body in Larynx.		186C Explosions.		186D Other External Violences.		187 Organic Lesions Not Defined.		188 Sudden Death.		189 Ill Defined Causes.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	37		106		73		42		24		25		39		....		....		46	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	31	6	81	25	58	15	....	42	16	8	24	1	28	11	....	....	....	....	28	18
Under 1 year...	....	....	14	11	1	....	....	....	2	3	....	....	1	2	....	....	....	....	1	1
1 year.....	....	....	....	....	....	....	....	....	5	....	....	....	2	....	....	....	....	....	17	12
2 years.....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	4	3
3 years.....	....	....	....	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	1	....
4 years.....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	1	....
T't'l under 5 y'rs	....	....	14	11	2	1	....	....	8	5	....	....	4	3	....	....	....	....	24	16
5 to 9 years....	....	....	1	....	1	....	....	....	2	....	....	....	....	....	....	....	....	....	....	1
10 to 14 years..	1	....	4	2	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....
15 to 19 years..	3	1	5	....	1	....	....	7	....	1	1	....	1	....	....	....	....	....	....	....
20 to 24 years..	4	....	5	1	1	....	....	14	....	....	5	....	5	1	....	....	....	....	....	....
25 to 29 years..	4	1	7	2	2	....	....	12	3	....	4	....	1	....	....	....	....	....	....	....
30 to 34 years..	7	....	4	2	3	2	....	5	....	....	4	....	3	....	....	....	....	....	....	....
35 to 39 years..	5	3	12	2	16	2	....	....	1	....	3	1	1	1	....	....	....	....	....	....
40 to 44 years..	3	....	6	....	8	2	....	4	....	....	2	....	1	....	....	....	....	....	1	1
45 to 49 years..	1	....	11	1	6	1	....	....	....	....	....	....	4	2	....	....	....	....	....	....
50 to 54 years..	2	1	6	2	3	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....
55 to 59 years..	....	....	3	1	7	1	....	....	1	1	1	....	1	....	....	....	....	....	....	....
60 to 64 years..	1	....	3	....	2	....	....	....	....	1	4	....	1	....	....	....	....	....	....	....
65 to 69 years..	....	....	....	....	3	2	....	....	....	....	....	....	1	2	....	....	....	....	2	....
70 to 74 years..	....	....	....	1	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
75 to 79 years..	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....
80 to 84 years..	....	....	....	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....
85 y'rs and over	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colored.....	3	....	4	2	1	....	....	1	....	....	....	....	2	....	....	....	....	....	2	....
Chinese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Japanese.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Summary.																					
	I General Diseases.		A Tuberculous Diseases.		B Cancer.		II Diseases of the Nervous System and Organs of Sense.		III Diseases of Circulatory System.		IV Diseases of Repository System.		V Diseases of Digestive System.		VI Diseases of Genito Urinary System.		VII Puerperal Diseases.		VIII Diseases of the Skin and Cellular Tissue.		IX Diseases of Locomotory System.	
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.	
Total, all ages..	21,069		9,648		4,701		5,021		14,210		12,008		6,439		7,282		653		290		111	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total, by sexes.	11,738	9,331	6,185	3,163	2,004	2,697	2,900	2,121	7,116	7,094	6,743	5,265	3,561	2,878	3,751	3,531	....	653	175	115	75	36
Under 1 year...	615	526	136	109	....	5	374	271	40	27	1,621	1,270	1,453	1,145	35	32	....	....	25	28	5	1
1 year.....	452	409	104	83	2	3	371	258	10	10	759	633	227	226	7	8	....	....	7	4	....	2
2 years.....	238	231	63	62	1	8	286	208	11	6	230	235	92	70	4	5	....	....	1	1	5	5
3 years.....	167	138	44	35	3	1	206	149	13	13	107	88	50	32	4	4	....	....	....	1	5	....
4 years.....	101	92	24	19	2	2	157	83	15	12	53	57	31	19	3	3	....	....	1	1	3	3
T'tl, under 5 y'rs.	1,573	1,396	371	308	8	19	1,394	969	89	68	2,770	2,283	1,853	1,492	53	52	....	....	34	35	18	11
5 to 9 years....	269	262	84	78	5	3	260	210	83	111	108	129	58	50	18	19	....	....	1	2	9	2
10 to 14 years..	115	177	57	105	5	6	63	60	85	123	40	44	59	29	8	19	....	....	. .	....	6	1
15 to 19 years..	317	400	251	328	11	7	56	49	114	102	96	50	50	40	25	26	....	41	4	....	8	2
20 to 24 years..	616	570	494	475	27	12	54	35	130	132	113	88	59	62	51	82	....	141	8	3	4	3
25 to 29 years..	796	605	630	486	35	34	59	37	159	156	186	128	98	66	77	111	....	187	3	1	2	3
30 to 34 years..	957	592	760	404	43	80	81	40	177	186	249	127	111	95	146	142	....	148	12	4	1	4
35 to 39 years..	1,149	622	859	356	66	156	98	57	258	241	344	157	124	112	179	225	....	94	13	....	4	1
40 to 44 years..	1,094	711	714	298	149	257	105	71	379	327	352	184	185	115	291	264	....	37	14	7	5	.
45 to 49 years..	1,143	725	689	221	196	347	119	59	557	418	406	185	191	143	354	304	....	3	16	7	4	1
50 to 54 years..	1,053	653	512	130	291	341	131	70	724	543	431	237	206	124	404	343	....	. .	10	3	2	1
55 to 59 years..	859	694	356	89	294	383	127	90	763	641	378	241	145	139	452	353	....	2	8	8	3	.
60 to 64 years..	696	620	220	80	309	337	97	92	863	785	335	302	139	115	477	349	....	.	13	5	....	3
65 to 69 years	502	515	117	53	237	288	78	80	817	850	313	296	92	102	394	362	....	.	9	5	5	2
70 to 74 years..	316	385	43	31	183	231	77	75	804	872	257	289	94	82	336	346	....	.	14	9	3	1
75 to 79 years..	185	221	25	15	91	112	56	57	556	714	193	214	53	47	257	262	....	....	8	10	. .	1
80 to 84 years..	64	124	2	3	35	59	33	46	330	503	99	163	36	42	148	169	....	....	4	11	1	.
85 yrs. and over	34	59	1	3	19	25	12	24	228	322	73	118	8	23	81	103	....	....	4	5	....	....
Colored.....	461	400	337	241	20	57	68	47	191	230	268	180	104	80	92	140	....	26	5	1	1	1
Chinese.....	40	....	27	....	3	....	5	....	9	1	4	....	2	....	13	....	....	....	2	....	....	....
Japanese.....	4	....	4	....	....	....	....	....	1	....	2	1	....	....	....	....	....	....	....	....	....	....

DEATHS BY SEX, AGE, AND CAUSE OF DEATH FOR 1916.—Continued.

	Summary—*Continued.*																Total Males.	Total Females.	Total Both Sexes.
	X Malformations.		XI Diseases of Infancy.		XII Diseases of Old Age.		XIII External Causes.		A Suicides.		B Homicides.		C Accidents.		XIV Ill Defined Causes.				
	Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.		Both Sexes.				
Total, all ages..	707		4,588		317		5,060		836		256		3,968		46				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Total, by sexes.	390	317	2,605	1,983	91	226	3,740	1,320	587	249	210	46	2,943	1,025	28	18	42,913	34,888	77,801
Under 1 year...	353	289	2,604	1,983	....	....	67	51	....	....	14	11	53	40	2	1	7,194	5,624	12,818
1 year.....	18	9	1	....	....	....	76	57	....	....	....	....	76	57	19	15	1,947	1,631	3,578
2 years.....	5	4	....	....	....	....	58	52	....	....	....	....	58	52	1	....	931	817	1,748
3 years.....	3	2	....	....	....	....	51	56	....	....	....	....	51	56	1	....	607	483	1,090
4 years.....	1	3	....	....	....	....	57	37	....	....	....	1	57	36	1	....	423	310	733
T'tl, under 5y'rs.	380	307	2,605	1,983	....	....	309	253	....	....	14	12	295	241	24	16	11,102	8,865	19,967
5 to 9 years....	6	7	....	....	....	....	245	99	....	....	1	....	244	99	....	1	1,057	892	1,949
10 to 14 years..	2	1	....	....	....	....	150	25	1	1	6	2	143	22	....	....	528	479	1,007
15 to 19 years..	....	....	....	....	....	....	139	46	12	9	11	3	116	34	....	....	809	756	1,565
20 to 24 years..	....	1	....	....	....	....	258	74	27	26	27	5	204	43	....	....	1,293	1,191	2,484
25 to 29 years..	....	1	....	....	....	....	299	93	58	31	37	7	204	55	....	....	1,679	1,888	3,067
30 to 34 years..	1	....	....	....	....	....	322	78	61	29	30	3	231	46	....	....	2,057	1,416	3,473
35 to 39 years..	....	....	....	....	....	....	397	87	71	32	27	5	299	50	....	....	2,566	1,596	4,162
40 to 44 years..	1	....	....	....	....	....	351	84	68	33	23	2	260	49	....	....	2,777	1,800	4,577
45 to 49 years..	....	....	....	....	....	....	308	55	65	14	13	1	230	40	1	1	3,099	1,901	5,000
50 to 54 years..	....	....	....	....	....	....	284	81	57	21	13	4	214	56	....	....	3,245	2,055	5,300
55 to 59 years..	....	....	....	....	....	2	235	73	67	19	4	1	164	53	....	....	2,970	2,243	5,213
60 to 64 years..	....	....	....	....	4	2	153	73	42	16	4	....	107	57	....	....	2,777	2,346	5,123
65 to 69 years..	....	....	....	....	2	12	110	68	25	10	....	....	85	58	2	....	2,324	2,292	4,616
70 to 74 years..	....	....	....	....	15	27	86	46	20	5	....	1	66	40	....	....	2,002	2,132	4,134
75 to 79 years..	....	....	....	....	19	37	42	43	7	1	....	....	35	42	....	....	1,369	1,636	3,005
80 to 84 years..	....	....	....	....	24	66	38	28	5	2	....	....	33	26	1	....	778	1,152	1,930
85 yrs. and over	....	....	....	....	27	80	14	14	1	....	....	....	13	14	....	....	481	748	1,229
Colored.....	4	4	86	86	1	2	111	37	4	3	17	3	90	31	2	....	1,394	1,234	2,628
Chinese.....	....	....	....	....	....	....	3	....	....	....	....	....	3	....	....	....	78	1	79
Japanese.....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	7	3	10

TOTAL DEATHS BY AGE GROUPS, YEAR 1916.

	Manhattan.			The Bronx.			Brooklyn.			Queens.			Richmond.			City of New York.		
	Males.	Females.	Total Both Sexes.	Males.	Females.	Total Both Sexes.	Males.	Females.	Total Both Sexes.	Males.	Females.	Total Both Sexes.	Males.	Females.	Total Both Sexes.	Males.	Females.	Total Both Sexes.
Total by Sexes	20,147	15,675	35,822	4,200	3,475	7,675	14,579	12,502	27,081	3,009	2,538	5,547	978	698	1,676	42,913	34,888	77,801
Under 1 year	3,434	2,801	6,235	712	485	1,197	2,428	1,844	4,272	496	389	885	124	105	229	7,194	5,624	12,818
1 year	906	783	1,689	141	128	269	736	600	1,336	128	107	235	36	13	49	1,947	1,631	3,578
2 years	372	343	715	88	72	160	396	333	729	63	54	117	12	15	27	931	817	1,748
3 years	223	198	421	67	45	112	246	182	428	57	52	109	14	6	20	607	483	1,090
4 years	154	125	279	48	24	72	158	130	288	51	24	75	12	7	19	423	310	733
Total under 5 years	5,089	4,250	9,339	1,056	754	1,810	3,964	3,089	7,053	795	626	1,421	198	146	344	11,102	8,865	19,967
5 to 9 years	455	346	801	100	72	172	384	349	733	98	104	202	20	21	41	1,057	892	1,949
10 to 14 years	220	190	410	52	52	104	178	174	352	62	54	116	16	9	25	528	479	1,007
15 to 19 years	348	296	644	121	110	231	261	271	532	59	60	119	20	19	39	809	756	1,565
20 to 24 years	606	543	1,149	128	128	256	438	400	838	95	96	191	26	24	50	1,293	1,191	2,484
25 to 29 years	811	635	1,446	167	152	319	566	475	1,041	102	93	195	33	33	66	1,679	1,388	3,067
30 to 34 years	1,015	684	1,699	205	150	355	688	458	1,146	114	94	208	35	30	65	2,057	1,416	3,473
35 to 39 years	1,325	821	2,146	223	168	391	796	478	1,274	166	103	269	56	26	82	2,566	1,596	4,162
40 to 44 years	1,451	875	2,326	253	180	433	864	597	1,461	152	123	275	57	25	82	2,777	1 800	4,577
45 to 49 years	1,595	898	2,493	259	187	446	1,014	674	1,688	183	119	302	48	23	71	3,099	1,901	5,000
50 to 54 years	1,624	966	2,590	323	209	532	1,017	709	1,726	204	138	342	77	33	110	3,245	2,055	5,300
55 to 59 years	1,376	967	2,343	338	228	566	917	839	1,786	239	168	407	70	41	111	2,970	2,243	5,213
60 to 64 years	1,305	1,003	2,308	281	249	530	931	877	1,808	194	168	362	66	49	115	2,777	2,346	5,123
65 to 69 years	1,051	981	2,032	237	247	484	809	880	1,689	163	135	298	64	49	113	2,324	2,292	4,616
70 to 74 years	858	854	1,712	181	216	397	731	842	1,573	164	167	331	68	53	121	2,002	2,132	4,134
75 to 79 years	549	641	1,190	132	157	289	517	660	1,177	111	133	244	60	45	105	1,369	1,636	3,005
80 to 84 years	274	436	710	101	138	239	300	439	739	62	96	158	41	43	84	778	1,152	1,930
85 years and over	195	289	484	43	78	121	174	291	465	46	61	107	23	29	52	481	748	1,229
Colored	929	808	1,737	50	41	91	349	319	668	56	61	117	10	5	15	1,394	1,234	2,628
Chinese	66	1	67	1	....	1	9	....	9	2	....	2	....	....	....	78	1	79
Japanese	7	3	10	....	....	....	....	....	....	....	....	....	....	....	....	7	3	10

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