

FIFTY-FOURTH ANNUAL REPORT

OF THE

Department of Health

OF THE

STATE OF NEW JERSEY

1931



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Department of Health of the State of New Jersey

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The offices of the Department are in the State House, Trenton

STATE OF NEW JERSEY,
DEPARTMENT OF HEALTH,
TRENTON, N. J., August 17, 1931.

To the Senate and General Assembly of the State of New Jersey:

As required by law, I have the honor of submitting herewith the Annual Report of the Department of Health, together with accompanying important documents, for the fiscal year ending June 30, 1931.

CHARLES I. LAFFERTY,
President,
State Department of Health.

STATE OF NEW JERSEY,
DEPARTMENT OF HEALTH,
TRENTON, N. J., August 17, 1931.

To the Department of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit herewith the Annual Report of the Department for the year ending June 30, 1931. The reports of the Bureau Chiefs will give comprehensive accounts of the activities of the ten Bureaus of the Department during the year.

Respectfully submitted,
J. LYNN MAHAFFEY, M.D.,
Director of Health.

Report of Bureau of Administration

For the Year Ending June 30, 1931

CHARLES J. MERRELL, CHIEF

The terms of S. A. Cosgrove, M.D., and J. O. McDonald, M.D., members of the Department, expired on July 1, 1931. Both of the physicians named were reappointed by Governor Larson for terms of four years

At a meeting of the Department on July 7, 1931, Mr. Charles I. Lafferty, of Atlantic City, was re-elected President and Harold J. Harder, C.E., of Paterson, was re-elected Vice-President for the coming year.

The term of Mr. D. C. Bowen, Director of Health, expired on June 30, 1931, and J. Lynn Mahaffey, M.D., member of the Board, was appointed to succeed him for a term of four years. Dr. Mahaffey immediately resigned as a member of the Board.

APPROPRIATIONS

For the year ending June 30, 1931, an appropriation of \$428,990.50 was granted the Department by the Legislature, while for the year ending June 30, 1932, an appropriation of \$539,708.50 was granted, an increase of \$110,718.

This includes a special appropriation of \$25,000 to be used for the enforcement of the law with respect to pollution of the Raritan River.

No increases in salaries of present employees were allowed for the current year, but an increased appropriation was granted in order that additional personnel might be employed more efficiently

to carry on the regular work of the Department. About \$40,000 will be used for the salaries of the following additional employees:

Four District Health Officers,
 One Inspector of Milk Pasteurizing Plants,
 One Assistant Veterinarian,
 One Engineer,
 Two Assistant Sanitary Engineers,
 Two Water Shed Inspectors,
 One Chemist,
 One Bacteriologist,
 One Junior Laboratory Technician,
 Six Clerk Stenographers.

The remainder of the increased appropriation will be needed to meet additional expenses in connection with the new employees above-mentioned, and for the equipping of the offices and other current expenses of the new District Health Officers.

A financial statement showing the expenditures by Bureaus of this Department for the year ending June 30, 1931, will be found at the close of the Report of this Bureau.

BOARD OF EXAMINERS AND EXAMINATIONS

Edwin G. Coward, M.D., of Pleasantville, James J. Hagan, of Jersey City, Patrick J. Monaghan, of Newark, together with Wallace T. Eakins and A. I. Goehrig, of the Department, were reappointed as members of the Board of Examiners of Health Officers and Sanitary Inspectors for the year beginning March 1, 1931. Mr. Goehrig was continued as President of the Board and Mr. Eakins as Secretary.

During the year, 133 applications for examination as Health Officer or Inspector of the various classes were filed with the Board. Four examinations were held during the year on the regularly fixed dates, namely, the last Friday of July, October, January and April. The Board of Examiners cooperated with the State Civil Service Commission in holding a joint examination in July, but no special examinations were conducted during the year.

Licenses were issued during the year to those securing the general average of 70% or more as follows: Health Officers, 11; Sanitary Inspectors of the First Class, 4; Sanitary Inspectors of the Third Class, 1; Plumbing Inspectors, 25; Food and Drug Inspectors, 1.

In addition to the above examinations were held for sewage and water plant operators. Information concerning said examinations will be found in the Report of the Bureau of Engineering of this Department.

The following preamble and resolution, recommended by the Board of Examiners, was adopted by the Department on June 2, 1931:

WHEREAS, The Board of Examiners appointed by the Department of Health of the State of New Jersey has in the past examined applicants for licenses as health officers, sanitary inspectors and plumbing inspectors without any restriction upon the number of examinations an applicant may take; and,

WHEREAS, A number of candidates have repeatedly taken such examinations and failed to qualify for licenses and their papers have indicated that no serious attempt has been made by such persons to improve their knowledge since previous examinations; therefore,

Be it resolved, By the Department of Health of the State of New Jersey at a meeting held on the second day of June A. D. one thousand nine hundred and thirty-one, that any candidate for a license having failed in two examinations within a period of one year shall thereafter be ineligible to take a further examination of the same class until one year has elapsed from the date of his second failure.

SANITARY CODE AND REGULATIONS

At a meeting of the Department held on December 2, 1930 Chapter VIII of the State Sanitary Code containing regulation governing the conduct of boarding homes for children was revised and new regulations were adopted under said Chapter to take effect on January 1, 1931. Hereafter, under the revised Code, licenses for boarding homes for children will not be issued by the State Department of Health as heretofore, but will be issued by the various local boards of health throughout the State in the same manner in which other licenses are issued by the said local boards.

At the meeting of the Department on February 3, 1931, Regulation 83 of Chapter XI of the State Sanitary Code, said Chapter

relating to certified milk, was repealed and Regulations 44, 45, 47, 84 and 85 of said Chapter were amended. The repealer and amendments as adopted taking effect July 1, 1931.

CEMETERIES AND MAUSOLEUMS

Application of citizen freeholders for reversal of the decision of the Township Committee and Board of Health of Clark township, Union county, in granting consent to Philip Rose to locate a cemetery in Clark township, was presented to the Department at its meeting on April 7, 1931. Following a preliminary conference before the Department on May 5, 1931, a public hearing in reference to said application was given by a committee of the Board in the Township Hall on May 28, 1931, and the committee inspected the proposed site for the cemetery. At the meeting of the Department on July 7, 1931, it was, after consideration of the report of the committee and statements made at the hearing and papers filed with the Department, unanimously voted that the application of citizen freeholders for reversal of the decision of the local officials of Clark township in granting consent to Mr. Philip Rose to locate a cemetery in said township be granted and that permission to establish a cemetery on said proposed site be refused.

Plans and specifications submitted by the Harleigh Memorial, Inc., for the construction of a mausoleum in the Harleigh Cemetery, located in the City of Camden, were presented at a meeting of the Department held on September 11, 1930, together with a statement to the effect that the construction of the mausoleum had been approved by the officials of the City of Camden. It was on motion voted that the application of the Harleigh Memorial, Inc., to construct said mausoleum be granted and that the attention of the Commissioners and Health Officers of the City of Camden be called to the requirements of the law relating to the establishment of a trust fund for the perpetuation of the mausoleum.

At the meeting of the Department on January 6, 1931, application of the Overlook Mausoleum Company for permission to construct a mausoleum in the Overlook Cemetery, Bridgeton, New Jersey, was submitted. It was further reported that the construc-

tion of the mausoleum had been approved by the Board of Health of the City of Bridgeton, and it was voted that the application of the Overlook Mausoleum Company to construct said mausoleum be granted. It was also voted that the attention of the Mayor and Council and the Health Officer of the City of Bridgeton be called to the requirements of the law relating to the establishment of a trust fund.

ANNUAL CONFERENCES

On February 13, 1931, the Twenty-First Annual Conference of State and Local Health Officials was held in the State House, Trenton. Afternoon and evening sessions were held. There were 270 present, which is the highest attendance on record for this conference. The arrangements for registration, caring for and interesting the delegates, were far superior to previous years and were appreciated by those attending the conference.

In the roll call of delegates from the various municipalities and townships of the State, it was found that every county except Warren was represented. Some excitement was produced by the calling of the roll on account of keen rivalry between the different districts in having the largest number of delegates present.

The address at the afternoon session on the subject of "Vaccination of Animals Against Rabies" was given by G. W. McCoy, M.D., Medical Director, National Institute of Health, U. S. Public Health Service. This was followed by ten-minute talks by the Health Officers of Paterson, Atlantic City, Perth Amboy, Kearny, Montclair and East Orange.

Changes in Chapter VIII of the State Sanitary Code regulating boarding homes for children were explained by Dr. Julius Levy, Consultant to the Bureau of Child Hygiene of this Department.

At the close of the afternoon session, an amusing demonstration playlet of dairy inspection entitled "Milk, Microbes and Men" was given by I. H. Shaw, D.V.M., and S. S. DeCou, Sr., of the Department, which was greatly enjoyed by those present.

Moving pictures were shown at the evening session, after which an interesting paper was read by Henry O. Reik, M.D., of the

New Jersey State Medical Society, on "A Medical Vacation (illustrated by moving pictures) with Casual Observation Upon Health Insurance Laws", together with paper on the subject of "Lessons from Outbreaks of Disease Traced to Contaminated Eclairs and Cream Puffs", by I. H. Shaw, D.V.M., Inspector of the Bureau of Food and Drugs of the Department. Many of those present were greatly interested in the subject presented by Dr. Shaw and were eager to enter into the discussion which followed the reading of the paper.

At the annual meeting of the Health Officers' Association of New Jersey, held on Saturday morning, February 14, 1931, the following officers were elected for the coming year:

President.....S. L. Salasin, M.D., Health Officer of Atlantic City
 Vice-President.....L. Van D. Chandler, Health Officer of Hackensack
 Treasurer.....N. J. R. Chandler, Health Officer of Plainfield
 Secretary.....Eugene H. Sullivan, Health Officer of Nutley
 Chairman of Executive Committee, A. L. Stone, M.D., Health Officer of Camden

A new Constitution and By-Laws was adopted at the fifty-sixth annual meeting of the New Jersey Public Health and Sanitary Association held at the Monterey Hotel, Asbury Park, on December 12th and 13th, 1930, under which the name of the Association was changed to "New Jersey Health and Sanitary Association." The provision for the compulsory employment of an executive secretary was changed to read that the executive council may employ an executive secretary. No salary was set aside for an executive secretary, but it was voted that for the coming year \$1,000 be placed at the disposal of the Executive Council to be used in a program of expansion in the nature of an executive secretary or someone of that order.

Samuel B. English, M.D., Superintendent, State Sanatorium for Tuberculous Diseases, Glen Gardner, New Jersey, was elected President of the Association for the coming year.

LEGISLATION

The following bills of interest to health officials were introduced at the last session of the Legislature:

Senate Bill No. 69, legalizing offspring of all ceremony marriages even though such marriages be afterward declared void. This bill became a law, Chapter 311.

Senate Bill No. 130, prohibiting pollution of tidal waters within three miles of coast line and prohibiting discharge of petroleum or chemicals. This bill failed to pass.

Senate Bill No. 147, giving local boards of health power to enact ordinances more stringent than regulations in the State Sanitary Code. This bill failed to pass.

Senate Bill No. 170, regulating and restricting the use of wood alcohol and promoting public health service by fixing penalties for violation of provisions. This bill failed to pass.

Senate Bill No. 199, providing for control and supervision of plumbing through a uniform State-wide plumbing code and the creation of a State Examining Board to issue licenses under supervision of State Health Department. This bill failed to pass.

Senate Bill No. 201, necessitating granting of permits by the State Department of Health before shipment of milk or cream for sale may be sent into New Jersey. This bill failed to pass.

Senate Bill No. 202, penalizing manufacturers, wholesalers, or other dealers in drugs, medicines or poisons who sell such drugs to general merchants for re-sale with full knowledge that it is unlawful for the general merchant to sell them under the Pharmacy Act. This bill failed to pass.

Senate Bill No. 293, making it unlawful for a male under eighteen or a female under sixteen to contract marriage. This bill failed to pass.

Senate Bill No. 302, directing the use of funds paid by State for slaughtered tuberculous cattle to purchase of other cattle for replacing. This bill failed to become a law.

Assembly Bill No. 29, providing for a more thorough examination by a medical inspector of the chest and spine of school pupils. This bill failed to pass.

Assembly Bill No. 126, amending the Tenement House Act providing that four families, instead of three, may inhabit dwellings not more than four stories which have been converted into tenement houses. This bill became a law, Chapter 359.

Assembly Bill No. 149, providing for the licensing of public swimming pools and public bath places. This bill failed to pass.

Assembly Bill No. 219, authorizing Township Committees in townships having a population in excess of 5,000 to name a secretary of the board of health. This bill became a law, Chapter 269.

Assembly Bill No. 222, defining the requirements of milk and cream sold and delivered in the State. This bill failed to pass.

Assembly Bill No. 225, regulating the passing of ordinances, codes and rules by local boards of health or the State Board of Health in the sale of "New Jersey Grade 'A' Raw Milk" and "New Jersey Grade 'AA' Pasteurized Milk." This bill failed to pass.

Assembly Bill No. 229, empowering the principal, class room teacher, school nurse or school physician to exclude a pupil from school upon evidence of departure from normal health. This bill became a law, Chapter 84.

Assembly Bill No. 301, placing cold storage warehouses under the supervision of Public Utilities Commission. This bill failed to pass.

Assembly Bill No. 352, regulating the sale, transfer and exposure of articles commonly known as "anti-freeze." This bill failed to pass.

Assembly Bill No. 357, repealing the Act of 1918 which regulates the making and sale of mattresses. This bill failed to pass.

Assembly Bill No. 370, regulating the occupation of barbers and creating the "State Board of Barbers." Also regulating the licensing of persons carrying on such business. This bill failed to pass.

FINANCIAL STATEMENT SHOWING EXPENDITURES BY BUREAUS OF THE DEPARTMENT OF HEALTH OF THE STATE OF NEW JERSEY FOR THE YEAR ENDING JUNE 30th, 1931

Bureaus	Payrolls	Traveling Expense	Stationery and Printing	Office Equipment	Telephone	Sundries	Public Health News	Maint. of Tabulating Machines	Laboratory Equipment
Administration	\$22,814	\$2,121	\$910	\$353	\$137	\$532	\$1,253	.....	.....
Vital Statistics	26,544	146	2,219	146	67	70	.....	.....	.....
Local Health	28,258	2,168	1,743	325	149	331	.....	\$899	.....
Food and Drugs	31,185	11,183	764	66	25	103	.....	.....	\$285
Engineering	42,293	2,766	674	.....	162	1,195	.....	.....	2,622
Chemistry	19,970	757	514	.....	29	143	.....	.....	1,074
Bacteriology	27,682	501	610	.....	83	677	.....	.....	10,046
Public Health Education	4,129	31	.....	.....	.....	.....	.....	.....	.....
Total Thus Far	\$202,875	\$19,553	\$7,434	\$931	\$652	\$3,051	\$1,253	\$899	\$14,027
Child Hygiene	\$89,770	\$28,350	\$4,684	\$1,687	\$95	\$1,095	.....	.....	.....
V. D. Control	16,230	3,546	860	1,016	99	183	.....	.....	.....
Total of Columns	\$308,875	\$51,449	\$12,978	\$3,634	\$846	\$4,239	\$1,253	\$899	\$14,027

FINANCIAL STATEMENT SHOWING EXPENDITURES BY BUREAUS OF THE DEPARTMENT OF HEALTH OF THE STATE OF NEW JERSEY FOR THE YEAR ENDING JUNE 30th, 1931—Continued

Bureaus	Boat Expense	Auto Expense	Rabbits and Guinea Pigs	Engineering Equipment	Rent	Welfare Station Equipment	Clinic Equipment	Atlantic City Exhibit	Total by Bureaus
Administration									\$28,120
Vital Statistics									29,971
Local Health		\$1,321			\$245				34,540
Food and Drugs		1,498		\$1,408					43,611
Engineering	\$2,929	1,513	\$827						52,618
Chemistry									26,929
Bacteriology									40,467
Public Health Education								\$1,708	5,868
Total Thus Far:	\$2,929	\$4,332	\$827	\$1,408	\$245			\$1,708	\$262,124
Child Hygiene					\$271	\$1,904	\$5,138		\$127,826
V. D. Control									27,072
Total of Columns	\$2,929	\$4,332	\$827	\$1,408	\$516	\$1,904	\$5,138	\$1,708	\$417,022

Report of the Bureau of Local Health Administration

For the Year Ending June 30, 1931

WILLIAM H. MACDONALD, ACTING CHIEF

New low records for certain communicable diseases were established in New Jersey in 1930. In typhoid fever and in diphtheria the annual case and death rates were the lowest recorded in the State. For the first time, the computed yearly death rate from tuberculosis dropped below 70 per 100,000.

Typhoid fever has consistently been reduced in prevalence in recent years and the low rate of 1930 is gratifying. Many phases of public health activity have had a part in the reduction of this disease and further application of principles now established will cause a greater reduction.

The new low rate for diphtheria is encouraging and should result in further stimulating the use of toxin-antitoxin and toxoid among children as an important practical means of preventing this disease.

In spite of the decreased prevalence of certain diseases the number of cases of all diseases declared reportable by the State Sanitary Code which were reported and tabulated in the Bureau during 1930 was 68,338.

Chickenpox cases numbered 9,563, or about 14% of all cases of disease reported. This number of cases of chickenpox is below the number reported last year.

Epidemic cerebrospinal meningitis again dropped to about the normal prevalence and the rate for 1930 was considerably lower than the relatively high rate for 1929. Ninety per cent of the reported cases and deaths occurred in five counties within the metropolitan area.

The prevalence of infantile paralysis, as indicated by reports of cases and deaths, was practically the same as in 1929. There occurred the usual increased prevalence of this disease during the late summer, nearly 70% of the cases recorded being reported during the months of August, September and October.

Both the number of cases and the number of deaths from influenza and from pneumonia recorded in 1930 were lower than the number recorded during any year since these diseases were added to the reportable list. However, inasmuch as the prevalence of these diseases fluctuates considerably, it cannot be expected that the rates will be consistently reduced each year, until more definite and specific preventive measures are established and applied. In pneumonia both the number of cases and deaths recorded in 1930 was appreciably greater among males than among females.

For the second consecutive year only one case of smallpox was reported in the State. Again the warning is given that the almost complete freedom of the State from this disease for two years should not lead to a false sense of security which will result in persons neglecting vaccination.

The low rate of scarlet fever for 1929 was not continued during 1930, there being an increase both in the number of reported cases and deaths. However, the 58 deaths charged directly to this disease were less than the number of deaths charged either to measles or to whooping cough.

Measles again showed its tendency to fluctuate, the number of recorded cases being over three times greater than the number reported during 1929. Whooping cough cases were below the normal in number. The number of deaths recorded from these two diseases during the year was 216. Ninety-one per cent of these deaths occurred in children less than five years of age. There should be still more forcibly emphasized to parents the great importance of protecting against these two diseases, in as far as practical, children less than 5 years old.

By an amendment to Regulation 1, Chapter VI, of the State Sanitary Code, five diseases were added to the list of reportable diseases beginning July 1, 1930. These diseases and the number

of cases reported from that date to the end of the year are: mumps, 361 cases; tularemia, 1 case; tetanus, 13 cases; lethargic encephalitis, 11 cases; undulant fever, 14 cases. In view of the fact that these diseases so recently became reportable throughout the State, the number of cases recorded can scarcely be considered a true indication of their prevalence during the period considered.

As an appendix to the report of this Bureau the number of cases of diseases reported is shown in detailed tables.

Investigations of Outbreaks—A decade ago extensive local outbreaks of typhoid fever were all too common. However, in recent years large outbreaks of this disease in the State have become less and less frequent. The increased use of pasteurized milk, scientific treatment and supervision of public water supplies, greater protection of private supplies, greater care in cleansing dishes and glasses in eating establishments, discovery and supervision of an increasing number of typhoid carriers, as well as improvement in sewage disposal methods and in general sanitation, all have had their effect in lessening the number and extent of such outbreaks. In municipalities in which formerly several cases of typhoid fever aroused but temporary curiosity in the community, the occurrence of even one case now very often results in a public request for careful investigation. In studying a single case, or a very small group of cases, it is usually extremely difficult to fix definitely the source of infection. Opinions about the actual source of infection may be given, but reasonable proof that the opinion is correct can be presented only in a limited number of cases.

During 1930, employees in the Bureau investigated 78 cases of typhoid fever in 37 municipalities. In two instances the group of cases investigated consisted of five or more.

In Willingboro and Evesham townships, Burlington county, there was investigated a group of 19 cases among persons employed in picking berries and vegetables, nearly all of whom were residents of Pennsylvania who had come to live in New Jersey temporarily during the picking season. A typhoid carrier was

discovered among this group of persons and evidently was the source of infection.

Another group including seven cases of typhoid fever in three related families in Woodbridge township was studied. It was found that a previously unrecognized case had occurred in a member of one of these families who, it was concluded, spread the infection to others by contact in this home.

Twenty-two cases of diphtheria in 10 municipalities were investigated. In a majority of these instances a carrier was discovered as the probable source of infection.

Investigation was made of 20 cases of undulant fever in 11 municipalities. Six of these cases occurred as a definite milk-borne outbreak in Pitman, Gloucester county. All patients were users of raw milk obtained from a local producer-distributor who supplied from his herd about 300 quarts of milk daily. This was about 14% of the milk sold in the community. The onset of the first case was about September 1, the other cases occurring during the next four months. Patients ranged in age from 17 to 56 years. Three were males and three females. Tests made of the cows in this herd late in December, 1930, by the State Department of Agriculture showed that the blood of 24 contained agglutinins for *Brucella* organisms. Milk from two of these reactors examined at the laboratory of the State Department of Health on February 5, 1931, contained *B. abortus*. Milk from the herd was pasteurized from January 5, 1931, to May 11, 1931, upon which date an order prohibiting the sale of raw milk from these premises was withdrawn upon certification by the State Department of Agriculture that all animals reacting to the contagious abortion test had been removed from the premises.

The remaining 14 cases of undulant fever investigated by the Bureau during the year were in 10 municipalities in eight counties. All of these patients had been users of raw milk prior to illness.

In August, 1930, the attention of the Department was drawn to the sudden occurrence of cases of severe intestinal affection in a section of Hamilton township, Mercer county. Investigation was made of 64 cases of illness in this vicinity, all showing simi-

lar symptoms. From specimens of feces examined at the State laboratory from two of these cases there were isolated Flexner dysentery bacilli. The patients were users of raw milk, bottled and distributed by a local dealer, who obtained the milk from three nearby producers. Examinations of specimens of body discharges from workers at the milk plant and at the farms did not reveal any infected person. Cases did not develop among users of this milk after pasteurization was commenced.

During July, investigation was made of six acute cases of illness, three of which were fatal, in one family in Lafayette township, Sussex county. Although epidemiological investigation pointed to potted meat as the article of food used in common by these persons, definite proof that herein lay the cause of these cases was not secured. The agent which actually caused these cases of illness was not discovered.

The case of tularemia reported during the year was in the person of an adult female who shortly before becoming ill handled the entrails of a rabbit shot in Cape May county. Two cases of this disease in humans were discovered during 1927 in this county.

The first case of spotted fever in the State coming to the attention of the State Department of Health occurred in May, 1931. This case was in a farmer, aged 32, who resided near Fort Mott in Salem county. Definite history of a tick bite shortly prior to onset was obtained. The infection was evidently received locally.

Other cases of diseases investigated during the year by employees in the Bureau include six of infantile paralysis and six of miscellaneous diseases, in 12 municipalities.

Diseases on Dairy Premises—Fifty-seven cases of communicable diseases on 47 dairies were reported directly to the State Department of Health in accordance with the provisions of Regulation 4, Chapter VI of the State Sanitary Code. Cases on 27 of these premises were referred to local boards of health for investigation and action. Twenty premises were visited by employees in the Bureau.

On 42 premises the sale of milk was permitted after precautionary measures were established. In two instances the sale of milk was voluntarily stopped during the continuance of the case. In two instances the sale of milk was temporarily prohibited by the local board of health and in one instance by the State Department of Health.

Diphtheria Immunization—Assistance was rendered local officials by employees in the Bureau in giving toxin-antitoxin or toxoid in 62 municipalities. At these clinics 4,916 persons received the preventive treatments. Seventy-six municipalities were aided in giving Schick tests to 6,830 persons. During the year in public clinics in a number of communities toxoid has been used in place of toxin-antitoxin.

In annual reports received from local boards of health, it was reported that during 1930 public diphtheria immunization clinics were held in 330 municipalities at which nearly 90,000 persons received preventive treatments. Eighteen per cent of these persons were reported to be below school age.

Assistance in Diagnosis—Although work of the Bureau has not been developed in a way to encourage requests for assistance in establishing a diagnosis in cases of illness suspected of being communicable, some requests for such assistance are received and help given when practical. During the year, aid in establishing a diagnosis was given in 45 instances.

Typhoid Carriers—Five typhoid carriers were added during 1930 to the list on file at the office of the State Health Department. Four of the five were females. In the report of this Bureau for 1929 it was pointed out that a person shown to be a carrier of the causative organisms of typhoid fever is denied by health laws and regulations, the opportunity of earning a livelihood by taking part in the handling of food for sale or distribution. It was also pointed out that certain persons, particularly household servants, found to be typhoid carriers, often have great difficulty in procuring positions or even to find homes, owing to the very proper hesitancy of householders to admit to their households known carriers of typhoid bacilli.

It is again recommended that in unusual instances in which such carriers, having been placed under restrictions to protect the public health and who, therefore, find it extremely difficult to procure living quarters and to maintain themselves independently, the State provide some means for their maintenance, either in a proper institution or by pension.

State Institutions—At eight State institutions there were investigated 35 cases of communicable diseases, including chickenpox, diphtheria, measles, German measles, scarlet fever and typhoid fever. Assistance was given at four State institutions in Dick testing 564 inmates. Assistance was also rendered at three State institutions in giving Schick tests to 375 persons.

Special Surveys—There was completed during the year an inquiry at each State institution coming under the supervision of the State Department of Institutions & Agencies to learn of communicable disease preventive measures followed at these institutions. This survey was requested by the Commissioner of Institutions & Agencies and recommendations were made to him for communicable disease prevention work at each of these institutions.

Some special work with Dick test and scarlet fever toxin was carried on at the State Village for Epileptics and at the State Home for Girls in co-operation with these institutions.

Other Investigations—Hundreds of complaints of nuisances and alleged nuisances from all parts of the State are referred to the Bureau annually. Although some of these complaints are trivial and others are of conditions which do not come within the jurisdiction of health departments, a majority relates to matters which definitely come within the jurisdiction of local boards of health as anticipated in Section 12, Chapter 68, P. L. 1887, and Chapter I of the State Sanitary Code. It is the general policy to refer such complaints to local boards of health. However, during the year employees in the Bureau made 177 investigations in the field, including inspection of camps, private water supplies, private sewerage systems, piggeries, and garbage and refuse

dumps. Most of these inspections were made in company with local health officials.

Meetings and Conferences—Meetings of 19 local boards of health were attended by representatives of the Bureau during 1930 and 83 other public meetings at which some phase of public health work was considered. In order that the Bureau may function in the field assigned to it, conferences with local health officials as well as with other public officials, physicians and citizens are essential. During the year employees in the Bureau held 2,480 such conferences at which many problems pertaining to health administration were discussed.

Lectures and Talks—Although the Bureau does not undertake to carry on lecture work as a routine, requests for talks and papers on subjects related to the activities of the Bureau are filled when practical. During the year response was made to 35 such requests.

Public Health News—The monthly bulletin of the Department was edited by Mr. C. K. Blanchard, of this Bureau, as during the previous year. The News has been continued on the somewhat popular lines described in the last annual report.

An issue ordinarily contains one or two short signed articles of interest and value to health officials in New Jersey, special news articles, a conversational feature entitled "Mark Time," and seven to ten pages of news notes on the activities of local boards of health and those of the State Department. Monthly morbidity and mortality summaries and a brief report of the official actions of the Department fill the last few pages of each issue.

The policy of carefully preparing the published material in an interesting and condensed form, of using distinctive type, and numerous illustrations has resulted in a magazine which frequently brings forth favorable comment from its readers.

Summer School for Health Officials—Co-operation with Rutgers University in the short summer course for health officials was continued this year. During the session of 1930 there were 20 students in the first year class and eight in the second year

class. All of the latter were granted certificates by the University for completion of the two-year course. Six of these graduates were employed in some capacity by local boards of health at the time the course was completed. Two employees in the Bureau were regular lecturers in the course during the 1930 session.

Circulars and Pamphlets—Circular No. 192, a Handbook for Physicians, was made available during the year. This contained a digest of the various State laws and of Regulations of the State Sanitary Code which require that physicians report to health departments in New Jersey cases of communicable diseases and other ailments and facts pertaining to births, still births and deaths. The circular was distributed directly to physicians, and numerous favorable comments on the booklet have been received from members of that profession. Through the co-operation of the State Board of Medical Examiners a copy of the handbook will be furnished each physician when licensed to practice in New Jersey.

The Department's circular on rabies was revised. A new circular on scarlet fever was completed and made available for the use of local health departments. This circular is written in nontechnical terms and includes definite suggestions for concurrent disinfection and for measures to be followed in preventing spread of infection from a case kept at home.

Personnel—At the close of the year the personnel of the Bureau consisted of two assistant epidemiologists, five permanent and one temporary office clerks in addition to the Acting Chief at the central office; a district health officer and clerk at a branch office in Pitman, Gloucester county, and a district health officer at a branch office in Freehold, Monmouth county. The services of one clerk at the Freehold office are furnished by the Monmouth County Board of Freeholders.

Local Boards of Health—The number of local boards of health in the State at the close of 1930 was 563. Three hundred and thirty were in the incorporated municipalities and 233 in townships. A report as required by Chapter 68, P. L. 1887 as amended, was received for 1930 from 562 of these boards. The

total amount reported available for the use of these boards during 1930 was \$2,705,342.97, of which \$271,281.43 was expended for special features such as hospital maintenance, garbage and rubbish collection, and anti-mosquito work. Therefore, the amount reported available to be expended by 562 local boards of health in the State during the year, exclusive of the special features mentioned, was \$2,434,061.54, a per capita amount of 60c. Although, in general, local appropriating bodies in New Jersey are fairly liberal in setting aside funds for the use of health departments, there is a vast difference in the per capita amount made available for this purpose in different communities. In all incorporated municipalities the amount reported available for the use of boards of health in 1930 was 68c. per capita, while in all townships the per capita amount reported available was 23c. With some exceptions, the amount varied in direct ratio to the population of the municipality.

The 562 local boards of health reported a total of 1,692 employees during 1930, 672 or 39% of whom were on a full-time basis. In the 425 incorporated municipalities and townships below 5,000 population there were reported 590 employees of local boards of health of which only 8 were on full-time in the municipality in which employed. The employment last year of a local health officer licensed by this Department was reported in but 6 of 200 townships below 5,000 population.

Efficiency of the work of local health departments in small communities has been the subject of discussion in many states during recent years. From reports received from local boards of health in 1930 it is evident that funds available for the use of these boards in small communities are relatively much less than in large communities in the State. It is also true that few licensed health officers are employed in small communities. The law requiring that there shall be a local board of health in each municipality in New Jersey irrespective of the size or population of the district was enacted in 1887 and although this was a progressive law for that time, public health work has since so expanded that a change in this fundamental law might well be considered at this time. It is recommended that, as promptly as practical, there be enacted a law which would apply only to the six

counties below 50,000 population, viz., Sussex, Warren, Hunterdon, Somerset, Salem and Cape May. It is recommended that there be established in this law a minimum standard for local health administration which shall be met by any township or incorporated municipality in these counties which desires to maintain its own health department independently. In case any township or municipality does not choose to maintain a health department to meet this standard, it is recommended provision be made in this law whereby all such townships and municipalities, within the boundaries of each of these counties, be joined in a single unit for purposes of health administration, with one board having jurisdiction in the area so combined in the county, empowered to appoint a health officer and other agents and to perform the public health work in the entire district.

There are appended standard morbidity and mortality tables for the State for the calendar year 1930 showing the distribution of reported cases of certain diseases by months and by age periods, and the distribution of cases and deaths from these diseases by age periods and sex. There are also appended tables showing the number of reported cases and deaths from certain diseases by counties, together with the computed case and death rates from these diseases for each county.

REPORTED CASES OF ANTHRAX IN NEW JERSEY

For the Calendar year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
2 years	0	0	0	0	0	0	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0	0	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0	0	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0	0	0	0	0	0	0	0
15 to 19 years	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24 years	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 34 years	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 44 years	2	0	1	0	0	0	0	0	0	0	0	0	0
45 to 54 years	1	0	0	0	0	0	0	0	0	0	0	0	1
55 to 64 years	0	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	1	0	0	1	0	0	0	0	0	0	0	0	0
Total	4	0	1	1	0	0	1	0	0	0	0	1	0

REPORTED CASES AND DEATHS FROM ANTHRAX IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	0	0	0	0	0	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0
15 to 19 years	0	0	0	0	0	0
20 to 24 years	0	0	0	0	0	0
25 to 34 years	0	0	0	0	0	0
35 to 44 years	1	0	1	0	2	0
45 to 54 years	1	0	0	0	1	0
55 to 64 years	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0
Age not stated	1	0	0	0	1	0
Total	3	0	1	0	4	0

REPORTED CASES OF CHICKENPOX IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	251	58	31	26	26	27	13	8	2	3	7	21	84
1 year	387	68	59	49	31	24	30	15	3	7	9	32	60
2 years	487	80	59	75	73	42	41	10	4	7	9	21	66
3 years	604	116	81	84	70	45	45	16	2	5	17	53	70
4 years	740	129	99	104	78	65	50	14	2	6	23	65	110
Under 5 years	2469	448	329	338	278	203	177	88	13	28	65	194	340
5 to 9 years	6130	1019	845	866	572	479	430	64	12	56	150	651	956
10 to 14 years	658	123	99	100	68	40	46	9	1	8	14	69	112
15 to 19 years	103	23	15	13	17	7	3	3	0	0	4	7	11
20 to 24 years	58	6	9	4	11	2	5	2	2	0	3	4	10
25 to 34 years	71	12	11	8	9	3	4	2	2	1	2	3	14
35 to 44 years	27	4	3	5	1	3	3	0	0	0	0	2	6
45 to 54 years	10	2	3	0	2	1	0	0	0	1	0	0	0
55 to 64 years	2	0	1	0	0	0	0	0	0	0	0	1	0
65 years and over	1	0	0	1	0	0	0	0	0	0	0	0	0
Age not stated	3	1	0	0	0	1	1	0	0	0	0	0	0
Total	9563	1658	1315	1235	956	739	669	138	30	93	269	851	1450

REPORTED CASES AND DEATHS FROM CHICKENPOX IN NEW JERSEY

For Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	124	1	127	0	251	1
1 year	181	1	196	0	387	2
2 years	256	0	231	0	487	0
3 years	282	0	322	0	604	0
4 years	373	0	367	0	740	0
Under 5 years	1226	2	1243	1	2469	3
5 to 9 years	3220	0	2910	0	6130	0
10 to 14 years	360	0	329	0	689	0
15 to 19 years	62	0	41	0	103	0
20 to 24 years	28	0	30	0	58	0
25 to 34 years	34	0	37	0	71	0
35 to 44 years	17	0	10	0	27	0
45 to 54 years	6	0	4	0	10	0
55 to 64 years	0	0	2	0	2	0
65 years and over	1	0	0	0	1	0
Age not stated	2	0	1	0	3	0
Total	4956	2	4607	1	9563	3

REPORTED CASES OF DIPHTHERIA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	194	31	30	21	30	4	16	16	4	3	2	0	6
1 year	312	44	30	42	31	36	20	18	14	13	15	22	27
2 years	362	44	31	52	47	30	26	27	9	25	21	23	27
3 years	390	41	39	48	46	42	32	28	18	15	23	23	32
Under 5 years	1333	163	134	177	163	117	101	102	51	71	69	76	104
5 to 9 years	1554	186	151	190	162	150	147	67	47	84	141	97	132
10 to 14 years	546	84	65	65	45	41	57	23	25	21	33	49	38
15 to 19 years	201	45	27	20	24	21	8	4	10	10	8	9	15
20 to 24 years	163	23	23	29	19	23	10	16	3	12	8	11	12
25 to 34 years	173	20	25	24	16	18	9	12	8	8	12	8	15
35 to 44 years	120	10	11	22	16	8	5	10	2	6	8	7	15
45 to 54 years	45	4	7	7	10	1	4	2	2	3	1	0	4
55 to 64 years	14	1	0	1	3	2	4	0	0	0	0	1	0
65 years and over	4	2	0	0	1	0	0	0	0	0	0	0	1
Age not stated	3	0	1	0	2	1	0	0	0	0	0	0	0
Total	4162	543	446	526	461	382	345	230	149	209	276	258	337

REPORTED CASES AND DEATHS FROM DIPHTHERIA IN NEW JERSEY

For Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	33	5	42	11	75	16
1 year	107	17	87	20	194	37
2 years	191	17	151	23	342	40
3 years	198	20	164	18	362	38
4 years	217	23	173	18	390	41
Under 5 years	716	82	617	90	1333	172
5 to 9 years	808	59	745	48	1554	107
10 to 14 years	292	13	254	16	546	29
15 to 19 years	93	3	103	2	201	5
20 to 24 years	57	3	108	1	165	4
25 to 34 years	54	1	121	3	175	4
35 to 44 years	0	0	80	0	80	0
45 to 54 years	18	1	27	2	45	3
55 to 64 years	6	2	8	0	14	2
65 years and over	2	1	2	1	4	2
Age not stated	1	0	4	0	5	0
Total	2053	165	2109	166	4162	331

REPORTED CASES OF DYSENTERY IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	2	1	0	0	0	0	0	1	0	1	0	0	0
1 year	1	0	0	0	0	0	0	1	0	0	0	0	0
2 years	2	0	0	1	0	0	0	0	0	0	1	0	0
3 years	0	0	0	0	0	0	0	0	0	0	0	0	0
4 years	2	0	0	0	0	0	0	0	1	0	1	0	0
Under 5 years	7	0	0	1	0	0	1	1	1	1	2	0	0
5 to 9 years	0	0	0	0	0	0	0	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0	0	0	0	0	0	0	0
15 to 19 years	1	0	0	0	1	0	0	0	0	0	0	0	0
20 to 24 years	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 34 years	2	0	0	0	1	0	0	0	1	0	0	0	0
35 to 44 years	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 54 years	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 64 years	3	1	0	0	0	0	0	1	0	0	0	0	0
65 years and over	5	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	1	0	1	2	0	1	2	2	2	2	7	0

REPORTED CASES AND DEATHS FROM DYSENTERY IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	1	2	2	2	3
1 year	0	1	1	0	1	1
2 years	2	1	0	0	2	1
3 years	0	0	0	0	0	0
4 years	1	0	1	1	2	1
Under 5 years	3	3	4	3	7	6
5 to 9 years	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0
15 to 19 years	0	0	1	1	1	0
20 to 24 years	0	0	1	0	1	0
25 to 34 years	1	1	1	0	2	1
35 to 44 years	0	0	0	0	0	0
45 to 54 years	0	1	0	0	0	1
55 to 64 years	4	2	1	2	5	4
65 years and over	5	4	0	0	5	2
Age not stated	0	0	0	0	0	0
Total	13	8	7	7	20	15

REPORTED CASES OF EPIDEMIC CEREBROSPINAL MENINGITIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	17	3	3	1	0	0	1	1	0	0	1	5	2
1 year	10	0	1	1	0	2	2	1	1	1	1	0	0
2 years	12	1	1	2	2	1	2	0	0	1	0	2	0
3 years	11	2	3	3	0	0	0	2	0	0	1	0	0
4 years	10	0	1	0	2	3	0	1	2	0	1	1	0
Under 5 years	60	6	9	7	4	6	5	5	2	2	4	8	2
5 to 9 years	28	4	5	4	1	5	0	3	0	1	3	1	1
10 to 14 years	38	4	3	3	2	5	5	2	10	2	0	1	1
15 to 19 years	24	1	1	7	3	1	0	1	4	1	0	2	1
20 to 24 years	15	4	2	1	2	1	3	1	0	1	0	0	0
25 to 34 years	20	4	2	2	1	1	3	3	0	1	1	1	1
35 to 44 years	9	1	1	1	1	0	0	0	2	0	0	1	0
45 to 54 years	9	2	1	1	0	1	0	2	0	5	0	1	1
55 to 64 years	3	1	1	0	0	1	0	0	0	0	0	0	1
65 years and over	1	0	0	0	0	0	0	0	1	0	0	0	0
Age not stated	1	0	0	0	0	1	0	0	0	0	0	0	0
Total	208	26	25	26	16	24	16	16	19	10	8	14	8

REPORTED CASES AND DEATHS FROM EPIDEMIC CEREBROSPINAL MENINGITIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	8	2	3	4	11	6
1 year	6	0	4	2	10	2
2 years	7	3	5	1	12	4
3 years	6	1	5	1	11	2
4 years	5	1	5	2	10	3
Under 5 years	33	7	27	10	60	17
5 to 9 years	17	4	11	6	28	10
10 to 14 years	30	7	8	3	38	10
15 to 19 years	18	6	6	2	24	8
20 to 24 years	13	2	2	2	15	4
25 to 34 years	12	5	3	6	20	11
35 to 44 years	5	3	4	2	9	5
45 to 54 years	4	3	5	3	9	6
55 to 64 years	1	0	0	0	1	0
65 years and over	1	0	0	0	1	0
Age not stated	1	0	0	0	1	0
Total	187	38	71	34	208	72

REPORTED CASES OF GERMAN MEASLES IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	76	2	0	12	17	12	8	9	2	2	3	1	2
1 year	97	3	9	21	21	15	14	0	3	0	3	1	2
2 years	121	8	16	27	27	24	13	4	0	0	0	2	0
3 years	156	7	16	29	35	34	19	7	0	5	1	2	1
4 years	173	9	19	32	42	38	19	7	3	1	1	0	2
Under 5 years	623	29	66	121	142	123	73	27	8	13	5	8	8
5 to 9 years	2538	104	319	690	696	452	263	30	1	5	6	13	9
10 to 14 years	1413	56	139	439	419	263	67	2	2	2	3	1	0
15 to 19 years	946	10	37	163	166	108	31	4	2	0	0	3	0
20 to 24 years	118	3	11	32	41	14	10	2	0	0	1	2	0
25 to 34 years	80	3	6	21	24	13	7	0	0	1	0	0	0
35 to 44 years	42	0	5	13	11	9	1	0	0	0	0	0	1
45 to 54 years	5	0	1	1	2	1	0	0	0	0	0	0	0
55 to 64 years	0	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	2	0	0	0	2	0	0	0	0	0	0	0	0
Age not stated	9	0	0	2	2	3	2	0	0	0	0	0	0
Total	5426	207	624	1486	1505	991	454	65	18	21	15	27	18

REPORTED CASES AND DEATHS FROM GERMAN MEASLES IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	45	0	31	0	76	0
1 year	51	1	46	0	97	1
2 years	57	0	64	0	121	0
3 years	76	0	78	0	156	0
4 years	90	0	83	0	173	0
Under 5 years	321	1	302	0	623	1
5 to 9 years	1250	0	1388	0	2538	0
10 to 14 years	639	0	744	0	1413	0
15 to 19 years	269	0	277	0	546	0
20 to 24 years	44	0	74	0	118	0
25 to 34 years	23	0	57	0	80	0
35 to 44 years	7	0	35	0	42	0
45 to 54 years	1	0	4	0	5	0
55 to 64 years	0	0	0	0	0	0
65 years and over	1	0	1	0	2	0
Age not stated	3	0	6	0	9	0
Total	2588	1	2838	0	5426	1

REPORTED CASES OF INFLUENZA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	9	4	0	3	0	0	0	0	0	0	0	1	1
1 year	14	2	6	0	1	0	0	0	0	0	0	1	4
2 years	12	1	4	2	0	0	0	0	0	0	0	3	2
3 years	13	1	4	1	1	0	1	0	0	0	2	1	2
4 years	12	2	1	1	4	1	0	0	0	0	1	1	1
Under 5 years	60	10	15	7	6	1	1	0	0	0	3	7	10
5 to 9 years	41	7	6	8	7	2	1	0	0	0	2	1	7
10 to 14 years	23	0	3	2	4	1	0	1	2	1	2	1	6
15 to 19 years	30	3	5	7	3	4	2	0	0	0	1	4	1
20 to 24 years	42	8	3	7	7	2	0	0	1	1	2	5	6
25 to 34 years	36	8	3	13	10	8	3	5	9	1	4	9	19
35 to 44 years	91	9	18	15	12	6	2	1	3	2	7	4	12
45 to 54 years	71	9	8	14	12	2	4	1	2	1	2	6	10
55 to 64 years	47	10	9	10	4	2	0	0	1	0	1	4	6
65 years and over	49	3	7	12	8	2	1	0	1	3	3	2	7
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	540	67	82	95	73	30	14	6	10	9	27	43	84

REPORTED CASES AND DEATHS FROM INFLUENZA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	4	24	5	20	9	44
1 year	8	3	6	14	14	5
2 years	7	8	5	1	12	4
3 years	9	1	4	0	13	1
4 years	7	3	5	1	12	4
Under 5 years	35	34	25	24	60	58
5 to 9 years	23	9	18	5	41	14
10 to 14 years	11	3	12	5	23	8
15 to 19 years	14	3	16	5	30	8
20 to 24 years	16	6	26	4	42	10
25 to 34 years	43	9	44	20	87	29
35 to 44 years	47	27	44	21	91	48
45 to 54 years	40	28	31	21	71	49
55 to 64 years	21	24	26	24	47	48
65 years and over	25	37	24	51	49	88
Age not stated	0	0	0	0	0	0
Total	275	180	265	171	540	351

REPORTED CASES OF MALARIA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
2 years	0	0	0	0	0	0	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0	0	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0	0	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0	0	0	0	0	0	0	0
15 to 19 years	0	0	0	1	0	0	0	1	0	0	0	0	0
20 to 24 years	2	0	0	0	0	0	0	1	0	0	1	0	0
25 to 34 years	4	1	0	0	0	0	0	1	1	0	0	1	0
35 to 44 years	3	0	0	0	0	1	1	0	1	0	0	0	0
45 to 54 years	2	0	0	0	0	0	0	0	0	2	0	0	0
55 to 64 years	0	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	1	0	0	0	1	0	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	1	0	1	1	1	1	2	3	0	3	1	0

REPORTED CASES AND DEATHS FROM MALARIA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	0	0	0	0	0	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	1
15 to 19 years	1	0	1	0	2	0
20 to 24 years	1	0	1	0	2	0
25 to 34 years	2	0	2	0	4	0
35 to 44 years	2	0	1	1	3	2
45 to 54 years	1	0	1	0	2	0
55 to 64 years	0	0	0	0	0	0
65 years and over	0	1	1	1	1	2
Age not stated	0	0	0	0	0	0
Total	7	1	7	3	14	4

REPORTED CASES OF MEASLES IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	490	37	57	66	95	98	63	27	9	4	1	7	26
1 year	1195	44	80	139	270	286	202	81	26	8	10	15	34
2 years	1776	49	125	214	385	452	310	184	21	7	6	25	48
3 years	1978	79	108	234	472	517	329	130	19	4	9	27	50
4 years	2313	67	126	298	542	530	408	163	22	6	13	34	65
Under 5 years	7752	276	496	951	1904	1892	1312	533	97	29	39	108	213
5 to 9 years	14484	550	1006	1919	3628	3240	2393	622	59	34	114	298	412
10 to 14 years	1627	101	135	208	368	366	230	61	8	8	9	25	60
15 to 19 years	325	9	36	70	75	73	38	12	2	0	1	1	0
20 to 24 years	155	8	19	29	44	36	16	10	0	0	1	2	0
25 to 34 years	149	6	9	29	28	40	26	8	1	1	0	1	0
35 to 44 years	47	1	7	7	11	14	3	0	0	0	1	1	2
45 to 54 years	22	0	2	1	8	3	4	0	0	0	0	3	1
55 to 64 years	11	0	0	0	2	1	0	0	0	0	1	0	1
65 years and over	3	0	0	0	0	1	1	0	0	0	1	0	1
Age not stated	36	0	3	2	13	4	3	1	0	0	0	0	0
Total	24619	951	1718	3214	5981	5679	4281	1250	167	73	165	438	702

REPORTED CASES AND DEATHS FROM MEASLES IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	256	13	234	10	490	23
1 year	611	25	584	26	1195	51
2 years	904	8	872	6	1776	14
3 years	886	7	892	5	1978	12
4 years	1209	6	1104	2	2313	8
Under 5 years	3966	59	3786	49	7752	108
5 to 9 years	7440	9	7044	6	14484	15
10 to 14 years	751	1	878	0	1627	1
15 to 19 years	151	0	172	1	323	1
20 to 24 years	75	0	90	0	165	0
25 to 34 years	55	0	94	0	149	0
35 to 44 years	17	0	30	0	47	0
45 to 54 years	9	0	13	0	22	0
55 to 64 years	2	0	9	1	11	1
65 years and over	0	0	3	0	3	0
Age not stated	19	0	17	0	36	0
Total	12485	69	12134	57	24619	126

REPORTED CASES OF PARA-TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
2 years	0	0	0	0	0	0	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0	0	0	0	0	0	0	0
5 to 9 years	1	0	0	0	1	0	0	0	0	0	0	0	0
10 to 14 years	4	0	0	0	1	0	0	0	1	0	0	0	0
15 to 19 years	4	0	0	0	1	0	0	0	2	0	0	0	1
20 to 24 years	1	0	0	0	0	0	0	0	0	0	0	1	0
25 to 34 years	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 44 years	3	0	0	0	1	0	0	0	0	1	0	1	0
45 to 54 years	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 64 years	3	1	0	0	1	0	0	0	0	0	0	1	0
65 years and over	0	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	18	1	0	0	4	0	0	0	3	1	0	3	1

REPORTED CASES AND DEATHS FROM PARA-TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	0	0	0	0	0	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0
5 to 9 years	1	0	0	0	1	0
10 to 14 years	0	0	1	0	1	0
15 to 19 years	2	0	2	0	4	0
20 to 24 years	0	0	1	0	1	0
25 to 34 years	0	0	0	0	0	0
35 to 44 years	3	0	0	0	3	0
45 to 54 years	0	0	0	0	0	0
55 to 64 years	1	1	2	0	3	1
65 years and over	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0
Total	7	1	6	0	13	1

REPORTED CASES OF PNEUMONIA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	558	94	128	82	59	39	28	19	4	10	22	29	46
1 year	306	59	49	46	23	11	7	7	10	17	25	1	0
2 years	271	32	62	47	35	27	16	8	2	5	11	24	0
3 years	197	33	50	26	20	16	10	1	2	4	11	6	18
4 years	174	29	29	29	24	18	9	3	1	5	8	8	11
Under 5 years	1595	249	344	243	187	146	84	42	18	28	56	71	127
5 to 9 years	523	63	101	88	93	44	32	12	8	8	25	23	26
10 to 14 years	163	18	26	26	24	13	7	3	3	4	12	15	12
15 to 19 years	175	20	18	26	21	15	8	4	5	7	10	20	21
20 to 24 years	163	19	19	27	23	17	2	4	9	6	7	12	18
25 to 34 years	392	47	54	55	53	34	10	11	7	20	25	40	34
35 to 44 years	447	78	51	53	51	37	17	15	15	15	29	37	49
45 to 54 years	431	53	67	66	56	38	19	10	12	15	30	24	41
55 to 64 years	390	64	58	49	52	31	13	9	6	17	17	30	30
65 years and over	473	72	74	70	69	34	14	14	19	16	32	31	47
Age not stated	8	0	1	2	0	3	0	0	0	0	0	2	0
Total	4760	683	813	705	631	415	211	124	93	136	230	314	405

REPORTED CASES AND DEATHS FROM PNEUMONIA IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	297	353	261	309	558	662
1 year	233	117	162	86	395	203
2 years	184	39	117	32	271	71
3 years	112	24	83	20	197	44
4 years	82	12	92	17	174	29
Under 5 years	878	575	717	464	1595	1039
5 to 9 years	291	84	232	44	523	78
10 to 14 years	101	11	92	20	193	31
15 to 19 years	116	33	59	27	175	60
20 to 24 years	112	30	51	34	163	64
25 to 34 years	231	96	161	82	392	177
35 to 44 years	299	204	148	93	447	289
45 to 54 years	268	258	133	118	431	373
55 to 64 years	229	219	161	155	390	374
65 years and over	218	299	257	362	473	661
Age not stated	6	0	3	0	8	0
Total	2776	1759	1984	1359	4760	3148

REPORTED CASES OF POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	4	1	0	0	0	0	0	0	1	0	1	1	0
1 year	7	0	1	0	1	0	0	0	0	1	3	0	1
2 years	3	0	0	0	0	0	0	1	1	1	0	0	0
3 years	8	0	0	0	1	0	0	0	1	5	1	0	0
4 years	5	0	1	0	0	0	1	0	0	1	0	2	0
Under 5 years	27	1	2	0	2	0	1	1	3	7	6	3	1
5 to 9 years	20	0	2	1	0	0	0	1	5	6	4	1	0
10 to 14 years	4	0	0	0	0	0	0	1	1	0	2	0	0
15 to 19 years	5	0	0	0	0	0	0	0	0	1	3	1	0
20 to 24 years	2	0	0	1	0	0	0	1	0	0	0	0	0
25 to 34 years	1	0	0	0	0	0	0	0	1	0	0	0	0
35 to 44 years	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 54 years	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 64 years	0	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	59	1	4	2	2	0	1	4	10	14	15	5	1

REPORTED CASES AND DEATHS FROM POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	2	1	2	1	4	2
1 year	6	2	1	1	7	3
2 years	2	1	1	0	3	0
3 years	4	0	4	0	8	0
4 years	3	0	2	0	5	0
Under 5 years	17	4	10	2	27	6
5 to 9 years	12	2	3	2	15	4
10 to 14 years	2	1	2	1	4	2
15 to 19 years	2	0	3	0	5	0
20 to 24 years	0	0	2	1	2	1
25 to 34 years	0	0	1	0	1	0
35 to 44 years	0	0	0	0	0	0
45 to 54 years	0	0	1	0	1	0
55 to 64 years	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0
Total	53	8	26	8	59	16

REPORTED CASES OF SCARLET FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	32	3	6	7	2	5	1	0	2	1	0	5	0
1 year	100	19	21	14	12	11	2	2	1	1	3	9	5
2 years	289	47	34	46	52	30	7	3	4	6	12	22	26
3 years	465	79	72	59	54	49	27	8	8	9	13	32	50
4 years	535	79	72	73	78	59	27	9	8	13	18	41	58
Under 5 years	1421	227	205	199	198	154	64	22	23	30	51	109	139
5 to 9 years	3582	489	469	524	456	396	233	59	37	77	130	262	403
10 to 14 years	1470	189	172	256	219	179	103	16	9	32	55	102	134
15 to 19 years	427	50	77	59	41	26	5	3	4	18	20	35	35
20 to 24 years	248	33	32	41	39	33	13	5	2	3	11	17	19
25 to 34 years	303	41	33	56	34	25	15	9	5	2	15	29	36
35 to 44 years	118	17	18	22	18	18	3	1	0	1	6	1	13
45 to 54 years	37	6	2	6	5	4	2	0	1	1	2	2	6
55 to 64 years	5	0	2	2	1	0	0	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	9	0	2	1	0	3	0	1	0	0	0	2	0
Total	7620	1032	1012	1196	1029	853	467	118	75	151	338	544	785

REPORTED CASES AND DEATHS FROM SCARLET FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	18	1	14	0	32	1
1 year	32	1	48	4	100	5
2 years	148	4	141	2	289	6
3 years	218	4	247	3	465	7
4 years	258	5	232	1	536	6
Under 5 years	710	15	702	10	1421	25
5 to 9 years	1782	10	1800	8	3582	18
10 to 14 years	693	4	777	4	1470	8
15 to 19 years	214	1	213	2	427	3
20 to 24 years	88	0	180	1	248	1
25 to 34 years	105	0	198	0	303	0
35 to 44 years	46	0	72	1	118	1
45 to 54 years	13	0	24	0	37	0
55 to 64 years	0	0	1	5	5	2
65 years and over	0	0	0	0	0	0
Age not stated	3	0	6	0	9	0
Total	3683	31	3957	27	7620	58

REPORTED CASES OF SMALLPOX IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
2 years	0	0	0	0	0	0	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0	0	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0	0	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0	0	0	0	0	0	0	0
15 to 19 years	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24 years	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 34 years	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 44 years	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 54 years	1	0	0	1	0	0	0	0	0	0	0	0	0
55 to 64 years	0	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	0

REPORTED CASES AND DEATHS FROM SMALLPOX IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	0	0	0	0	0	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	0	0	0	0	0	0
5 to 9 years	0	0	0	0	0	0
10 to 14 years	0	0	0	0	0	0
15 to 19 years	0	0	0	0	0	0
20 to 24 years	0	0	0	0	0	0
25 to 34 years	0	0	0	0	0	0
35 to 44 years	0	0	0	0	0	0
45 to 54 years	1	0	0	0	1	0
55 to 64 years	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0
Total	1	0	0	0	1	0

REPORTED CASES OF TUBERCULOSIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	21	2	2	1	2	2	1	2	3	3	1	0	2
1 year	25	3	1	2	3	5	1	0	4	2	1	1	2
2 years	20	1	2	2	3	3	1	2	1	0	2	2	1
3 years	17	2	0	2	0	0	3	3	1	2	0	1	0
4 years	29	5	0	3	2	6	2	5	3	2	0	1	0
Under 5 years	112	13	5	10	10	16	8	12	12	9	4	6	7
5 to 9 years	210	13	6	25	35	23	23	29	20	17	15	9	1
10 to 14 years	312	13	17	27	49	24	36	47	19	17	17	19	9
15 to 19 years	506	50	37	35	48	59	48	61	35	47	34	27	25
20 to 24 years	745	64	67	54	73	64	78	57	70	66	58	45	49
25 to 34 years	1234	104	112	119	109	87	104	101	96	112	107	85	98
35 to 44 years	971	79	94	72	93	95	73	81	78	67	85	64	90
45 to 54 years	696	63	64	61	72	60	62	64	60	53	39	50	44
55 to 64 years	324	30	25	37	25	26	28	25	23	21	24	24	25
65 years and over	151	14	10	16	9	13	18	14	16	18	7	8	8
Age not stated	33	2	4	2	3	6	2	3	0	1	8	4	3
Total	5306	441	441	442	508	510	468	472	470	435	397	345	377

REPORTED CASES AND DEATHS FROM TUBERCULOSIS IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	8	16	13	14	21	30
1 year	13	17	12	18	25	35
2 years	9	3	11	6	20	9
3 years	8	5	9	4	17	9
4 years	16	8	13	4	29	12
Under 5 years	54	49	58	46	112	95
5 to 9 years	101	21	118	21	219	42
10 to 14 years	132	25	180	31	312	56
15 to 19 years	200	69	306	147	506	216
20 to 24 years	292	125	453	169	745	294
25 to 34 years	585	292	649	317	1234	609
35 to 44 years	634	334	337	187	971	521
45 to 54 years	518	353	181	114	699	469
55 to 64 years	223	203	101	85	324	288
65 years and over	107	98	44	67	151	165
Age not stated	13	0	20	0	33	0
Total	2859	1621	2447	1184	5306	2905

REPORTED CASES OF TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0	0	0	0	0	0	0
1 year	1	0	0	0	0	0	0	0	0	0	0	0	1
2 years	4	0	0	1	0	0	0	0	1	1	1	0	0
3 years	2	0	0	0	0	0	0	0	0	0	1	1	0
4 years	8	0	0	0	0	1	0	2	2	2	1	2	0
Under 5 years	15	0	0	1	0	0	1	0	3	3	3	3	1
5 to 9 years	33	2	0	0	2	2	0	8	10	7	2	4	2
10 to 14 years	48	0	1	1	1	2	3	5	8	12	10	4	1
15 to 19 years	54	2	1	4	0	3	6	4	14	9	4	3	4
20 to 24 years	39	3	0	1	2	2	1	2	11	10	4	2	1
25 to 34 years	64	2	4	5	2	2	2	4	9	14	6	8	6
35 to 44 years	47	1	1	2	0	1	4	4	6	8	6	6	3
45 to 54 years	19	3	1	0	1	0	1	3	2	1	4	3	0
55 to 64 years	13	1	0	2	0	1	2	0	1	5	0	1	0
65 years and over	4	0	0	0	1	0	2	0	0	0	0	0	1
Age not stated	6	0	0	0	0	0	2	1	2	0	0	1	0
Total	334	14	8	16	9	12	24	24	63	69	44	32	19

REPORTED CASES AND DEATHS FROM TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	1	1	0	0	1	1
2 years	3	0	1	0	4	0
3 years	2	0	0	0	2	0
4 years	5	0	3	0	8	0
Under 5 years	11	1	4	0	15	1
5 to 9 years	37	2	18	1	55	3
10 to 14 years	30	1	18	0	48	1
15 to 19 years	32	7	22	4	54	11
20 to 24 years	27	2	12	3	39	5
25 to 34 years	25	7	29	1	54	8
35 to 44 years	14	1	23	7	37	8
45 to 54 years	11	3	8	2	19	5
55 to 64 years	6	2	7	0	13	2
65 years and over	4	1	0	0	4	1
Age not stated	1	0	5	0	6	0
Total	188	27	146	18	334	45

REPORTED CASES OF WHOOPING COUGH IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Months

AGE GROUPS	NUMBER OF CASES												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Under 1 year	396	60	38	31	85	23	21	29	28	28	31	27	42
1 year	454	69	51	49	35	35	30	38	28	33	21	24	41
2 years	587	79	53	86	35	42	49	53	44	41	36	35	54
3 years	649	88	64	74	56	49	46	51	44	46	38	27	64
4 years	685	88	83	84	32	49	39	51	58	34	46	41	69
Under 5 years	2751	394	289	304	218	198	185	232	182	184	172	154	151
5 to 9 years	2230	350	295	297	206	135	119	111	77	105	102	192	271
10 to 14 years	164	36	24	11	12	13	6	6	8	8	9	9	22
15 to 19 years	16	1	2	3	1	2	3	0	1	1	1	0	1
20 to 24 years	10	0	0	1	1	0	1	1	2	1	1	1	1
25 to 34 years	20	3	2	3	0	0	3	4	0	1	1	1	2
35 to 44 years	11	0	2	1	2	0	2	1	0	1	1	1	1
45 to 54 years	3	0	0	0	0	0	0	0	0	0	0	0	0
55 to 64 years	1	0	0	0	0	0	0	0	0	0	0	0	0
65 years and over	4	2	0	0	0	0	0	0	0	0	0	1	1
Age not stated	5	2	2	0	0	0	0	0	1	0	0	0	0
Total	5215	788	586	623	438	349	319	346	270	391	286	359	550

REPORTED CASES AND DEATHS FROM WHOOPING COUGH IN NEW JERSEY

For the Calendar Year 1930 by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	208	34	188	23	396	57
1 year	224	6	220	14	444	20
2 years	282	3	305	2	587	5
3 years	305	2	344	2	649	4
4 years	311	1	354	2	665	3
Under 5 years	1330	46	1421	43	2751	89
5 to 9 years	1041	0	1189	1	2230	1
10 to 14 years	78	0	86	0	164	0
15 to 19 years	11	0	5	0	16	0
20 to 24 years	2	0	8	0	10	0
25 to 34 years	6	0	14	0	20	0
35 to 44 years	3	0	8	0	11	0
45 to 54 years	0	0	3	0	3	0
55 to 64 years	0	0	1	0	1	0
65 years and over	0	0	4	0	4	0
Age not stated	2	0	3	0	5	0
Total	2473	46	2742	44	5215	90

REPORTED CASES OF LETHARGIC ENCEPHALITIS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Months

AGE GROUPS	Total	Number of Cases					
		July	Aug.	Sept.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0
2 years	2	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0
Under 5 years	2	0	0	0	0	0	0
5 to 9 years	2	1	0	0	2	0	0
10 to 14 years	1	0	0	0	0	0	0
15 to 19 years	1	0	0	0	0	1	0
20 to 24 years	2	0	0	0	1	0	1
25 to 34 years	0	0	0	0	0	0	0
35 to 44 years	2	0	0	0	0	0	0
45 to 54 years	0	0	0	0	0	0	0
55 to 64 years	0	0	0	0	0	0	0
65 years and over	1	0	0	0	0	0	1
Age not stated	0	0	0	0	0	0	0
Total	11	1	0	0	5	1	4

REPORTED CASES AND DEATHS FROM LETHARGIC ENCEPHALITIS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	2	0	0	0	2	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	2	0	0	0	2	0
5 to 9 years	0	0	2	0	2	0
10 to 14 years	1	0	0	0	1	0
15 to 19 years	1	0	0	0	1	0
20 to 24 years	2	0	0	0	2	0
25 to 34 years	0	0	0	0	0	0
35 to 44 years	2	0	0	0	2	0
45 to 54 years	0	0	0	0	0	0
55 to 64 years	0	0	0	0	0	0
65 years and over	1	0	0	0	1	0
Age not stated	0	0	0	0	0	0
Total	9	0	2	0	11	24

* Deaths not tabulated by Age Groups and Sex.

REPORTED CASES OF MUMPS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Months

AGE GROUPS	Total	Number of Cases					
		July	Aug.	Sept.	Oct.	Nov.	Dec.
Under 1 year	1	1	0	0	0	0	0
1 year	12	1	2	1	0	0	8
2 years	12	1	1	1	2	2	5
3 years	20	6	3	1	3	3	4
4 years	24	6	6	0	1	4	7
Under 5 years	60	15	12	3	6	9	17
5 to 9 years	198	57	22	14	23	23	57
10 to 14 years	64	13	7	11	11	8	16
15 to 19 years	16	2	1	2	3	2	6
20 to 24 years	8	5	0	0	0	2	1
25 to 34 years	10	4	1	2	0	2	1
35 to 44 years	4	4	0	0	0	0	0
45 to 54 years	0	0	0	0	0	0	0
55 to 64 years	1	0	0	0	0	0	1
65 years and over	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0
Total	861	100	43	32	43	44	99

REPORTED CASES AND * DEATHS FROM MUMPS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	1	0	1	0
1 year	5	0	0	0	5	0
2 years	8	0	4	0	12	0
3 years	11	0	9	0	20	0
4 years	11	0	13	0	24	0
Under 5 years	35	0	27	0	62	0
5 to 9 years	117	0	79	0	196	0
10 to 14 years	37	0	27	0	64	0
15 to 19 years	7	0	9	0	16	0
20 to 24 years	0	0	8	0	8	0
25 to 34 years	2	0	8	0	10	0
35 to 44 years	1	0	3	0	4	0
45 to 54 years	0	0	0	0	0	0
55 to 64 years	1	0	0	0	1	0
65 years and over	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0
Total	200	0	161	0	361	1

* Deaths not tabulated by age groups and sex.

REPORTED CASES OF TETANUS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Months

AGE GROUPS	Total	Number of Cases					
		July	Aug.	Sept.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0
1 year	0	0	0	0	0	0	0
2 years	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0
4 years	1	0	0	1	0	0	0
Under 5 years	1	0	0	1	0	0	0
5 to 9 years	3	1	0	1	1	0	0
10 to 14 years	3	1	0	1	0	1	0
15 to 19 years	0	0	0	0	0	0	0
20 to 24 years	3	1	0	1	0	1	0
25 to 34 years	1	0	0	0	0	1	0
35 to 44 years	0	0	0	0	0	0	0
45 to 54 years	1	0	0	1	0	0	0
55 to 64 years	0	0	0	0	0	0	0
65 years and over	1	0	1	0	0	0	0
Age not stated	0	0	0	0	0	0	0
Total	18	3	1	5	1	3	0

REPORTED CASES AND DEATHS FROM *TETANUS IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	0	0	0	0
2 years	0	0	0	0	0	0
3 years	0	0	1	0	1	0
4 years	0	0	1	0	1	0
Under 5 years	0	0	1	0	1	0
5 to 9 years	2	0	1	0	3	0
10 to 14 years	3	0	0	0	3	0
15 to 19 years	0	0	0	0	0	0
20 to 24 years	2	0	1	0	3	0
25 to 34 years	1	0	0	0	1	0
35 to 44 years	0	0	0	0	0	0
45 to 54 years	0	0	1	0	1	0
55 to 64 years	0	0	0	0	0	0
65 years and over	1	0	0	0	1	0
Age not stated	0	0	0	0	0	0
Total	9	0	4	0	13	11

* Deaths not tabulated by age groups and sex.

REPORTED CASES OF UNDULANT FEVER IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Months

AGE GROUPS	Total	July	Number of Cases				
			Aug.	Sept.	Oct.	Nov.	Dec.
Under 1 year	0	0	0	0	0	0	0
1 year	2	0	0	1	0	1	0
2 years	0	0	0	0	0	0	0
3 years	0	0	0	0	0	0	0
4 years	0	0	0	0	0	0	0
Under 5 years	2	0	0	1	0	1	0
5 to 9 years	0	0	0	0	0	0	0
10 to 14 years	1	0	0	0	0	1	0
15 to 19 years	1	0	0	0	1	0	0
20 to 24 years	0	0	0	0	0	0	0
25 to 34 years	5	0	0	0	2	2	1
35 to 44 years	3	0	0	0	0	1	2
45 to 54 years	2	0	0	0	2	0	0
55 to 64 years	0	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0	0
Total	14	0	0	1	5	5	3

REPORTED CASES AND DEATHS FROM UNDULANT FEVER IN NEW JERSEY

From July 1, 1930, to December 31, 1930, by Age Groups and Sex

AGE GROUPS	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Under 1 year	0	0	0	0	0	0
1 year	0	0	2	0	2	0
2 years	0	0	0	0	0	0
3 years	0	0	0	0	0	0
4 years	0	0	0	0	0	0
Under 5 years	0	0	2	0	2	0
5 to 9 years	0	0	0	0	0	0
10 to 14 years	1	0	0	0	1	0
15 to 19 years	1	0	0	0	1	0
20 to 24 years	0	0	0	0	0	0
25 to 34 years	4	0	1	0	5	0
35 to 44 years	2	0	1	0	3	0
45 to 54 years	0	0	2	1	2	1
55 to 64 years	0	0	0	0	0	0
65 years and over	0	0	0	0	0	0
Age not stated	0	0	0	0	0	0
Total	8	0	6	1	14	1

REPORTED CASES AND DEATHS FROM CHICKENPOX AND DIPHTHERIA BY COUNTIES FOR 1930

COUNTIES	CHICKENPOX			DIPHTHERIA				
	Cases	Cases per 1000 Pop.	Deaths	Cases	Cases Per 1000 Pop.	Deaths	Deaths per 1000 Pop.	Percent Fatality
Atlantic	88	0.70	0	18	0.14	3	0.02	16.66
Bergen	802	2.34	0	252	0.68	16	0.04	6.34
Burlington	247	2.63	0	48	0.51	1	0.01	2.08
Camden	447	1.64	0	183	0.73	14	0.05	7.56
Cape May	124	4.17	0	2	0.06	0	...	...
Cumberland	158	2.25	0	15	1.41	74	0.09	6.24
Essex	3420	4.08	1	1186	0.21	1	0.01	6.86
Gloucester	222	3.23	0	44	0.61	2	0.03	4.54
Hudson	370	0.53	1	1142	1.65	98	0.14	8.53
Hunterdon	30	0.86	0	7	0.20	2	0.05	28.57
Mercer	370	1.97	0	118	0.63	6	0.03	5.08
Middlesex	301	1.41	0	302	1.41	37	0.17	12.25
Monmouth	884	4.25	0	49	4.33	6	0.04	12.24
Morris	179	1.61	0	48	0.43	1	0.01	2.08
Ocean	67	2.02	0	1	0.03	0	...	...
Passaic	597	1.97	1	437	1.44	34	0.11	7.78
Salem	11	0.30	0	9	0.24	1	0.02	11.11
Somerset	59	0.90	0	30	0.46	6	0.09	20.00
Sussex	20	0.72	0	6	0.21	1	0.03	16.66
Union	1873	4.46	0	244	0.79	25	0.08	10.24
Warren	4	0.08	0	19	0.33	3	0.06	15.79
State	9563	2.35	3	4162	1.02	331	0.08	7.95

REPORTED CASES AND DEATHS FROM DYSENTERY, LEPROSY, OPHTHALMIA NEONATORUM AND PARATYROID FEVER BY COUNTIES FOR 1930

COUNTIES	DYSENTERY		LEPROSY		OPHTHALMIA NEONATORUM		PARATYROID FEVER	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Atlantic	0	0	0	0	0	0	0	0
Bergen	0	2	0	0	0	0	2	0
Burlington	0	0	0	0	0	0	0	0
Camden	2	2	0	0	1	0	0	0
Cape May	0	0	0	0	0	0	1	0
Cumberland	0	0	0	0	0	0	0	0
Essex	5	2	0	0	30	0	4	0
Gloucester	0	0	0	0	0	0	0	0
Hudson	8	3	0	0	0	0	0	0
Hunterdon	0	0	0	0	0	0	0	0
Mercer	3	1	0	0	3	0	0	0
Middlesex	0	0	0	0	0	0	0	0
Monmouth	1	0	0	0	0	0	1	1
Morris	0	1	0	0	0	0	2	0
Ocean	0	0	0	0	0	0	0	0
Passaic	0	0	0	0	3	0	0	0
Salem	0	0	0	0	0	0	0	0
Somerset	0	1	0	0	0	0	0	0
Sussex	0	2	0	0	0	0	0	0
Union	1	0	0	0	1	0	2	0
Warren	0	1	0	0	0	0	0	0
State	20	15	0	0	43	0	13	1

REPORTED CASES AND DEATHS FROM INFLUENZA AND PNEUMONIA BY COUNTIES FOR 1930

COUNTIES	INFLUENZA				PNEUMONIA			
	Cases	Cases per 1000 Pop.	Deaths	Deaths per 1000 Pop.	Cases	Cases per 1000 Pop.	Deaths	Deaths per 1000 Pop.
Atlantic	8	0.06	13	0.12	60	0.47	89	0.70
Bergen	24	0.06	34	0.09	383	1.04	211	0.57
Burlington	3	0.03	11	0.11	31	0.86	54	0.89
Camden	17	0.06	26	0.10	246	0.97	218	0.86
Cape May	7	0.23	4	0.13	11	0.37	30	1.01
Cumberland	4	0.03	12	0.17	74	1.05	33	0.75
Essex	221	0.26	52	0.06	2412	2.38	669	0.80
Gloucester	0	...	6	0.02	28	0.39	41	0.37
Hudson	181	0.26	71	0.10	491	0.71	653	0.94
Hunterdon	0	...	2	0.05	9	0.26	27	0.77
Mercer	15	0.08	10	0.05	182	0.97	143	0.76
Middlesex	1	0.004	16	0.07	47	0.22	173	0.81
Monmouth	20	0.13	11	0.07	182	1.23	96	0.65
Morris	13	0.11	6	0.05	91	0.82	62	0.56
Ocean	0	...	3	0.09	2	0.06	29	0.87
Passaic	16	0.05	25	0.05	179	0.59	201	0.66
Salem	0	...	10	0.27	8	0.21	28	0.76
Somerset	0	...	3	0.04	30	0.46	49	0.75
Sussex	2	0.07	2	0.07	48	1.72	22	0.79
Union	7	0.02	31	0.10	191	0.62	242	0.78
Warren	1	0.02	1	0.02	5	0.10	28	0.56
State	540	0.13	331	0.08	4760	1.17	3148	0.77

REPORTED CASES AND DEATHS FROM MALARIA AND EPIDEMIC CEREBROSPINAL MENINGITIS BY COUNTIES FOR 1930

COUNTIES	MALARIA			EPIDEMIC CEREBROSPINAL MENINGITIS				
	Cases	Cases per 1000 Pop.	Deaths	Cases	Cases per 1000 Pop.	Deaths	Deaths per 1000 Pop.	Percent Fatality
Atlantic	2	0.01	0	0	...	0	...	...
Bergen	3	0.01	1	19	0.05	7	0.02	36.84
Burlington	0	...	0	0	...	0	...	...
Camden	0	...	0	6	0.02	3	0.01	50.00
Cape May	0	...	0	0	...	0	...	...
Cumberland	0	...	0	1	0.01	0	...	...
Essex	4	0.004	1	72	0.08	19	0.02	26.02
Gloucester	0	...	0	0	...	0	...	...
Hudson	1	0.001	0	42	0.06	21	0.03	45.65
Hunterdon	0	...	0	0	...	0	...	...
Mercer	2	0.01	0	3	0.02	3	0.01	60.00
Middlesex	2	0.01	1	9	0.04	3	0.01	33.33
Monmouth	0	...	0	4	0.02	2	0.01	50.00
Morris	0	...	1	5	0.04	2	0.02	40.00
Ocean	0	...	0	0	...	0	...	...
Passaic	0	...	0	11	0.03	0	...	...
Salem	0	...	0	1	0.02	1	0.02	100.00
Somerset	0	...	0	1	0.01	0	...	...
Sussex	0	...	0	0	...	0	...	...
Union	0	...	0	27	0.08	11	0.08	40.74
Warren	0	...	0	0	...	0	...	...
State	14	0.003	4	208	0.05	72	0.01	34.61

**REPORTED CASES AND DEATHS FROM MEASLES AND GERMAN MEASLES
BY COUNTIES FOR 1930**

COUNTIES	MEASLES				GERMAN MEASLES			
	Cases	Cases per	Deaths	Deaths per	Percent	Cases per	Deaths	
		1000 Pop.						1000 Pop.	Fatality	1000 Pop.
Atlantic	209	1.06	0	.....	318	2.51	0
Bergen	2384	6.47	2	0.005	932	2.58	0	
Burlington	887	4.12	2	0.02	0.51	0.10	0	
Camden	772	3.04	5	0.02	0.08	0.08	0	
Cape May	75	2.52	0	.....	112	3.76	0
Cumberland	38	0.54	0	.....	17	0.24	0
Essex	11471	13.06	40	0.04	0.35	1177	1.40	0
Gloucester	78	1.09	0	.....	18	0.25	0
Hudson	2193	3.17	41	0.06	1.87	20	0.03	0
Hunterdon	128	3.68	0	.....	0	.....	0
Mercer	602	3.20	11	0.06	1.82	59	0.31	0
Middlesex	322	1.51	2	0.01	0.62	33	0.15	0
Monmouth	1076	7.28	4	0.02	0.37	11	0.07	0
Morris	653	5.89	4	0.03	0.61	46	0.41	0
Ocean	84	2.53	0	.....	5	0.15	0
Passaic	1040	3.43	5	0.01	0.48	114	0.37	0
Salem	12	0.32	0	.....	1	0.02	0
Somerset	140	2.14	0	.....	65	0.99	0
Sussex	39	3.21	0	0.03	1.09	4	0.14	0
Union	2871	9.38	8	0.02	0.28	2444	7.94	1
Warren	45	0.91	1	0.02	2.22	0	0
State	24619	6.06	126	0.03	0.51	5426	1.33	1

**REPORTED CASES AND DEATHS FROM ACUTE ANTERIOR POLIOMYELITIS AND
SCARLET FEVER BY COUNTIES FOR 1930**

COUNTIES	ACUTE ANTERIOR POLIOMYELITIS				SCARLET FEVER			
	Cases	Cases per	Deaths	Deaths per	Cases	Cases per	Deaths	Deaths per
		1000 Pop.				1000 Pop.			1000 Pop.
Atlantic	4	0.03	1	0.007	103	0.82	1	0.007
Bergen	3	0.01	0	.....	845	1.75	4	0.01
Burlington	2	0.02	0	.....	171	1.32	2	0.02
Camden	7	0.02	1	0.004	360	1.42	5	0.02
Cape May	1	0.03	0	.....	32	1.07	0	.....
Cumberland	0	.....	0	.....	82	1.17	1	0.01
Essex	11	0.01	0	0.002	1980	2.36	7	0.01
Gloucester	1	0.01	0	.....	179	2.51	1	0.01
Hudson	3	0.004	3	0.004	668	0.96	8	0.01
Hunterdon	0	.....	1	.....	91	2.61	1	0.03
Mercer	2	0.01	1	0.005	598	3.18	10	0.05
Middlesex	3	0.01	3	0.01	211	0.99	1	0.004
Monmouth	4	0.02	2	0.01	195	1.32	3	0.02
Morris	3	0.02	0	.....	167	1.30	2	0.02
Ocean	2	0.06	0	.....	40	1.20	0	.....
Passaic	7	0.02	0	.....	832	2.74	6	0.02
Salem	0	.....	0	.....	41	1.11	0	.....
Somerset	1	0.01	1	0.01	184	2.81	1	0.01
Sussex	0	.....	0	.....	207	7.43	0	.....
Union	4	0.01	2	0.006	753	2.44	5	0.01
Warren	1	0.02	0	.....	81	1.64	0	.....
State	59	0.01	16	0.004	7620	1.57	58	0.01

**REPORTED CASES AND DEATHS FROM RABIES, TRACHOMA AND TRICHINOSIS
BY COUNTIES FOR 1930**

COUNTIES	RABIES		TRACHOMA		TRICHINOSIS	
	Cases	*Deaths	Cases	Deaths	Cases	Deaths
Atlantic	1	0	0	0	0	0
Bergen	0	0	2	0	2	0
Burlington	0	0	0	0	0	0
Camden	0	0	1	0	0	0
Cape May	0	0	0	0	0	0
Cumberland	0	0	0	0	0	0
Essex	0	0	3	0	10	1
Gloucester	0	0	0	0	0	0
Hudson	0	0	0	0	0	0
Hunterdon	0	0	0	0	0	0
Mercer	0	0	0	0	0	0
Middlesex	0	0	0	0	0	0
Monmouth	1	1	1	0	0	0
Morris	0	0	0	0	0	0
Ocean	0	0	0	0	0	0
Passaic	1	1	4	0	2	0
Salem	0	0	0	0	0	0
Somerset	0	0	0	0	0	0
Union	0	0	0	0	0	0
Warren	0	0	1	0	0	0
State	3	2	12	0	14	1

* Another death is reported to have occurred outside of New Jersey, but no official copy of death certificate has been received.

**REPORTED CASES AND DEATHS FROM SMALLPOX AND TUBERCULOSIS
BY COUNTIES FOR 1930**

COUNTIES	SMALLPOX				TUBERCULOSIS				
	Cases	Cases Per	Deaths Per		Cases	Cases Per	Deaths	Deaths Per	Per Cent
	Cases	1000 Pop.	1000 Pop.		Cases	1000 Pop.	1000 Pop.	1000 Pop.	Fatality
Atlantic	0	.....	0	.....	154	1.22	102	0.81	66.23
Bergen	0	.....	0	.....	324	0.88	207	0.56	63.39
Burlington	0	.....	0	.....	137	1.46	56	0.39	40.87
Camden	0	.....	0	.....	423	1.66	155	0.61	36.64
Cape May	0	.....	0	.....	20	0.67	10	0.33	50.00
Cumberland	0	.....	0	.....	79	1.12	54	0.77	68.35
Essex	0	.....	0	.....	1465	1.75	718	0.85	49.01
Gloucester	0	.....	0	.....	43	0.63	38	0.33	84.44
Hudson	0	.....	0	.....	957	1.38	513	0.74	53.60
Hunterdon	0	.....	0	.....	14	0.40	14	0.40	100.00
Mercer	0	.....	0	.....	292	1.55	156	0.83	53.42
Middlesex	0	.....	0	.....	210	0.98	131	0.61	62.38
Monmouth	0	.....	0	.....	168	1.13	96	0.65	57.14
Morris	0	.....	0	.....	186	1.22	75	0.67	55.14
Ocean	0	.....	0	.....	30	0.90	26	0.78	86.66
Passaic	0	.....	0	.....	379	1.25	169	0.55	44.59
Salem	0	.....	0	.....	29	0.78	23	0.62	79.31
Somerset	0	.....	0	.....	72	1.10	35	0.53	48.61
Sussex	0	.....	0	.....	8	0.28	15	0.54	.....
Union	1	0.003	0	.....	332	1.08	181	0.59	54.82
Warren	0	.....	0	.....	32	0.64	31	0.62	96.87
State	1	0.002	0	.....	5306	1.80	2805	0.69	52.86

* More deaths than cases reported.

**REPORTED CASES AND DEATHS FROM TYPHOID FEVER AND WHOOPING COUGH
BY COUNTIES FOR 1930**

COUNTIES	TYPHOID FEVER				WHOOPING COUGH			
	Cases	Cases per 1000 Pop.	Deaths	Deaths per 1000 Pop.	Cases	Cases per 1000 Pop.	Deaths	Deaths per 1000 Pop.
Atlantic	16	0.12	4	0.03	16	0.12	0	....
Bergen	42	0.11	0	....	532	1.44	5	0.01
Burlington	31	0.33	3	0.03	77	0.82	2	0.02
Camden	32	0.12	5	0.02	167	0.42	4	0.01
Cape May	9	0.30	1	0.03	44	1.48	2	0.06
Cumberland	9	0.13	0	....	17	0.24	0	....
Essex	44	0.08	7	0.01	2509	2.93	18	0.02
Gloucester	9	0.12	0	....	58	0.81	1	0.01
Hudson	27	0.04	5	0.007	304	0.44	27	0.04
Hunterdon	2	0.05	0	....	19	0.54	0	....
Mercer	25	0.13	3	0.01	174	0.92	9	0.04
Middlesex	14	0.06	4	0.02	25	0.11	5	0.02
Monmouth	21	0.14	4	0.02	332	2.25	6	0.04
Morris	9	0.08	1	0.01	228	2.06	2	0.02
Ocean	1	0.03	1	0.03	25	0.75	0	....
Passaic	10	0.03	0	....	277	0.91	4	0.01
Salem	6	0.10	1	0.02	7	0.19	2	0.05
Somerset	7	0.10	3	0.04	33	0.50	1	0.01
Sussex	2	0.07	0	....	30	1.79	0	....
Union	15	0.05	3	0.01	351	1.24	2	0.006
Warren	3	0.06	0	....	0	....	0	....
State	334	0.08	45	0.01	5215	1.28	90	0.02

**REPORTED CASES AND DEATHS FROM MUMPS, LETHARGIC ENCEPHALITIS,
UNDULANT FEVER, TETANUS AND TULAREMIA BY COUNTIES
FROM JULY 1, 1930, TO DECEMBER 31, 1930**

COUNTIES	MUMPS		LETH. EN- CEPHALITIS		UNDULANT FEVER		TETANUS		TULAREMIA	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Atlantic	11	0	1	0	0	0	0	0	0	0
Bergen	43	0	1	4	1	0	1	1	0	0
Burlington	22	0	0	0	0	0	0	1	0	0
Camden	14	0	0	0	0	0	1	1	0	0
Cape May	4	0	0	0	0	0	0	0	1	0
Cumberland	1	0	0	0	0	0	0	1	0	0
Essex	175	0	7	6	4	0	3	0	0	0
Gloucester	2	0	0	0	3	0	0	0	0	0
Hudson	9	0	1	5	0	0	1	0	0	0
Hunterdon	1	0	0	0	0	0	0	0	0	0
Mercer	7	0	0	1	1	0	2	1	0	0
Middlesex	6	1	0	3	1	0	0	0	0	0
Monmouth	16	0	0	0	1	1	2	1	0	0
Morris	9	0	0	2	0	0	0	0	0	0
Ocean	1	0	0	0	0	0	0	0	0	0
Passaic	15	0	0	1	0	0	1	3	0	0
Salem	5	0	0	0	0	0	0	0	0	0
Somerset	0	0	1	0	1	0	0	0	0	0
Sussex	0	0	0	0	0	0	0	0	0	0
Union	21	0	0	2	0	0	1	2	0	0
Warren	0	0	0	0	0	0	0	0	0	0
State	361	1	11	24	14	1	13	11	1	0

REPORTED CASES AND DEATHS FROM MISCELLANEOUS DISEASES

For the Year 1930

DISEASE	Male		Female		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Ophthalmia Neonatorum	26	0	17	0	43	0
Rabies	3	*2	0	0	3	*2
Trachoma	8	0	4	0	12	0
Trichinosis	6	0	8	1	14	1
Tularemia	0	0	1	0	1	0
Typhus Fever	2	1	0	0	2	1

* Another death is reported to have occurred outside of New Jersey, but no official copy of death certificate has been received.

Report of the Bureau of Engineering

For the Year Ending June 30, 1931

H. P. CROFT, C. E., CHIEF

During the past year this State, in so far as the quality of its public potable water supplies were concerned, was in a more fortunate position than many of its sister states, for no supply was compelled to go to heavily polluted streams for additional sources of water; there have been no epidemics of water-borne diseases and no mass complaints as to objectionable odors and tastes in these supplies.

Progress has been made in the improvement of the waters of the State from a pollution standpoint. This movement has been aided by public opinion which, during the past year, has become more pronounced than ever in insisting upon cleaner streams. The factor which is now adversely affecting the moves to prevent increased pollution of some of our streams and to improve the quality of other streams is the financial condition of the municipalities. It has been suggested that State aid be provided for the construction of sewage treatment works inasmuch as such works are installed for the benefit of large areas of the State; the oft-repeated statement that stream pollution is not confined by municipal boundaries. It has also been suggested that any municipality, under orders of the State Department of Health to install a sewage treatment plant, or to improve existing sewage treatment works should, by law, be prevented from issuing temporary improvement notes or bonds, or permanent bonds, for any purpose whatsoever, except for the purpose of completing work already under way, until provisions shall be made to carry into effect the

order of the Health Department and for the issuance of notes or bonds to pay for such construction.

During the past year two (2) opinions have been handed down by the Court of Chancery which are bound to aid the Department in the exercise of its jurisdiction in the matter of stream pollution and in the supervision of the operation of sewage treatment plants.

There follows an opinion of the Court in an action based upon provisions of Chapter 210, P. L. 1899, as amended by Chapter 72, P. L. (The State Sewerage Act):

IN CHANCERY OF NEW JERSEY.

In re Borough of Fort Lee, et al.,
Charged With Contempt. }

Conclusions

ON FINAL HEARING

Mr. Robert Peacock, Assistant Attorney General for the prosecution.

Messrs. Mackay & Mackay, for defendants.

Buchanan, V. C.

On December 14, 1929, a final decree was entered in this court in a suit brought by the Department of Health of the State of New Jersey against the Borough of Fort Lee,—by the terms of which decree the defendant borough, its officers, servants, employees and agents, were ordered to cease, desist and refrain, from and after June 1, 1930, from permitting and allowing insufficiently treated domestic sewage and other polluting material to flow from its sewage system and drains into the water of a brook tributary to Overpeck Creek in Bergen County,—and commanding the said borough to make such other disposition of its sewage, on or before June 1, 1930, as should be approved by the Department of Health aforesaid.

The decree was duly served on the defendant borough, on December 24, 1929. It was not obeyed; up to the time of these proceedings the pollution has not been stopped, nor has the new disposition of sewage disposal been installed.

To enforce the performance by the borough of the acts which it was by the decree directed affirmatively to do, civil contempt proceedings were instituted for the complainant on March 18, 1931,—resulting in an order imposing a fine to enforce performance. *Department of Health v. Fort Lee*, 108 N. J. Eq. 139.

The present case is a criminal contempt proceeding, to ascertain the guilt of those charged with continuing the pollution of the stream, in violation of the injunctive order of this court, and to impose punishment for that offense, upon conviction.

Obviously the borough acts, and can act, only by its mayor and council. The responsibility rests upon them for the performance or non-performance by the borough of its legal duties. Violation by the borough of an injunction, involves, at least *prima facie*, guilt on the part of one or more of the mayor and council, of the same criminal or quasi-criminal offense. Both a corporation and its individual officers, directors and agents may be guilty and punishable for the same offense. *State v. Engeman*, 54 N. J. Law 247.

Where a municipality is enjoined from doing or continuing a certain act, it seems obvious that those members of the governing body of the municipality, through which alone it can act, who with knowledge of the injunction fail to take such steps as they are in duty bound to take to accomplish the cessation of the thing enjoined, are guilty of contempt.

In the instant case the borough, and all the individuals comprising its mayor and council were made defendants and charged with the offense of the violation of the injunction. On the return of the order to show cause, all of them appeared, waived the presentation of proofs in court and admitted their guilt as charged. This eliminated all questions except the determination of the punishment to be imposed.

Testimony was offered by the defendants to show circumstances alleged to be in mitigation of the offense, and proofs in that behalf were accordingly taken in open court. From these proofs it appears to the entire satisfaction of the court that there was no intent on the part of any defendant of any flagrant flouting of the authority of the court. Apparently they failed to realize that the disobedience to the injunction was a punishable offense; they seem to have regarded only the mandatory portion of the decree and to have looked upon the performance of those provisions as something which for various reasons they could and should avoid or resist as long as possible.

Neither the lack of disrespectful intent,—nor the failure to realize the character of their neglect or refusal to cease the pollution constitute any defense to the charge of contempt,—(and of course were not so offered here, since the guilt was admitted), but may properly be considered in mitigation of punishment. *In re Coolcy*, 95 N. J. Eq. 485, at 488.

Mitigation of punishment however does not mean absolution nor escape from punishment. The defendants have been guilty, as they admit, of a violation,—a long continued violation of an injunction of this court. That in itself requires punishment, by way of deterrent example to others,—for if injunction may be disobeyed without punishment, the government of this state cannot long be carried on.

There are, in the instant case, the additional factors that the violation of the injunction was in derogation of the health of other citizens of the State; and the *desideratum* of a warning to members of the governing bodies of other municipalities and directors of other corporations, that their acceptance of office entails legal duties and responsibilities as well as privileges, honors or emoluments.

The pollution enjoined came from the defendants sewage system, and the cessation of the pollution could only be accomplished by changes in, and repairs to, that sewage system,—which required legal steps by the borough council and subsequent construction and repair work by employees or contractors. To allow the necessary time for this, the injunction became operative some five months after the date of the decree. The proofs before the court show that this was more than ample time: that if the defendants had done, immediately following the service of the decree, the things they have done since the institution of the civil contempt proceedings, there would have been no violation of the decree.

The principal reason offered by defendants by way of excuse in mitigation of their neglecter delay, was that the State Highway Department was contemplating the construction or reconstruction of certain highways, which would in all probability interfere with any reconstructed sewage disposal system, and therefore in all likelihood soon entail a further or duplicate expenditure, if the provisions of the decree were promptly performed. (There was some statement or intimation of the impossibility of the borough, in its then financial condition, legally contracting the expense necessary to perform the decree,—but there was no proof of this.)

That this was a factor properly and reasonably to be considered by the defendants is not questioned; but that it cannot excuse the contemning of the decree is equally beyond question. If the circumstances in that behalf were such as, in the judgment of the defendants, warranted or required delay for a greater period than that afforded by the decree, they should have applied to the court for a modification of, or temporary stay of the injunction. *Cf. In re Cooley, Supra*, 491, and cases cited.

It should be, and has been, taken into consideration, that the defendants have pleaded guilty, instead of putting the State to the time and expense of a trial on that issue.

It is the judgment of the court that under all the circumstances, imprisonment should not be decreed in the present instance, but that a fine of \$500.00 should be imposed upon the defendant borough, and a fine of \$100.00 each upon the individual defendants.

The solicitors for the defendants are directed to produce the defendants in court for sentence, on Tuesday, June 30th; at which time also the solicitor for the prosecution should present draft, of decree for entry.

There follows an opinion of the Court in an action based upon Chapter 23, P. L. 1918 (The operator's licensing act):

IN CHANCERY OF NEW JERSEY.

Between State of New Jersey, ex rel.
Department of Health of the State
of New Jersey,

Complainant.

and

The Township of Chester, in the
COUNTY OF BURLINGTON,

Defendant.

On Bill, etc.

FINAL DECREE

This cause coming on to be heard in the presence of Robert Peacock, Esq., appearing for William A. Stevens, Attorney General, of counsel with the complainant, and George Hillman, Esq., of counsel with the defendant, and the Court having read the pleadings, and having heard the testimony produced on behalf of the complainant and defendant, and having heard the argument of counsel and considered the same, and it appearing that a decree should be entered in accordance with the prayer of the bill of complaint;

It is thereupon, on this twelfth day of June A. D., nineteen hundred and thirty-one, on motion of the Attorney General of the State of New Jersey, of counsel with the complainant, ORDERED, ADJUDGED AND DECREED and the Chancellor doth, by virtue of the power and authority in him vested, order, adjudge and decree that a writ of injunction of this court do forthwith issue out of and under the seal of this court directed to the Township of Chester in the County of Burlington, commanding the said defendant that on and after the first day of July, A. D., nineteen hundred and thirty-one, said Township of Chester, in the County of Burlington, its officers, servants, employees and agents, absolutely and immediately desist and refrain from appointing any person as superintendent or operator in charge of its sewage treatment plant discharging an effluent into any of the waters of this State, or permitting any person to discharge the duties of superintendent or operator in charge of such plant who is not the holder of a license issued by the Department of Health of the State of New Jersey, in violation of the provisions of an act of the Legislature of the State of New Jersey entitled "An Act to provide for the examination and licensing of superintendents and operators in charge of water purification or treatment plants and sewage treatment plants under the direction of the Department of Health of the State of New Jersey," approved February ninth, one thousand nine hundred and eighteen, being Chapter 23 of the Laws of 1918.

AND IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the defendant pay to the complainant its cost in this suit to be taxed.

E. R. WALKER.

Respectfully advised:

(Signed) MALCOLM G. BUCHANAN, V. C.

Filed: June 13, 1931.

TABLE NO. 1.—NUMBER OF WATER, SEWAGE AND OTHER PROJECTS EXAMINED DURING THE FISCAL YEAR ENDING JUNE 30, 1931

Character of Projects	Number	Number of Plans	Number of Applying Municipalities, Commissions or Companies	Engineers' Estimates of Costs
<i>Sewage:</i>				
Sewer extension and pumping stations..	27	81	22	\$715,391.25
Trunk, sub-trunk, relief and intercepting sewers	5	92	4	2,535,000.00
Alterations and improvements at existing sewage treatment works	16	108	15	1,289,256.00
Sewer systems, new	7	71	7	784,000.00
Sewage treatment works, new	5	98	5	715,975.00
Sewer systems and sewage treatment works, combined	1	10	1	210,000.00
<i>Water:</i>				
New systems and supplies	14	35	14	638,870.00
Alterations, improvements and additions at water supplies	44	102	38	745,194.00
<i>Mausoleums:</i>				
New	2	18	2	380,000.00
Totals	121	615	108	\$8,003,686.25
Total of engineers' estimates of costs for the fiscal year ending June 30, 1930				\$5,875,753.10

NUMBER OF WATER SUPPLIES AND SEWAGE PLANTS IN NEW JERSEY

Public potable water supplies	283
Institutional water supplies, State	16
Institutional water supplies, County	16
Total	315
Water supplies, untreated	199
Water supplies, treated	116
Total	315
Municipal sewage plants	191
All other sewage plants, including trade wastes plants	*174
Total	365
Municipal plants under construction	6
All other plants under construction	1
Total	7
Total	372

During the fiscal year ending June 30, 1931, investigations or inspections were made relating to the following:

<i>Water:</i>	
Special water, including complaints and conferences	209
Cross-connections	8
Watersheds	1
Swimming pools' and bathing beaches	2
<i>Sewage:</i>	
Special sewage and trade wastes, including construction work	193
Complaints and conferences	70
<i>Mausoleums</i>	
Construction of new	1

Seventy-three certificates were issued to railroad and vessel companies for the use of water upon interstate carriers. Forty-four man-working days were spent on the investigation of the

* Does not include creamery and dairy wastes treatment plants.

Collingswood sewage treatment work; 14½ man-working days were spent on the investigation of the Freehold sewage treatment works; 34 man-working days were spent on the investigation of the Red Bank sewage treatment works; and, 6 man-working days were spent on the investigation of the Woodbury sewage treatment works. Inspections were made of 7 sewage treatment works' outfalls along the Atlantic Coast. Four man-working days were spent in the collection of surf samples.

Sanitary inspections were made upon the following streams:

Arthur Kill.
Assunpink Creek at Trenton and vicinity.
Bonegut Brook at Plainfield.
Cooper River at Camden.
Hackensack River.
Kill von Kull.
Lakes Bay at Northfield.
Mine Brook at Bernardsville.
North Branch of Raritan River at Far Hills.
Newark Bay.
Overpeck Creek near Hackensack.
Passaic River, Upper reaches.
Tributary of Passaic River at New Providence.
Peapack Brook at Peapack-Gladstone.
Rahway River.
Shabacong Creek at Lawrence Township.
South Branch of Rahway River at Menlo Park.
Wading River, and
Woodbury Creek at National Park.

A sanitary survey was made upon Berry's Creek, requiring 57½ man-working days; 20 man-working days were spent in preliminary work upon the sanitary survey of the Raritan River; and, 10½ man-working days were spent in serving court processes and attending court trials.

Stream pollutions investigated	153
Notices issued to cease stream pollution	153
Reinspections of stream pollutions made	24
Actions against stream polluters held in abeyance	2
Cases for abatement of pollutions referred to Attorney-General	7
Notices issued upon municipalities or water companies to improve water supplies	15

Notices issued upon municipalities or sewer companies to cease the discharge of raw or insufficiently treated sewage into the waters of the State and/or to alter, enlarge or improve sewage treatment works....	9
Resolutions adopted requesting Attorney-General to prosecute municipalities for the employment of non-licensed operators at water and sewage treatment works—	
Water	1
Sewage	4
Cases for the prosecution of municipalities or companies delivering water from unapproved or improperly treated sources of supply referred to Attorney-General	5
Stipulations of agreement entered into with Department by municipalities or companies to improve sewage treatment works	1

TABLE No. 2.—REPORT OF WATER LABORATORY—JULY 1, 1930, TO JULY 1, 1931

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	Total
Public Water Supplies	170	145	219	172	126	152	118	115	141	131	117	151	1,757
Private (submitted by)	27	18	1	1	1	1	4	3	2	2	5	30	86
Camp	3	2	7	5	3	2	4	3	6	5	9	3	52
Employees	34	50	38	14	9	15	10	4	23	14	18	24	253
Local Boards of Health	17	6	9	7	5	3	5	3	7	2	8	7	79
Pay Samples	1	3	2	1	1	1	1	1	1	2	1	1	10
Second Samples	8	7	3	10	8	1	17	1	5	8	7	3	78
State Institution Supplies	24	12	7	10	10	6	4	8	7	5	5	3	101
County Institution Supplies	5	7	9	52	153	130	205	110	20	15	12	6	724
State Highway Supplies	10	10	1	1	3	5	3	5	1	4	2	3	37
School Supplies	34	15	11	1	1	1	1	1	1	1	1	21	81
Dairy Samples	2	3	2	1	1	1	1	1	1	1	1	1	14
Bottled Water Supplies	10	3	2	1	1	1	1	1	1	1	2	1	26
Soft Drink Supply	35	14	5	5	1	1	4	1	4	8	1	6	77
Bathing Waters & Swimming Pools	2	1	2	2	1	1	1	1	1	1	1	1	15
Roadside Stand Supplies	197	127	32	3	15	9	49	131	42	192	52	5	854
Sewage Samples	14	12	7	8	9	1	1	1	3	1	1	15	70
Trade Waste Samples	133	162	18	6	49	5	6	4	6	33	8	1	431
Stream Samples	4	4	4	4	4	4	4	4	4	4	4	4	39
Sand Samples	1	135	1	1	1	1	1	1	1	1	1	1	136
Surf Samples	1	1	1	1	1	1	1	1	1	1	1	1	13
Ice Samples	1	1	1	1	1	1	1	1	1	1	1	1	13
S. W. P. C. Samples	1	1	1	1	1	1	1	1	1	1	1	1	13
Special Experiments	1	1	1	1	1	1	1	1	1	1	1	1	13
Total	730	716	374	305	417	341	501	430	315	484	282	291	5,186

THE LICENSING OF WATER AND SEWAGE TREATMENT PLANT OPERATORS

During the fiscal year, the following number of licenses to operate water and sewage treatment plants in the State were issued by the Department of Health of the State of New Jersey, acting under the authority granted by Chapter 23, P. L. of 1918, according to the classifications set out in the Rules and Regulations governing the examinations of applicants for such licenses:

<i>Water</i> —First Class	7
Second Class	..
Third Class	11
<i>Sewage</i> —Primary-Secondary Treatment, First Division	7
Primary-Secondary Treatment, Second Division	16
Primary-Secondary Treatment, Third Division	4
Primary Treatment, First Division	1
Primary Treatment, Second Division	3
Primary Treatment, Third Division	4
Prior-To	1

One hundred and twenty-four applicants for licenses of the various classifications mentioned above appeared and were examined at the quarterly examinations, 91 applying for licenses to operate water purification or treatment plants. Of the 53 who were issued licenses, 43 were successful at the time they were first examined, 9 after the second examination and 1 after the third examination. A few of the applicants who were successful at their first or second examinations had been examined during the previous fiscal year.

Considering the increase of 28% in the number appearing for examinations over the previous year, and a decrease from 65% in the previous year to 42% during the past year, in the number who passed the examination and received licenses, and with an increase in the number who are required to repeat in order to obtain a license, it is the opinion of the Department that many of the applicants have made very little preparation for the examinations for licenses for which they expect to qualify. In order

to impress upon the applicant the importance of preparation and to minimize the amount of unnecessary time required by the Department personnel in dealing with consistently unsuccessful applicants, the following resolution for an addition to the Rules and Regulations adopted on April 6, 1926, was passed by the members of the Department of Health of the State of New Jersey on December 2, 1930:

RESOLUTION

WHEREAS, The Department of Health of the State of New Jersey has in the past examined applicants at each of the quarterly examinations held for the licensing of water and sewage plant superintendents and operators; and,

WHEREAS, A number of applicants have continually taken such examinations and failed to qualify for licenses, and the Department of Health of the State of New Jersey is of the opinion that many of the applicants have taken advantage of the leniency allowed in the taking of these examinations, and examination papers have shown that no attempt has been made on the part of some of the persons previously examined to improve their knowledge since past examination; therefore,

BE IT RESOLVED, By the Department of Health of the State of New Jersey at a meeting held on the second day of December, A. D. one thousand nine hundred and thirty, that an addition to the regulations for the examining and licensing of water and sewage plant superintendents and operators be and is herewith adopted and made a part of such regulations providing, that on and after October thirty-one, A. D. one thousand nine hundred and thirty, where any applicant has failed twice in any one year or at two successive examinations for any particular grade of water or sewage plant superintendent or operator, such applicant must wait until a period of one year has elapsed from the time of the applicant's last examination before the Department will accept his application or permit him to take an examination to qualify at the quarterly examinations for a license or licenses as water and/or sewage plant superintendent or operator.

Another addition to the Rules and Regulations adopted in a resolution by the Members of the Department of Health of the State of New Jersey on March 3, 1931, is as follows:

RESOLUTION

WHEREAS, The Department of Health of the State of New Jersey has found that superintendents or operators who hold licenses issued by the Department of Health of the State of New Jersey for the operation of water treatment or purification and sewage treatment plants are in some instances operating anywhere from two to six or seven sewage treatment plants under such licenses; and,

WHEREAS, It is the opinion of the Department of Health of the State of New Jersey that it is a physical impossibility for any one person to daily supervise, in a satisfactory manner, the operation of a large number of water treatment or purification or sewage treatment plants; and,

WHEREAS, In order to prevent such a procedure from becoming a growing and hazardous menace to public health and to stay the practice by licensed superintendents or operators in operating or supervising the operation of large numbers of water treatment or purification or sewage treatment plants, it is the opinion of the Department of Health of the State of New Jersey that an amendment be made to the Rules and Regulations, adopted by the said Department of Health on April 6, 1926; therefore,

BE IT RESOLVED, By the Department of Health of the State of New Jersey, at a meeting held on the third day of March, A. D. one thousand nine hundred and thirty-one, that the foregoing amendment to the Rules and Regulations governing examinations for licenses for sewage treatment and water treatment plant operators be made in manner following: That there be added to such Rules and Regulations a new paragraph to be known as Paragraph 6, under the title "General", which shall read:

"6. When a license is issued or has been issued by the Department of Health of the State of New Jersey to any superintendent or operator to supervise or operate any water treatment or purification or any sewage treatment plant in the State of New Jersey, before any person holding such a license can operate more than one of such plants, a permit must first be obtained by such person from the Department of Health of the State of New Jersey; and, if the application of any superintendent or operator to operate more than one of such plants is denied by the Department of Health of the State of New Jersey, then if such operator shall in any way supervise or operate or attempt to supervise or operate more than one of such plants he shall be immediately summoned to appear before the Director or the Department of Health of the State of New Jersey for a hearing, and, if no good cause for such action by such superintendent or operator be shown his license to operate a water treatment or purification or sewage treatment plant in this State shall be forthwith revoked by the Department of Health of the State of New Jersey."

The Department of Health of the State of New Jersey, charged with the enforcement of Chapter 23 of the P. L. of 1918, instituted proceedings, and obtained an injunction, in the Court of Chancery against two municipalities in the State restraining the continuance, after a specified date, of the operation of the municipal sewage treatment works without a licensed operator.

Through confidence in the competency of the operators of water and sewage treatment works the Department is better able to serve municipalities, corporations or individuals in the production of safe drinking water and in the proper treatment of sewage, and

it is toward this end that the qualifications of applicants for licenses are being considered more carefully and additions to the Rules and Regulations have been adopted.

SEWAGE WORKS ASSOCIATION

The New Jersey Sewage Works Association and the Bureau of Engineering, cooperating, held on March 20 and 21, 1931, at Trenton, the Sixteenth Annual Conference of sewage plant operators. Over three hundred sewage plant operators, sanitary engineers, and chemists from New Jersey and other states were in attendance. A number of papers containing helpful information to sewage plant operators, sanitary engineers and chemists were read before the meeting. These papers are printed in the Association's Annual Proceedings.

COOPERATION WITH OTHER STATE DEPARTMENTS

The Bureau, as in the past, is cooperating in the examination of samples of water, other than from public potable water supplies, and the making of sanitary surveys, with:

The State Water Policy Commission of waters from the streams of the State;
The State Department of Conservation and Development, of water supplies in the State Parks;

The State Department of Education, of water supplies from the several hundred rural schools in the State;

The State Fish and Game Commission, of pollutions in streams which may be detrimental to fish life;

The several County Mosquito Extermination Commissions, in the investigation of methods to control mosquito breeding at sewage treatment plants in the State.

PUBLIC MAUSOLEUMS

Eleven public mausoleums have been constructed in the State since the approval of Chapter 233 of the P. L. of 1916. Two of these mausoleums have been enlarged since construction. During the fiscal year plans and specifications have been approved for the erection of mausoleums at:

Bridgeton (Overlook Cemetery)—Overlook Mausoleum Company	
—Estimated Cost of Construction	\$80,000
Camden (Harleigh Cemetery)—Harleigh Memorial, Inc.—Estimated	
Cost of Construction	\$300,000

PERMITS ISSUED FOR THE ESTABLISHMENT OF FACTORIES ON WATERSHEDS

During the past fiscal year permits were issued for the establishment of the following factories upon watersheds in the State:

Hackensack Watershed:

Permit No. 111—William H. Schulz, Woodcliffe Lake. Establishment of a cider factory on Glen Brook, a tributary of Pascack Creek.

Permit No. 112—Everett Terhune, Park Ridge. Establishment of a cider factory on Woodbridge Lake, a tributary of the Hackensack River.

WATER SUPPLIES IN NEW JERSEY

Many manufacturing industries in the several States have requested during the past few years a list of the water supplies in the municipalities of New Jersey containing hardness and alkalinity figures. In order that the Department may in future be able to comply with such requests there is printed in the following Table No. 2 pertinent data of the water supplies in the State.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION 1930 PERMANENT	POPULATION SUPPLIED ESTIMATED	1930 CONSUMPTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Callion Water Company (Callion) Camden (Municipality)	3 springs 1 driven wells, 118'-183' deep at Camden; 5 driven wells, 150'-200' deep at Putnam Field; 115 driven wells at Adams Station; 3 driven wells, 130'-144' deep at Cedar	Chlorination	634 118,700	600 105,000	2 G 10,448 P	2 G P	35.1 50.0	20.0 21.5
(Pensauken Twp.) (Dear Section)	2 springs, 2 driven wells, 30'-40' deep	Chlorination	10,915 2,510	300 200*	30 P	P	31.0	35.0
Camp Meeting Assoc. of Newark Con- tinental (Municipality)	1 spring 1 driven wells, 290'-312' deep	Chlorination	1,235 2,037	50* 2,037*	..... G 941 P	G P	18.2 37.7	23.0 30.0
(Parsippany Twp., part) Mt. Taber Section)	1 driven well, 602' deep; 4 shallow wells, 10'-20' deep	Chlorination	1,048 164	1,048 101*	40 P	P	37.1	300.0
(Cape May (Municipality) (West Cape May))	Springs		1,444 2,162	1,000* 800*	..... G	G	35.0	25.0
Cedar Lake Water Co. (Denville Twp., part)	1 driven wells, 88'-326' deep		3,839 369	3,500 369	355 P	P	90.0	73.0
Chatham (Municipality)	1 driven well, 276' deep		5,117	4,000	800 P	P	50.0	39.0
Chatham Colony Assoc. (Floral Hill Section of Chatham)	1 driven wells, 355' deep	Aeration and rapid sand filtration (pressure) for iron removal	2,351	1,500	60 P	P	.....	.....
Chester (Municipality)	1 driven well, 100' deep	Aeration and lime treatment for iron removal						
(Maple Shade Section) (Municipality)								
Clayton (Municipality)								

(HI Wells) (Lindenwold)	1 driven wells, 172'-239' deep	Chlorination	2,605 2,160 2,523	2,005 1,100 1,800	268 P	P	60.0	65.0
(Pine Hill)	1 driven well, 200' deep		1,140 40	25 25	50 P	P	28.0	5.0
Cliffwood Beach Co., Inc. (Metawan Twp., part) Clifton Water & Water Supply Co. (Clinton)	1 driven well, 200' deep Beaver Brook	Chlorination	2,498 932 1,550 650	250* 892 1,550 650	50 P 158 G	P G	28.0 75.0	5.0 70.0
(Clinton Twp., Annandale Section) (Labanon) (Cape water to Beaver Brook Water Co.)			1,974	600	..... G	G	.....	.....
Clymer, Miss Valera (Pohatcong Twp., Bigselsville Section)	1 springs		8,970	200*	..... P	P	.....	.....
Coast Inland Development Co. (Dover Twp., Normandy Beach Section)	1 driven well, 1038' deep	Chlorination, aeration	12,728 2,315	12,723 2,315	1,100 P	P	65.7	48.0
Collingswood (Municipality)	3 driven wells, 297'-337' deep		5,865	1,200	26 P	P	64.0	68.0
(Haddon Township)								
Colonial Manor Water Co. (West Beverly Twp., Colonial Manor Section of Mansfield Twp.)	1 driven well, 140' deep		1,709	500	17 P	P	60.0	75.0
Columbus Water Company (Columbus Section of Mansfield Twp.)	2 driven wells, 223'-230' deep		1,711	210	..... P	P	15.0	20.0
Cook, H. A. (Dutch Neck Section of West Inman Twp.)	3 shallow wells, 30' deep		14,666 5,509 57,691 3,470	14,598 5,509 57,691 3,470	0,201 P	P	137.6	80.0
Cummins Water Co. (Summit)	37 driven wells, 40'-304' deep	(Coagulation, rapid sand filtration (gravity) and chlorination)	21,821 2,112 3,915 1,889 3,725 2,149 2,442 2,709 2,400 27,121	21,821 2,112 3,915 1,889 3,725 2,149 2,442 2,709 2,400 27,121	..... P	P	20.0	11.0
(Hillside Twp., part) (Irvington Twp.)			280	280*	89 P	P	33.8	68.0
(Livingston Twp.)			1,607	200				
(Maplewood Twp.) (Millburn Twp.) (New Providence) (New Twp.) (Springfield Twp., part) (Stirling)								
(Union Twp., part) (West Orange) Columbia Water Co. (Yanville Hts. Sections of Hamilton Twp.) Corson's Inlet Water Co. (Corson's Inlet and Strathmere Sections of Upper Twp.)	1 spring at Yanville 1 spring at Yanville Hts. 1 driven well, 356' deep							

* Seasonal increase from 2 to 20 times in population.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT 1930	POPULATION SUPPLIED ESTIMATED	1930 CONSUMPTION IN THOUSAND GALLONS PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Cranbury Water Co. (Cranbury Twp.)	2 driven wells, 115'-267' deep	Aeration and lime treatment for CO ₂ removal	1,278	1,000	27 P	F	65.7	31.0
Crestmont Realty Co. (Crestmont Park Section of Irving Twp.)	1 driven well, 165' deep		6,942	150	....	F	47.0	56.0
Crosswicks Water Co. (Crosswicks Section of Chesterfield Twp.)	Spring collecting drains		1,280	600	21 P	P	53.0	5.0
Dale, River Water Co. (Berwick)	12 driven wells, 69'-70' deep		2,864	2,864				
(Delanco Twp.)			2,849	2,000				
(Edgewater Park Twp.)			1,483	5,000				
(Horseshoe Twp.)			2,182	1,600				
Dover (Municipality)	1 driven well, 100' deep	2 Chlorination for spring supplies	10,981	10,000	689 G&P	....	....	70.0
(Delaware, Village and Carney's Neck Twp.)	8 springs, 1 spring collecting drain		3,879	450	38 P	P	15.0	81.0
E. I. duPont de Nemours & Co. (Despatch, Village and Carney's Neck Twp.)	1 driven well, 96' deep		2,361	550	....	P	20.8	7.0
E. I. duPont de Nemours & Co. (Gibbstown Section of Greenwich Twp.)	40 driven wells, 115'-200' deep	Aeration, sedimentation and filtration (pressure) for iron removal and chlorination	98,020	68,020	4,054 P	105.0	89.0	
East Orange (Municipality)	4 driven wells, 332'-440' deep		3,478	3,478	289 P	....	....	5.0
Egg Harbor City (Municipality)			2,031	160	....	P	47.1	175.0
Etchler, August (East Greenwich Twp., Mickleton Section)	1 driven well, 170' deep							

Elizabethtown Water Co., Cons.	Elizabeth River; Hammock Station, 56 driven wells, 125' deep; Spring-Field station, 54 driven wells, 135' deep; many other shallow wells; 1225' deep Watchung station	Rapid sand filtration (gravity) for surface supplies and chlorination for all supplies	114,580	110,580	9,007 P	136.0	125.0	
(Elizabeth)			1,474	800				
(Clark Twp.)			5,148	5,084				
(Dunellen)			17,001	14,000				
(Hillside Twp.)			3,604	3,000				
(Middlesex)			5,895	800				
(Piscataway Twp.)			34,422	4,000				
(Plainfield, part)			6,025	1,500				
(Raritan Twp.)			15,021	1,500				
(South Plainfield, part)			6,047	600				
(Union Twp.)			19,472	8,572	122 P	24.7	20.0	
Elmer Water Company (Elmer)	1 driven well, 75' deep	Chlorination	1,219	1,219				
Essexville (Municipality)	10 driven wells, 30'-236' deep		5,144	5,004				
(North Caldwell)			1,492	1,402				
(West Caldwell)			2,911	2,911				
(Verona)			1,101	1,051				
(Westfield)			1,831	1,000				
Evans, Charles N. (Lincoln Park)	1 driven well, 53' deep		15,030	4,000	0.8 P	06.0	51.0	
Fairbanks-Morse Co. (Bridgeport)	1 driven well, 74' deep	"Chlorination	5,009	5,009	306 P	146.5	44.0	
Fairview (Municipality)	3 driven wells, 300'-325' deep		8,146	800	13 P	91.5	104.0	
(Ilwaco Twp., part)	1 driven well, 468' deep		1,316	500	....	G	101.3	174.0
Fisher, David K. (Sparta, part)	Spring	"Chlorination	5,975	150	....	P	55.0	40.0
Flemer, Wm. Jr. (Franklin Twp., Kingsessing Section)	1 dug well, 23' deep		2,729	2,729	....	P	78.0	67.0
Flemington Water Co. (Flemington)	2 driven wells, 405' deep; 4 springs; South Branch of Raritan River	Rapid sand filtration (gravity) and chlorination on springs and surface supply	1,269	1,269	....	P	....	80.0
(Forsyth)	1 driven well, 306' deep		1,574	40'	....	P	....	80.0
Florida, A. W. (Sparta, part)	1 spring		1,310	150	....	G	105.0	185.0
Freehold (Municipality)	116 driven wells, 60'-500' deep		6,894	6,894	400 P	....	....	98.0

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT	POPULATION ESTIMATED	1930 CONSUMPTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Hamburg (Municipality) Co. (Hamilton Twp., Hamilton Square Sec.)	3 driven wells, 98'-103' deep 1 driven well, 130' deep	Chlorination	1,160	1,190	30 P	P	145.2	227.0
Hammonton (Municipality)	8 driven wells, 190-323' deep		6,417	6,417	485 P	P	14.8	5.0
Hanover Water Co. (Wrightstown)	1 driven well, 140-341' deep		176	176	6 P	P	90.0	98.0
Harvey Cedars (Municipality)	1 driven well, 350' deep		63	40*	8 P	P	30.0	8.0
Highland Park (Municipality)	1 driven well, 350' deep		3,115	400	89 P	P	....	....
Hightstown (Municipality)	3 shallow wells, 27-39' deep 1 well, 24-36' deep 1 well, 24-36' deep	Permutit filter for iron removal	11,808	11,808	697 P	P	81.4	84.0
Holmdel (Municipality)	1 driven well, 280' deep; 2 shallow wells, 113'-256' deep		801	601	17 P	P	30.0	8.0
Irvington (Municipality)	1 driven well, 70' deep		1,892	200	....	P	7.0	12.0
Irvington Lakes, Rees (Elin, Hill) Light Bridge (Municipality)	3 driven wells, 63'-100' deep; 1 dug well, 27' deep; 1 seepage well	Chlorination, except driven wells	1,800	1,800	173 G	G	70.0	60.0
Highlands (Municipality)	1 driven well, 163' deep; 1 spring	Aeration and slow sand filtration for iron removal	1,877	1,877*	218 P	P	68.6	65.0
Hightstown (Municipality)	5 driven wells, 200' deep	Aeration and rapid sand filtration (pressure) for iron removal. Rapid sand filtration (pressure) and lime for CO ₂ and iron removal	3,012	3,012	273 P	P	65.5	59.0
Home Colony, Inc. (Prospect Point Section of Lake Hopatcong)	1 driven well, 330' deep		1,254	150*	3.4 P	P	88.5	37.0
Hopewell (Municipality)	2 driven wells, 224'-506' deep		1,697	1,697	54 P	P	116.5	88.0
Hopewell (Municipality)	1 driven well, 285' deep		1,574	30*	....	P	....	....
Horseneck (Municipality) (Fortescue Section of Dovey Twp.)	1 well, 60' deep		2,162	300*	....	P	23.8	17.0
Hussa, Harry (Indian Lakes Section of Denver Twp.)	2 driven wells, 100'-165' deep		2,100	300*	28 P	P	32.0	21.6
Island Heights (Municipality)	4 driven wells, 50'-200' deep	Aeration and rapid sand filtration (gravity) for iron removal	453	453*	22 P	P	15.6	65.0
Jamesburg Water Company (Jamesburg)	4 driven wells, 75'-128' deep		2,048	2,048	23.6 P	P	17.3	5.0

Jersey City (Municipality) (Calowal Twp., Fairfield Section) (Hoboken) (North Arlington) (Little Falls, part) (Nutley, part) (Passaic, part) (Secaucus, part) (Union, part) (West Woodbury, New York Harbor) (York Harbor)	Stockaway River	Chlorine and hypochlorite disinfection	316,715	316,715	50,756 G	G	32.5	26.0
Junction Water Company (Hampton) (Bayonne, in emergency)	Hokey River; 12 springs; 1 driven well, 227' deep	Chlorination	88,970	88,970	....	....	....	....
Kearnsburg (Municipality)	2 driven wells, 200' deep	Aeration, lime and rapid sand filtration (pressure) for iron removal	961	961	139 G&P	P	31.2	27.0
Keystone (Municipality)	7 driven wells, 240'-278' deep	Aeration and slow sand filtration for iron removal	2,100	1,800*	467 P	P	35.0	23.0
Koch, Fred W. (Rochelle Park Twp.)	1 driven well, 206' deep		4,940	4,840*	176 P	P	41.6	13.0
Lacy, Philip (Hamilton Twp., White Horse Section)	1 driven well, 60' deep		250	250	....	P	115.0	66.0
Lakehurst (Municipality)	2 driven wells, 123'-283' deep		27,121	200	....	P	30.0	5.0
Lakewood Water Co. (Lakewood)	3 driven wells, 600' deep; 3 shallow wells, 20' deep (emergency supply, Metacombk River)	Chlorination	947	947*	33 P	P	31.0	41.0
(Howell Twp., part)	7,869	3,620*	710 P	20.0	25.5	....	....
Lambertville Water Co. (Lambertville)	Spring; streams tributary to Delaware River	Slow sand filtration and chlorination	4,060	800	293 G	G	51.4	41.0
Lawrenceville Water Co. (Gloucester Twp., Overbrook Section)	6 driven wells, 96'-110' deep		4,660	4,000	....	....	....	....
(Lanrel Springs) (Magnolia) (Stratford)			5,820	200	....	....	....	....
(Voorhees Twp., Kirkwood Section)			1,843	1,843	....	....	....	....
Lawrence Harbor Hts. Co. (Madison Township, Municipal Harbor Section)	2 driven wells, 99'-200' deep		1,622	1,622	354 P	P	78.6	71.0
Lawrenceville Water Company (Lawrenceville Twp., Lawrenceville Section)	2 driven wells, 1186'-1829' deep		1,495	1,331	....	....	....	....
Lawrenceville Sec. (Lawrenceville Sec.)	2 driven wells, 68'-230'		1,406	500	59 P	P	30.0	9.3
Lehigh Valley Water Company (Location of Lehigh River, infiltration gallery) (Lehigh Twp., part) (Phillipsburg, N. J.)			987	987*	37 P	P	52.0	164.0
			6,293	1,650	92 P	P	15.1	68.0
			19,295	25	30 P	P	27.0	20.0

* Seasonal increase from 2 to 20 times in population.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT	POPULATION SUPPLIED	ESTIMATED	1930 CONSUMPTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Lodi (Municipality)	5 driven wells, 305'-390' deep	1. Rapid sand filtration (pressure) for iron removal at Beach Haven Terrace	11,549	11,549	713	P	166.3	97.0	
Long Beach Water Company (Long Beach Twp.)	1 Beach; 1 driven well, 308' deep at Beach Haven Terrace	2. Chlorination	385	385*	70	P	10.9	10.0	
Longport (Municipality)	2 driven wells, 850'-885' deep	Chlorination	228	228*	103	G	86.1	57.0	
Long Valley Water Co. (Washington Township)	Spring fields and underdrains	Chlorination	1,615	660	....	P	18.2	30.0
Lonsdale Water Co. (Phillipsburg, part)	Merrill Brook		19,245	755	....	P	....	....
(Lopatcong Twp.)	2 driven wells, 150' deep		1,289	1,000	753	G	20.0	4.0	
Lucas & Company, John (Gibbboro)	1 driven well, 400' deep		1,405	320	35	P	55.7	73.0	
Lumberton Light, Water and Sewerage Co. (Lumberton Twp.)	11 driven wells, 386'-106' deep		905	600	21	P	40.6	42.0	
Madison (Municipality)	3 driven wells, 390'-400' deep		7,481	7,481	609	P	110.8	107.0	
Madison Water Co. (Hoboken Twp., Hrielle)	6 driven wells, 48'-150' deep		3,586	1,500	....	P	86.0	82.0
Manasquan (Municipality)	2 driven wells, 210' deep		2,320	2,320*	174	P	30.0	8.3	
Manua Water Co. (Manlius Twp.)	2 driven wells, 210' deep		684	684*	19	P	32.5	148.0	
Marville (Municipality)	2 driven wells, 510'-525' deep	Chlorination	2,077	1,000	39	P	73.0	80.0	
Marvin City (Municipality)	2 driven wells, 210' deep		2,913	2,913*	570	P	168.9	119.0	
Marion Water Company (Marion)	2 driven wells, 216' deep		1,054	1,100	....	P	106.9	119.0
Matavon (Municipality)	5 driven wells, 207'-227' deep	Aeration and slow sand filtration for iron removal	2,264	2,264*	177	P	10.5	6.0	
Mays Landing (Municipality, Hamilton Twp., Atlantic County)	3 driven wells, 250' deep		8,189	1,000	82	P	22.1	18.0	
Mays Landing Water Power Co. (Mays Landing, Section of Hamilton Twp., Atlantic County)	2 driven wells, 176' deep (emergency supply, Lake Lenape)	Chlorination for emergency supply	8,183	500	....	P	60.0	43.0
McCollin (Municipality)	1 driven well, 170' deep		27,121	200	....	P	27.0	9.0
McCallister, W. M. (White Horse Section of Hamilton Twp.)	1 driven well, 70' deep; 1 shallow well, 20' deep		27,121	200	....	P	15.6	3.0

Medford Water Co. (Medford Twp.)	1 driven well, 538' deep (emergency supply, Runnons Creek)	1. Chlorination of emergency supply	2,021	1,290	53	P	88.6	75.0
Medham (Municipality)	4 springs, Brook tributary to North branch of Luritan River	2. Slow sand filtration of brook water	1,278	1,278	80	G	18.2	36.0
Merchantville-Pensauken Water Company (Merchantville)	13 driven wells, 75'-227' deep	Aeration and rapid sand filtration (pressure) for iron removal	1,003	400	....	P	....	....
(Pensauken Twp., part)			3,682	3,682	945	P	53.5	18.5
(Delaware Twp., part)			1,516	1,516	....	P	....	....
(Camden, part)			5,734	3,506	....	P	....	....
Middlesex Water Co.	118,700	1,700	....	....	....	P	....	....
(Woodbridge Twp.)			25,266	25,266	4,080	P	138.0	48.2
(Cartersville)			13,930	13,930	....	P	....	....
(Clark Twp.)			1,474	1,474	....	P	....	....
(Metuchen)			5,748	5,748	....	P	....	....
(Barrington Twp.)			10,027	3,000	....	P	....	....
(Barrington Twp.)			2,149	1,000	....	P	140.0	146.0
Millington Water Co. (Passaic Twp., Millington Section)	2 shallow wells, 16'-20' deep	1. Coagulation, rapid sand filtration	14,705	7,200	2,294	P	13.7	9.0
Millville (Municipality)	8 driven wells, 112' deep	2. Rapid sand filtration (gravity) and chlorination for surface supply	14,705	7,200	1,737	P	16.9	3.0
Millville Water Co. (Millville)	14 driven wells, 338'-400' deep; Union wa.; 11 driven wells, 300' deep at South Plainfield		883	883	82	P	114.8	107.0
Mine Spring Water Co. (Milford)	1 driven well, 96' deep; 1 shallow well, 24' deep		....	....	....	P	....	....

* Seasonal increase from 2 to 20 times in population.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT	POPULATION SUPPLIED ESTIMATED	1930 CONSTRUCTION GAINS PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Monmouth Consolidated Water Co. (Neptune Twp., Bradley Beach) (Easton) (Fair Haven) (Long Branch) (Middletown Twp.) (Ocean Twp.) (West Bank, part) (Trenton) (Sea Bright) (Shrewsbury) (Trenton) (West Long Branch) Monice Township (Municipality, Whitmanstown Section) Moors-town (Municipality)	10 driven wells, 690'-1125' deep; Jumping Brook at Neptune Twp., auxiliary supply at Whitesville Branch Whole Pond Brook at West Long Branch Hop and Yellow Brooks at Newman Springs 8 driven wells, 380'-585' deep, at Deal, held as supplementary supply 3 driven wells, 101'-338' deep at Fair Haven, held as supplementary supply 2 driven wells, 102'-114' deep 3 driven wells, 157'-517' deep	Rapid sand filtration (pressure), lime sedimentation and chlorination for Ca_2 iron removal Rapid sand filtration (pressure) and chlorination Coagulation, rapid sand filtration (gravity) and chlorination Aeration and slow sand filtration for iron removal Aeration, sedimentation and rapid sand filtration (gravity) for iron removal	10,625 3,300 800 1,038 2,560 18,457 9,200 2,258 2,852 1,600 11,622 889 1,052 1,680 4,064 7,247	6,425* 3,300* 800* 1,038* 2,000* 18,457* 9,200* 2,258* 2,852* 1,600* 11,622* 889* 1,052* 1,680* 4,064* 7,247	8,139	P	85.7	30.0

Morris and Sussex Water Service Co. (Lake Rogers Section of Mt. Arlington) Moers-town (Municipality)	8 driven wells, 45'-60' deep; springs and sand springs (to bottom of reservoir); East Primrose Brook with infiltration gallery in two reservoirs in Spring West Primrose Brook with infiltration gallery in two reservoirs in series; Harmony Brook (emergency supply)	Chlorination for surface supply	306 15,197	100 15,107	1,180	P	70.0	84.0
(Hanover Twp., part) (Harding Twp., part) (Cedar Grove Twp., part) (Morris Twp., part) Mountain Lakes (Municipality) Mount Holly Water Co. (Cranford Twp., Mt. Holly Section)	5 driven wells, 50'-460' deep 1 driven well, 372' deep (emergency supply); Manocoe Creek	Rapid sand filtration (gravity) and chlorination for iron removal Lime treatment for alkalinity	9,516 1,294 1,713 5,565 2,132 6,073	1,500 800 1,713 4,000 2,132* 6,060*	141 318	P	75.0 45.5	45.0 61.7
(Hinesport Twp., part) (Morris Twp., part) (Morris Twp., part) National Park (Municipality) (West Bedford Twp., part) (Newburg (Municipality) Newark (Municipality)	1 driven well, 200' deep 2 driven wells, 100'-120' deep 2 driven wells, 20'-87' deep; Springs, underground and brook Pequanook River Ruys water from North Jersey District Water Supply Commission)	Chlorination	984 903 10,025 1,828 2,610 2,607 442,337 28,974	400 260 600 1,828 2,610 2,607 442,337 28,974	98 98 141 318	P	43.5 74.3	85.0 15.0
(Belleville) (Bloomfield, part) (Cedar Grove Twp.) (Elizabeth, part) (Northey) New Brunswick (Municipality) (Franklin Twp., part) (Hightland Park) (Milltown) (New Brunswick Twp., part) New Water Co. (Pinnstead Twp., New Egypt Section)	Lawrence Brook 1 driven well, 238' deep	Aeration, rapid sand filtration (gravity) and chlorination	5,675 8,601 2,824 3,622 1,215	800 8,601 2,824 3,622 650*	6,452	P	85.1	7.0

* Seasonal increase from 2 to 20 times in population.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT 1930	POPULATION SUPPLIED ESTIMATED	1930 CONSUMPTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
New Jersey Conference Camp Meeting Assoc. (Morris Township, Pitman Section) New Jersey Water Company	1 driven well, 183' deep		5,411	400*	118 P	P	87.8	73.0
(Haddon Heights)	1 driven well, 408' deep at Ashland Terrace; 6 driven wells, 190'-285' deep at Haddon Heights and vicinity; 1 driven well, 100' deep at Barrington; 27 driven wells, 82'-178' deep at Camden; 1 driven well, 518' deep at Runnemede	Chlorination on Runnemede supply Aeration and filtration for iron removal on Barrington supply	5,894 5,904 2,252 2,262 11,729 5,774 2,200 8,867 9,198 8,948 3,843 1,948 2,438 1,405	5,894 5,904 2,252 2,262 11,729 5,774 2,200 8,867 9,198 8,948 3,843 1,948 2,438 1,405	1,423 P	P	71.5	83.8
New Jersey Water Service Company Ashland Terrace (East Orange) (Burgade) (Pompton Lakes) (Riverside) (Wanaque) (Little Falls Twp.) (West Paterson)	Purchases Water from Passaic Valley Water Commission	Chlorination	8,892 2,548 3,768 1,062 3,119 4,000 3,101	8,892 2,548 3,768 1,062 3,119 4,000 3,101	....	G	37.7	80.0

New Jersey Water and Light Co. 29 driven wells, 400'-1100' deep (Ocean Grove Section of Neptune Twp.)	Walkill River	Rapid sand filtration (gravity) and chlorination	10,625	4,000*	340 P	P	87.1	75.0
New Jersey Zinc Co. (Franklin)	1 driven well, 275' deep		4,176	4,176	265 P	P	112.0	57.2
New Orange Park Water, Heat, Light and Power Co. (Kenilworth)	Morris Lake	Chlorination	2,243	1,243	147 P	P	80.0	70.0
Newtown (Municipality)			5,401	5,401	625 G	....	....	....
New York and New Jersey Suburban Water Co. (East Newark)	Purchases water from Passaic Valley Water Commission		2,686 40,710 15,000 1,200 1,205	2,686 40,710 15,000 1,200 1,205	....	P	36.4	20.0
Niagara Falls, R. H. (Mt. Olive Twp., Farmers Section)	Spring	New supply	....	....	....	G	....	....
Normandy Water Co. (Morris Twp.)	2 driven wells, 80'-90' deep		5,696	4,000	262 P	P	26.8	162.0
North Brunswick Twp. (Municipality)	1 driven well, 102' deep		3,622	3,000	25 P	P	156.9	300.0
Northern District Water Supply Commission	Wanaque River (Reservoir at Wanaque, N. J.)	Chlorination	86,979 28,077 38,070 40,710 30,716 42,017 442,387 889	86,979 28,077 38,070 40,710 30,716 42,017 442,387 889	....	G	....	....
Ober, Charles C. (Newfield) (Ocean City Water Service Co. (Ocean City))	1 driven well, 26' deep; 1 driven well, 80'-84½' deep		5,523 3,429	5,523* 2,500*	943 P	P	48.0	4.0
Ocean County Water Co. (Bay Head, Middle Twp.)	4 driven wells, 700'-860' deep; 5 driven wells, 600'-600' deep	Chlorination	100	100*	10 P	....	....	....
Ocean Gate Water Co. (Ocean Gate)	1 driven well, 378' deep	Rapid sand filtration (pressure) and chlorination	1,138	1,198	72 G	G	26.0	13.0
Ogdensburg (Municipality)	West Branch of Rahway River; 1 driven well, 880' deep	Rapid sand filtration (pressure) and chlorination	35,389	35,389	2,675 P	P	118.0	75.0
Orange (Municipality)	1 driven well, 435' deep	Chlorination	2,220	2,220	133 P	P	71.5	83.6
Park Ridge (Municipality) (Woodcliff Lake)	1 driven well, 282' deep		2,500	2,500	2 P	P	51.4	90.0
Parippany Water Co. (Parippany-Troy Hills Twp.)	1 driven well, 282' deep		6,081	6,081	....	....	....	....

* Seasonal increase from 2 to 20 times in population.

(Wells at Mantoloking only used during peak loads.)

TABLE NO. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION 1930	POPULATION ESTIMATED	1930 CONSTRUCTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Redd, Arthur (Mt. Olive Twp., Budd Lake Section) (Municipality)	Spring	Chlorination	1,225	50*	.....	G	37.0	83.5
Ridgewood (Municipality)	14 driven wells, 200'-260' deep		12,168	12,188	1,254	P	76.5	55.0
Rocky Hill (Municipality)	1 driven well, 130' deep		4,069	4,369	.....		
Rocky Hill (Municipality)	1 driven well, 130' deep		3,038	3,038	.....		
Ringwood Co., The (Avoying Section of West Milford Twp.) (Municipality)	2 driven wells, 184'-500' deep		1,001	900*	.....	P	64.5	83.6
Riverton-Parkway Water Co. (Riverton) (Municipality)	4 driven wells, 20'-200' deep		1,088	360	.....	P	.....	.....
(Chambers Twp., part) (Municipality)	1 driven well, 50' deep; 12 driven wells, 245'-300' deep; field in reserve		2,483	2,483	004	P	68.2	17.8
Roebling's Sons Co., John A. (Florence Twp., Roebing Section) (Municipality)	1 driven well, 510' deep (emergency supply); DeWaters Creek; tributary to Alloway Creek	Rapid sand filtration (gravity) and chlorination on emergency supply	7,924	3,500	280	P	56.8	35.8
Salem (Municipality)	1 driven well, 525' deep; tributary to Alloway Creek	Rapid sand filtration (gravity) and chlorination	5,074	8,047	906	P	70.0	35.0
Schultz, A. Z. (Belmar) (Municipality)	1 driven well, 220' deep		1,108	500	.....	P	73.0	81.5
Sea Girt (Municipality)	3 driven wells, 700' deep; 1 dug well, 30'		1,123	500	.....	P	53.5	36.2
Sea Isle City (Municipality)	2 driven wells, 800'-870' deep		800	800*	280	P	83.4	81.0
Sensie Heights (Municipality)	1 driven well, 460' deep	Chlorination	330	300*	73	P	7.0	25.5
Sensie Park (Municipality)	3 driven wells, 130'-465' deep	Aeration and rapid sand filtration (gravity) for CO ₂ and iron removal	571	571*	80	P	10.3	43.3
Swell Water Co. (Sewell) (Municipality)	1 driven well, 80' deep		2,677	650	13	P	70.0	62.0
Ship Bottom-Bench Arlington (Municipality)	2 driven wells, 300'-500' deep		2,277	277*	20	P	23.0	15.7
Short Hills Water Co. (Springfield Twp.) (Municipality)	2 driven wells, 80' deep	(Chlorination)	8,002	1,900	1,415	P	186.1	96.0
(Millsboro Twp., part) (Municipality)	1 driven well, 55' deep; springs; 3 driven wells, 234'-238' deep in reserve	Aeration and filtration for iron removal	3,725	3,000	.....		
South Amboy (Municipality)	2 driven wells, 108' deep		8,002	2,000	.....		
Somerville Water Co. (Belvidere Twp., part) (Municipality)	Raritan River	Rapid sand filtration (pressure) and chlorination	508	400	.....	P	50.0	52.6
(Somerville) (Municipality)								
South Amboy (Municipality)								
(Sayreville, Morgan Hts. Section) (Buyers from Perth Amboy in emergency)			8,058	3,000	2,231	P	58.6	41.0
South Jersey Water Supply Co. (Municipality)	2 driven wells, 200' deep	Chlorination	1,827	1,000	.....	P	40.8	270.7
South Orange (Municipality)	10 driven wells, 274'-340' deep		13,630	13,630	1,101	P	106.0	86.2
South River (Municipality)	2 driven wells, 150'-100' deep; 257' deep collecting drains; 1 collecting well, 35' deep		10,759	10,759	350	P	47.1	10.0
(East Brunswick Twp., part) (Municipality)	13 driven wells, 700' deep		2,711	700	414	P	32.2	35.0
Stanhope (Municipality)	2 driven wells, 54'-60' deep		1,745*	1,745*	82	P	36.4	31.0
Stonington (Municipality)	2 driven wells, 100' deep		1,089	1,089	.....		
Stone Harbor (Municipality)	2 driven wells, 800'-830' deep		556	556	80	P	28.5	21.6
Stonewall Park Association (Mt. Olive Twp., Budd Lake Section) (Municipality)	1 shallow well, 2' deep		363	303*	80	P	25.0	50.0
Swart (Municipality) (Barr City) (Municipality)	1 driven well, 584' deep		1,255	100*	.....		
Swackhammer, B. B. (Long Valley section of Washington Twp.) (Municipality)	Lake Rutherford	Chlorination	76	76*	.....	P	84.3	15.0
Swedesboro (Municipality)	5 driven wells, 135'-210' deep		1,415	1,415*	417	G	27.3	7.0
Swedesboro (Municipality)	1 driven well, 100' deep		1,615	250	.....	G	19.0	13.0
Toms River Water Co. (Dover Twp., Toms River Section) (Municipality)	8 driven wells, 47'-62' deep	Chlorination	2,152	2,152	105	P	50.3	58.6
			1,158	1,158	314	P	10.5	2.6
			3,970	2,400*				

* Seasonal increase from 2 to 20 times in population.

TABLE No. 3.—DESCRIPTIVE DATA OF PUBLIC WATER SUPPLIES IN NEW JERSEY (Continued)

OWNER AND MUNICIPALITIES SUPPLIED	SOURCE OF SUPPLY	TREATMENT	POPULATION PERMANENT	POPULATION SUPPLIED	1930 CONSUMPTION IN THOUSAND GALS. PER DAY	GRAVITY OR PUMPED	HARDNESS	ALKALINITY
Trenton (Municipality)	Delaware River	Rapid sand filtration (gravity) and chlorination	123,366	123,366	37,505	P	41.2	28.7
(Ewing Twp., part)			6,942	8,600				
(Hamilton Twp., part)			27,121	8,000				
(Lawrence Twp., part)	1 driven well, 148' deep		6,293	1,000				
Tuckerton Railroad Co. (Whiting)	1 driven well, 100' deep		1,000	25		P		
(Municipality)								
Tuckerton Water Co. (Tuckerton)	2 driven wells, 300' deep		1,420	1,420*	80	P	20.0	25.0
Union Beach (Municipality)		Aeration and sand filtration (pressure) for iron removal	1,863	1,863*	64	P	89.0	37.8
(Municipality)			1,568	500				
(Bartan Twp., part)	1 driven well, 160' deep		1,568	500				
(Municipality)			1,568	500				
Venmore (Municipality)	1 driven well, 800'-825' deep		6,074	6,074*	1,305	P	84.7	50.5
Vincetown Water Co. (Vincetown)	1 driven well (emergency supply)	Chlorination of emergency supply	6,573	700	19	P	30.0	53.6
Section of Northampton Twp.)	Branch of Rancocas Creek							
Vineland (Municipality)	12 driven wells, 120' deep		7,356	7,356	957	P	10.9	3.0
(Municipality)			14,727	6,000				
Waldwick (Municipality)	1 driven well, 200' deep		1,768	200		P		
Walton (Municipality)	3 driven wells, 275'-300' deep		1,728	1,728		P	106.6	81.5
Walworth (Municipality)	5 driven wells, 275'-300' deep		9,583	8,583	816	P	121.1	52.8
Warren (Municipality)	10 springs		1,725	800		P	122.0	53.5
Warren Manufacturing Company	7 shallow wells, 50' deep	Rapid sand filtration (gravity) and chlorination						
(Milled)			933	933		P	85.2	66.0
(Warren Glen Section of Folsom Twp.)	1 dug well, 22' deep	Chlorination	1,974	500		P		
(Hollisville Section of Hollis Twp.)		Chlorination	984	500		G		

Washington Water Co. (Washington)	Honoring Rock Brook	Chlorination	4,410	4,410	419	G	29.9	14.6
(Washington Twp., part)			1,245	1,245				
Wanaonah (Municipality)	8 driven wells, 210'-250' deep				92	P	30.8	123.6
West Jersey Water Service, Inc.	1 driven well, 100' deep	Chlorination	1,235	50*	.03	P	39.0	32.0
(Budd Lake Section of Mt. Olive Twp.)								
Westville (Municipality)	5 driven wells, 112'-117' deep		3,462	3,462	151	P	63.5	79.0
(DeVrford Twp., part)			4,607	2,000				
(West Deptford Twp., part)			3,856	600				
Wharton (Municipality)	Rockaway River above Stevens Brook	Rapid sand filtration (pressure) and chlorination	3,688	3,683	92	P	32.5	41.6
(Municipality)			1,254	100		G	44.4	40.0
Wheeler, E. B. (Nolans Point Sec. Spring of Lake Hopatcong-Jefferson Twp.)			2,510	1,000		P		
Whippany Water Co. (Hanover Twp.)	Purchase water from Normandy		5,330	5,330*	1,401	P		
(Municipality)	32 driven wells, 50'-1000' deep	Chlorination, part						
Wildwood (Municipality)	(emergency plants at Wildwood and North Wildwood)		2,049	2,049*				
(North Wildwood)			738	738				
(Wildwood Crest)			738	738*				
Winters, Albert (Hoboken Twp., Spring Malwah Section)			3,539	500*		G	94.3	71.0
Winters, John (Hoboken Twp., Malwah Section)	1 driven well, 84' deep		3,656	400		P	75.7	45.5
Woodbine Light, Power and Water Co. (Woodbine)	5 driven wells, 150'-180' deep		2,164	2,164		P	28.6	8.5
Woodbury (Municipality)	10 driven wells, 237'-298' deep		8,172	8,172	698	P	23.4	144.0
Woodbury Heights (Municipality)	7 driven wells, 165'-711' deep	Chlorination	897	397		P		
Woodstock (Municipality)			1,552	1,552	103	P	81.6	137.5

* Seasonal increase from 2 to 20 times in population.

The following table No. 4 contains a list of the new water supplies approved during the fiscal year ending June 30, 1931:

TABLE No. 4
NEW WATER SUPPLIES APPROVED DURING THE FISCAL YEAR ENDING JUNE 30, 1931.

LOCATIONS	OWNERS	SOURCE OF SUPPLY	TREATMENT
Allendale	Municipality	2 driven wells, 450'-500' deep	Chlorination
Barnegat	Municipality	Driven well	Chlorination
Bridgeport	Palmbach-More, Water Supply Co.	1 driven well, 54' deep	
Brickton	Palmbach-More, Water Supply Co.	1 driven well, 100' deep	
Clifton	H. R. H. Nicholas	Spring	
Franklin Park	Municipality	1 driven well, 128' deep	Chlorination
Kingston	William Finzer, Jr.	1 dug well, 28' deep	Chlorination
Lake Rogerens	Morris & Sussex Water Service Co.	2 driven wells, 117' deep	Chlorination
Manalapan	Manalapan Township	1 driven well, 102' deep	
Marlborough	Russell Park Association	1 driven well, 20' deep	
Newfield	Charles Obert	1 driven well, 70' deep	Chlorination
Pine Hill	Mrs. Rose Homann	Wanaque River (Reservoir)	
Wanaque	North Jersey District Water Supply	1 driven well, 85' deep	
Hamilton Township (White Horse Section)	Andrew Gropf		

The following table No. 5 shows the additions and alterations to water supplies during the year ending June 30, 1931:

TABLE No. 5
ADDITIONS AND ALTERATIONS TO WATER SUPPLIES FOR THE FISCAL YEAR ENDING JUNE 30, 1931

LOCATION	OWNER	ALTERATIONS AND ADDITIONS	NEW WELLS
Atlantic City	Municipality		Construction of 6 driven wells, 97'-100' deep and use of water therefrom
Allendale	Municipality		Use of water from driven well No. 2, plans for the construction of which were approved during the fiscal year ending June 30, 1930.
Allenhurst	Municipality		Construction of 1 driven well, 651' deep and use of water therefrom
Avon	Municipality		Use of water from driven well, plans for the construction of which were approved during the fiscal year ending June 30, 1930.
Avonling	Ringwood Company	Covered reservoir	Location of 1 driven well
Beach Haven	Municipality		Construction of 1 driven well, 618' deep and use of water therefrom
Bay Head	Ocean County Water Company		Construction of 1 driven well, 1000' deep and use of water therefrom
Blackwood	Blackwood Water Company	(Chlorinator	Use of water therefrom
Bridgeport	Bridgeport Water Company		Construction of 1 driven well, 40' deep and use of water therefrom
Byram Township (Hopatcong Park)	Morris & Sussex Water Service Co.		Construction of 1 driven well, 100' deep and use of water therefrom
Calton	Cullion Water Co.	Chlorinator	
Camden	Municipality		Construction of 8 driven wells, 129'-144' deep and use of water therefrom
Elmer	Elmer Water Company		Construction of 1 driven well, 75' deep and use of water therefrom
Fairlawn	Municipality	Chlorinator	Use of water from well formerly owned as a public supply by Patrick Lynch
Frenchtown	Greshock Real Estate Company	Chlorinator	
Greenwich	New Jersey Water Company	Chlorinator	Construction of 1 driven well, 271' deep and use of water therefrom
Highland Heights			

TABLE No. 6
ADDITIONS AND ALTERATIONS TO WATER SUPPLIES FOR THE FISCAL YEAR ENDING JUNE 30, 1931 (Continued)

LOCATION	OWNER	ALTERATIONS AND ADDITIONS	NEW WELLS
Lavallette	Municipality		Construction of 1 driven well, 1130' deep and use of water therefrom
Lodi	Municipality	Chlorinator (Chlorinators)	Reconstruction of driven well 900' deep and use of water therefrom
Long Valley	Long Valley Water Company		Construction of 1 driven well, 145' deep and use of water therefrom
Newark	Municipality		Construction of 1 driven well, 95' deep and use of water therefrom
Orange	Municipality	Collecting basin and chlorinator	Construction of 1 driven well, 301-303' deep and use of water therefrom
Paulboro	Municipality		Construction of 1 driven well, 700' deep and use of water therefrom
Pleasantville	Atlantic County Water Company		Location for 2 driven wells
Princeton	Princeton Water Co.		Construction of 2 driven wells, 375' deep and use of water therefrom
Red Bank	Municipality		Construction of 1 driven well, 870' deep and use of water therefrom
Ringwood (Lake Erskine Section).....	Ringwood Co.		Construction of 1 driven well, 870' deep and use of water therefrom
Sea Isle City	Municipality		Construction of 2 driven wells, 840' deep and use of water therefrom
Short Hills	Short Hills Water Company		Construction of 1 driven well, 810' deep and use of water therefrom
South Orange	Municipality		Construction of 2 driven wells, 80' deep and use of water therefrom
South Plainfield	Middlesex Water Company	Chlorinator	Construction of 1 driven well, 305' deep and use of water therefrom
Toms River	Toms River Water Company		Construction of 1 driven well, 61' deep and use of water therefrom
Ventnor	Municipality		Use of water from 1 driven well, 810' deep and use of water therefrom
Wanaque	North Jersey District Water Supply Commission	Chlorinators	Construction of 1 driven well, 112' deep and use of water therefrom
Westrville	Municipality		

The following table No. 6 contains a list of the plans and specifications approved for improving the method of sewage treatment at existing sewage treatment plants during the fiscal year ending June 30, 1931:

TABLE No. 6—PLANS AND SPECIFICATIONS APPROVED FOR IMPROVING THE METHOD OF SEWAGE TREATMENT IN THE FOLLOWING MUNICIPALITIES DURING THE FISCAL YEAR ENDING JUNE 30, 1931

LOCATION	OWNER	PAST METHOD OF TREATMENT	APPROVED METHOD OF TREATMENT	DESIGN CAPACITY OF PLANT GALLONS PER DAY
Hurlington	Municipality	Sedimentation and hand filtration	Sedimentation, sprinkling filters and chlorination	2,200,000
Glassboro	Municipality	Sedimentation, sprinkling filters, secondary sedimentation and chlorination	Sedimentation, sprinkling filters, secondary sedimentation and chlorination *	400,000
Little Falls Township	Municipality	Sedimentation and intermittent sand filtration	Sedimentation, sprinkling filters, sand filtration and chlorination *	650,000
Long Branch	Municipality	Sedimentation	Sedimentation (additional tank)	800,000
Long Branch	Long Branch Sewer Co.	Screening	Sedimentation, separate sludge digestion and chlorination	2,257,000
Manasquan	Municipality	Sedimentation	Sedimentation (ventilating system)	625,000
Morrisown	Municipality	Sedimentation, contact beds intermittent sand filtration and chlorination	Activated sludge and chlorination	3,000,000
Neptune City	Municipality	Sedimentation	Sedimentation and chlorination	310,000
Newton	Municipality	Sedimentation and intermittent sand filtration	Sedimentation, sprinkling filters, sand filtration and chlorination	800,000
Ocean City	Ocean City Sewer Service Co.	Screening, sedimentation and chlorination	Screening, sedimentation and chlorination * (mechanical sludge removal)	2,600,000
Spring Lake	Municipality	Sedimentation	Sedimentation, separate sludge digestion and chlorination	1,040,000
Verona	Municipality	Sedimentation and intermittent sand filtration	Sedimentation, sprinkling filters, sand filtration and chlorination *	1,200,000
Westwood	Municipality	Sedimentation and intermittent sand filtration	Sedimentation, intermittent sand filtration and chlorination *	1,320,000
Woodbury	Municipality	Sedimentation	Sedimentation and chlorination	2,500,000

* Glass covered sludge beds.

The following table No. 7 contains a list of the water supplies abandoned during the fiscal year ending June 30, 1931:

TABLE No. 7—WATER SUPPLIES ABANDONED DURING THE FISCAL YEAR ENDING JUNE 30, 1931

LOCATION	OWNER	SOURCE OF SUPPLY	TREATMENT
Rochelle Park	William Colling	1 driven well, 112 feet deep	.....

CONSTRUCTION OF NEW SEWAGE TREATMENT PLANTS AND IMPROVEMENTS TO EXISTING SEWAGE TREATMENT PLANTS

The following table No. 8 shows the plans and specifications approved for the construction of sewer systems and/or sewage treatment plants in the State during the fiscal year ending June 30, 1931:

TABLE No. 8—PLANS AND SPECIFICATIONS FOR SEWER SYSTEMS AND/OR SEWAGE TREATMENT PLANTS APPROVED DURING THE FISCAL YEAR ENDING JUNE 30, 1931

LOCATION	OWNER	SEWER SYSTEMS AND SEWAGE TREATMENT PLANTS	TYPE OF PLANT	EFFLUENT DISCHARGED INTO	DESIGN CAPACITY OF PLANT, GALLONS PER DAY
Alexandria Township (Huron County)	Camp McMahon	Sewage Treatment Plant	Sedimentation, sand filtration and chlorination	Trietary to Nishkekawick Creek	18,000
Clark Township	Municipality	Partial Sewer System		Proposed Rahway Valley Sewage Treatment Plant, Rahway River	
Far Hills	Municipality	Partial Sewer System		Proposed Sewage Treatment Plant into Rahway River	
Kentworth	Municipality	Partial Sewer System		Proposed Rahway Valley Sewage Treatment Plant, Rahway River	
Lakewood Township (Ocean County)	Newman School	Sewage Treatment Plant	Sedimentation, sand filtration and chlorination	Metedeokk River	10,000
Long Branch	Municipality	Sewage Treatment Plant	Sedimentation and chlorination	Atlantic Ocean	2,000,000
North Caldwell	Municipality	Partial Sewer System		Caldwell Sewage Treatment Plant, Trietary to Passaic River	
Princeton	Municipality	Sewage Treatment Plant	Sedimentation, sprinkling filters and chlorination	Milbstone River	2,000,000
Raritan Township, Steiton Huron County)	Municipality	Sewer System and Sewage Treatment Plant	Sedimentation and chlorination	Proposed Sewage Treatment Plant, Rahway River	400,000
Roselle Park	Municipality	Partial Sewer System		Proposed Rahway Valley Sewage Treatment Plant, Rahway River	
Westfield	Rahway Valley Joint Meeting	Sewage Treatment Plant	Sedimentation and Chlorination	Rahway River	12,000,000
West Orange	Municipality	Partial Sewer System		Proposed Joint Outlet Sewage Treatment Plant, Arthur Kill	

The following table No. 9 contains a list of the new sewage treatment plants constructed and placed in operation during the fiscal year ending June 30, 1931:

TABLE No. 9

NEW SEWAGE TREATMENT PLANTS CONSTRUCTED AND PLACED IN OPERATION DURING THE FISCAL YEAR ENDING JUNE 30, 1931			
LOCATION	OWNER	METHOD OF TREATMENT	DESIGN CAPACITY OF PLANT GALLONS PER DAY
Gloucester Township (Blackwood Section) Millisale	Municipality State of New Jersey (Dept. of Institutions and Agencies)	Sedimentation, sprinkling filters and chlorination, aeration (activated sludge) and chlorination, (Contact plant) of the New Jersey Dept. of Health	200,000
Lower Penna Neck Township	American Gas and Electric Company and United Gas Improvement Company	Sedimentation	20,000
Hartman Township (Oura Barton Section)	Municipality	Sedimentation, separate sludge digestion and chlorination	750,000
Red Bank	Municipality	Sedimentation, separate sludge digestion, sprinkling filter, and chlorination	1,250,000
Somerset Hills	United States Veterans' Hospital	Sedimentation, sprinkling filter and chlorination	56,000
West Paterson	Municipality	Sedimentation	400,000
Woodbridge Township (Craney Heights Section)	Municipality	Sedimentation	75,000

EFFLUENT DISCHARGED INTO

South Branch of Big Timber Creek
Tributary of Swimming River

Delaware River

Tributary of Hartman River

Shrewsbury River

Tributary of Passaic River

Passaic River

Tributary of Hartman River

INVESTIGATION OF BERRY'S CREEK

As a result of numerous complaints filed with the Department upon the gross pollution of Berry's Creek, a tributary of the Hackensack River, the bureau was instructed to make a detailed investigation of this stream and report, with recommendations for improvements, to the Board. The investigation, made during the summer of 1930, required the expenditure of fifty-seven and one-half (57½) man-working days. The report, of ninety (90) pages and seventeen (17) plates, was submitted to the Board in November, 1930, and the data collected was presented in ten (10) sections dealing with: Physiography of the District; Determination of Tidal Volumes; Chemical Analyses; Bacteriological Studies; Oxygen Studies; Sources of Pollution; The Stream Survey; Suggested Remedies; Summary and Conclusions; and Recommendations.

The "Summary and Conclusions" of the report are as follows:

"This investigation has shown conclusively that Berry's Creek is very seriously polluted by the discharge of sewage and industrial wastes from the municipalities located in the drainage area and that numerous complaints concerning the condition of the stream are justified. On a number of occasions, on ebb tide during the past summer, the oxygen has been entirely exhausted and the water was black and foul on all that portion of the stream north of the Paterson Plank Road bridge. The bacterial contamination is so great as to render the water unfit for bathing. The stream would be valuable for recreational purposes if it were not for these conditions. There are a number of boats and small yachts moored in the stream but the above described conditions seriously interfere with their use; also the paint is turned black by the foul gases in the water.

All the sewage plant effluents are discharged into small branches behind tide-gates or into the upper end of small guts where the tidal action tends rather to keep the sewage back than to increase its rate of mixture with the creek water. This results in putrefaction and the complete exhaustion of oxygen from the stream. The Borough of Moonachie is particularly unfortunate in its location as it now receives the effect of both the Woodridge and Hasbrouck Heights sewage effluents.

The investigators have reached the following conclusions:

1. Immediate action is required to improve the condition of Berry's Creek.
2. The capacities of the settling tanks of East Rutherford, Carlstadt, Woodridge and Hasbrouck Heights are inadequate.
3. If these municipalities are to continue the discharge of an effluent into Berry's Creek at their present locations, oxidizing units will be required.

4. The Rutherford tanks are adequate to handle present requirements but the suggestions under "Summary and Conclusions" in the discussion of that plant in Section VI, Sources of Pollution should be carried out.

5. There is sufficient oxygen available in the Berry's Creek canal to stabilize the settled sewage of the municipalities concerned and conditions are favorable for dispersion there.

6. The sewage treatment plant effluents should be chlorinated, at least during the summer season.

7. It is not possible to maintain a high per cent saturation of oxygen in the creek unless the oxygen content of the tidal water entering the creek from the Hackensack River is increased.

8. Marked economy would result from the construction of a joint sewage treatment works and intercepting sewer by the four municipalities whose plants are inadequate."

The recommendations made were:

"1. Rutherford be notified to comply with the suggestions given under 'Summary and Conclusions' in the discussion of that plant in Section VI, Sources of Pollution.*

2. The other four municipalities be advised to give serious consideration to a joint sewage treatment plant project, consisting of sedimentation and chlorination with sufficient area reserved for additional treatment in the future, or to proceed immediately with the preparation of plants for enlarged plants consisting of sedimentation, oxidation and chlorination.

3. All the municipalities discharging treated sewage to Berry's Creek chlorinate the effluent from May 15 to October 15 each year to such a degree that the organism B. Coli shall be absent in all 0.01 cubic centimeter portions examined.

4. The Advance Piece Dye Works of Rutherford be ordered to refrain from discharging their dye wastes and wash water into the small tributary flowing through East Rutherford."

Copies of the reports were forwarded to the interested municipalities and commissions, and, on June 2, 1931, a public hearing was held by the Department as to why notices should not be served under the provisions of Chapter 72, P. L. 1900, as amended by Chapter 186, P. L. 1930, upon the municipalities responsible for

*"The area of the sludge bed should be doubled. The old and new sludge beds should be divided so as to provide four (4) units of equal area. The retaining walls of the present sludge beds should be straightened. The effluent should be carried in an outfall line discharging through multiple outlets below low water mark to the channel of Berry's Creek just north of the Lyndhurst line. That a recording gauge of the float operated type be installed. That modern sludge pumping equipment be installed."

conditions found in the sanitary survey of 1930. At this hearing the Hackensack Valley Sewerage Commission (created by Chapter 144, P. L. 1930 and provided with an appropriation of thirty-five thousand dollars (\$35,000) to investigate the pollution of the Hackensack River and its tributaries) informed the Department that they were planning to make an investigation of the entire Hackensack Valley during the summer and fall of 1931; that the report of their investigation, with recommendations, would be presented to the Legislature; and, that proceedings by the State Department of Health against the polluters of Berry's Creek may adversely affect any comprehensive scheme for the improvement of the entire river, recommended by their commission. They, therefore, requested that action on the part of this Department be held in abeyance. Consideration of this request is scheduled for the first meeting of the Department in the fiscal year of 1931.

CHLORINATION OF THE EFFLUENTS AT SEWAGE TREATMENT PLANTS SERVING THE NORTH JERSEY SEASHORE MUNICIPALITIES, SUMMER, 1930

The New Jersey State Department of Health passed a resolution, January 15, 1929, concerning the North Jersey seashore municipalities discharging their domestic sewage into the Atlantic Ocean. The minimum degree of sewage treatment required was sedimentation and chlorination; the settled and disinfected sewage to be discharged into the waters of the Atlantic Ocean through outfall pipes, one thousand feet or more in length from mean low water mark, chlorination to continue from May 15th to October 15th, inclusive, in each year. It has been demonstrated, through investigations made from time to time by representatives of the State Department of Health, that the existing methods of sewage disposal, by sedimentation alone, are not sufficient to adequately protect the health and comfort of those people using the waters of the Atlantic Ocean for recreational purposes.

During the last two weeks of August, 1930, an investigation of the North Jersey coast sewage treatment plants was made for the purpose of checking the efficiency of chlorination, obtaining the chlorine demand of the sewage and to study the effect chlori-

nation had on the bacteriological quality of the surf waters in comparison with the quality before chlorination, 1928.

At each plant the following information was obtained: (a) type and capacity of chlorinator; (b) sewage flow at time of visit; (c) pounds of chlorine being applied; (d) residual chlorine test.

Of the twenty (20) plants visited, six (6) were not using any chlorine and only five (5) plant effluents showed a residual chlorine test.

In order to better advise each municipality of the approximate amount of chlorine necessary for them to add to their sedimentation tank effluents to obtain efficient disinfection and to maintain a residual, a chlorine demand determination was made on settled sewage samples, collected just ahead of the point of application of the chlorine. The method of making the chlorine demand determinations as used in the field was as follows: 100 cubic centimeters of the tank effluent was measured into each of ten bottles of about 150 cubic centimeters capacity. To each bottle was added varying amounts of a standardized chlorine solution, one cubic centimeter of the standard solution added to 100 cubic centimeters sewage was equivalent to 10 parts per million chlorine. The solution was added in steps of $2\frac{1}{2}$ parts per million; usually starting at 7.5 parts per million. All the test bottles were allowed to stand 20 minutes, then a test for residual chlorine was made by the starch-iodide method. The amount of chlorine indicated in the first bottle showing a positive test was considered as the chlorine demand of that tank effluent. The chlorine demand of the various tank effluents varied between wide ranges, from 9 to 50 parts per million, the higher demands being on effluents that were very septic.

The following table, No. 10, shows the chlorine demands of the tank effluents tested, together with pertinent data:

TABLE No. 10—CHLORINE DEMAND AND OTHER DATA, NORTH JERSEY COAST SEWAGE TREATMENT PLANTS, AUGUST, 1930

MUNICIPALITY	Flow at Time of Visit	Capacity of Chlorinator	Lbs. of Chlorine Added	P. P. M. of Chlorine Added	Residual Test	P. P. M. Chlorine Demand (20 Minutes)	Lbs. of Chlorine Required to Meet Demand	REMARKS
Allenhurst	420,000	100 lbs.	74	21	+	10	35	Very heavy flow 3 times a day. Chlorine increased 6 A. M. to take care of the 3 peaks. Flow measured by pumpage, no other means provided. Had chlorine mixing.
Asbury Park	2,440,000	No chlorine used				30	600	
Ocean Grove	850,000	300 lbs.	255	37.5	-	50	373	
Bradley Beach, Ocean Park	805,000	120 lbs.	84	11.5	+	15	107	Very short chlorine detention period.
Bradley Beach, Evergreen Ave. Tank	215,000	120 lbs.	53	46	+	10	18	Very heavy residual.
Avon	342,000	50 lbs.	50	17.5	-	40	113	
Belmar	1,350,000	75 lbs.	60	5.5	-	17.5	100	
Manasquan	250,000	100 lbs.	30	10.8	-			Prechlorination for odor control. Long chlorine detention period.
Point Pleasant	650,000	160 lbs.	60	11	-	10	54	
Seaside Heights	250,000	40 lbs.	17	8.2	-	12	25	
Seaside Park	720,000	125 lbs.			-	17	102	
Seaside Heights	188,000	40 lbs.	25	13.0	-	40	62	
Neptune City	558,000	250 lbs.	109	20.4	-	30	147	Flow obtained from capacity and time of pump.
Neptune Township	301,000	300 lbs.	95	37.6	+	25	62.7	Screwed sewage chlorinated.
Kearnsburg	400,000	60 lbs.	30	8.5	+		29	
Athletic Highlands		No chlorine used				25		
Sea Girt		200 lbs. each	B. Ave. 50 Pa. Ave. 40			B. Ave. 10 Pa. Ave. 12		No means of obtaining flow. Chlorine hose in overflow lines, not possible to sample.
Spring Lake (2 plants)								New plant not in operation.
Deal	900,000	250 lbs.						

A bacteriological examination was made on ten plant effluents, three showing a test for residual chlorine, to determine the per cent reduction of the 37° Count and the B. Coli content, noting the amount of chlorine added and the amount required as indicated by the chlorine demands. The following Table No. 11 contains the results of the bacteriological tests:

Table No. 11—EFFECT OF CHLORINATION ON NORTH JERSEY COAST SHORE SEWAGE PLANT EFFLUENTS, AUGUST, 1930

MUNICIPALITY	UNCHLORINATED EFFLUENT		CHLORINATED EFFLUENT				Residual Chlorine Test	* Lbs. of Chlorine Required to Meet Demand at Time of Inspection	Lbs. of Chlorine Added at Time of Inspection	REMARKS
	37° Col.	B. Coli per c.c.	37° Col. per c.c.	% Reduction	B. Coli per c.c.	% Reduction				
Allenhurst	45,000	10,000	500	98	Absent	100	+	74		
Ocean Grove	120,000	100,000	85,000	20	10,000	90	+	255		
Bradley Beach, Ocean Park Ave. Plant	500,000	50,000	38,000	92	10,000	80	+	84		
Bradley Beach, Evergreen Ave. Plant	100,000	100,000	100	99+	Absent	100	+	18		Very short chlorine detention period.
Avon	180,000	10,000	77,000	57	5,000	50	+	113		
Belmar	450,000	50,000	480,000	0	10,000	80	+	100		
Point Pleasant	3,500,000	100,000	350,000	90	10,000	90	+	54		
Seaside Heights	500,000	100,000	300,000	40	10,000	90	+	23		
Neptune City	480,000	100,000	75,000	84	10,000	90	+	62		
Neptune Township	160,000	100,000	14,000	91	5,000	95	+	147		Very long chlorine detention period.

* The chlorine demand determinations are 20-minute detention periods.

Surf samples, about sixty in number, collected from all the bathing beaches from Long Branch to Bay Head inclusive, on both tides and similar weather conditions during the summer of 1928 before the shore municipalities were using chlorine, are compared in Table No. 12, with similar samples collected during the investigation (August, 1930) when 75% of the plants were chlorinating their sewage plant effluents. Table No. 12 follows:

TABLE No. 12

AVERAGE B. COLI CONTENT OF SURF BATHING WATERS BEFORE AND AFTER 75% OF THE NORTH JERSEY SHORE MUNICIPALITIES INSTALLED CHLORINATION OF THEIR SEWAGE PLANT EFFLUENTS (AVERAGE OF APPROXIMATELY 60 BATHING BEACHES)

	1928 (Before Chlorination)	1930 (after 75% of Plants Chlorinated)
Ebb Tide	56.7 per cc.	1.64 per cc.
Flood Tide	49.0 per cc.	3.40 per cc.

The averages for the most populated beaches, in the five municipalities of Allenhurst, Loch Arbour, Asbury Park, Ocean Grove and Bradley Beach are:

	1928	1930
Ebb Tide	60.4 per cc.	2.52 per cc.
Flood Tide	66.8 per cc.	4.60 per cc.

A study of the above table shows that with chlorination at 75% of the plants, there is a marked improvement in the bacteriological quality of the surf bathing waters. It is believed when the remaining 25% of the plants have installed chlorine treatment and the existing plants, where chlorination is practiced, apply sufficient chlorine to produce a safe effluent, the bacteriological quality of the bathing waters will show an additional improvement.

The "Conclusions" formed, as of August, 1930, are as follows:

1. The State Department of Health required the North Jersey shore municipalities to chlorinate their sewage plant effluents by May 15, 1929. In August, 1930, five municipalities were not using chlorine; namely, Long Branch, Ocean Township, Asbury Park, Spring Lake and Sea Girt.

2. Of the fourteen plants using chlorine only five were adding sufficient to give positive tests in the final effluent. Partial chlorination, however, reduced the total count and B. coli materially.

3. The chlorine demand of the various tank effluents varied widely, due more to septic conditions than to strength of the sewage.

4. Chlorination has had a very marked effect in reducing the B. Coli content of the surf bathing waters, the per cent reduction being about 95%.

5. A few of the municipalities, not yet using chlorine, are benefiting by their neighbors, who are chlorinating, but are not contributing to the general good themselves.

6. Under certain tidal conditions the sewage discharged in the ocean comes ashore.

Report of Bureau of Food and Drugs

For the Year Ending June 30, 1931

W. W. SCOFIELD, CHIEF

During the year 3,577 inspections have been made of premises where milk is produced for sale. The dairy farms in a given area, regardless of the place of distribution of the milk, have been inspected. Marked interest has been shown by dairymen in complying with essential requirements which result in a clean milk acceptable to the consumer or to the milk distributor. Emphasis has been placed upon the necessity for healthy cows and milkers, for cleanliness in the maintenance of cows, stables, milk houses and utensils. Instruction has been given in the importance of prompt cooling of milk and of protecting it from contamination with dirt and foreign matter.

Representatives of the Bureau attended numerous conferences and hearings called by agricultural interests or health officials on the adoption of regulations governing four grades of milk by the Department of Health of the State of New Jersey and on proposed legislation which would require that persons shipping milk into New Jersey must procure a permit from this Department and which would impose the same requirements on milk production outside of the State as those in effect in New Jersey and also which would establish standards in detail for two grades of milk to be known as "New Jersey A Raw Milk" and "New Jersey AA Pasteurized Milk". Certain of the proposed requirements in the suggested legislation had little or no bearing upon the safety of the milk, but were designed primarily to regulate the marketing of milk. Up to the present time public opinion has been divided upon the merits of these proposals and, consequently, the Department of Health and the Legislature have not passed the proposed regulations and laws. Throughout these conferences

representatives of this Department maintained that the protection of the consumer against the use of milk which is unfit for human consumption, because of bacterial contamination from diseased human beings or diseased animals, or which is adulterated or misbranded within the meaning of the laws of this State, is a function of the health officials of the State.

The Bureau has recognized the value of the Pasteurization of milk in killing or checking the growth in milk of bacterial life which may be detrimental to consumers if the milk had not been treated. Up to the present time Pasteurization is the only practical means of securing protection of milk from possible contamination with organisms causing scarlet fever, diphtheria, sore throat and certain other diseases. It is apparent that greater numbers of people are demanding safety in the milk which they consume by the increasing demand for Pasteurized milk.

During the year 717 inspections have been made of milk Pasteurizing plants in New Jersey. The importance of the inspection of milk Pasteurizing plants and the process of Pasteurization by competent specialists is apparent when it is realized that there are many types of Pasteurizing equipment and also that all equipment which comes in contact with milk must be thoroughly cleansed daily. The daily checking of the temperature to which milk is heated in the process of Pasteurization by an accurate thermometer and the checking of the accuracy of the temperature made by a mechanical recording thermometer are essential if the desired bacterial reduction is to be obtained without impairment of the flavor of the milk and without affecting the cream line of the milk. After Pasteurization it is essential to cool the milk promptly to a temperature of 50° F. or below and then to bottle it immediately at the place of Pasteurization by means of a mechanical filling machine and to place the caps on the filled bottles of milk by machine in order to avoid the possibility of contamination from hands of persons.

It is desirable to visit the Pasteurizing plants at least once a month if satisfactory control is to be maintained. Provision has been made by the last Legislature for the employment of one additional man who will devote his entire time to this work.

With this assistance it will be possible to inspect Pasteurizing plants more frequently.

Physical Examination of Dairy Cows.—During the year reports were received from veterinarians showing that 49,073 cows had been examined physically on dairy premises and 51 of these cows were suspected of being affected with tuberculosis. Information in each case was forwarded to the Department of Agriculture of New Jersey.

Collection of Milk and Cream and Milk Products.—During the year 4,897 samples of milk and cream, buttermilk, condensed milk, etc., have been collected by agents of the Bureau for chemical analysis. The addition of preservatives to milk has been abandoned and the adulteration of milk with water is seldom practiced at this time. A small percentage of the samples collected failed to meet the legal standard for total solids or milk fat.

Ice Cream Factory Inspection.—During the year the number of applications from firms located in other States for permits from this Department which are necessary in order to ship ice cream into New Jersey has been larger than in previous years. In each instance a request is made of the board of health of the municipality of the State where the ice cream is prepared for the report of an inspection of the plant by their agents before action is taken upon the application. This co-operative arrangement has prevented duplication of inspection and has promoted confidence and good will between officials of the different States.

In the case of ice cream manufacturing establishments within our own State agents of the Department have inspected the plants at least once during the year. Local boards of health of several municipalities have co-operated by inspecting those plants within their jurisdiction independently. Agents of the Bureau have collected 115 samples of ice cream, 112 of which have been found to conform to the legal standard. The fat content of the samples collected averaged 12.38% milk fat. No fats other than milk fats were detected in these samples.

It is recommended that the Legislature be requested to increase the minimum fat standard for ice cream to 10% milk fat.

Cream and Custard Filled Bakery Products.—During the year three outbreaks of food poisoning attributed by local health officials to eclairs and cream puffs were reported to this office. A study was begun to disclose if general bakery practices might be expected to cause food poisoning through these products. The study was extended to forty-two bakeries located in sixteen cities and towns, in seven counties. In the beginning eighteen samples of cream puffs and eclairs were collected and submitted to the laboratory. The laboratory reports showed a wide variety and large numbers of micro-organisms in practically all samples. The filling used in these articles was found to be a favorable medium for the growth of bacteria. The practices disclosed in nearly all bakeries included some step in the handling which would permit contamination, followed by keeping the product in a warm place, permitting the contaminating organisms to grow and develop toxic substances responsible for the symptoms of illness which too frequently follow the eating of these articles. Common sources of contamination were found to be: wooden pails and other open top utensils unsterile to begin with and exposed to air of the shop; unsterile spoons, dippers and cardboards used in the transferring of the filling from place to place; the hands of employees commonly used in handling and filling; the filling machine or pastry bag commonly not clean and seldom sterile at the time used. It is common knowledge among bakers that these articles spoil rapidly. However, few bakers are taking adequate measures to prevent spoilage. It is believed that unless means of preventing contamination and spoilage of the ingredients of these articles is carried out extensive outbreaks of poisoning are likely to develop. While the outbreaks of poisoning in this State so far have been attributed to eclairs and cream puffs, there are a number of other bakery products containing the same filling or similar filling likely to cause the same results.

Investigation of Samples of Sausage.—Large quantities of pork sausage are prepared in this State. This product is a comminuted meat product which is prepared in a manner so that the purchaser is unable to ascertain whether the product is adulterated or not. As the product is sold by weight the incorporation of a

cheap and heavy substance is desired where adulteration is intended and the incorporation of excessive quantities of water with sausage meat is easily accomplished without the knowledge of the purchaser. During the year 263 samples of sausage have been collected and examined and 33 samples were found to be adulterated. Sausage meat has also been examined for sulphites, which is prohibited by law in meat products and in one instance sulphites were detected. Suits have been instituted in cases where excessive quantities of water or where sulphites were detected in sausage.

Investigation of Spray Residue on Fruits.—Representative samples of fruit grown in New Jersey during 1930 were collected at the time of marketing and examined in the laboratory of the Department for the presence of arsenical residue remaining after the application of the spray materials. The samples of fruit were found to contain less arsenical residue than the tolerance specified for the fruit of this year by the United States Department of Agriculture. The period of 1930 during which apples grew and were harvested was one of unusual drought. The results of examinations of the fruit indicated that the growers had used exceptional care in following schedules of spraying devised to give maximum protection against pests with a minimum amount of poisonous residue at the time of harvesting.

Beverage Bottling Plants.—There are 286 nonalcoholic beverage bottling plants operating in this State at this time. Under the provisions of Chapter 122 of the Laws of 1924 such establishments are required to be licensed by the Department of Health. Agents of the Department have made 543 inspections of these plants during the year. From the inspections which have been made a considerable improvement has been observed in the sanitation of these plants and a noticeable interest on the part of the operators to provide suitable buildings and equipment for these establishments has been shown.

During past years carbonated beverages sold under the name of Grape, Cherry, Strawberry, Raspberry, etc., were prepared in general from imitation fruit flavorings with the addition of added coloring to obtain a final product with a color simulating the

color of the fruit mentioned in the name of the beverage on the label of the bottle. During the past two years there seems to have been a change on the part of a large number of bottlers to obtain and use true fruit flavorings. This change has come about largely through the development of fruit flavorings for carbonated beverages by certain manufacturers of flavorings and the desire of the progressive bottler to improve his merchandise.

As in the past the same difficulty has been experienced in causing the proper labelling of beverages prepared from imitation fruit flavorings with the words "Imitation" or "Artificial" in a legible manner, although considerable improvement has been observed in the manner of labelling such beverages.

During the past year there has appeared on the highways of this State, particularly at roadside stands, beverages which are dispensed and sold under the name of "Cherry Cider", "Wild Cherry" and numerous other names. Investigations which have been made show that in a great many instances these products were not only misbranded, but were prepared in kitchens, cellars and other places which did not meet the requirements of the laws and regulations in force in this State. In most instances these beverages were prepared from imitation fruit flavorings, coloring, sugar and preservatives, displayed in gallon or half-gallon jugs, in some cases bearing no label or bearing a label which was grossly misleading or deceptive to the purchaser of the product. The Department has instituted prosecutions against those persons found to be operating without a license and who were offering products which were misbranded within the meaning of the law. These investigations are to be continued during the coming year with a view of breaking up the practice of manufacturing beverages in places which do not meet the sanitary requirements in force in this State and the practice of misbranding such products in the labelling.

The Department is charged with the enforcement of the beverage bottling laws and with the licensing of such places. These licenses expire on June 30th of each year. While in general these places comply with the sanitary requirements at the time of licensing, it is difficult, with the present force of inspectors, to give them as frequent inspection as seems necessary. The

employment of a full-time inspector in the supervision of these plants would materially improve the control and sanitation of these plants throughout the year.

TABLE 1

Samples of Milk, Foods, Drugs, Cleansing Solutions, Collected for Analyses and their Classification

	<i>Above Standard</i>	<i>Below Standard</i>	<i>Totals</i>
Milk and Milk Products	4,561	252	4,813
Foods	1,352	128	1,480
Drugs	323	80	403
Cleansing Solutions	74	10	84
	6,310	470	6,780

TABLE 2

Sanitary Inspections Made of Establishments Where Foodstuffs are Prepared, Packed, Stored or Otherwise Handled

Dairies	3,577
Creameries	717
Milk depots	125
Ice cream factories	531
Cold storage warehouses	209
Slaughter-houses	168
Beverage bottling plants	543
Canning factories	89
Meat markets	113
Miscellaneous inspections	58
Total	6,130

Cold Storage.—Section 8, Chapter 101 of the Laws of 1916, provides that the Director of Health shall extend the period of storage beyond twelve months for any particular article of food, providing the food is found to be in proper condition for further storage. A report of each particular lot of food on which extensions were granted shall be included in the annual report of the Director of Health.

During the fiscal year from July 1, 1930, to June 30, 1931, extensions of time were granted for the storage of food in cold storage as follows:

Article	Quantity	Date of Storage	Period of Extension
Butter	400—60-lb. tubs	July 8, 1929	1 month
Butter	400—60-lb. tubs	July 19, 1929	1 month
Butter	275—60-lb. tubs	July 25, 1929	1 month
Frozen eggs	449—30-lb. cans	July 15, 1929	1 month
Frozen eggs	47—30-lb. cans	July 15, 1929	1 month
Frozen eggs	10,700—30-lb. cans	July 1, 1929	1 month
Frozen eggs	2,000—30-lb. cans	July 1, 1929	1 month
Frozen eggs	1,479—30-lb. cans	July 1, 1929	1 month
Beef	597 quarters	Aug. 24, 1929	1 month
Beef	400 quarters	Sept. 26, 1929	1 month
Beef	487 quarters	Aug. 30, 1929	1 month
Beef	1,397 quarters	Sept. 23, 1929	1 month
Ox tails	32 boxes	Sept. 16, 1929	1 month
Ox tails	63 boxes	Sept. 27, 1929	1 month
Beef	400 quarters	Sept. 23, 1929	1 month
Tongues	13 barrels	Sept. 13, 1929	1 month
Pork	21 boxes	Oct. 11, 1929	1 month
Ox tails	33 boxes	Oct. 10, 1929	1 month
Frozen eggs	3,284—30-lb. cans	Oct. 29, 1929	1 month
Frozen eggs	1,866—30-lb. cans	Nov. 14, 1929	1 month
Butter	579—60-lb. tubs	Nov. 14, 1929	1 month
Frozen eggs	1,752—30-lb. tins	Dec. 9, 1929	1 month
Frozen eggs	14,308—44-lb. tins	Feb. 14, 1930	1 month
Chickens	14,707 lbs.	Apr. 16, 1930	1 month
Frozen eggs	162—30-lb. cans	May 17, 1930	1 month
Frozen eggs	200—30-lb. cans	June 5, 1930	1 month

In each case where extensions of time were granted, the articles were inspected and found to be in suitable condition for additional period of storage.

SUMMARY OF THE KINDS AND AMOUNTS OF FOODS IN COLD STORAGE WAREHOUSES IN NEW JERSEY ON THE LAST DAY OF EACH MONTH DURING THE YEAR 1930-1931

ARTICLE	July 1930	Aug. 1930	Sept. 1930	Oct. 1930	Nov. 1930	Dec. 1930	Jan. 1931	Feb. 1931	March 1931	April 1931	May 1931	June 1931
Eggs, cases	1,016,003	970,512	871,708	656,316	482,387	278,046	138,827	42,118	198,405	598,730	887,745	975,965
Eggs, broken, lb. ...	4,212,918	3,787,154	3,600,128	3,340,328	2,978,983	2,784,904	2,448,700	3,067,523	3,859,524	5,826,463	6,208,552	6,831,701
Cheese, lbs.	6,841,816	6,400,178	6,028,178	6,120,885	5,753,879	5,256,741	5,102,848	4,701,046	4,702,220	4,384,558	4,212,081	5,318,945
Butter, lbs.	6,706,843	5,487,827	4,427,831	3,048,108	2,060,207	1,872,774	1,663,160	1,487,604	1,188,837	1,103,488	1,707,146	5,173,080
Poultry, lbs.	6,023,372	5,928,504	6,273,829	7,109,406	8,830,017	9,782,185	10,185,702	9,778,743	8,426,940	4,308,513	3,390,128	3,720,737
Fresh meats, lbs.	5,232,881	4,416,463	7,027,626	4,342,632	4,145,621	3,502,141	4,818,034	4,868,940	4,030,004	3,850,328	5,100,316	4,804,187
Fresh fish, lbs.	2,640,581	2,008,072	4,585,277	4,087,720	3,441,265	3,742,118	3,023,247	1,403,000	381,920	307,303	743,004	1,156,173
Milk and milk prod- ucts, lbs.	923,297	536,584	407,800	395,310	300,854	114,116	136,100	904,270	790,300	133,250	105,230	200,512
Edible fats and oils, lbs.	30,942	632,054	1,114,826	159,680	1,007,883	758,600	718,942	634,926	171,724	1,070,000	1,980,008	1,870,165
Game, lbs.	9,667	10,203	9,337	9,337	3,772	4,728	4,466	8,477	2,236	6,736	2,734	2,734
Miscellaneous articles, pkcs.	327,052	204,342	703,025	1,312,813	1,384,701	1,039,449	870,315	646,094	436,745	236,435	101,706	96,772

Report of the Bureau of Bacteriology

For the Year Ending June 30, 1931

J. V. MULCAHY, CHIEF

It will be seen from the following table that the fiscal year ending June 30, 1931, has been an exceedingly busy year for this Bureau with the limited number of technical workers engaged.

TABLE I

Total Number of Specimens Examined During Fiscal Year
Ending June 30, 1931

Diphtheria	14,536
Tuberculosis	6,760
Typhoid fever	2,201
Typhoid bacilli (feces and urine)	4,175
Gonorrhoea	5,474
Syphilis	34,334
Miscellaneous specimens	4,379
Total	71,859

The amount of work done during this year exceeds by about 6,000 specimens the number examined last year when the total was far in excess of any previous year. The greatest marked increase is in the number of specimens of blood examined for syphilis by means of the Wassermann reaction.

This blood work has been handled by three technicians who deserve credit for the conscientious manner in which it has been carried on under adverse working conditions requiring considerable overtime on their part to complete each day's test. On many occasions about three hundred specimens are run a day. Those familiar with the working quarters allotted can appreciate what handling this number of specimens has meant and wonder how it has been possible to do this volume of work in such a small room.

It is earnestly hoped that the plans contemplated for the relief of the crowded condition of the laboratory will materialize during the coming year so this condition in this respect may be remedied. With such a volume of work as shown by Table I the inadequate quarters where this work must be done has been most apparent. This is especially true in the room devoted to the washing and preparation of glassware; the preparation of mailing cases and the sterilization of glassware and culture media. The working conditions in this room, especially in the summer time, where five women are employed, are almost intolerable.

A remedy for this unfavorable working condition is urgent and every effort should be made at the earliest opportunity to provide enlarged quarters so that the increased demands on the laboratory facilities by the physicians of the State may be met.

Specimens of feces and urine submitted for examination from convalescent cases of typhoid fever, from suspected carriers of this disease and from food handlers, to detect typhoid carriers, have shown a large increase in this type of examination. The total number of these specimens examined was 4,175. Such examinations are time-consuming, and such an increase represents a large volume of additional work to complete the tests.

These specimens are sent in by physicians to diagnose and determine the isolation in cases of typhoid fever; also, by representatives of this Department and local health officials investigating the source of typhoid in the search for typhoid carriers, and from employees on premises producing certified milk. An increasing number of these specimens are examined at the request of the Department of Agriculture, of employees on dairy premises where the owner desires to obtain a permit for the production of New Jersey Grade A raw milk and New Jersey Grade A Pasteurized milk.

The agglutination tests for typhoid fever alone were 2,201 specimens. Para-typhoid examinations are listed in the miscellaneous table (Table XI) and show that 897 specimens were examined by means of the agglutination test and that 958 feces and urine specimens were examined for para-typhoid bacilli.

Table XII shows specimens examined for evidence of *Brucella* infection during the year. Agglutination tests using a *Brucella*

abortus antigen were made on 180 samples of human blood, of which number 47 gave a reaction in a dilution of 1-80 to 1-1280 or higher. Of three specimens of human blood submitted for the isolation of the *abortus* organism, *B. abortus* was isolated from two of these three cases.

In the investigation of cases of undulant fever, cows' milk was submitted to determine the source of infection and in two instances an organism was isolated from the milk by animal inoculation which was identified as *B. abortus* (bovine type). It was interesting in these cases to note the reaction obtained on the milk serum from these cows. In both instances where the organism was isolated, the milk serum gave a reaction in high dilutions.

The laboratory is prepared to examine specimens of blood by means of the agglutination test from persons suspected of having undulant fever, when submitted in a satisfactory condition. These specimens should be collected in the same manner and amount as a specimen for the Wassermann test. The regular Wassermann containers may be used for the collection and transmission of specimens, but the history slip in these containers should be marked to show that a test for undulant fever reaction is desired. Special containers, consisting of a tube with a partial vacuum and containing a broth medium, will be sent upon request to any physician who desires to have a blood culture examination made from persons suspected of having undulant fever.

Specimens of blood from suspected cases of tularemia may be sent to the laboratory in the same manner and amount as described for the collection of blood for undulant fever. We have examined several specimens of blood for tularemia during the year, and in one case a positive reaction was obtained for this disease.

Table II, which follows, is a tabulation showing the prevalence of rabies as judged by the number of examinations of animals made in this laboratory. During the past year 202 animals' heads, mostly of dogs, were examined, and of this number 80 were found to be affected with rabies. This is a slight decrease from last year, and a decided decrease from the years 1924 to 1927, inclusive.

TABLE II

Yearly Totals of Animals Examined for Rabies from 1922 to 1931, Inclusive

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Positive	46	36	125	160	202	164	93	106	96	80
Negative	41	49	79	116	145	132	116	115	121	114
Unsatisfactory ..	18	10	22	18	25	26	19	22	11	8
Total	105	95	226	294	372	322	228	243	228	202

Table XIII shows the species of animals, besides dogs, that have been examined for evidence of rabies. In one instance a cow was shown to have been affected with this disease.

Some of these specimens are forwarded to the laboratory for examination with apparently very little thought as to the condition in which they arrive. The result is a specimen that is so badly decomposed, and in some instances seething with maggots, that no semblance of a brain is found.

The laboratory diagnosis of rabies in dogs, or other animals, is made by either of two methods; first, by a microscopical examination of the brain of the animal suspected of being affected with this disease; and, second, by inoculating sub-durally a guinea pig with an emulsion in glycerine of different portions of the animal's brain.

The microscopical examination is made immediately upon receipt of the animal's head, and a report of the result of this examination, whether positive or negative, is sent within an hour or two after the specimen is received.

The animal inoculation is made only on those specimens that are found to be negative by the microscopical method, or on specimens that are in such unsatisfactory condition when received that a satisfactory microscopical examination could not be made.

It is essential for a prompt and reliable report that the brain be received in as fresh condition as possible, and that it shall not be badly injured by shooting or beating the animal over the head. Animals' heads, when received in a badly decomposed condition, make a satisfactory microscopical examination impossible.

The inoculation of such putrid material into the brain of a guinea pig often results in the death of the animal from septicemia

within a few days, before symptoms of rabies would have time to develop if the suspected animal was rabid.

Should the first animal inoculated die too soon to establish a diagnosis, a second animal is always inoculated after the emulsion in glycerin has been kept in the ice box for several days to allow the putrefactive organisms to die off.

An animal that has been shot through the head, or one that has been killed by beating it over the head, is sometimes not in good condition for a microscopical examination, as the brain may be so badly injured that it is not possible to select those portions most likely to show evidence of the disease.

When it is not possible to make a satisfactory microscopical examination of a brain, due to decomposition or destruction by injury, and it is necessary to resort to animal inoculation alone, a delay of two to four weeks is occasioned before a report can be made. This delay could be avoided in many cases by observation of proper precautions when submitting an animal's head for examination for rabies.

When killing an animal, do not shoot it through the head or beat its brains out. Injury to the brain may prevent a satisfactory laboratory examination and result in loss of time and delayed treatment which might be fatal to the person bitten.

As soon as the animal is killed or dies, remove the head, wrap it in a tight cloth, place in a tight container, preferably a can with a close-fitting cover, tightly solder; pack the container in ice and send by messenger, or by express to the Bureau of Bacteriology, State Department of Health, at Trenton, without delay. Sawdust, or other absorbent material, should be used to prevent leakage of blood if a perfectly tight container cannot be procured. Care should be used to prevent wounding the hand or inoculating scratches or abrasions with saliva or blood while handling the head.

When shipping a head, mark the package plainly with the name and address of the sender. Then write a letter to the State Department of Health giving full particulars concerning the case. In this letter be sure to give all the following points of information:

Sender's name Address.....
 Health officer's name Address.....
 Name of owner of animal Address.....
 Description of animal
 Where animal was found
 Whether the animal was killed or allowed to die
 Period of illness
 Diagnosis from symptoms
 Mention other animals bitten by this one
 Name of persons bitten
 State to whom report is to be sent and whether by telegraph (collect) or mail

Our animal room facilities for inoculated animals have been overtaxed due to the number of inoculations of so many animals for rabies, seventy-two tests for diphtheria virulence, and the large number of animals used in milk examinations for the presence of *Brucella abortus*. The rabies test and the test for *Brucella abortus* require that these animals be kept for several months before they can be autopsied or discarded.

Biologicals have been distributed to State institutions and physicians and furnished to the epidemiologists connected with this Department for use in communities where the use of toxin-antitoxin is being carried on.

Altogether the past year has been a most active one for this Bureau and the tabulations that follow show the various examinations made and the number of specimens examined in the laboratory, arranged and classified under the name of the disease for which they were examined.

Table XI shows the examinations made of specimens of a miscellaneous character and includes a variety of different diseases.

Table XV shows the number of different kinds of mailing cases for the collection and transmission of specimens from suspected cases of communicable diseases that are assembled in the laboratory and distributed to physicians direct and to repositories located in drug stores and to local boards of health for the use of physicians in their communities. Altogether 84,185 outfits were prepared and shipped to all parts of the State.

TABLE III

Specimens Examined for Diphtheria Bacilli, Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	13	418	22	30	267	7	737
August	16	260	7	25	192	4	504
September	27	359	10	23	270	10	699
October	57	1147	31	103	414	21	1773
November	61	924	47	155	715	39	1944
December	55	1445	96	161	994	63	2814
January	36	695	36	122	537	20	1466
February	22	561	14	90	378	11	1076
March	20	550	13	44	378	6	1016
April	19	467	9	42	264	3	804
May	28	404	13	79	297	5	826
June	6	477	13	18	339	4	857
Total	360	7707	316	895	5085	193	14538

During the year seventy-two tests were made for the virulence of the diphtheria bacillus.

TABLE IV

Specimens Examined for Tubercle Bacilli, Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	54	283	4	52	122	3	518
August	59	243	6	51	118	2	479
September	43	267	2	48	119	.....	479
October	45	362	1	61	150	3	562
November	42	272	5	33	107	2	461
December	44	258	1	36	162	1	532
January	53	300	8	64	171	1	637
February	47	313	4	37	184	.....	582
March	55	336	2	55	159	.....	607
April	58	338	6	44	158	.....	604
May	55	290	2	68	172	2	589
June	50	364	2	78	171	2	667
Total	608	3626	43	677	1798	18	6760

TABLE V

Specimens Examined for Typhoid Fever Reaction, Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	7	161	2	3	23	2	198
August	21	131	4	5	14	1	173
September	24	184	11	2	17	7	191
October	14	119	5	4	12	3	137
November	5	95	1	2	4	1	106
December	7	214	4	1	32	2	238
January	2	200	6	1	38	2	249
February	4	142	1	1	8	1	157
March	5	108	2	1	11	2	126
April	10	150	7	3	11	2	158
May	5	185	3	1	23	1	173
June	4	138	2	1	108	1	253
Total	108	1707	47	23	297	19	2201

TABLE VI

Specimens of Feces and Urine Examined for Typhoid Bacilli, Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	7	188	9	7	125	2	338
August	5	283	3	20	50	1	361
September	10	270	5	4	55	2	346
October	10	252	6	4	73	1	346
November	7	105	1	22	63	1	158
December	3	348	7	25	111	11	408
January	3	280	5	7	140	1	436
February	2	208	1	5	154	6	373
March	1	220	1	7	72	2	311
April	3	253	1	5	48	3	313
May	8	96	2	4	35	1	148
June	6	202	6	9	279	8	505
Total	64	2717	43	122	1205	22	4175

TABLE VII

Specimens Examined for Gonococci (pus smears), Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	113	289	11	8	94	2	517
August	77	237	14	15	106	3	452
September	107	240	15	21	99	2	484
October	104	204	16	15	88	6	431
November	94	214	12	23	98	3	439
December	81	237	9	25	106	6	459
January	85	210	17	22	107	5	446
February	66	193	11	18	94	3	385
March	73	236	14	24	96	2	465
April	86	246	15	21	77	4	440
May	80	240	7	12	113	3	455
June	93	254	10	14	88	3	462
Total	1059	2840	151	221	1161	42	5474

TABLE VIII

Miscellaneous Specimens Examined, Primary and Secondary, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary			Secondary			Total
	+	-	Uns.	+	-	Uns.	
July	64	168	6	15	41	1	298
August	38	248	1	15	69	1	391
September	102	240	2	43	82	2	477
October	96	212	7	38	95	1	440
November	94	167	1	65	94	1	421
December	78	157	9	58	118	1	420
January	63	138	1	29	59	1	281
February	68	108	8	39	42	1	264
March	76	132	3	37	52	2	302
April	95	168	3	32	54	3	355
May	84	187	3	22	43	1	340
June	79	169	2	80	58	2	330
Total	957	2092	44	476	798	13	4379

TABLE IX

Specimens of Blood and Spinal Fluid Examined for Syphilis (Complement Fixation Test), with Alcoholic Extract Beef Heart Antigen, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary							Secondary							Total
	4+	3+	2+	+	±	-	Uns.	4+	3+	2+	+	±	-	Uns.	
July	156	8	8	12	24	1836	111	58	5	4	14	23	474	21	2904
August	121	7	8	12	17	1531	84	22	8	5	10	17	443	11	2313
September	102	6	8	12	20	1697	64	42	11	3	9	19	410	18	2421
October	160	11	14	20	21	2075	69	90	12	13	17	18	430	21	2971
November	121	7	11	10	24	1611	84	73	13	7	23	47	429	11	2465
December	137	11	11	14	16	1821	86	73	10	11	18	19	504	24	2737
January	171	9	11	12	16	1748	96	145	21	23	20	31	506	31	2838
February	186	10	16	16	23	1893	98	114	14	15	32	32	390	26	2865
March	186	16	15	11	21	2188	114	103	15	19	18	37	465	28	3256
April	173	22	8	22	17	2250	71	119	28	12	44	32	483	29	3308
May	202	19	17	18	20	2029	87	97	23	24	20	36	478	32	3145
June	164	26	13	19	24	2059	67	60	13	11	16	28	581	23	3108
Total	1879	152	139	178	250	22031	1004	1018	175	147	241	339	3586	275	34334

TABLE X

Specimens of Blood and Spinal Fluid Examined for Syphilis (Complement Fixation Test), with Cholesterinized Antigen, During Fiscal Year Ending June 30, 1931, by Months

MONTH	Primary							Secondary							Total
	4+	3+	2+	+	±	-	Uns.	4+	3+	2+	+	±	-	Uns.	
July	299	9	6	13	10	1947	111	102	14	2	17	10	433	21	2904
August	160	3	6	7	11	1504	84	81	8	1	10	15	410	11	2313
September	154	7	3	21	12	1648	64	84	9	3	16	15	387	18	2421
October	243	9	6	17	6	2020	69	153	14	7	11	20	375	21	2971
November	176	4	1	14	13	1576	84	161	16	7	28	34	343	11	2458
December	193	14	3	8	9	1787	83	137	11	5	14	16	454	24	2757
January	212	5	11	8	17	1712	96	236	19	7	22	21	441	31	2838
February	240	10	6	16	19	1858	98	187	14	15	17	17	547	26	2865
March	256	4	7	11	13	2146	114	188	18	8	18	18	497	28	3256
April	241	5	9	15	16	2205	71	239	19	13	33	23	395	29	3308
May	283	18	8	16	18	2032	60	193	20	16	28	29	390	32	3145
June	271	12	4	7	16	1997	67	151	21	16	20	23	480	23	3108
Total	2645	102	67	156	154	22423	1004	1912	183	100	236	243	4832	275	34334

TABLE XI

Miscellaneous Specimens Examined, Positive, Negative and Unsatisfactory During Fiscal Year Ending June 30, 1931

Specimen for	Positive	Negative	Unsatisfactory
Rabies	80	114	8
Anthrax	..	3	..
Bacterial infection (blood, body fluids, feces, milk, pus, sputum, urine, etc.)	932	135	13
B. tuberculosis (body fluids, feces, urine, pus, etc.)	7	127	..
B. typhosus (water, etc.)	1	22	..
Para-typhoid fever reaction (blood)	7	879	11
B. Para-typhosus (feces, urine, etc.)	1	950	7
Gonococcus infection (urine)	1	8	..
Malarial parasite (blood)	..	45	2
Ophthalmia neonatorum (smears and cultures)	36	16	3
Pneumococci (sputum)	5	11	..
Treponema pallida	..	2	..
Tularemia (blood reaction for)	1	5	..
Undulant fever	58	147	10
Vincent's Angina	298	409	2
Other unusual examinations	5	17	1
Total	1432	2890	57
Grand total	..	..	4379

TABLE XII

Specimens Examined for Evidence of Brucella Infection, During Fiscal Year Ending June 30, 1931

Specimens for	Positive	Negative	Unsatisfactory
Undulant fever—			
Agglutination test of human blood	47	123	10
Human blood (cultures for type of organism)	2	1	..
Feces and urine (cultures for type of organism)	..	8	..
B. abortus—			
Animal inoculation of cow's milk	2	2	..
Animal inoculation of horse's blood	..	1	..
Agglutination test of cow's milk	5	12	..
Agglutination test of cow's blood	1	..	..
Agglutination test of horse's blood	1	..	..
Total	58	147	10
Grand total	..	..	215

TABLE XIII

Rabies Specimens, Species of Animals, Positive, Negative and Unsatisfactory,
Examined During Fiscal Year Ending June 30, 1931

Dogs—Positive, 79; Negative, 107; Unsatisfactory, 8.

Cats—Negative, 6.

Cows—Positive, 1.

Squirrels—Negative, 1.

TABLE XIV

Municipalities, Arranged by Counties, from Which Rabid Animals Were
Received During Fiscal Year Ending June 30, 1931

Atlantic County—Atlantic City, 2.

Bergen County—Garfield, 2; Hackensack, 4; Maywood, 1; Oradell, 4;
Tenafly, 1.

Burlington County—Burlington, 1; Maple Shade, 1.

Camden County—Camden, 8; Haddonfield, 2; Haddon Heights, 2.

Cumberland County—Bridgeton, 3.

Essex County—Orange, 3.

Gloucester County—Woodbury, 1.

Mercer County—Trenton, 2.

Middlesex County—Highland Park, 1; New Brunswick, 1; New Market, 2;
Perth Amboy, 1; South Plainfield, 1.

Monmouth County—Farmingdale, 1; Matawan, 1.

Morris County—Dover, 3; Mendham, 2; Morris Plains, 1; Morristown, 5;
Riverdale, 1; Wharton, 1.

Passaic County—Mountain View, 1; Passaic, 1; Paterson, 2.

Salem County—Elmer, 1; Hancocks Bridge, 1; Penns Grove, 2.

Somerset County—Bernardsville, 5; Peapack, 1; Raritan, 1; Somerville, 1.

Union County—Garwood, 1; Plainfield, 2; Westfield, 3.

TABLE XV

Mailing Cases for the Collection and Transmission of Specimens Supplied to
Physicians and Repositories Throughout the State During
Fiscal Year Ending June 30, 1931

Diphtheria—Regular mailing cases	14,305
Serum tubes and swabs	1,450
Extra swabs	4,617
	20,372
Tuberculosis mailing cases	9,612
Typhoid fever mailing cases	2,886
Gonorrhoea mailing cases	7,438
Malaria mailing cases	468
Feces and urine mailing cases	5,619
Syphilis mailing cases	37,578
Ophthalmia neonatorum mailing cases	212
	84,185
Total	84,185

Annual Report of the Bureau of Chemistry

For the Year Ending June 30, 1931

JOHN E. BACON, CHIEF

The Bureau of Chemistry examines samples of food and drugs collected by inspectors of the Department in the enforcement of the Pure Food and Drugs Act. The facilities of the laboratory are also extended to local boards of health, the State Purchasing Agent, New Jersey State Police, State Department of Institutions and Agencies, State Board of Pharmacy, State Fish and Game Commission, State Board of Shell Fisheries. Analyses are made of various samples of food and supplies purchased under specifications for institutional use, alcoholic beverages to assist in the enforcement of the State Hobart Prohibition Enforcement law, and drugs collected by the inspectors of the State Board of Pharmacy. This Bureau has supervision over the Department's laboratory boat "Inspector", which is used for field investigations in connection with the sanitary control of the shellfish industry. In co-operation with local health authorities, the condemned waters are patrolled and frequently opened to permit transplanted shellfish, and several hundred thousand dollars worth of dangerously polluted shellfish have been conserved through this policy. Over ten thousand samples of food, drugs, water, shellfish and miscellaneous preparations are examined annually. The variety of food and drug products examined is indicated by the following tabulation:

TABLE SHOWING NUMBER AND CHARACTER OF SAMPLES EXAMINED IN THE
FOOD AND DRUG LABORATORY DURING THE FISCAL YEAR ENDING JUNE 30, 1931

<i>Character of Sample</i>	<i>Above Standard</i>	<i>Below Standard</i>	<i>Total</i>
Milk, chemical	3,948	266	4,214
Milk, bacteriological	55	...	55
Cream	572	4	576
Sour cream	20	...	20
Buttermilk	11	...	11
Ice cream	108	2	110
Butter	131	3	134
Cheese	30	13	43
Hamburg	223	2	225
Pork sausage	209	55	264
Soft drinks	337	51	388
Olive oil	43	...	43
Canned tomatoes	47	1	48
Tomato products	63	3	64
Canned vegetables	21	2	23
Vinegar	27	27	54
Shellfish	70	...	70
Waters, shellfish investigations	89	...	89
Waters, Fish Hatchery	52	...	52
Waters for copper	10	...	10
Fruits for spray	21	...	21
Creamery wash waters	85	...	85
Alcoholic beverages	93	7	100
Miscellaneous	45	9	54
Total	6,310	445	6,755

<i>Drugs</i>	<i>Above Standard</i>	<i>Below Standard</i>	<i>Total</i>
Aromatic spirits ammonia	23	94	117
Camphorated oil	211	44	255
Citrate magnesia	18	23	41
Boric acid ointment	8	0	8
Essence peppermint	16	2	18
Ethers	37	1	38
Fowlers solution	63	59	122
Germanium oxide	12	...	12
Goulard's extract	5	1	6
Hydrogen peroxide	34	32	66
Lime water	117	17	134
Lysol	18	...	18
Mercurochromes	5	3	8
Milk of magnesia	20	26	46
Spirits of camphor	28	...	28
Spirits of nitre	76	141	217
Syrup ferrous iodide	10	3	13
Tincture ferric chloride	58	5	63
Tincture iodine	172	11	183
Witch hazel	37	6	43
Miscellaneous	14	6	20
Total drugs	982	474	1,456
Urinalysis .....	...	...	125
Total	7,292	919	8,336

Ten and nine-tenths per cent of the samples examined were below the legal requirements.

Up to date the examination of food and drug samples has been confined to chemical and bacteriological determinations along well recognized methods, although it has been frequently necessary to develop special procedures for certain preparations for which there are no published determinations. The subject of vitamins in foods, both in health building and in the curation of certain diseases, has received so much publicity that there is a wide interest in this subject upon the part of the public. There are also a number of drugs, fairly commonly prescribed by physicians, for which there are no chemical assays, and the determination of the potency of the drug must be established by biological means. If the Department is to be progressive and in a position to supply to the public information pertaining to the vitamins of food

products and the efficacy of those drugs whose potency can only be determined by biological assays, then this Bureau should be furnished with the necessary facilities and personnel for these advanced scientific determinations.

The condemned waterways west of Atlantic City were thrown open from July 1 to August 15 in order that the clams therein might be gathered and transplanted to approved waters under supervision. The plan under which the transplanted of clams was carried out worked very successfully, and the Department received considerable favorable newspaper publicity, particularly along the line of doing its part in relieving the unemployment situation. While this phase, and also the conservation of a valuable food, is spectacular and bespeaks a constructive policy, the Department should be especially gratified in that in addition a health menace was partially removed. The dangerously polluted clams were so plentiful in these waters as to make surreptitious removal of same by irresponsible persons profitable enough to attempt to evade the patrol which is maintained; but since last September there has been a marked decrease in the number of persons arrested by the Atlantic City patrol in these waters for the illicit removal of clams.

Employment was furnished to an average of 140 boats per day for the thirty-three working days the area was open, and close to six million clams were harvested and transplanted. In this operation over \$30,000 were paid in wages, and the average wage per day per boat was \$6.50. The clams were safe for food purposes after September 15, and the market value should have exceeded \$100,000. Considerable additional work was provided in the handling of these clams for the market. The following tabulation gives a summary of what was accomplished:

TABULATION SHOWING NUMBER OF CLAMS REMOVED FROM CONDEMNED WATERS WEST OF ATLANTIC CITY AND THEIR VALUE, THE NUMBER OF MEN EMPLOYED AND AMOUNT OF WAGES PAID, JULY 1 TO AUGUST 15, 1930

Number of clams removed	5,635,092
Number of work days area was open	33
Average number of boats working per day	140
Amount paid in wages	exceeding \$30,000
Average wage per day per boat	\$6.50
Estimated market value of clams	\$100,000

The recent investigations of Cresses Thorofare and Richardson Channel, small streams tributary to the condemned waters of Grassy Sound and Grassy Sound Channel, west of Wildwood, showed that both of these bodies of water were subject to pollution of a highly dangerous character. Over fifty houses are located in close proximity to the banks of Cresses Thorofare, and untreated sewage from overhanging privies empties directly into the stream or upon the marshy meadowlands, subsequently gaining access to the water by means of drainage ditches or following periods of heavy precipitation or unusually high tides. The same situation exists at Richardson Channel, there being approximately one hundred houses along the banks of said stream. While both of these bodies of water are small in area, the investigation disclosed that it is the practice to store on these bottoms shellfish gathered from approved waters, which shellfish are later taken up and sold from roadside stands.

In view of the character of the pollution gaining access to these waters, recommendation was made that they be condemned for shellfish purposes, which was subsequently approved by the Board.

The Maurice River Oyster Growers and Dealers Association constructed a drainage ditch at a cost of \$1,500 at the rear of the road leading to Bivalve, which should obviate the insanitary conditions which existed in the past due to the collection of surface waters. The Central Railroad of New Jersey have reconstructed the retaining wall under the shipping platforms, which will prevent waters from the Maurice River flooding some of this section during extremely high tides. These improvements should result in considerable improvement in the general sanitary conditions.

Careful inspections of the scavenger service for boats entering the river indicated this is working efficiently, and the four full-time men employed by the Association to keep the sanitary chemical toilets in a cleanly condition, and the tanks properly emptied as needed seem to be adequate to cope with the situation.

The past year has witnessed a merger of the principal shucking houses in this district into one large corporation known as the

Port Norris Oyster Company, Incorporated. This move should facilitate sanitary supervision, as two or three small houses formerly operated will be shut down, and the activities concentrated in three or four of the larger establishments of this company.

An additional shucking house is being constructed and will be ready for operation in the fall of 1931. The Planters Oyster Company, Incorporated, as this concern will be known, is constructing a model up-to-date shucking house and contemplates having opening facilities for 175 shuckers.

The general trend in this section is towards the shipment of more of the oysters shucked in cans and less in the shell.

Since the detection of added water in shucked oysters is based upon the determination of the solid content, and as the latter is affected by various factors such as the amount of precipitation during the summer and early fall months; time of the season that oysters are removed from beds; length of time that beds have been worked; salinity of the overlying waters, etc., it seems essential that the Department gather authentic information upon this subject. With this thought in mind, therefore, considerable numbers of samples from different beds in Maurice River Cove were collected during the year and the solid content determined before and after storage, and after shucking before and after cleansing.

Working in co-operation with the American Can Company, the oyster industry has put up an experimental pack of oysters, using the so-called vacuum process, which they seem to think has great possibilities in the retail trade for the small containers for individual oyster stews. This Bureau assisted the industry in the preparation of labels acceptable to the United States Department of Agriculture for this innovation.

At this time I wish to bring out the very excellent co-operation which exists between the Department and the oyster industry at Bivalve and Maurice River, New Jersey. This is undoubtedly due to the strength of the local organization which the oystermen have formed, known as the Maurice River Oyster Growers and Dealers Association. Between \$15,000 and \$25,000 per year are

expended by this Association in maintaining a scavenger service for all oyster boats entering the river and to pay four full-time men for the sanitary supervision of the large number of chemical toilets in existence in this district. All funds for these services are obtained by the Association levying a tax on each thousand of oysters handled; the Department should look with disfavor upon individuals dissociating themselves from an efficient association and attempting to maintain sanitary conditions individually.

A large number of persons at Highlands, New Jersey, are dependent upon the soft clam industry for a livelihood. The method of handling the shucked soft clams, the sanitary improvements made in this industry, and the rules and regulations adopted governing same, were described in last year's report. The consistently high scores obtained upon examination of these shucked soft clams, particularly during the warm weather months, have always been a matter of considerable concern, as the product has been excluded from sale in the New York City markets on various occasions. While the Department maintains there is no particular sanitary significance attached to these high scores, inasmuch as the product is invariably cooked before being consumed, an experiment was conducted during the past year attempting to purify the shell clams by means of sterilized running water to eliminate scores which have usually been obtained in the past during the opening and handling processes. Results of this investigation were very encouraging, but as they were obtained during the cold weather months, it is deemed advisable to repeat them during the coming summer before drawing definite conclusions.

Following are tabulations of bacteriological results obtained on water and oyster samples taken from the various shellfish areas of the State.

WATER SAMPLES

Barnegat Bay Section

Barnegat Bay—Number samples collected	20
Number showing <i>B. coli</i> in 10 cc.	0
Number showing <i>B. coli</i> in 1 cc.	0

Great Bay Section

Manahawkin Bay—Number samples collected	20
Number showing B. coli in 10 cc.	1= 1%
Number showing B. coli in 1 cc.	0
Tuckerton Creek—Number samples collected	20
Number showing B. coli in 1 cc.	6=30%
Number showing B. coli in 0.1 cc.	1= 5%
Number showing B. coli in 0.01 cc.	1= 5%
Little Egg Harbor Bay—Number samples collected	60
Number showing B. coli in 10 cc.	4= 6.6%
Number showing B. coli in 1 cc.	1= 1.6%
Number showing B. coli in 0.1 cc.	0
Great Bay—Number samples collected	60
Number showing B. coli in 10 cc.	5= 8.3%
Number showing B. coli in 1 cc.	0
Number showing B. coli in 0.1 cc.	0
Oyster Creek—Number samples collected	10
Number showing B. coli in 1 cc.	5=50%
Number showing B. coli in 0.1 cc.	0

Atlantic City Section

Little Bay—Number samples collected	30
Number showing B. coli in 10 cc.	3=10%
Number showing B. coli in 1 cc.	0
Number showing B. coli in 0.1 cc.	0
Grassy Bay—Number samples collected	30
Number showing B. coli in 10 cc.	3=10%
Number showing B. coli in 1 cc.	0
Number showing B. coli in 0.1 cc.	0
Lakes Bay—Number samples collected	80
Number showing B. coli in 1 cc.	23=28.7%
Number showing B. coli in 0.1 cc.	10=12.5%
Great Egg Harbor Bay—Number samples collected	60
Number showing B. coli in 1 cc.	9=15%
Number showing B. coli in 0.1 cc.	1= 1.6%

Cape May Section

Pecks Bay—Number samples collected	30
Number showing B. coli in 10 cc.	23=76.6%
Number showing B. coli in 1 cc.	12=40%
Main Channel near Corsons Inlet—	
Number samples collected	30
Number showing B. coli in 10 cc.	9=30%
Number showing B. coli in 1 cc.	2=6.6%
Ludlams Bay—Number samples collected	30
Number showing B. coli in 10 cc.	15=50%
Number showing B. coli in 1 cc.	6=20%
Main Channel near Townsend Inlet—	
Number samples collected	30
Number showing B. coli in 10 cc.	19=63.3%
Number showing B. coli in 1 cc.	10=33.3%
Great Sound—Number samples collected	30
Number showing B. coli in 10 cc.	17=56.6%
Number showing B. coli in 1 cc.	6=20%
Great Channel—Number samples collected	30
Number showing B. coli in 10 cc.	22=73.3%
Number showing B. coli in 1 cc.	10=33.3%
Number showing B. coli in 0.1 cc.	2= 6.6%
Richardson Sound—Number samples collected	10
Number showing B. coli in 10 cc.	6=60%
Number showing B. coli in 1 cc.	1=10%
Jarvis Sound—Number samples collected	10
Number showing B. coli in 10 cc.	10=100%
Number showing B. coli in 1 cc.	3=30%

Delaware Bay Section

Delaware Bay, over leased oyster grounds—	
Number samples collected	45
Number showing B. coli in 10 cc.	4= 8.8%
Number showing B. coli in 1 cc.	0

Maurice River Section

	Ebb Tide	Flood Tide
Section 1. Leesburg to upper end of Long Branch—		
Number samples collected	78	80
Number showing B. coli in 1.0 cc.	77=98.9%	73=91.2%
Number showing B. coli in 0.1 cc.	53=66.3%	33=41.2%
Number showing B. coli in 0.01 cc.	16=20.0%	6= 7.5%
Section 2. One mile above Manumuskin Creek to Leesburg—		
Number samples collected	80	80
Number showing B. coli in 1.0 cc.	80=100%	80=100%
Number showing B. coli in 0.1 cc.	54=67.5%	57=71.2%
Number showing B. coli in 0.01 cc.	14=17.5%	12=15.0%
Section 3. Sand Wash Wharf to a point one mile above Manumuskin Creek—		
Number samples collected	80	80
Number showing B. coli in 1.0 cc.	79=98.7%	79=98.7%
Number showing B. coli in 0.1 cc.	56=70.0%	54=67.5%
Number showing B. coli in 0.01 cc.	22=27.5%	16=20.0%
Section 4. Bridge at Millville to Sand Wash Wharf—		
Number samples collected	80	80
Number showing B. coli in 1.0 cc.	78=97.5%	80=100%
Number showing B. coli in 0.1 cc.	59=73.7%	77=96.2%
Number showing B. coli in 0.01 cc.	28=35.0%	46=57.5%
Number showing B. coli in 0.001 cc.	20=25.0%	29=36.2%

THE FOLLOWING ARE SCORES OF WATER SAMPLES TAKEN FROM STORAGE AREAS,
GREENBANK AND LONG REACHES, MAURICE RIVER

Number of samples collected	140
Number scoring 0	40=28.5%
Number scoring 1	34=24.3%
Number scoring 2	29=20.7%
Number scoring 3	15=10.8%
Number scoring 4	13= 9.3%
Number scoring 5	9= 6.4%

THE FOLLOWING ARE SCORES OF SALT OYSTERS COLLECTED FROM DELAWARE BAY

Number of samples collected	50
Number scoring 0	36=72.0%
Number scoring 1	4= 8.0%
Number scoring 2	4= 8.0%
Number scoring 3	4= 8.0%
Number scoring 4	0
Number scoring 5	1= 2.0%
Number scoring 140	1= 2.0%

THE FOLLOWING ARE SCORES OF STORED OYSTERS TAKEN FROM MAURICE RIVER

Number of samples collected	100
Number scoring 0	10=10.0%
Number scoring 1	19=19.0%
Number scoring 2	12=12.0%
Number scoring 3	18=19.0%
Number scoring 4	23=23.0%
Number scoring 5	12=12.0%
Number scoring 14	4= 4.0%
Number scoring 23	1= 1.0%
Number scoring 32	0
Number scoring 41	1= 1.0%

Report of the Bureau of Child Hygiene

For the Calendar Year 1930

JULIUS LEVY, M. D., CONSULTANT

STATISTICAL SUMMARY

The following rates are per 1,000 live births for the State.

Deaths under one year	56
Deaths under one month	30
Stillbirths	38
Puerperal deaths	5.7

146 nurses supervised 6,276 expectant mothers, 22,838 babies, 38,404 preschool children and 113,037 school children.

22 field nurses were paid by the State Department of Health.

102 field nurses were paid by local communities.

22 field nurses were paid partly by the State and partly by the community in which they work.

473 communities carried on the State Child Hygiene Program under State supervision.

155 Baby Keep-well stations were conducted weekly where mothers could bring their babies and preschool children.

13 district supervisors supervised 400 midwives who delivered 14.5 per cent of the births of the State.

13 communities during the year assumed the salary of the nurse and requested the State Department of Health to continue supervision.

INFANT MORTALITY

The infant mortality rate for 1930 was 56, a reduction of 6.5 per cent over the rate of 1929. This presents not only the lowest rate that has ever been reported for New Jersey, but one of the lowest rates for any state in the Union with similar climatic and industrial conditions.

The highest infant mortality rate for any county was 76. Only three counties had a rate over 70 and five had a rate less than 50.

Counties with rate over 70

Hunterdon
Mercer
Salem

Counties with rate less than 50

Cape May
Bergen
Union
Sussex
Essex

Among the ten largest cities in the State, the highest infant mortality appears again in Trenton, with a rate of 78. The lowest rate, 36, is represented by East Orange.

Among the cities with a population between 50,000 and 100,000 East Orange has the lowest infant mortality rate and Hoboken, with a rate of 75, has the highest.

Among the cities with a population between 25,000 and 50,000 the lowest rate was for Montclair, 35, and the highest New Brunswick, 67.

The lowest rate for the cities with a population between 10,000 and 25,000 was 18 for Rutherford and the highest 99 in Carteret. These towns also had the highest and lowest rates in 1929.

MATERNAL MORTALITY

The maternal mortality rate 5.7 shows a slight increase over the year 1929. The maternal mortality rate with slight variations from year to year has practically shown no change. This problem still challenges the medical profession and public health workers. We are in a position to say that certain activities which have taken place in the last ten years, looking towards the reduction of maternal mortality, have had very little effect upon this problem and that a new approachment will be necessary, if any impression is to be made.

NEONATAL MORTALITY

A slight decrease has occurred in the neonatal mortality. The 1930 neonatal mortality, 30, is two points lower than that of 1929 and 5.4 lower or 16% less than in 1928.

The stillbirth rate, which was 38, also presents a slight decrease over 1929.

PRENATAL SUPERVISION

During the year some 6,276 mothers received prenatal advice from the child hygiene nurses and were referred to physicians for prenatal examinations. Of this group, pregnancies ended in 4,249 with a maternal mortality rate of 3.5. This maternal mortality rate is mentioned merely to call attention to the fact that it is not statistically correct to compare the maternal mortality of a special group under supervision with the maternal mortality of a city or country as a whole. The reason for this is obvious. The maternal mortality of a city is based on all deaths in mothers associated in any way with pregnancy, labor or the puerperium. Maternal mortality rates reported by those carrying on prenatal care are based on a group in which the first five or six months of pregnancy are not included, as mothers rarely come under supervision before the sixth month of pregnancy. This fact should be kept in mind in attempting to estimate the influence of prenatal care on maternal mortality.

DEVELOPMENT OF CHILD HYGIENE WORK

There are now 146 child hygiene nurses under the supervision of the Bureau, who are working in 473 communities. This represents an increase of 13 nurses in some 73 communities. These nurses conduct 155 Baby Keep-well Stations, where consultations are held at least once a week. On January 1, 1931, 102 nurses were paid by local communities, 22 partly by the communities and the State and only 22 by the State entirely. When we remember that these nurses, even though paid by the local communities, remain under the supervision of the State Department and continue to carry out the continuous child hygiene program, we have an estimate of the success of the program developed by the Department.

BOARDING HOMES FOR CHILDREN

Number of homes licensed by the State Department of Health	328
Number of homes rejected by the State Department of Health	16
Number of homes recommended for licensing to local boards of health....	10
Of the 338 homes licensed, 185 were renewals of license	
153 were for new licenses	
Of the 338 licensed homes, 102 were licensed for 1 child	
138 were licensed for 2 children	
62 were licensed for 3 children	
28 were licensed for 4 children	
7 were licensed for 5 children	
1 for more than 5	

Effective January 1, 1931, a complete change was made in the control of boarding homes. Through an amendment to the Sanitary Code the responsibility for the licensing and supervising of boarding homes was placed with the local boards of health. This brings this activity in line with the general policy of the State Department to have local boards carry on all possible health activities in their own communities under the advice and direction of the State Department. Through the District Supervisors, local health officers have been advised in regard to the details and principles of this activity and it is believed that it will be carried out in accordance with our general policies.

UNMARRIED MOTHERS

During the year 1930 there were 1,245 reported illegitimate births. This was four cases less than last year.

The State Department of Health has continued its policy of co-operation with hospitals where maternity cases are cared for, and with established social workers and social agencies for the proper care and follow-up of unmarried mothers.

The northern part of the State is well cared for by the Church Mission of Help.

There has been a slight increase in the number of social workers in the southern part of the State, but there is still great need for more trained workers.

We have visited the different hospitals throughout the State twice during the year to further persuade them to refer the

unmarried mothers, as soon as possible, to the social agency. With few exceptions the hospitals have accepted our three principles:

To refer cases for investigation as early as possible in pregnancy;

To keep the baby breast fed while in the hospital;

To keep mother and baby together until arrangements have been made by social workers for their return home.

NUMBER REPORTED ILLEGITIMATE BIRTHS ACCORDING TO DELIVERIES IN COUNTIES

(1.7 per cent of total births)

Atlantic	85
Bergen	49
Burlington	42
Camden	96
Cape May	8
Cumberland	43
Essex	217
Gloucester	31
Hudson	169
Hunterdon	16
Mercer	126
Middlesex	54
Monmouth	56
Morris	35
Ocean	7
Passaic	69
Salem	33
Somerset	9
Sussex	7
Union	74
Warren	19
Total	1,245

MATERNITY HOMES

In 1930 there were 28 applications for maternity home licenses.

22 were renewals of license

1 was rejected

3 were discontinued

2 were referred to Institutions and Agencies

The 22 licensed maternity homes were conducted as follows:

- 3 by graduate nurses
- 17 by practical nurses
- 2 by midwives

Of 695 cases delivered in licensed maternity homes, 655 were delivered by physicians and 40 by licensed midwives.

MIDWIVES

In a general way it may be said that continued progress has been made with the training and supervision of midwives and the elimination of unlicensed and undesirable midwives. With a gradual reduction in the number of births attended by them, the detailed report will indicate some of the methods followed and the results obtained.

There were 421 licensed registered midwives in 1930. Three hundred and sixty-seven of these were supervised by the State Department of Health and 54 in Jersey City were under local supervision.

There was a decrease of 37 midwives over 1929. This was due to deaths and retirement among the older midwives, and in a few instances to revocation of license for mal-practice.

During the year the midwives were grouped into three classes:

- A, midwives who deliver more than 12 cases per year 197
- B, midwives who deliver less than 12 cases per year 108
- C, midwives who registered but did not deliver a case 62

District supervisors made 1,820 visits to midwives during the year.

UNLICENSED MIDWIVES

Two unlicensed midwives were referred to the State Board of Medical Examiners and their cases are pending prosecution.

This is the first year that we can positively say that there was not an active unlicensed midwife working in the State. However, as long as midwives exist, it will be necessary to run down reports that an unlicensed midwife has delivered an occasional case. In most of these cases an explanation of the law is all that is required to stop the unlicensed woman.

Licensed midwives delivered 10,174 cases or 14.9 of the total births of the State. This is a decrease of 1,178 births or 1.7 per cent since 1929.

Year	Total Births	Births Delivered by Midwives	Percentage of Births Delivered by Midwives
1919	70,935	30,000	42.2
1920	76,431	21,571	28
1921	78,172	21,106	27
1922	74,479	19,205	26
1923	74,611	18,265	24.5
1924	76,530	17,645	23
1925	74,193	16,077	21.6
1926	72,386	14,739	20.3
1927	72,799	14,016	19.2
1928	70,076	12,718	18.1
1929	68,297	11,352	16.6
1930	68,282	10,174	14.9

LIVE BIRTHS ATTENDED BY MIDWIVES BY COUNTIES

County	Total Births	Attended by Midwives	Percentage Delivered by Midwives
Atlantic	1,925	102	5.3
Bergen	5,985	915	15.3
Burlington	1,627	75	4.6
Camden	4,252	343	8
Cape May	425	0	0
Cumberland	1,118	0	0
Essex	14,463	2,036	14
Gloucester	1,196	0	0
Hudson	11,782	2,486	21
Hunterdon	475	3	.6
Mercer	3,457	330	9.5
Middlesex	3,755	1,195	31.5
Monmouth	2,267	59	2.6
Morris	1,755	63	3.6
Ocean	538	0	0
Passaic	4,901	1,295	26.4
Salem	605	2	.3
Somerset	1,106	293	26.5
Sussex	522	1	.19
Union	5,383	967	17.9
Warren	745	3	.4

LIVE BIRTHS ATTENDED BY MIDWIVES IN LARGER CITIES

City	Total Births	Attended by Midwives	Percentage Delivered by Midwives
Atlantic City	1,026	48	4.6
Hammonton	153	37	24.1
Cliffside Park	282	139	49
Fairview	146	66	45.2
Garfield	584	296	50.6
Hackensack	461	36	8
Wallington	174	102	58.6
Camden	2,111	342	16.
Bloomfield	715	148	20.7
East Orange	978	34	3.5
Irvington	941	30	3.1
Newark	8,252	1,626	19.7
Orange	732	108	14.7
Bayonne	1,593	517	32.3
Hoboken	899	474	52.7
Jersey City	5,641	887	15.5
Kearny	682	8	1.1
Union City	864	215	24.8
West New York	665	229	34.4
Trenton	2,243	330	14.7
Carteret	242	168	69
New Brunswick	620	128	20.6
Perth Amboy	749	404	54
South Amboy	137	63	46
Clifton	747	153	20.5
South River	196	128	65.3
Passaic	928	450	48
Paterson	2,326	642	27.5
Bound Brook	175	154	88
Elizabeth	2,062	835	40.5
Linden	420	79	18.8

In nine cities midwives delivered from 48 to 88 per cent of the total births. Midwives delivered only 8 per cent of the total births in Camden County, but they delivered 16 per cent of the births in Camden City.

The reduction of births delivered by midwives this year (1,178), 1.7 less than last year was distributed among counties where large groups of midwives are practicing. (Decrease in Bergen County, 2.2; Camden County, 2.3; Essex County, 1.7; Hudson County, 4.0; Middlesex County, 4.5; Union County, 1.2.)

MATERNAL MORTALITY

In 1930 there were 23 more maternal deaths and 15 fewer births, giving a maternal mortality rate of 5.7.

Upon investigation of 380 puerperal deaths it was found that midwives were in attendance at some time during pregnancy or labor in 20 or 5.1 per cent of the cases. Midwives attended 14.9 of all live births and 5 per cent of the maternal deaths.

SUPERVISION

In 1930 the nine midwives' organizations throughout the State held 94 meetings with an attendance of 1,369. This was a small increase in number of meetings and attendance over the previous year.

The subjects for lectures and demonstrations provided concentration on "Labor". This was a logical sequence to last year's subject of "Pregnancy".

Local physicians and district supervisors gave lectures and demonstrations on "Normal Labor, Prolonged Labor, Bleeding in Labor, Labor in Heart Disease, Tuberculosis and Toxemia, Resuscitation in Asphyxia of the New-Born."

A special drive was made on accurate temperature readings and accurate records of temperatures in post-partum care.

It was found that 261 or 85.5 of the active midwives made correct temperature readings and 188 or 61.6 kept accurate records of post-partum temperatures in case books.

There were 43 special detailed investigations of cases made where it was suspected that midwives were responsible for unfavorable results. They were as follows: puerperal deaths, 18; infant deaths, 1; stillbirths, 11; peritonitis, 1; puerperal sepsis, 9; miscarriage, 1; abortion, 1; ophthalmia, 1.

PROSECUTIONS

In nine instances midwives were referred to the State Board of Medical Examiners for suspension or revocation of license. They were as follows:

For the practice of medicine	2
Failure to call physician on abnormal case	3
For the practice of midwifery without license.	2
Conviction by local court for abortion	2

Result—

One midwife was fined \$200.00 for practicing medicine without a license.

One midwife was fined \$200.00 for practice of midwifery without a license.

License of one midwife revoked for criminal abortion.

One midwife was reprimanded by State Board of Medical Examiners for failure to call physician on abnormal case.

Five cases are pending.

PRENATAL CASES

There has been a considerable increase in the number of prenatal cases referred by midwives. The midwives referred 2,260 or 22.2 of the total cases delivered by them for prenatal care. The cases were referred to the district supervisors, who in turn referred them to doctors, prenatal nurses, clinics and centers for regular prenatal follow-up care. Many of them reported to family physicians for examination during pregnancy upon advice of midwives.

In four instances prenatal clinics are conducted solely or in large measure for midwives' cases. They are: Belleville Board of Health, Wallington Board of Health, Paterson Board of Health and Newark City Hospital prenatal centre.

In other instances hospital clinics co-operate by examining midwives' cases with the understanding that midwives will deliver where they are normal. These are hospitals in Jersey City, Bayonne, Newark, Elizabeth, Trenton and Camden.

ABNORMAL CASES

In 1930 midwives referred 484 abnormal cases or 4.7 of the cases delivered by them to the district supervisors. In 449 instances or 92.8 of the total abnormal cases, physicians were

called in. Of these 21 were sent to hospitals. This is a slight increase in the number of cases with the percentage about the same as the previous year.

ADVANCED COURSE

The advanced course for licensed midwives in the southern part of the State was given in Cooper Hospital, Camden, New Jersey, during 1930. Every midwife in Camden completed the course and four midwives from Trenton travelled a distance of eighty miles each day to take advantage of it. In addition, fifteen midwives completed the course in Jersey City Hospital, Jersey City, N. J.

Dr. A. B. Davis and Dr. Thomas Lee, Camden, and Dr. George O. O'Hanlon and Dr. S. A. Cosgrove, Jersey City, together with the superintendants of nurses have made these courses possible.

The courses have been very helpful in establishing proper technique and up-to-date methods in our instruction of midwives.

SEVENTH ANNUAL CONFERENCE

The seventh annual conference was held in Jersey City Hospital May 23, 1930, with an attendance of about 300. The program was devoted to "Control of Cancer, Maternal and Neonatal Problem, Tuberculosis, Communicable Diseases in Relation to Labor."

MIDWIFERY BULLETIN

There were four issues of the "Progressive Midwife", a quarterly bulletin, in 1930. Some of the subjects discussed were "Guidance and Advice for Midwives; Cancer; Tuberculosis; Preparations for Labor and Home Delivery."

PUBLIC HEALTH COURSE

One of the few special activities during the year was the establishment of a public health course through the co-operation of Dean Clarence Partch of Rutgers University, which was held in Atlantic City during the Winter and Spring. While this course was open to all nurses doing public health work, it was established

primarily for the child hygiene nurses. In the group were many nurses carrying on tuberculosis, Red Cross and Visiting Nurse Association work.

The Bureau has continued its co-operation with the authorities at the Clinton Reformatory by arranging, through one of the District Supervisors, a course of twelve lessons in the demonstration of personal and child hygiene care. This seems to be very popular with the girls in the Reformatory and has received their wholehearted support.

The nurses have continued to extend their instruction in child hygiene to groups of girls in the upper grade of the elementary schools. During the year some 1,154 school children have received instruction, through actual demonstration, in the general care of young infants.

NURSES' ACTIVITIES

Visits made by nurses	288,016
To expectant mothers	26,557
To babies	127,208
To preschool children	83,134
To school children	51,117
Visits to Baby Keep-well Stations	95,880
Babies brought to stations	73,338
Preschool children brought	22,542
Prenatal care (expectant mothers)—	
Supervised prenatal cases	6,276
Expectant mothers supervised, address changed before delivery	302
Pregnancies ended	4,249
Live births	4,124
Stillbirths	81
Miscarriages	44
Maternal deaths—15	
Attendants at birth—	
Midwife	904
Doctor or hospital	3,292
No attendant	19
Infant care—	
Babies supervised during 1930	22,838
Infant deaths under 1 year	102
Under 1 month (over 1 week)	25
Under 1 week (over 1 day)	18
Under 1 day	31

Preschool care—		
Children supervised		38,404
New cases	12,400	
Illnesses and defects—		
Detected (not including school child)	7,283	
Corrected	4,108	
Contagious diseases—		
Suspected cases discovered	1,213	
Unreported births discovered	107	
Unsanitary conditions discovered	289	
Eye smears taken	74	
Suspected tuberculosis cases referred	600	
Toxin anti-toxin given (not including school child) ...	9,803	
Attendance at Little Mother's League	1,154	
Vaccinations	1,344	
School Hygiene—		
School children supervised		113,037
Inspections (general, classroom, annual, etc., assisting doctor or nurses working alone)		935,140
Defects detected		110,432
Defects corrected		37,094
Illnesses detected		2,809
Illnesses corrected		1,943
Pupils excluded		9,771
Pupils readmitted		7,876
Nose and throat cultures for diphtheria		1,791
Toxin anti-toxin given		16,889

Report of the Bureau of Venereal Disease Control

For the Year Ending June 30, 1931

WILLIAM SAMPSON, CHIEF

It is difficult properly to evaluate the work of the Bureau of Venereal Disease Control due to the social taboo, which still lays a heavy hand upon its operations. Yearly there is an increasing freedom in the mention of venereal diseases, discussions as to their incidence, manner of spread, and results. Nevertheless the time has not yet arrived when the venereal diseases can be accorded the same publicity that attends smallpox, scarlet fever, diphtheria, etc. This false sense of modesty is strikingly in evidence when it comes to arranging an exhibit. Lest the public sense of propriety be offended, a soft pedal must be put upon an exhibit that would adequately illustrate the work of the bureau. Nothing must be shown that would affect the delicate sensibilities of our grandparents, let alone the sensibilities of a child. The Bureau is deprived of the immeasurable advantages of the radio in bringing its propaganda to the public. Yet with all the handicaps there has been a tremendous advance as contrasted with the state of the public mind when the World War had begun and the venereal diseases first came into the open.

CASES REPORTED

Number of cases of venereal disease reported to the State Department of Health for the twelve months ending June 30, 1930, and June 30, 1931:

	1930	1931
Chancroid	51	57
Gonorrhoea	4,255	4,175
Syphilis	6,805	7,591
Total	11,111	11,823

The table below gives the reported cases in New Jersey by county, disease and sex for the calendar year of 1930, together with the rate per thousand:

County	Gonorrhoea		Syphilis		Chancroid		Total	Population	Rate Per M
	M	F	M	F	M	F			
Atlantic	215	15	205	165	0	0	600	124,823	4.80
Bergen	108	41	183	162	2	0	496	364,977	1.35
Burlington	74	6	87	74	0	0	241	93,541	2.57
Camden	319	97	237	217	10	1	881	252,312	3.49
Cape May	13	2	7	6	0	0	28	29,486	.95
Cumberland	59	14	45	53	2	0	173	69,895	2.48
Essex	1,532	258	1,478	1,396	22	8	4,694	833,513	5.63
Gloucester	37	8	25	17	1	0	88	70,802	1.24
Hudson	428	93	611	356	1	0	*1,489	690,730	2.15
Hunterdon	21	12	9	63	0	0	105	34,728	3.02
Mercer	264	64	472	301	2	0	1,103	187,143	5.89
Middlesex	60	13	92	52	1	0	218	212,208	1.03
Monmouth	73	17	268	251	2	1	612	147,209	4.16
Morris	70	9	56	27	0	0	162	110,445	1.47
Ocean	18	4	24	15	2	1	64	33,069	1.93
Passaic	268	79	286	158	2	0	793	302,129	2.62
Salem	55	12	94	53	1	0	215	36,843	5.84
Somerset	51	4	33	17	1	0	106	65,132	1.63
Sussex	19	3	6	4	0	0	32	27,830	1.15
Union	98	16	192	114	8	0	428	305,209	1.40
Warren	3	3	15	11	0	0	32	49,319	.65
Total	3,785	770	4,425	3,512	57	11	12,560	4,041,343	3.11

* Does not include cases from Hudson County Laboratory.

The foregoing table is a striking instance of the failure of doctors to report their cases. That the reporting law is not generally observed must be apparent when we note that during the calendar year of 1930 only two cases of gonorrhoea in the female were reported from Cape May County, four from Ocean, four from Somerset, three from Warren, and in the entire State, with over four million population, only 770 cases of gonorrhoea in the female were reported. This may be largely due to the fact that the seriousness of gonorrhoea is not appreciated either by physicians or those who are suffering from it, and accordingly the latter resort to quacks or to the corner drug stores for their remedies. Such cases are seldom reported nor are they properly

treated. On the face the tables would indicate an increase in the diseases, but this may be accounted for by the increased population upon which the incidence is based, the rate per thousand being practically the same, 3.00 in 1929 and 3.11 in 1930.

IS SYPHILIS DECREASING?

The question is often asked, "Is syphilis decreasing?" This is not susceptible of a direct answer that can be demonstrated by figures, but syphilologists usually assert that the trend is along the diminishing line. Medical science aided by educational propaganda appears to be reducing the number of tertiary cases among the intelligent and fairly well-to-do—those who have sense enough to take and continue treatment—and shifting the problem to the ignorant, indigent classes who today constitute the chief public health problem as regards syphilis.

OFFER OF FREE DRUGS

The free distribution of drugs for the treatment of syphilis promised to physicians in return for the names and addresses of sources of infection of their patients, while bringing out many sources that otherwise would probably never have reached the Bureau, did not develop as many new sources as had been anticipated. Nevertheless the probable source was given in 501 cases, the highest number recorded in any year. This was without repeated reminders having been sent to physicians, so many of whom with occasional cases do not remember the requirements of the law. The coming year the matter will be called to the attention of physicians generally several times, and a wider response will undoubtedly be received.

The following table classifies the sources of infection that were reported to the State Department of Health for the fiscal years ending June 30, 1930, and June 30, 1931:

ANALYSIS OF SOURCES OF INFECTION

	1930	1931
Professional prostitutes and brothels	59	45
Clandestine prostitutes	206	225
Husband or wife	137	160
Congenital	33	69
Miscellaneous	4	2
Total	439	501

Many of the sources of infection are not necessarily referred to local health authorities for investigation, as for example, when the husband or wife is specified as such the reporting physician is asked to endeavor to bring the offending spouse in for treatment. The reason for this is obvious. Naturally, however, it does not apply when husband or wife are separated. Where the sources are reported nearly one-third name a spouse as the source. Many cases are contracted as pre-marital infections.

During the past fiscal year 210 cases have been referred to local health executives for investigation as contrasted with 217 the preceding year. There is appended an analysis as to the manner in which these sources were handled by local health executives:

	1930	1931
Under supervised medical treatment	55	53
Unable to locate the person named	42	36
Examined but found presumably non-infectious	30	36
Satisfactory disposition (agreed to take treatment, etc.)	14	10
Disposition unknown, or unsatisfactory (evaded supervision by moving, etc.)	38	10
Referred to health officials in other states	26	29
Handled by police authorities	12	6
No response from local health authorities	No record	30
Total	217	210

It is extremely interesting to observe that in only one case out of seven did we fail to get a response from local health authorities, and more than 25% of the sources were placed under supervised medical treatment. Think of the number of potential infections prevented!

INVESTIGATING SOURCES OF INFECTION

To the average local health executive in a rural community a request to have the probable source of an infection of venereal disease examined is in the nature of a bugaboo and is to be shunned or neglected. To help educate these officials the Bureau conceived the idea of having regional conferences of health executives at which the four members of the staff of the Bureau met with the local officials and discussed the venereal disease reporting and control laws, and told the methods of investigating probable sources of infection in other sections of the State. Local health officials, known to the men, related their personal experiences in handling alleged sources. Then the Medical Consultant took up the subject of the length of time one infected with venereal disease was a public health problem; that is, in an infectious stage, giving it as his opinion that after six months' treatment a patient need no longer be an object of concern to health officers.

These meetings were strictly informal; one was held at Dover, March 27, for Morris County; at Bergen Pines, May 5, for Bergen County; and at Asbury Park, June 16, for Monmouth, Middlesex and Ocean Counties. Many questions were answered and troublesome problems solved.

CONFERENCES

Under the auspices of the Bureau a meeting of venereal disease clinicians, nurses and case workers was held at the Elks Temple in Elizabeth, December 4th. About 100 were present. Mrs. Elsa Butler Groves of Columbia University delivered a formal address, after which the conference settled down to a discussion of eminently practical questions. Some of the matters taken up were the following: Should clinic records be available to social welfare organizations? Should police aid be expected in other than primary cases? Is an evening clinic essential? How can the delinquent patient be kept under treatment? What is the value of routine Wassermanns on all hospital patients? Is the darkfield examination of primary syphilis necessary from public

health standpoint? What drugs are necessary in the treatment? How long should treatment be continued? When is the syphilitic infectious? When is it advisable to do a spinal fluid Wassermann? Can we state by any laboratory tests that a gonorrheal patient is cured? When may patient be permitted to marry? It is hoped that similar conferences may be held every year or so.

The demonstration clinics which have proven to be such a feature were continued during the year, when the Medical Consultant participated in such meetings held under the auspices of County Medical Societies as follows: Mercer County Society at Trenton with an attendance of 125, and the Morris County Medical Society with physicians from adjacent counties as its guests, held at Greystone Park, when 75 doctors were present.

NEW CLINICS

During the past year two new clinics have been established, one at Northfield in the Atlantic County Hospital for Mental Diseases, and one at Phillipsburg in the Warren Hospital, Wilbur Avenue. There are no clinics at present in the neighborhood of Phillipsburg and the establishment of one there is important. The total number of clinics in the State now is twenty-nine.

CLINIC PATIENTS AND TREATMENTS FOR FISCAL YEARS 1929, 1930 AND 1931

<i>Patients</i>	1929	1930	1931
Syphilis	2,536	3,476	4,153
Gonorrhea	1,772	2,116	2,242
Total	4,308	5,592	6,395
<i>Treatments</i>			
Syphilis	65,301	97,830	108,887
Gonorrhea	21,067	25,357	27,109
Total	86,368	123,187	135,996

The big increase is due to several reasons, economic conditions among others. Then the Newark clinic, the largest one in the State, is practically opened throughout the day.

That syphilis is still being viewed with a suspicious mind, as an authority claims it should be, is evident from the fact that

during the last fiscal year Wassermann test analyses in the State Laboratory had increased to 33,340, a gain of over 2,000 during the preceding year.

The Bureau was again represented in the Public Health Course at Rutgers, where the Chief delivered two lectures dealing with venereal disease phases to the senior class.

EDUCATIONAL

During the past fiscal year the largest number of lectures ever delivered in one year, since the organization of the Bureau, was given; namely, 421. The attendance did not hold so well, the total amounting to 31,316. As is well known the policy of the Bureau has been to furnish a speaker when a minimum audience of 25 is assured, and it is a source of gratification rather than otherwise to find a demand coming from so many smaller groups.

Below is a recapitulation of the number of meetings, the total attendance and the pamphlets distributed for each year since 1920:

	<i>Number of Meetings</i>	<i>Attendance</i>	<i>Pamphlets Distributed</i>
1920	376	72,192	353,873
1921	255	28,912	84,389
1922	232	28,111	120,032
1923	229	30,058	65,668
1924	300	41,629	49,560
1925	334	39,415	45,000
1926	357	38,923	50,000
1927	307	35,095	89,354
1928	308	28,624	38,146
1929	285	28,151	30,589
1930	388	37,954	49,502
1931	421	31,316	52,778
	3,792	440,380	1,028,891

GROUPS ADDRESSED

During the fiscal year meetings have been held as follows:

Name of Group	Number of	
	Meetings	Attendance
Parent-Teacher Associations	195	11,102
Children of high school age	83	12,274
Kiwanis clubs	21	858
Rotary clubs	21	817
Camps	17	702
Lions clubs	14	437
Women's clubs	9	492
Health officers	9	414
Men's clubs	7	411
National Guards	6	1,385
Y's Men's clubs	6	200
Industrial groups	5	310
Colored men	4	515
Business colleges	4	230
Jewish women groups	3	120
Nurses	3	90
Colored Y. M. C. A.	2	335
Doctors	2	200
Y. W. C. A.	2	125
Public Health Course	2	16
Social Workers Conference	1	85
Presbyterian Brotherhood	1	75
Church group	1	40
Cardinal Club	1	30
Boy Scouts	1	25
Exchange Club	1	28
Total	421	31,316

It is interesting to observe the increased number of meetings of and those in attendance at parent-teacher associations. These are meetings where the parents are usually addressed on the subject of sex education with a view to interesting them in the sexual development of their children. The parents are told what the children should know about sex matters and venereal disease as they grow up and the best way of imparting the information. Such meetings really constitute the cornerstone of the educational work of the Bureau, for it is believed that proper training in the early years constitutes the best insurance against the acquisition of a venereal disease in later years.

MEETINGS HELD EACH MONTH, WITH THE TOTAL ATTENDANCE FOR THE MONTH, AND THE TYPE OF ATTENDANCE AT THE MEETINGS

1930-31	Men Only		Women Only		Men & Women Together		Students		Totals	
	No. Meet.	Attendance	No. Meet.	Attendance	No. Meet.	Attendance	No. Meet.	Attendance	No. Meet.	Attendance
July	6	983	1	10	..	...	9	272	16	1,265
August	5	700	..	...	2	16	7	420	14	1,136
September	8	273	2	60	1	150	..	...	11	483
October	19	1,004	21	2,113	9	1,195	2	55	51	4,367
November	9	325	15	735	17	1,685	4	1,450	45	4,195
December	5	165	12	522	10	380	9	2,510	36	3,577
January	9	481	32	1,464	3	115	7	620	51	2,680
February	4	154	22	872	6	285	10	801	42	2,112
March	4	140	20	875	15	768	14	1,838	53	3,621
April	8	267	21	825	7	763	28	3,240	64	5,095
May	7	194	8	380	7	475	8	1,146	30	2,195
June	5	355	1	175	2	60	..	...	8	590

HIGH SCHOOL TALKS

Formerly like all other high schools in the State the East Side High School in Paterson has had one address yearly given to the boys and one to the girls; in each instance the group being about 1,200. Last spring the plan was tried of having the speaker address smaller groups. Two full days were given to the school by each of the bureau speakers and twelve groups of girls and twelve of boys were addressed. The experiment was so successful that it will be urged on other large schools hereafter.

The speaker who has addressed most of the men's civic clubs during the past year has met with great success in presenting what he calls a Social Hygiene Symposium. In a short address he outlines the program of the Bureau in dealing with the control of the venereal diseases and then has invited questions. Usually these come thick and fast and run the whole gamut of the venereal disease phases. In almost every instance the set time of his address has been exceeded from five to forty-five minutes, and even then some members remain to have private talks with the speaker. The important feature is that the listeners secure information that they want and not what the speaker thinks they want. It is noteworthy also that the majority of questions deal with the venereal diseases themselves.

The Bureau has recently purchased additional films and now owns the following, which are sent free throughout the State for exhibition purposes:

The Gift of Life
 The Venereal Diseases (for men)
 Social Hygiene for Women
 Deferred Payments.

The usual attention was paid to the National Guard encampment and several films were provided for exhibition to the soldiers under the auspices of the Y. M. C. A. secretary.

It is gratifying to say that the entente cordiale between physicians, clinics, health officers and the Bureau has been well maintained.

Report of the Bureau of Public Health Education

For the Year Ending June 30, 1931

EDWIN C. LANIGAN, CHIEF

An intensive campaign has been carried on by the bureau during the last fiscal year to acquaint the public with the various activities of the State Department of Health. In the belief that four out of five residents of the State read the newspapers the bureau has concentrated on these media for distribution of material on health topics. The articles pertained to the work of the various bureaus and advice on a variety of subjects.

Governmental experts have publicly commended the advisability of providing the department with an appropriation of at least \$100,000 to inaugurate an educational campaign which might eventually result in a substantial curtailment of the State's growing burdens for institutional care. Such a recommendation is based on the theory that prevention will return greater dividends than subsequent cure after custodial care.

A better understanding on the part of the public of the services rendered by the Department to the physicians of the State in diagnosis of communicable disease specimens and the work of the Chemistry Bureau in analyzing food products and milk supplies would bring the Department moral support to extend its work.

"Pitiless publicity" during the past year has served to bring many an offender of the health laws into line and conform with the Department's regulations. An instance in point was the failure of the Borough of Fort Lee to obey an order to cease pollution of a tributary of the Hackensack River. The borough officials also disregarded a mandate of the Court of Chancery, based on the findings of the Department, and were held in contempt of court. The officials agreed to comply with the board's

original orders as soon as engineering plans and finances could be arranged.

Municipalities employing unlicensed operators at sewage and water plants have also come under the ban of the Department and conditions corrected after derelictions were called to public attention.

The bureau reiterated throughout the year the necessity of creating four additional district health officers, to supplement the work of the two officers employed for the past ten years. The 1931 Legislature granted this request and the Department is now ready to zone the State into health districts, completing its organization and afford a better co-ordinated health service.

With an appropriation of \$25,000, the Department has undertaken a clean-up of pollution in the Raritan Valley. More than a dozen municipalities have been served with formal legal notices to cease pollution of the Raritan River.

North seashore municipalities still resisting the orders of the board to cease emptying insufficiently treated sewage into the Atlantic Ocean have been summoned into court to show cause why they should not be compelled to construct sewage disposal plants. The Department has utilized the public press in calling attention to the shortcomings of the recalcitrant and offending municipalities.

Work of the Department was displayed at the Trenton Interstate Fair and Flemington Fair in the past year.

Report of the Bureau of Vital Statistics

For the Calendar Year 1930

DAVID S. SOUTH, STATE REGISTRAR

This Bureau, which was established in 1878, has the custody of over seven million records of births, marriages and deaths which date back to 1848. In 1930 over seventeen thousand copies of the records were issued for which \$9,601.00 were received and paid to the State Treasurer. Approximately seven thousand of the copies were issued to widows, veterans and veteran's organizations for compensation and other pension purposes; for children to enter school or procure employment; for enlistment in the Army or Navy of the United States, for all of which purposes no charge is made.

The registration of births, marriages and deaths is supervised in each city, borough and township of the State. Blanks for birth, marriage and death certificates, burial and transit permits and other forms are supplied by the Bureau as required by law.

During the year 1930, the Bureau received, examined, classified, indexed and permanently filed over one hundred and fifty thousand certificates of births, marriages and deaths. The annual growth of the records requires approximately two hundred cubic feet of storage space.

The Bureau yearly compiles an increasing amount of special statistical data for the use of insurance companies, chambers of commerce, students, statisticians and agencies interested in disease and accident prevention.

GENERAL SUMMARY

	1920	1929	1930
Births registered, tabulated and indexed	76,431	68,297	68,282
Marriages registered, tabulated and indexed ...	31,327	30,257	28,499
Deaths registered, tabulated and indexed	40,820	45,746	43,190
Stillbirths registered, tabulated and indexed ...	3,221	2,767	2,647
Total records registered, tabulated and permanently filed	151,799	147,067	142,618
Searches made and certified copies issued for which fees were received	4,664	11,351	10,523
Certified copies issued and searches made in pension and other cases for which no fees were received	4,232	8,420	6,938
Fees returned to State Treasurer for searches and certified copies	\$4,051	\$10,191	\$9,601

CHARTS AND TABLES, 1930

- Table 1. Births, marriages and deaths reported, with rates, 1879-1930.
- Table 1a. Births, marriages and deaths and deaths under one year of age by counties, cities, boroughs and townships.
- Table 2. Deaths by age groups, with the percentage which each group forms of total deaths, 1930.
- Chart 1. Total deaths per 1,000 population for 52 years.
- Table 3. Deaths of infants under five years of age and percentage of total deaths, 1904-1930.
- Chart 2. Deaths under five years of age per 10,000 population for 52 years.
- Table 4. Number of births, stillbirths, deaths under one month, deaths under one year and maternal deaths with rates per 1,000 living births, 1906-1930.
- Table 5. Deaths under one year, deaths under one month, stillbirths and maternal deaths per 1,000 living births, by counties.
- Table 6. Deaths under one year, deaths under one month, stillbirths and maternal deaths per 1,000 living births in the ten largest cities of New Jersey.
- Table 7. Births, birth rates, deaths under one year and infant mortality rates (exclusive of stillbirths).
- Chart 3. Deaths from typhoid fever per 10,000 population for 52 years.
- Table 8. Comparison between typhoid fever death rates in New Jersey and the United States Registration Area, 1920-1929.
- Table 9. Typhoid fever in urban and rural districts.
- Table 10. Typhoid fever rates in the counties of New Jersey, 1921-1930.
- Chart 4. Deaths from scarlet fever per 10,000 population for 52 years.
- Chart 5. Deaths from diphtheria per 10,000 population for 52 years.
- Table 11. Average annual death rates from all causes and from tuberculosis of lungs per 10,000 inhabitants, by counties for 52 years, with rates for 1930.
- Chart 6. Deaths from tuberculosis of lungs per 10,000 population for 52 years.

- Table 12. Cancer and other malignant tumors by sex, age periods and organ affected.
- Chart 7. Deaths from cancer and other malignant tumors, per 10,000 population for 52 years.
- Table 13. Suicide by sex, age periods and means employed.
- Table 14. Percentage of the various causes of total deaths and each sex of total in New Jersey.
- Table 15. Death rates, total, white and colored, from important causes, per 100,000 total, white and colored population in New Jersey.
- Table 16. Deaths (exclusive of stillbirths) by causes and months of death, in New Jersey.
- Table 17. Deaths (exclusive of stillbirths) from each cause of the Abridged International List, by age, sex, and color in New Jersey.
- Table 18. Deaths (exclusive of stillbirths) by causes, by days, weeks and months of the first year of life, in New Jersey.
- Table 19. Deaths (exclusive of stillbirths) under one year of age, by causes and months of death, in New Jersey.
- Table 20. Deaths from each cause, Detailed International List, in the counties of New Jersey and selected municipalities of 5,000 or more inhabitants in 1930.
- Table 21. Deaths by occupation, age groups and certain selected causes.
- Table 22. Deaths by causes, sex, color and age periods in the counties and cities having 10,000 or more inhabitants in 1930 (county figures include cities which follow):

Atlantic County—	Irvington	Long Branch
Atlantic City	Montclair	Red Bank
Pleasantville	Newark	Morris County—
Bergen County—	Nutley	Dover
Cliffside Park	Orange	Morristown
Englewood	South Orange	Ocean County—
Garfield	West Orange	Passaic County—
Hackensack	Gloucester County—	Clifton
Lodi	Hudson County—	Hawthorne
Ridgefield Park	Bayonne	Passaic City
Ridgewood	Harrison	Paterson
Rutherford	Hoboken	Salem County—
Burlington County—	Jersey City	Somerset County—
Burlington City	Kearny	Sussex County—
Camden County—	Union City	Union County—
Camden City	West New York	Elizabeth
Collingswood	Hunterdon County—	Linden
Gloucester	Mercer County—	Plainfield
Cape May County—	Trenton	Rahway
Cumberland County—	Middlesex County—	Roselle
Bridgeton	Carteret	Summit
Millville	New Brunswick	Westfield
Essex County	Perth Amboy	Warren County—
Belleville	South River	Phillipsburg
Bloomfield	Monmouth County—	
East Orange	Asbury Park	

Population—The estimated mid-year population of the State for 1930 was 4,062,930. This figure was obtained by the arithmetical method, using the United States census figures for 1920 and 1930. The estimated population of the counties and incorporated municipalities of the State having 10,000 or more inhabitants in 1930 appears at the foot of the mortality tables for the places. It had been customary in the past to use population estimates furnished by the United States Bureau of the Census. It was necessary to discontinue this practice upon request that the population figures be not attributed to the Bureau of the Census.

Births—The number of births for 1930 was 68,282, which is equivalent to a rate of 16.8 per 1,000 inhabitants. Total births reported decreased 15 from the number for the previous year. The 1930 rate was the lowest since 1905. It is likely that a higher rate would have prevailed around 1905 had all births been reported. The low figure for 1930 is merely a continuance of the decline in evidence since 1917, when the rate was 24.9.

Marriages—The number of persons married during 1930, per thousand population, was 14.0, which rate was slightly higher than that for the previous year. The ease and rapidity with which marriage licenses can be secured in certain adjacent states materially affect the New Jersey rate. Economic conditions are also a considerable factor and are undoubtedly partly responsible for the gradual decline which has occurred in the marriage rate during the past ten years.

Deaths—The death rate for 1930 was 10.6. This was the lowest rate ever attained in New Jersey, the previous low was 11.4 for 1927.

TABLE 1—POPULATION: BIRTHS, MARRIAGES AND DEATHS REPORTED WITH RATES PER 1,000 POPULATION

YEAR	Estimated Population	BIRTHS		MARRIAGES		DEATHS	
		Number of births reported	Birth rate per 1,000 population	Number of marriages	Persons married per 1,000 population	Number of deaths	Death rate per 1,000 population
1879	1,020,584	23,116	22.65	7,096	13.91	20,440	20.03
1880	1,130,892	23,680	20.94	7,963	14.08	18,967	16.77
1881	1,160,775	23,484	20.24	8,109	13.98	20,812	17.94
1882	1,188,658	23,108	19.42	8,837	14.86	25,859	21.82
1883	1,209,048	24,480	20.21	9,166	15.16	23,310	19.28
1884	1,248,224	25,283	20.20	9,868	14.37	21,718	17.40
1885	1,278,033	24,077	18.84	8,989	14.07	23,907	18.68
1886	1,310,431	25,407	19.46	12,351	18.35	22,734	17.35
1887	1,342,829	27,340	20.36	15,416	22.96	24,331	18.12
1888	1,375,227	28,074	20.41	16,025	23.81	27,173	19.76
1889	1,407,625	29,099	20.67	15,728	22.34	28,543	18.86
1890	1,441,017	30,108	20.89	15,684	21.80	28,530	19.80
1891	1,473,784	28,822	19.43	15,308	20.70	28,840	19.50
1892	1,511,653	30,627	20.26	16,082	21.23	32,685	21.62
1893	1,538,798	32,285	20.98	17,178	22.33	30,596	19.88
1894	1,578,378	33,962	21.33	16,245	20.58	30,004	19.00
1895	1,672,942	31,742	18.97	15,873	18.98	30,684	18.31
1896	1,718,548	31,207	18.16	18,370	21.38	30,767	17.90
1897	1,764,144	31,595	17.61	18,171	20.80	29,822	16.90
1898	1,810,008	32,515	17.96	18,213	14.59	27,337	15.11
1899	1,855,872	29,419	15.84	18,336	14.37	30,999	16.70
1900	1,883,069	32,270	17.13	14,611	15.61	31,474	16.62
1901	1,925,781	31,812	16.08	16,530	17.18	31,739	16.48
1902	1,967,893	35,116	17.84	18,150	18.45	31,519	15.81
1903	2,016,797	37,242	18.47	19,512	19.35	31,820	15.87
1904	2,058,909	38,751	18.82	18,919	18.38	35,298	17.14
1905	2,144,148	39,689	18.51	20,372	19.19	33,864	15.79
1906	2,198,829	42,677	19.43	21,389	19.25	35,870	16.34
1907	2,248,331	44,851	19.86	23,649	21.04	37,408	16.63
1908	2,300,427	47,405	20.61	26,155	22.74	35,897	15.47
1909	2,352,522	47,508	20.19	20,724	25.27	36,359	15.46
1910	2,397,167	53,942	21.26	27,612	22.00	39,494	15.87
1911	2,438,772	58,113	22.22	28,014	19.13	38,611	14.76
1912	2,694,377	60,073	22.30	26,821	19.91	37,772	14.02
1913	2,772,981	61,432	22.15	27,097	19.98	39,425	14.22
1914	2,861,566	65,403	22.94	28,628	20.01	39,967	14.02
1915	2,877,532	66,476	23.10	27,694	19.22	39,438	13.70
1916	2,948,016	70,211	23.82	31,439	21.15	43,378	14.71
1917	3,014,193	75,300	24.98	30,600	19.94	43,532	14.44
1918	3,080,371	74,549	24.20	28,989	18.58	60,852	19.75
1919	3,146,547	70,936	22.54	29,281	18.61	39,979	12.71
1920	3,167,767	76,431	25.91	31,327	19.65	40,820	12.80
1921	3,251,494	78,172	24.04	37,515	17.10	37,882	11.49
1922	3,316,228	74,479	22.46	27,114	16.35	40,086	12.00
1923	3,378,063	74,611	22.08	28,730	17.00	41,294	12.22
1924	3,442,695	76,530	22.22	27,601	16.03	40,531	11.77
1925	3,506,474	74,183	21.15	27,672	15.78	41,749	11.90
1926	3,570,159	72,588	20.27	26,424	15.92	44,806	12.43
1927	3,633,891	72,799	20.03	26,316	15.58	41,562	11.43
1928	3,697,623	70,076	18.98	26,120	15.75	44,555	12.04
1929	3,761,353	68,297	18.15	30,237	16.08	45,746	12.16
1930	4,062,930	67,282	16.80	28,499	14.02	43,190	10.63

TABLE 1A—BIRTHS, MARRIAGES AND DEATHS AND DEATHS UNDER ONE YEAR OF AGE BY COUNTIES, CITIES, BOROUGHS AND TOWNSHIPS, 1930

ATLANTIC COUNTY				
NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Absecon City	36	12	35	3
Atlantic City	1026	551	888	62
Brighton City	9	3	1	1
Buena Vista Township	66	34	41	5
Corbin City	5	...	5	...
Egg Harbor City	78	40	58	6
Egg Harbor Township	36	11	32	4
Estelle Manor City	...	2	...	...
Folsom Borough	2	...	1	...
Galloway Township	57	6	34	3
Hamilton Township	45	11	24	1
Hammon Town	153	45	76	0
Livewood Borough	30	9	13	2
Longport Borough	3	1	3	...
Margate City	25	...	...	...
Mullica Township	26	7	15	2
Northfield City	42	4	32	...
Pleasantville City	159	81	133	11
Port Republic City	5	1	6	1
Somers Point City	37	8	23	1
Ventnor City	57	54	78	3
Weymouth Township	18	...	9	1
Total	1925	885	1579	113

BERGEN COUNTY 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Allendale Borough	23	5	18	...
Alpine Borough	7	2	4	...
Bergenfield Borough	144	66	67	6
Bogota Borough	91	43	77	2
Cristadtl Borough	111	46	83	6
Cliffside Park Borough	232	76	116	10
Closter Borough	37	15	29	4
Cresskill Borough	42	13	26	2
Demarest Borough	12	6	10	3
Dumont Borough	93	36	49	4
East Paterson Borough	83	31	42	4
East Rutherford Borough	104	57	77	10
Edgewater Borough	39	46	49	4
Emerson Borough	30	7	11	...
Englewood City	235	179	161	11
Englewood Cliffs Borough	6	2	6	...
Fair Lawn Borough	125	33	39	7
Fairview Borough	146	103	64	8
Fort Lee Borough	125	60	90	4
Franklin Lakes Borough	14	3	5	...
Gardfield Borough	584	102	213	34
Glen Rock Borough	64	15	40	1
Hackensack City	461	236	256	18
Harrington Park Borough	16	3	7	...
Hastbrack Heights Borough	77	33	47	...
Haworth Borough	14	8	8	...
Hillsdale Borough	13	8	27	...
Hohokus Borough	16	13	8	...
Hohokus Township	54	16	30	6
Leonia Borough	62	26	30	2
Little Ferry Borough	87	30	24	2
Lodi Borough	266	90	18	18
Lodi Township	22	2	13	8
Lyndhurst Township	323	96	122	7
Maywood Borough	53	13	32	3
Midland Park Borough	76	35	43	2
Montvale Borough	16	5	11	1
Moonachie Borough	19	11	9	...
New Milford Borough	29	13	33	...
North Arlington Borough	171	42	72	10
Northvale Borough	19	12	9	...
Norwood Borough	27	6	12	1

BERGEN COUNTY—Continued - 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Oakland Borough	16	1	5	...
Old Tappan Borough	8	2	7	...
Oradell Borough	30	11	35	2
Palisade Park Borough	138	56	69	10
Paramus Borough	30	5	34	2
Park Ridge Borough	20	23	20	1
Ramsay Borough	38	25	38	3
Ridgefield Borough	22	33	36	2
Ridgefield Park Borough	146	73	107	3
Ridgewood Village	121	80	123	8
River Edge Borough	36	10	36	3
Riverside Township	13	13	10	1
Rochelle Park Township	24	14	20	1
Rockleigh Borough	...	...	3	...
Rutherford Borough	163	72	143	3
Saddle River Borough	6	4	7	...
Saddle River Township	31	16	15	1
Teaneck Township	276	54	137	9
Tenafly Borough	93	37	47	2
Teterboro Borough	1	...	1	...
Upper Saddle River Borough	1	...	2	...
Waldeck Borough	24	2	23	1
Wallington Borough	174	14	66	11
Washington Township	9	3	2	...
Westwood Borough	69	29	43	3
Woodcliff Lake Borough	10	4	10	...
Woodridge Borough	28	25	25	...
Wyckoff Township	40	15	30	5
Total	5985	2257	3252	275

BURLINGTON COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bass River Township	8	3	13	2
Beverly City	49	23	38	3
Bordentown City	79	43	67	4
Bordentown Township	8	1	8	1
Burlington City	206	72	136	8
Burlington Township	38	2	25	2
Chester Township	110	16	43	3
Chesterfield Township	14	2	12	3
Cinnaminson Township	29	9	27	2
Delanco Township	33	8	23	...
Delran Township	31	9	17	3
Eastampton Township	6	...	4	2
Edgewater Park Township	11	3	8	...
Evesham Township	23	5	31	1
Fieldsboro Borough	13	1	4	3
Florence Township	143	31	76	7
Hainesport Township	17	...	11	...
Lumberton Township	17	2	11	1
Mansfield Township	24	11	27	1
Medford Township	59	5	43	5
Moorestown Township	106	23	66	5
Mount Laurel Township	29	2	22	2
New Hanover Township	14	3	12	3
Northampton Township	123	43	106	6
North Hanover Township	9	5	12	2
Palmyra Borough	81	20	56	6
Pemberton Borough	8	3	17	1
Pemberton Township	2	...	1	...
Riverside Township	152	41	64	5
Riverton Borough	31	14	18	2
Shamong Township	8	...	7	...
Southampton Township	30	5	30	4
Springfield Township	17	2	11	2
Tabernacle Township	11	2	1	...
Washington Township	15	1	13	1
Westampton Township	6	3	3	...
Willingboro Township	6	1	6	...
Woodland Township	15	2	10	2
Wrightstown Borough	9	...	5	...
Total	1627	438	1109	91

CAMDEN COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Audubon Borough	115	24	13	9
Barrington Borough	42	7	15	1
Bellmawr Borough	23	1	12	3
Berlin Borough	43	25	25	2
Berlin Township	28	9	12	3
Brooklawn Borough	38	4	13	1
Camden City	2111	755	1866	159
Cheslharst Borough	8	...	3	...
Clomont Borough	49	8	36	5
Collingswood Borough	170	69	137	5
Delaware Township	70	6	43	5
Gibbsboro Borough	16	3	4	2
Gloucester City	232	65	162	21
Gloucester Township	74	21	55	7
Haddonfield Borough	124	35	121	7
Haddon Heights Borough	51	40	70	3
Haddon Township	96	29	70	7
HINella Borough	4	...	2	...
Laurel Springs Borough	23	7	16	2
Lawnside Borough	23	7	20	3
Lindenwald Borough	42	4	19	1
Magnolia Borough	25	5	15	...
Merchantville Borough	113	35	63	4
Mount Ephraim Borough	47	9	29	1
Oaklyn Borough	71	8	28	...
Pensauken Township	254	30	130	15
Pine Hill Borough	21	5	14	2
Pine Valley Borough	...	...	...	...
Runnemede Borough	56	16	19	2
Somerdale Borough	27	...	13	2
Stratford Borough	11	3	9	...
Tavistock Borough	...	1	...	...
Voorhees Township	27	2	11	...
Waterford Township	55	17	38	4
Winslow Township	89	8	45	6
Woodlyane Borough	47	4	23	1
Total	4252	1290	2710	283

CAPE MAY COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Avalon Borough	7	...	5	...
Cape May City	34	32	46	2
Cape May Point Borough	1	1	1	...
Dennis Township	29	2	25	2
Lower Township	17	7	20	...
Middle Township	59	25	56	...
North Wildwood City	25	5	31	...
Ocean City	97	46	39	4
Sea Isle City	11	6	5	...
South Cape May Borough	...	...	...	...
Stone Harbor Borough	10	3	9	1
Upper Township	27	11	22	1
West Cape May Borough	10	...	12	...
West Wildwood City	3	...	2	...
Wildwood City	74	48	69	5
Wildwood Crest Borough	3	3	3	...
Woodbine Borough	22	4	15	2
Total	425	193	385	17

CUMBERLAND COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bridgeton City	270	103	244	23
Commercial Township	53	13	46	1
Deerfield Township	27	5	18	...
Downe Township	26	15	31	...
Fairfield Township	36	11	30	4
Greenwich Township	21	4	9	...
Hopewell Township	31	3	27	...
Landis Township	74	78	136	13
Lawrence Township	31	10	20	2
Maurice River Township	25	3	36	...
Millville City	240	80	187	15
Shiloh Borough	...	6	11	2
Stow Creek Township	8	1	12	...
Upper Deerfield Township	33	8	16	1
Vineland Borough	232	67	92	10
Total	1118	411	916	72

ESSEX COUNTY 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bellefonte Town	466	161	251	24
Bloomfield Township	715	223	335	33
Caldwell Borough	64	36	102	7
Caldwell Township	5	1	7	...
Cedar Grove Township	31	7	19	1
East Orange City	978	385	661	36
Essex Falls Borough	19	8	19	...
Glen Ridge Borough	76	32	53	...
Irrington Town	941	291	492	37
Livingston Township	61	13	28	3
Maplewood Township	339	81	181	11
Millbury Township	118	34	75	5
Montclair Town	613	264	388	22
Newark City	8232	4661	5344	469
North Caldwell Borough	9	1	9	1
Nutley Town	347	91	174	14
Orange City	732	239	408	34
Roseland Borough	8	8	7	...
South Orange Village	162	52	130	8
Verona Borough	120	30	72	5
West Caldwell Borough	33	9	25	2
West Orange Town	380	101	215	15
Total	14463	6732	9010	721

GLOUCESTER COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Clayton Borough	30	20	23	...
Deptford Township	58	9	32	2
East Greenwich Township	41	15	15	1
Elk Township	23	3	7	1
Franklin Township	54	14	33	1
Glassboro Borough	39	41	65	7
Greenwich Township	59	4	17	7
Harrison Township	13	11	29	2
Logan Township	23	3	16	1
Marina Township	53	10	34	8
Monroe Township	30	16	42	3
National Park Borough	44	6	23	3
Newfield Borough	19	4	10	1
Paulsboro Borough	159	35	60	10
Fitman Borough	59	31	74	3
South Harrison Township	10	4	5	1
Swedesboro Borough	53	24	29	5
Washington Township	23	8	19	...
Wenonah Borough	12	8	15	3
West Deptford Township	32	10	24	1
Westville Borough	37	11	45	3
Woodbury City	135	62	109	8
Woodbury Heights Borough	17	5	11	...
Woodwich Township	14	1	4	...
Total	1196	535	750	70

HUDSON COUNTY 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bayonne City	1593	543	764	85
East Newark Borough	41	9	25	1
Guttenberg Town	112	45	61	3
Harrison Town	211	130	168	14
Hoboken City	890	985	762	63
Jersey City	5641	2647	3783	421
Kearny Town	632	230	364	38
North Bergen Township	658	161	367	30
Secaucus Borough	119	58	70	10
Union City	894	704	603	44
Weehawken Township	187	325	144	11
West New York Town	665	527	308	24
Total	11782	6364	7410	749

HUNTERDON COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Alexandria Township	21	2	10	...
Bethlehem Township	7	...	11	3
Bloom-bury Borough	14	5	12	1
Calton Borough	6	8	10	2
Clinton Town	11	5	15	2
Clinton Township	37	7	28	1
Delaware Township	24	4	21	2
East Amwell Township	16	5	15	2
Flemington Borough	33	14	37	1
Franklin Township	12	4	19	1
Frenchtown Borough	14	10	23	1
Gen Gardner Borough	4	3	8	...
Hampton Borough	11	3	10	...
High Bridge Borough	25	14	32	...
Holland Township	15	3	8	1
Kingwood Township	18	2	21	6
Lambertville City	76	20	50	5
Lebanon Borough	15	5	8	...
Lebanon Township	16	4	11	1
Milford Borough	18	4	13	2
Raritan Township	29	4	11	1
Readlington Township	23	8	41	2
Stockton Borough	3	5	11	1
Tewksbury Township	18	7	18	...
Union Township	18	4	9	...
West Amwell Township	11	1	11	...
Total	475	151	465	34

MERCER COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
East Windsor Township	7	1	8	...
Ewing Township	188	13	77	8
Hamilton Township	570	103	270	36
Highstown Borough	...	29	47	3
Hopewell Borough	12	9	18	...
Hopewell Township	50	9	59	8
Lawrence Township	103	15	57	7
Pennington Borough	14	7	22	1
Princeton Borough	...	60	84	6
Princeton Township	137	1	18	2
Trenton City	2243	661	1415	175
Washington Township	13	2	25	1
West Windsor Township	23	4	16	...
Total	3437	914	2116	247

MIDDLESEX COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Carteret Borough	242	60	100	24
Cranbury Township	22	9	17	3
Dunellen Borough	89	49	69	2
East Brunswick Township	37	12	20	2
Helmetta Borough	9	11	4	1
Highland Park Borough	157	50	83	11
Jamesburg Borough	37	24	18	2
Madison Township	45	18	21	1
Metuchen Borough	167	33	69	8
Middletown Borough	50	5	24	3
Milford Township	63	18	23	...
Monroe Township	21	...	16	1
New Brunswick City	620	324	407	42
North Brunswick Township	70	31	29	2
Perth Amboy City	749	340	404	38
Piscataway Township	98	16	64	5
Plainsboro Township	12	8	6	...
Raritan Township	183	26	79	12
Sayreville Borough	171	45	113	13
South Amboy City	137	68	100	10
South Brunswick Township	42	3	23	...
South Plainfield Borough	86	23	29	8
South River Borough	196	76	80	8
Spotswood Borough	15	2	11	2
Woodbridge Township	439	93	230	32
Total	3755	1347	2039	223

MONMOUTH COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Allenhurst Borough	6	2	10	1
Allentown Borough	12	12	16	8
Asbury Park City	201	183	214	17
Atlantic Township	7	2	11	1
Atlantic Highlands Borough	50	30	29	3
Avon Borough	14	12	7	...
Belmar Borough	60	26	43	2
Bradley Beach Borough	45	32	36	1
Brielle Borough	11	3	9	3
Deal Borough	12	13	17	1
Eatontown Borough	26	12	26	3
Englishtown Borough	12	6	12	1
Fair Haven Borough	22	11	23	3
Farmingdale Borough	25	5	11	...
Freehold Borough	133	59	86	8
Freehold Township	30	4	26	4
Highlands Borough	36	17	23	...
Holmdel Township	16	3	12	...
Howell Township	29	8	29	1
Interlaken Borough	10	1	7	...
Keansburg Borough	37	34	35	2
Keyport Borough	78	53	66	6
Little Silver Borough	16	1	9	1
Long Branch City	297	119	243	18
Manalapan Township	15	6	16	3
Manasquan Borough	32	29	29	2
Marlboro Township	18	5	22	...
Matawan Borough	47	20	32	4
Matawan Township	33	8	16	3
Middletown Township	103	62	115	5
Millstone Township	16	2	8	2
Monmouth Beach Borough	7	2	8	...
Neptune Township	182	54	137	10
Neptune City Borough	56	6	13	3
Ocean Township	49	9	41	2
Oceanport Borough	11	9	15	...
Raritan Township	23	2	19	2
Red Bank Borough	192	99	167	9
Rumson Borough	42	21	34	2
Sea Bright Borough	11	6	11	1
Sea Girt Borough	4	2	3	...
Shrewsbury Borough	11	10	12	...
Shrewsbury Township	19	3	14	2
South Belmar Borough	20	3	11	2
Spring Lake Borough	27	15	24	2
Spring Lake Heights Borough	1	1	12	...
Union Beach Borough	32	2	19	2
Upper Freehold Township	23	...	19	3
Wall Township	54	2	36	4
West Long Branch Borough	34	5	22	3
Total	2267	1046	1915	142

MORRIS COUNTY 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Boonton Town	109	53	77	7
Boonton Township	8	1	5	...
Butler Borough	44	21	34	1
Chatham Borough	74	31	35	4
Chatham Township	5	2	7	...
Chester Borough	5	4	7	1
Chester Township	17	4	10	1
Denville Township	40	11	23	1
Dover Town	140	70	107	5
East Hanover Township	4	2	8	...
Florham Park Borough	4	1	11	2
Hanover Township	61	18	31	9
Harding Township	11	5	9	...
Jefferson Township	25	4	18	4
Kinclon Borough	5	1	3	...
Lincoln Park Borough	27	5	18	4
Madison Borough	190	54	99	9
Mendham Borough	23	16	19	3
Mendham Township	11	9	9	2
Mine Hill Township	21	5	15	3
Monville Township	42	14	36	5
Morris Plains Borough	61	20	24	5
Morristown Town	245	146	214	15
Morris Township	11	20	63	2
Mountain Lakes Borough	11	18	20	1
Mount Arlington Borough	10	2	3	1
Mount Olive Township	12	5	8	...
Netcong Borough	46	16	21	4
Parsippany-Troy Hills Township	19	15	43	3
Pascic Township	52	14	33	3
Pequanock Township	33	4	15	1
Randolph Township	26	11	22	3
Riverdale Borough	18	3	10	1
Rockaway Borough	73	36	36	6
Rockaway Township	45	...	36	3
Roxbury Township	58	18	41	3
Washington Township	25	4	25	2
Wharton Borough	66	17	39	3
Total	1753	683	1230	110

OCEAN COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Barnegat City Borough	4	2	1	...
Bay Head Borough	7	5	5	...
Beach Haven Borough	16	8	9	1
Beachwood Borough	9	1	5	...
Berkeley Township	11	2	10	1
Brick Township	17	1	21	1
Dover Township	86	46	49	5
Egglewood Township	13	5	9	...
Harvey Cedars Borough	1	...	...	...
Island Heights Borough	2	2	6	2
Jackson Township	17	4	16	...
Lacey Township	5	4	20	1
Lakehurst Borough	19	2	11	...
Lakewood Township	119	61	110	8
Lavallette Borough	6	2	3	...
Little Egg Harbor Township	6	...	9	1
Long Beach Township	1	...	2	...
Manchester Township	10	...	6	...
Mantoloking Borough	1	...	1	...
Ocean Township	4	5	5	...
Ocean Gate Borough	5	1	7	...
Pine Beach Borough	1	1	4	...
Plumstead Township	22	7	29	5
Point Pleasant Borough	52	11	36	2
Point Pleasant Beach Borough	4	14	21	...
Seaside Heights Borough	9	4	7	...
Seaside Park Borough	12	5	6	...
Ship Bottom-Beach Arlington Borough	4	3	3	1
South Toms River Borough	12	3	5	...
Stafford Township	17	4	15	1
Surf City Borough	...	...	...	...
Tuckerton Borough	26	8	14	2
Union Township	20	7	18	...
Total	838	220	458	31

PASSAIC COUNTY - 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bloomington Borough	47	22	22	3
Clifton City	747	190	343	44
Haledon Borough	78	30	51	6
Hawthorne Borough	199	62	95	13
Little Falls Borough	82	34	46	5
North Haledon Borough	33	7	14	1
Passaic City	828	181	50	50
Faterson City	2826	1181	1463	115
Pompton Lakes Borough	53	17	26	...
Prospect Park Borough	111	44	42	5
Ringwood Borough	27	2	15	5
Totowa Borough	62	11	26	6
Wanaque Borough	54	26	38	6
Wayne Township	69	21	53	2
West Milford Township	35	9	15	1
West Paterson Borough	50	13	32	4
Total	4901	2300	2823	261

SALEM COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Alloway Township	34	8	25	3
Elmer Borough	19	14	13	1
Elsinboro Township	8	1	6	...
Lower Alloways Creek Township	14	4	13	...
Lower Penns Neck Township	17	7	45	10
Manington Township	18	4	27	1
Oldmans Township	29	10	20	1
Penns Grove Borough	101	34	66	6
Pilesgrove Township	20	7	17	2
Pittsgrove Township	28	4	21	3
Quinton Township	23	3	17	5
Salem City	117	45	115	8
Upper Penns Neck Township	68	15	35	2
Upper Pittsgrove Township	28	9	25	2
Woodstown Borough	34	13	32	2
Total	605	178	482	46

SOMERSET COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Bedminster Township	5	6	10	...
Bernards Township	30	18	23	2
Bernardsville Borough	63	32	28	5
Bound Brook Borough	175	71	66	...
Branchburg Township	12	5	12	...
Bridgewater Township	73	6	38	...
Far Hills Borough	11	9	6	...
Franklin Township	84	14	52	6
Hillsborough Township	41	13	28	2
Manville Borough	123	40	41	7
Millstone Borough	4	4	3	1
Montgomery Township	29	4	22	1
North Plainfield Borough	145	58	109	5
North Plainfield Township	3	...	6	...
Pearack-Cladstone Borough	24	9	17	...
Raritan Borough	65	27	30	4
Rocky Hill Borough	11	4	10	1
Somerville Borough	159	66	106	10
South Bound Brook Borough	32	9	21	3
Warren Township	18	3	9	1
Watchung Borough	8	17	13	...
Total	1106	415	652	57

SUSSEX COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Andover Borough	6	3	9	...
Andover Township	15	...	2	...
Branville Borough	11	3	14	2
Byram Township	3	...	8	...
Frankford Township	25	1	16	1
Franklin Borough	86	17	26	3
Fredon Township	6	2	...	...
Green Township	3	12	3	1
Hamburg Borough	37	8	13	1
Hampton Township	10	19	5	...
Hardyston Township	17	2	13	1
Hopatcong Borough	5	...	5	...
Lafayette Township	21	...	4	...
Montague Township	1	1	5	...
Newton Town	89	24	61	2
Ogdensburg Borough	31	3	14	4
Sandyston Township	4	...	7	1
Sparta Township	29	8	21	2
Stanhope Borough	20	13	13	3
Stillwater Township	8	5	8	...
Sussex Borough	36	11	23	1
Vernon Township	19	5	12	2
Wallpack Township	...	...	4	...
Wantage Township	38	4	23	1
Total	522	147	322	25

UNION COUNTY - 1930

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one year
Clark Township	15	6	12	2
Cranford Township	171	48	86	5
Elizabeth City	2662	869	1195	104
Fanwood Borough	26	3	13	3
Garwood Borough	72	12	18	2
Hillside Township	282	63	115	9
Kenilworth Borough	43	7	21	2
Linden City	420	96	180	27
Mountainside Borough	13	3	13	1
New Providence Borough	37	9	10	...
New Providence Township	19	8	11	...
Plainfield City	625	248	375	25
Plainfield Township	301	102	183	12
Roselle Borough	207	74	105	8
Roselle Park Borough	132	48	69	6
Scotch Plains Township	79	22	52	4
Springfield Township	84	16	45	7
Summit City	226	85	180	13
Union Township	307	49	138	12
Westfield Town	282	96	141	8
Total	5888	1885	2910	251

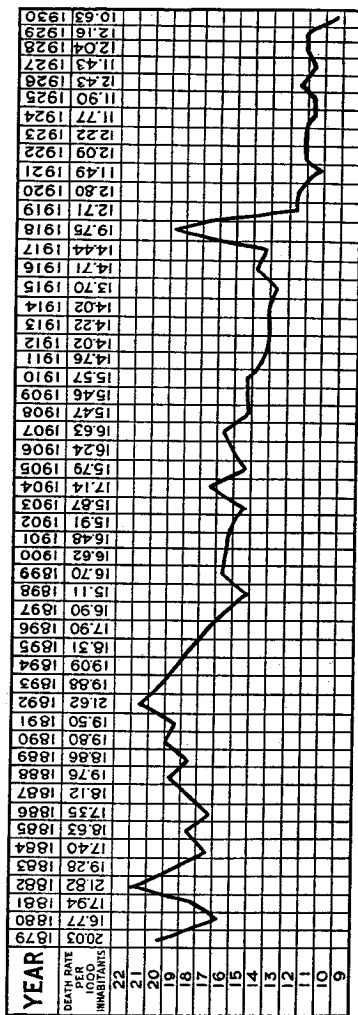
WARREN COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Deaths under one Year
Allamuchy Township	9	...	6	1
Alpha Borough	59	13	23	3
Belvidere Town	17	12	32	1
Blairtown Township	12	4	22	1
Franklin Township	27	5	23	4
Frelinghuysen Township	12	...	7	1
Greenwich Township	22	7	14	...
Hackett-town Town	34	13	57	5
Hardwick Township	5	...	...	...
Harmony Township	23	3	11	...
Hope Township	6	1	11	...
Independence Township	18	23	16	...
Knowlton Township	11	11	16	...
Liberty Township	3	...	2	...
Lopatcong Township	21	2	7	1
Mansfield Township	12	7	20	...
Oxford Township	29	12	27	2
Pahaquarry Township	1	...	1	...
Phillipsburg Town	321	95	227	22
Pohtcong Township	18	8	24	3
Washington Borough	57	49	77	3
Washington Township	16	2	15	1
White Township	12	5	10	4
Total	745	263	648	52
State Total	68282	23499	43190	3870

TABLE 2.—TOTAL DEATHS BY AGE PERIODS SHOWING PERCENTAGE OF TOTAL DEATHS—1880

Deaths	Percentage of total	AGE PERIODS																	
		Total	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown
48,190	3,870	3,870	949	586	294	247	208	5,205	760	1,145	2,257	3,472	4,735	6,588	8,048	7,083	4,470	623	...
Percentage of total	100.0	9.49	1.33	0.7	0.6	0.5	12.1	1.8	3.3	5.2	7.3	11.0	11.0	15.3	18.6	16.4	7.8	1.2	...

CHART I—TOTAL DEATHS PER 1,000 POPULATION FOR 52 YEARS



Infant Mortality—The infant mortality rate for 1930 was 56.6 per 1,000 babies born alive. This was the lowest rate ever attained in New Jersey and compares with 65.6 for 1928 and 60.2 for the preceding year. Reference to Table 4 will show the great decrease in the infant death rate in New Jersey since more extensive baby welfare work was undertaken. *Colored Races*—The infant mortality rate among the colored people of New Jersey for 1930 was 99.8 compared with a rate of 105.4 for the previous year. The colored races have shown high mortality rates ever since vital statistics were first collected and analyzed.

Maternal Mortality—This rate for 1930 was 5.7, which compares with 5.3 for the previous year. It is regrettable that a decrease comparable to the infant mortality decline is not shown in deaths due to maternity. The colored maternal mortality rate was 8.6.

Stillbirths—The number of stillbirths reported for 1930 was 2,647, which compares with 2,767 for the previous year. The 1930 figure is equivalent to a rate of 38.7 per 1,000 living births, with the rate for the colored population 68.1.

TABLE 3—NUMBER OF DEATHS AT ALL AGES, UNDER ONE YEAR OF AGE AND UNDER FIVE YEARS OF AGE, AND THEIR PERCENTAGES OF TOTAL DEATHS

CALENDAR YEAR	DEATHS IN NEW JERSEY				
	All Ages	Under one year		Under five years	
		Number	Percentage of Total	Number	Percentage of Total
1904	35,298	7.472	21.2	10,927	31.0
1905	33,864	6.951	20.5	9,864	29.1
1906	35,670	7.773	21.8	11,246	31.5
1907	37,408	7.732	20.7	10,867	29.0
1908	35,597	7.823	22.0	10,869	30.5
1909	36,359	7.658	21.1	11,137	30.6
1910	39,494	8.352	21.1	11,648	29.5
1911	38,612	7.642	19.8	10,740	27.8
1912	37,772	7.457	19.7	10,309	27.3
1913	39,425	7.542	19.1	10,686	27.1
1914	39,967	7.431	18.6	10,278	25.7
1915	39,435	7.077	17.9	9,828	24.9
1916	43,376	7.348	16.9	11,188	25.8
1917	43,532	7.582	17.4	10,267	23.6
1918	60,852	8.372	13.8	13,709	22.5
1919	39,979	6,111	15.3	8,661	21.7
1920	40,820	6,672	16.3	9,569	23.4
1921	37,362	5,773	15.4	8,047	21.5
1922	40,086	5,864	14.6	8,371	20.9
1923	41,294	5,368	13.0	7,727	18.7
1924	40,531	5,359	15.5	7,344	21.3
1925	41,749	5,109	12.3	6,997	16.8
1926	44,396	5,090	11.5	7,442	16.8
1927	41,562	4,464	10.7	6,045	14.5
1928	44,555	4,600	10.3	6,438	14.4
1929	45,746	4,116	9.0	5,795	12.6
1930	43,190	3,870	9.0	5,205	12.1

CHART 2—DEATHS UNDER 5 YEARS OF AGE PER 10,000 TOTAL POPULATION FOR 52 YEARS

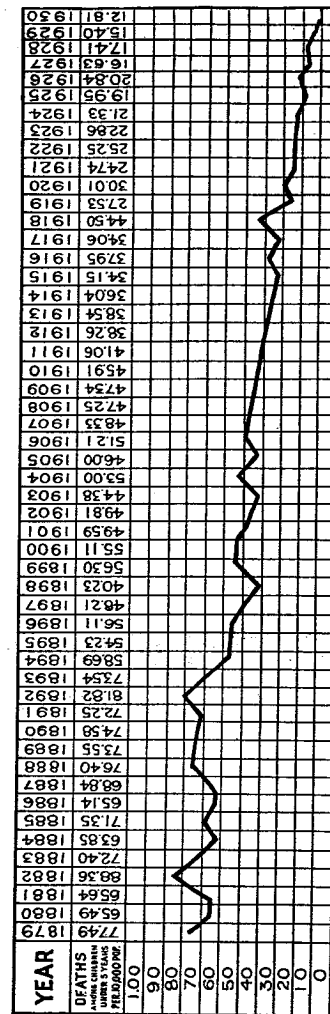


TABLE 4.—NUMBER OF BIRTHS, STILLBIRTHS, DEATHS UNDER ONE MONTH, DEATHS UNDER ONE YEAR AND MATERNAL DEATHS IN NEW JERSEY, WITH RATES PER 1,000 LIVE BIRTHS

Year	Births Reported	Deaths Under 1 Year of Age	Rates per 1,000 Live Births	Deaths Under 1 Month of Age	Rates per 1,000 Live Births	Stillbirths	Rates per 1,000 Live Births	Maternal Deaths	Rates per 1,000 Live Births
1906	42,677	7,773	182.1	2,545	59	.....	.....	322	7.5
1907	44,651	7,732	173.2	2,602	58	.....	.....	289	6.5
1908	47,405	7,823	165.2	2,655	56	.....	.....	329	6.9
1909	47,508	7,658	161.2	2,661	56	.....	.....	311	6.5
1910	53,942	8,352	154.8	2,801	51	.....	.....	377	6.9
1911	58,133	7,642	131.4	2,887	49	.....	.....	427	7.3
1912	60,073	7,547	124.1	2,836	47	.....	.....	415	6.9
1913	61,432	7,542	122.7	2,903	47	.....	.....	460	7.4
1914	63,403	7,431	113.6	2,995	45	.....	.....	416	6.3
1915	66,476	7,077	106.4	2,862	43	.....	.....	390	5.8
1916	70,211	7,348	104.7	3,075	43	.....	.....	383	5.4
1917	75,309	7,582	100.7	3,256	43	.....	.....	411	5.4
1918	74,540	8,372	112.3	3,175	42	.....	.....	472	6.1
1919	70,935	6,111	86.1	2,696	38	.....	.....	366	5.9
1920	76,431	6,672	87.2	2,961	38	.....	.....	421	5.5
1921	78,172	5,773	73.8	2,830	36	.....	.....	464	6.2
1922	74,479	5,864	78.7	2,773	37	.....	.....	466	6.2
1923	74,611	5,368	71.9	2,621	35	.....	.....	424	5.4
1924	76,530	5,359	70.0	2,739	35	.....	.....	466	6.0
1925	74,193	5,109	68.8	2,607	35	.....	.....	466	6.2
1926	72,386	5,090	70.3	2,537	35	.....	.....	466	6.0
1927	72,799	4,464	61.3	2,462	33	.....	.....	466	6.2
1928	70,076	4,660	65.6	2,485	35	.....	.....	466	6.0
1929	68,297	4,116	60.2	2,233	32	.....	.....	406	5.7
1930	68,282	3,870	56.6	2,107	30	.....	.....	390	5.3

TABLE 5.—DEATHS UNDER ONE YEAR, DEATHS UNDER ONE MONTH, STILLBIRTHS AND MATERNAL MORTALITY PER THOUSAND LIVE BIRTHS—1930

	Rates per 1,000 Live Births			Maternal Deaths
	Deaths Under One Year	Deaths Under One Month	Stillbirths	
New Jersey	56	30	38	5.7
Atlantic	58	33	35	5.4
Bergen	45	28	36	5.3
Burlington	55	31	31	4.3
Camden	66	34	41	9.1
Cape May	40	21	44	9.4
Cumberland	64	26	33	7.1
Essex	49	28	37	5.9
Gloucester	58	33	42	7.5
Hudson	63	33	47	5.3
Hunterdon	71	37	33	10.5
Mercer	71	41	35	6.6
Middlesex	59	31	33	4.2
Monmouth	62	33	37	9.7
Morris	62	39	37	3.4
Ocean	57	31	33	5.5
Passaic	53	29	37	5.1
Salem	76	26	46	6.6
Somerset	51	26	33	4.5
Sussex	47	21	44	3.8
Union	46	24	35	3.3
Warren	69	30	41	4.0

TABLE 6.—DEATHS UNDER ONE YEAR, DEATHS UNDER ONE MONTH, STILLBIRTHS AND MATERNAL MORTALITY PER THOUSAND LIVE BIRTHS IN NEW JERSEY AND TEN LARGEST CITIES—1930

	Rates per 1,000 Live Births			Maternal Deaths
	Deaths Under One Year	Deaths Under One Month	Stillbirths	
New Jersey	56	30	38	5.7
Newark	56	28	40	5.6
Jersey City	74	38	48	5.8
Paterson	49	25	33	6.4
Trenton	78	45	34	5.7
Camden	75	32	40	9.4
Elizabeth	50	27	40	2.9
Bayonne	53	30	48	5.0
East Orange	36	29	27	5.1
Atlantic City	60	29	43	5.8
Passaic City	53	26	49	3.2

TABLE 7.—BIRTHS, BIRTH RATES, DEATHS UNDER ONE YEAR AND INFANT MORTALITY RATES (EXCLUSIVE OF STILLBIRTHS)—1930

	<i>Births (Exclusive of Still- births)</i>	<i>Birthrates per 1,000 Population</i>	<i>Deaths Under One Year</i>	<i>Infant Mortality Rates</i>	<i>Births (Exclusive of Still- births)</i>	<i>Birthrates per 1,000 Population</i>	<i>Deaths Under One Year</i>	<i>Infant Mortality Rates</i>	
New Jersey	68,282	16.8	3,870	56	South Orange	162	11.7	8	49
Atlantic County	1,925	15.2	113	58	West Orange	380	15.4	15	39
Atlantic City	1,026	15.4	62	60	Gloucester County	1,196	16.7	70	58
Hammonton	153	19.9	6	39	Woodbury	135	16.4	8	59
Pleasantville	159	13.5	11	69	Hudson County	11,782	17.0	749	63
Bergen County	5,985	16.2	275	45	Bayonne	1,593	17.8	85	53
Bergenfield	144	16.1	6	41	Guttenberg	112	17.1	3	26
Cliffside Park	282	18.1	10	35	Harrison	291	18.6	14	48
Englewood	285	15.8	11	38	Hoboken	899	15.1	68	75
Fairview	146	15.9	8	54	Jersey City	5,641	17.7	421	74
Fort Lee	125	14.1	4	32	Kearny	682	16.6	38	55
Garfield	584	19.4	34	58	Secaucus	119	13.1	10	84
Hackensack	461	18.6	18	39	Union City	864	14.7	44	50
Lodi Borough	266	22.8	18	67	West New York	665	17.8	24	36
North Arlington	171	20.3	10	58	Hunterdon County	475	13.6	34	71
Ridgefield Park	146	13.4	3	20	Lambertville	76	16.8	5	65
Ridgewood Village	121	9.8	8	66	Mercer County	3,457	18.4	247	71
Rutherford Borough	163	10.8	3	18	Princeton Borough	137	19.5	6	43
Wallington	174	19.0	11	63	Trenton	2,243	18.1	175	78
Burlington County	1,627	17.3	91	55	Middlesex County	3,755	17.5	223	59
Bordentown City	79	17.9	4	50	Carteret	242	18.0	24	99
Burlington City	206	18.9	8	38	Highland Park	157	17.8	11	70
Camden County	4,252	16.7	283	66	New Brunswick	620	17.9	42	67
Audubon	115	12.7	9	78	Perth Amboy	749	17.1	38	50
Camden City	2,111	17.7	159	75	Sayreville	171	19.6	13	76
Collingswood	170	13.2	5	29	South Amboy	137	16.1	10	72
Gloucester City	262	18.9	21	80	South River	196	18.0	8	40
Haddonfield	124	13.8	7	56	Monmouth County	2,267	15.2	142	62
Cape May County	425	14.2	17	40	Asbury Park	201	13.3	17	84
Cumberland County	1,118	15.9	72	64	Long Branch	297	16.0	18	60
Bridgeton	270	17.1	23	85	Red Bank	192	16.4	9	46
Millville	240	16.3	15	62	Morris County	1,755	15.7	110	62
Vineland	232	30.5	10	43	Dover	140	13.9	5	35
Essex County	14,463	17.2	721	49	Madison	190	25.2	9	47
Belleville Town	466	17.1	24	51	Morristown	245	16.0	15	61
Bloomfield	715	18.5	24	33	Ocean County	538	16.1	31	57
East Orange	978	14.2	36	36	Passaic County	4,901	16.1	261	53
Irvington	941	16.3	37	39	Clifton	747	15.7	44	58
Montclair	613	14.4	22	35	Hawthorne	199	16.5	13	65
Newark	8,252	18.6	469	56	Passaic City	928	14.7	50	53
Nutley	347	16.6	14	40	Paterson	2,326	16.7	115	49
Orange	732	20.6	34	46	Salem County	605	16.4	46	76
					Salem City	117	14.5	8	68
					Somerset County	1,106	16.8	57	51
					Bound Brook	175	23.6	4	22

	Births (Exclusive of Still- births)	Birthrates per 1,000 Population	Deaths Under One Year	Infant Mortality Rates
North Plainfield	145	14.7	5	34
Somerville	159	19.1	10	62
Sussex County	522	18.7	25	47
Union County	5,383	17.4	251	46
Elizabeth	2,062	17.9	104	50
Linden	420	19.5	27	64
Plainfield	625	18.0	25	40
Rahway	301	18.6	12	39
Roselle	207	15.6	8	38
Roselle Park	132	14.5	6	45
Summit	226	15.4	13	57
Westfield	262	16.4	9	34
Warren County	745	15.0	52	69
Phillipsburg	321	16.6	22	68

Typhoid Fever—The death rate for this disease (including paratyphoid) for 1930 was only 0.11 per 10,000 population, which was the lowest rate ever attained in New Jersey. That the rate was indeed low was proven by the 1929 rate of 0.42 for the United States Registration Area. The rate for the Registration Area for 1930 was not available. The number of deaths from this disease and others of the international list of causes of death by counties and cities can be obtained by referring to Table 20. Table 22 shows the more important causes by sex, color and age groups.

TABLE 8—COMPARATIVE DEATH RATES FROM TYPHOID FEVER PER 10,000 INHABITANTS, IN THE REGISTRATION AREA OF U. S. AND IN N. J. FOR 10 YEARS

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Registration area of the United States.....	0.78	0.90	0.75	0.68	0.67	0.80	0.65	0.53	0.49	0.42
New Jersey	0.31	0.44	0.38	0.31	0.26	0.31	0.27	0.14	0.17	0.14

TABLE 9—URBAN AND RURAL DEATHS FROM TYPHOID FEVER—1930

1930	Estimated population	Deaths from typhoid fever	Rate per 10,000 population
State	4,062,930	46	0.11
Municipalities having 5,000 or more inhabitants in 1930	2,794,332	30	0.10
Remainder of State	1,268,598	16	0.12

CHART 3—DEATHS FROM TYPHOID FEVER PER 10,000 POPULATION FOR 52 YEARS

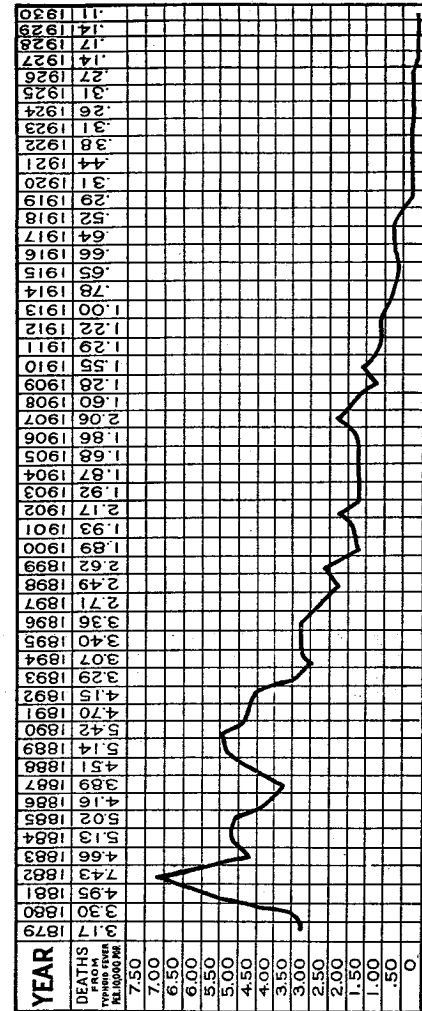


TABLE 10—DEATHS FROM TYPHOID FEVER, BY COUNTIES, PER 10,000 POPULATION, FOR 10 YEARS

COUNTIES	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Atlantic County	0.69	0.57	0.34	0.44	0.97	0.53	0.21	0.10	0.31	
Bergen County	0.40	0.17	0.12	0.28	0.25	0.26	0.07	0.15	0.07	
Burlington County	2.37	1.16	0.45	0.56	0.44	0.54	0.32	0.31	0.31	0.31
Camden County	0.40	0.49	0.19	0.42	0.36	0.35	0.08	0.47	0.29	0.19
Cape May County	0.51			0.51		0.51	1.54			0.33
Cumberland County	1.92	0.31	0.31	0.31	1.07	0.15		0.14	0.14	
Essex County	0.17	0.21	0.22	0.22	0.13	0.16	0.15	0.09	0.15	0.08
Gloucester County	0.80	0.58	0.93	0.37	0.91	0.90		0.51	0.33	
Hudson County	0.34	0.15	0.22	0.19	0.32	0.18	0.09	0.09	0.09	0.07
Hunterdon County	0.30	0.30		0.91	0.60		0.30	0.30		
Mercer County	0.60	0.77	0.87	0.22	0.39	0.49	0.10	0.15	0.15	0.15
Middlesex County	0.35	0.11	0.35	0.27	0.31	0.41	0.10	0.09	0.19	0.15
Monmouth County	0.73	1.17	0.85	0.36	0.36	0.26	0.26	0.70	0.17	0.33
Morris County	0.35	0.11	0.93		0.34		0.11	0.22		0.08
Ocean County	0.89			0.44		0.88				0.29
Passaic County	0.30	0.23	0.14	0.21	0.24	0.06	0.03	0.10	0.23	
Salem County	1.03	1.53		0.24	0.47	0.23	0.45	0.22		0.27
Somerset County	0.01			0.95	0.94	0.18	0.36	0.35		0.45
Sussex County		7.37	1.20		0.40			0.40	0.40	
Union County	0.14	0.46	0.31	0.21	0.34	0.41	0.12	0.11	0.11	0.09
Warren County	0.44									
The State	0.44	0.88	0.31	0.26	0.31	0.27	0.14	0.17	0.14	0.11

Malaria—As the following figures show, deaths during recent years from this affection are practically negligible in this State:

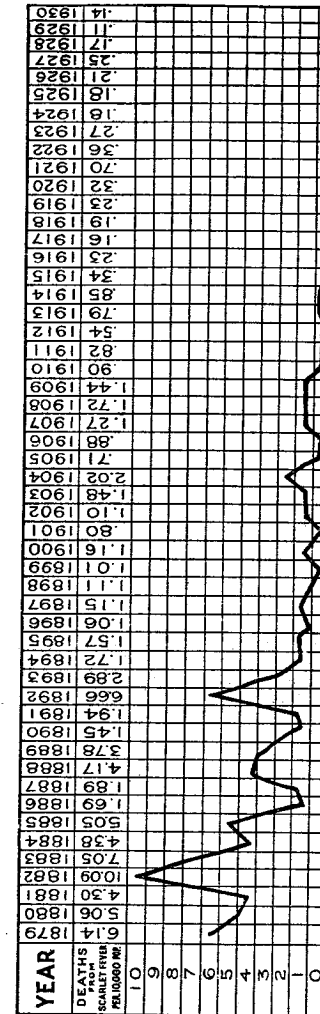
1879	268	1892	198	1905	21	1918	13
1880	293	1893	148	1906	33	1919	2
1881	431	1894	162	1907	29	1920	5
1882	379	1895	144	1908	30	1921	10
1883	290	1896	119	1909	25	1922	3
1884	230	1897	132	1910	25	1923	2
1885	209	1898	82	1911	25	1924	6
1886	243	1899	96	1912	29	1925	3
1887	217	1900	84	1913	11	1926	2
1888	264	1901	50	1914	10	1927	2
1889	203	1902	36	1915	17	1928	3
1890	195	1903	40	1916	10	1929	5
1891	180	1904	47	1917	5	1930	5

Smallpox—During 1926, 1927, 1928, 1929 and 1930, no deaths from smallpox occurred in New Jersey. During the two years previous to 1926 deaths occurred as the disease was prevalent in epidemic form in certain sections of the State.

Measles—This disease was responsible for 126 deaths in 1930, while during the preceding year only 33 deaths occurred. In 1928 there were 250 deaths from measles. Deaths by age periods follow: Under one year, 23; one year, 51; two years, 14; three years, 12; four years, 8; five to nine, 15; ten to fourteen, 1; fifteen to nineteen, 1; sixty to sixty-four, 1.

Scarlet Fever—Very little variation is noted in the death rate from this disease for the past ten years, the average rate for the period being about one-half the rate which prevailed during the previous decade.

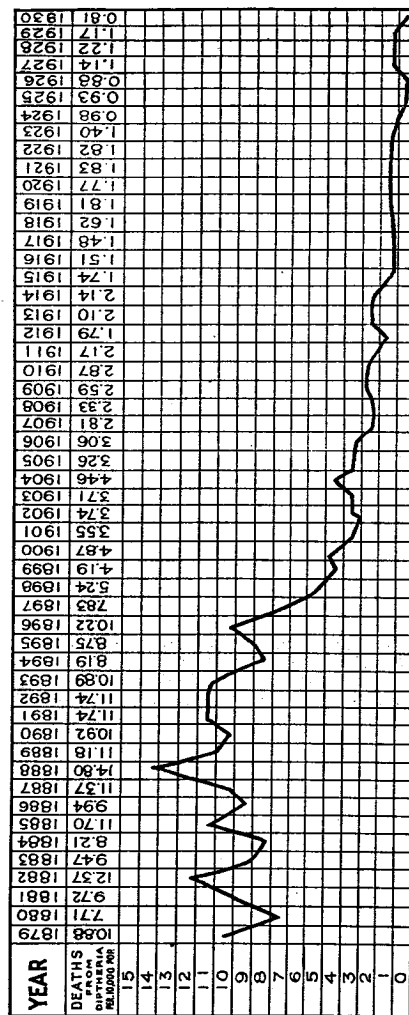
CHART 4—DEATHS FROM SCARLET FEVER PER 10,000 POPULATION FOR 52 YEARS



Whooping Cough—This disease caused 90 deaths in 1930, for 1929 the figure was 185, and for 1928, 183.

Diphtheria—During 1930, 331 persons died from diphtheria and laryngeal croup, which is equivalent to a rate of 0.81 per 10,000 population, compared with 1.17 for the previous year. The 1930 rate established a new low for the disease, the mortality from which is now one-tenth of that which prevailed in 1879, when records were first kept.

CHART 5—DEATHS FROM DIPHTHERIA PER 10,000 POPULATION FOR 52 YEARS



Tuberculosis—The number of deaths from all forms of tuberculosis during 1930 was 2,805 and from tuberculosis of the lungs 2,504, which figures are equivalent to rates of 6.90 and 6.16 per 10,000 inhabitants. These were the lowest tuberculosis death rates ever recorded in New Jersey.

TABLE 11.—AVERAGE ANNUAL DEATH RATES FROM ALL CAUSES AND FROM TUBERCULOSIS OF LUNGS, PER 10,000 POPULATION, FOR 52 YEARS, COMPARED WITH RATES FOR 1930

COUNTIES	Average annual death rate from all causes	Death rate from all causes, 1930	*Average annual death rate from tuberculosis of lungs	*Death rate from tuberculosis of lungs, 1930
Atlantic County	158	125	12.5	6.9
Bergen County	127	88	11.3	4.9
Burlington County	148	118	13.6	5.4
Camden County	161	106	15.6	5.5
Cape May County	144	129	10.3	3.0
Cumberland County	108	130	14.6	6.8
Essex County	153	107	17.2	7.5
Gloucester County	142	105	12.7	4.6
Hudson County	164	107	17.4	6.8
Hunterdon County	142	133	12.1	4.0
Mercer County	154	112	16.6	7.3
Middlesex County	141	95	11.9	5.6
Monmouth County	153	129	12.8	5.8
Morris County	122	110	14.6	5.8
Ocean County	147	137	15.2	6.8
Passaic County	145	93	13.9	4.9
Salem County	138	130	13.4	5.7
Somerset County	135	99	11.4	4.5
Sussex County	126	115	11.5	4.6
Union County	128	94	12.0	5.1
Warren County	141	131	11.3	4.6
The State	149	106	14.8	6.1

* It should be noted that these rates are for tuberculosis of the respiratory system. Rates of all forms of tuberculosis appear in the tables of the Bureau of Local Health Administration.

CHART 6—DEATHS FROM TUBERCULOSIS OF LUNGS PER 10,000 POPULATION FOR 52 YEARS

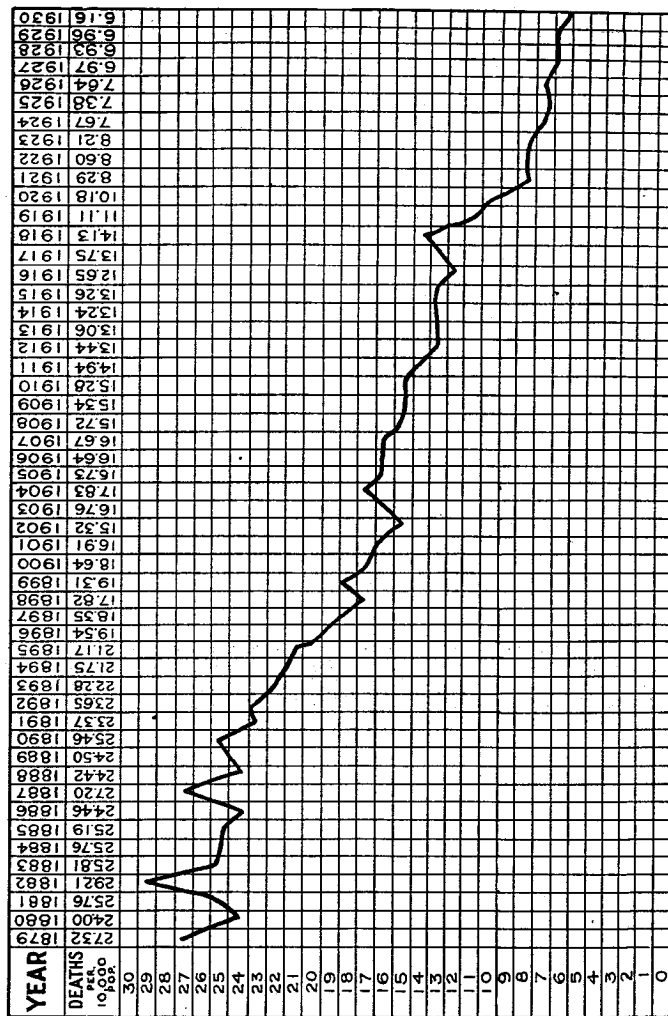
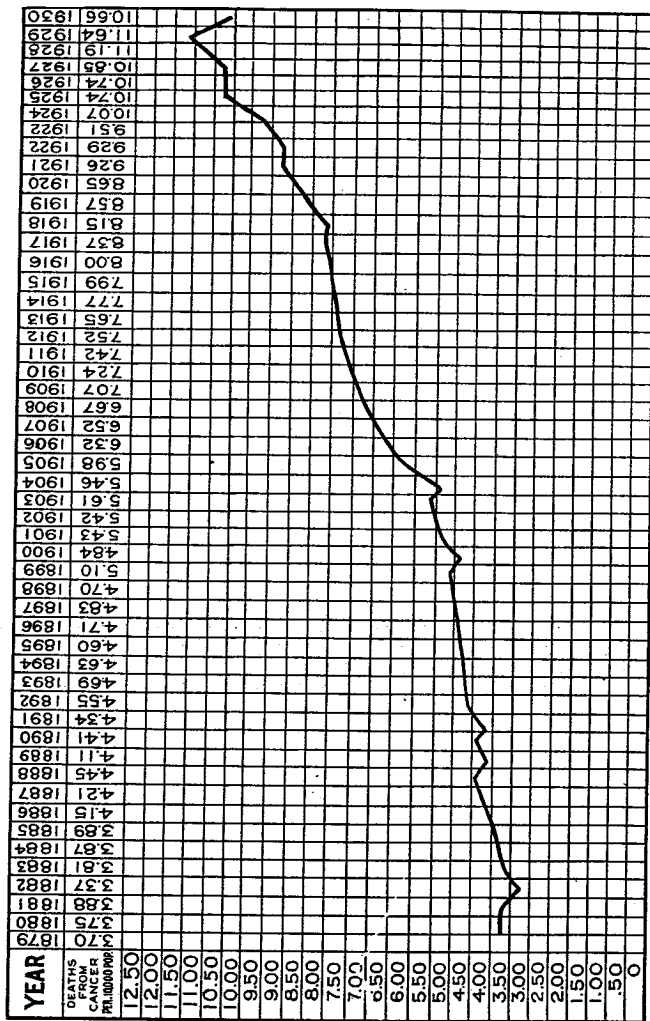


CHART 7—DEATHS FROM CANCER PER 10,000 POPULATION FOR 52 YEARS



Encephalitis Lethargica or Sleeping Sickness—Forty-six deaths were assigned to this affection for the year 1930. In 1922, which was the first year that the disease was separately classified, there were forty-five deaths, while for 1929, 51 were recorded.

Bright's Disease—Total deaths due to acute and chronic nephritis totaled 4,137, which compares with 3,959 during the previous year.

Suicide—Deaths by this means increased considerably during the years 1926 to 1930. Poisonous gas was responsible for the most deaths with hanging and firearms in second and third places. The number of deaths by suicide for five years follow:

1926, 472; 1927, 505; 1928, 565; 1929, 622; 1930, 601.

TABLE 13.—DEATHS IN NEW JERSEY BY SUICIDE, 1880

MODE OF DEATH	AGE PERIODS											Total		
	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 69	70 to 79		80 to 89	90 and over	Not stated
Solid or liquid poisons—														
Male	1	2	2	1	5	4	3	3	3	3	3	3	3	22
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	4
Total	2	3	3	2	6	5	4	4	4	4	4	4	4	26
Corrosive substances—														
Male	2	4	4	2	1	3	4	2	3	8	2	1	1	10
Female	1	2	2	2	2	2	1	2	2	8	2	1	1	18
Total	3	6	6	4	3	5	5	4	5	16	4	2	2	28
Poisonous gas—														
Male	2	6	5	7	15	11	13	23	13	16	5	1	1	110
Female	1	2	4	6	6	6	4	4	8	6	5	1	1	52
Total	3	8	9	12	21	17	17	27	21	22	10	1	1	171
Hanging or strangulation—														
Male	2	2	6	6	9	21	18	21	12	26	4	1	1	138
Female	1	1	1	1	5	2	2	4	2	1	1	1	1	17
Total	3	3	7	7	14	23	20	25	14	27	5	2	2	155
Drowning—														
Male	1	1	1	1	1	1	1	1	1	1	1	1	1	11
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	11
Total	2	2	2	2	2	2	2	2	2	2	2	2	2	22
Piercings—														
Male	5	7	9	8	5	16	11	17	9	28	6	1	1	130
Female	3	3	3	3	3	3	3	3	3	3	3	3	3	36
Total	8	10	12	11	8	19	14	20	12	31	9	4	4	166

MODE OF DEATH	AGE PERIODS											Total		
	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 69	70 to 79		80 to 89	90 and over	Not stated
Cutting or piercing instruments—														
Male	1	2	1	1	5	2	1	2	1	1	4	1	1	27
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	11
Total	2	3	2	2	6	3	2	3	2	2	5	2	2	38
Jumping from high places—														
Male	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Total	2	2	2	2	2	2	2	2	2	2	2	2	2	32
Crossing—														
Male	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Total	2	2	2	2	2	2	2	2	2	2	2	2	2	26
Others—														
Male	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Total	2	2	2	2	2	2	2	2	2	2	2	2	2	26
Total Male	10	19	25	28	42	60	54	71	46	87	27	8	3	474
Total Female	1	8	11	11	15	12	10	16	15	16	7	2	2	127
Total Male and Female	11	27	36	39	57	72	64	87	61	103	34	10	5	601

AUTOMOBILE FATALITIES

During 1930 there occurred in New Jersey 1,269 deaths due to accidents in which moving automobiles were involved. The above figure includes 15 deaths due to motorcycle accidents, but is exclusive of 36 fatalities due to the inhalation of motor exhaust. The total of 1,269 deaths compares with 1,275 during the preceding year and is the first decrease shown since automobile fatalities were first separately recorded in 1923. While the number of deaths has been increasing annually the death rate per 100,000 registered motor vehicles has declined from 2.0 in 1923 to 1.6 for 1930.

Analyzed, the motor fatality figures show the death of 683 pedestrians, which number is equivalent to 53 per cent of the total. Approximately one-fourth of the pedestrians who died were children under fifteen years of age. Twenty-three per cent of the drivers and occupants of automobiles who were killed were under twenty years of age.

Collision of motor vehicles with railroad trains was responsible for 50 deaths. This is the lowest number of deaths from this type of accident since 1923. The highest number occurred in 1924 when 74 deaths took place. Collision with other automobiles, overturning and running into stationary objects were responsible for 486 deaths. Twenty-four fatalities were due to collisions with horse drawn vehicles and bicycles.

The following table shows deaths, in New Jersey, of both residents and non-residents of the State, arranged by age groups:

MOTOR VEHICLE FATALITIES, 1930

Age	Pedestrians Struck by Motor Vehicles		Deaths From Other Motor Vehicle Accidents		Totals	
	Residents	Non-Residents	Residents	Non-Residents	Residents	Non-Residents
Under 5 years ..	41	2	7	2	48	4
5 to 9	84	2	14	2	98	4
10 to 14	35	1	17	2	52	3
15 to 19	25	1	63	12	88	13
20 to 24	12	1	84	20	96	21
25 to 29	14	6	47	18	61	24
30 to 34	22	1	39	14	61	15
35 to 39	31	5	37	15	68	20
40 to 44	27	5	39	6	66	11
45 to 49	43	2	29	6	72	8
50 to 54	47	3	23	3	70	6
55 to 59	44	4	24	6	68	10
60 to 64	66	3	14	1	80	4
65 to 69	50	6	17	3	67	9
70 and over	97	3	15	7	112	10
Totals	638	45	469	117	1107	162

TABLE 14—PERCENTAGE OF THE VARIOUS CAUSES OF TOTAL DEATHS AND EACH SEX OF TOTAL IN NEW JERSEY—1930

Abridged International List Number	CAUSE OF DEATH	Percentage of Total	
		Percentage of Total	Percentage of Total
1	Typhoid fever .....	.1	80
2	Typhus fever	100	40
3	Malaria	25	75
4	Smallpox	3	46
5	Measles	1.1	47
6	Scarlet fever	2	49
7	Whooping cough .....	.8	54
8	Diphtheria and croup .....	.8	49
9	Influenza .....	.8	49
10	Asiatic cholera		
11	Cholera nostras .....	.6	49
12	Other epidemic diseases	5.8	42
13	Tuberculosis of the lungs	2	48
14	Tuberculosis meningitis .....	.5	52
15	Other forms of tuberculosis	10.0	44
16	Cancer and other malignant tumors	3	56
17	Simple meningitis	7.6	39
18	Cerebral hemorrhage and softening	21.7	46
19	Organic diseases of the heart	4	52
20	Bronchitis	4.4	41
21	Pneumonia	4.4	43
22	Other diseases of the respiratory system (tuberculosis and broncho pneumonia excepted) .....	.6	40
23a	Broncho pneumonia	2.9	53
24	Diseases of the stomach (cancer excepted) .....	.8	76
25	Diarrhoea and enteritis (under 2 years)	1.1	55
26	Appendicitis and typhlitis	1.4	45
27	Hernia, intestinal obstruction .....	.9	52
28	Cirrhosis of the liver .....	.8	70
29	Acute nephritis and Bright's disease	9.6	30
30	Noncancerous tumors and other diseases of the female genital organs .....	.5	100
31	Puerperal septicæmia (puerperal fever, peritonitis) .....	.3	100
32	Other puerperal accidents of pregnancy and labor .....	.6	100
33	Congenital debility and malformations	4.5	59
34	Senility .....	.8	41
35	Suicide	1.4	78
36	Violent deaths (suicide excepted)	7.2	71
37	Other diseases	13.2	52
38	Unknown or ill-defined diseases .....	.1	52
	Total	100.0	53.5

TABLE 15—DEATH RATES, TOTAL, WHITE AND COLORED, FROM IMPORTANT CAUSES, PER 100,000 TOTAL, WHITE AND COLORED POPULATION IN NEW JERSEY—1930

Abridged International List Number	CAUSE OF DEATH	Total Deaths per 100,000		
		Total Population	White Population	Colored Population
1	Typhoid fever	1.1	.9	5.2
2	Typhus fever			
3	Malaria			
4	Smallpox			
5	Measles	3.1	8.0	3.7
6	Scarlet fever	1.4	1.4	4
7	Whooping cough	2.2	1.8	8.0
8	Diphtheria and croup	3.1	8.2	6.1
9	Influenza	8.6	8.3	14.6
10	Asiatic cholera			
11	Cholera nostras			
12	Other epidemic diseases	5.6	6.7	8.5
13	Tuberculosis of the lungs	61.6	52.6	225.7
14	Tuberculosis meningitis	2.5	1.9	13.2
15	Other forms of tuberculosis	4.8	3.6	28.9
16	Cancer and other malignant tumors	106.6	108.5	72.4
17	Simple meningitis	2.7	2.5	6.1
18	Cerebral hemorrhage and softening	80.6	78.6	97.9
19	Organic diseases of the heart	230.7	228.8	266.0
20	Bronchitis	4.0	3.8	7.5
21	Pneumonia	47.0	42.9	121.1
22	Other diseases of the respiratory system (tuberculosis and broncho pneumonia excepted)	6.1	5.9	9.4
23a	Broncho pneumonia	30.4	27.7	79.5
24	Diseases of the stomach (cancer excepted)	8.7	8.6	10.8
25	Diarrhoea and enteritis (under 2 years)	11.4	10.8	25.6
26	Appendicitis and typhlitis	14.7	14.6	17.9
27	Hernia, intestinal obstruction	9.6	9.6	9.4
28	Cirrhosis of the liver	8.4	8.5	5.6
29	Acute nephritis and Bright's disease	101.8	99.6	140.5
30	Noncancerous tumors and other diseases of the female genital organs	5.4	4.7	17.5
31	Puerperal septicæmia (puerperal fever, peritonitis)	3.3	3.1	7.1
32	Other puerperal accidents of pregnancy and labor	6.2	5.8	13.2
33	Congenital debility and malformations	47.9	45.0	101.2
34	Senility	3.3	3.3	3.7
35	Suicide	14.7	13.3	8.2
36	Violent deaths (suicide excepted)	76.9	74.8	123.0
37	Other diseases	140.7	136.8	212.0
38	Unknown or ill-defined diseases .....	.9	.9	2.3
	Total	1083.0	1029.7	1689.0

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS) FROM EACH CAUSE OF THE ABRIDGED INTERNATIONAL LIST, BY AGE, SEX, AND COLOR IN NEW JERSEY, 1930—Continued

CAUSE OF DEATH, SEX, AND COLOR	AGE PERIODS—YEARS																										
	All deaths	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over	Age unknown	
31 Bronchitis—																											
Total	106	43	8	2	1	1	56	2	1	1	1	1	2	2	5	6	10	9	17	11	11	18	11	7	1	1	
Males—White	90	18	6	1	1	1	24	1	1	1	1	1	2	2	5	6	10	9	17	11	11	18	11	7	1	1	
Males—Colored	6	6	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	6	11	1	1	1	27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	7	1	1	1	1	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
32 Pneumonia—																											
Total	1011	211	61	33	24	18	307	64	21	51	51	55	89	119	125	142	158	129	136	133	69	75	65	33	12	1	
Males—White	46	20	4	1	1	3	22	8	2	2	2	2	3	5	7	7	9	7	7	6	5	4	3	2	1	1	
Males—Colored	146	30	8	4	4	7	130	23	12	19	20	18	28	36	35	41	53	41	53	40	30	33	13	4	1	1	
Females—White	609	79	22	13	9	7	130	23	12	19	20	18	28	36	35	41	53	41	53	40	30	33	13	4	1	1	
Females—Colored	110	23	10	1	1	2	36	1	1	3	5	10	10	4	7	10	8	4	3	2	1	1	1	1	1	1	
33a Bronchopneumonia—																											
Total	1237	431	129	98	96	11	672	24	10	9	13	14	20	17	20	35	40	52	60	51	61	55	42	23	12	1	
Males—White	500	225	46	15	10	2	242	9	4	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—Colored	67	49	22	4	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	509	174	42	17	8	6	247	15	7	5	6	4	10	8	9	10	13	21	20	21	33	29	23	15	10	1	
Females—Colored	71	33	12	2	2	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
33 Other diseases of the respiratory system (tuberculosis and broncho pneumonia excepted)—																											
Total	249	11	9	5	2	2	29	7	4	8	7	10	10	20	12	14	21	18	22	13	24	9	12	6	3	1	
Males—White	12	7	5	3	1	1	18	4	2	5	4	6	13	9	11	15	11	15	11	6	13	3	4	1	1	1	
Males—Colored	50	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	9	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	50	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
34 Diseases of the stomach (cancer excepted)—																											
Total	356	15	3	2	1	1	21	2	1	2	2	10	15	21	26	34	44	46	41	33	28	11	8	7	2	2	
Males—White	237	2	2	1	1	1	6	1	1	1	1	8	11	14	21	26	37	39	32	20	17	7	7	2	2	2	
Males—Colored	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	79	4	1	1	1	1	10	1	1	1	1	3	5	6	6	6	4	6	12	4	10	4	1	4	2	2	
Females—Colored	7	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
35 Diarrhoea and enteritis (under 2 years)—																											
Total	405	405	60	1	1	1	405	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—White	212	205	27	1	1	1	212	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—Colored	28	24	1	1	1	1	28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	173	173	32	1	1	1	173	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	236	236	0	1	1	1	236	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36 Appendicitis and typhlitis—																											
Total	603	4	2	7	10	5	31	46	32	50	47	60	34	51	44	41	56	30	19	14	7	1	1	1	1	1	
Males—White	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—Colored	24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Females—White	223	3	3	3	3	3	14	18	16	21	20	12	19	15	12	14	15	11	12	7	3	1	1	1	1	1	
Females—Colored	14	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
37 Hernia, intestinal obstruction—																											
Total	301	30	3	1	1	1	34	3	3	4	5	8	17	22	33	30	42	38	44	30	29	25	12	4	1	1	
Males—White	103	10	2	1	1	1	19	2	2	3	3	5	11	16	11	22	16	24	18	17	14	4	1	1	1	1	
Males—Colored	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	177	12	1	1	1	1	13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
38 Cirrhosis of the liver—																											
Total	342	2	2	2	2	2	2	1	1	2	1	5	9	15	27	45	36	52	49	22	16	12	7	1	1	1	
Males—White	230	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—Colored	101	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
39 Acute nephritis and Bright's disease—																											
Total	4187	8	1	5	4	1	10	9	18	32	41	33	63	124	180	210	227	412	480	518	571	609	339	102	74	1	
Males—White	1063	6	1	4	1	1	12	2	10	9	19	17	28	53	83	98	133	189	214	241	242	242	161	71	20	1	
Males—Colored	147	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	1857	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	380	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
30 Noncancerous tumors and other diseases of the female genital organs—																											
Total	291	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—White	184	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—Colored	37	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
31 Puerperal, septicaemia (puerperal fever, peritonitis)—																											
Total	198	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Males—White	123	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Females—White	123	1	1	1																							

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS) FROM EACH CAUSE OF THE ABRIDGED INTERNATIONAL LIST, BY AGE, SEX, AND COLOR IN NEW JERSEY, 1930—Continued

CAUSE OF DEATH, SEX, AND COLOR	AGE PERIODS—YEARS																											
	All deaths	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over	Age unknown		
32 Other maternal accidents of pregnancy and labor	232									14	47	33	40	60	28	2	1											
Total	224									10	41	31	38	58	26	2	1											
Females—White	28									4	0	0	2	4	3													
Females—Colored	25									4	0	0	2	4	3													
Males—White	1050	1010	16	8	9	31046	4																					
Males—Colored	1030	1015	7	4	21028	2																						
Females—White	128	127	1	1	128	2																						
Females—Colored	78	79	0	2	3	1768	2																					
Males—White	486	583	1	1	80																							
Males—Colored	188																											
Females—White	59																											
Females—Colored	76																											
Males—White	603																											
Males—Colored	464																											
Females—White	10																											
Females—Colored	120																											
33 Violent deaths (suicide excepted)	3129	88	47	81	44	84	184	183	130	195	300	178	189	268	214	200	308	108	184	128	110	98	28	2				
Total	2937	20	22	15	22	15	87	120	87	180	142	118	137	178	163	164	258	138	188	138	98	42	19	6	2			
Males—White	233	0	2	1	1	1	11	13	6	18	23	20	21	20	18	15	16	8	8	8	5	2	1	2				
Males—Colored	283	2	30	3	3	3	8	8	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
Females—White	46																											
Females—Colored	46																											
37 Other diseases—	5718	428	46	62	40	36	612	120	118	128	130	143	218	215	822	869	407	904	501	541	506	378	227	160	68			
Total	2736	190	17	20	24	20	280	61	67	72	72	61	69	84	106	156	183	200	254	275	247	241	189	101	62	30		
Males—White	250	80	7	11	2	2	39	7	5	3	12	13	25	18	18	80	25	16	13	12	6	5	4	2				
Males—Colored	232	23	2	3	13	16	33	56	44	47	64	61	60	74	124	138	108	221	200	253	252	177	121	64	36			
Females—White	192	23	2	3	8	8	36	6	4	6	16	6	20	12	24	18	14	1	8	1	2	1	2	2				
Females—Colored	40	17	8	10	11	8	20	1	1	1	1	1	4	2	8	1	2	1	1	1	1	1	1	1				
Males—White	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Males—Colored	16	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
Females—White	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Females—Colored	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

TABLE 20.—DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST, IN THE COUNTIES
FIGURES INCLUDE PLACES

	Bloomfield	East Orange	Irvington	Montclair	Newark	Nutley	Orange	South Orange	West Orange	Gloucester County	Woodbury
Typhoid and paratyphoid fever	1	2	1		1		1	1			
Typhus fever	5										
Relapsing fever (spirillum obermeieri)	3										
Matta fever	4										
Malaria	4										
Smallpox	6										
Measles	7	6		1	18	1	6		3		
Scarlet fever	8				4						
Whooping cough	9	11			11		3				
Diphtheria	10	27	3	1	50	1	5		1	1	
Influenza	11	57	5	3	22	5	5		1	2	1
Military fever	12			6					4		
Mumps	13										
Asiatic cholera	14										
Cholera nostras	15										
Dysentery	16				2						
Plague	17										
Yellow fever	18										
Splenohepatic hemorrhagic jaundice	19										
Leptos	20										
Erysipelas	21	3		1	10		2	1			
Acute anterior poliomyelitis	22				2						
Lethargic encephalitis	23	2			8	1					
Meningococcus meningitis	24				15	1	2		1		
Other adenitic and endemic diseases	25				1						
Glanders	26										
Anthrax	27										
Rabies	28										
Tetanus	29								1	1	
Mycoses	30										
Tuberculosis of the meninges and central nervous system	31	16	27	34	24	42	7	33	2	10	33
Tuberculosis of the intestines and peritoneum	32	1	1	2	16				1	1	
Tuberculosis of the vertebral column	33				13					2	
Tuberculosis of the joints	34				6						
Tuberculosis of other organs	35		1	1	5	1					
Disseminated tuberculosis	36				3		1				
Syphilis	37		2	1	18				2		
Soft chancre	38	1	2	1	30	2			1		
Gonococcus infection	39			2	3						
Purulent infection, septicaemia	40				3						
Other infectious diseases	41	1		2	4						
Cancer and other malignant tumors of the buccal cavity	42										
Cancer and other malignant tumors of the stomach, liver	43	2		1	25	1	1	3		4	
Cancer and other malignant tumors of the peritoneum	44	10	32	15	6	162	2	13	8	10	26
Cancer and other malignant tumors of the intestine, rectum	45	9	14	8	12	88	3	8	2	7	9
Cancer and other malignant tumors of the female genital organs	46	3	17	10	7	53	1	5	4	5	8
Cancer and other malignant tumors of the breast	47	3	16	7	7	43		6	6	4	7
Cancer and other malignant tumors of the skin	48	3	1	1		4		1		1	1
Cancer and other malignant tumors of other or unspecified organs	49	11	22	10	11	112	2	12	4	3	19
Benign tumors and tumors not returned as malignant (tumors of the female genital organs excepted)	50		1			5					
Acute rheumatic fever	51	2	3	1	2	21					
Chronic rheumatism, osteoarthritis, gout	52		1	1		2				1	
Scurvy	53										

OF NEW JERSEY AND MUNICIPALITIES OF 5,000 OR MORE INHABITANTS IN 1930. (COUNTY WHICH FOLLOW): 1930—Continued

	Hudson County	Bayonne	Guttenberg	Harrison	Irishborn	Jersey City	Kearny	Secaucus	Union City	West New York	Hunterdon County	Lambertville	Mercer County	Pelicon	Trenton	Middlesex County	Carteret	Highland Park	New Brunswick	Perth Amboy	Sayreville	South Amboy	
5	1					1	2		1				3		2	4				1	1		
41	11			1	24	1	1	1	1				11		7	2							
27	3			1	3	1			1				10		4	1							
98	17		1	4	52	9			1	9			6		5	37				2	1	17	1
71	4	1	4	8	38	1							10		5	16	2	1	1	3			
11	1			1	5	1			1	1			6		3	4				2	2		
3	1			1	1	1			1	1			2		1	3							
8				1	3	1			1	1			1		1	4				2	2		
21	6		1	1	9	2			1	1			3	2	1	3				2	1		2
1				1																			
1	1												3		1								
47	50	4	10	43	238	15	3	38	17	14		3	138	4	100	121	5	5	31	28	5	6	
19	4	1		1	8	2			2				5		7	1	5	1		1	2		1
3	1				2				1				5		3	4				1			
2					1								2		2	1				1			
12	3				5	1			2				3		3	2							
34				4	20	2			3	1			14		12	17				9	3		
2					2								2		1								
13	1			1	6	1			2	1			4	1	2	2							
24	2				1	17	3			1	1		4	1	2	7				1	1	1	1
229	23	3	5	24	110	18	2	19	13	16		1	62	4	36	55	4			6	14		1
120	9	1	2	21	63	3			10	5	7		30	1	24	19	1	1	5	1	1	2	
79	8		2	6	41	4			7		6		19		11	23			1	8	3	3	
61	6		2	7	30	4	1	4		5	1	17	1	10	18				1	5	5		1
10	1			1	7				1		2		6		5	12				1	2	3	
180	17		3	14	101	6	1	20	13	7	1	36	1	26	30	1	2	8	6	2	2	2	
2	6				2								1		6								
31	6		1	2	9	1			9	1	1		6		1	10				4			1
5	2				2								4		3	3							1

TABLE 20.—DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST, IN THE COUNTIES
FIGURES INCLUDE PLACES

	Bloomfield	East Orange	Irvington	Montclair	Newark	Nutley	Orange	South Orange	West Orange	Gloucester County	Woodbury
Pellegra	54										
Beriberi	55										
Rickets	56										
Diabetes mellitus	57	6	14	15	3	133	3	10	3	9	3
Anemia, chlorosis	58		1		14			1			
Diseases of the pituitary gland	59				1						
Diseases of the thyroid gland	60		5	3	2	23	1		1		
Diseases of the parathyroid glands	61										
Diseases of the thymus gland	62	1	1		1	10	2	1			
Diseases of the adrenals (Addison's disease)	63										
Diseases of the spleen	64				2						
Leukemia & Hodgkin's disease	65	1	2	1	1	21	1	1			
Alcoholism (acute or chronic)	66	2	2		1	42	2	2	1		
Chronic poisoning by mineral substances	67					2					
Chronic poisoning by organic substances	68				1						
Other general diseases	69			1	5				2		
Encephalitis	70			1	3						
Meningitis	71		2		8			2			
Tabs Dorsalis (locomotor ataxia)	72				2				3		2
Other diseases of the spinal cord	73	2	3	2	1	7			1		
Cerebral hemorrhage, apoplexy	74	36	49	42	29	306	14	29	11	15	56
Paralysis without specified cause	75	2	1	1	2	8		2	1		4
General paralysis of the insane	76	3	1		1	30		1			4
Other forms of mental alienation	77	1	1		1	5		3	1		4
Epilepsy	78		2	1	1	11	1		1	1	
Convulsions (nonpuerperal; 5 years and over)	79							1			
Infantile convulsions (under 5 years of age)	80		1	1	1	2				1	
Chorea	81										
Neuralgia and neuritis	82				1						
Softening of the brain	83				1						
Other diseases of the nervous system	84	2	3	1		23	1	3		1	
Diseases of the eye and annexa	85				3						
Diseases of the ear and of the mastoid process	86	3	2	1	1	28	1	5		3	1
Pericarditis	87				2						
Endocarditis and myocarditis (acute)	88				43			4	1	5	5
Angina pectoris	89	2	25	6	12	57	2	24	4	5	15
Other diseases of the heart	90	54	131	104	70	950	40	64	16	32	151
Diseases of the arteries	91	5	13	5	3	100	5	6	1	1	17
Embolism and thrombosis (not cerebral)	92										
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)	93	1	10	7	7	37		1		1	5
Diseases of the lymphatic system (lymphangitis, etc.)	94			1	1	4					
Hemorrhage without specified cause	95				2						
Other diseases of the circulatory system	96			1		2					
Diseases of the nasal fossae and their annexa	97				7						
Diseases of the larynx	98				3				1	1	
Bronchitis	99		4	1	3	17	1	4		3	1
Broncho pneumonia	100	9	14	8	9	190	2	6	4	5	14
Pneumonia	101	17	26	15	20	278	7	16	3	10	27
Pleurisy	102	1			1	16		1	2	1	5
Congestion and hemorrhagic infarct of the lung	103	1			3	1	2	1			
Gangrene of the lung	104		1								
Asthma	105	1			6					1	
Pulmonary emphysema	106										
Other diseases of the respiratory system (tuberculosis excepted)	107	1	2		1	4	1	1		1	
Diseases of the mouth and annexa	108		1		2					1	

OF NEW JERSEY AND MUNICIPALITIES OF 5,000 OR MORE INHABITANTS IN 1930. (COUNTY WHICH FOLLOW): 1930—Continued

	Hudson County	Bayonne	Guttenberg	Harrison	Hoboken	Jersey City	Kearny	Secaucus	Union City	West New York	Hunterdon County	Lambertville	Morristown	Princeton	Trenton	Millisecus County	Cherokee	Highland Park	New Brunswick	Perth Amboy	Stevenville	South Amboy	
2	1								1							1					1		
183	17	2	2	18	73	8		13	13	9	1	37	2	19	3	2	1	10	7	1			
17	1			2	9			2	2			8	1	3	1	1							
24	4		1	3	9	3	1	3	4	1	2	5	5	1	1	2							
3				1	1	1		1	1	1	1	9	5	2									
6				3	1			1	1	1	1	9	5	2									
3	1			2																			
22	2			1	11	2		3	1	1	1	6	6	4									
12	2			4	3	2	1		1		9	5	18	1	1	6	1						
1				1																			
18	4		1	2	7	2			1	1	1	1	3										
9				7	1							2	2										
21	3			2	15	9			1	1	1	6	1	12	1	1	1	3	1				
18	3			2	9	1			2	1	2	1	9	3	1	1							
472	61	6	4	50	226	19	4	56	13	63	5	137	77	84	191	3	7	44	31	11	9		
17	1			2	7	1	3	2	1	1	6	6	8	1	2								
82	4	1		4	18			4	1	1	10	1	8	6	4	1							
6	2			3	3						1	1	2	2									
11				3	8						2	4	4	2									
3				1																			
8	2			1	3				1	2	1	4	1	2									
1				1																			
1				1																			
28	3	1	2	2	13	3		1	1	1	11	5	9										
1	1			2																			
19	1		2	1	8	1		3	3	1		7	1	6	4	1							
3				2																			
54	7	1	1	7	27			3	5			12	1	8	23	1							
162	2		2	3	36	5		3	2	14	5	30	1	17	19	1							
1873	124	37	38	184	794	64	13	189	89	33	11	373	8	248	349	11	15	78	7	11	15		
83	6		2	13	32	11	1	9	2	20	4	84	7	58	31								
38	6			2	13	3		3	4			7	4	11	1	2	2						
2				1																			
2	1			1																			
1																							
2				2																			
20	5		2	9	2	1						9	1	7	6								
298	35	1	4	25	188	7	4	12	6	11		65	1	49	85	7	1	16	7	4			
353	26	1	10	44	193	14	1	20	19	16	1	78	1	60	108	9	7	15	21	5	11		
15	1			1	8	14		4	19	16	1	27	2	6	1	2							
5				1	4																		
1				1																			
7	1			2	1																		
1				1																			
6	1			2	1																		
5				4	1																		

TABLE 20.—DEATHS IN COUNTIES AND CERTAIN SELECTED MUNICIPALITIES, FROM EACH WHICH FOLLOW:

	State Total	Atlantic County	Atlantic City	Hammononton	Pleasantville	Bergen County	Jerseyfield	Churchside Park	Englewood	Parkview	Fort Lee	Camden	Hackensack
Diseases of the pharynx and tonsils	109	152	3	2		12	2						1
Diseases of the esophagus	110	7	1	1			1						
Cancer of the stomach and duodenum	111	267	4	1		1	14	2			1	1	1
Other diseases of the stomach (cancer excepted)	112	59	6	2	1	2	4					1	
Diarrhoea and enteritis (under 2 years of age)	113	465	21	9	2	3	20	1	1	1		2	1
Diarrhoea and enteritis (2 years and over)	114	351	13	8	1	1	37	1	1	2		1	2
Other diseases of the intestines	115	142	5	2			6	1	1				
Ancylostomiasis	115												
Diseases due to other intestinal parasites	116	4											
Appendicitis and typhilitis	117	601	17	10	2	1	59	1	1	2	2	3	6
Hernia, intestinal obstruction	118	351	13	8	1	1	37	1	1	2		1	2
Other diseases of the liver	119	76	2										
Acute yellow atrophy of the liver	120	19	1				1						
Hydatid tumor of the liver	121												
Cirrhosis of the liver	122	542	16	8	1	1	30	1	1	1	2	5	5
Biliary calculi	123	204	2				20	1	1			1	2
Other diseases of the pancreas	124	120	3	3									
Diseases of the pancreas	125	27	1	1			3						
Peritonitis without specified cause	126	42	5	4			1						1
Other diseases of the digestive system (cancer and tuberculosis excepted)	127												
Acute nephritis (including unspecified under 10 years of age)	128	208	15	10	1	2	9	1		1			
Chronic nephritis (including unspecified 10 years and over)	129	3929	139	88	2	12	253	8	4	21	2	9	8
Chylouria	130	88											
Other diseases of the kidneys and annexa	131	4											
Calculi of the urinary passages	132	43	2	1			5						2
Diseases of the bladder	133	24	1				3			1			
Diseases of the urethra, urinary abscess, etc.	134	14	1	1			1			1			
Diseases of the prostate	135	183	5	1			18	1	2				8
Nonvenereal diseases of the male genital organs	136									1			
Cysts and other benign tumors of the ovary	137	41					5						
Sarcoma and polyoma (female)	138	49	1				3	1					1
Benign tumors of the uterus	139	91											9
Nonpuerperal uterine hemorrhage	140	2	5				9	1	1				1
Other diseases of the female genital organs	141	38					2						10
Nonpuerperal diseases of the breast (cancer excepted)	142	2											1
Accidents of pregnancy	143	41	1	1			5			1			8
Puerperal hemorrhage	144	39					3						3
Other accidents of labor	145	49	1				10	1	1				1
Puerperal septicaemia	146	138	3	2			7	1	1				2
Puerperal plegmasia alba dolens, embolus, sudden death	147	37	2	2			2						9
Puerperal albuminuria and convulsions	148	83	2	1	1		5	2					17
Following child-birth (not otherwise defined)	149	2	1										
Puerperal diseases of the breast	150	1	2	1									1
Gangrene	151	30					1						1
Furuncle	152	22	1				2		1				3
Acute abscess	153	29					2						6
Other diseases of the skin and annexa	154	25	2		1		1						6
Diseases of the bones (tuberculosis excepted)	155	53	1	1			5	1		1			18
Diseases of the joints (tuberculosis and rheumatism excepted)	156	2											
Amputations	167												

CAUSE OF DEATH, DETAILED INTERNATIONAL LIST. (COUNTY FIGURES INCLUDE DISTRICTS 1930—Continued.)

Local	North Arlington	Hedgefield Park	Hedgefield	Boothtown	Burlington County	Bordertown	Burlington City	Camden County	Atlantic	Camden City	Collingswood	Gloucester City	Haddonfield	Cape May County	Cumberland County	Bridgeton	Millville	Vineland	Essex County	Relieville
2					6	1	1	8		5				1	1					33
1			1																	2
1							1	11		5				6	4		2			55
1					19		10	40		28		2		1	4	1		1		60
1					6		1	13		8		2		3	1	8	1			19
1					2			2												14
1					19			19		28		2		3	15	8	1			60
1					6		1	13		8		2		4	7	3	3			69
1					2			2		2		2		2	7	2	8			181
1					6		1	21		2		2		2	7	3	3			69
1					8			8		2		2		1	1		1			3
1					1		1	1		1				1	6					2
1					2		3	1		6		1		2	4	2	1	2		36
1					1		1	1		5		1		2	2					66
1					1			1		1		1		1	1					7
1					1			1		1				1	1					9
1					1			1		1										39
1					5		1	18		11		3		3	4		2			39
1					1			1		1										1
1					7		12	18		4		10		12	152	10	17	21	48	91
1					13		7	10		329		12		2	2	19	17	13	762	29
1					3		1	2		2				2						22
1					2			3		1				1						8
1					1		1	1		3				1		1				8
1					1		1	1		6		1		1		4	1	1		7
1					13		1	13		1										38
1																				
1					2			1		3				1	2	1	1			3
1					1		1	1		2				1	1					10
1					2		1	1		8		1	1	1	2	2				20
1					1			1		1				1	1					1
1					2			2												1
1					1			1		2										10
1					1			1		5				4						1
1					5			5						2	1	1				8
1					12		1	1		12		1								9
1					1			1				1		1						1
1					2			2		2				1						3
1					1			1				1		1						6
1					1			1						1						6
1					1			1						1	1	1				9
1					1			1						1	1	1				17
1					2			2						1						1
1					1			1						1						1
1					1			1						2						3
1					2			2						1						3
1					1			1						1						6
1					1			1						1	1	1				6
1					1			1		1				1	1	1				18

TABLE 20.—DEATHS IN COUNTIES AND CERTAIN SELECTED MUNICIPALITIES, FROM EACH WHICH FOLLOW:

Table with 15 columns for various municipalities and 2 columns for State Total. Rows list causes of death such as Congenital malformation, Accidental drowning, and Homicide.

CAUSE OF DEATH, DETAILED INTERNATIONAL LIST. (COUNTY FIGURES INCLUDE DISTRICTS 1930—Continued.

Table with 20 columns for municipalities and 2 columns for State Total. Rows list causes of death such as Congenital malformation, Accidental drowning, and Homicide.

TABLE 20.—DEATHS IN COUNTIES AND CERTAIN SELECTED MUNICIPALITIES, FROM EACH WHICH FOLLOW:

Table with 11 columns (South River, Monmouth County, Asbury Park, Long Branch, Red Bank, Morris County, Dover, Madison, Morrisown, Ocean County, Passaic County) and rows listing causes of death (e.g., Congenital malformation, Accidental trauma, Homicide) with corresponding counts.

CAUSE OF DEATH, DETAILED INTERNATIONAL LIST. (COUNTY FIGURES INCLUDE DISTRICTS 1930—Continued.

Table with 16 columns (Clifton City, Hawthorne, Passaic City, Paterson, Salem County, Salem City, Somerset County, Bound Brook, North Plainfield, Somerville, Sussex County, Union County, Elizabeth, Linden, Plainfield, Rahway, Roselle, Roselle Park, Summit, Westfield, Warren County, Phillipsburg) and rows listing causes of death (e.g., Congenital malformation, Accidental trauma, Homicide) with corresponding counts.

TABLE 21.—DEATHS BY OCCUPATIONS

	Glass industries	Iron, steel and other metal industries	Leather industries	Lumber and furniture industries	Potteries	Rubber industries	Textile industries	Other industries	Machinists, millwrights and toolmakers	Managers, superintendents and foremen (manufacturing)	Manufacturers and officials	Mechanics (gunsmiths, locksmiths, wheelwrights, etc.)
Tuberculosis of the respiratory system												
10 to 19								4	1			
20 to 29								4	3			
30 to 39								4	3			
40 to 49			1					2	3			
50 to 59								1	1			
60 to 69								1	1			
70 to 79								1	1			
80 and over								3	3			
Totals	4	10	1	2	2	2	2	17	28	15	7	14
Cancer and other malignant tumors												
10 to 19												
20 to 29												
30 to 39												
40 to 49								4	5			
50 to 59								5	4			
60 to 69								12	7			
70 to 79								12	19			
80 and over								7	4			
Totals	16	2	1	1	2	19	43	35	31	11		
Diseases of the nervous system and of the special sense organs												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59												
60 to 69												
70 to 79												
80 and over												
Totals	13	1	1			4	16	45	35	16	14	
Diseases of the circulatory system												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59												
60 to 69												
70 to 79												
80 and over												
Totals	3	32	1	6	1	6	7	34	107	81	62	27

AND AGE GROUPS, NEW JERSEY, 1930—Continued

	Millers (grain, flour, feed, etc.)	Milliners and millinery dealers	Monitors, founders and casters	Painters, glaziers, varnishers, enamellers, etc.	Paperhangers	Plasterers	Plumbers and gas and steam fitters	Pressmen (printing)	Rockers and slaters	Semi-skilled operatives (industry not stated)	Chemical industries	Cigar and tobacco factories	Clay and stone industries (excepting potteries)	Clothing industries	Food industries	Glass industries	Iron, steel and other metal industries	Leather industries	Lumber and furniture industries	
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	1	11	84	2	2	22	9	3	50	6	4	3	16	5	4	27	4	4	2	
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	1	9	40	3	3	19	11	3	13	3	5	3	11	4	5	31	9	3		
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	2	8	42	1	3	17	12	2	4	5	4	1	17	2	3	29	6	2		
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	3	6	28	109	4	10	40	34	6	10	11	12	8	36	7	11	80	22	10	

TABLE 21.—DEATHS BY OCCUPATIONS

	Potteries	Rubber industries	Textile industries	Other industries	Shoemakers and cobblers (not in factory)	Stonemasons	Tailors and tailresses	Thamblins and coppermiths	Upholsterers	Other manufacturing and mechanical industries	TRANSPORTATION	Water
Tuberculosis and other respiratory ailments	10 to 19	1	2	6	2	3	6	6	5	10		
	20 to 29	1	11	16	2	2	6	6	2	10		
	30 to 39	1	16	7	1	1	1	1	1	2		
	40 to 49	7	9	1	1	1	1	1	1	2		
	50 to 59	2	4	1	1	1	1	1	1	2		
	60 to 69	4	2	2	1	1	1	1	1	2		
	70 to 79	4	2	1	1	1	1	1	1	2		
	80 and over	4	2	2	1	1	1	1	1	2		
	Totals	15	2	46	11	3	6	6	5	10		
Cancer and other malignant tumors	10 to 19			1			1					
	20 to 29			1			1					
	30 to 39			4			1					
	40 to 49			7			1					
	50 to 59	1	1	13			4		1	2		
	60 to 69	3	1	19			3		2	3		
	70 to 79	3	15	4	7		2		1	5		
	80 and over		1	1			1			2		
	Totals	4	6	60	20	11	4	10	5	25		
Diseases of the nervous system and of the special sense organs	10 to 19			1								
	20 to 29			3								
	30 to 39			1								
	40 to 49			4								
	50 to 59	1	1	7								
	60 to 69	2	1	10			1		2	3		
	70 to 79	1	2	12			6		2	2		
	80 and over	1	1	6			1		1	1		
	Totals	5	5	39	31	14	2	14	3	2	17	
Diseases of the digestive system	10 to 19			1								
	20 to 29			2								
	30 to 39			4								
	40 to 49			13			1		11	1		
	50 to 59	2	1	25			2		9	3		
	60 to 69	6	2	16			13		1	9		
	70 to 79	2	4	23			7		6	9		
	80 and over	1	5	4			4		4	2		
	Totals	12	11	94	85	34	13	49	12	7	35	

AND AGE GROUPS, NEW JERSEY, 1930—Continued

	Boatmen, canal men, millers and deck hands	Longshoremen and stevedores	Other parents	Road and street	Carriage and hack drivers, draymen, teamsters and expressmen	Chauffeurs	Contractors and foremen (road building)	Cargo loaders and managers	Laborers (road building) and street cleaners	Livery stable keepers and managers, heaters and stable hands	Other parents	Railroad	Baggage men and freight agents	Brakemen	Conductors	Foremen, overseers and inspectors	Laborers	Locomotive engineers	Locomotive firemen	
Tuberculosis and other respiratory ailments	10 to 19	1				4	2	2	2	1										
	20 to 29	1				1	1	2	1	1										
	30 to 39	1				1	1	1	1	1										1
	40 to 49	7				3	14	3	1	1		2								3
	50 to 59	2				3	3	3	2	1		2								3
	60 to 69	4				3	3	3	2	1		2								2
	70 to 79	4				3	3	3	2	1		2								2
	80 and over	4				3	3	3	2	1		2								2
	Totals	4	4	3	14	55	1	3	4	1	4	4	3	3	3	3	13		1	1
Cancer and other malignant tumors	10 to 19	1				3	3	3	1	1										
	20 to 29						3	2	1	1										
	30 to 39					1	3	3	1	4	1									
	40 to 49	1	1	1	1	4	4	3	1	4	1	1						5		1
	50 to 59	1	2		2	5	5	3	1	3							5	1		1
	60 to 69					1	1	2	1	2	1						2	2		2
	70 to 79	1	2		4	1	1	2	1	3	2						2	1		3
	80 and over	1	1		1	1	1	1	1	1	1						1	2		3
	Totals	3	4	3	18	9	4	4	9	1	2	2	1	4	4	10	9	5	5	6
Diseases of the nervous system and of the special sense organs	10 to 19					1														
	20 to 29					2														
	30 to 39					3	5	4	1	1										
	40 to 49					3	5	4	1	1										
	50 to 59	1	1	1	1	2	2	2	2	2	1						1	1		1
	60 to 69	1	1	2	5	1	1	1	3	2							4	4		2
	70 to 79	1	1	1	4	1	1	1	1	1							1	2		2
	80 and over	1	1	1	1	1	1	1	1	1							1	2		3
	Totals	9	5	4	14	13	4	6	4	4	2	2	1	7	4	6	10	10	10	11
Diseases of the digestive system	10 to 19																			
	20 to 29					1														
	30 to 39					7														
	40 to 49	1		3		1	17	1												
	50 to 59	4	3	4	4	8	8	2												
	60 to 69	7	3	3	13	4	4	1	12	6	1	2								
	70 to 79	5	2	9	10	2	4	1	3	3										
	80 and over	5	7	7	4	1	1	1	1	1										
	Totals	24	12	24	37	47	1	3	30	7	7	8	8	9	15	8	28	15	3	3

TABLE 21.—DEATHS BY OCCUPATIONS

	Motormen	Officials and superintendents	Switchmen, flagmen and yardmen	Ticket and station agents	Other pursuits	Express, Post, Telegraph and Telephone	Express messengers and railway mail clerks	Linemen	Mail carriers	Telegraph operators	Telephone operators	Other pursuits
Tuberculosis of the respiratory system												
10 to 19							1			1	1	
20 to 29				1		1	1			1	4	
30 to 39					2							
40 to 49	2		2	1			1	2		1		
50 to 59	1		2									
60 to 69					1							
70 to 79												
80 and over					1							
Totals	5	5	2	3	2	2	2	3	6	5		
Cancer and other malignant tumors												
10 to 19										1		
20 to 29									1	3	1	
30 to 39												
40 to 49	1				2					1	1	
50 to 59	1	1	1	1	2			5	1			
60 to 69												
70 to 79												
80 and over												
Totals	2	1	2	1	5			6	1	5	2	
Diseases of the nervous system and of the special sense organs												
10 to 19												
20 to 29			1									
30 to 39					1							
40 to 49			1									
50 to 59	1		1				1					
60 to 69	2	1	4	2	2							
70 to 79	2		2		5			1				
80 and over	1		1		1							
Totals	3	1	10	4	9	1		1		1	4	
Diseases of the circulatory system												
10 to 19											1	
20 to 29			1						1			
30 to 39	1									1		
40 to 49	2	1	1					1			1	
50 to 59	1	1	4	2	5			1	2	1	4	
60 to 69	3	1	12	6	6			3	4	4	5	
70 to 79	1	2	12	2	4			1		1	1	
80 and over	1	1	1	4	4			2	1		1	
Totals	7	5	32	9	19			1	10	9	2	13

AND AGE GROUPS, NEW JERSEY, 1930—Continued

TRADE	Bankers, brokers and moneylenders	Clerks in stores	Deliverymen	Laborers	Real estate and insurance agents and officials	Stenographers and saleswomen	Undertakers	Wholesale and retail dealers	Other pursuits	PUBLIC SERVICE (NOT ELSEWHERE CLASSIFIED)	Firemen (fire department)	Laborers (public service)	Marshals, sheriffs, detectives, etc.	Officials and inspectors (city, county, state, U. S.)	Police-men	Soldiers, sailors and marines	Other pursuits
10 to 19	2	1	1	1	1	1	1	1	1								
20 to 29	3	1	1	2	5	2	2	2	2								1
30 to 39	4	1	1	11	1	6	1	1	6								2
40 to 49	1	1	2	2	10	1	23	3	1								9
50 to 59	1	1	2	2	3	3	10	3	1								4
60 to 69	1	1	1	1	2	2	2	5									
70 to 79																	
80 and over																	
Totals	1	10	3	6	8	34	2	50	2		3	8		5	3	1	18
10 to 19																	
20 to 29			1	1	4	2		1								1	
30 to 39		1	1	3	6	2		2									1
40 to 49	1	1	2	9	12	20		57	2		3	2	1	1			12
50 to 59	5	2	1	10	18	24		44	2		3	4	4	4			17
60 to 69	3	1		6	13	33		3			1	1	1	1			13
70 to 79	1			3	3	8		8						1			1
80 and over																	
Totals	15	3	3	4	33	54	2	164	10		7	10	1	9	11	1	44
10 to 19																	
20 to 29						1		3	1								
30 to 39	2			2	15	1		20	1		2						2
40 to 49	2	2	1	4	4	11		23	2								7
50 to 59	3	2	1	9	9	1		29	4		2						11
60 to 69	1	1		8	5	1		23	1		1			3			15
70 to 79		1		2	2	7		7						1			4
80 and over																	
Totals	11	6	2	5	26	45	3	112	10		5	3		10	17	1	39
10 to 19																	
20 to 29						4		1									
30 to 39						2		3									
40 to 49	2	2	2	4	2	6		13	2								1
50 to 59	3	5	1	4	12	23		37	5		1	4	2	1			3
60 to 69	12	5	1	3	12	32		69	6		3	3	2	14	9		23
70 to 79	17	5		1	28	36		120	8		3	8		16	8		44
80 and over	7			2	15	23		3	78		3	3		5	6		29
Totals	3	1		8	3	1	36	27	11		11	21	3	45	34	1	107

TABLE 21.—DEATHS BY OCCUPATIONS

	PROFESSIONAL SERVICE											
	Architects	Authors, editors and reporters	Chemists, assayers, etc.	Civil and mining engineers and surveyors	Clergymen	Dentists	Designers, draftsmen and inventors	Lawyers, judges and justices	Musicians and teachers of music	Photographers	Physicians and surgeons	Teachers and other educators
Tuberculosis of the respiratory system	10 to 19								1			
	20 to 29											
	30 to 39	1		1								
	40 to 49	1					1	1				
	50 to 59				2							
	60 to 69	1				1		1				
	70 to 79					1						
	80 and over				1							
Totals	3		2	3	2	2	2	2	5	3	1	12
Cancer and other malignant tumors	10 to 19											
	20 to 29											2
	30 to 39											4
	40 to 49			1				1				3
	50 to 59	1	1	1		1		4		3		8
	60 to 69	2	2	1		1		2		2		5
	70 to 79	1	1		3	1		5		1		7
	80 and over									1		1
Totals	3	3	4	1	3	2	3	12	1	3	12	23
Diseases of the nervous system and of the special sense organs	10 to 19											
	20 to 29											1
	30 to 39											2
	40 to 49	1				1						3
	50 to 59											4
	60 to 69	1										4
	70 to 79											3
	80 and over											4
Totals	1	4		1	2			5	9		13	22
Diseases of the circulatory system	10 to 19											
	20 to 29											1
	30 to 39											3
	40 to 49	1										2
	50 to 59	2	2	2	2	1		2				10
	60 to 69	3	3	3	3	3	3	4	1	3		9
	70 to 79	5	5	5	5	5	5	5	1	5		16
	80 and over	1	1	1	1	1	1	1		1		2
Totals	2	14	9	9	33	6	9	18	17	3	25	49

AND AGE GROUPS, NEW JERSEY, 1930—Continued

	Other professional and semi-professional pursuits											DOMESTIC AND PERSONAL SERVICE											
	Barbers, hairdressers and manicurists	Bar tenders	Hotel keepers and managers	Homekeepers and stewards	Janitors and sextons	Laundresses and linendresses	Porters (except in stores)	Restaurant, cafe and lunch room keepers	Shooleathers	Servants	Waiters	Other Pursuits	CLERICAL OCCUPATIONS										
	Agents, canvassers and collectors	Bookkeepers, cashiers and accountants	Clerks (except clerks in stores)	Other clerical pursuits	Grand Total	Agents, canvassers and collectors	Bookkeepers, cashiers and accountants	Clerks (except clerks in stores)	Other clerical pursuits	Grand Total	Agents, canvassers and collectors	Bookkeepers, cashiers and accountants	Clerks (except clerks in stores)	Other clerical pursuits	Grand Total								
Tuberculosis of the respiratory system	10 to 19				20		1	1		8	2	3		1	13	7	104						
	20 to 29				150		4	3		16	5	5		12	34	11	459						
	30 to 39				177		5	3		12	5	1		8	28	6	523						
	40 to 49				101		1	2		7	2	2		3	8	2	468						
	50 to 59				69		1	1		5	3	1		3	3	1	319						
	60 to 69				44		1	1		3	2	1		2	1	1	156						
	70 to 79				13			1		2	2	1		2	1		58						
	80 and over				2					1							9						
Totals	24	13	2	2	582	7	16	14	6	56	17	16		6	29	106	2126						
Cancer and other malignant tumors	10 to 19				19			1		1				1	3	1	5						
	20 to 29				100		1	1		5	4	1		1	3	1	181						
	30 to 39				261		1	2		12	5	1		1	6	12	507						
	40 to 49				440		1	2		8	2	5		3	9	17	957						
	50 to 59				437		2	2		10	3	3		3	7	4	907						
	60 to 69				261		6	5		9	1	2		2	4	5	600						
	70 to 79				64		2	1		1	1	1		1	2		133						
	80 and over																						
Totals	27	20	3	7	1582	29	6	8	7	46	15	20		8	31	58	17	3429					
Diseases of the nervous system and of the special sense organs	10 to 19				1					1				1	1			10					
	20 to 29				14			2		1				1	4	1		64					
	30 to 39				44			1		9	1	2		1	8			168					
	40 to 49				119			1		7		6		1	8			361					
	50 to 59				249		7	1	3	10	4	3		1	4	11		601					
	60 to 69				352		5	1	3	5	1	5		1	6	10		796					
	70 to 79				334		5	1	3	5	1	4		1	5	5		728					
	80 and over				169		1			3		1		3	3			306					
Totals	24	10		5	1272	20	2	12	10	41	7	24		2	23	53	7	3082					
Diseases of the circulatory system	10 to 19				6					1					7	4		36					
	20 to 29				59			2	1	3	2				7	17		94					
	30 to 39				149			2	1	9	2	1			3	17		406					
	40 to 49				278			2	1	20	6	13			12	20		833					
	50 to 59				498		7	3	11	5	20	8			14	49		1332					
	60 to 69				783		18	4	5	6	1	25	4	13	20	35	1	2968					
	70 to 79				712		14	4	4	14		9		2	7	28	6	1735					
	80 and over				400		3			9		1		2	2	5		513					
Totals	68	24	4	18	2885	48	17	22	19	1	101	22	52		13	65	178	81	7669				

TABLE 21.—DEATHS BY OCCUPATIONS

		AGRICULTURE, FORESTRY AND ANIMAL HUSBANDRY							
		Farmers	Farm laborers	Fishermen and oystermen	Gardeners, florists, fruit growers and nurserymen	Other agricultural and animal husbandry pursuits	EXTRACTION OF MINERALS		Others
		MANUFACTURING AND MECHANICAL INDUSTRIES				Quarry operatives	Others		
Pneumonia	10 to 19		1						
	20 to 29	1							
	30 to 39	1							
	40 to 49	1	1						
	50 to 59	1							
	60 to 69	1							
	70 to 79	1							
	80 and over	1							
	Totals	27	8	1	10	2		1	6
	Diseases of the respiratory tract (pneumonia and tuberculous excepted)	10 to 19	1						
20 to 29					1				
30 to 39								2	
40 to 49								1	
50 to 59									
60 to 69		6	1						1
70 to 79		1	1						
80 and over		1							
Totals		18	1	2	9	1		4	2
Diseases of the digestive system		10 to 19	1						
	20 to 29	1	2						
	30 to 39	1		1					3
	40 to 49	1		1					
	50 to 59	1		1					
	60 to 69	10	1	3				1	3
	70 to 79	11	1						1
	80 and over	3		1					
	Totals	38	5	5	7			5	7
	Non-general diseases of the skin and genito-urinary system and annexa	10 to 19			1				
20 to 29									
30 to 39									3
40 to 49		15	1	2	6	1		1	3
50 to 59		38	11	4	1			4	5
60 to 69		38	7	7					1
70 to 79		34	3	3	1				1
80 and over									
Totals		125	12	15	19	8		5	18

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		Blacksmiths, forgers and hammermen		Boilermakers		Brick and stone masons		Builders and building contractors		Carpenters, coopers and cabinetmakers		Compositors, linotypers and typesetters		Dressmakers and seamstresses (not in factory)		Dyers		Electricians and electrical engineers		Engineers (stationary)		Engravers		Filters, grinders, buffers and polishers (metal)		Firemen (except locomotive and fire department)		Glassblowers		Jewelers, watchmakers, goldsmiths and silver-smiths		Laborers (general and not specified)		Building and hand trades		Chemical industries		Clay and stone industries (excepting potteries)		
Pneumonia	10 to 19																																							
	20 to 29																																							
	30 to 39																																							
	40 to 49																																							
	50 to 59																																							
	60 to 69																																							
	70 to 79																																							
	80 and over																																							
	Totals	6	2	9	5	28	3	2	5	5	1	1	5	1	1	5	1	1	5	1	1	5	4	134	6	3	3	1	6	1	1	1	1	1	1	1	1	1	1	
	Diseases of the respiratory tract (pneumonia and tuberculous excepted)	10 to 19																																						
20 to 29																																								
30 to 39																																								
40 to 49																																								
50 to 59																																								
60 to 69																																								
70 to 79																																								
80 and over																																								
Totals		5	7	4	20	1	1	1	3	3	1	3	1	3	1	4	1	4	1	4	4	4	57	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1		
Diseases of the digestive system		10 to 19																																						
	20 to 29																																							
	30 to 39																																							
	40 to 49																																							
	50 to 59																																							
	60 to 69																																							
	70 to 79																																							
	80 and over																																							
	Totals	6	12	10	43	5	3	6	15	2	3	7	2	3	7	2	3	7	2	3	7	6	105	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1		
	Non-general diseases of the skin and genito-urinary system and annexa	10 to 19																																						
20 to 29																																								
30 to 39																																								
40 to 49																																								
50 to 59																																								
60 to 69																																								
70 to 79																																								
80 and over																																								
Totals		25	2	17	16	100	3	11	3	9	22	5	2	7	2	14	21	8	5	2	7	2	14	21	8	5	2	7	2	14	21	8	5	2	7	2	14	21		

TABLE 21.—DEATHS BY OCCUPATIONS

	Motormen	Officials and superintendents	Switchmen, flagmen and yardmen	Ticket and station agents	Other pursuits	Express, Post, Telegraph and Telephone	Express messengers and railway mail clerks	Janitors	Mail carriers	Telegraph operators	Telephone operators	Other pursuits
Pneumonia												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59		1		1	1							
60 to 69					1							
70 to 79												
80 and over												
Totals	2	1	4	2	4		1		2			
Diseases of the respiratory system (pneumonia and tuberculosis excepted)												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59												
60 to 69												
70 to 79												
80 and over												
Totals	1	1	1	1	1		1		1			1
Diseases of the digestive system												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59												
60 to 69												
70 to 79												
80 and over												
Totals												
Nonvenereal diseases of the genito-urinary system and anus												
10 to 19												
20 to 29												
30 to 39												
40 to 49												
50 to 59												
60 to 69												
70 to 79												
80 and over												
Totals	4	2	23	4	10		2		6	2	1	1

AND AGE GROUPS, NEW JERSEY, 1930—Continued

TRADE	Bankers, brokers and moneylenders	Clerks in stores	Deliverymen	Laborers	Rent estate and insurance agents and officials	Salesmen and saleswomen	Undertakers	Wholesale and retail dealers	Other pursuits	PUBLIC SERVICE (NOT ELSEWHERE CLASSIFIED)	Firemen (fire department)	Laborers (public service)	Marshals, sheriffs, detectives, etc.	Officials and inspectors (city, county, state, U. S.)	Police-men	Soldiers, sailors and marines	Other pursuits
Pneumonia																	
10 to 19																	
20 to 29																	
30 to 39																	
40 to 49																	
50 to 59																	
60 to 69																	
70 to 79																	
80 and over																	
Totals	1	1	1	1	1	1	1	10	6	1	1	1	1	1	2	1	4
Diseases of the respiratory system (pneumonia and tuberculosis excepted)																	
10 to 19																	
20 to 29																	
30 to 39																	
40 to 49																	
50 to 59																	
60 to 69																	
70 to 79																	
80 and over																	
Totals	1	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	1
Diseases of the digestive system																	
10 to 19																	
20 to 29																	
30 to 39																	
40 to 49																	
50 to 59																	
60 to 69																	
70 to 79																	
80 and over																	
Totals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nonvenereal diseases of the genito-urinary system and anus																	
10 to 19																	
20 to 29																	
30 to 39																	
40 to 49																	
50 to 59																	
60 to 69																	
70 to 79																	
80 and over																	
Totals	4	5	5	5	1	4	1	4	1	1	1	1	1	1	6	1	12

TABLE 21.—DEATHS BY OCCUPATIONS

		PROFESSIONAL SERVICE													
		Architects	Authors, editors and reporters	Chemists, assayors, etc.	Civil and mining engineers and surveyors	Clergymen	Dentists	Designers, draftsmen and inventors	Lawyers, judges and justices	Musicians and teachers of music	Photographers	Physicians and surgeons	Teachers and other educators		
Pneumonia		10 to 19			1			1							
20 to 29															
30 to 39				1											
40 to 49															
50 to 59			1			1				1					
60 to 69															
70 to 79			1				1								1
80 and over					1										
Totals			1	2	2	1	6	1	2	1	2	1	1	7	
Diseases of the respiratory system (Influenza and tubercular excepted)		10 to 19													
20 to 29															
30 to 39															
40 to 49			1												
50 to 59				1											2
60 to 69			1		1										
70 to 79					1										1
80 and over						2									
Totals			2	1	3		1	1	1	1			3		
Diseases of the circulatory system		10 to 19													
20 to 29															
30 to 39				1	1	1		1						4	
40 to 49				1		4		2						2	
50 to 59					2	1		2						2	
60 to 69						3		1						3	
70 to 79						1								1	
80 and over				1										1	
Totals			1	4	2	12	2	3	13	8			8	14	
Nonvenereal diseases of the genito-urinary system and annexa		10 to 19													
20 to 29															1
30 to 39														2	
40 to 49														1	
50 to 59													4		1
60 to 69								2							2
70 to 79			2											1	3
80 and over				2				1							1
Totals			1	4	3	13		3	9	8			5	5	15

AND AGE GROUPS, NEW JERSEY, 1930—Continued

Other professional and semi-professional pursuits																					
DOMESTIC AND PERSONAL SERVICE																					
Barbers, hairdressers and manicurists																					
Bar-tenders																					
Hotel keepers and managers																					
Housekeepers and stewards																					
Janitors and sextons																					
Lanolin-ers and laundresses																					
Porters (except in stores)																					
Restaurant, cafe and lunch room keepers																					
Shooinkeepers																					
Servants																					
Waiters																					
Other Pursuits																					
CLERICAL OCCUPATIONS																					
Agents, canvassers and collectors																					
Bookkeepers, cashiers and accountants																					
Clerks (except clerks in stores)																					
Other clerical pursuits																					
Grand Total																					
1															23						
1															32						
1															199						
4															255						
1															263						
1															234						
1															125						
1															61						
Totals	12	3		1	392	16	3	2	5				32	3	12	3	11	39	5	1241	
1																				6	
1																				68	
1																				87	
1																				130	
1																				185	
1																				118	
1																				69	
Totals	5	6	2	1	223	6	1	2	3	1			11	4	2	2	6	12	5	651	
1																				80	
3																				2	
4																				204	
4																				254	
1																				496	
7																				446	
3																				8	
2																				2	
2																				152	
2																				52	
Totals	24	10		6	631	12	6	3	8	1			40	21	17		2	22	60	11	1881
1																				2	
1																				18	
1																				98	
1																				256	
1																				470	
1																				668	
1																				5	
9																				883	
7																				768	
2																				317	
Totals	26	16	3	7	1476	16	14	6	8	2			56	6	14		6	35	85	16	3593

TABLE 21.—DEATHS BY OCCUPATIONS

	Glass industries	Iron, steel and other metal industries	Leather industries	Lumber and furniture industries	Potteries	Rubber industries	Textile industries	Other industries	Machinists, millwrights and toolmakers	Managers, superintendents and foremen (manufacturing)	Manufacturers and craftsmen	Mechanics (gunsmiths, locksmiths, wheelwrights, etc.)
Violent deaths (suicide excluded)												
10 to 19	1	3						1	1			
20 to 29	1	3						1	3			
30 to 39	3	3						6	3			
40 to 49	6	2						5	5			
50 to 59	1	1						3	12			
60 to 69	1							3	5			
70 to 79								1	2			
80 and over	1							1	1			
Totals	2	18		2		2	3	23	29	27	9	28
All other deaths (suicide excluded)												
10 to 19	1	4						1	4			
20 to 29	3	3						1	8			
30 to 39	1	1						3	17			
40 to 49	2	1						5	54			
50 to 59	1	1						4	36			
60 to 69	1							2	64			
70 to 79								3	50			
80 and over								2	33			
Totals	9	11		2		1	10	35	20	9	15	33
Summary												
10 to 19	1	4				1	1	4	8			3
20 to 29	3	15				3	3	9	27			33
30 to 39	4	18				5	5	14	41			38
40 to 49	9	30				6	6	26	77			55
50 to 59	2	3				3	3	7	46			29
60 to 69	1	1				1	1	3	39			11
70 to 79	1	2				1	1	2	16			7
80 and over	2	3				2	2	3	23			10
Totals	14	141	4	15	9	22	27	172	596	281	180	116

AND AGE GROUPS, NEW JERSEY, 1930—Continued

	Millers (grain, flour, feed, etc.)	Milliners and millinery dealers	Molders, founders and casters	Painters, glaziers, varnishers, enamellers, etc.	Paperhangers	Printers	Plumbers and gas and steam fitters	Freshmen (painting)	Roofers and slaters	Semi-skilled operatives (industry not stated)	Chemical industries	Cigar and tobacco factories	Clay and stone industries (excepting potteries)	Clothing industries	Food industries	Glass industries	Iron, steel and other metal industries	Leather industries	Lumber and furniture industries	
Violent deaths (suicide excluded)																				
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	1	10		3	7	1	1	1	1	2	1		2	3		9	3	1		
All other deaths (suicide excluded)																				
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	1	9	43	3	23	9	4	9	5	3	8	6		1	32	5	2			
Summary																				
10 to 19																				
20 to 29																				
30 to 39																				
40 to 49																				
50 to 59																				
60 to 69																				
70 to 79																				
80 and over																				
Totals	6	26	3	2	12	4	4	10	3	2	4	8	7	1	18	3	2			

TABLE 21.—DEATHS BY OCCUPATIONS

	Potteries	Rubber Industries	Textile Industries	Other Industries	Shoemakers and cobblers (not in factory)	Stonecutters	Tailors and tailoresses	Thsmiths and coopersmiths	Upholsterers	Other manufacturing and mechanical industries	TRANSPORTATION	Water
Suicides												
10 to 19	1	1	1	1	1					1		
20 to 29										1		
30 to 39	1	1	1	1	1					1		
40 to 49			1	1	1			1	1	1		
50 to 59	1		3	3	1			1	1	1		
60 to 69			3	3				1	1	1		
70 to 79			3	3				1	1	1		
80 and over			2	2						1		
Totals	1	2	14	7	2		2	2		5		
Violent deaths (excepted)												
10 to 19										1		
20 to 29		1	4	4	1					1		
30 to 39		1	4	9	9					1		
40 to 49		2	8	8	5		2	1		10		
50 to 59	1	2	8	3	1		1	1		7		
60 to 69	1	1	3	3	1		1	1		1		
70 to 79		1	3	3	2		2	2		2		
80 and over		1	1	1	1			2				
Totals	3	5	31	43	8		8	4	1	26		
All other causes of death												
10 to 19			2	4						1		
20 to 29			4	1						2		
30 to 39		1	1	1						1		
40 to 49	1	1	3	3			4			1		
50 to 59	2		7	2			1	1		1		
60 to 69			2	2			1	1		5		
70 to 79			4	3	1		1	1		1		
80 and over			2	1	1							
Totals	3	2	20	15	3	3	5	1	2	12		
Summary												
10 to 19	1	1	10	25	1		1			3		
20 to 29	1	5	37	45	2		2			19		
30 to 39	1	6	35	32	1		14	1		26		
40 to 49	1	3	32	37	1		4	4		24		
50 to 59	1	3	32	32	2		2	2		36		
60 to 69	1	1	13	12	2		2	2		12		
70 to 79	1	1	8	8	3		3	3		11		
80 and over	1	3	15	8	2		2	2		7		
Totals	52	47	404	318	112	33	123	44	22	169		

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	Boatmen, canal men, sailors and deck hands	Loughshoremen and stevedores	Other pursuits	Road and street	Carrriage and hack drivers, draymen, teamsters and expressmen	Chauffeurs	Contractors and foremen (road building)	Garage keepers and managers	Laborers (road building) and street cleaners	Livery stable keepers and managers, bootlers and stable hands	Other pursuits	Railroad	Baggage men and freight agents	Brakemen	Conductors	Foremen, overseers and inspectors	Laborers	Locomotive engineers	Locomotive firemen	
Suicides																				
10 to 19							1													
20 to 29							3		1											
30 to 39							2		2											
40 to 49		1					3		1											1
50 to 59							3													
60 to 69							1													
70 to 79							1													
80 and over							1													
Totals	1						9		2											1
Violent deaths (excepted)																				
10 to 19							9		2											
20 to 29							7		1											
30 to 39							6		3											
40 to 49							26		10											
50 to 59							4		4											
60 to 69							9		8											
70 to 79							1		1											
80 and over							1		1											
Totals	15	6	9			30	50	2	6	10	5	7	1	13	4	5	23	4	2	
All other causes of death																				
10 to 19							1													
20 to 29							1													
30 to 39							7		2											
40 to 49							7													
50 to 59							3													
60 to 69							1													
70 to 79							2													
80 and over							1													
Totals	3	1	4			9	23	1	6	1	1	1	1	2	5	1	12	1	2	
Summary																				
10 to 19	7	1	1				11		85	1										3
20 to 29	8	5	8				10		66	1										
30 to 39	13	16	7				31		67	1										
40 to 49	13	12	10				39		27	4										
50 to 59	14	8	14				41		10	2										
60 to 69	8	2	18				20		4	6										
70 to 79	7		13				6			3										
80 and over	7									2										
Totals	70	44	71			171	271	13	38	82	25	33	10	47	45	53	129	54	11	

TABLE 21.—DEATHS BY OCCUPATIONS

	OCCUPATIONS											
	Motormen	Officials and superintendents	Switchmen, flagmen and yardmen	Ticket and station agents	Other pursuits	Express, Post, Telegraph and Telephone	Express messengers and railway mail clerks	Linemen	Mail carriers	Telegraph operators	Telephone operators	Other pursuits
Suicide	10 to 19											
	20 to 29											
	30 to 39											
	40 to 49											
	50 to 59											
	60 to 69			2								
	70 to 79					1				1	1	
	80 to 89											
	90 and over											
Totals			2		1				1	1	1	
Violent deaths (intoxicants excluded)	10 to 19											
	20 to 29											2
	30 to 39											
	40 to 49	1		1	2							
	50 to 59	2		1	1	1						
	60 to 69	1	1	2	1	1						
	70 to 79					1						1
	80 to 89											
	90 and over											
Totals	4	1	4	4	4		2	3	2	3	4	
All other diseases and causes of death	10 to 19											2
	20 to 29			1	1	1						1
	30 to 39											
	40 to 49								1	2	1	
	50 to 59											
	60 to 69			1								
	70 to 79			1								1
	80 to 89											
	90 and over											
Totals		1	6	1	1			1	3	2	5	
Summary	10 to 19											4
	20 to 29											1
	30 to 39			3	3	1						9
	40 to 49	3		1	3	6						3
	50 to 59	7	1	10	9	3						6
	60 to 69	6	2	17	4	14						3
	70 to 79	1	2	23	3	17						2
	80 to 89	1	1	3	4	5						7
	90 and over	1	1	3	4	5						2
Totals	25	12	94	31	60		8	8	35	28	25	

AND AGE GROUPS, NEW JERSEY, 1930—Continued

	TRADE																	
	Bankers, brokers and moneylenders	Clerks in stores	Deliverymen	Laborers	Real estate and insurance agents and officials	Salesmen and saleswomen	Undertakers	Wholesale and retail dealers	Other pursuits	PUBLIC SERVICE (NOT ELSEWHERE CLASSIFIED)	Firemen (fire department)	Laborers (public service)	Marshals, sheriffs, detectives, etc.	Officials and inspectors (city, county, state, U. S.)	Police	Soldiers, sailors and marines	Other pursuits	
Suicide	10 to 19																	
	20 to 29																	
	30 to 39																	
	40 to 49																	
	50 to 59																	
	60 to 69																	
	70 to 79																	
	80 to 89																	
	90 and over																	
Totals																		
Violent deaths (intoxicants excluded)	10 to 19																	
	20 to 29																	
	30 to 39																	
	40 to 49																	
	50 to 59																	
	60 to 69																	
	70 to 79																	
	80 to 89																	
	90 and over																	
Totals																		
All other diseases and causes of death	10 to 19																	
	20 to 29																	
	30 to 39																	
	40 to 49																	
	50 to 59																	
	60 to 69																	
	70 to 79																	
	80 to 89																	
	90 and over																	
Totals																		
Summary	10 to 19																	
	20 to 29																	
	30 to 39																	
	40 to 49																	
	50 to 59																	
	60 to 69																	
	70 to 79																	
	80 to 89																	
	90 and over																	
Totals																		
Totals	105	82	25	47	27	49	26	110	82	48	68	17	126	134	16	829		

TABLE 22.—TABULATION OF DEATHS IN ATLANTIC COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	AGE PERIODS										Total	Rate per 1,000 population, 1930							
			Under 1 year		1 to 4 years		5 to 9		10 to 19		20 to 39				40 to 59		60 to 79		80 and over		
			Male	Female	Color, if other than white	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9			10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever	4	4						1	1	1										
2	Typhus fever																				
3	Malaria																				
4	Smallpox																				
5	Measles																				
6	Scarlet fever	1																			
7	Diphtheria and group	19	12	7					1	1	1	1	1	1	1	1	1	1	1	1	
8	Whooping cough																				
9	Influenza	19	12	7																	
10	Asiatic cholera	3	2	1																	
11	Cholera nostras	3	2	1																	
12	Typhoid meningitis	6	4	2																	
13	Tuberculous meningitis	9	8	1																	
14	Other forms of tuberculous meningitis	1	1																		
15	Other forms of tuberculous meningitis (under 2 years)	1	1																		
16	Cerebral meningitis and typhilitis	100	79	21					4	4	4	4	4	4	4	4	4	4	4	4	
17	Styphoid meningitis	1																			
18	Cerebral meningitis and softening	127	45	82					4	1	0	1	0	1	1	1	1	1	1	1	1
19	Organic diseases of the heart	425	243	182					1	1	1	1	1	1	1	1	1	1	1	1	1
20	Bronchitis	2																			
21	Pneumonia	54	32	22					3	3	1	4	4	4	4	4	4	4	4	4	
22	Other forms of the respiratory system (tuberculous excepted)	43	10	33					19	0											
23	Influenza and enteritis (under 2 years)	10	8	2					15	1		1	1	1	1	1	1	1	1	1	
24	Diarrhoea and enteritis (cancer excepted)	21	8	13					11	1		4	2	2	2	2	2	2	2	2	
25	Diarrhoea and enteritis (under 2 years)	21	8	13					11	1		4	2	2	2	2	2	2	2	2	
26	Paratyphoid and typhilitis	17	10	7					24	1		2	2	2	2	2	2	2	2	2	
27	Dysentery	1							1	1	1	1	1	1	1	1	1	1	1	1	
28	Cirrhosis of the liver	16	7	9					4	1	0	1	1	1	1	1	1	1	1	1	
29	Acute nephritis and Bright's disease	154	74	80					20	2	3	0	13	20	27	44	10	5			
30	Noncancerous tumors and other diseases of the female genital organs (tonitis)	6							3	1											
31	Other neoplasms (cancer excepted) fever, pertussis	3							3	1											
32	Other periparturient accidents of pregnancy & labor	7							3	1											
33	Other periparturient accidents of pregnancy & labor	58	31	27					68	5	5										
34	Congenital debility and malformations	35	27	8																	
35	Scalds	1							1	1	1	1	1	1	1	1	1	1	1	1	
36	Suicide	1							1	1	1	1	1	1	1	1	1	1	1	1	
37	Violent death (suicide excepted)	117	71	46					24	4	3	2	1	1	1	1	1	1	1	1	
38	Other diseases	135	114	21					44	12	3	2	1	1	1	1	1	1	1	1	
39	Unknown or ill-defined diseases	1							1	1	1	1	1	1	1	1	1	1	1	1	
Total		1570	850	720	388	118	21	6	3	2	745	23	48	70	100	188	247	314	290	115	24

Estimated population, 125,621.

Total resident deaths, 1,679.

Rate per 1,000 population, 13.5.

TABULATION OF DEATHS IN ATLANTIC CITY FOR 1930 ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	AGE PERIODS										Total	Rate per 1,000 population, 1930							
			Under 1 year		1 to 4 years		5 to 9		10 to 19		20 to 39				40 to 59		60 to 79		80 and over		
			Male	Female	Color, if other than white	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9			10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever	3	3																		
2	Typhus fever																				
3	Malaria																				
4	Smallpox																				
5	Measles																				
6	Scarlet fever																				
7	Diphtheria and group	2	1	1																	
8	Whooping cough																				
9	Influenza	7	6	1																	
10	Asiatic cholera																				
11	Cholera nostras																				
12	Typhoid meningitis	2	2																		
13	Tuberculous meningitis	62	30	32																	
14	Other forms of tuberculous meningitis	4	1	3																	
15	Other forms of tuberculous meningitis (under 2 years)	80	37	43																	
16	Cerebral meningitis and typhilitis	6	4	2																	
17	Styphoid meningitis	64	27	37																	
18	Cerebral meningitis and softening	239	160	79																	
19	Organic diseases of the heart	63	37	26																	
20	Bronchitis	2																			
21	Pneumonia	32	20	12																	
22	Other forms of the respiratory system (tuberculous excepted)	31	15	16																	
23	Influenza and enteritis (under 2 years)	3	12	1																	
24	Diarrhoea and enteritis (cancer excepted)	16	1	15																	
25	Diarrhoea and enteritis (under 2 years)	16	1	15																	
26	Paratyphoid and typhilitis	10	7	3																	
27	Dysentery	8	5	3																	
28	Cirrhosis of the liver	8	8																		
29	Acute nephritis and Bright's disease	88	46	42																	
30	Noncancerous tumors and other diseases of the female genital organs (tonitis)	5																			
31	Other neoplasms (cancer excepted) fever, pertussis	2																			
32	Other periparturient accidents of pregnancy & labor	2																			
33	Other periparturient accidents of pregnancy & labor	30	14	16																	
34	Congenital debility and malformations	11	6	5																	
35	Scalds	2																			
36	Suicide	11	6	5																	
37	Violent death (suicide excepted)	56	38	18																	
38	Other diseases	125	73	52																	
39	Unknown or ill-defined diseases	1																			
Total		888	484	404	263	62	11	2	1	78	11	23	47	75	137	161	108	134	44	10	1

Estimated population, 66,576.

Total resident deaths, 888.

Rate per 1,000 population, 13.2.

TABULATION OF DEATHS IN CLIFFSIDE PARK BOROUGH FOR 1880, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat. List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS										Total					
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	Typhoid fever																				
2	Typhus fever																				
3	Malaria																				
4	Smallpox																				
5	Scarlet fever																				
6	Scarlet fever																				
7	Whooping cough																				
8	Diphtheria and croup																				
9	Diphtheria and croup																				
10	Acute cholera																				
11	Acute cholera																				
12	Other epidemic diseases																				
13	Tuberculosis of the lungs	7	4	3																	
14	Tuberculosis meningitis	19	11	8																	
15	Other forms of tuberculosis	7	4	3																	
16	Other forms of tuberculosis	19	11	8																	
17	Cerebral hemorrhage and softening	13	13																		
18	Cerebral hemorrhage and softening	31	18	13																	
19	Organic diseases of the heart	6	5	1																	
20	Organic diseases of the heart	1																			
21	Pneumonia																				
22	Pneumonia																				
23	Other diseases of the respiratory system (tuberculosis excepted)	5	4	1																	
24	Diseases of the stomach (cancer excepted)	2	2																		
25	Diseases of the stomach (cancer excepted)	1																			
26	Apoplexy and epilepsy (under 2 years)																				
27	Hernia, intestinal obstruction	1	1																		
28	Chirrhosis of the liver	4	2	2																	
29	Acute nephritis and Bright's disease																				
30	Acute nephritis and Bright's disease of the female genital organs (puerperal fever, peritonitis)	1	1																		
31	Puerperal septicaemia (puerperal fever, peritonitis)																				
32	Puerperal accidents of pregnancy & labor	1																			
33	Conjunctival discharges	5	5																		
34	Scalds and burns	3	3																		
35	Selfie	4	4																		
36	Violent deaths (suicide excepted)	10	7	3																	
37	Violent deaths (suicide excepted)																				
38	Unknown or ill-defined diseases																				
	Total	110	68	42		10	1	1	1	1	2	14	10	2	10	6	17	26	18	6	

Estimated population, 16,500. Total resident deaths, 116. Rate per 1,000 population, 7.4.

TABULATION OF DEATHS IN ENGLEWOOD CITY FOR 1880, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat. List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS										Total						
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	Typhoid fever																					
2	Typhus fever																					
3	Malaria																					
4	Smallpox																					
5	Menses																					
6	Scarlet fever																					
7	Scarlet fever																					
8	Diphtheria and croup																					
9	Diphtheria and croup																					
10	Acute cholera																					
11	Acute cholera																					
12	Other epidemic diseases																					
13	Tuberculosis of the lungs	0	0	0																		
14	Tuberculosis meningitis	1	1																			
15	Other forms of tuberculosis	2	1	1																		
16	Other forms of tuberculosis	20	8	12																		
17	Simple meningitis malignant tumors	31	10	21																		
18	Cerebral hemorrhage and softening	4	4																			
19	Organic diseases of the heart																					
20	Organic diseases of the heart	5	5																			
21	Pneumonia	4	4																			
22	Pneumonia	5	5																			
23	Other diseases of the respiratory system (tuberculosis excepted)	2	2																			
24	Diseases of the stomach (cancer excepted)																					
25	Diseases of the stomach (cancer excepted)	2	2																			
26	Apoplexy and epilepsy (under 2 years)																					
27	Hernia, intestinal obstruction																					
28	Chirrhosis of the liver	1	1																			
29	Acute nephritis and Bright's disease	21	12	9																		
30	Acute nephritis and Bright's disease of the female genital organs (puerperal fever, peritonitis)	1	1																			
31	Puerperal septicaemia (puerperal fever, peritonitis)																					
32	Puerperal accidents of pregnancy & labor	1	0	1																		
33	Conjunctival discharges and inflammations	7	7																			
34	Scalds and burns	8	8																			
35	Selfie	4	4																			
36	Violent deaths (suicide excepted)	17	11	6																		
37	Violent deaths (suicide excepted)																					
38	Unknown or ill-defined diseases																					
	Total	161	81	80		11	1	1	1	1	1	13	4	5	10	6	21	30	31	21	6	

Estimated population, 17,065. Total resident deaths, 161. Rate per 1,000 population, 8.9.

TABULATION OF DEATHS IN GARFIELD CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH		AGE PERIODS																			
	Total	Male	Female	Color, If other than white	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown	
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
32																						
33																						
34																						
35																						
36																						
37																						
38																						
Total	213	120	84	4	84	3	2	1	1	40	8	15	10	17	30	39	35	13	5			

Estimated population, 20,992.

Total resident deaths, 213.

Rate per 1,000 population, 7.1.

TABULATION OF DEATHS IN HACKENSACK CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH		AGE PERIODS																			
	Total	Male	Female	Color, If other than white	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown	
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
32																						
33																						
34																						
35																						
36																						
37																						
38																						
Total	268	136	120	88	18	8	1	1	1	22	7	8	8	21	28	31	50	55	20	6		

Estimated population, 24,796.

Total resident deaths, 268.

Rate per 1,000 population, 10.3.

TABULATION OF DEATHS IN LODI BOROUGH FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS												Rate per 1,000 population, 8.2.					
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59		60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	Typhoid fever																						
2	Malaria																						
3	Smallpox																						
4	Scarlet fever																						
5	Measles																						
6	Diphtheria and croup																						
7	Whooping cough																						
8	Indiennas																						
9	Asiatic cholera																						
10	Cholera nostras																						
11	Cholera infantum																						
12	Other diseases of the lungs																						
13	Tuberculosis of the lungs																						
14	Tuberculosis meningitis																						
15	Other forms of tuberculosis																						
16	Other forms of tuberculous																						
17	Simple meningitis																						
18	Cerebral hemorrhage and softening																						
19	Organic diseases of the heart																						
20	Myocarditis																						
21	Bronchitis																						
22	Other diseases of the respiratory system (tuberculosis excepted)																						
23	Diseases of the stomach (cancer excepted)																						
24	Diarrhoea and enteritis (under 2 years)																						
25	Other diseases of the intestines																						
26	Hernia, intestinal obstruction																						
27	Other diseases of the liver																						
28	Cirrhosis of the liver																						
29	Acute nephritis and Bright's disease																						
30	Nephritis and other diseases of the genito-urinary system (gonorrhoea and syphilis excepted)																						
31	Puerperal septicaemia (puerperal fever, peritonitis)																						
32	Other puerperal accidents of pregnancy & labor																						
33	Other puerperal accidents of pregnancy & labor																						
34	Septicemia																						
35	Sepsis																						
36	Suicide																						
37	Violent deaths (suicide excepted)																						
38	Other deaths																						
39	Unknown or ill-defined diseases																						
Total		96	54	42	5	18	2				8	23	4	10	5	7	8	14	10	7	1		

Estimated population, 11,833.

Total resident deaths, 96.

Rate per 1,000 population, 8.2.

TABULATION OF DEATHS IN RIDGEFIELD PARK FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS												Rate per 1,000 population, 9.8.					
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59		60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	Typhoid fever																						
2	Malaria																						
3	Smallpox																						
4	Scarlet fever																						
5	Measles																						
6	Diphtheria and croup																						
7	Whooping cough																						
8	Indiennas																						
9	Asiatic cholera																						
10	Cholera nostras																						
11	Cholera infantum																						
12	Other diseases of the lungs																						
13	Tuberculosis of the lungs																						
14	Tuberculosis meningitis																						
15	Other forms of tuberculosis																						
16	Other forms of tuberculous																						
17	Simple meningitis																						
18	Cerebral hemorrhage and softening																						
19	Organic diseases of the heart																						
20	Myocarditis																						
21	Bronchitis																						
22	Other diseases of the respiratory system (tuberculosis excepted)																						
23	Diseases of the stomach (cancer excepted)																						
24	Diarrhoea and enteritis (under 2 years)																						
25	Other diseases of the intestines																						
26	Hernia, intestinal obstruction																						
27	Other diseases of the liver																						
28	Cirrhosis of the liver																						
29	Acute nephritis and Bright's disease																						
30	Nephritis and other diseases of the genito-urinary system (gonorrhoea and syphilis excepted)																						
31	Puerperal septicaemia (puerperal fever, peritonitis)																						
32	Other puerperal accidents of pregnancy & labor																						
33	Other puerperal accidents of pregnancy & labor																						
34	Septicemia																						
35	Sepsis																						
36	Suicide																						
37	Violent deaths (suicide excepted)																						
38	Other deaths																						
39	Unknown or ill-defined diseases																						
Total		107	60	47	8	1					1	1	1	6	8	10	22	21	17	14	2		

Estimated population, 30,817.

Total resident deaths, 107.

Rate per 1,000 population, 9.8.

TABULATION OF DEATHS IN BURLINGTON COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS								Rate per 1,000 population, 1,109.											
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19		20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown		
1	Typhoid fever	8		8																					
2	Typhus fever																								
3	Malaria																								
4	Smallpox																								
5	Measles	2		2		1																			
6	Scarlet fever	2		2		1																			
7	Whooping cough	2		2		1																			
8	Diphtheria and croup	1		1		1																			
9	Influenza	11	7	4		1																			
10	Asiatic cholera																								
11	Cholera nostras																								
12	Other epidemics disease	2		2																					
13	Tuberculosis of the lungs	51	22	29		12																			
14	Tuberculosis meningitis																								
15	Other forms of tuberculosis	5	4	1		1																			
16	Cancer and other malignant tumors	122	49	73		8																			
17	Simple meningitis	1		1																					
18	Cerebral hemorrhage and softening	81	46	35		6																			
19	Organic diseases of the heart	259	140	119		18																			
21	Bronchitis	4		4																					
22	Pneumonia	4		4		3																			
23	Other diseases of the respiratory system (tuberculosis excepted)	56	29	27		6																			
24	Diseases of the stomach (cancer excepted)	33	23	10		5																			
25	Diarrhoea and enteritis (under 2 years)	12	9	3		2																			
26	Appendicitis and typhlitis	19	12	7		2																			
27	Hernia, intestinal obstruction	10	8	2		2																			
28	Glands of the liver	6	3	3		1																			
29	Acute nephritis and Bright's disease	6	4	2		1																			
30	Nonaeceros tumors and other diseases of the female genital organs	138	61	75		15																			
31	Puerperal septicæmia (puerperal fever, peritonitis)	4		4		1																			
33	Other puerperal accidents of pregnancy & labor	1		1																					
34	Congenital debility and malformations	6		6																					
35	Senility	48	23	25		7																			
36	Stroke	8	2	6		1																			
37	Violent deaths (suicide excepted)	12	11	1																					
92	Other diseases	92	55	37		5																			
118	Unknown or ill-defined diseases	118	65	53		9																			
	Total	1109	583	526		90																			

Estimated population, 93,828. Total resident deaths, 1,109. Rate per 1,000 population, 11.8.

TABULATION OF DEATHS IN BURLINGTON CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS								Rate per 1,000 population, 12.4.												
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19		20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown			
1	Typhoid fever	1		1																						
2	Typhus fever																									
3	Malaria																									
4	Smallpox																									
5	Measles	1		1		1																				
6	Scarlet fever																									
7	Whooping cough																									
8	Diphtheria and croup	1		1																						
9	Influenza																									
10	Asiatic cholera																									
11	Cholera nostras																									
12	Other epidemics disease																									
13	Tuberculosis of the lungs	9	3	6		4																				
14	Tuberculosis meningitis																									
15	Other forms of tuberculosis	1		1																						
16	Cancer and other malignant tumors	10	7	3		1																				
17	Simple meningitis	6		6																						
18	Cerebral hemorrhage and softening	6	1	5		1																				
19	Organic diseases of the heart	42	24	18		4																				
21	Bronchitis	8		8		3																				
22	Pneumonia	8	8			2																				
23	Other diseases of the respiratory system (tuberculosis excepted)	3	2	1		1																				
24	Diseases of the stomach (cancer excepted)	1		1																						
25	Diarrhoea and enteritis (under 2 years)	2		2																						
26	Appendicitis and typhlitis	1		1																						
27	Hernia, intestinal obstruction	1		1																						
28	Cirrhosis of the liver	19	6	13		4																				
29	Acute nephritis and Bright's disease	2		2		1																				
30	Nonaeceros tumors and other diseases of the female genital organs	2		2																						
31	Puerperal septicæmia (puerperal fever, peritonitis)																									
32	Other puerperal accidents of pregnancy & labor																									
33	Congenital debility and malformations	2	1	1		2																				
34	Senility	1		1																						
35	Stroke	12	5	7		1																				
36	Violent deaths (suicide excepted)	13	6	7		2																				
37	Other diseases	1		1																						
38	Unknown or ill-defined diseases	1		1																						
	Total	136	66	70		28																				

Estimated population, 10,888. Total resident deaths, 136. Rate per 1,000 population, 12.4.

TABULATION OF DEATHS IN COLLINGSWOOD BOROUGH FOR 1890, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	AGE PERIODS										Total	Male	Female if other than white				
		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39				40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever																	
2	Typhus fever																	
3	Malaria																	
4	Smallpox																	
5	Measles																	
6	Scarlet fever																	
7	Diphtheria and croup																	
8	Whooping cough																	
9	Infuenza																	
10	Asiatic cholera																	
11	Cholera nostras																	
12	Cholera infantum																	
13	Tuberculosis of the lungs																	
14	Tuberculosis meningitis																	
15	Tuberculosis of other organs																	
16	Other forms of tuberculosis																	
17	Stomach and other malignant tumors																	
18	Cerebral hemorrhage and softening																	
19	Organic diseases of the heart																	
20	Coronary atherosclerosis																	
21	Chlorosis																	
22	Other diseases of the respiratory system (tuberculosis excepted)																	
23	Diarrhea and enteritis (under 2 years)																	
24	Appendicitis																	
25	Hernia, intestinal obstruction																	
26	Hernia, intestinal obstruction																	
27	Obstruction of the bile ducts																	
28	Cirrhosis of the liver																	
29	Scute hepatitis and Bright's disease																	
30	Other diseases of the liver and other diseases of the female genitalia (menstrual fever, excepted)																	
31	Puerperal septicemia (puerperal fever, septicaemia)																	
32	Other accidents of pregnancy & labor																	
33	Congenital debility and malformations																	
34	Senility																	
35	Intoxication																	
36	Suicide																	
37	Other deaths (suicide excepted)																	
38	Unknown or ill-defined diseases																	
39	Total	137	64	73	5	1	1	1	1	2	4	13	24	24	36	22	2	1

Estimated population, 12,621. Total resident deaths, 137. Rate per 1,000 population, 10.6.

TABULATION OF DEATHS IN GLOUCESTER CITY FOR 1890, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	AGE PERIODS										Total	Male	Female if other than white				
		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39				40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever																	
2	Typhus fever																	
3	Malaria																	
4	Smallpox																	
5	Measles																	
6	Scarlet fever																	
7	Diphtheria and croup																	
8	Whooping cough																	
9	Infuenza																	
10	Asiatic cholera																	
11	Cholera nostras																	
12	Cholera infantum																	
13	Tuberculosis of the lungs																	
14	Tuberculosis meningitis																	
15	Tuberculosis of other organs																	
16	Other forms of tuberculosis																	
17	Stomach and other malignant tumors																	
18	Cerebral hemorrhage and softening																	
19	Organic diseases of the heart																	
20	Coronary atherosclerosis																	
21	Chlorosis																	
22	Other diseases of the respiratory system (tuberculosis excepted)																	
23	Diarrhea and enteritis (under 2 years)																	
24	Appendicitis																	
25	Hernia, intestinal obstruction																	
26	Hernia, intestinal obstruction																	
27	Obstruction of the bile ducts																	
28	Cirrhosis of the liver																	
29	Scute hepatitis and Bright's disease																	
30	Other diseases of the liver and other diseases of the female genitalia (menstrual fever, puerperal septicemia, excepted)																	
31	Puerperal septicemia (puerperal fever, septicaemia)																	
32	Other accidents of pregnancy & labor																	
33	Congenital debility and malformations																	
34	Senility																	
35	Intoxication																	
36	Suicide																	
37	Other deaths (suicide excepted)																	
38	Unknown or ill-defined diseases																	
39	Total	102	69	69	21	3	1	3	1	1	3	10	22	38	28	7	1	1

Estimated population, 13,886. Total resident deaths, 162. Rate per 1,000 population, 11.7.

TABULATION OF DEATHS IN BRIDGETON CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internal List No., Cause of Death, Total, Male, Female, Color, Age Periods (Under 1 year to 90 and over), Unknown.

Estimated population, 15,733.

Total resident deaths, 244.

Rate per 1,000 population, 15.5.

TABULATION OF DEATHS IN MILLVILLE CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internal List No., Cause of Death, Total, Male, Female, Color, Age Periods (Under 1 year to 90 and over), Unknown.

Estimated population, 14,705.

Total resident deaths, 137.

Rate per 1,000 population, 12.7.

TABULATION OF DEATHS IN NEWARK CITY FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internat'l List No., Cause of Death, Total, Male, Female, Color, If other than white, AGE PERIODS (Under 1 year, 1 year, 2 years, 3 years, 4 years, Under 5 years, 5 to 9, 10 to 19, 20 to 29, 30 to 39, 40 to 49, 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, Unknown).

Total resident deaths, 5,844. Rate per 1,000 population, 12.0.

Estimated population, 448,015.

TABULATION OF DEATHS IN NUTLEY TOWN FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internat'l List No., Cause of Death, Total, Male, Female, Color, If other than white, AGE PERIODS (Under 1 year, 1 year, 2 years, 3 years, 4 years, Under 5 years, 5 to 9, 10 to 19, 20 to 29, 30 to 39, 40 to 49, 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, Unknown).

Total resident deaths, 174. Rate per 1,000 population, 8.3. Estimated population, 20,844.

TABULATION OF DEATHS IN HARRISON TOWN FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than White	AGE PERIODS											50 and over	Total
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49			50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever	108	36	72	14	4	2	20	3	4	13	20	21	29	34	10	5	
2	Typhus fever																	
3	Malaria																	
4	Smallpox																	
5	Diphtheria																	
6	Scarlet fever																	
7	Whooping cough																	
8	Diphtheria and croup																	
9	Influenza																	
10	Cholera																	
11	Cholera nostras																	
12	Other epidemic diseases																	
13	Tuberculosis of the lungs	10	8	2														
14	Tuberculosis meningitis																	
15	Tuberculosis of other organs	15	6	9														
16	Cancer and other malignant tumors	41	23	18														
17	Simple meningitis																	
18	Cerebral hemorrhage and softening																	
19	Cerebral diseases of the heart	22	12	10														
20	Bronchitis																	
21	Pneumonia	10	8	2														
22	Other diseases of the respiratory system	4	1	3														
23	(tuberculosis excepted) (cancer excepted)	4	1	3														
24	Diarrhoea and enteritis (under 2 years)	5	4	1														
25	Appendicitis and typhilitis	1	1															
26	Hernia, intestinal obstruction	2	1	1														
27	Acute nephritis and Bright's disease																	
28	Noncancerous tumors and other diseases of the female genital organs	23	12	11														
29	Puerperal septicemia (puerperal fever, peritonitis)	1	1															
30	Other puerperal accidents of pregnancy & labor	1	1															
31	Congenital debility and malformation	8	6	2														
32	Senility																	
33	Violent deaths (suicide excepted)	8	6	2														
34	Violent deaths (suicide excepted)	16	11	5														
35	Other diseases																	
36	Unknown or ill-defined diseases																	
37	Unknown or ill-defined diseases																	
38	Unknown or ill-defined diseases																	
	Total	108	36	72	14	4	2	20	3	4	13	20	21	29	34	10	5	

Estimated population, 15,001.

Total resident deaths, 108.

TABULATION OF DEATHS IN HOBOKEN CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than White	AGE PERIODS											50 and over	Total			
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49			50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever	1	1																		
2	Typhus fever																				
3	Malaria																				
4	Smallpox																				
5	Diphtheria																				
6	Scarlet fever	2	2																		
7	Whooping cough	4	4																		
8	Diphtheria and croup																				
9	Influenza	4	4																		
10	Cholera																				
11	Cholera nostras																				
12	Other epidemic diseases	4	2	2																	
13	Tuberculosis of the lungs	45	27	18																	
14	Tuberculosis meningitis																				
15	Tuberculosis of other organs	73	32	41																	
16	Cancer and other malignant tumors	30	30																		
17	Simple meningitis	2	2																		
18	Cerebral hemorrhage and softening	19	12	7																	
19	Cerebral diseases of the heart	21	12	9																	
20	Bronchitis	41	30	11																	
21	Pneumonia																				
22	Other diseases of the respiratory system	30	15	15																	
23	(tuberculosis excepted) (cancer excepted)	11	6	5																	
24	Diarrhoea and enteritis (under 2 years)																				
25	Appendicitis and typhilitis	11	7	4																	
26	Hernia, intestinal obstruction	8	8																		
27	Acute nephritis and Bright's disease	11	7	4																	
28	Noncancerous tumors and other diseases of the female genital organs	01	01																		
29	Puerperal septicemia (puerperal fever, peritonitis)	4	4																		
30	Other puerperal accidents of pregnancy & labor	2	2																		
31	Congenital debility and malformations	30	17	13																	
32	Senility	0	0																		
33	Violent deaths (suicide excepted)	53	44	9																	
34	Violent deaths (suicide excepted)	89	53	36																	
35	Other diseases																				
36	Unknown or ill-defined diseases																				
37	Unknown or ill-defined diseases																				
38	Unknown or ill-defined diseases																				
	Total	762	440	322	7	68	14	3	2	1	88	12	34	38	61	92	139	167	87	34	10

Estimated population, 69,291.

Total resident deaths, 762.

Rate per 1,000 population, 12.8.

TABULATION OF DEATHS IN JERSEY CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internat'l List No., Cause of Death, Total, Male, Female, Color, Under 1 year, 1 year, 2 years, 3 years, 4 years, Under 5 years, 5 to 9, 10 to 19, 20 to 29, 30 to 39, 40 to 49, 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, Total. Rows include Typhoid fever, Typhus fever, Cholera, Malaria, Smallpox, Measles, Scarlet fever, Whooping cough, Diphtheria and croup, Influenza, Asiatic cholera, Cholera nostris, Other epidemic diseases, Tuberculosis meningitis, Other forms of tuberculosis, Cancer and other malignant tumors, Cerebral meningitis and softening, Coronary diseases of the heart, Bronchitis, Pneumonia, Tuberculosis of the respiratory system, Tuberculosis of the stomach, Diarrhoea and enteritis, Appendicitis and typhlitis, Obstruction of the biliary tract, Cirrhosis of the liver, Acute nephritis and Bright's disease, Noncancerous tumors and other diseases of the female genital organs, Gonorrhoea, Syphilis, Other neuropathic accidents of pregnancy & labor, Congenital debility and malformations, Suicide, Sudden death, Violent deaths (suicide excepted), Other diseases, Unknown or ill-defined diseases.

Estimated population, 317,460.

Total resident deaths, 3,782.

Rate per 1,000 population, 11.0.

TABULATION OF DEATHS IN KEARNY TOWN FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Table with columns: Abridged Internat'l List No., Cause of Death, Total, Male, Female, Color, Under 1 year, 1 year, 2 years, 3 years, 4 years, Under 5 years, 5 to 9, 10 to 19, 20 to 29, 30 to 39, 40 to 49, 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, Total. Rows include Typhoid fever, Typhus fever, Cholera, Malaria, Smallpox, Measles, Scarlet fever, Whooping cough, Diphtheria and croup, Influenza, Asiatic cholera, Cholera nostris, Other epidemic diseases, Tuberculosis meningitis, Other forms of tuberculosis, Cancer and other malignant tumors, Cerebral meningitis and softening, Coronary diseases of the heart, Bronchitis, Pneumonia, Tuberculosis of the respiratory system, Tuberculosis of the stomach, Diarrhoea and enteritis, Appendicitis and typhlitis, Obstruction of the biliary tract, Cirrhosis of the liver, Acute nephritis and Bright's disease, Noncancerous tumors and other diseases of the female genital organs, Gonorrhoea, Syphilis, Other neuropathic accidents of pregnancy & labor, Congenital debility and malformations, Suicide, Sudden death, Violent deaths (suicide excepted), Other diseases, Unknown or ill-defined diseases.

Estimated population, 41,037.

Total resident deaths, 364.

Rate per 1,000 population, 8.8.

TABULATION OF DEATHS IN CARTERET BOROUGH FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat'l List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS																				
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown				
1	Typhoid fever																									
2	Typhus fever																									
3	Malaria																									
4	Smallpox																									
5	Measles																									
6	Scarlet fever																									
7	Whooping cough																									
8	Diphtheria and croup																									
9	Influenza																									
10	Asiatic cholera																									
11	Cholera nostras																									
12	Other epidemic diseases																									
13	Tuberculosis of the lungs																									
14	Tuberculosis meningitis																									
15	Other forms of tuberculosis																									
16	Cancer and other malignant tumors																									
17	Simple meningitis																									
18	Cerebral hemorrhage and softening																									
19	Organic diseases of the heart																									
20	Bronchitis																									
21	Pneumonia																									
22	Other diseases of the respiratory system (tuberculosis excepted)																									
23	Diseases of the stomach (cancer excepted)																									
24	Diarrhea and enteritis (under 2 years)																									
25	Appendicitis and typhilitis																									
26	Hernia, intestinal obstruction																									
27	Cirrhosis of the liver																									
28	Acute nephritis and Bright's disease																									
29	Noncancerous tumors and other diseases of the female genital organs																									
30	Puerperal septicemia (puerperal fever, peritonitis)																									
31	Other puerperal accidents of pregnancy & labor																									
32	Congenital debility and malformations																									
33	Senility																									
34	Suicide																									
35	Violent deaths (suicide excepted)																									
36	Other diseases																									
37	Unknown or ill-defined diseases																									
38	Unknown or ill-defined diseases																									
	Total	100	63	37	2	24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Estimated population, 13,395.

Total resident deaths, 100.

Rate per 1,000 population, 7.4.

TABULATION OF DEATHS IN NEW BRUNSWICK FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat'l List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS																								
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown								
1	Typhoid fever																													
2	Typhus fever																													
3	Malaria																													
4	Smallpox																													
5	Measles																													
6	Scarlet fever																													
7	Whooping cough																													
8	Diphtheria and croup																													
9	Influenza																													
10	Asiatic cholera																													
11	Cholera nostras																													
12	Other epidemic diseases																													
13	Tuberculosis of the lungs																													
14	Tuberculosis meningitis																													
15	Other forms of tuberculosis																													
16	Cancer and other malignant tumors																													
17	Simple meningitis																													
18	Cerebral hemorrhage and softening																													
19	Organic diseases of the heart																													
20	Bronchitis																													
21	Pneumonia																													
22	Other diseases of the respiratory system (tuberculosis excepted)																													
23	Diseases of the stomach (cancer excepted)																													
24	Diarrhea and enteritis (under 2 years)																													
25	Appendicitis and typhilitis																													
26	Hernia, intestinal obstruction																													
27	Cirrhosis of the liver																													
28	Acute nephritis and Bright's disease																													
29	Noncancerous tumors and other diseases of the female genital organs																													
30	Puerperal septicemia (puerperal fever, peritonitis)																													
31	Other puerperal accidents of pregnancy & labor																													
32	Congenital debility and malformations																													
33	Senility																													
34	Suicide																													
35	Violent deaths (suicide excepted)																													
36	Other diseases																													
37	Unknown or ill-defined diseases																													
38	Unknown or ill-defined diseases																													
	Total	407	217	190	36	42	6	4	4	4	2	54	3	6	29	38	51	56	70	69	22	9	9	9	9	9	9	9	9	9

Estimated population, 34,598.

Total resident deaths, 407.

Rate per 1,000 population, 11.7.

TABULATION OF DEATHS IN PERTH AMBOY CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	AGE PERIODS												Total	Male	Female	Color, if other than white														
		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59					60 to 69	70 to 79	80 to 89	90 and over	Unknown									
1	Typhoid fever																														
2	Typhus fever																														
3	Malaria																														
4	Scarlet fever																														
5	Measles																														
6	Scarlet fever																														
7	Whooping cough																														
8	Diphtheria and croup																														
9	Diphtheria																														
10	Acute cholera																														
11	Cholera nostris																														
12	Other epidemic diseases																														
13	Tuberculosis of the lungs																														
14	Tuberculosis of other organs																														
15	Other forms of tuberculosis																														
16	Cancer and other malignant tumors																														
17	Simple meningitis																														
18	Other forms of meningitis																														
19	Urethane disease and meningitis																														
20	Brain abscess																														
21	Encephalitis																														
22	Encephalitis																														
23	Other diseases of the respiratory system																														
24	Diseases of the stomach (cancer excepted)																														
25	Dysentery and enteritis (under 2 years)																														
26	Appendicitis and typhlitis																														
27	Other forms of intestinal obstruction																														
28	Diaphragmatic hernia																														
29	Acute nephritis and Bright's disease																														
30	Noncancerous tumors and other diseases of the female genital organs																														
31	Puerperal septicemia (puerperal fever, puerperal pyrexia)																														
32	Other puerperal accidents of pregnancy & labor																														
33	Congenital debility and malformations																														
34	Stillbirth																														
35	Sudden infant death																														
36	Violent death (suicide excepted)																														
37	Other diseases																														
38	Unknown or ill-defined diseases																														
	Total	404	230	168	15	28	3	2	1	1	4	10	24	29	43	53	58	74	45	21	2										

Estimated population, 43,500.

Total resident deaths, 404.

Rate per 1,000 population, 9.2.

TABULATION OF DEATHS IN SOUTH RIVER BOROUGH FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	AGE PERIODS												Total	Male	Female	Color, if other than white															
		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59					60 to 69	70 to 79	80 to 89	90 and over	Unknown										
1	Typhoid fever																															
2	Typhus fever																															
3	Malaria																															
4	Scarlet fever																															
5	Measles																															
6	Scarlet fever																															
7	Whooping cough																															
8	Diphtheria and croup																															
9	Diphtheria																															
10	Acute cholera																															
11	Cholera nostris																															
12	Other epidemic diseases																															
13	Tuberculosis of the lungs																															
14	Tuberculosis of other organs																															
15	Other forms of tuberculosis																															
16	Cancer and other malignant tumors																															
17	Simple meningitis																															
18	Other forms of meningitis																															
19	Urethane disease and meningitis																															
20	Brain abscess																															
21	Encephalitis																															
22	Encephalitis																															
23	Other diseases of the respiratory system																															
24	Diseases of the stomach (cancer excepted)																															
25	Dysentery and enteritis (under 2 years)																															
26	Appendicitis and typhlitis																															
27	Other forms of intestinal obstruction																															
28	Diaphragmatic hernia																															
29	Acute nephritis and Bright's disease																															
30	Noncancerous tumors and other diseases of the female genital organs																															
31	Puerperal septicemia (puerperal fever, puerperal pyrexia)																															
32	Other puerperal accidents of pregnancy & labor																															
33	Congenital debility and malformations																															
34	Stillbirth																															
35	Sudden infant death																															
36	Violent death (suicide excepted)																															
37	Other diseases																															
38	Unknown or ill-defined diseases																															
	Total	269	158	92	8	11	2	1	1	1	11	4	5	4	7	10	32	4</														

TABULATION OF DEATHS IN MONMOUTH COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat lional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS										Under 5 years	Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown					
						Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49																		50 to 59	60 to 69	70 to 79	80 to 89	90 and over
						Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49																		50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever	5	3	2							1											1															
2	Typhus fever																																				
3	Malaria																																				
4	Smallpox																																				
5	Measles	4	2	2	2		2																														
6	Scarlet fever	3	1	2	1		1																														
7	Whooping cough	6	4	2	1		1																														
8	Diphtheria and croup	6	5	1	1		1																														
9	Influenza	11	3	8	3		2															2															
10	Asiatic cholera																																				
11	Cholera nostras	12	4	8	1		2															1															
12	Other epidemic diseases	86	47	39	32		32															15															
13	Tuberculosis of the lungs	3	1	2	1		1															22															
14	Tuberculosis meningitis	7	3	4	2		2															2															
15	Other forms of tuberculosis	212	73	137	11		11															6															
16	Cancer and other malignant tumors	192	98	94	18		1															1															
17	Simple meningitis	450	233	217	48		1															5															
18	Cerebral hemorrhage and softening	52	24	28	7		4															3															
19	Organic diseases of the heart	54	28	26	16		1															2															
20	Bronchitis	15	12	3	1		1															2															
21	Pneumonia	17	11	6	5		5															17															
22	Other diseases of the respiratory system	27	16	11	6		1															1															
23	(tuberculosis excepted)	182	93	89	15		2															9															
24	Diseases of the stomach (cancer excepted)	10	10	0	4																																
25	Diarrhoea and enteritis (under 2 years)	8	8	0	2		2																														
26	Appendicitis and typhlitis	14	29	10	75		75																														
27	Hernia, intestinal obstruction	11	6	5	1		1																														
28	Cirrhosis of the liver	21	18	3	1		1																														
29	Acute nephritis and Bright's disease	45	45	0	16		1															2															
30	Noncancerous tumors and other diseases of the female genital organs	122	77	45	16		1															1															
31	Puerperal septicemia (puerperal fever, peritonitis)	275	133	142	48		19															25															
32	Other puerperal accidents of pregnancy & labor																																				
33	Congenital debility and malformations	75	46	29	10		75																														
34	Senility	11	6	5	1		1																														
35	Selficide	18	8	10	0		0															4															
36	Violent deaths (suicide excepted)	21	18	3	1		1															2															
37	Other diseases	122	77	45	16		1															1															
38	Unknown or ill-defined diseases	275	133	142	48		19															25															
Total		1015	967	948	256		142															8															

Estimated population, 148,240.

Total resident deaths, 1,916.

Rate per 1,000 population, 12.8.

TABULATION OF DEATHS IN ASBURY PARK CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat lional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS										Under 5 years	Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown					
						Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49																		50 to 59	60 to 69	70 to 79	80 to 89	90 and over
						Under 1 year	1 year	2 years	3 years	4 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49																		50 to 59	60 to 69	70 to 79	80 to 89	90 and over
1	Typhoid fever																																				
2	Typhus fever																																				
3	Malaria																																				
4	Smallpox																																				
5	Measles																																				
6	Scarlet fever																																				
7	Whooping cough																																				
8	Diphtheria and croup																																				
9	Influenza																																				
10	Asiatic cholera																																				
11	Cholera nostras																																				
12	Other epidemic diseases																																				
13	Tuberculosis of the lungs																																				
14	Tuberculosis meningitis																																				
15	Other forms of tuberculosis																																				
16	Cancer and other malignant tumors																																				
17	Simple meningitis																																				
18	Cerebral hemorrhage and softening																																				
19	Organic diseases of the heart																																				
20	Bronchitis																																				
21	Pneumonia																																				
22	Other diseases of the respiratory system																																				
23	(tuberculosis excepted)																																				
24	Diseases of the stomach (cancer excepted)																																				
25	Diarrhoea and enteritis (under 2 years)																																				
26	Appendicitis and typhlitis																																				
27	Hernia, intestinal obstruction																																				
28	Cirrhosis of the liver																																				
29	Acute nephritis and Bright's disease																																				
30	Noncancerous tumors and other diseases of the female genital organs																																				

TABULATION OF DEATHS IN LONG BRANCH CITY FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	Total	Male	Female	AGE PERIODS																	
					Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown	
1	Typhoid fever	1	1																			
2	Typhus fever																					
3	Rialaria																					
4	Malaria																					
5	Scarlet fever																					
6	Scarlet fever																					
7	Whooping cough																					
8	Diphtheria and croup																					
9	Diphtheria and croup																					
10	Asiatic cholera																					
11	Cholera nostras																					
12	Other epidemic diseases	4	3	1	2																	
13	Tuberculosis of the lungs	12	11	1	9																	
14	Tuberculosis meningitis	4	3	1	1																	
15	Other forms of tuberculosis	1			1																	
16	Cancer and other malignant tumors	24	16	8																		
17	Simple meningitis	3	2	1																		
18	Cerebral hemorrhage and softening	2	2																			
19	Organic diseases of the heart	60	31	29	3																	
20	Organic diseases of the heart																					
21	Phthisis	11	5	6	1																	
22	Phthisis																					
23	Other diseases of the respiratory system (tuberculosis excepted)	3	2	1	2																	
24	Diseases of the stomach (cancer excepted)	4	3	1	1																	
25	Other diseases of the stomach (cancer excepted)	1			1																	
26	Appendicitis and typhlitis	4	1	3	1																	
27	Hernia, intestinal obstruction	1		1	1																	
28	Obstruction of the liver	1		1	1																	
29	Acute nephritis and Bright's disease	36	20	16	3																	
30	Acute nephritis and Bright's disease of the female genital organs (puerperal septicemia, peritonitis)																					
31	Puerperal septicemia (puerperal fever, peritonitis)	7	6	1	3																	
32	Other puerperal accidents of pregnancy & labor																					
33	Congenital debility and malformations	3	2	1																		
34	Sexuality	16	9	7																		
35	Suicide	22	15	7	7																	
36	Violent death (suicide excepted)	20	14	6	6																	
37	Other diseases	2		2																		
38	Unknown or ill-defined diseases																					
	Total	213	129	84	33	18	3	1	2	24	31	7	8	19	16	41	38	51	91	5		

Estimated population, 18,518.

Total resident deaths, 248.

Rate per 1,000 population, 13.1.

TABULATION OF DEATHS IN RED BANK BOROUGH FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Internat- ional List No.	CAUSE OF DEATH	Total	Male	Female	AGE PERIODS																	
					Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown	
1	Typhoid fever																					
2	Typhus fever																					
3	Malaria																					
4	Smallpox																					
5	Scarlet fever																					
6	Scarlet fever																					
7	Whooping cough																					
8	Diphtheria and croup																					
9	Diphtheria and croup																					
10	Asiatic cholera																					
11	Cholera nostras																					
12	Other epidemic diseases																					
13	Tuberculosis of the lungs	22	9	13	2																	
14	Tuberculosis meningitis	1		1																		
15	Other forms of tuberculosis	49	27	22	10																	
16	Cancer and other malignant tumors																					
17	Simple meningitis																					
18	Cerebral hemorrhage and softening																					
19	Organic diseases of the heart																					
20	Organic diseases of the heart																					
21	Phthisis	5	2	3	2																	
22	Phthisis																					
23	Other diseases of the respiratory system (tuberculosis excepted)	1	4	1	3				8													
24	Diseases of the stomach (cancer excepted)																					
25	Other diseases of the stomach (cancer excepted)																					
26	Diarrhea and enteritis (under 5 years)																					
27	Appendicitis and typhlitis																					
28	Hernia, intestinal obstruction																					
29	Obstruction of the liver																					
30	Acute nephritis and Bright's disease of the female genital organs (puerperal septicemia, peritonitis)	10	8	2	2																	
31	Puerperal septicemia (puerperal fever, peritonitis)																					
32	Other puerperal accidents of pregnancy & labor																					
33	Congenital debility and malformations	4	3	1	4																	
34	Sexuality	12	9	3																		
35	Suicide	22	14	8	8																	
36	Violent death (suicide excepted)	22	15	7	7																	
37	Other diseases																					
38	Unknown or ill-defined diseases																					
	Total	167	92	76	32	9	2		1	1	3	6	4	10	17	28	34	29	10	6		

Estimated population, 11,680.

Total resident deaths, 167.

Rate per 1,000 population, 14.2.

TABULATION OF DEATHS IN MORRIS COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Sex		Color, If other than white	AGE PERIODS										Total						
			Male	Female		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 14	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	(Not known)
1	Typhoid fever	1	1																			
2	Dysentery	1		1																		
3	Malaria	1	1																			
4	Smallpox	4	2	2																		
5	Menses	2		2																		
6	Scarlet fever	2	2																			
7	Diphtheria and croup	6	2	4																		
8	Whooping cough																					
9	Infantia																					
10	Asiatic cholera	11	5	6																		
11	Cholera nostras																					
12	Other epidemic choleras	13	8	5																		
13	Other epidemic diarrheas	4	4																			
14	Tuberculosis meningitis	19	10	9																		
15	Other forms of tuberculosis	6	4	2																		
16	Cancer and other malignant tumors	127	54	73																		
17	Cerebral meningitis	13	3	10																		
18	Cerebral meningitis and softening	240	134	106																		
19	Organic diseases of the heart	41	21	20																		
20	Bronchitis	41	21	20																		
21	Pneumonia	41	21	20																		
22	Diseases of the respiratory system (tuberculosis excepted)	90	49	41																		
23	Diseases of the stomach (cancer excepted)	26	10	16																		
24	Diarrhoea and enteritis (under 2 years)	9	6	4																		
25	Appendicitis and typhilitis	10	6	4																		
26	Acute nephritis	8	5	3																		
27	Cirrhosis of the liver	4	4																			
28	Acute nephritis and Bright's disease	8	5	3																		
29	Noncancerous tumors and other diseases of the female genital organs	144	70	68																		
30	Noncancerous tumors and other diseases of the male genital organs	4	4																			
31	Other septicaemia (puerperal fever, puerperal abscess, etc.)	8	4	4																		
32	Other puerperal accidents of pregnancy & labor	5	5																			
33	Congenital debility and malformations	63	27	36																		
34	Senility	6	4	2																		
35	Violent deaths (suicide excepted)	94	47	47																		
36	Violent deaths (suicide excepted)	131	55	86																		
37	Other diseases (suicide excepted)	1	1																			
38	Unknown or ill-defined diseases	1	1																			
	Total	1200	630	564	67	140	11	7	3	5	130	14	37	65	68	102	188	223	253	130	24	
		Estimated population, 141,122.																				
		Total resident deaths, 1,230.																				
		Rate per 1,000 population, 11.0																				

TABULATION OF DEATHS IN DOVER TOWN FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Sex		Color, If other than white	AGE PERIODS										Total						
			Male	Female		Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	Typhoid fever																					
2	Dysentery																					
3	Malaria																					
4	Smallpox																					
5	Menses																					
6	Scarlet fever																					
7	Diphtheria and croup																					
8	Whooping cough																					
9	Infantia																					
10	Asiatic cholera																					
11	Cholera nostras																					
12	Other epidemic choleras																					
13	Other epidemic diarrheas																					
14	Tuberculosis meningitis																					
15	Other forms of tuberculosis																					
16	Cancer and other malignant tumors	17	9	8																		
17	Cerebral meningitis	1	1																			
18	Cerebral meningitis and softening	2	2																			
19	Organic diseases of the heart	20	10	10																		
20	Bronchitis	19	10	9																		
21	Pneumonia	2	1	1																		
22	Other diseases of the respiratory system (tuberculosis excepted)	5	3	2																		
23	Diseases of the stomach (cancer excepted)	3	3																			
24	Diarrhoea and enteritis (under 2 years)																					
25	Appendicitis and typhilitis	1	1																			
26	Acute nephritis																					
27	Cirrhosis of the liver																					
28	Acute nephritis and Bright's disease	1	1																			
29	Noncancerous tumors and other diseases of the female genital organs	1	1																			
30	Noncancerous tumors and other diseases of the male genital organs																					
31	Other septicaemia (puerperal fever, puerperal abscess, etc.)	1	1																			
32	Other puerperal accidents of pregnancy & labor	2	2																			
33	Congenital debility and malformations	1	1																			
34	Senility	1	1																			
35	Violent deaths (suicide excepted)	20	6	14																		
36	Violent deaths (suicide excepted)	20	6	14																		
37	Other diseases (suicide excepted)																					
38	Unknown or ill-defined diseases																					
	Total	107	54	53	2	6	1	2	1	0	1	0	0	0	1	1	1	1	1	1	1	5
		Estimated population, 10,087.																				
		Total resident deaths, 107.																				
		Rate per 1,000 population, 10.6.																				

TABULATION OF DEATHS IN PASSAIC COUNTY FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS																																		
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown																		
1	Typhoid fever																																							
2	Typhus fever																																							
3	Malaria																																							
4	Smallpox																																							
5	Measles	5	4	1	1	1	1																																	
6	Scarlet fever	6	4	2	1	1	1																																	
7	Whooping cough	4	4		3	1	1																																	
8	Diphtheria and droup	34	19	15	3	3	3																																	
9	Influenza	25	17	8	1	2	1																																	
10	Asiatic cholera																																							
11	Cholera nostras	5	3	2	2	1	1																																	
12	Other epidemic diseases	101	50	51	14	2	1																																	
13	Tuberculosis of the lungs	6	1	5	1	1	1																																	
14	Tuberculosis meningitis	12	6	6	2	1	1																																	
15	Other forms of tuberculosis	342	169	173	6	1	1																																	
16	Cancer and other malignant tumors	12	9	3	2	1	2																																	
17	Simple meningitis	247	129	118	5	1	2																																	
18	Cerebral hemorrhage and softening	488	244	244	15	1	7																																	
19	Organic diseases of the heart	21	12	9	1	7	1																																	
20	Bronchitis	127	65	62	5	13	7																																	
21	Pneumonia	92	51	41	8	29	7																																	
22	Other diseases of the respiratory system (tuberculosis excepted)	18	11	7	1	1	1																																	
23	Diseases of the stomach (cancer excepted)	21	11	10	4	2	1																																	
24	Diarrhoea and enteritis (under 2 years)	36	23	13	1	1	1																																	
25	Appendicitis and typhlitis	38	20	18	1	1	1																																	
26	Hernia, intestinal obstruction	17	12	5	1	1	1																																	
27	Cirrhosis of the liver	242	134	108	8	1	1																																	
28	Acute nephritis and Bright's disease	13																																						
29	Noncancerous tumors and other diseases of the female genital organs	6																																						
30	Puerperal septicemia (puerperal fever, peritonitis)	19																																						
31	Other puerperal accidents of pregnancy & labor	148	95	53	4	147																																		
32	Congenital debility and malformations	31	45	6																																				
33	Senility	215	162	53	11	4	1																																	
34	Suicide	414	221	193	12	26	4																																	
35	Violent deaths (suicide excepted)																																							
36	Other diseases																																							
37	Unknown or ill-defined diseases																																							
38	Unknown	2828	1582	1241	100	261	93	18	20	18	35	50	83	141	230	288	461	526	468	192																				

Estimated population, 808,177.

Total resident deaths, 2,828.

Rate per 1,000 population, 8.3.

TABULATION OF DEATHS IN CLIFTON CITY FOR 1980, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged International List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS																																			
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown																			
1	Typhoid fever																																								
2	Typhus fever																																								
3	Malaria																																								
4	Smallpox																																								
5	Measles	2	2																																						
6	Scarlet fever	2	2																																						
7	Whooping cough	2	2																																						
8	Diphtheria and droup	4	4																																						
9	Influenza																																								
10	Asiatic cholera																																								
11	Cholera nostras																																								
12	Other epidemic diseases	13	10	3																																					

TABULATION OF DEATHS IN SOMERSET COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH		AGE PERIODS												Total	Color, if other than white				
	Male	Female	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59			60 to 69	70 to 79	80 to 89	90 and over	Unknown
1	3	2	1																	
2																				
3																				
4																				
5	1	1																		
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13	2	1																		
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				
33																				
34																				
35																				
36																				
37																				
38																				
Total	652	348	304	36	57	8	3	5	1	74	11	28	30	42	61	81	172	127	68	17
Estimated population, 66,250.	Total resident deaths, 652.																			
	Rate per 1,000 population, 9.4.																			

TABULATION OF DEATHS IN SUSSEX COUNTY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH		AGE PERIODS												Total	Color, if other than white				
	Male	Female	Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59			60 to 69	70 to 79	80 to 89	90 and over	Unknown
1																				
2																				
3																				
4																				
5	1	1																		
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				
33																				
34																				
35																				
36																				
37																				
38																				
Total	822	104	108	4	25	2	3	1	8	84	5	0	13	24	22	41	57	71	42	7
Estimated population, 27,901.	Total resident deaths, 322.																			
	Rate per 1,000 population, 11.5.																			

TABULATION OF DEATHS IN LINDEN CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS										80 and over	Unknown								
						AGE PERIODS																			
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39			40 to 49	50 to 59	60 to 69	70 to 79	80 to 89			
1	Typhoid fever	1		1																					
2	Typhus fever																								
3	Malaria																								
4	Smallpox																								
5	Measles																								
6	Scarlet fever																								
7	Diphtheria and croup																								
8	Influenza																								
9	Whooping cough																								
10	Asiatic cholera																								
11	Cholera nostras																								
12	Bacillary dysentery																								
13	Tuberculosis meningitis	14	15	1	1																				
14	Other forms of tuberculosis	14	15	1	1																				
15	Cancer and other malignant tumors	10	5	5	4	1	1	1	2	1	1	1	2	1	2	1	1	2	1	2	1	1	1		
16	Cerebral hemorrhage and softening	4	4																						
17	Organic diseases of the heart	26	17	9	9																				
18	Coronary thrombosis	1	1																						
19	Bronchitis	12	8	4	4																				
20	Pneumonia	11	8	3	3																				
21	Other (tuberculosis excepted)	11	8	3	3																				
22	Diseases of the respiratory system	11	8	3	3																				
23	Diseases of the stomach (cancer excepted)	5	5																						
24	Diarrhea and enteritis (under 2 years)	5	1	4	4																				
25	Enteritis and typhitis	2	1	1	1																				
26	Hepatitis and typhitis	2	1	1	1																				
27	Other forms of liver infection	2	1	1	1																				
28	Otrchosis of the liver	1	1																						
29	Acute nephritis and Bright's disease	12	6	6	6																				
30	Noncancerous tumors and other diseases of the female genital organs																								
31	Puerperal septicemia (puerperal fever, peri- tonitis)																								
32	Other puerperal accidents of pregnancy & labor																								
33	Conjugal debility and malformations	12	6	6	6																				
34	Other congenital malformations	23	15	8	8																				
35	Suicide	23	15	8	8																				
36	Violent deaths (suicide excepted)	23	15	8	8																				
37	Other diseases	23	15	8	8																				
38	Unknown or ill-defined diseases																								
	Total	180	110	70	11	27	5	1	2	2	2	3	2	4	1	3	5	4	2	2	4	1	1	1	

Estimated population, 21,519.

Total resident deaths, 180.

Rate per 1,000 population, 8.3.

TABULATION OF DEATHS IN PLAINFIELD CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	Male	Female	Color, If other than white	AGE PERIODS										80 and over	Unknown									
						AGE PERIODS																				
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39			40 to 49	50 to 59	60 to 69	70 to 79	80 to 89				
1	Typhoid fever																									
2	Typhus fever																									
3	Malaria																									
4	Smallpox																									
5	Measles																									
6	Scarlet fever																									
7	Whooping cough																									
8	Influenza and croup																									
9	Asiatic cholera																									
10	Cholera nostras																									
11	Other epidemic diseases	3	1	2																						
12	Tuberculosis of the lungs	12	5	7	2																					
13	Other forms of tuberculosis	40	14	26	5																					
14	Cancer and other malignant tumors	37	13	24	3																					
15	Cerebral hemorrhage and softening	30	35	22	3																					
16	Organic diseases of the heart	14	7	7	2																					
17	Coronary thrombosis	1	1																							
18	Bronchitis	18	11	7	4																					
19	Pneumonia	14	7	7	3																					
20	Other (tuberculosis excepted)	13	8	5	4																					
21	Diseases of the respiratory system	13	8	5	4																					
22	Diseases of the stomach (cancer excepted)	5	5																							
23	Diarrhea and enteritis (under 2 years)	5	2	3	2																					
24	Enteritis and typhitis	1	1																							
25	Hepatitis and typhitis	1	1																							
26	Other forms of liver infection	6	6																							
27	Otrchosis of the liver	2	2																							
28	Acute nephritis and Bright's disease	42	20	22	8																					
29	Noncancerous tumors and other diseases of the female genital organs																									
30	Puerperal septicemia (puerperal fever, peri- tonitis)	2	2	1	1																					
31	Other puerperal accidents of pregnancy & labor	2	2	1	1																					
32	Conjugal debility and malformations	18	10	8	4																					
33	Other congenital malformations	6	4	2	1																					
34	Suicide	31	15	16	3																					
35	Violent deaths (suicide excepted)	46	23	23	4																					
36	Other diseases																									
37	Unknown or ill-defined diseases																									
	Total	375	177	198	30	25	6	1	8	5	4	10	3	13	20	45	55	60	71	106	2	2	2	1	1	

Estimated population, 34,586.

Total resident deaths, 375.

Rate per 1,000 population, 10.8.

TABULATION OF DEATHS IN RAYWAY CITY FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS										Total												
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown					
1	Typhoid fever	1																										
2	Typhus fever																											
3	Smallpox																											
4	Scarlet fever																											
5	Diphtheria and croup																											
6	Whooping cough																											
7	Whooping cough																											
8	Scarlet fever																											
9	Influenza																											
10	Asiatic cholera																											
11	Cholera nostris																											
12	Other epidemic diseases																											
13	Other forms of typhoid																											
14	Tuberculosis meningitis																											
15	Other forms of tuberculosis																											
16	Cancer and other malignant tumors	25	31	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
17	Simple meningitis and softening	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	Other diseases of the brain	27	11	10	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	Organic diseases of the heart	21	11	10	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
20	Bronchitis	7	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
21	Phthisis	0																										
22	Other diseases of the respiratory system (tuberculosis excepted)	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	Diseases of the stomach (cancer excepted)																											
25	Diarrhoea and enteritis (under 2 years)																											
26	Appendicitis and typhlitis																											
27	Other diseases of the intestines																											
28	Obstruction of the intestines																											
29	Acute nephritis and Bright's disease																											
30	Noncancerous tumors and other diseases of the female genital organs	12	7	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
31	Other diseases of the female genital organs (puerperal fever, peritonitis)																											
32	Other puerperal accidents of pregnancy & labor																											
33	Congenital debility and malformations	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
34	Senility																											
35	Violent deaths (outside excepted)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36	Other diseases (outside excepted)	40	16	24	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
37	Unknown or ill-defined diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
38	Unknown or ill-defined diseases																											
Total		158	92	91	11	12	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Estimated population, 16,332. Total resident deaths, 183. Rate per 1,000 population, 11.3.

TABULATION OF DEATHS IN ROSELLE BOROUGH FOR 1930, ACCORDING TO THE ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH

Abridged Interna- tional List No.	CAUSE OF DEATH	Total	Male	Female	Color, if other than white	AGE PERIODS										Total													
						Under 1 year	1 year	2 years	3 years	4 years	Under 5 years	5 to 9	10 to 19	20 to 29	30 to 39		40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 and over	Unknown						
1	Typhoid fever	1																											
2	Typhus fever																												
3	Smallpox																												
4	Scarlet fever																												
5	Diphtheria and croup																												
6	Whooping cough																												
7	Whooping cough																												
8	Scarlet fever																												
9	Influenza																												
10	Asiatic cholera																												
11	Cholera nostris																												
12	Other epidemic diseases																												
13	Other forms of typhoid																												
14	Tuberculosis meningitis																												
15	Other forms of tuberculosis																												
16	Cancer and other malignant tumors	11	6	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
17	Simple meningitis																												
18	Cerebral hemorrhage and softening	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	Other diseases of the brain	21	13	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
20	Bronchitis	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
21	Phthisis	0																											
22	Other diseases of the respiratory system (tuberculosis excepted)	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	Diseases of the stomach (cancer excepted)																												
25	Diarrhoea and enteritis (under 2 years)																												
26	Appendicitis and typhlitis																												
27	Other diseases of the intestines																												
28	Obstruction of the intestines																												
29	Acute nephritis and Bright's disease																												
30	Noncancerous tumors and other diseases of the female genital organs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
31	Other diseases of the female genital organs (puerperal fever, peritonitis)																												
32	Other puerperal accidents of pregnancy & labor																												
33	Congenital debility and malformations	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
34	Senility																												
35	Violent deaths (outside excepted)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36	Other diseases (outside excepted)	15	8	7	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
37	Unknown or ill-defined diseases																												
38	Unknown or ill-defined diseases																												
Total		105	59	49	17	8	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Estimated population, 13,398. Total resident deaths, 103. Rate per 1,000 population, 7.6.

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