

EIGHTY-SECOND ANNUAL REPORT

OF THE

Department of Health

OF THE

STATE OF NEW JERSEY

1959



STATE OF NEW JERSEY

DEPARTMENT OF HEALTH

TRENTON, N. J., July 1, 1959

To His Excellency Governor Robert B. Meyner:

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

To the Public Health Council:

LADIES AND GENTLEMEN:

There is submitted herewith the Annual Report of the Department of Health for the fiscal year ending June 30, 1959.

Daniel Bergsma, M.D., was Commissioner of Health during the entire year covered in this report. The undersigned assumed office July 1, 1959.

The Division of Aging was a unit of the Department during the year covered in this report and its report is therefore included. It was transferred, pursuant to legislation, to the Department of State effective July 1, 1959.

Respectfully submitted,

ROSCOE P. KANDLE, M.D.,
Commissioner of Health.

Department of Health of the State of New Jersey
 Public Health Council
 Fiscal Year 1958-1959

HARRY J. ROBINSON, M.D., *Chairman* Union
 KATHLEEN SLETTELAND, *Vice-Chairman* Ridgewood
 ERMA T. DILKES, *Secretary* Sewell
 C. BYRON BLAISDELL, M.D. Deal
 NELSON S. BUTERA, P.E. Morristown
 JOHN J. CANE, D.D.S. Phillipsburg
 HARRY N. LENDALL, C.E. New Brunswick
 ANTHONY P. MILLER, JR. Pleasantville

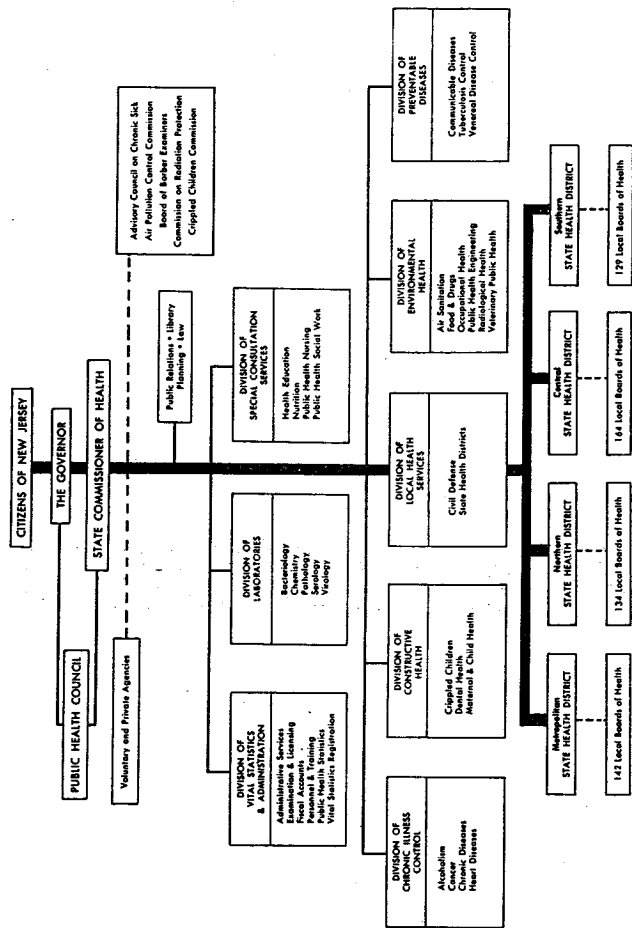
DANIEL BERGSMAN, M.D., M.P.H., *State Commissioner of Health*

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 OF THE STATE OF NEW JERSEY, 1959

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Report of the State Commissioner of Health

DANIEL BERGSMA, M.D., M.P.H., *State Commissioner of Health*

This report marks the end of a period of eleven years and one month in which I served as New Jersey State Commissioner of Health. I was originally sworn into office on June 1, 1948 and the closing date of this report, June 30, 1959, marks the close of my service with the State of New Jersey.

Under these circumstances, rather than highlight what has happened in the previous 12-month period, it seems in order to list some of the most important developments in the Department during the 11-year period.

Administrative Reorganization

The State Department of Health was reorganized very considerably by legislation which was enacted in 1947. It created for the first time the office of State Commissioner of Health, the incumbent being appointed by the Governor and answerable to the Governor. Previously, the Director of Health was appointed by the State Board of Health and was answerable to it. The Board of Health was thus the executive head of the Department. It was abolished by the 1947 legislation. There was created in its stead a Public Health Council with responsibilities specifically spelled out in law.

Following my appointment in 1948, a substantial administrative reorganization of the Department was effected to bring functionally related units into cohesive working relationships. Additional responsibilities were assumed by the Department as the result of legislative mandate.

As of June 30, 1959, there are nine major divisions in the Department. These are the Divisions of Aging; Chronic Illness Control; Constructive Health; Environmental Health; Laboratories; Local Health Services; Preventable Diseases; Special Consultation Services; and Vital Statistics and Administration.

Several new programs were added during the 11-year period. These include programs for the control of air pollution, alcoholism, convulsive disorders, diabetes, heart diseases, and radiological hazards to health. Other new programs included meat inspection, pathology, program writing and evaluation, public health statistics, veterinary public health and virology. As of June, 1959 there were 43 separate, identifiable public health programs being

carried out by the Department. They were reduced to writing in a standard format. Criteria were developed for evaluating their effectiveness.

During the 11-year period, there were placed in the Department, as the result of legislation, the New Jersey Air Pollution Control Commission and the New Jersey Radiation Protection Commission.

Four district offices were established with diversified staff to serve local boards of health and other health agencies in the respective districts. The Southern District serves six counties, each of the others serves five counties. A map showing district offices and the counties they serve appears on page 125.

State Sanitary Code Rewritten

The State Sanitary Code, a body of regulations issued by the Public Health Council which has the force and effect of law, was completely revised during the period. One of the most significant chapters (Chapter VIII) declared dumps to be hazardous to human health. It provides that disposal of organic and/or combustible matter shall be made only through sanitary landfills or incineration. Since this chapter went into effect on July 1, 1958, there has been a remarkable and steady increase in the number of sanitary landfills in the State and in the number of municipalities using them for disposal of garbage and refuse.

Twelve Model Codes Prepared

The Department secured adoption of legislation in 1950 to permit municipalities to adopt model codes, approved by the State Department of Health, by reference. This means that if a model code has been approved by the State Department of Health, it may be adopted by the local board of health by ordinance; in the ordinance, the local board of health refers to the code by name. It need not advertise the complete text of the code proposed to be adopted and is thus saved substantial advertising cost. The board must make provision for copies to be available for inspection. Each code is prepared by a group representative of those who will be affected by the code, those who must enforce it, persons trying to achieve a public health benefit, and others who may have an interest.

The 12 codes approved by the Department deal with retail food handling establishments; public health nuisances; smoke control; weed control; individual sewage disposal systems; plumbing; swimming pools; trailer courts; boarding-homes for children; maintenance of swine; semi-public water supplies; and solid waste disposal.

Air Pollution Control Code

As authorized by law, the New Jersey Air Pollution Control Commission has promulgated the New Jersey Air Pollution Control Code. As of this date, its chapters deal with control of open burning, control of smoke, and control of fly ash from the burning of solid fuel, such as coal. Work is proceeding on measures to control other sources of air pollution.

Radiological Hazards to Health

The Radiation Protection Commission was organized in October, 1958, subsequent to approval of the Radiation Protection Act on July 8, 1958. It deals with complex matters not susceptible to simple enactment. It has not as of this time (June 30, 1958) promulgated any regulations.

Stream Pollution Control

The 11-year period was one of intense effort to clean up the streams and waters of New Jersey and to keep them clean. The following are the comparative costs of construction, in three decades, of sewage disposal projects approved by the New Jersey State Department of Health:

1929-1938	\$57,370,000
1939-1948	48,930,000
1949-1959	275,000,000

Even allowing for the greater costs which resulted from inflation, there is still a significant increase in the amount of construction approved by the Department. Since such construction on the part of municipalities and industries often results only after considerable pressure from the State Department of Health, the increase reflects the increase in effort by the Department to clean up New Jersey streams and to keep them clean.

Controlling Accidental Poisoning

Poisons kill more children than all the following communicable diseases combined: diphtheria, whooping cough, scarlet fever, polio, rheumatic fever and other streptococcal infections. The seriousness of the accidental ingestion of poisons among children motivated us to stimulate the development of poison control centers around the State, nearly all of them in hospitals. Such centers, with our help, have developed lists of poisons, their ingredients, and their antidotes and appropriate treatment. The prompt availability of this service in time of need literally saves lives. The number of such centers on June 30, 1958 was 24, 14 of them having been started in the last fiscal year.

An even greater need is a sustained educational effort among parents so that they will be motivated to prevent the occurrence of those situations which lead to accidental poisoning—access of toddlers to drugs; putting poisons into soda bottles, etc.

Controlling Chronic Illness

A good deal of effort was expended during the period in strengthening the community's ability to detect and treat chronic illnesses. Through Departmental grants-in-aid to provide for personnel and equipment, hospitals were enabled to start and maintain services not previously available such as routine screening of patients for tuberculosis, inauguration of outpatient treatment centers for alcoholics, strengthening of diagnostic and treatment services for cancer and for heart disease, development of rehabilitation centers in hospitals for the physical restoration of patients, and the development of facilities for more accurate diagnosis and treatment of arthritic and convulsive disorders. Another grant which provided for employment of a consulting dietitian by the New Jersey Hospital Association enabled voluntary hospitals to strengthen their dietary services to patients.

A State Consultant Committee on Community Homemaker Service, set up by the Division of Chronic Illness Control, has achieved remarkable success in stimulating the development of community homemaker services. Homemakers are women available for hire, under community organized agencies, in households in which there is illness or other disruption. The women are given a training course under the auspices of Rutgers University before accepting assignments. Their presence in the household often enables the principal breadwinner to continue working. By June 30, 1959, 12 such services were functioning with their services available to two-thirds of the population. Preliminary steps had been taken to initiate the establishment of such services in other areas.

Miscellaneous

The development of Salk vaccine, which provides immunity to the paralytic effects of poliomyelitis, occurred during the 11-year period. Five New Jersey counties were among the areas in which the vaccine was first tested by the National Foundation, which financed the research on the vaccine. Considerable planning and coordinating were required both at this time and later when the vaccine was demonstrated to be both safe and effective and when it was for a while in short supply. This necessitated priorities to assure protection to the greatest number. State law imposed upon the State Commissioner of Health responsibility for establishing the priorities as well as the distribution of the available vaccine.

Departmental laboratory service was greatly strengthened near the end of the period by legislation permitting development of a virology laboratory for the identification of virus diseases which might be developing in the community.

As the period drew to an end, the Public Health Council of the Department was considering a list of recognized activities and minimum standards of performance for local health departments recommended to it by the Commissioner for adoption. The activities and standards had been prepared by a representative committee of local health officers. If they are ultimately adopted, they will provide a yardstick by which residents of every municipality can measure both the quantity and quality of public health services available to them locally.

The progress which was made during the period could not have been recorded without efficient and loyal personnel. Their efforts are commended.

ANNUAL MEETING OF PUBLIC HEALTH COUNCIL

The annual meeting of the Public Health Council was held on July 14, 1958. The following officers were elected for the fiscal year 1958-1959: Harry J. Robinson, M.D., Chairman; Mrs. Kathleen Stetteland, Vice-Chairman; Mrs. Erma T. Dilkes, Secretary.

The membership of the Public Health Council is as follows:

<i>Name</i>	<i>Address</i>	<i>Expiration of Term</i>
Anthony P. Miller, Jr.	Pleasantville	June 30, 1959
Mrs. Erma T. Dilkes	Sewell	June 30, 1960
John J. Cane	Phillipsburg	June 30, 1961
Harry N. Lendall	New Brunswick	June 30, 1961
Nelson S. Butera	Morristown	June 30, 1963
C. Byron Blaisdell	Deal	June 30, 1964
Harry J. Robinson	Union	June 30, 1964
Mrs. Kathleen Stetteland	Ridgewood	June 30, 1965

Dr. Daniel Bergsma resigned as State Commissioner of Health, effective July 1, 1959. On May 18, 1959, Dr. Roscoe P. Kandle was nominated by the Governor to succeed Dr. Bergsma. On May 21, 1959, the Senate confirmed the Governor's nomination. Dr. Kandle was sworn as State Commissioner of Health on July 1, 1959.

Division of Aging*

MRS. EONE HARGER, *Director*

R. NORMAN SPRAGUE, *Assistant to the Director*

The Division of Aging was officially activated on April 23, 1958, when Mrs. Eone Harger was sworn in as director.

During the early months of its existence, the Division devoted its energies to preliminary organizing, conferences with officials in the Department of Health on matters of personnel, procedures and funds, and meetings with groups expressing an interest in developing programs for the aging. The second and third employees were not hired until September, 1958, and by the end of December of that year, the number of employees totaled only six. The Division now† numbers nine employees, plus two short-term persons engaged in special projects. Four employees are professional—an inter-departmental liaison officer, a consultant on community organizations, a research specialist, and a public information officer.

The New Jersey State Commission on Aging held its organizational meeting in August, 1958, in the Office of the Governor, with Governor Meyner present. It has held regular meetings since then, addressing itself to such problems as discrimination in employment on account of age, protection of the aging with regard to health and medical insurance, housing for the elderly, and all other matters related to the aging.

Members of the Commission, in addition to the chairman, Mrs. Eone Harger, Director, Division of Aging, are: Sister Mary Andrew, St. Francis Hospital, Trenton; Dr. Harold W. Dodds, Princeton; Mrs. Paul Rauschenbach, Paterson; Thomas G. Walker, Morristown; Dr. Lloyd W. McCorkle, Director, Division of Administration, Department of Institutions and Agencies; Dr. Everett C. Preston, Director, Adult Education Division, Department of Education; Lawrence O. Houstoun, Jr., Executive Assistant to the Commissioner, Department of Labor and Industry; David S. Davies, Executive Assistant to the Commissioner, Department of Conservation and Economic

* Transferred, pursuant to legislation, to the Department of State effective July 1, 1959.

† June 30, 1959.

Development; William Joseph, Assistant Director, Division of Pensions, Department of the Treasury; and Dr. Roscoe P. Kandle, State Commissioner of Health.

The Division's first major project was launched in July, 1958, in conjunction with the Division of Employment Security: an investigation of employer policies and practices in hiring older workers. The active phases of this project were completed in October, 1958. Since that time the data have been undergoing compilation and evaluation, and discussions have been held with the Division of Employment Security on means for implementing the conclusions of the project. The data have been printed and are to be condensed for distribution to employers.

Another prime project of the Division was initiated in December, 1958. Known as the Paterson Survey, this was a joint project of the Division, the Department of Institutions and Agencies, and the city government of Paterson through the Mayor's Advisory Committee on Services to the Aging. To investigate the numbers and the needs of the aging in that city, volunteer interviewers from private organizations and the general citizenry were trained by personnel from the Department of Institutions and Agencies and supervised by students of the Graduate School of Social Work of Rutgers University. Office space and clerical help were made available by the city of Paterson, and Mrs. Paul Rauschenbach was appointed city-wide coordinator and supervisor of personnel. Questionnaires were drawn up by Dr. Rupert Hester of the Department of Institutions and Agencies, and funds for tabulating and printing the survey results were provided by the Division of Aging. Survey forms for the survey were pre-tested in January, 1959; the actual door-to-door interviewing was conducted in February. A 30-page booklet on the survey results will be released by the Division in the early fall of 1959.

The Division's biggest single project during the fiscal year was the Governor's Conference on Aging, held April 16, 1959. The conference date was set in October, 1958, and invitations went out in November to speakers, all of whom were secured by the end of December. Mailing lists were compiled, news releases issued, and conference materials put into print in January. Ten thousand invitations were sent out in February, exhibits were planned and publicity kits were prepared. With registrations flowing in during March, printed programs and materials for distribution were put into final form. Newspapers made extensive use of pre-conference publicity kits, which contained seven papers on subjects related to aging, written by New Jersey residents especially qualified in their fields.

The conference itself was judged eminently successful by all who attended it. In a speech in Washington in June, Governor Meyner said he believed it was "the best attended conference of its kind ever held in the United States."

Help for the conference came to the Division from many directions, the staff worked overtime in its preparations, and the outcome of the conference was beyond all expectations. Attendance was larger than anticipated (close to 1,500 were counted), and all literature provided by any group was exhausted. The conference achieved its main purpose—the bringing together of a cross-section of New Jersey citizens rather than special groups. Many persons who attended had not previously responded to written communications or publicity. Questionnaires, returned from discussion leaders and individuals attending the conference, will provide significant leads for future action.

The proceedings of the conference were published in the August, 1959 issue of *Public Health News*. The Division of Aging had 10,000 extra copies of this issue printed and distributed to interested persons.

In August, 1958, the Division made its first appearance on television, on Governor Meyner's regular half-hour program. Five citizens took part in a discussion on housing, employment, and recreation for the aging, as well as on the Homemaker program operated by the Division of Chronic Illness Control.

In December, the director appeared on station WNTA's "Open Wire" panel program with Dr. M. Rochstein, of New York University; Jack Fasteau, consultant, Welfare of the Aging, Community Council of Greater New York; and Dr. Ethel P. Andrus, Retired Teachers Association. The panel answered questions phoned in by the listening audience.

The director again appeared on the radio in March, on the Rutgers Forum Program, and in April, the Division prepared a program for Governor Meyner's Report, his Sunday television show, April 19.

In the early months of its existence, the Division wrote to all the mayors of the State to request information on governmental and voluntary programs for the aging at the local level and to announce that one of the services of the Division is to consult with communities on their problems in helping senior citizens. Representatives of the Division, which includes a community consultant on its staff, were in communication with many municipalities during the year. The number of such community consultations increased sharply when requests for them came to the Division after the Governor's Conference on Aging, in April. Tabulation of the answers to the questionnaire helped in establishing the Division as a central source of information, thereby fulfilling one of the agency's basic functions.

Staff members attended many conferences during the year as part of their becoming familiar with the problems in the many-faceted field of aging.

Among the more important conferences were those of the National Committee on Aging; the Federal Council of Aging and the Council of State Governments; the Conference on Individual Planning for Retirement (Na-

tional Chamber of Commerce); 57th Annual Conference of the New Jersey Welfare Council (the director's speech at this meeting was given significant newspaper coverage); the 11th Annual Meeting of the Gerontological Society (an extremely helpful meeting because the subjects discussed were in the fields in which the Division was gathering data—more flexible retirement systems; facilities for people requiring supervision but not hospitalization; senior centers featuring recreation, creative and group activities, and counseling); 59th Annual Meeting of New York Welfare Department, at which the major topic of discussion was supporting services for housing projects for older citizens; conference with the Regional Director of Health, Education, and Welfare in New York, at which the subjects discussed were needs in education, employment, medical care, housing, and where responsibilities lie in these fields and how various levels in government can work out methods for meeting needs; Institute on Aging sponsored by School of Public Health and Administrative Medicine of Columbia University; Joint Committee on Aging (the director attended this meeting in Washington with Governor Meyner); American Geriatric Society; and the Joint Council to Improve the Health Care of the Aged (in Washington).

During the year, the Division maintained constant liaison with other State departments and divisions whose activities touch upon the problems of the aging—such as nutrition, general physical health, mental health, adult education, rehabilitation, health—medical insurance, facilities for non-psychotic senile cases, pensions, employment and hiring practices, regulations for boarding houses, etc.

In June, members of the Division staff attended the National Leadership Training Institute at the University of Michigan, a three-day meeting in preparation for the first White House Conference on Aging, scheduled for January, 1961, in Washington, D. C., They also attended the 12th Annual Michigan Conference on Aging, held in conjunction with the Institute.

Through Joel Stearns, Executive Secretary to the Economic Ambassadors, appointed by the Governor to promote New Jersey as a place for industry, preliminary work was begun, in May, to organize the known reservoir of retired executives and professional personnel for possible consultation with industry, the idea behind the project being that retired executives, with their skills, could be of great service to the State in helping bring in new industry and maintaining existing industry. Such executives could help meet temporary needs on a consulting basis, to the mutual benefit of the individual company, the State, and the retired executives' own economic and mental health.

As the fiscal year ended, the Division initiated—in cooperation with the New Jersey State League of Municipalities—an inquiry, by means of letters, into local regulations governing rooming house operations in the State's mu-

nicipalities; conferred with the Extension Division of Rutgers University to plan a course on pre-retirement for individuals in industry and unions who are in charge of personnel contacts, and a course for operators of licensed nursing homes; met with the Dental Health Program personnel (Department of Health) and the New Jersey Dental Society to discuss a demonstration with experimental portable dental equipment and the general dental problems of the aging; met with personnel of the Metropolitan Health District and the Rutgers University Graduate School of Social Work for further planning on a research project on housing needs for the aging in Newark; and worked out with the Bureau of Housing (Department of Conservation and Economic Development) and the New Jersey Association of Housing and Redevelopment Agencies an educational campaign on available housing aids for municipalities.

Among the other Division programs underway as the fiscal year ended were research on discrimination in employment on account of age—a study being conducted for the Division by Princeton Ph.D. candidate Walter Weiker, whose findings will be submitted to the Commission on Aging and then to the Governor; a demonstration program, in conjunction with the Mercer County Council for the Senior Citizens, on employment for the aging through the medium of a Day Center offering job counseling to older persons and job leads to which these persons can be referred; cooperation with the Trenton Committee on Housing for the Elderly on a survey of housing needs for the aging.

During the year, the Division closely scrutinized all Federal legislation bearing on the problems of the aging, paying particular attention to such matters as proposed medical care within the social security program; a surplus agricultural products distribution program that would provide nutritive, well-balanced diets for the aging, while at the same time encouraging a full-consumption agricultural economy; and rehabilitation for independent living.

Areas in which the Division has been active can be suggested by the following partial list of organizations and personnel groups with which meetings have been held in an effort to carry out the Division's mandate from the State Legislature to serve as a co-ordinating agency:

- Hospital and health authorities
- Doctors and dentists
- Psychiatrists and psychologists
- Nursing homes
- Visiting nurses
- Family service groups
- Welfare councils
- Safety councils
- Councils of social agencies
- Employers
- Personnel councils

Division of Chronic Illness Control

If any major attack is to be made during the next 20 years on the problems of chronic disability, the general hospital and the individual practicing physician must be the focal points of that attack. It is only in doctors' offices and in general hospitals that such services can be brought to the patient at the earliest possible time so that the costly and damaging physical, emotional, social, and vocational sequelae of the acute disease process or trauma may be alleviated or minimized.

As in the past, the Chronic Illness Program was centered on stimulating and assisting local agencies to provide services for "the prevention, early detection and control of chronic illness and the rehabilitation of the chronic sick" (The Prevention of Chronic Illness Act, New Jersey Statutes Annotated, 26:1A-94). For the most part, activities are centered in demonstration, case-finding, co-ordination and consultation services, educational programs, and evaluation studies. Financial assistance is given to promote the early application of proven theories in scientific research in chronic disease in community hospitals and in a few other agencies through grants-in-aid for technical personnel specially trained in the complicated techniques and newer aspects of chronic illness control. Also, through the loan of scientific equipment, new methods of diagnosis and control are demonstrated and made available to practicing physicians for the benefit of the residents of New Jersey.

Cooperative Community Service

During the past year, the largest proportion of chronic illness funds was used to promote comprehensive restorative services in hospitals, planned and undertaken as early as possible, preferably at the time of diagnosis. Hospitals in which a program of restorative services has been initiated have laid groundwork for progressive patient care with plans for ultimate extension of services so essential to adequate patient care. In this way, a continuum of service, essential to adequate patient care, is assured. In this program, progressive service to the patient is planned at the time of diagnosis and evaluated from time to time by the patient's physician in collaboration with paramedical personnel of the hospital, including medical social worker, nurse, physical and occupational therapists, and representatives of such community agencies as may be indicated.

Assistance to community hospitals to strengthen chronic illness programs, in areas other than restorative services, has also been a primary objective of the Division. As in the past, this assistance has included consultation services and educational programs (listed on page 25) for professional personnel. The major expenditure of funds has been (1) for the purchase of scientific equipment for loan to general hospitals to detect disease by routine screening and to utilize new techniques in diagnosis and control of disease; and (2) through grants-in-aid for paramedical personnel, such as specialized technicians, social workers, and physiotherapists.

Twenty-nine different community hospitals, six homemaker services, one local board of health and the New Jersey Hospital Association received financial assistance through grants-in-aid in a total amount of \$269,000 (Table 1, page 22).

Table 1.

GRANT-IN-AID CONTRACTS: 1958-1959

Name of Agency and Type of Service

ALL SOULS HOSPITAL, MORRISTOWN:	Rehabilitation service for alcoholics.
ATLANTIC CITY HOSPITAL:	Diagnostic and consultation service for convulsive disorders.
ATLANTIC COUNTY HOMEMAKER SERVICE:	Homemaker program.
BERGEN COUNTY BOARD OF FREEHOLDERS:	Homemaker program of Homemaker Service of Bergen County.
BERGEN PINES COUNTY HOSPITAL:	Rehabilitation service for alcoholics.
CAMDEN COUNTY BOARD OF FREEHOLDERS:	Comprehensive program of restorative services at Camden County General Hospital.
F. W. DONNELLY MEMORIAL HOSPITAL, TRENTON:	Rehabilitation service for alcoholics. Comprehensive program of restorative services.
EAST ORANGE BOARD OF HEALTH:	Study of latex fixation serologic test for detection of rheumatoid arthritis.
ELIZABETH GENERAL HOSPITAL:	Diagnostic and consultation service for convulsive disorders.
ESSEX COUNTY BOARD OF FREEHOLDERS:	Comprehensive program of restorative services at Essex County Hospital—Belleville.

FITKIN MEMORIAL HOSPITAL:	Routine chest x-ray of in-patients and hospital personnel.
HOMEMAKER SERVICE, INC., CRANFORD:	Homemaker program.
HUNTERDON MEDICAL CENTER, FLEMINGTON:	Routine chest x-ray of in-patients, out-patients, and hospital personnel. Screening tests for diabetes and other chronic disorders. Evaluation and correction of hearing and speech defects. Diagnostic and consultation service for convulsive disorders. Screening tests for cancer. Evaluation of vectorcardiograms. Cytology teaching center.
VISITING HOMEMAKER SERVICE OF HUNTERDON COUNTY, INC.:	Homemaker program.
HELENE FULD HOSPITAL, TRENTON:	Medical social services.
MIDDLESEX GENERAL HOSPITAL, NEW BRUNSWICK:	Rehabilitation service for alcoholics. Routine chest x-ray of in-patients, out-patients, and hospital personnel. Cardio-pulmonary function laboratory. Screening tests for diabetes.
VISITING HOMEMAKER SERVICE OF MIDDLESEX COUNTY, INC.:	Homemaker program.
MONMOUTH MEMORIAL HOSPITAL, LONG BRANCH:	Routine chest x-ray of in-patients, out-patients, and hospital personnel. Diagnostic and consultation service for convulsive disorders.
MOUNTAINSIDE HOSPITAL, MONTCLAIR:	Routine chest x-ray of in-patients, out-patients, and hospital personnel. Arterial bank.
NEWARK EYE AND EAR INFIRMARY:	Evaluation and correction of hearing and speech defects. Glaucoma detection and research.
NEWCOMB HOSPITAL, VINELAND:	Rural cardiology service.
NEW JERSEY HOSPITAL ASSOCIATION:	Hospital dietary consultant services.
HOSPITAL CENTER AT ORANGE:	Medical social service. Cardio-pulmonary function laboratory.
OVERLOOK HOSPITAL, SUMMIT:	Rehabilitation service for alcoholics.

- PASSAIC GENERAL HOSPITAL:
Rehabilitation service for alcoholics.
- PATERSON GENERAL HOSPITAL:
Diagnostic and consultation service for convulsive disorders.
- PERTH AMBOY GENERAL HOSPITAL:
Rehabilitation service for alcoholics.
Routine chest x-ray of in-patients, out-patients, and hospital personnel.
Diagnostic and consultation service for convulsive disorders.
- B. S. POLLAK HOSPITAL FOR CHEST DISEASES, JERSEY CITY:
Cytology teaching center.
Screening tests for cancer.
Pulmonary neoplasm study program.
- PRESBYTERIAN HOSPITAL, NEWARK:
Cytology teaching center.
Screening tests for cancer.
Isotope laboratory.
Cancer training sessions for nurses.
Diagnostic and consultation service for convulsive disorders.
- ROOSEVELT HOSPITAL, METUCHEN:
County-wide rehabilitation service for alcoholics.
- ST. FRANCIS HOSPITAL, TRENTON:
Evaluation and correction of hearing and speech defects.
- ST. MARY'S HOSPITAL, PASSAIC:
Routine chest x-ray of in-patients, out-patients, and hospital personnel.
- ST. MICHAEL'S HOSPITAL, NEWARK:
Rehabilitation service for alcoholics.
Medical social services.
Cardiac consultant services.
- SETON HALL COLLEGE OF MEDICINE AND DENTISTRY, JERSEY CITY:
Scientific studies in field of arthritis.
- SOMERSET HOSPITAL, SOMERVILLE:
Comprehensive program of restorative services.
- HOMEMAKER SERVICE OF SOMERSET COUNTY, INC.:
Homemaker program.
- WEST JERSEY HOSPITAL, CAMDEN:
Rehabilitation service for alcoholics.
Medical social service.
Cardio-pulmonary function laboratory.

In re-negotiating the grant-in-aid contracts for the year 1959-1960, approximately 29 percent of the total amount was assumed by the local agencies, thus releasing this amount of money for promotion of other chronic illness control activities or similar programs in other areas of the State. Certain hospitals expanded their programs to include additional skilled personnel without additional financial help from this Division. This kind of expansion is regarded as an assumption of further financial responsibility. The programs subsidized in selected hospitals or other community agencies serve primarily to demonstrate the possibility of reducing the chronic illness burden and to encourage other communities to adopt a similar program, without State financial assistance.

Scientific equipment was purchased for loan to 16 different hospitals and a visiting nurse association during the year. A total of 68 hospitals and community agencies throughout the State are using equipment placed by the Division since 1953 to improve their chronic illness facilities.

Professional Training

Continued support has been given for lectures, seminars, courses and consultation to bring to physicians and paramedical personnel scientific information in chronic disease control. This educational program has been in cooperation with community hospitals, medical societies, professional organizations, the Academy of Medicine of New Jersey, the Academy of General Practice (accredited), and Seton Hall College of Medicine and Dentistry. A listing follows:

ST. MICHAEL'S HOSPITAL, NEWARK:

Courses:

- Recent Advances in Internal Medicine and Endocrinology (12 bi-weekly sessions).
- Advanced Clinical Electrocardiography (20 weekly sessions).
- Acute Cardio-Respiratory Failure with Resuscitation (one day training, held once a month).

ACADEMY OF MEDICINE—CHRONIC ILLNESS COURSE:

- Newcomb Hospital—Vineland (four monthly sessions).
- Warren Hospital—Phillipsburg (four weekly sessions).

WEST JERSEY HOSPITAL, CAMDEN:

- Chronic Illness Course (five monthly sessions).

NEWCOMB HOSPITAL, VINELAND:

- Services of a consultant cardiologist in the development of a rural cardiac facility.

BRIDGETON HOSPITAL:

- Services of a consultant cardiologist in the development of a rural cardiac facility.

- MARTLAND MEDICAL CENTER, NEWARK:
Sixth Annual Diabetes Symposium.
- ST. PETER'S HOSPITAL, NEW BRUNSWICK:
Diabetes Symposium.
- NEW JERSEY NEURO-PSYCHIATRIC INSTITUTE:
Symposium on Electroencephalography.
- HOSPITAL CENTER AT ORANGE:
Arthritis Workshop.
- PRESBYTERIAN HOSPITAL, NEWARK:
Cancer Symposium.
- TRENTON:
Diabetes Training Institute (three days).
- PRINCETON:
Seminar on Chronic Disease in Childhood.
- BRIDGETON:
Continuity of Care Workshop.
- WARREN COUNTY WELFARE COUNCIL:
Speaker on rehabilitation.

Alcoholism Control

According to the researchers, Mark Keller and Vera Eiron, using the Jellinek Estimation Formula, there are an estimated 4,712,000 alcoholics in this country—a rate of 4,520 alcoholics per 100,000 adult population (age 20 years and over). New Jersey is second only to California with a rate of 6,060, and an estimated 232,000 alcoholics. These are the latest statistics, June, 1958, released by the Yale Center of Alcohol Studies.

Alcoholism continues to be a major public health problem affecting approximately one in 14 adults in New Jersey. The impact of the problem is felt by many. One alcoholic affects the lives of his family, friends, fellow workers, etc.

Rehabilitation Services

With the above facts in mind, we have been primarily concerned with the patient. The past year showed expansion of alcoholism out-patient rehabilitation centers. Negotiations were completed for a new center at the Mountaineer Hospital in Montclair. Plans were made for a comprehensive, integrated program to include research, services to individuals, and post-graduate training of physicians in alcoholism at the Seton Hall College of Medicine and Dentistry, Jersey City.

The Middlesex County Program, with headquarters at the Roosevelt Hospital in Metuchen, has extended consultation services for alcoholics (with some grant-in-aid assistance from this Department) to Perth Amboy General Hospital, Perth Amboy and to St. Peter's Hospital, New Brunswick.

An encouraging step forward in the treatment of alcoholics is the fact that more and more of the community general hospitals are accepting the alcoholic for hospitalization. The new drugs have made it possible to handle many of these patients on the general services of the hospitals. This appears to be an indication that more recognition is being given to the problem and that the alcoholic is gradually being accepted as a sick person.

Group Therapy

Following several orientation sessions for the entire staff of the Monmouth County Jail, weekly group sessions were scheduled. Group sessions are also held in five tuberculosis hospitals, a county workhouse, and at the New Jersey Neuro-Psychiatric Institute. Individuals are screened for these groups by physicians of the respective hospitals, and the warden of the workhouse or jail. The field representative of this Program is the group leader for these sessions. Administrators of two of the hospitals have informed us that the alcoholism problem within the institution has improved considerably, and a third hospital has requested a second series of orientation meetings for their service personnel so that they will have a better understanding of the alcoholism problem and the group meetings. In working with the inmates of the jail and workhouse, the need for a Half-Way House (transitional facility) is becoming more apparent. Such a facility would help this type of individual adjust to community life.

A total of 536 individuals have attended these group meetings. It is recommended that these contacts utilize the out-patient clinics for follow-up and assistance upon discharge.

Education

Requests for pamphlets, books, and exhibit materials were filled for teachers, students, physicians, nurses, social workers, and lay and professional groups. Approximately 6,500 pieces of literature were distributed through this medium. Requests from students continue to increase. This indicates to us a growing interest in this subject and an awareness of the seriousness of the problem.

We continue to mail the Alcoholism Treatment Digest to all practicing physicians in New Jersey and to an increasing number of other interested persons who make requests. We feel the Digest is responsible, in part, for

the large number of patients referred to the out-patient clinics by physicians. The Digest is published quarterly and mailed to approximately 7,000 individuals. Most of the material in the Digest is obtained from syndicated articles from the *Journal of Studies on Alcohol, Inc.*, Yale University, New Haven, Connecticut.

The use of films has also been an effective medium of education among the general public. During this fiscal year, there was a total of 447 film showings with a total of 19,521 in attendance. Five films are available for loan, and are suitable for teenagers and adult groups.

A second two-week Workshop on Alcohol Education, co-sponsored by the Trenton State College and this Department, was arranged for teachers and school nurse teachers. These individuals are responsible for health education in their respective schools. There were 55 applicants for the course. Because the number selected had to be limited, only 22 attended, 20 on scholarship from this Department. Because the response was so enthusiastic, we hope to arrange two such programs this year, one at the Trenton College and another with a State college in the northern area of the State.

One of the highlights of the educational phase of our Program was a three-day Workshop on "Alcoholism as a Mental Health Problem to Labor and Management." It is in this area that considerable education and help are needed. The Workshop, held at the Princeton Inn, Princeton, was attended by 50 selected representatives from New Jersey industries and labor unions. Speakers and group leaders were people of authority working in the field of alcoholism. The proceedings of the workshop were published for national distribution. This is to promote continued interest and further thinking and action in the area of alcoholism control among labor and management. A technical assistance grant, designed to extend the regular consultation and technical assistance of the regional and headquarters' consultants of the Community Services Branch of the United States Public Health Service, supported the Workshop. This is the first time the Federal Government has made funds available in the field of alcoholism education.

Scholarships to the Summer School of Alcohol Studies of Yale University, New Haven, Connecticut, were granted again this year to 10 individuals. This is a four-week course organized to meet the needs of a number of categories of professional and non-professional people. Specialists in various fields—medicine, religion, education, public health, address the student body. Each person attending the summer school adds to the number of those prepared to help in the promotion of programs and the dissemination of information on alcohol and alcoholism. A total of 37 individuals have attended the summer school on scholarships from this Department. Included in this group are social workers, parole officers, probation officers, police officers, physicians, teachers, clergymen, and the program secretary.

Program Emphasis

An appropriation of \$14,000 for the beginning of a rehabilitation program at the Mercer County Workhouse was included in the county budget. Future plans include a Half-Way House and the coordination of all services available to the alcoholic in the county. Mercer County is the first to utilize enabling legislation (Chapter 213, Laws of 1956) permitting county boards of freeholders to provide money for the establishment of programs for the rehabilitation of alcoholics.

If the problem of alcoholism is to be successfully combated or controlled, it will be through a better understanding of the problem by all professional disciplines, the acceptance of alcoholism as an illness, and the acceptance of the alcoholic as a sick person by the public at large. Therefore, we hope to place more emphasis on education during the coming year to promote prevention of alcoholism through early recognition of signs and symptoms and early and adequate therapy.

Arthritis and Allied Disorders

According to a recent analysis of findings on initial physical examination, arthritis is the second most frequent disease or defect encountered. From 10 to 20 percent of the general population are found to have such disorders.

The neglect of disability in its early stages is far more costly than an early aggressive program of restorative service which restores the individual to the highest possible level of physical, economic, social, and emotional self-sufficiency.

In order to prevent or minimize the development of unnecessary complications of disability, the following program activities have been initiated.

The New Jersey Arthritis Project, the name given to a group of persons representing 44 agencies, professions, disciplines, and organizations, meeting in general and committee sessions on nine occasions during the last year, drafted objectives and planned activities on a state-wide level in the field of arthritis. Their first joint project was a demonstration and workshop session on "Teamwork in the Management and Rehabilitation of Arthritis," held at the Hospital Center at Orange, and attended by 112 participants. It was pronounced a success, and plans for future similar demonstrations are under way.

A research project dealing with the application of the Hyland slide test for the RA (rheumatoid arthritis) factor in human sera is being applied at the East Orange Health Department laboratory to all sera submitted for routine examinations. The project began in January, 1959 and, over a half-year period, 1,689 persons have been screened, with positive reactions reported in nine and weakly positive reactions in 14. In collaboration with the Seton

Hall Department of Medicine, follow-up is being made of positive reactors through a questionnaire to their physicians. The study will be continued for a 12-month period, and an evaluation made of the findings, which will be then prepared for publication.

The Arthritis Unit of the Seton Hall College of Medicine has carried out, with assistance of personnel and equipment from this Division, 480 special types of laboratory tests on 310 patients with various kinds of arthritis and rheumatic diseases, as an aid in specific diagnosis and in an attempt to elucidate further the still unknown etiologic factors in these chronic disorders.

Thirteen of the known Arthritis Clinics in the State have been visited, and evaluations of their personnel, services and facilities made. New areas for the establishment of clinics have been elicited, and assistance in bringing these into being is sorely needed. Some assistance to existing arthritis clinics has been made in the form of additional equipment for physiotherapy services (Helene Fuld Hospital, Trenton and St. Barnabas Hospital, Newark).

Program Activities

All cancer projects and programs are located in community hospitals. These are developed by grant-in-aid funds for highly specialized personnel such as physicists or cytologists, or the loan of equipment to hospitals, depending on the need and the stage of development of the project.

Cytology in Selected Community Hospitals

Hunterdon Medical Center—Flemington. This hospital continues its cytological screening on *in-* and *out-*patients. Diagnostic services to the Cancer Program on special projects are also furnished by this hospital. The State Employees Cancer Screening Program was such a project.

Pollak Hospital—Jersey City. The lung neoplasm study continues at this hospital. Diagnostic services in the State Employees Cancer Screening Program were also furnished by this hospital.

Presbyterian Hospital of the United Hospitals—Newark. Diagnostic services in the State Employees Cancer Screening Program were also furnished by this hospital.

State Employees Cancer Screening Project

This project which terminates this year was a methodology study. We believe that we have adequately demonstrated the efficacy of our methods which were adaptations for mass utilization of proven techniques. The popu-

lation used was State employees who prepared slides from self-obtained specimens.

The adaptation used follows:

a. Females:

1. The use of the Draghi Tampon for vaginal smears.
2. Women made their own vaginal smears.
3. Group education method was used.

b. Males:

1. Collection of 24-hour sputa by large group of asymptomatic men.
2. Group education method was used.

The data will be published when a statistical analysis is made. We can say that the application of the modifications of the Papanicolaou methods, as used in the survey, proved satisfactory diagnostic specimens for screening purposes.

Pilot Studies

Two pilot studies were designed this year:

Rural Cytology Study. In this study, a kit was designed and equipped which will be distributed to those doctors participating in the study. Professional program personnel spent considerable time devising a questionnaire. This study was scheduled to go into operation in July, 1959. The reading of these slides will be centralized in the Shore Memorial Hospital, Somers Point. Suitable recording methods have also been devised.

Oral Cytology Study. This study is being done in cooperation with the Dental Health Program of this Department. It is hoped to determine the usefulness of the Papanicolaou technique for early detection of cancer of the oral cavity in dental office practice.

Training Program

The training of cytology technicians has continued actively at the Presbyterian Hospital, Newark. The number trained is still limited by the space and the time that is allowed for instruction. (See Table No. 2.)

Table 2.
TEACHING PROGRAMS AT PRESBYTERIAN HOSPITAL, NEWARK
1958-1959

Category of People	Subject or Experience	No. Hours per year	No. Persons Attended	Man Hours
Nurses	Full days clinic experience including radiation therapy and isotopes	7 hours per nurse (1 full work day)	86	602
Lab. Technicians	Cytology training	40 hours per technician	5	1,890
Physicians	Radiation therapy and Physics	Not Known	6	....
Radiation Therapy Technicians	Course given by Biophysics Dept. in Physics	96 hours per technician	3	288

Radiobiology and Nuclear Medicine

Presbyterian Hospital of United Hospitals—Newark. The Radiobiology Department is supported in part by the Cancer Program of the State Department of Health. This support is carried out by means of grant-in-aid funds to the hospital for the employment of highly trained personnel (physicist). The increase in the services rendered by the Radiobiology Department is shown by the large patient load in isotopes and in deep x-ray therapy.

This Department has also carried out some significant technical research. A study which involved the calibrations of the Cobalt⁶⁰ machines has been completed and measurements for techniques to be used in Rotational Therapy were determined. This study on the calibration of the Cobalt⁶⁰ machines is being prepared for publication.

The educational value of this program at Presbyterian Hospital is becoming known and accepted for its high standards. Doctors who are planning to use the new Cobalt⁶⁰ machines in their hospitals are coming to Presbyterian Hospital to become familiar with the new techniques of cancer cases.

St. Barnabas Hospital—Newark. The hospital has succeeded, with the cooperation of the Coordinator of the Cancer Control Program, to put into operation an isotope laboratory essential for the diagnosis and therapy of cancer.

West Jersey Hospital—Camden. An isotope laboratory has been in operation for the last three years. A limited increase in the number of patients who were diagnosed or treated with isotopes is indicated.

Pathology Laboratory

The Pathology Laboratory time spent on the Leukemia-Lymphoma Project amounts to 4.4 per cent of the total time available to the Pathology Program based on total number of slides prepared. Twenty-one per cent of the cases submitted to the Pathology Laboratory were related to the Leukemia-Lymphoma Project, the dog study.

Educational Activities

Lay Education

Cancer Detection Program. The Cancer Control Program cooperated with the Woman's Auxiliary to The Medical Society of Mercer County in a cancer film-showing program. Five local physicians conducted the discussion at five sessions, attended by 210 women. The pamphlet "Self-Examination of the Female Breast" was distributed.

Professional Education

Symposia—Physicians and Paramedical Workers. The Cancer Control Program of the New Jersey State Department of Health, in cooperation with the Presbyterian Hospital of the United Hospitals of Newark, and Rutgers—the State University, sponsored a lecture in May, 1959 on "Radiation Hazards in Medical Practice." There were five speakers, including the head of the Physics Department of the Cancer Institute Board, Melbourne, Australia. Of the 100 who attended, about 40 were biologists and physicists from Rutgers.

Another symposium on "Cytology and its Expanding Applications to Research, Diagnosis, Treatment" was sponsored in March, 1959 by the Cancer Control Program and the Presbyterian Hospital, Newark. There were seven speakers and 80 attended.

Nursing Activities of Program

A one or two-day clinical experience in cancer nursing at the Presbyterian Hospital, Newark, has been provided for public health nurses throughout the State for the past one and one-half years. The nurses visit admission, diagnostic, treatment and follow-up clinics of the hospital cancer service. They also observe procedures in isotope and deep therapy departments. This is followed by discussion of problems of field public health nurses with this type of patient. Three hundred fifty-four public health nurses have attended these sessions.

A survey was planned and carried out to determine whether the clinical experience at Presbyterian Hospital, Newark, had been helpful to the public health nurses who participated.

Two-thirds of the participating individuals replied to the questionnaire mailed to them. The analysis revealed that the nurses had derived benefit from this experience. It was on this information that the training program for nurses is continuing at Presbyterian.

This year's program of clinical observation for public health nurses has been planned in cooperation with the Presbyterian Hospital staff. The Public Health Nurse Consultant also took active part in the observation on 22 days. Eighty-six nurses participated in this clinical observation, which enables public health nurses to visit the hospital for two one-day sessions.

In cooperation with the Program Coordinator, the Public Health Nurse Consultant assigned to the Cancer Program wrote an article entitled, "A Clinical Experience in Cancer for Public Health Nurses." This article is based on the clinical experience at Presbyterian Hospital and the results of the survey. The manuscript has been accepted for publication in *Nursing Outlook* in the fall of 1959.

Literature Distribution. Distribution of 9,332 pamphlets entitled, "Self-Examination of the Female Breast" was made throughout the State. These were requested by physicians for use in their offices.

State Employees Cancer Screening Program. The Public Health Nurse Consultant gave instructions to 4,731 persons in 166 groups on techniques to obtain specimens for cytology studies and to give health education in relation to the Cancer Screening Program.

Research

National Cooperative Child Health Study

Lymphoma-Leukemia Study. A grant of \$9,200 was obtained from the National Cancer Institute of the National Institute of Health. This grant was activated February 1, 1959 and the study, which is part of a National Cooperative Child Health Study, is to continue for two years. The diseases included in the study are the lymphoma-leukemia group (200-205 International Classification of the Diseases) in the age groups 0-16 years.

The questionnaire used for this national study was designed by the Public Health Service. However, relevant animal questions are added to the above questionnaire so that the study becomes part of the dog study, which was commenced prior to this study.

Prior to this study, the Cancer Program initiated a lymphoma-leukemia study on dogs in cooperation with the Bureau of Veterinary Public Health. This investigation was based on two premises: (1) that there is some evidence to indicate that these diseases may be infectious (by a virus) and, (2) that it could be of some help to use animals, namely dogs, as possible indicators of the disease. Dogs also are subject to this group of diseases and live in close association with man.

Dr. Daniel Cohen, B.S., D.V.M., was assigned on loan by the Public Health Service to the Cancer Control Program for this project. The first step was to attempt a dog census, as a base line, using the same methods as used in human census studies, as far as possible. This dog census was completed by Dr. Cohen in August, 1958 and the paper was read at the American Veterinary Medical Association meeting in Philadelphia, in September, 1958.

At the same time, a diagnostic service to all veterinarians cooperating in this study was organized. Those cooperating send biopsy specimens to the State Pathology Laboratory where the slides are prepared. The diagnosis is made and a report is sent to the cooperating veterinarians. The families associated with dogs which have been diagnosed as having any one of the group of diseases under scrutiny will be investigated by the Cancer Program, using the same questionnaire as is being used in the National Cooperative Child Health Study.

Cooperation has been sought from all doctors in the State as a group, and then from each specialty as they are relevant to the study, as well as from hospital administrators, record librarians, and the people themselves who are the raw data of such a study. This has taken four months to accomplish. However, it still means that a visit will have to be made to each hospital monthly to obtain cases that may have been diagnosed. Reporting is never 100 per cent, and when there is no law, those seeking data must go to the source themselves to find it.

The nurse interviewer recruited for this study has had a three-month orientation period. During this time, she was able to obtain some background in cancer by attending the Cancer Clinics at Presbyterian Hospital, Newark, by reading literature, and by discussion with the principal investigator. The manual for interviewers and the questionnaire in the study were carefully read and studied and synonyms for difficult words compiled.

The nurse interviewer has now commenced the pilot study and the actual study. She has spent 358 man-hours since inception of this program to date. A part-time physician helped in the formulation of the animal questionnaire, spending 60 hours.

The principal investigator, who formulated all of the mechanics for obtaining data, also discussed the project with all of the various groups of doctors

necessary to the project in the State. She also formulated all letters and developed adequate filing and recording systems with the public health nurse interviewer and clerical staff in the Cancer Control Program. In all, 1,195 hours were spent in this fiscal year.

Diabetes-Endocrine and Metabolic Disorders

To the physician and his diabetic patient, the future is a serious one. The natural history of diabetes indicates that, in the majority of cases, more rapid and extensive deterioration is likely with increased duration of the disease. It is a strange paradox that, in spite of increasing medical knowledge about diabetes mellitus and with almost positive means of diagnosis available, this chronic disease frequently remains undiagnosed and the victims untreated. Even when the disease is diagnosed and the patients are treated, its complications continue to be a source of disability to the patient and an increasing problem to the physician, often imposing a heavy socio-economic burden on the patient's family and community.

A summary of the activities of the Diabetes Control Program during the year 1958-1959 follows:

Case-Finding Activities

1. The Sixth Annual State-wide Diabetes Detection Drive was observed during November 16-22, 1958. This was a joint effort of The Medical Society of New Jersey, the New Jersey Diabetes Association, and the New Jersey State Department of Health. Twenty-one County Medical Society Diabetes Detection and Education Committees were organized. Educational efforts and publicity utilized all methods of communication including posters, pamphlets, newspaper and radio reports, public meetings, etc. All methods of case-finding were used, including blood and urine testing.

A pamphlet was sent to all New Jersey physicians with the theme "The Doctor's Office: A Diabetes Detection Center." Further details can be found in the attached work load data.

2. Several short-term local projects in urine and/or blood screening were implemented or assisted by the Diabetes Control Program. The results are to be found in the attached tabular data.
3. A demonstration of the rapid blood screening methods of diabetes detection (Dextrotest) successfully resulted in the inauguration of this method of case-finding as a part of pre-employment and annual health

maintenance examinations at the Campbell Soup Company in Camden. A similar technique is used at the Hunterdon Medical Center.

4. The program at the Middlesex General Hospital, utilizing the Clinitron, has been expanded to include case-finding among local industries, as well as groups from the general public. The salaries of the personnel for administrative and technical services are paid by the New Jersey State Department of Health on a grant-in-aid basis.
5. A special pilot project of case-finding in the home was instituted as a joint project with the Mercer County Medical Society and Mercer County nursing agencies. Urine tests are performed by the nurse using Uristix.

Activities Related to Long-term Control of Diabetes

1. Activities related to patient and family:
 - (a) A Diet Counseling Service was instituted as a pilot project of the State Department of Health, the Mercer County Medical Society, and the area dietitians. Patients and their relatives were referred by their physicians for group and individual diabetes diet instruction. The project was considered very successful and plans were made for expansion.
 - (b) State Department of Health personnel have rendered consultative assistance to the New Jersey Diabetes League and the New Jersey Diabetes Association relative to a summer camp for diabetic children at Johnsonburg, New Jersey. Negotiations were completed to provide a grant-in-aid for salary of a full-time nurse for the next camping season. District personnel have been in consultation concerning other aspects of the camp.
2. *Activities Involving Professional Personnel:*
 - (a) On October 29, 1958, the Sixth Annual Diabetes Symposium for physicians was held at the Martland Medical Center, Newark. An excellent group of speakers proved very interesting to the audience. In addition to the formal papers, there were ward rounds with Dr. Francis Lukens and an exhibit.
 - (b) On May 13, 1959, the State Department of Health and the New Jersey Diabetes Association presented a symposium on "Neurovascular Complications of Diabetes Mellitus." The meeting was held at the St. Peter's General Hospital in New Brunswick and was attended by approximately 125 physicians. Speakers from Philadelphia, Boston, and New Brunswick presented papers and held a panel discussion.

Table 3.
RESULTS OF DREYPAKS TESTED*
FISCAL YEAR 1958-1959

	Number Tested	Positive Reactors	Known Diabetic	Newly Diagnosed Diabetic	Potential Diabetic	Diagnosis Not Determined	Negative	Diagnosis Incomplete
State Employees	658	12	2	1	1	2	5	1
General Public and Industries	7,227	87	28	27	7	7	6	12
Totals	7,885	99	30	28	8	9	11	13

* These figures include only those Dreypons returned to State Laboratory for testing.

Diseases of the Nervous System and Special Senses

Neurological Disorders

It is estimated that there are 50,000 victims of convulsive disorders in this State. In 1958, epilepsy was reported as causing 63 deaths in New Jersey, exceeding poliomyelitis, infectious encephalitis, and meningitis combined.

Early detection of chronic neurological disorders, especially convulsive disorders, continues to be facilitated by the electroencephalograph machines placed in hospitals throughout the State by this Division. Fifteen hospitals now report a total of 3,915 examinations, an increase of 881 over the preceding year. New machines have been placed, bringing the total to 17 on loan from this Division. The number of records reported as compatible with convulsive disorders totaled 1,158 as compared with 1,284 in the old clinical classification made last year. Use of a new reporting form, in which actual findings contrast with clinical impression, provides more accurate determination of abnormalities. The clinical classification of tumor was 168 cases last year; in reporting classification, the number of focal lesions disclosed was 543. These, however, include all cases of head trauma as well as tumor, and certain cerebrovascular accidents. Confirmation of the diagnosis of tumor rests on many more studies than the electroencephalograph.

The Convulsive Disorder Consultation Service was a continued user of the above electroencephalograph facilities. A total of 251 patients were so served, an increase of 49 over the preceding year (202 patients). A fifth clinic center was established at the Newark Presbyterian Hospital, facilitated by this Division through grant-in-aid for full-time technician services.

The hospitals where electroencephalograph machines are located were visited, and evaluations made of the services, facilities, and interpretation potential. As a result of liaison with the Department of Institutions and

Agencies, visits also were made to the electroencephalograph departments in several of the State hospitals.

As a result of the above activities, a symposium on electroencephalography for physicians and electroencephalograph technicians, sponsored by this Division and the Department of Institutions and Agencies, the New Jersey Neuro-Psychiatric Association, and The Medical Society of New Jersey, was held at the New Jersey Neuro-Psychiatric Institute. It drew an attendance of 97 physicians and technicians. It was pronounced a success, and plans for future similar programs are under way.

An in-service training program for public health and school nurses on epilepsy, sponsored jointly by this Division and the Division of Special Consultation Services, was held in the Southern State Health District and attracted 52 persons.

Glaucoma

Visual impairments affect one out of 40 in the ages 45-64, one out of 13 in the ages 69-74, and one out of six aged 75 and over.

An estimated 30,000 persons in New Jersey have undetected glaucoma and may lose their sight if untreated. Failure to detect glaucoma in its early stages is particularly disastrous in this disease process, where vision once lost, cannot be restored. If detected early, effective treatment can preserve vision for the lifetime of the individual.

The Newark Eye and Ear Infirmary, a unit of the United Hospitals of Newark, opened a Department of Visual Rehabilitation in 1958, aided by a grant-in-aid and the loan of scientific equipment from this Division. The Visual Rehabilitation Department is concerned with the prevention of unnecessary blindness, the early detection and treatment of glaucoma, the treatment of strabismus and amplyopia through orthoptic training and correction with refraction and surgery, and correction of low vision with convex lens systems.

The Glaucoma Program is carried on through a Glaucoma Committee which is in charge of all glaucoma patients, and is responsible for their complete evaluation. The clinic is equipped for study, with the usual methods of examination with special interest in tonometry, including aplanation tonometry, tonography, perimetry, and gonioscopy.

The Visual Rehabilitation Department provides an opportunity for qualified ophthalmologists, including doctors not on the staff of the Infirmary, to gain experience in the techniques of modern examination through work in the clinics. Ophthalmologists interested in research or preparation of papers will be given an opportunity to carry on their work through the Department. Physicians are invited to visit the Infirmary and inspect the facilities and bring

patients for examination. Staff ophthalmologists currently active in the Glaucoma Program have offered their services as speakers on glaucoma and other ophthalmological subjects to staffs of general hospitals.

There are at present 130 glaucoma patients seen on the average of once monthly, and these, with the permission of the clinic chiefs, are being rearranged so that there is equal distribution among all the clinics. The doctor representing his clinic as a member of the Glaucoma Committee is responsible for any problems that arise on said patients, and also for the completing of the new basic work sheet instituted by the committee, to be included on all glaucoma charts.

The Department of Visual Rehabilitation of the Newark Eye and Ear Infirmary participated in the three-day Essex County Health Fair. The glaucoma exhibit, prepared by this Division, was displayed, and screening tests to ascertain defects in the visual field were administered. There were 295 individuals who availed themselves of this screening procedure, of whom approximately eight percent failed. Those individuals who failed the test were referred to their family physician or ophthalmologist.

Scientific equipment has also been loaned to Newcomb Hospital, Vineland, and to Seton Hall College of Medicine and Dentistry to assist in the development of glaucoma detection programs.

Hearing and Speech

According to a recent report of the National Health Survey for fiscal year 1958, hearing defects rank first among physical impairments. They affect one of every 20 persons in the ages 45-64, one of eight in ages 65-74, and one of four aged 75 and over. Yet, early and accurate diagnosis of these disorders may result in therapeutic measures which will enable the individual to lead an essentially normal life. Continued grant-in-aid assistance has been given to Newark Eye and Ear Infirmary, Hunterdon Medical Center, and St. Francis Hospital, Trenton. A new center has been opened at the Bergen Pines Hospital in Paramus, making this much needed service available to residents of that area.

These hearing and speech centers demonstrate the importance of an adequate otolaryngological examination and paramedical team evaluation of the total needs of the patient in a community hospital setting.

The following is a summary of the service rendered at the hearing and speech center.

	<i>New Patients</i>	<i>Patient Visits</i>	<i>Referred for further medical consultation</i>
St. Francis	244	1,318	27
Hunterdon Medical Center	333	1,942	11
Newark Eye and Ear	835	3,851	184

A hearing and speech screening program for school children was carried on in some of the Hunterdon County schools. As a follow-up, a speech program was outlined for those children with speech difficulties to determine the possible relationship of hearing loss and speech problems.

The Hearing and Speech Center of the Newark Eye and Ear Infirmary participated in the Essex County Health fair. During the three-day exhibit, hearing screening tests were administered to 597 individuals of whom approximately 12 percent failed. Those individuals who failed the test were referred to their family physician or otolaryngologist.

Heart and Circulatory Disease Program

Heart disease today accounts for 38 percent of all deaths in the United States.

The major activity of the year has continued to be that of assisting community hospitals in the development and expansion of advanced cardiovascular diagnostic and consultation centers to promote rapid application of the newest techniques. Included in the above category are facilities for earlier cardiovascular detection, pulmonary physiology laboratories, a work classification center, studies in heart muscle physiology, peripheral vascular disease, and circulatory mechanisms of the liver to promote a better understanding of heart disease. Other existing projects that are being aided by the program are peripheral vascular disease clinics, rural diagnostic centers, and physician education in selected cardiac hospital centers in urban and rural areas.

Cardiac Diagnosis and Surgery

More hospitals in the State are developing facilities for major cardiac diagnosis and heart surgery. Physiologists are being provided through grant-in-aid from this Division to three hospitals: West Jersey Hospital, Camden; St. Michael's Hospital, Newark; and the Hospital Center at Orange. These grants are being provided to demonstrate the important role of physiologists in a cardiac diagnostic unit.

Work Classification

The unit at Barnert Memorial Hospital, Passaic, has shown a steady increase in its patient-load. During the first quarter of 1959, there was an average of 33 patient-visits per month. This Work Classification Unit evaluates persons with heart disease to determine their work potential. Patients are classified as to the types of activity or employment in which they may engage, within the limits of their heart disease. Candidates are also chosen from this group for vocational rehabilitation. This program represents joint cooperation of the hospital, vocational rehabilitation, and the Heart and Circulatory Disease Program of the State Department of Health.

Pulmonary Physiology

During the year, the laboratory at Middlesex Hospital, New Brunswick, began to function. This unit is providing a valuable service in this highly industrialized area. A biochemist is being provided by this program. Approximately 35 patients a quarter are being studied in this laboratory.

Heart-Muscle Physiology

This laboratory is located at Jersey City Medical Center and is under the capable direction of an experimental physiologist. Equipment is on loan for the purpose of evaluating the effect of strain, tension, and pressure on the cardiac musculature. Preliminary reports of this study have been presented at the recent meeting of The Medical Society of New Jersey held in Atlantic City. Findings from this study are contributing to a greater understanding of the nutrition of heart muscle.

Circulatory Studies of the Liver

Studies of the circulatory mechanisms of the liver, conducted at Jersey City Medical Center, are providing better understanding of heart failure and a method for earlier detection and management. During the year, the Heart and Circulatory Disease Program has contributed equipment to expand this facility. Reports on this study made by Dr. Carroll M. Leevy, have appeared in the *Annals of Science*. Reference to the contribution of the New Jersey State Department of Health is included.

Peripheral-Vascular Disease

Mountainside Hospital, Montclair, has a completely functional peripheral-vascular disease clinic. The recent acquisition of a treadmill and hypothermia unit has enabled broader consideration and understanding of this disease and has also provided methods for prevention, early detection and rehabilitation for the affected, with a reduction in the number of patients requiring amputation of limbs.

Rural Diagnostic Clinics

For the past two years, a rural cardiovascular disease clinic has expanded its service to include patients referred by rural physicians. A well-qualified cardiologist is being provided as a consultant to Newcomb Hospital, Vineland, and Bridgeton Hospital, Bridgeton. This, in effect, provides the local physicians with a better understanding of cardiovascular techniques and patient care. Clinic facilities and patient load have shown recent expansion.

Cardiac Case Finding

This service is conducted as a corollary project of the Community Chest X-ray Survey. In 1958-1959, there were 30,774 persons x-rayed, revealing 619 with possible cardiovascular disease. Forty-five persons were discovered who were unaware of their heart disease. The notices, sent to the family physician and to all suspects, further serve as reminders or stimuli for those persons not regularly seeking medical care.

The Beth Israel Hospital, Newark, was recently loaned a Twin Beam Stethocardiograph to supplement its existing facilities. This instrument will significantly aid in detecting and evaluating heart disease suspects.

Public Health Nursing

Attention was given to public health nursing service as a part of the total Program of Heart Disease Control. Through public health nurse consultant services, there has been active participation in planning, with nursing representatives of State and local agencies, for program meetings, institutes and workshops relating to nursing aspects of heart disease control. These educational efforts are sponsored by the county heart association, in cooperation with local hospitals, community nursing service agencies, and State and other official organizations.

Public health nursing material has been prepared such as a guide sheet for follow-up of patients with heart disease, in-service education outline, reference reading lists, and other teaching aids, to provide essential tools for improvement of nursing services. In conferences and consultation service with members of nursing and other disciplines, coordination of community resources has been stressed as an essential element in achieving continuity of care for the heart patient.

Planning for the future includes the provision of clinical observation and experience for nurses in cardiac clinics and teaching centers.

Physician Education

The courses in cardiology in cardiac resuscitation were repeated at St. Michael's Hospital in Newark. These courses were again well-attended by physicians.

The booklet, "Strike Back at Stroke," was distributed to physicians, medical institutions, schools of nursing, nursing homes, and public health nursing agencies. This booklet interprets techniques to aid the physician, nurse, and family in the rehabilitation of patients affected by stroke. Over five thousand copies have been distributed and more requests are anticipated.

A comprehensive diet manual, prepared by a committee of the New Jersey Dietetic Association and The Medical Society of New Jersey in consultation with our State Consultant in Nutrition, is being printed by this Division and will be distributed to interested physicians and institutions caring for the ill. Many requests are being received for this manual.

This program, in cooperation with the Chronic Illness Committee of The Medical Society of New Jersey, conducted a heart disease survey of New Jersey physicians. Questionnaires were sent to 427 New Jersey physicians. The statistical information obtained from this survey forms the basis of an exhibit and a talk presented at the annual meeting of The Medical Society of New Jersey.

Anti-Coronary Club

An "Anti-Coronary Club" is scheduled to be initiated at St. Vincent's Hospital, Montclair, with a two-pronged program in mind. First and foremost, it will serve as a state-wide demonstration center for both physician and nutritionist as to the technique and procedures to be followed in placing a patient on a diet designed to lower the blood cholesterol level in the hope of preventing the occurrence of arteriosclerosis. The Club will be primarily a teaching center in anti-atherogenic techniques. We hope to extend this service to the entire population of the State.

Secondarily, it will provide vital statistics as to whether or not lowering of blood cholesterol does, in fact, prevent the development or recurrence of arteriosclerosis in patients. This will be done at no added expense and should provide the answers to the missing link in the chain of evidence concerning production of arteriosclerosis in man. Thus a two-fold benefit of demonstration and teaching concerning anti-arteriosclerosis techniques and collection of valuable statistics from these techniques will be accomplished with the establishment of the "Anti-Coronary Club."

Homemaker Service

Homemaker Service has demonstrated its value as one of the important resources for preserving homes threatened by the loss or incapacity of the person who formerly carried the chief responsibility for family care and home management.

Four new homemaker services, Hunterdon County, Monmouth County, Somerset County, and Princeton, began operation during the past year which brings the total of functioning homemaker services in this State to 12, and makes these services available to more than two-thirds of the State.

Grant-in-aid assistance was given to six of these Services to demonstrate the importance of full-time, qualified directors. (Atlantic County Homemaker Service, Inc.; Community Homemaker Service of Bergen County, Inc.; Homemaker Service, Inc., Cranford; Visiting Homemaker Service of Hunterdon County, Inc.; Visiting Homemaker Service of Middlesex County, Inc.; and Homemaker Service of Somerset County, Inc.) The other six Services are supported entirely by local agencies.

The 12 Services, as listed below, provided more than 170,000 hours of service to 2,338 families:

Atlantic County Homemaker Service, Inc., Ventnor.
 Chr-III Homemaker Service, East Orange (Essex County).
 Homemaker Service, Inc., Cranford (part of Union County).
 Homemaker Service of Monmouth County, Inc., Red Bank.
 Homemaker Service of Somerset County, Inc., Somerville.
 SAGE Visiting Homemaker Service, Summit (part of Union County).
 The Community Homemaker Service of Bergen County, Inc., Englewood.
 Visiting Homemaker Service of Hunterdon County, Inc., Flemington.
 Visiting Homemaker Service of Middlesex County, Inc., New Brunswick.
 Visiting Homemaker Service of Morris County, Morristown.
 Passaic County Homemaker Service, Inc., Paterson.
 Princeton Community Homemaker Service, Princeton.

In addition, three counties have completed organization and will be serving the public early in the next fiscal year: Camden County, Cape May County, and Hudson County.

The training course for Homemakers, conducted by Rutgers University Extension Division and subsidized by this Division, was given 11 times and was attended by 184 homemakers. More than 700 women have attended these courses since they were initiated five years ago.

The 30-minute motion picture, entitled "Home Again," which was initiated by this Division and made by the Mental Health Film Board in cooperation with other agencies has been shown 83 times during this year.

The State Consultant Committee on Community Homemaker Service, composed of 47 representative women from various parts of the State, held four meetings during the year. In addition, the executive committee met more frequently. The executive committee is composed of the chairman of the State Committee and the chairman of its four divisions: Administrative Division, Financial and Legal Division, Organizational Division, and the Program, Education and Training Division.

Nutrition

Grant-in-aid assistance to the New Jersey Hospital Association for the provision of dietary consultation to community hospitals was continued. This Division has provided a grant-in-aid for the salary of a well-trained nutritionist experienced in hospital problems. Since she was employed in October, 1957, she has visited 44 hospitals, 34 of which were general hospitals, ranging in size from 26 beds to 622 beds, spending from two to seven days in a hospital. In addition, five homes for the aged, three county geriatric units, and one non-profit nursing home have been visited, and revisits made to 33 hospitals. A written report was prepared and presented to the hospital administrator outlining conditions found and listing specific suggestions for improving the food service to patients. The hospitals have been very appreciative of this service and the grant will be renewed for another year as the project is filling a long-felt need.

A two-day training course for hospital dietary personnel was held at the East Orange General Hospital. Those who attended were given certificates by the New Jersey Hospital Association. This is also part of the hospital nutrition program being carried on through grant-in-aid assistance from this Division to the New Jersey Hospital Association.

Restorative Services

Disability is one of the most serious problems of the chronically ill. The impact of disability on the patient, family, and community is greatest when the disability is severe enough to confine the patient to bed. Cancer, fractures, and heart disease take enormous tolls in terms of disability.

Experience with modern dynamic rehabilitation, using the team approach, has shown that much can be done to help patients. Hemiplegic patients, for example, have filled the back beds of our medical wards, the back bedrooms of their families' homes, and have crowded the few available beds in nursing homes and institutions for the chronically disabled. Studies have shown, however, that 90 percent of all hemiplegic patients can be taught ambulation, self-care, and urinary and fecal continence. Fifty percent can be taught to do gainful work.

Negotiations for the establishment of comprehensive rehabilitation services at Donnelly Memorial Hospital, Trenton, which have been carried on over a three-year period, were completed, and agreement reached as to the support that will be given by the city government, the State Rehabilitation Commission, the State Department of Health, and several community agencies. As its share, this Division has already purchased equipment for the use of therapists in the restoration of physical function and has entered into a grant-in-aid contract

effective July 1, 1959 to provide funds for a demonstration period for salaries of a medical social worker, a physical therapist, an occupational therapist, a supervising nurse trained in rehabilitation, and a clerk. The service will be available to patients referred by the Rehabilitation Commission and by other hospitals. Twenty beds will be available at the beginning of the program. It is hoped to increase the number of beds later as may be needed and to work toward the establishment of an out-patient service.

Because of the dramatic results attained, continued support has been given with equipment and grants-in-aid to the demonstration projects in Essex County Hospital and Camden County General Hospital. A 31-month study of 177 patients, 134 of whom were totally bedfast, admitted to the Restorative Services Unit at the Essex County Hospital since it was initiated in 1955, demonstrated that estimated savings of approximately \$400,000 have been effected. These patients are now in nursing homes, boarding homes, or with families, with various reductions in the cost of their maintenance. After 45 months of study, 103 of these patients are still alive, 53 of whom are living in their own homes at a reduced cost to the community.

Somerset and Mountainside Hospitals are showing an expansion of restorative services as a result of the Division's continued assistance for a demonstration period.

The following table shows the physical and occupational therapy services rendered at these hospitals during the fiscal year ending June 30, 1959:

Table 4.

Hospital	Physical Therapy			Occupational Therapy		
	No. New Patients	Total Patient Visits	Total Treatments	No. New Patients	Total Patient Visits	Total Treatments
Camden County General.	97	2,968	8,929	....	....	....
Essex County Hospital..	66	3,632	3,632	90	5,896	5,896
Middlesex Rehab. and Polio Hospital	214	1,966	4,434	140	146	3,798
Somerset Hospital	367	4,077	6,729	49	577	592

Also, assistance in expansion has been given to Helene Fuld Hospital, Trenton, and St. Michael's Hospital, Newark, to strengthen their programs for restoring function to the disabled.

Demonstration projects in community hospitals and county institutions have demonstrated tangibly the value of long and short term casework service. Continued support through grant-in-aid assistance has been provided for the services of a medical social worker in the following hospitals: Camden County

General Hospital, Blackwood; Essex County Hospital, Belleville; Hospital Center at Orange; Helene Fuld Hospital, Trenton; Somerset Hospital, Somerville; and West Jersey Hospital, Camden. A total of 1,492 patients received casework services related to problems of a personal or environmental nature, which interfered with obtaining the maximum benefits from medical care. This involved 7,686 casework interviews.

As a new way of meeting the need for medical social services, a successful experience was carried out at Helene Fuld Hospital, Trenton. By placing a well-trained social worker, drawn from a family and children's agency, in a hospital setting, this trainee gained practical experience which prepared her for a medical social work position in the new restorative services unit at Donnelly Memorial Hospital, Trenton.

Division of Constructive Health

CURTIS F. CULP, M.D., M.S., *Director*

Programs:

Crippled Children Program CURTIS F. CULP, M.D., M.S.
Program Coordinator

Dental Health Program J. CLARK GLEESON, D.D.S.

Maternal and Child Health Program RENEE ZINDWER, M.D., M.P.H.
Program Coordinator

Division of Constructive Health

Crippled Children Program

General Statement

The objective of the Crippled Children Program is the prevention of chronic disability by providing, at the time needed, recommended medical rehabilitation services to the physically handicapped, whose disabilities may be alleviated. Major emphasis has been directed toward meeting with State, county, and municipal representatives of hospitals, rehabilitation facilities, private, philanthropic, and professional groups in developing a closer working relationship between these groups and the Program. This has resulted in better Program planning at all levels in meeting the unmet needs of the handicapped child.

Community Services and Program Activities

In accordance with the definition of a crippled child and within the diagnostic categories as accepted and approved by the Program, there were 18,968 children registered with the Program at the end of the year. A breakdown of this number is reflected in the following table:

Table 1.

CRIPPLED CHILDREN ON STATE REGISTER, CALENDAR YEAR 1958	
On Register as of January 1, 1958	18,709
Placed on Register during calendar year	1,968
Total Entered on Register	20,677
Removed from Register for specified reasons	1,709
Reached age of 21	633
Dead	137
Cured	259
Residence established in another state	155
Ineligible for service	32
Cannot locate	263
Registration in error	12
Maximum recovery	216
Other reasons	2
On Register at end of year December 31, 1958	18,968

The Program participated in 34 cerebral palsy diagnostic and follow-up medical clinics open to all children in the State referred by physicians desiring such services in Newton, Jersey City, Camden, Trenton, Long Branch, and Somerville.

Through this Program, the services of six physicians specially trained in the field of cerebral palsy were made available to these clinics. In addition, there were six State sponsored consultation clinics provided by the Program for follow-up study of cerebral palsy cases. These clinics were held in each of the four State Health Districts on alternate months.

Hospitalization and Convalescent Care

The Program assisted in underwriting 16,794 bed days of hospitalization for 469 children and 15,964 bed days of convalescent care for 113 children. This reflects a 20 percent increase in the number of children served over the previous year. The total expenditure for these services was \$396,010.35. Of this amount, State and federal funds utilized were \$204,325.24; contributions by county boards of chosen freeholders, \$150,971.81; and contributions by parents, private and philanthropic agencies, \$40,713.30.

Artificial Limbs, Bracing and Appliances

Services were provided for 502 children in the purchase of 1,105 such appliances at a total cost of \$67,918.43. State and federal contributions amounted to \$30,746.23; contributions on the part of county boards of chosen freeholders, \$28,709.56; and contributions on the part of parents, private, and philanthropic agencies amounted to \$8,462.64.

Nursing Services

Nursing services are provided under the Program by:

1. Local public health nurses under the supervision of State public health nurse supervisors.
2. Nurses provided by private and official agencies having a cooperative arrangement with the Program.
3. Contract agreements with the Program on the part of 39 local private nursing agencies.

During the year, those agencies having contracts with the Program made a total of 8,962 nursing visits to crippled children registered with the Program at a total cost of \$26,886. Reimbursement for the cost of this service was made entirely on the part of the Crippled Children Program.

Psychological Services

Direct psychological consultation services were provided to 163 handicapped children. In addition, 13 counseling sessions were held with parents of handicapped children. These latter sessions were designed to assist the parents so that their children might become socially more competent. Many of these sessions were so arranged that in addition to parent participation, educators and psychologists could also be present and might be helped in developing their skill as counselors.

The Program psychologist participated in some 20 conferences, lectures, and demonstrations to various local groups within the State on diagnostic problems in the field of psychology. In these sessions, the significance of recent research in the field of psychology was interpreted, as well as the evaluation of test results and their application to the educational problems.

Work was continued on the research project, "Perceptual Problems of Children with Brain Damage."

Special Projects

Cleft Palate Evaluations

As a demonstration project in the utilization of the team approach to the rehabilitation of the total individual, the Program has continued its assistance in the pre- and post-operative evaluations for cleft palate and selected dental facial deformities.

In addition to affording financial support for 43 such cases to the Center of Reconstructive Surgery at St. Barnabas Hospital in Newark, 31 additional cases received this service through the Department of Plastic Surgery at Cooper Hospital in Camden.

In support of the team approach in the Cooper Hospital Center, the Program assisted in providing 123 speech therapy sessions for the 31 children seen in their pre- and post-operative evaluation project.

Physical Therapy

In support of a total rehabilitation service being afforded the handicapped children of Mercer County at the Donnelly Memorial Hospital, Trenton, the Program has provided the services of a physical therapist to this facility. Similarly, during the last six months of the year, the Program assisted in providing this service through the rehabilitation facilities of Warren Hospital, Phillipsburg. As a result of this project, 105 children were afforded approximately 2,500 physical therapy treatments.

Education and Training

The Program sponsored two physicians, one from Somerset County, and one from Monmouth County, in attending an intensive course in Neuro-muscular diseases of children with special emphasis on Cerebral Palsy at the Cook County Graduate School of Medicine in Chicago.

The Program assisted 12 dentists from various areas of the State in attending a course in dentistry for handicapped children at the University of Pennsylvania Dental College, Philadelphia.

Table 2.

CASE NUMBER AND PAYMENT OF HOSPITAL, CONVALESCENT HOME
AND APPLIANCE SERVICES FOR CALENDAR YEAR 1958

<i>Hospital Convalescent Care</i> —Total Number of Children	582	
Total Bed Days	32,758	
<i>In-Patient</i>		
Number of children receiving hospital services	469	
Number of bed days	16,794	
<i>Convalescent Home</i>		
Number of children receiving convalescent services	113	
Number of bed days	15,964	
<i>Payment of Bed Days (Hospital and Convalescent Home)</i> Total	\$396,010.35	
State and Federal Funds	\$204,325.24	
County Boards of Chosen Freeholders	150,971.81	
Total payments from tax sources	\$355,297.05	
<i>Private Contributions</i>		
Local Chapters of Polio Foundations	\$25,098.27	
Parents	10,308.17	
Elks Lodges	159.00	
Insurance	5,057.86	
Others	90.00	
Total Contributions	\$40,713.30	
<i>Appliances</i> —Total Number of Children	502	
Total Number Purchased	1,105	
Total Payments	\$67,918.43	
State and Federal Funds	\$30,746.23	
County Boards of Chosen Freeholders	28,709.56	
Total payments from tax sources	\$59,455.79	
<i>Private Contributions</i>		
Parents	\$3,510.65	
Local Chapters of Polio Foundation	3,102.20	
Elks Lodges	1,499.19	
Insurance	225.60	
Miscellaneous	125.00	
Total payments from private sources	\$8,462.64	

Table 3.

CALENDAR YEAR 1958

Section I—Children Who Received Clinic, Hospital and Convalescent Services, and the Number of Services:

<i>Services</i>	<i>Number Children</i>	<i>Number Visits or Days</i>
Clinic	6,485	12,827 Visits
Hospital	469	16,794 Days
Convalescent	113	15,964 Days
Duplicated Count of Children and Services	7,067	45,585 Units
Unduplicated Count of Children	6,885	

Section II—County Residence of Children Receiving Clinic, Hospital and Convalescent Services.

Total Number of Children

<i>County</i>	<i>Number of Children</i>	<i>County</i>	<i>Number of Children</i>
Atlantic	31	Middlesex	368
Bergen	905	Monmouth	604
Burlington	141	Morris	274
Camden	392	Ocean	33
Cape May	13	Passaic	65
Cumberland	17	Salem	32
Essex	1,886	Somerset	194
Gloucester	87	Sussex	32
Hudson	525	Union	755
Hunterdon	72	Warren	28
Mercer	428	Military	3

Section III—Distribution of Children (New and Old Cases) Receiving Clinic, Hospital and Convalescent Services by Number, Race, and Age.

	<i>Number Children</i>	<i>Age in Years</i>				
		<i>Under 1</i>	<i>1-4</i>	<i>5-14</i>	<i>15-20</i>	<i>Unknown</i>
Total	6,885	338	1,844	3,576	1,127	..
<i>Race</i>						
White	5,709	263	1,402	3,059	985	..
Other	1,176	75	442	517	142	..
Unknown .....	..	..	..	..	..	..
Number who received physician's services for the first time	1,822	338	685	656	143	..
Number who had received physician's services in previous years	5,063	..	1,159	2,920	984	..

Section IV—Distribution of Children Receiving Clinic, Hospital and Convalescent Services by Diagnosis Group, Sex and Age.

Report Group Code No.	Diagnosis Group	Total	Sex		Age in Years					Unknown
			Male	Female	Under 1	1-4	5-14	15-20		
	Total	6,885	3,781	3,104	338	1,844	3,576	1,127	...	
6120	Tuberculosis of bones and joints	12	6	6	...	...	4	8	...
6130	Late effects of tuberculosis of bones and joints	29	17	12	...	5	14	10	...	
0199	Other tuberculosis, except respiratory	1	...	1	...	...	1	...	...
6818	Late effects of acute poliomyelitis	1,025	621	404	1	69	694	261	...	
2830	Rickets, active	2	1	1	...	...	1	1	...
2840	Late effects of rickets	14	3	11	...	1	10	3	...	
3510	Cerebral palsy	1,529	831	698	5	312	943	269	...	
3590	Other diseases of the nervous system and sense organs, except eye, ear, and mental disorders	26	15	11	...	3	17	6	...	
3899	Other diseases of the eye, except congenital or diabetic cataract.	3	...	3	...	...	...	3	...
3999	Other diseases and conditions of the ear and mastoid process	8	5	3	...	...	5	3	...
4099	Rheumatic fever, acute	52	13	39	...	1	35	16	...	
4160	Chronic rheumatic heart disease	25	11	14	...	...	12	13	...
4300	Other diseases of the heart, except congenital malformations	12	9	3	...	...	4	8	...
7200	Arthritis and rheumatism, except rheumatic fever	22	11	11	...	2	14	6	...	
7309	Osteomyelitis and periostitis, except tuberculous	38	24	14	2	3	21	12	...	
7459	Curvature of spine, except congenital or late effect of poliomyelitis or tuberculosis	128	32	96	...	1	60	67	...	
7469	Flatfoot, acquired or unspecified	11	6	5	...	...	4	7	...

Report Group Code No.	Diagnosis Group	Total	Sex		Age in Years				Unknown
			Male	Female	Under 1	1-4	5-14	15-20	
7499	Other diseases of the bones and organs of movement, except congenital malformations	433	305	128	...	70	268	95	...
7510	Spina bifida and meningocele	170	73	97	24	29	92	25	...
7530	Congenital malformations of the circulatory system	125	50	75	8	48	55	14	...
7540	Cleft palate and hare-lip	588	342	246	48	221	270	49	...
7571	Congenital dislocation of hip	167	41	126	8	95	50	14	...
7584	Clubfoot, congenital or unspecified	1,019	562	457	121	432	421	45	...
7585	Flatfoot, congenital ..	20	15	5	...	9	9	2	...
7599	Other congenital malformations	1,088	602	486	104	492	407	85	...
7609	Injuries at birth, intracranial and spinal, except cerebral palsy and epilepsy	1	1	...	...	1	...	...	...
7619	Other injuries at birth, except cerebral palsy and epilepsy	111	58	53	13	24	52	22	...
9400	Burns	67	39	28	...	8	41	18	...
9980	Other morbid conditions due to accidents, poisonings, and violence	102	64	38	1	4	50	47	...
9991	Other diagnosed diseases, injuries, or handicapping conditions, except provisional or deferred diagnoses	57	24	33	3	14	22	18	...

Dental Health Program

Since its inception 20 years ago, the Dental Health Program has assisted in providing dental treatment services to approximately 117,185 children in 19 counties, at a total estimated cost of \$2,491,595. The average case load during the past 10 years has been 7,193 patients per annum.

Program Development

It became clear in 1959 that Program activity is limited and the total effort far from adequate. This evaluation is based upon United States Public Health Service statistics, supported by Program data, which point out a prevalence rate for dental disease of more than 95 percent among a constantly expanding population.

An Advisory Committee was appointed composed of the following members: Dr. John J. Cane, Dental Representative, Public Health Council; Dr. Walter A. Wilson, Dean, Fairleigh Dickinson University School of Dentistry; Dr. John G. Carr, Secretary, New Jersey State Dental Society; Dr. Herbert N. D. Cahlan, Chairman, Council on Dental Health, New Jersey State Dental Society.

A series of special projects was initiated to explore the possibilities of Program expansion in the areas of dental health education, application of preventive measures, and epidemiologic research. A major portion of the ground-work was completed for reorientation of Program activities with emphasis on prevention of dental disease through education and research. An in-service indoctrination course, embodying these basic concepts, was developed on the post-graduate level for professional personnel. Investigation of means for improving dental health educational material and methods of teaching was conducted in cooperation with the State Department of Education.

Other areas of exploration and activity included studying the needs for providing dental care to handicapped children, the chronically ill and aged; utilization of dental hygienists in dental health education; production of a dental health film; establishing a pilot examination and referral program for pre-school children; augmenting hospital services through dental residency; and research in attitudes of the public toward fluoridation, cytologic detection of oral cancer, and the epidemiological aspect of periodontal disease.

Development of an expanded Program was begun, while at the same time, treatment services were maintained.

Treatment Services

Statistics regarding treatment services rendered during 1958-1959 appear in Table 4. A total of 7,395 children received dental care, with 61 percent of the cases carried to completion. Treatment was provided through the facilities of 61 private dental offices, 14 stationary clinics and seven mobile clinics and trailers, operated by 89 dental practitioners.

Table 5 shows a comparison of Program statistics during the past 10 years. It should be noted that the number of children treated and total number of operations per child remained rather constant, while the number of school

districts visited increased. This reflects a trend of increased demand for dental care and a need for an increase in the acceptance of financial responsibility by local authorities. In this respect, 13 additional grant-in-aid contracts were negotiated, increasing the total number to 18 in 13 counties. State contributory funds, which are allocated under contract, presently amount to more than \$33,000. (Table 6.)

Fluoridation

The fluoridation of community water supplies did not appreciably increase. National statistics show that in this country, approximately one in five persons drinks fluoridated water through either a natural source or through the addition of fluorides to attain the optimal concentration of one part per million.

A dental survey of communities in Monmouth County was conducted after five years of fluoridation. Preliminary results indicate a decrease in the incidence of dental caries of approximately 50 percent.

A cooperative relationship is maintained with the New Jersey State Dental Society Committee on Fluoridation and United States Public Health Service relative to surveys and community projects. Assistance was provided to several communities in which fluoridation became a public issue, and exhibits were presented at the annual meetings of the New Jersey League of Municipalities and The Medical Society of New Jersey.

An oral rehabilitation program for the treatment of cleft palate cases was initiated at Cooper Hospital in cooperation with the Crippled Children Program. A panel of four dentists, specializing in the areas of oral surgery, orthodontia, prosthodontia, and pedodontia, cooperate with a team of physicians, speech therapists and para-medical personnel in providing evaluation and treatment services. The successful rehabilitation of the cleft palate patient is largely dependent upon maintenance of oral health. Plans for establishing a similar project in the metropolitan area were under consideration as the year ended.

Dental Health Education

A visiting team was organized by the Interdepartmental Committee of the Departments of health and education for the purpose of observing dental health education programs in various public school systems within the State. A pilot program in Phillipsburg, which is continuing through the second year, is conducted by two Program dentists who present lectures on dental health, utilizing visual aids. Visits were also made to Springfield schools, where an inspection and referral program is supplemented by awards for class participation in follow-up treatment; and to Teaneck schools, where student hygienists instruct elementary grades in the basic principles of dental health, including proper tooth-brushing instruction.

Table 5.

TREATMENT PROGRAM SUMMARY

July 1, 1948 to June 30, 1959

Year	Number of Dentists	School Districts	Number of Examinations	Number of Visits	Total Operations	Number of Children Treated	Percentage of Completed Check
1948-49	107	170	26,050	37,365	73,539	8,782	60
1949-50	110	191	37,919	34,660	66,762	8,340	67
1950-51	107	189	29,627	29,142	61,319	7,869	70
1951-52	102	179	31,825	29,382	60,289	7,890	69
1952-53	98	173	25,534	22,627	48,015	6,874	64
1953-54	92	177	28,424	21,256	42,046	6,179	62
1954-55	102	199	34,021	22,591	50,849	6,422	62
1955-56	89	203	35,846	22,825	51,061	7,144	59
1956-57	84	213	36,348	24,347	51,981	7,018	54
1957-58	88	207	42,609	23,513	49,788	6,844	63
1958-59	89	217	36,155	24,812	51,499	7,359	61

TYPES OF PROGRAM

1944-1955 Clinics, Private Offices, two Trailers and four Mobile Clinics.
 1955-1959 Clinics, Private Offices, three Trailers and four Mobile Clinics.

Table 6.

FINANCIAL SUMMARY

July 1, 1948 to June 30, 1959

Year	Federal and State		Local Contributions		Total		Status of Grant-In-Aid Initiated 1954
	Amount	%	Amount	%	Amount	%	
1948-49	\$94,257	70	\$41,377	30	\$135,634	100	...
1949-50	91,829	58	67,367	42	159,196	100	...
1950-51	89,996	58	64,897	42	154,893	100	...
1951-52	91,107	58	66,033	42	157,140	100	...
1952-53	87,858	54	76,165	46	164,023	100	...
1953-54	91,902	58	65,371	42	157,273	100	...
1954-55	107,929	60	72,426	40	180,355	100	\$1,500
1955-56	101,713	54	88,296	46	190,009	100	3,075
1956-57	101,327	53	90,935	47	192,262	100	4,650
1957-58	97,339	52	91,153	48	188,492	100	8,350
1958-59	102,984	53	91,168	47	194,152	100	33,345

Maternal and Child Health Program

Hospital Consultation Services

The Maternal and Child Health Program makes available to hospitals special advisory consultation services in the area of maternity and newborn care and exchanges pertinent information with representatives of the Department of Institutions and Agencies and the New Jersey State Board of Nursing.

This service, which was initiated in December, 1955, has received increasing recognition and success since its beginning, as attested by numerous letters received from hospital administrators, nursing directors and others, as well as by requests for additional consultation services. By the end of the fiscal year 1958-1959, 52 percent of the hospitals in which approximately 75 percent of the births in New Jersey occur, have been covered by the service.

Midwives

There were 94 licensed midwives registered to practice in the State, one less than in the preceding year; 17 midwives were active in 1958 in contrast to 25 in 1957. The total number of infants delivered by midwives was 42. These midwife deliveries represented 0.03 percent of the 125,794 births occurring in New Jersey. Midwife activities by State Health Districts were as follows:

Table 7.
MIDWIFE ACTIVITIES BY DISTRICT

State Health District	Number of Active Midwives	Number of Infants Delivered by Midwives
Central	5	8
Northern	2	5
Metropolitan	8	16
Southern	2	13
Totals	17	42

Retrolental Disease

Retrolental Disease, a serious eye condition which is preventable in most instances, is today's leading cause of blindness among young children in this country. Occurring particularly in very small premature infants, it has been definitely associated with the administration of oxygen in high concentrations and for a prolonged time. The Program has made every effort to alert hospitals and physicians to this problem and has assisted hospitals to institute

desirable safeguards. It is believed that these efforts have contributed to the dramatic decline in the occurrence of the disease as indicated by the number of cases reported to the New Jersey Commission for the Blind. Informed by the commission of any reported case of Retrolental disease, the Program promptly follows through, offering specific consultation regarding oxygen administration and equipment to hospitals, where these occurred. No case of Retrolental disease was reported for 1958.

Table 8.
CASES OF RETROLENTAL DISEASE BY YEAR

Year of Birth	Number of Cases of Retrolental Disease reported to the Commission for the Blind*
1952	58
1953	34
1954	18
1955	11
1956	4
1957	2
1958	0

* As indicated by correspondence to the Maternal and Child Health Program.

Migrant Health

Two pediatric clinics for children of migrant workers were held in conjunction with the school programs for these children conducted at Freehold and Cranbury, following cooperative planning with representatives of the State Department of Labor and Industry (Bureau of Migrant Labor), the State Department of Education, and the Cranbury Council of Churches. The services provided consisted of complete physical examinations of all children attending the school, as well as a few preschool age children who were brought to the school for this purpose, treatment of minor conditions, provision of protective immunizations against diphtheria, pertussis, tetanus, and poliomyelitis, as indicated, tuberculin testing, and dental examinations.

Additional Maternal and Child Health services were provided to migrants through the Monmouth County Organization for Social Service. These services were rendered on a contract basis, whereby the Department assisted financially toward the payment of physicians' services in prenatal clinics and of public health nursing services, both to cover additional personnel time needed due to the influx of migrant workers. No separate services were set up here, but already existing community services were made available to these people.

Professional Educational Activities

A postgraduate course on "Emotional and Psychiatric Aspects of Pediatrics" was planned and held in cooperation with Seton Hall University Medical School, postgraduate department. Outstanding speakers in the field were selected. The average attendance was approximately 50 and included physicians, nurses, and social workers.

The lecture series was subsequently published in the June, 1959 issue of *Public Health News* under the general title, "A Psychiatric Look at Children." The demand for this publication has been considerable from within and outside the State and requests have come from individuals, mental health organizations and hospitals, state departments of health, of mental health, and of education, schools of public health and social work, the United States Children's Bureau, the United States Public Health Service, and others.

Two regional postgraduate courses for physicians on "Recent Advances in Obstetrics" were arranged in cooperation with Seton Hall University, Postgraduate Department and were held at Mercer Hospital, Trenton and St. Mary's Hospital, Passaic. Each course consisted of 12 sessions.

A one-day symposium on "Accidental Poisoning" was held at the Princeton Inn. Reports from various poison control centers, description of the State Health Department's program, and presentations by outstanding authorities in the field of poison control were presented. About 130 persons participated, representing various poison control centers in the State. Representatives from Connecticut and Philadelphia poison control centers were also present. In addition to the physicians, pharmacists, nurses, hospital administrators and health officers, members of the State Safety Council, parent-teachers associations and first-aid squads were in attendance.

Maternal Deaths

The Maternal and Child Health Program works cooperatively with the Special Committee on Maternal and Infant Welfare of the Medical Society of New Jersey, in the study of deaths occurring in women during pregnancy, delivery or the puerperium. These studies reveal that the irreducible minimum of maternal deaths has not as yet been reached, despite the dramatic decline of the maternal death rate over the past decades. The 1958 maternal death rate of 0.4 per 1,000 live births has shown a slight increase over the preceding two years and is the first reversal of the trend of a decreasing maternal mortality rate since 1938.

Mental Retardation

Considerable thought and planning were involved in developing, cooperatively with administrative and medical personnel of the Morristown Memorial Hospital, the Morris County Chapter of the New Jersey Association for Retarded Children, and the State Association for Retarded Children, the "Child Evaluation Clinic" at Morristown Memorial Hospital. This clinic will use the team approach to the diagnosis, evaluation, and follow-up of mentally retarded children. The clinic director is a neuro-pediatrician; other members of the team are pediatricians, a psychiatric social worker, a psychologist and a public health nurse. Other medical consultation services in a variety of specialties and necessary laboratory facilities, are available at the hospital. The clinic will be ready to function in September, 1959.

The October, 1957 issue of *Public Health News* entitled "Understanding Mental Retardation" and presenting the lectures on mental retardation given at a seminar for physicians on the subject arranged for by the Program, continued to be in considerable demand throughout 1958-1959.

Poison Control Service

Because accidental poisonings, especially among children, present a public health problem and because increasing professional and citizen interest in this problem has developed in recent years, a Consultant in Public Health Toxicology was assigned to the Maternal and Child Health Program in February, 1958. Considerable progress has been made in this area since then.

Prior to the fiscal year 1958-1959, 10 poison control centers were in existence. During 1958-1959, 14 additional centers were developed, all of these with consultation from the Service; thus a total of 24 active poison control centers were in existence throughout the State at the end of the fiscal year 1958-1959. These centers are located as follows:

Table 9.

NEW JERSEY POISON CONTROL CENTERS (All provide 24-hour service)
As of June 30, 1959

<i>Location</i>	<i>Location</i>
All Souls Hospital, Morristown	Newark Beth Israel Hospital, Newark
Atlantic City Hospital, Atlantic City	Newton Memorial Hospital, Newton
Babies Hospital, Newark	Nutley Child Safety Prog., Nutley
Clara Maass Memorial Hospital, Belleville	Orange Memorial Hospital, Orange
Fitkin Memorial Hospital, Neptune	Overlook Hospital, Summit
Holy Name Hospital, Teaneck	Paterson General Hospital, Paterson
Hunterdon Medical Center, Flemington	Perth Amboy General Hospital, Perth Amboy
Middlesex General Hospital, New Brunswick	Princeton Hospital, Princeton
Monmouth Memorial Hospital, Long Branch	St. Elizabeth's Hospital, Elizabeth
Morristown Memorial Hospital, Morristown	St. Peter's General Hospital, New Brunswick
Mountainside Hospital, Montclair	Warren Hospital, Phillipsburg
	Helene Fuld Memorial Hospital, Trenton
	West Jersey Hospital, Camden

A card, listing existing poison control centers, together with address, phone number and name of director, was prepared and printed for distribution to all physicians, full-time health officers and hospital administrators, and other interested groups.

The Poison Control Service receives individual case reports from these centers and compiles them prior to forwarding them to the Poison Control Unit of the United States Public Health Service. A total of 955 such reports was received from 21 centers during the fiscal year 1958-1959. The age distribution was as follows:

Table 10.

POISON CASES BY AGE GROUPS AS REPORTED BY NEW JERSEY POISON CONTROL CENTERS FOR FISCAL YEAR 1958-1959

<i>Age Groups</i>	<i>Number of Cases</i>
Under 1	28
1	185
2	309
3	146
4	55
5	16
6 and over	183
Unknown	33
Total	955

DEPARTMENT OF HEALTH

Accident Prevention

An intensive educational campaign regarding use and misuse of plastic bags and containers was carried out during June, 1959, to prevent accidental deaths in children due to suffocation as a result of handling these materials improperly. In addition to newspaper publicity, 60,000 educational leaflets were distributed as follows: all New Jersey physicians; special supply to all pediatricians; all local boards of health; all Registrars (with suggestion to obtain additional copies for distribution with birth certificates); all State employees (with pay check); all New Jersey pharmacies.

Appointment of District Consultant Pediatricians

During the year, four part-time District Consultant Pediatricians were appointed to help improve existing child health services and to develop such services in areas where need exists. These pediatricians are administratively responsible to the respective District State Health Officer and programwise to the Program Coordinator of the Maternal and Child Health Program. In the Metropolitan, Northern, and Southern State Health Districts, the pediatric consultants cover the entire District. The consultant in the Central State Health District limits his services, for the present, to Burlington County, with the goal of developing demonstration child health services in that county.

Field Activities on Local Level

The operation and administration of Department sponsored and supervised maternal and child health activities on local level is the responsibility of the four State Health Districts. During the report year, the Department supervised the work done at 74 Child Health Stations, rendering services to 9,055 children in 1,557 sessions.

A demonstration child health conference was established in Burlington County Hospital, Mount Holly, under the direct supervision of the District Consultant Pediatrician, through Departmental grant-in-aid. This station will be used as teaching center for physicians, pediatric residents, public health nurses, and others.

Statistics

Statistical material, also of great importance and concern to the Maternal and Child Health Program, is included in that portion of the Departmental Annual Report which deals with the activities of the Public Health Statistics Program.

Division of Environmental Health

ALFRED H. FLETCHER, M.S. in Engineering, *Director*ROBERT S. SHAW, M.P.H., *Assistant Director**Programs:*

Air Sanitation	WILLIAM A. MUNROE <i>Program Coordinator</i>
Food and Drugs	MILTON RUTH, <i>Chief</i>
Food	FRANCIS A. TIMKO <i>Program Coordinator</i>
Drug, Device and Cosmetic	HOWARD C. SAYRE, PH.G. <i>Program Coordinator</i>
Meat Inspection	WILLIAM C. CARTER, D.V.M., M.P.H. <i>Program Coordinator</i>
Milk	HOWARD ABBOTT, M.P.H. <i>Program Coordinator</i>
Shellfish	FRANCIS A. TIMKO <i>Program Coordinator</i>
Occupational Health	E. LYNN SCHALL, M.P.H. <i>Program Coordinator</i>
Public Health Engineering	ROBERT S. SHAW, <i>Chief</i>
Potable Water	ANTHONY T. LEAHEY <i>Program Coordinator</i>
Stream Pollution	LEROY FORMAN <i>Program Coordinator</i>
Solid Waste	JOHN ZEMLANSKY, M.S. <i>Program Coordinator</i>
Ragweed and Poison Ivy	JOHN ZEMLANSKY, M.S. <i>Program Coordinator</i>
Camp and Bathing Places	ERNEST R. SECESSER <i>Program Coordinator</i>
Housing	ALFRED H. FLETCHER, M.S. <i>Program Coordinator</i>
Radiological Health	WILLIAM H. AAROE <i>Program Coordinator</i>
Veterinary Public Health	OSCAR SUSSMAN, D.V.M. <i>Program Coordinator</i>

Division of Environmental Health

The broad objectives of the Division of Environmental Health are to influence the planning, construction, maintenance, and operation of sanitary facilities that are important to healthful living; to prevent the transmission of animal diseases to humans; and to develop and encourage programs to promote healthful environmental conditions. More specifically, this includes activities to improve and properly maintain water supplies, liquid and solid waste disposal systems, bathing places, housing, milk, shellfish and other food and drug supplies; activities to prevent and control air pollution and radiation hazards, and to promote health and control unhealthful conditions in industry; activities to discover the transmission of animal diseases to humans; to determine the mode of transmission and practical methods of control; and programs to deal with the other environmental health problems such as ragweed and poison ivy, insects, and rodents.

To carry out these activities, the Division is organized into six Bureaus or Programs namely, Engineering, Food and Drugs, Veterinary Public Health, Occupational Health, Air Sanitation, and Radiological Health. The activities are grouped into the following programs:

<i>Engineering</i>	<i>Food and Drugs</i>	<i>Veterinary Public Health</i>
Bathing-Camp	Milk and Milk Products	Rabies
Housing	Shellfish	Other Animal Diseases
Potable Water	Food	Insect and Rodent Control
Solid Waste Disposal	Drugs	
Stream Pollution Control		
Ragweed and Poison Ivy		
<i>Radiological Health</i>	<i>Air Sanitation</i>	<i>Occupational Health</i>

Codes have been drafted and when approved are recommended for adoption by local boards of health by reference. The following is a list of recommended codes pertaining to environmental health in existence to date: Retail Food Handling, Smoke Control, Weed Control, Plumbing, Swimming Pools, Nuisance Control, Individual Sewage Disposal Systems, Trailer Camps, Individual and Semi-Public Water Supplies, Maintenance of Swine, and Garbage and Refuse Collection and Disposal.

Food and Drugs

General

The four Food and the Drug, Device and Cosmetic Programs are designed to protect public health and to prevent the manufacture and sale of adulterated and misbranded food, drugs, devices, and cosmetics. Laws and regulations are enforced pertaining to the operation of milk plants, ice cream plants, narcotic plants, refrigerated warehouses and locker plants, egg-breaking establishments, shellfish establishments, non-alcoholic beverage bottling plants, and slaughterhouses as well as other food processing plants.

Certain types of food and drug establishments are required by law or regulation to obtain licenses, permits or certificates from the Department. The following tabulation shows the number of licenses, permits or certificates issued and the revenue from that activity:

Table 1.

<i>Establishment</i>	<i>Licenses</i>	<i>Permits</i>	<i>Certificates</i>	<i>Revenue</i>
Milk plant .....	...	493	...	\$12,325.00
Goat dairy .....	...	28	...	269.63
Refrigerated warehouse and/or locker plant	92	...	...	4,575.00
Ice cream factory	1,301	...	...	11,085.00
Narcotic drug	85	...	...	650.00
Creamery and/or pasteurizing plant	45	...	...	No fee
Egg-breaking plant	22	...	...	No fee
Non-alcoholic beverage bottling plant	175	...	...	No fee
Shellfish interstate shipping plant .....	...	...	196	No fee
Shellfish intrastate shipping plant .....	...	...	56	No fee
Slaughterhouses	131	...	...	No fee
	1,851	521	252	\$28,904.63

In addition, \$2,410.80 in penalties and court costs were collected by the Attorney General for violations of these laws and regulations.

Legislation

Legislation defining and authorizing the manufacture and sale of artificially sweetened ice cream for diabetics was enacted becoming effective July 3, 1958.

On September 24, 1958, Regulations Concerning Construction, Operation, Maintenance and Licensing of Slaughterhouses and Inspection and Labeling of Animals Slaughtered for Food were filed with the Secretary of State to become effective July 8, 1959. The new regulations replaced existing requirements which did not provide for compulsory veterinary inspections of meat intended for sale for human consumption.

Food (Other Than Milk, Ice Cream and Shellfish)

The licensing of egg-breaking, non-alcoholic beverage bottling and bottled water plants, refrigerated warehouses and locker plants, together with enforcement of sanitary requirements in the above and other non-licensed establishments are functions of the Food Program. In addition, supervision is exercised over the collection of food samples for analyses for bacteriological and chemical adulteration and compliance with established standards of quality and identity. Labels of food products are also reviewed for violations and for statements which might mislead or deceive the consumer. Over 700 samples of food, other than milk and shellfish, were evaluated for the above purposes. New and revised labels submitted by industry, State and local health officials were also reviewed and comments made regarding compliance with laws and regulations.

Almost 12,000 pounds of misbranded liquid broken eggs, which were suspected of being adulterated and having been broken in an unlicensed plant, were seized at an Ocean County processing plant where they were undergoing flash pasteurization. The eggs were placed under embargo in a local freezing plant by the alleged owner pending examination of the eggs and determination of their wholesomeness. Bacteriological and chemical analyses indicated that the eggs consisted in part of decomposed eggs, resulting in seizure of the entire lot by a United States Marshal, inasmuch as they had been shipped in interstate commerce.

Investigation of an outbreak of food poisoning attributed to chemically adulterated fish fillets prior to the Easter holidays was coordinated by Program personnel. The outbreak caused one death in New Jersey and an undetermined number of cases of illness. Investigation by federal agents disclosed that the fillets were contaminated by the addition of substantial quantities of sodium nitrate at a Philadelphia wholesale fish dealer's establishment and were then distributed to a chain store warehouse and several independent outlets in southern New Jersey and eastern Pennsylvania. Prompt follow-up action on the part of the chain food store management and local, State and federal food control officials prevented greater numbers of cases of illness. Radio, television, newspapers, sound trucks and other means were used to disseminate news relating to the danger of eating fresh fish fillets purchased during a specified period. Although the widespread publicity resulted in an enormous economic loss to the fish industry during this period, the program did prevent numerous housewives and restaurant owners from preparing adulterated fillets for consumption and may have saved a number of lives. The operator of the fish firm was eventually indicted by a federal grand jury in Philadelphia.

A continuing program to halt the practice of adulterating ground meats and sausage by the addition of sodium sulphite or sodium bisulphite was car-

ried on during the year. The chemical substance is usually added to preserve the meats for longer periods of time, to impart a bright red color, and often is used to conceal inferiority in the meat. Of a total of 441 samples analyzed, 14 were found to be adulterated in this manner, representing slightly more than three percent of the samples. Based on the above analyses, 10 cases were referred to the Attorney General for prosecution for violation of Revised Statutes 24:5-14. Nine hundred dollars were paid to the Attorney General during the past fiscal year by persons or firms violating the above statute.

Beef products among the above samples were also examined to detect substitution of horseflesh. Out of 151 glycogen determinations, no positive results of analyses were reported indicating that this practice has apparently disappeared.

Agents of the Department continued to cooperate with federal, State and local agencies by making special investigations and placing embargoes on adulterated or misbranded foods. In cases where embargoes were placed at the request of federal agencies, the embargoes were continued until seized by the United States Marshal or disposed of by other lawful means. Technical and consultative advice was also provided to other State agencies in matters relating to wholesomeness of food and sanitation.

The following tabulation lists the number and type of food establishments, other than milk products and shellfish, inspected by representatives of this Department during the fiscal year:

Table 2.

FOOD ESTABLISHMENTS INSPECTED

Type of Establishment	Total
Bakeries	26
Egg-breaking establishments	84
Eating establishments	26
Non-alcoholic beverage bottling and bottled water plants	197
Refrigerated warehouses and locker plants	60
*Miscellaneous food establishments	1,273
Total	1,666

* Inspections of eating establishments made by Central and Metropolitan Districts are included in this total.

Drug, Device and Cosmetic

During the year, 82 inspections were conducted of manufacturing plants, wholesale distributors and research laboratories holding or applying for a license to handle narcotic drugs. Eighty-five such establishments are licensed

by this Department. Emphasis is placed on safeguards for the narcotics while being processed and stored to prevent diversion to illicit channels by pilferage or burglary.

Forty-four inspections and nine investigations were made in drug and cosmetic establishments in regard to sanitation and compliance with the New Jersey Food and Drug Law.

Samples of drugs and cosmetics were collected for analysis and label review. One hundred and twenty-four such samples were collected. First violators were warned by letter and subsequently checked to see that violation was corrected. Twenty-seven gross of an adulterated hair wave preparation were embargoed and eventually destroyed under supervision of representatives of the Department.

The stock of a drug store damaged by fire was placed under embargo. This stock, consisting of several truck loads, which could not be salvaged, was destroyed under supervision of Department personnel.

One lot of cough syrup consisting of 321 bottles was destroyed under supervision of a representative of this Department and an agent of the Federal Bureau of Narcotics. The lot consisted of returned, aged, and damaged goods containing a narcotic drug.

On eight occasions during the year, the Department was notified by the United States Food and Drug Administration that products which were nationally distributed were being recalled for various reasons. Although the recall programs were monitored by the United States Food and Drug Administration, checks were made by this Department in order to evaluate the efficiency of the recall program in New Jersey.

The Department renders a service to the drug and cosmetic industry in this State by issuing certificates of inspection to qualified firms in order that they may export products to foreign countries. After inspection of the plant, investigation of quality control and review of labels and labeling had shown satisfactory compliance, 112 such certificates were issued.

Meat Inspection

During the year, 131 red meat slaughterhouses were licensed by the Department. All red meat slaughterhouses were inspected by District personnel to determine if they were operated in substantial compliance with the laws and regulations enforced by the Department.

On September 24, 1958, the Commissioner of Health filed with the Secretary of the State "Regulations Concerning the Construction, Operation, Maintenance and Licensing of Slaughterhouses and Inspection and Labeling of Animals Slaughtered for Food," to become effective July 8, 1959.

In addition to more specific requirements for slaughterhouse construction and maintenance, the new regulations regulate poultry slaughterhouses as well as red meat slaughterhouses and require meat inspection services excepting those:

- a. Processed in slaughterhouses subject to federal inspection programs and under observation and inspection of the United States Government inspection personnel, or
- b. Slaughtered and dressed upon order of a consumer who observes and selects the animal to be killed, or
- c. Raised for a period of not less than 30 days on premises where they are slaughtered and sold directly to household consumers, or restaurants, or other public eating places, or as a prepared meal to the consumer.

In connection with the new regulations, persons slaughtering poultry under the Department of Agriculture State Seal of Quality Program for Poultry, made application for a license to operate poultry slaughterhouses under the voluntary provisions of the regulations in advance of the effective date of July 8, 1959. Provisions of the State Seal of Quality program include, "Prior to slaughtering any lot of poultry, inspection shall be made by a meat inspector licensed by the New Jersey Department of Health or by a qualified United States Department of Agriculture inspector performing inspection in a United States Department of Agriculture approved plant. All slaughtered birds shall be inspected by a licensed meat inspector or by a qualified United States Department of Agriculture inspector performing inspection in a United States Department of Agriculture approved plant. All animals that are found to be unfit for food as a result of ante-mortem or post-mortem inspection are to be condemned.

The cooperative program between the Department of Agriculture and the Department of Health for the State Seal of Quality Program resulted in:

- 27 license applications received.
- 16 licenses issued.
- 1 unnecessary application.
- 5 license applications denied.
- 5 license applications withdrawn.
- 72 sanitary and veterinary slaughterhouse inspections.

Cases of Anthrax

An outbreak of anthrax involving a dairy farm, slaughterhouse, and pig farm was investigated in Salem County. The epidemiological investigation revealed that one human and seven animals were involved. The human case was discovered by Department personnel during the course of the investigation relative to the animal cases. The animals were processed in a licensed slaughter-

house, and their offal was subsequently fed to pigs. As a result of the investigation, the sale of animals and their products at the dairy farm, slaughterhouse, and pig farm was discontinued until such time as all embargoed products were destroyed under supervision and the premises involved could be disinfected in a manner approved by the Department. In addition, 26 other establishments that had purchased meat from the involved slaughterhouse during the investigation period were disinfected before resuming the sale of food. Approximately \$12,000 worth of meat was destroyed at the slaughterhouse and all hides were required to undergo special disinfection at a tannery. As of the end of the fiscal year, all embargoes and quarantines have been removed, except at the pig farm.

Milk Control

In cooperation with the United States Public Health Service, the Department continued to inspect milk plants and ice cream plants for listing as sources of approved supplies for interstate carriers and United States Coast Guard installations. Two additional sanitarians are being trained to carry on this work.

There has been an increasing number of reports of persons sensitized to penicillin. The fact that this antibiotic is normally used in the treatment of mastitis infections in dairy animals resulted in setting up a program of routine sampling of milk supplies to determine the presence of that drug. The samples taken to date indicate that the educational programs aimed at proper use of the drug and elimination of milk from treated animals have been effective because only one sample, representing less than 0.1 percent of the volume of milk tested, showed the presence of penicillin.

The Farm Practices Committee of the New York State Association of Milk and Food Sanitarians completed studies and made recommendations for adoption of requirements in the northeastern states on the following subjects: installation, operation, and cleaning of C-I-P farm milker systems; and transfer of milk from farm pickup tank trucks to over-the-road tank trucks.

Studies are continuing on control of mastitis in dairy herds, better control in the use of antibiotics in the treatment of dairy animals, and uniform labeling requirements for milk and milk products. This work provides for greater uniformity in requirements, which should eventually provide a basis for exchange of inspection information between states in our milk shed.

Local boards of health having reciprocal inspection agreements with the Department submitted 531 reports of inspection of milk plants holding permits.

The following average ratings of milk plants and dairy farms supplying milk and milk products for New Jersey consumers have been obtained:

Table 3.

<i>Out-of-State</i>		1959
Fluid Milk Plants	94.1	
Fluid Milk Dairy Farms	91.3	
Manufacturing Milk Plants	91.6	
Manufacturing Milk Dairy Farms	89.8	
<i>In-State</i>		
Milk Plants	89.7	
Dairy Farms	86.5	

The following tabulation shows the number of inspections made and samples obtained during the year by Department personnel of various establishments handling milk and milk products:

Table 4.

Milk Plants	619
Dairy Farms	4,231
Goat Dairy Farms	33
Ice Cream Plants	1,416
Samples Collected	6,429

Shellfish Control

The harvesting, handling, and sale of shellfish (oysters, clams, and mussels) are regulated under authority contained in Chapter 14, of Title 24, of the Revised Statutes and regulations promulgated thereunder. The general provisions of the New Jersey Food, Drug and Cosmetic Act govern the labeling and define adulteration of such products. By regulation, all places engaged in the wholesale handling or shucking of shellfish must be certified by the Department.

Shellfish growing areas and market shellfish are periodically examined for bacteriological quality, and inspections are made of all establishments shucking or wholesaling shellfish. Regulatory procedure includes patrolling of shellfish areas condemned pursuant to Revised Statutes 24:14-2, to prevent harvest or sale of potentially dangerous shellfish. Almost 800 man-hours of patrol at irregular intervals and places were spent in condemned shellfish areas by program personnel. In addition, considerable cooperation was received in this effort from local police officers and from agents of the Division of Shellfisheries of the New Jersey Department of Conservation and Economic Development.

The Department also participates in a voluntary cooperative program administered by the United States Public Health Service in which all shellfish producing states and the Dominion of Canada use the Public Health Service

Manual of Recommended Practice for the Sanitary Control of the Shellfish Industry as a uniform enforcement guide. Compliance with the recommended practices contained in the manual and endorsement of our Department's control program by the Public Health Service permit publication of the names of certified New Jersey shippers in a list of certified shippers of raw shellfish in interstate commerce. This ensures free acceptance of New Jersey shellfish products in other states.

An extensive survey was made of the shellfish waters and potential sources of pollution in the Great Bay area and tributaries in Cape May and Atlantic Counties by Stream Pollution and Shellfish Program personnel. Evaluation of the survey findings will be made when the report is completed and will determine whether the status of the waters for shellfishing purposes will have to be altered.

Plans were also completed for a similar survey in the Absecon Bay area in Atlantic County.

The mortality rate of oysters in the Delaware Bay area continued to increase with the result that practically no New Jersey oysters were shucked during the past year. The plight of the industry has become so acute that the New Jersey Department of Conservation and Economic Development has prohibited the dredging of oysters in Delaware Bay for an indefinite period of time with the hope that the oysters surviving the blight will propagate a more resistant strain and allow the once thriving industry to re-establish itself. Hand tonging of oysters will be permitted in Maurice River for a portion of the year. If any New Jersey oyster shucking plants operate during the ensuing year, they will have to import shellstock from other producing states or import shucked stock for repacking.

In addition to the oyster shucking industry, there are 10 plants certified for the shucking and shipment of sea clams in New Jersey. This relatively new industry, which processes sea clams harvested beyond the continental limits of the United States for use in soups, stews and for frying, located in the State due to the large supply of sea clams off the New Jersey coast. The clam is entirely eviscerated, the clam meat washed several times, diced, sliced or minced and shipped fresh or frozen to other processing plants or sterilized in cans for consumer use.

During the past few years, a substantial growth of oysters occurred in a condemned area near the Red Bank Sewage Treatment Plant outfall in the Navesink River in Monmouth County. In an effort to preserve the shellfish from destruction during channel dredging operations and desiring to create a new potential source of shellfish seed in an area formerly noted for producing large quantities of oysters, this Department and the Division of Shellfisheries of the Department of Conservation and Economic Development arranged for

creation of a shellfish sanctuary in an open area of the Shrewsbury River where the oysters were relaid by the latter agency. An order was promulgated by this Department prohibiting the harvesting of oysters from the sanctuary area for a period of 30 days to permit self-purification of the shellfish, and the Division of Shellfisheries prohibited the harvesting of shellfish from the area for an indefinite period for conservation purposes.

The following tables show the number of inspections of shellfish establishments made and the number of water and shellfish samples collected for bacteriological analyses:

Table 5.

INSPECTIONS OF SHELLFISH ESTABLISHMENTS
Number of Inspections

Shellfish shipping plants	636
Shellfish shucking plants	56
Total	692

Table 6.

Number of Samples Collected

Shellfish waters	4,427
Shell oysters	98
Shucked oysters	194
Shell hard clams	454
Shell soft clams	55
Shell mussels	1
Total	5,229

Public Health Engineering

Potable Water

Fifteen new sources of water supply, 34 new treatment plants, 20 storage units and additions and alterations to 46 existing facilities were recommended for approval. Based upon the recommendations, formal permits were issued by the Department for the construction and operation of the projects. The dollar value of the projects was estimated to be \$6,209,205.

Fourteen original physical (cross) connection permits were issued pursuant to statute, bringing the total of such permits to 237.

Two "Orders of Necessity" were issued, pursuant to the provisions of R. S. 40:1-16 (g), so that the municipalities concerned might be able to provide additional sources of water supply and more adequate distribution facilities.

A survey of municipal water supply data for New Jersey on behalf of the United States Public Health Service was completed.

The "Water Supply Code of New Jersey (1959)" was approved by the Department on March 19, 1959, and is available for adoption by reference to any interested local board of health.

Stream Pollution Control

The Stream Pollution Control Program encompasses the whole field of liquid waste collection, treatment and disposal as it affects stream quality.

This program includes interstate stream pollution problems and cooperation in the pollution control activities of both the Interstate Commission on the Delaware River Basin (Incodel) and the Interstate Sanitation Commission.

Plans, specifications and other engineering data were examined and permits issued for the construction and operation of 192 sewerage projects having an estimated cost of construction of \$43,259,247. This is the third highest estimated expenditure for any single year and assures that the high level rate of construction of recent years will be maintained.

Nineteen permits were issued permitting factories or workshops to locate on potable watersheds.

"Orders of Necessity" were issued to 20 municipalities permitting them to exceed their bonded indebtedness in order to construct necessary sewerage projects.

Twenty-three formal orders were issued to municipalities and industries requiring the cessation of the pollution of waters of the State.

Twenty-four new sewage treatment plants were completed and placed in service. Many of the new sewage treatment plants serve housing developments and consolidated schools.

The routine stream sampling program, started in the spring of 1958, was continued and intensified. One hundred twenty-six sampling stations have been established on the streams of the State. Forty-five sampling trips were made collecting 318 stream samples from these stations.

Three hundred thirty-eight stream samples were collected for the Northwest Bergen County Sewage Authority on streams in their district.

The current Raritan Bay-Raritan River survey is to establish conditions existing in the waters both prior to and following the placing in operation of the Middlesex County Sewerage Authority collection and treatment facilities. During the year, over 1,000 Raritan Bay-Raritan River samples were collected and analyzed for chemical, physical and bacteriological characteristics requiring approximately 432 man-hours of survey work. This work is being done jointly by Public Health Engineering and the Sewerage Authority.

An extensive survey was performed of the Great Egg Bay to establish by sanitary survey and sampling the condition of the "approved" and "closed" shellfish areas for the harvesting of shellfish. This was a joint project by Public Health Engineering and Food and Drugs; 340 man-hours by personnel of the former and 500 man-hours of the latter were required.

Eight applications for federal grants to aid in the construction of sewage treatment works and the required supporting documents were processed and forwarded to Public Health Service, Region II, together with complete plans, specifications and other engineering data. Later, State priorities were given upon advice from Public Health Service that the projects met their prerequisites for a grant. The projects consumed all of the money allotted to New Jersey for the fiscal year 1959.

During the year, an extensive research study of our records was completed to document and summarize the accomplishments of the past 10 years. A report entitled *Ten Years of Cleansing New Jersey's Streams and Waters* was published. Between 1948 and 1958, the State Department of Health approved sewerage facility projects for municipalities and industries in this State the combined total of which exceeds \$275,000,000.00, or an average of 27.5 millions of dollars per year. This compares with a total of only \$51,000,000.00 in the previous decade and \$38,000,000.00 in the decade 1928-1938.

Solid Waste

Sanitary landfills have been proven to be a practical method of disposing of garbage and refuse throughout the State. The usual nuisances of flies, odors, insects and rodents or stream pollution associated with open dumps are eliminated. Thirty-seven new landfills were initiated this year. In the last two years, the number of sanitary landfills has doubled. There are a total of 88 sanitary landfills serving 269 municipalities or approximately 40 percent of the population. Sixteen incinerators serve 17 municipalities or approximately 15 percent of the population.

A Solid Waste Code of New Jersey (1959) was approved by the Department to provide a useful legal tool to local boards of health to assist them in controlling garbage and refuse problems within their jurisdiction. This code regulates the storage, collection and disposal of refuse and may be adopted without publication of the text pursuant to the provisions of Chapter 188, P. L. 1950. An ordinance for this purpose is also furnished.

Chapter 20, P. L. 1959, was enacted to extend the effective date of Chapter 8 of the State Sanitary Code by ordinance. A proviso in this law requires the approval of the Commissioner of Health before the ordinance is enacted by

the municipality. At the end of this fiscal year, only 10 municipalities submitted ordinances under this new legislation.

The Department prepared and distributed a circular entitled *In New Jersey, Open Dumps Are Disappearing*. The circular briefly describes the growth of proper disposal of refuse by sanitary landfills and incinerators.

Ragweed and Poison Ivy

Twenty-four pollen collection stations reported the pollen counts for the 1958 growing season.

The following locations in the State had seven or less pollen grains per square centimeter average: Madison (Madison Avenue) 4, Madison (Station Road) 4, Summit 6, Newark 6, Atlantic City 6, Jersey City (Medical Center) 3, Jersey City (Pavonia Avenue) 3, Asbury Park 6, Westfield 4, New Brunswick 7, McGuire Air Force Base 3, Fort Dix 1, and Sparta 3.

Camp and Bathing Places

Participation by owners and operators in the lake bathing place certification phase of the program increased threefold over the previous year's activity with 41 Certificates of Compliance being issued during the bathing season. A large sign was also made available to those operators indicating to his patrons in an effective manner that State Health Department standards were being complied with.

A total of 222 summer camps were inspected. Of those inspected, 180 camps received departmental Certificates of Approval.

Sampling of New Jersey surf and other tidal bathing waters was continued in accordance with procedures set forth to meet existing circumstances of sanitation in these areas.

Housing

A suggested housing ordinance has been distributed as a guide to municipalities interested in developing housing programs.

This Department cooperated with the New Jersey Health Officers' Association and the United States Public Health Service in presenting a two-day housing institute for local health officers.

A sanitarian from the Department attended Yale University for a five-week course in housing sponsored by Yale University and the Public Health Service. After this training, it is planned to utilize his services as a program coordinator in further developing the housing program.

The Department has also cooperated with the Department of Conservation

and Economic Development in the development of an application for a grant-aid project from the Federal Housing and Home Finance Agency in the field of housing and urban renewal. This project is designed to demonstrate a "State Housing and Urban Renewal Program" using a committee to bring about a coordinated program of housing among the Departments having responsibility for various phases of the problem.

A representative of the Department is serving as a member of the State Advisory Commission on Planning.

The Department has rendered assistance to local boards of health in connection with the enforcement of Chapter 199, P. L. 1954 in dealing with proposals for the installation of water and sewerage facilities for realty improvements.

Occupational Health

General

New Jersey is one of the most industrial and heavily populated states. New corporations are registering in New Jersey at a record rate and a projection shows that new corporations will eventually exceed last year's number of 8,000 by 50 percent. It is reliably reported that South Jersey is leading the nation in economic growth. Whole new industries and methods of work have been developed, and more new materials and chemicals are being used than ever before. New threats to health, physical and mental, are to be found in new products, new forms of energy, and new patterns of production and distribution.

The objective of the Occupational Health Program is to protect and improve the health of the working population by cooperating with local health departments, management, and labor in preventing and controlling occupational diseases and health hazards, and by promoting the provision of preventive health services to employees.

Provide Information

Requests to receive Occupational Health Bulletins published by this Program amounted to 442, almost double the number requested last year. Requests were received from persons residing in the United States, Australia, Brazil, Canada, Germany, and Peru. These bulletins are mailed to approximately 1,500 persons, of whom 90 percent are industrial plant personnel located in New Jersey. They continue as a valuable educational instrument in several universities and insurance companies.

Several visitors from foreign countries consulted with Program personnel to gain occupational health orientation and information. Nursing students and

college students continued to seek training and guidance in the field of occupational health from the Program. On numerous occasions, representatives from the legal profession requested and received information on occupational health matters during visits to our offices. Laboratory technicians have been trained by staff toxicologists in the method of performing the urinary porphyrin test as a screening method to detect excessive lead absorption.

Arrangements were completed with Seton Hall University, College of Medicine and Dentistry, for a postgraduate course for physicians in industrial medicine. Lecturers and subjects were chosen for 10 sessions. The course was well received and is to be repeated in 1960.

Interest in the adoption of a performance code for noise from industry increased during this reporting period. Mt. Laurel Township in Burlington County and Woodbridge Township have adopted performance codes. The City of Elizabeth, the Township of Union, and the Township of Madison have codes under consideration. The values stated in the code have been used in interpreting complaints in nine communities: Edison Township, Secaucus, Jersey City, Trenton, Cliffside Park, Linden, West New York, Rahway, and Belleville.

Promote Health of Adults

Complete surveys and studies conducted within industries in New Jersey totaled 214, an 18 percent increase over the previously reported fiscal year. Seventy-one of these studies were self-initiated either as a follow-up of reported compensation claims or in preparation for a study of hazards associated with the use of electrostatic precipitators to control atmospheric emissions, mercury carbon brush manufacturing, the silversmith industry, and the asbestos insulating industry in New Jersey. Remaining surveys and studies were completed as the result of direct requests from industrial management, labor, medical personnel, or local and district health offices. Employees in establishments visited totaled 69,227 and of this number, 45,377 were directly affected by the service given. It is interesting to note that requests for assistance with occupational health problems are increasing from small industrial plants (employing less than 100 persons). This demonstrates an awareness of health problems associated with the work environment in plants unable to provide their own services. The public health team approach prevailed in the following detailed conditions:

Table 7.

Introductory visits	146
Technical studies of hazards	95
Occupational health surveys	139
Noise and vibration studies	42
Consultations only (advisory)	6
Follow-up on recommendations	17
Total	445

The total, 445, represents an increase of 13 percent over the same activities for the previously reported fiscal year.

Atmospheric contaminants determined in the field totaled 450, and 746 physical conditions were recorded. This represents an increase of 53 percent and 14 percent, respectively, above the number of determinations reported in the previous fiscal year. Routine laboratory analyses accounted for 245 samples, with clinical diagnostic analyses totaling 183. The total laboratory work load was almost one-fourth greater than that declared in the 1957-1958 report.

Throughout the year, assistance was given many hospital pathologists and practicing physicians in diagnosing suspected lead poisoning cases and other poisons. Blood lead and urine lead determinations were performed in the Occupational Health Laboratory.

There were 346 occupational diseases reported and 63 of these were investigated.

Radiological Health

The status of control of radiation received much impetus by the enactment on July 8, 1958, of Chapter 116, P. L. 1958, known as the "Radiation Protection Act." This act provides for comprehensive coverage of all sources of radiation within the State; not only materials and facilities subject to the licensing powers of the United States Atomic Energy Commission, but to all machines that produce radiation and to all radioactive materials as well.

The legislation creates in the State Department of Health the Commission on Radiation Protection. The Commission is authorized to promulgate codes, rules and regulations to prevent unnecessary radiation.

The State Department of Health is designated as the agency to administer such codes, rules, and regulations as may be adopted by the Commission. Among other things, the Department shall require registration of sources of radiation; inspect radiation sources and their shielding; develop comprehensive policies and programs for the evaluation and determination of hazards associated with the use of radiation and for their amelioration; advise, consult and cooperate with other agencies of the State.

Considerable progress has been made by the Commission in the drafting of a code to control unnecessary radiation. A great deal of care has been exercised by the Commission to produce a practical, workable code in addition to the technical provisions controlling exposure to radiation.

According to the law, the Department is responsible for rendering appropriate assistance to the Commission so that it may properly discharge its duties and responsibilities. The assistance rendered during the first year of operation has been substantial.

Activities

The work of the Program during the past year is summarized under the following eight activities:

1. Locate and evaluate radiation sources in New Jersey. The Radiological Health Program, together with the Commission on Radiation Protection, has been developing forms and procedures for the registration of radiation producing machines. The initial registration date has been tentatively set for October, 1959.

The registration process is designed to provide facts on the location of sources of radiation, scope of the sources, and the relative potential hazard. The latter will be used in setting up a priority system for inspecting the sources.

Location of radioactive materials licensed by the Atomic Energy Commission has been made possible by the receipt of copies of licenses issued by the Atomic Energy Commission. As of June 30, 1959 there were 11 special nuclear material licenses held by persons in New Jersey. These licenses were issued for the use of plutonium and enriched uranium, the handling of which requires special and advanced training in nuclear physics. On the same date, there were 52 source material licensees in New Jersey. Such licenses cover the use of 65,000 pounds of thorium and certain types of uranium.

The number of licensees of other types of radioisotopes in New Jersey on June 30, 1959 was 223. Of this number, 68 were physicians or hospitals, 16 were civil defense agencies, five were educational institutions and the remainder were other private individuals and industries. Sixty of these licensees are permitted to possess a curie or more of radioisotopes; 14 are entitled to use 1,000 or more curies.

2. Survey and evaluate radiation sources.

During the fiscal year 1958-1959, 23 inspections or surveys were made of the radiation installations licensed by the Atomic Energy Commission.

Eighty-one x-ray machines were surveyed during the first seven months of 1959 compared to 84 for the calendar year 1958. The number of machines surveyed by type of owner of the machine were:

Table 8.
X-RAY MACHINES BY TYPE OF OWNER

Type of Owner	Period Covered	
	1958 (12 months)	1959 (7 months)
All owners	84	81
Dentists	46	70
Private physicians	3	6
Private industry	3	0
Non-profit associations:		
Hospitals	1	2
Tuberculosis associations	4	1
Official agencies:		
City or county	9	2
State	17	0
Federal	1	0

As a result of these surveys, many recommendations were made to eliminate unnecessary radiation by the use of diaphragms, filters, cones, shielding, timing devices, use of fast film, etc.

3. Provide radiochemical analysis services.

Background radiation data and levels of radiation intensities in areas around nuclear reactors are ascertained by assaying samples of air, water, silt, soil, and vegetation for radioactivity. More than 1,500 samples were collected during the last 12 months; about 3,000 determinations were made—1,500 for alpha and 1,500 for beta radiation levels.

Certain water purveyors have been contacted and arrangements made to have their personnel take these samples and forward them to the Program for analysis. The water purveyors can be of real assistance to the Program by helping in this way, saving much travel, time, and expense.

4. Conduct special investigations.

5. Perform research and development of sampling and analytical techniques.

6. Promote dosimeter service.

This means encouraging the use of film badges and pocket dosimeters by radiation users and the maintenance of a permanent record of their radiation exposures. Film badges may be issued to selected radiation users to further this aim. The use of these devices is a means to measure radiation exposure and enable preventive measure to be taken.

7. Provide technical consultation service.

This is a very important part of the Program. Through consultations, it is possible to prevent unnecessary radiation exposure by providing statements of fact on the adequacy of standard procedures, shielding, etc.

One of the most efficient methods of providing information is to give it to groups of responsible and interested people. Some examples of the types of talks with various groups are:

"Radiological Health as a Profession"—Rutgers University College of Arts and Sciences, Newark.

"Radioactivity and the Environment—Administrative Responsibilities"—Rutgers University, New Brunswick.

"Introduction to Radiology"—Lawrenceville School and the Workshop for Teachers, Trenton State College.

"Industrial Hygiene Training Course"—Greater Trenton Chamber of Commerce.

Other types of information provided were: numerous requests for copies of the Radiation Protection Act of 1958 were filled; and requests for lists of radioactive material users were sent to many responsible public official agencies, such as police and fire departments.

Staff members attended meetings of local boards of health as a consultant on radiological health problems. Staff members also participated in several civil defense drills. Conferences and conventions participated in by staff members were: Regional conference on Radiological Health at the Public Health Service Region II Office, New York City; Interstate conference on the Delaware River, Philadelphia; New Jersey Sewage and Industrial Wastes convention at Atlantic City; Public Health Service Radiation Surveillance Network conference, Las Vegas, Nevada.

Air Sanitation

General

Air pollution control activity in New Jersey is carried on under the general public health law and under authority contained in the New Jersey Air Pollution Control Act (1954).

An Air Pollution Control Commission, as authorized by this legislation, was appointed and organized in February, 1955. Operating within the framework of the State Department of Health, it has power to formulate and promulgate codes, rules and regulations controlling and prohibiting air pollution.

The State Department of Health is assigned the responsibility of controlling air pollution in accordance with any code, rule or regulation promulgated by the Commission. The Department is also empowered to conduct and supervise research and educational projects and to require the filing of reports on the emissions of air contaminants.

The Act further prescribes procedures for hearings before the Department and provides for protection of confidential information. When investigation

discloses violation of any code, rule or regulation, the Department of Health is required first to endeavor to bring about correction by conference, conciliation, and persuasion. In case of failure to remedy the violation in this manner, the law provides for penalties.

Air Pollution Control Commission

Shortly after its organization, the Commission determined that air pollution could be dealt with in four major categories.

1. Smoke and odor from open burning dumps.
2. Smoke, fly ash and odor resulting from incomplete combustion of solid, liquid and/or gaseous fuels, including incinerators.
3. Dusts, gases, vapors, fumes and odors resulting from commercial and industrial operations.
4. Pollens.

The first of the four major categories established by the Commission, "smoke and odor from open burning," became the subject of regulation by adoption of Chapters I through III of what is now known as the New Jersey Air Pollution Control Code, effective May 1, 1956. These chapters control air pollution by prohibiting open burning of refuse, including garbage, refuse and trade wastes and by prohibiting open burning in connection with salvage operations.

The second category, "smoke, fly ash and odor resulting from incomplete combustion from solid, liquid and gaseous fuel," became the subject of regulation through the adoption of Chapter IV of the New Jersey Air Pollution Control Code, titled, "Control and Prohibition of Air Pollution by Smoke," effective January 1, 1958; and Chapter V of the Code titled, "Control and Prohibition of Air Pollution from Combustion of Solid Fuel," effective July 1, 1958. During the past year, the Commission has directed its attention toward the third and fourth categories, specifically particulate matter in the form of dusts, vapors, fumes, and airborne pollens.

In announcing its intention to promulgate rules and regulations to control particulate matter, the Commission conducted a public conference with the objective of gaining guidance from industries in the State as to the scope and content of the proposed chapters to the Code. A great many industries in the State were represented at the conference. The recommendations and comments received are contained in conference proceedings now under study by the Commission. Subsequent to the conference, the Commission met with representatives from specific industrial groups to discuss their recommendations regarding the content of regulations. The industry groups represented were chemical

industries, foundry operators, petroleum refineries, and bituminous concrete processors.

Facts assembled through all conferences have been the subject of considerable discussion by the Commission, although no drafts of proposed regulations were developed during the year.

The fourth category, "pollens," was the subject of much consideration, and drafts of a proposed regulation were developed although not promulgated during this period.

It is evident from the cooperation received from industrial groups, that there has been general acceptance of the philosophy of the Air Pollution Control Commission and the Commission's way of conducting its affairs.

Air Sanitation Program Administration

Certain activities of the Air Sanitation Program have now been developed to a point where routine policy and procedures have been established, and it has become practical to consider the decentralization of Program activities into State Health District Offices. During this fiscal year, the Metropolitan State Health District Office has been staffed and it is planned to staff the remaining three offices in the next two years.

Enforcement

Enforcement activity comprised about 60 percent of the total Program activity.

Control of Open Burning

Four hundred municipalities, industries, or commercial establishments were cited for violation of Code requirements prohibiting open burning in refuse disposal and salvage operations during the period of this report. This brings to a total of 1,120, the number of persons cited for violations since the effective date of May 1, 1956.

Although it is difficult to be certain that corrective measures taken will be 100 percent effective, it is conservatively estimated that a total of 540 persons have discontinued open burning since the effective date as the direct result of enforcement actions taken by the Air Sanitation Program. Of this total, 310 were corrected during the period of this report. Office conferences were held with 96 violators and 329 submitted written agreements to cease violation in lieu of conferences. The number of voluntary actions taken on the part of municipalities and particularly industries in the State, following the education phase of the enforcement activity, adds considerably to the total number of open burning operations which have been discontinued.

Although no objective measurement for the reduction of air pollution caused by open burning has been used, there has been a noticeable visual reduction in air contamination from open burning during this past year.

Actions on the part of persons to comply with this Code requirement included the construction of 30 commercial, 20 industrial, and two municipal incinerators. A large number of municipalities, five commercial establishments, and one industry have adopted the sanitary landfill method of solid waste disposal.

During this year, the enforcement activity in connection with open burning moved from the educational phase to that of more active legal action. Three of the largest operators of general refuse disposal areas in Hudson and Mercer counties were prohibited from open burning refuse through processes of consent judgments obtained in the courts by action of the office of the Attorney General, and the first fine assessed against a steel drum salvage company in Middlesex County was collected. One large municipal refuse collection contractor who had been cited for repeated violations elected to challenge the legality of the prohibition of open burning by the Code and this matter is pending resolution in the courts.

Department hearings were held before the State Commissioner of Health in order to obtain orders to cease violations by municipalities in Atlantic and Hudson counties, a demolition contractor in Passaic County, and three steel drum salvage companies in Middlesex County.

With the increase in legal actions and field enforcement, open burning of all types, and the resulting air pollution, should be further reduced during the coming year.

Control of Smoke Emissions

The administration of the New Jersey Air Pollution Control Code requirements, relating to the density of smoke emissions from stacks, has continued to be essentially in the nature of education and persuasion. However, it became necessary to institute a more rigid policy in some instances.

Six hundred sixty-eight field investigations were made in connection with violations of this requirement and 211 persons or industries were cited for violation, and 11 conferences were held with repeat violators. As in the case of violations of open burning requirements, it is difficult to determine that there will be complete and continuous compliance with this provision of the Code. However, those who have been cited for excessive smoke emissions have been cooperative and, while no figures are available, it is known for certain that thousands of dollars have been spent to correct excessive smoke emissions through the hiring of consulting engineers and the installation of suitable control equipment.

Included among those cited for violations were vessels in New Jersey waters and motor vehicles on highways and city streets. Many violations were recorded against operators of buses and trucks. Motor vehicle owners have been cooperative and trucking trade organizations have assisted materially in the educational phase.

Control of Fly Ash Emissions

Administration of Code requirements relating to the control of fly ash from the burning of solid fuel was essentially educational.

This provision of the Code regulates the quantity of fly ash which may be discharged from solid fuel burning operations and further requires that persons burning solid fuel in excess of one million British Thermal Units per hour (approximately 85 pounds of solid fuel) register certain information with the New Jersey State Department of Health.

Enforcement of this chapter of the Code has necessitated the development of complex technical procedures for carrying out tests on boiler stacks. Considerable time and effort during the past year have been devoted to the development of procedures for arriving at reasonably reliable estimates of fly ash emissions, based upon inspection of fuel burning equipment and calculation of potential fly ash emission. This procedure is intended to reduce the number of time-consuming field tests which the Department would conduct to administer this Code requirement. Considerable effort has also been devoted to developing field test procedures for accurate determination of fly ash emissions.

It should be noted that the State of New Jersey is the first State to regulate this form of air pollution at State level and, accordingly, the Department is pioneering in the field of technical and administrative procedures associated with state-wide activity. There being no established precedents, it has been necessary to devote considerable effort toward the development of techniques and procedures which are unique to the State of New Jersey.

Two hundred eleven registrations of fuel burning equipment were received and reviewed; 118 inspections of equipment were completed.

While it is still too early to determine the extent of compliance with this provision of the Code, it is known for certain that the largest electric utility in the State has designed its new power generating stations to meet Code requirements. The second largest utility has entered into an agreement with the Department to install necessary controls on its generating stations over the next three-year period with priorities established in accordance with numerous technical and economic considerations.

A number of conferences have been held with the owners of large solid fuel burning equipment. The conclusions reached at these conferences would indicate that the cooperation of plant operators will be good and the influence

of this provision of the New Jersey Air Pollution Control Code should be felt in the next two or three years through a substantially reduced fly ash content in the outdoor atmosphere.

Technical Service and Investigation

Providing a technical service to boards of health or other government agencies responsible for local control of air pollution not regulated by the State Code comprised about 20 percent of the total activity of the Air Sanitation Program. This assistance ranges in nature from conducting in-plant surveys for the purpose of evaluating air pollution control practices of an industry to detailed aerometric studies of ground level air contaminants to determine source or concentration of one or more airborne substances. The findings obtained, together with interpretation and recommendations for further action, are referred to the local agencies concerned. Follow-up service, including attendance at meetings, informal hearings and court action initiated under local authority, was provided where indicated.

In a number of instances, it appeared desirable for local governments to adopt ordinances to provide some degree of control in matters of nuisance caused by air contaminants. Technical assistance was provided in the preparation, adoption and enforcement procedures.

It is evident from the number of requests for assistance received from local boards of health that there is increasing concern on the part of local agencies and the general public in the matter of atmospheric pollution.

Research and Development

Research and development projects comprised about 20 percent of the total activity of the Air Sanitation Program. These projects are carried on with the objective of defining the air pollution problem as it exists in this State, developing technical field and laboratory capabilities for evaluation and control, and designing practical administrative and technical facilities for application in routine enforcement and investigation activity.

Specific projects carried on or completed during the period of this report were:

A joint project with the State of Pennsylvania and the City of Philadelphia was completed during this period. The objective of this study was to estimate the contribution of petroleum refineries to air pollution in the Delaware Valley Area. The findings of this study have been referred to the New Jersey Air Pollution Control Commission for possible application in the promulgation of regulations.

Development of technical field and office procedures for administration of Chapter V of the New Jersey Air Pollution Control Code which regulates fly ash emissions.

The procedures used in the State-wide Air Pollution Survey—"Smoke Index," completed during the previous year, have been under study with the objective of redesigning the instrumentation and procedures to facilitate carrying on a continuous state-wide evaluation of air dirtiness at 40 locations in the State.

A new mobile laboratory for evaluation of air pollution was designed and the unit is now under construction.

Plans were completed and equipment assembled for studies of oxidants, oxides of nitrogen and ozone in various parts of the State.

Educational Activity

Educational activity continues to be an important phase of this relatively new public health program of air pollution control. Program personnel assisted in the organization of three courses or technical conferences, 14 lectures or talks were given, and 15 conferences or courses were attended. Two formal training courses were conducted for Program personnel and representatives of local agencies. These courses entitled, "Smoke Observation Training and Qualification Course," have been very well received and have become a routine service of the Program.

Lack of standard air testing and sampling procedures and the lack of minimum standards for "Clean Air" continue to be a major obstacle in obtaining complete resolution to the problem of air pollution in New Jersey.

Operating within the framework of existing legislation, a definite and noticeable improvement in air quality has been attained and progressive improvement should continue to become evident.

Veterinary Public Health

General

The Program of Veterinary Public Health, functioning administratively as a coordinating and technical unit within the Division of Environmental Health, is responsible for epidemiologic and ecologic investigations of disease episodes in which a threat to human beings does or may exist. Since many diseases are perpetuated and transmitted through the activity of insect and rodent vectors, this part of the program is blended into the over-all veterinary public health function.

The Chief of the Program cooperated with Joseph Hearl, Chief Meat Inspector for the Newark Health Department, in the conduct of a meat inspection course at Rutgers University. The course was open to the public but was specifically designed to be useful to those individuals preparing themselves for careers in meat inspection. There were three courses given during the year; each consisted of eight two-hour sessions. The selection of three sites, one at Union, one at Camden, and one at New Brunswick, enabled maximum attendance with the greatest convenience. Course attendance was as follows: Camden 28, New Brunswick 106, and Union 57.

Rabies

Under the technical direction of the Program, dog control activities, including licensing, the annual census, and immunization clinics, are carried out by the Districts. There was approximately a 20 percent increase in the number of dogs vaccinated this year over the previous year. This was due in part to the increased acceptance by the pet-owning public, District educational activities, and probably the striking increase of rabies infection in neighboring states. The epidemic in New York State has not as yet expanded to the borders of New Jersey, but the following chart serves to emphasize the problem in our position and the need for continued surveillance.

Table 9.

RABIES CASES IN FOUR STATES

Year	Animal Rabies in Delaware	Animal Rabies in New York State Exclusive of New York City	Animal Rabies in Pennsylvania	Animal Rabies in New Jersey
1943	...	189	826	42
1944	...	314	902	68
1945	0	663	843	51
1946	1	1,175	502	276
1947	0	696	293	94
1948	1	568	147	112
1949	0	515	31	67
1950	0	1,022	102	5
1951	0	539	241	0
1952	7	337	300	1
1953	2	437	27	0
1954	0	472	38	0
1955	26	517	167	0
1956	46	306	99	1
1957	5	202	21	0
1958	0	261	55	0

The following tabulation lists the revenue receipts from licensing, and the number of dogs licensed and vaccinated with vaccine used in the program. The totals of previous years are listed for comparative purposes.

Table 10.

LICENSES, VACCINATIONS, AND REVENUE RECEIVED

	Revenue Received	No. Dogs Licensed	No. Dogs Vaccinated
1955-56	\$92,112.75	368,451	65,100
1956-57	95,513.25	382,053	66,300
1957-58	96,942.60	387,700	69,000
1958-59	99,740.10	398,960	88,000

Psittacosis

Psittacosis is a disease which is transmitted to man from psittacine birds and in some instances from turkeys, in which instance it is called ornithosis. This Program has kept under surveillance sales of psittacine birds in the State of New Jersey, resulting in quarantine where necessary to control the spread of the disease from aviaries or sales outlets. The effectiveness of these controls is evident by the decrease in human cases to its present negative status.

Brucellosis

Brucellosis activities of this Program, coordinated with the New Jersey State Department of Agriculture and the United States Department of Agriculture, have resulted in practical elimination of human brucellosis cases due to contact with infected animals and the consumption of raw milk. It is anticipated that continued cooperation will result in the eventual elimination of this disease as a public health hazard in New Jersey.

Anthrax

The sporadic and persistent occurrence of anthrax in humans and animals indicates this to be a problem disease in New Jersey. The occupational hazard connected with the handling of imported hides, wools, and bone meal products is well-known. Historically, we have experienced outbreaks of this disease in practically all livestock areas of the State. The problem of etiology is compounded by the many potential sources of infection. The practice of orchard men and truck farmers who use natural or treated wool waste as fertilizer, or, the widespread practice, until recent years, of using bone meal of foreign as well as domestic origin as a feed additive illustrates less obvious potentials.

Whatever the circumstances, the survival ability of the anthrax organism has afforded ample occasion for seeding the soil of New Jersey. The following review points up the problem:

A suspected case of anthrax was reported early in May. Subsequently, the existence of anthrax on a dairy farm in Monroeville, in the Southern District, was confirmed by clinical and laboratory diagnosis. Before the investigation was terminated, Program representatives found the owner of the herd to be suffering with cutaneous anthrax, until then medically unrecognized. This person subsequently was hospitalized. Questioning disclosed that during this episode, the owner had a total of six dairy cattle and an unrecorded number of goats die on the farm. The index event in this case appeared to focus on one cow. This animal was either moribund or dead at the time the foreman of a local slaughterhouse cut the throat of the animal in the barn so that the blood might drain, and delivered it to the same establishment where it was eviscerated and the carcass refrigerated, presumably for ultimate human consumption. The viscera, following the usual practice, was collected by a swine raiser and fed to his stock with the result that an unrecorded number of these animals likewise died. As the investigation expanded, milk from the dairy herd was placed under embargo, meat in the value of \$12,000 was likewise embargoed and denatured by rendering. Hides stored in the slaughterhouse had to be shipped out of the country since no local tanneries were willing to receive them for processing. Mink farmers, who utilize stale meat for feeding purposes, were obviously at risk and were alerted. Retail distributive meat channels that had purchased meat from this slaughterhouse from the time that deaths first occurred on the farm and until the termination of this investigation were placed under embargo pending the sanitation of their meat processing utensils and the work areas where the meat was handled. The prompt handling of this case was due to the cooperative efforts of all departmental agencies concerned and the New Jersey State Department of Agriculture. The health and economic penalties suffered by the principals involved in a situation such as this require that continuous vigilance be observed at all times.

Q Fever

Preliminary screening of milk and blood samples from dairy farms supplying milk plants suggests a positive serology prevalence in cattle upwards of 60 percent. This screening survey consisted of six milk plants involving 127 dairy farms and 1,854 animals which have been examined in representative areas of the State.

On one farm surveyed in connection with a proven human case, nine animals were diagnosed as infected by isolation of the causative organism *Coxiella*

burnetii. This project is being conducted and continued in cooperation with the United States Public Health Service, National Microbiological Institute, Rocky Mountain Laboratory, Hamilton, Montana.

A scientific paper covering the clinical aspects of a human case, with specific and peculiar syndrome, has been accepted for publication in *The Journal of The Medical Society of New Jersey*.

Eastern Equine Encephalomyelitis

This Program has, for the past four years, continued research into the ecological manifestations of Eastern Equine Encephalomyelitis as present in horses, pheasants, and wild birds. In cooperation with the United States Public Health Service, a number of papers have been written based on scientific studies made at the South River Game Farm. This Game Farm is a privately owned preserve which is managed by John Madara, Sr., who has aided the staff of this Department by practical application of husbandry techniques with regard to pheasants under study. Through the cooperation of Dr. A. Heaton Underhill and Lester G. MacNamara, Division of Fish and Game of the Department of Conservation and Economic Development, pheasants of the type needed for research work have been obtained, in addition to a great deal of advice necessary in activities with respect to wild bird banding and investigation procedures. Wild birds have been caught and blood withdrawn for virus isolation attempts, with the result that the Department is aware that wild birds do bring Eastern Equine Encephalitis virus into New Jersey. Scientific studies by the Rutgers Experiment Station indicate that mosquitoes are likewise infected with the virus. This has been corroborated by this Department and United States Public Health Service personnel in planned studies in the South River Game Farm area. There have been no human cases that were identified. The Department continues to survey the situation with a view towards the explosive possibility of such occurrence.

Statistics evaluated by this Program indicates that this disease has been noted in all but three of the 21 counties of the State in past years, but that the preponderance of cases has always occurred in the counties of the Southern District. Hudson, Union, and Warren counties are the only counties that have been free of reported cases of this disease. Antibody and virus isolation studies performed in the wild birds suggest that the disease has been introduced into New Jersey during July, if not earlier; the first isolations occurring in the early part of July from wild birds, the early part of August from pheasants, and the middle to latter part of August in horses, with primary isolations occurring in mosquitoes in the latter part of July.

The F₂ generation of captive pheasants, survivors of a previous viral challenge with Eastern Equine Encephalomyelitis virus, were propagated and

challenged in a controlled experiment designed to explore the possibility of the genetic selection of resistance to viral disease. The results indicate a trend toward such possibility. This work, if substantiated, would be of significant practical and theoretical value in the prevention and further elucidation of diseases of similar nature. In New Jersey, arbor viruses are known to be brought into the area by migratory birds and local foci probably extended to our resident bird populations.

Division of Laboratories

ELMER L. SHAFFER, Ph.D., *Director*

MARTIN GOLDFIELD, M.D., *Assistant Director*

Program:

Bacteriology	JOHN H. SPOONER <i>Program Coordinator</i>
Chemistry	JOHN J. NELSON, M.S. <i>Program Coordinator</i>
Pathology	EDWIN O. GILBERT, D.V.M. <i>Program Coordinator</i>
Serology	ELEANOR E. THOMAS <i>Program Coordinator</i>
Virology	J. NORMAN WELSH, M.S. <i>Program Coordinator</i>

Division of Laboratories

During the year, the Virology Program was able to expand its quarters by assignment of additional rooms in the Madden Building of the Donnelly Memorial Hospitals, Trenton. This permitted the installation of a considerable amount of additional major equipment required to operate a complete virus diagnostic and research program.

In September, the staff was augmented by the addition of Martin Goldfield, M.D., appointed by the Commissioner as Senior Public Health Physician. Dr. Goldfield's competence and experience in the field of virology and related epidemiology enabled us to develop our expanded facilities. A major obstacle was overcome by the installation of electric lines to furnish adequate power for all equipment. At the request of the Director of Laboratories, the Commissioner made an administrative assignment of Dr. Goldfield as Assistant Director of Laboratories in January, 1959.

As indicated in the last annual report, the great need for relating microbiology, including virology, to epidemiological investigations of disease is being further fulfilled by this assignment. Already the fruits of this have been made evident in relationships established within the Department and with physicians, health officers, and institutions.

The coordination between laboratory findings and their epidemiological application has been recognized by respective associations of officers in these fields with the appointment of a joint committee on the national level to deal with the problems of infectious disease. The Director is a member of this committee. As a result of these cooperative efforts, we can look for more public health value for the budget dollar. Direct diagnostic services to physicians need to be studied from the point of view of community health. Physicians and health officers have this dual responsibility of patient health *vis a vis* public health. This relates itself to careful reporting of communicable disease to local and State health authorities. Despite the great advances made in the control of infectious disease during the past decade, there is need for constant vigilance in this field. To let our guard down may invite disaster. Through efforts of our laboratories, reporting of positive and reactive laboratory tests is being carried out on an increasing scale.

Greater numbers of Salmonella isolations are being made in our bacteriological laboratories; these have public health implications and the reasons for the apparent increases need investigation.

The marked increase in staphylococcus cultures received for 'phage typing during the year needs careful scrutiny to determine how effectively this information is being applied in the control of hospital-acquired infection. 'Phage typing itself is neither a "soul" saving or life saving procedure. It requires epidemiological application as an effective tool. There is mounting need for epidemiological competence on a full-time basis to make better use of laboratory data to be applied in the prevention and control of infectious disease. The laboratory should not be merely a place where specimens are received and reports of tests are issued. Its greatest role can be played in using its professional, scientific and technical competence as consultant to those who require its services. The suitability and character of specimens, their applicability and aid in the interpretation of results all fall in the domain of the laboratory.

Apparatus for the fluorescent antibody techniques are completely installed, and the Assistant Director attended a two-week course at the Communicable Disease Center, Chamblee, Georgia, for training in this procedure. Great hopes are anticipated in all scientific laboratories for the use of this procedure in the rapid and certain identification of micro-organisms, including viruses. We anticipate engaging in some evaluation studies in applying this technique.

There is a growing recognition and even demand for evaluation of all medical and health laboratories. We have stimulated laboratory groups at the directorship level to consider seriously and to put into action a planned system of laboratory evaluation in order to raise standards of performance. We continue to cooperate with the Blood Bank Commission of New Jersey in carrying out a voluntary evaluation of practically all New Jersey blood banks. Some of our activities in the field of professional education are mentioned in the individual program reports. The absence of specific mention of these in the Director's report does not indicate diminished interest in this field. It is our intention to continue to develop refresher courses as in the past, to keep all laboratory personnel acquainted with advances in the laboratory sciences.

As this report is being written, the first evidence of an impending outbreak of Eastern Equine Encephalitis is being experienced in this State. Early in June, 1959, the Virology Program requested horse brains from animals dying with acute encephalitis. Isolation of a viral agent was obtained in at least one case. The Department's epidemiological services were alerted, again indicating the laboratory's important role as a sentinel in the surveillance of communicable disease.

Bacteriology Program

Highlights

The demand for services in the Bacteriology Program reached a new high during the fiscal year 1958-1959, and present work load rates indicate a continuation of this upward trend. There was an over-all 17 percent increase in specimens received and a 53 percent increase in examinations made in the analysis of these specimens. All categories except two showed these sharp percentage increases, especially staphylococcus 'phage typing, water and milk analysis at the central laboratory, and shellfish and shellfish waters at the branch laboratories.

Briefly, these activities showed the following percentage increases: staphylococcus 'phage typing, +150%; enteric disease, +20%; blood agglutinations, +3%; nose and throat bacteriology, +21%; rabies, +9%; water, central laboratory, +33%; milk, +20%; shellfish work, +45%; miscellaneous (bacteriology and mycology), +20%; M. tuberculosis and N. gonorrhea specimens declined by 7% and 5%, respectively.

At the request of the Milk Program, the laboratory set up and conducted penicillin assays of finished milk products; 168 tests were made with approximately 2 percent positive for as high as 1½ units of penicillin per ml. of sample.

Positive Diphtheria

During December and January, the Bacteriology Program had its first positive throat and nose specimens for virulent *C. diphtheriae* since August, 1957. The outbreak occurred in a family of nine children and two parents in Manalapan Township. All were positive except one child for *C. diphtheriae*, gravis type. Virulence tests were positive by guinea pig inoculations. Three of the children and the father were persistently positive after treatment by the physician with toxoid and penicillin. Sensitivity tests were conducted for the first time by the Bacteriology Program on a pure culture of diphtheria. Erythromycin was found to give the greatest zone of inhibition. The cultures almost immediately became negative when the physician was advised of the laboratory antibiotic findings.

COMPARISON CHART 1957-58, 1958-59

	Specimens		Examinations	
	1957-58	1958-59	1957-58	1958-59
Total	62,657	74,432	152,233	232,189
Central Lab.—Communicable Diseases	43,026	48,747	119,737	189,326
Phage Typing	1,976	5,062	58,576	125,224
Tuberculosis	15,643	14,519	31,573	29,808
Enteric Bacteriology	10,211	12,445	10,219	12,445
Blood Agglutinations	3,526	3,624	5,643	5,771
Nose and throat for diphtheria, hemolytic strep., Vincent's Angina, bacterial infections	6,280	7,591	6,577	8,734
Gonorrhea spreads	4,292	4,072	4,783	4,586
Rabies	331	361	1,398	1,685
Miscellaneous	767	1,073	893	1,073
Waters	9,862	12,951	15,742	21,016
Milk	5,284	6,269	7,153	8,173
Bivalve and Tuckerton (Shellfish analysis)	4,485	6,465	9,601	13,674

M. TUBERCULOSIS IDENTIFICATION

Stained spreads of sputa and other secretions and excretions:

Total	Positive	Negative	Unsatisfactory
14,519	452 (3.1%)	13,418	649

<i>M. tuberculosis</i>	Specimens	Examinations
Total	14,519	29,808
Sputum spreads	13,490	13,490
Body fluids	1,029	1,029
Cultures .....	.....	13,942
Animal Inoculations .....	.....	833
Sensitivity tests .....	.....	53
Neutral Red tests .....	.....	237
Virulence tests .....	.....	224

Cultures (May 1 to May 1) listed above were:

	Total	Positive	Negative	Unsatisfactory
Sputa	13,942	1,033 (8%)	11,841	45
Urine	8	602	6
Gastric	14	197	.....
Bronchial Washings	5	23	.....
Pleural Fluid	3	51	1
Spinal Fluid	19	.....
Miscellaneous	5	87	2

GUINEA PIG INOCULATIONS (Raw or Treated Specimens):

	Total	Positive	Negative	Unsatisfactory
Sputa	600	20	533	47
Urine	69	4	55	10
Gastric	344	9	307	28
Bronchial Washings	67	1	63	3
Pleural Fluid	27	4	23	.....
Spinal Fluid	35	.....	34	1
Miscellaneous	13	.....	13	.....
	45	2	38	5

253 guinea pig inoculations were performed for virulence.

ENTERIC DISEASES:

	Total Specimens	Total Examinations		
	12,445	12,445		
Enteric Bacteriology (Feces and Urine)		11,326		
	Total	Positive	Negative	Unsatisfactory
Ova and Parasites	1,013	101	900	12
Occult Blood	43	.....	43	.....
Culture for identification	63	.....	.....	.....
Salmonella	5,719	103	5,516	150
Shigella	5,771	.....	5,621	150

This work includes the more complete identification of the Salmonellae into their respective species and *S. typhi* types. The Division was assisted by the United States Public Health Service Communicable Disease Center, Chamblee, Georgia, in these identifications,

*Salmonellae**S. typhi*—48.

<i>Salmonellae B</i>	<i>Salmonellae C</i>	<i>Salmonellae D</i>
<i>S. java</i>	<i>S. newport</i>	<i>S. javiana</i>
1	3	1
<i>S. typhimurium</i>	<i>S. montevideo</i>	<i>S. miami</i>
41	18	1
<i>S. st. paul</i>	<i>S. blockley</i>	<i>S. enteritidis</i>
3	1	3
<i>S. heidelberg</i>	<i>S. tennessee</i>	
5	1	
<i>S. californica</i>	<i>S. infantis</i>	
1	7	
<i>S. reading</i>	<i>S. muenchen</i>	
4	1	
	<i>S. oranienburg</i>	
	6	
	<i>S. kentucky</i>	
	1	
<i>Salmonellae E</i>	<i>Salmonellae G</i>	
<i>S. anatum</i>	<i>S. cubana</i>	
1	1	

BLOOD AGGLUTINATIONS:

Blood agglutination tests are performed for typhoid O and H antigens, paratyphoid, A and B, undulant fever, tularemia and Weil Felix reactions for typhus and Rocky Mountain Spotted fever.

Following is the performance chart:

	<i>Total Specimens</i>			<i>Total Examinations</i>	
	<i>Total</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsat.</i>	<i>Examinations</i>
				5,771	
Typhoid fever	1,075	35	1,016	24	2,150
Paratyphoid fever	1,072	1	1,063	8	2,144
Undulant fever	1,198	3	1,184	11	1,198
Tularemia	83	...	77	6	83
Rickettsial fever (Weil Felix)	196	16	166	14	196

NOSE AND THROAT CULTURES AND ORGANISMS:

Diphtheria, Diphtheria Virulence, Hemolytic Streptococci and Sensitivity Tests:

	<i>Total Specimens</i>			<i>Total Examinations</i>	
	<i>Total</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsat.</i>	<i>Examinations</i>
				8,734	
Diphtheria	4,517	29	4,212	276	...
Diphtheria Virulence.. ..	...	...	...	...	17
Tellurite .....	...	...	...	...	1,126
Nose and Throat Bact.	1,144	640	446	58	...
Sensitivity Tests	139	...	...	...	...
Hemolytic Strep.	1,764	763	990	11	...
Vincent's Angina	27	8	16	3	...

GONORRHEA SPREADS:

	<i>Total Specimens</i>		<i>Total Examinations</i>	
	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>	
	514 (12.6%)	3,495	63	

RABIES:

New Jersey was again free this year of positive specimens for rabies. The Bacteriology Program has not had a positive brain since 1956.

	<i>Total Examinations</i>			
	<i>Total</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsat.</i>
	361	...	341	20
				1,685

The State Sanitary Code requires, under Chapter IV, Reg. 6 (e) that: "Animal brains examined for rabies and found to be Negri-negative shall have a suitable portion thereof inoculated into mice in those circumstances where there is record of a bite or intimate human or animal contact." This has been routine procedure in the Bacteriology Program for years. Every local, private or hospital laboratory making this type of examination should follow the requirements of the Sanitary Code, or if unable to do so, submit suitable brain portions carefully refrigerated to the Division of Laboratories with all information and data with request for animal inoculation.

Animal brain examinations were made on the following number and species of animals: dogs, 143; cats, 66; squirrels, 28; mice, 14; fox, 7; chipmunks, 6; rodents, 15; hamsters, 29; rabbits, 23; raccoon, 1; muskrats, 3; ground hog, 1; bats, 5; monkeys, 2; skunk, 1; moles, 6; opossums, 4; shrews, 3; minks, 4.

Swiss mice, 18 days old, are inoculated on all suspected or unsatisfactory animal brains where the animal has bitten or had intimate contact with humans. There were approximately 1,324 such follow-up inoculations made on 356 of the above specimens.

STAPHYLOCOCCUS PHAGE TYPING:

This activity, started in May, 1957, increased ten-fold during last year and more than doubled this fiscal year. By a transfer of personnel and laboratory space from the Serology Program, we are now satisfactorily staffed and quartered for what appears to be increasing demands.

<i>Total Specimens</i>	<i>Total Examinations</i>
5,062	125,224

BACTERIOLOGICAL ANALYSIS OF WATER, TRADE WASTES, SEWAGE AND MILK PRODUCTS, SHELLFISH AND SHELLFISH WATERS, CENTRAL LABORATORY AND BRANCH LABORATORIES:

	<i>Total Specimens</i>	<i>Total Examinations</i>
Waters	25,685	42,763
Milks	12,951	21,016
Shellfish	6,269	8,173
Shellfish and Shellfish Waters..	6,465	13,674

Central Laboratory water specimens and examinations were from the following sources:

	Total Specimens 12,951	Total Examinations 21,016	
Public	5,844	Poultry farms	10
State and County Inst.	1,174	Slaughter houses	3
Schools	445	Surfs	70
Camps	176	Sewage	1,356
Ice cream stands	21	Streams	1,897
Dairy plants	46	Waste	51
Bottled water plants	3	Private, L.H. and D.H.O.	2,139
Pools	55	Millipore filter	129
Bathing areas	351	Shellfish	1
State parks	100	Miscellaneous	15

Dairy products were as follows:

	Total Specimens 6,269	Total Below Standard 377	Average % Below Standard 6.0%	Total Exams. 8,173
	Total	Satisfactory	Below Standard	% Below Standard
Milk	1,185	1,080	105	8.8%
Cream	295	258	37	12.5%
Chocolate Milk	169	145	24	14%
Skim Milk	135	127	8	6.0%
Buttermilk	33	33	...	...
Half and Half	32	32	...	...
Sour Cream	9	9	...	...
Penicillin Residuals	164	160	4	2.4%
USPHS Split Samples	20	20	...	...
Evaporated Milk	1	1	...	...
Oyster Stew	3	3	...	...
Yogurt	1	1	...	...
Frozen Eggs	27	27	...	...
Experimental Milks	88	88	...	...
Direct Microscopic Milk Smears	4,007	3,908	199	5%

The apparent improvement in quality of milk products, based on below standard percentages, has continued to indicate a better product due to systematic testing.

	1956-57	1957-58	1958-59
Total Milk Products Below Standard..	9.6%	6.7%	6%
Milk	13.8%	10%	8.8%
Cream	19.6%	15%	12.5%
Skim Milk	16%	14%	6.0%
Chocolate Milk	12%	14.6%	14.2%

Total specimens and examinations made at the Bivalve and Tuckerton Laboratories were as follows:

	Total Specimens	Total Examinations
Bivalve Shellfish	361	6,465
Shellfish Waters	2,803	3,164
Tuckerton Shellfish	378	.....
Shellfish Waters	2,923	3,301
	.....	6,686
	.....	6,988

LABORATORY APPROVAL:

Certain statutes in the New Jersey Laws and Regulations of the State Sanitary Code require that laboratories, in order to perform certain examinations, shall be laboratories approved by the New Jersey State Department of Health.

In addition to the New Jersey State Department of Health Laboratories, there are now 119 laboratories approved by the New Jersey State Department of Health. Included in this total are 62 hospital laboratories, 48 private laboratories and nine municipal laboratories. Four newly approved private laboratories were visited, evaluated with check specimens, and accepted during this fiscal year.

MAILING CASES:

Mailing cases for the collection and transmission of specimens by mail were supplied to physicians, District State Health Offices, and local health departments as follows:

Diphtheria Mailing Cases	8,835
T. B. Mailing Cases	21,362
G. C. Mailing Cases	6,954
Feces and Urine Mailing Cases	10,601
Syphilis Mailing Cases	255,720

Total 303,472

9,105,313 c.c. of various kinds of media were produced and supplied during the year.

Chemistry Program

SUMMARIZED STATISTICS, 1958-59

Character of Samples	Number of Samples	Number of Determinations
Milk and Dairy Products	1,813	4,864
Other Foods	1,566	2,201
Drugs	88	172
Water, Sewage and Industrial Wastes	6,183	33,877
Urinalyses (Dreypaks)	7,206	7,206
Blood Sugars (Clinitron)	1,199	1,199
Miscellaneous*	318	921
Totals	18,373	50,440

*Includes methods development, referee samples, other urinalyses and research.

Character and Trend of Work Load

The steady increase in total work load experienced for the past several years continued during 1958-1959. This trend is especially evident in the right hand column of the following table since the number of determinations conducted is by far the most realistic measure of the true work load.

Fiscal Year	Total Number of Samples	Total Number of Determinations
1955-56	13,507	34,549
1956-57	17,999	43,585
1957-58	14,795	44,665
1958-59	18,373	50,440

Increased activities in stream pollution control and in diabetes detection accounted for the most significant changes in the character of this Program's work load when compared to the preceding year: 3,800 more determinations were conducted on water, sewage, and trade waste samples than in the previous year; the 7,200 Dreypaks processed almost tripled last year's like total. These and other less significant changes in the character of the Chemistry Program's work load may be noted in the following tabulation:

COMPARISON CHART, 1957-59

Character of Samples	Number of Samples		Percent Change	Number of Determinations		Percent Change
	1957-58	1958-59		1957-58	1958-59	
Totals	14,795	18,373	+ 24	44,665	50,440	+ 13
Milk and Dairy Products...	1,907	1,813	- 5	5,169	4,864	- 6
Other Foods	1,629	1,566	- 4	2,798	2,201	- 21
Drugs	37	88	+138	157	172	+ 10
Water, Sewage and Industrial Wastes	5,210	6,183	+ 19	30,107	33,877	+ 13
Urinalyses (Dreypaks)	2,579	7,206	+179	2,579	7,206	+179
Blood Sugars (Clinitron) ..	3,033	1,199	- 60	3,003	1,199	- 60
Miscellaneous (Methodology, experimental, etc.)	430	318	- 26	852	921	+ 8

In reviewing these work load statistics, it is pertinent to note the relative importance of specimens received in connection with diabetes detection projects and those related to stream pollution control. Large numbers of urine and blood sugar determinations (Dreypaks and Clinitron) may be absorbed with a minimum effect on routine operations since these tests are simple, rapid, and of relatively minor importance in terms of man-hours and supplies. The processing of almost 1,000 more water, sewage, and trade waste samples than last year, however, was of major significance since the required 3,800 additional determinations ranged in complexity from moderate to difficult and included hundreds of Biochemical Oxygen Demand tests with an average of five separate steps per determination.

It is of interest to note that of the 1,813 milks and milk products tested, only 32 (1.8%) were found to be below standard. This compares quite favorably with the 2.7 percent rate experienced last year; perhaps the beginning of a desirable trend is indicated.

It is estimated that the substantially increased work load handled this year will level off considerably in 1959-1960, and remain at the same plateau in the following year. This prediction is based on the facts that stream pollution activities are now receiving the full effort of recent increases in engineering personnel, and our potential to absorb further work has almost reached the saturation point due to limitations of space and facilities.

DEPARTMENT OF HEALTH

NUMBER AND CHARACTER OF SAMPLES EXAMINED IN FOOD AND DRUG LABORATORY, JULY 1, 1958 TO JUNE 30, 1959

Foods	Above Standard	Below Standard	Total	Determinations
Milk—Chemical	86	...	...	...
Milk—Chemical and Phosphates	1,157	29	...	...
Milk—Phosphatase	6	...	1,278	...
Choc. Milk—Chem. and Phos.	168	...	168	...
Cream—Chemical	4	...	...	...
Cream—Chem. and Phos.	308	3	315	...
Half and Half—Chem. and Phos.	6	...	9	...
Buttermilk—Chemical	2	...	...	...
Buttermilk—Chem. and Phos.	27	...	29	...
Sour Cream	9	...	9	...
Goat's Milk	7	...	7	...
Yogurt	1	...	1	...
	<u>1,781</u>	<u>32</u>	<u>1,813</u>	<u>4,864</u>
			<i>Total</i>	<i>Determinations</i>
Ice Cream			667	...
Meats			569	...
Liquid Eggs			34	...
Carbonated Beverages			118	...
Cider			43	...
Candies			69	...
Reconstituted Milk (Method Development)			51	...
Other Miscellaneous Foods			94	...
			<u>1,645</u>	<u>2,447</u>
Drugs			88	172
Miscellaneous				
Urinalyses			7,320	...
Blood Sugars			1,200	...
			<u>8,520</u>	<u>8,865</u>
			<u>12,066</u>	<u>16,348</u>

DIVISION OF LABORATORIES

NUMBER AND CHARACTER OF SAMPLES ANALYZED IN WATER AND SEWAGE LABORATORY JULY 1, 1958 TO JUNE 30, 1959

1958	Public	Miscellaneous	Camp	State and County Institutions	Dairy	School	Bathing Waters	Stream	Sewage	Waste	Sand	Experimental	Total	P. H. Engineers	District Health Services	Local Boards of Health	Total Determinations Completed
July	108	47	1	3	1	..	20	364	176	29	..	30	779	568	142	18	3,638
Aug.	83	53	..	..	..	2	4	418	273	69	..	..	902	770	99	10	4,675
Sept.	77	54	..	..	..	6	2	214	206	66	..	..	628	490	106	13	3,166
Oct.	71	49	..	..	..	4	..	133	196	55	..	..	511	386	101	15	3,279
Nov.	51	45	..	..	..	8	..	119	77	58	..	..	361	252	82	9	2,611
Dec.	30	47	..	..	..	4	..	14	139	27	1	..	270	179	60	15	1,478
1959																	
Jan.	71	52	..	..	3	6	..	63	84	73	..	..	352	218	102	18	2,516
Feb.	61	23	..	..	..	3	..	4	129	50	..	..	271	179	64	8	1,361
Mar.	91	38	..	..	..	8	..	66	116	65	..	..	385	238	98	11	2,503
Apr.	50	49	..	..	..	6	2	137	234	176	..	..	655	537	89	19	3,122
May	64	53	..	..	..	5	209	204	204	29	1	..	572	427	103	10	2,817
June	61	53	11	..	..	..	14	156	125	103	1	94	621	385	112	10	2,926
	<u>818</u>	<u>563</u>	<u>12</u>	<u>23</u>	<u>12</u>	<u>47</u>	<u>47</u>	<u>1,897</u>	<u>1,959</u>	<u>800</u>	<u>5</u>	<u>124</u>	<u>6,307</u>	<u>4,629</u>	<u>1,158</u>	<u>156</u>	<u>34,192</u>

Pathology Program

Diagnosis early in malignant disease coupled with properly selected treatment can cure many forms of cancer. Pathology is not yet an exact science; there are frequent border-line cases in which there is disagreement among experts as to the exact diagnosis.

The Pathology Program engages in professional education for pathologists and training of technologists and supplies certain technical services that aid pathologists in advancing their study of tissues. To facilitate diagnoses of problem cases, the Pathology Program has endeavored to perform top quality work, thus maintaining a standard for histologists in New Jersey. A measure of success is the request for training in micro-slide techniques by histologists from a Pennsylvania Medical School, New Jersey Dental School, and the New Jersey State Hospital. Requests for microphotographs for publication and demonstration were received from other State agencies as well as practicing pathologists.

The eighth annual slide seminar, sponsored by the New Jersey Society of Clinical Pathologists and the New Jersey State Department of Health, was held on December 6, 1958, in Newark at the Essex House. Dr. Purdy Stout, Emeritus Professor of Pathology at the College of Physicians and Surgeons, Columbia University, moderated. As usual, the transactions were published and distributed to those attending. Cases presented were selected from the files of the New Jersey Tumor Registry maintained by the Pathology Program.

<i>Histology</i>	<i>1957-58</i>	<i>1958-59</i>
Contributions to tumor registry	344	319
Consultation cases	199	196
Tissues processed	609	622
Slides prepared	12,550	9,770
Slides stained H and E	7,407	9,469
Slides stained with special stains	1,278	1,382
Special stains used	28	21
Slides distributed	5,660	6,364
Pollen count slides	210	249
Institutions visited	31	21
Meetings attended	11	7
Photographs made	387	529

Serology Program

There was in 1958-1959 a physical improvement for the Serology Program. Upon the recommendation of the United States Public Health Service, two air-conditioners were installed for the third floor serology testing rooms to bring the temperature within the necessary range for reliable reproducibility of results.

The only marked change of activity was the decided increase in the Kolmer tests employing the Reiter Protein Treponemal (RPT) antigen as the following statistics show. The cost of the TPI test prohibits its indiscriminate use so that 69 percent of the requests for the TPI test had to be refused for not meeting the criteria set forth by the United States Public Health Service. Upon all specimens received for the TPI test, a Kolmer Reiter Protein (KRP) complement fixation (C.F.) test was performed. The availability of this test procedure has caused the requests for the TPI test to be only 55 percent of that for the KRP test in the last six months.

A new approach was advanced in the field of refresher courses when 16 instructors, representing 12 American Medical Association approved schools in Medical Technology, attended a full-day session on April 23rd, in methods of teaching syphilis serology. This course was held in the Madden Building of the Donnelly Memorial Hospitals, with Miss Genevieve Stout of the Federal Venereal Disease Research Laboratories, presiding. As a result of such refresher courses, initiated by the Serology Program, an improvement in the evaluation-assistance survey of approved laboratories is still being noted. One hundred and seven (93.8%) of the 114 participating laboratories showed 90 percent or better agreement with the control laboratory in sensitivity and 98 percent or better agreement in specificity. The previous year, with satisfactory agreement set at the lowered rate of 88 percent in sensitivity, 92 percent of the approved laboratories showed acceptable performance. In May, the Chief Serologist attended a course in "Management and Control of Syphilis Serology by the Central Laboratory." The interchange of ideas with staff members of the Venereal Disease Research Laboratory and attending personnel from other states promises to bring forth new channels of endeavor for the standardization of procedures and higher levels of performance.

Due to budget limitations and the high cost of vacutainers, corked tubes are being distributed as of the last quarter. By this saving, estimated increases in cost of supplies will be absorbed.

The close of the year brought about the discontinuance of the Rh factor and blood grouping determinations in the prenatal group. This activity had been set up for a five-year period with federal funds as a part of a demonstration project under the Department's Maternal and Child Health Program.

Federal funds will no longer be available for its continuance. In accordance with that change, five technical positions were removed from the Program's table of organization.

	1957-58	1958-59
Specimens	252,515	253,186
Tests	278,349	282,649
Quantitative V.D.R.L.	15,961	17,993
Kolmer Simplified	15,597	16,327
K.R.P. (Kolmer Reiter Protein)	554	1,036
Spinal Kolmers	1,268	1,445
Total Protein Tests	615	630
T.P.I. Specimens	237	116
<hr/>		
Total Premaritals and Prenatal	119,497	115,525
Premaritals	46,720	45,561
Prenatals	72,777	69,964
Rh Factor and Blood Grouping	116,528	113,061
<hr/>		
Infectious Mononucleosis Tests	2,193	2,150
Cold Agglutinin Tests	310	231
Antistreptolysin Titer Tests	401	413
Trichinosis Agglutination Tests	112	131

Virology Program

During the initial year of the Virology Program, the quarters at the Madden Building of the Donnelly Memorial Hospitals were converted and equipped for diagnostic and investigative laboratory procedures; physicians and hospital administrators were contacted personally and through information documents as to the laboratory aids available for confirming diagnoses of viral diseases. Through the Division of Local Health Services and the District Health Offices, better facilities for transportation of specimens were arranged. In 80 percent of the paralytic polio cases which occurred in the small outbreak during the late summer and fall, the polio virus type was established; Coxsackie and Echo viruses were isolated in other cases of polio-like illnesses; the mild but extensive respiratory epidemic which spread during the winter was confirmed as Influenza B.

	1957-58	1958-59
Specimens received	2,363	2,742
Tests performed	5,176	7,363
Type of Tests:		
Virus Isolations	876	2,242
Serologic—Human	3,694	4,123
Serologic—Veterinary	626	998

During the coming year, it is planned to produce in the laboratory cell lines and solutions which were formerly purchased; to install fluorescent antibody equipment and investigate the diagnostic techniques relating to viral and other microbiologic agents; and to attempt to classify by isolation and serologic procedures the agents involved in polio-like illnesses in the State.

By their very nature, virological tests require research and investigative procedures both of technical and fundamental scientific nature. The statute authorizing the development of a Virology Program recognized this requirement and it is so stated. The employment of scientific and technical personnel trained in this field is of prime importance, since well-trained, competent personnel are relatively few in number. Fortunately, we anticipate in the coming year to add to our staff a Principal Virologist of considerable experience. Our greatest problem is to acquire technical personnel that can be trained in required laboratory procedures.

While there appears to be ample space at present for the full development of our diagnostic and research programs, it must be anticipated that with the growth of these activities, further space, equipment and staffing will be required. There is current need for developing isolation animal quarters and areas for the study of so-called "hot" viruses of arthropod-borne type. These cannot be safely handled in our present quarters.

It is anticipated that in the coming year, the work load will increase through direct services to physicians and health officers and in epidemiological surveys, etc. under study by the Department. While our equipment and facilities appear to be adequate at this time, some additional equipment and some alterations will be required to make the best use of our space.

Division of Local Health Services

JESSIE B. ARONSON, M.D., M.P.H., *Director*

STATE HEALTH DISTRICTS

Central .....	.....GEOFFREY W. ESTY, M.D., F.A.A.P. <i>District State Health Officer</i>
Metropolitan .....	.....MIRIAM SACHS, M.D., M.P.H. <i>District State Health Officer</i>
Northern .....	.....HARRY R. H. NICHOLAS <i>District State Health Officer</i>
Southern .....	.....HUGH D. PALMER, M.D., M.P.H. <i>District State Health Officer</i>

Division of Local Health Services

The Division of Local Health Services is responsible for ensuring the well-being of the citizens and visitors of this State by stimulating the development and maintenance of effective local health services in all areas of the State. Such local services are intended to prevent disease and to provide the possibility for optimum health. The staff of the Division presently consists of 77 professional and 34 office staff members.

The office of the Director has the following major functions:

1. Administering the four State Health Districts and the Office of Civil Defense, including the development and the day-to-day operation of administrative procedures.
2. Advising with and bringing to the attention of local boards of health public health problems and needs and making known to them acceptable methods of meeting these problems and needs. With the completion of the "Recognized Public Health Activities of Local Health Departments" and "Minimum Standards of Performance," focusing public health attention on these standards and securing compliance with them will require special effort and additional activities.
3. Establishing and maintaining productive working relationships with statewide organizations which are active or interested or which may become active or interested in the status and development of local public health services.
4. Maintenance of constructive working relationships with the several departmental divisions and their programs in order that District activities be developed to produce an optimum level of program accomplishment and so that the coordinators may be fully aware of local problems, needs and accomplishments.
5. The evolving and refinement of concepts and methods to stimulate the development and maintenance of effective local public health services in a State whose local government organization is such that the accepted pattern of a county health department and method for its establishment present extraordinary problems, and extensive modification of such a pattern must be devised.

6: Development of and administration of a system of grants-in-aid to local health agencies, both official and voluntary, designed to stimulate the initiation and expansion of demonstration programs and projects that will point out more effective methods of providing local health services.

7. The development of and stimulating the use of survey and evaluation methods to determine community health needs and the measurement of health services in respect to these needs.

The four State Health Districts are responsible for State Health Department activities in the following counties. The percentage of the State's population in each District as based on July 1, 1958 estimate is noted:

Central 20.9%	Metropolitan 55.9%	Northern 8.6%	Southern 14.6%
Burlington	Bergen	Hunterdon	Atlantic
Mercer	Essex	Morris	Camden
Middlesex	Hudson	Somerset	Cape May
Monmouth	Passaic	Sussex	Cumberland
Ocean	Union	Warren	Gloucester
			Salem

The State Health Districts have the following major functions:

1. To promote a coordinated program of optimum local health services.
2. To guide and advise local health agencies, both official and voluntary, in all phases of organization and program.
3. To maintain a competent staff of professionally trained workers in the several public health disciplines to whom communities can direct requests for guidance and consultation.
4. To carry out the programs of the State Department of Health by performing all required activities of these programs, to integrate the activities of the several programs in terms of the problems, needs, and priorities within any specific area of the State.
5. To assist in conducting evaluations of the local and State health programs.
6. To assist in the development of community health organization to make the people of the community cognizant of the needs, to evaluate these needs, and to recommend facilities and services to meet their needs.
7. To bring to the attention of the coordinators of the State Health Department Programs, the problems and needs in the various local areas of the State, enabling them to develop such programs so that they will more closely meet the real needs of our communities and citizens.

The staff of the four State Health Districts is shown in Table 1.

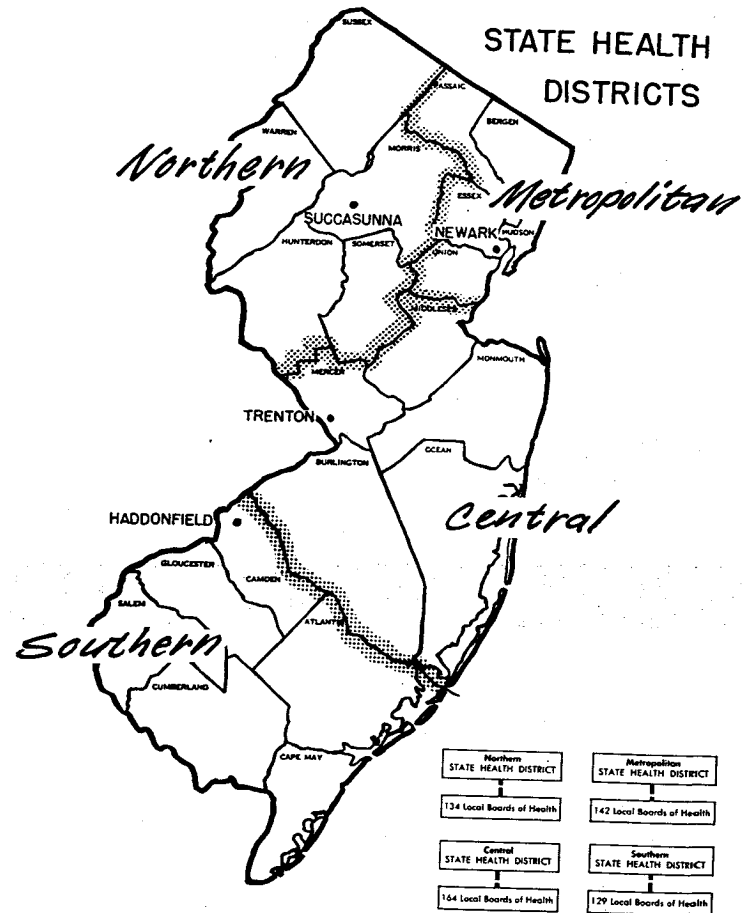


Table 1.

<i>Title</i>	<i>Total</i>	<i>Central</i>	<i>Metropolitan</i>	<i>Northern</i>	<i>Southern</i>
District State Health Officer	4	1	1	1	1
District Chief Environmental Health	3	1	1	vacant	1
Principal Public Health Engineer ..	4	1	1	1	1
Principal Sanitarian	4	1	1	1	1
Senior Sanitarian	4	1	1	1	1
Sanitarian	8	3	3	1	1
Assistant Sanitarian	1	..	..	1	vacant
Public Health Veterinarian	4	1	1	1	1
Veterinarian (part-time)	1	..	1	..	..
Rabies Control Warden	5	1	2	1	1
District Consultant Community Health Organization	4	1	1	1	1
District Consultant Medical-Social Rehabilitation	3	1	1	vacant	1
District Consultant Public Health Nutrition	3	1	1	..	1
Public Health Nutritionist	1	..	..	1	..
District Chief Public Health Nurse	4	1	1	1	1
Public Health Nurse Supervisor ..	16	1	5	4	6
Public Health Nurse	1	1	..	..	..
Senior Public Health Physician ...	1	..	1	..	..
Physical Therapist	1	1	..	..	..
Air Sanitation:					
Senior Industrial Hygienist	1	..	1	..	..
Industrial Hygienists	2	..	2	..	..

A beginning has been made in the decentralization of the Air Pollution Control Program with the assignment of three industrial hygienists to the Metropolitan District office. Similar assignments of Air Pollution personnel to the other district offices will follow when such personnel has been recruited and trained. In further development of Maternal and Child Health activities, a consultant pediatrician was assigned to each district staff. The positions of District Chief of Environmental Health which were created in the previous year were filled through promotional examination. The district public health veterinarians, the principal engineers, and principal sanitarians were eligible to compete in these promotions.

Successful efforts to develop local health services can only be consolidated if there is available properly trained personnel to administer the services. This Division, therefore, has a basic responsibility to initiate and, in cooperation with other divisions of the Department, to provide training opportunities for local health officers and other professional personnel.

During the past year, a two-day workshop was conducted, for full-time local health officers, on mental health. Of the 61 full-time local health officers in New Jersey, 43 attended this workshop. The objectives of the Mental Health Workshop were as follows:

1. To provide a fuller understanding of mental illness and available methods of control.
2. To consider the total community program for the control of mental illness and to delineate the areas of activity of the local health department with special reference to the needs for coordination with the mental institutions and mental health clinics.
3. To develop recommendations for activities of local health departments in the control of mental illness.

As a result of the workshop, there has developed among the participating local health officers considerable interest in mental health and especially in the possibility of providing services for the discharged hospital patient.

In addition, institutes were conducted for full-time local health department personnel on swimming pool sanitation, and on training food service personnel.

With the acceptance of the fact that the major unsolved problem in public health today is the control of long-term or chronic illness, a primary objective is the delineation of and implementation of patterns of local public health services that will meet these needs. The public health nursing, medical-social work, nutrition and community organization consultants on the District staffs are all involved in this effort. In order to carry out these activities effectively, it is necessary that these members of the District staff work closely with medical and allied health professions, hospitals, and other health agencies in the community. During the past year, continued progress was made in the decentralization of chronic illness program activities. The Senior Public Health Physician assigned to the Metropolitan District had the responsibility of establishing a close liaison with the hospitals and other agencies which have contracts for chronic illness services with the Department or who have department-owned equipment on loan. The purpose of this liaison is to provide consultation leading to the more effective use of these services and equipment, to insure adequate reporting by the contracting agency of the use made of these services and equipment, to bring to the attention of the Department knowledge of additional needs and, in general, to coordinate these chronic illness activities of the Department with the several other activities heretofore administered from the District offices. In the course of this activity, hospitals and other agencies were visited, surveyed and consultation offered. It is expected that similar assignments will be made to other Districts as soon as this pattern of activity is stabilized.

The start made in the previous year in the development of local health services in rural areas on a county rather than on a township basis in Burlington County served as an example for the promotion of similar patterns of services in additional counties. In Hunterdon County, a countywide public health nursing service was started which in time will absorb the individual township nursing services. The implementation of this plan, including a grant-in-aid from the State Department of Health, was finally consummated with the recruitment of a trained and experienced public health nurse director. In Somerset County, a citizens' committee has been working to coordinate the sanitary services on a countywide basis and is actively promoting plans to set up an office of public health coordinator for the county. The activities of this office initially will be concerned with environmental sanitation. In Somerset County, two of the visiting nurse services in the county were brought together into a single visiting nurse association. This was stimulated by the provision of grant-in-aid assistance. In Burlington County, further progress was made in the development of the countywide nursing service.

Following the approval by the Public Health Council in June, 1957 of the "Recognized Public Health Activities" and their resolution that such activities would be mandatory upon local boards of health when "Minimum Standards of Performance" were similarly completed and approved, the committee of health officers who formulated the "Recognized Public Health Activities" was intensively engaged in formulating the "Minimum Standards of Performance." This was completed in March, opened to detailed review at the annual conference of State and local health officials in April, completed and submitted to the State Commissioner of Health in May. The Commissioner recommended its adoption to the Public Health Council at its June meeting. The Council accepted the recommendations and scheduled a public hearing in October, 1959.

The Advisory Committee on State and Local Health Services met periodically and took under consideration the following subjects: "Recognized Public Health Activities of Local Health Departments;" the organization of a State public health organization affiliated with the American Public Health Association; program planning for the 48th Annual Conference of State and Local Health Officials; completion of arrangements for the Annual Conference; training institutes and workshops for the future; and employment of unlicensed personnel in local health departments.

The members of the committee appointed by the State Commissioner of Health were:

- Dr. Jesse B. Aronson, Director, Division of Local Health Services, Chairman.
- Dr. Miriam Sachs, District State Health Officer, Metropolitan State Health District.
- Mr. Ralph T. Fisher, Assistant Director, Division of Local Health Services.*
- Mr. Carl Wendel, President, New Jersey Health Officers Association and Health Officer of Maplewood Township.
- Mr. George Laubach, Health Officer of Elizabeth.
- Mr. Joseph Emmons, Health Officer of Long Branch.
- Mrs. Mary O. Wiley, President-elect, New Jersey Health Officers Association and Health Officer of Mahwah Township.
- Mrs. Noma Kline, Executive Director, Camden County Tuberculosis Association.
- Mrs. Amy Atchley, R. N., Executive Director, Trenton Visiting Nurse Association.

* Now Director, Division of Special Consultation Services.

Grants-in-Aid

Expenditures for Grants-in-Aid

The amount of money expended under grant-in-aid contracts consummated through the Division of Local Health Services during the fiscal year was \$27,536.35 divided as shown in Table 2.

Table 2.

No. of Contracts	Grantees	New Contracts		Renewal		Totals
		No.	Amount	No. Contracts		
19	Boards of Health	2	\$3,848.00	17	\$7,371.61	\$11,219.61
10	Boards of Education	9	1,860.90	1	387.00	2,247.90
1	A Regional Health Commission	0	.....	1	3,499.92	3,499.92
1	A County Board of Freeholders	0	.....	1	4,918.67	4,918.67
1	A County Visiting Nurse Association	1	3,624.00	0	.....	3,624.00
1	Rutgers—State University	0	.....	1	1,500.00	1,500.00
1	Medical and Nursing Service to Migrants	0	.....	1	96.25	96.25
1	County Welfare Council for Statistical Aid	1	250.00	0	.....	250.00
35	Totals	13	\$9,582.90	22	\$17,673.45	\$27,356.35

At the beginning of the fiscal year, July 1, 1958, there were in effect 12 grant-in-aid contracts which had been entered into in the previous fiscal year, the terms of which extended into the 1958-1959 year. Ten of these contracts were with local boards of health to assist them in providing local public health nursing services, one was with a local board of education, and one with a county board of freeholders for the same purpose.

Effective July 1, 1958, 13 primary contracts were entered into, one with a local board of health, nine with local board of education, one with a county visiting nurse association to aid its public health nursing program, one with a local board of health to enable it to employ for the first time a full-time health officer, and one with a county welfare council for statistical help in connection with a survey of health services.

Also effective July 1, 1958, renewal contracts were effected with seven local boards of health for continued assistance in public health nursing but at a reduced rate, usually two-thirds of the previous grant. On the same date, renewal contracts were signed with a regional health commission to aid its sanitation services, with Rutgers University for providing courses in public health; and with a county organization for social service for rendering services to migrant agricultural workers.

On January 1, 1959, eight contracts which expired on December 31, 1958, were renewed for one year at the usual reduction in the amount of the grant. Six of these contracts were with boards of health, one with a board of education, and one with a county board of freeholders. All were for assistance in providing public health nursing services.

Public Health Nursing Services Implemented

The greater portion of grant-in-aid funds allocated through the Division of Local Health Services was expended to assist local agencies in providing public health nursing services. There were 18 boards of health and 10 boards of education in 20 municipalities that received such assistance. In addition, one county visiting nurse association and one county board of freeholders received grants for the same purpose.

During the fiscal year, grant-in-aid funds allocated to local organizations, official and voluntary, aided in the support of one public health nurse director, two public health nurse supervisors, and 13 public health nurses. Seven of the public health nurses served in single municipalities, five served in two municipalities, and one served in three municipalities.

District Administration

General Administration

The following table shows population growth between the 1950 Census and July 1, 1958, based on data published by the Department of Conservation and Economic Development.

Among the 21 counties, the greatest numerical increase occurred in Bergen County (143,461) and the greatest percentage increase in Ocean County (44.64%).

Among the four State Health Districts, the Metropolitan District showed the greatest numerical increase, but the smallest percentage increase. This may indicate that land use in some of its five counties is nearing the saturation point.

Table 3.

POPULATION TRENDS—NEW JERSEY AND STATE HEALTH DISTRICTS

	1950 Census	Increase between 1950 Census and July 1, 1958	Percentage Increase Since 1950 Census
New Jersey	4,835,329	904,471	18.71
Central District	912,512	287,288	31.48
Metropolitan District	2,827,756	381,244	13.48
Northern District	394,956	97,044	24.57
Southern District	700,105	138,895	19.84

Civil Defense Medical and Health and Special Weapons Services

Survival Plan

The major portions of the Medical and Health and Special Weapons Annex and the Radiological Defense Annex of the New Jersey State Survival Plan were rewritten to conform with the organization, policies, and procedures recommended by the State Medical and Health Preparedness Committee, the basic assumption for survival planning, and existing legislation.

Training Programs

Further progress was made in the State Medical and Health Training Program with increased emphasis on in-service training. Accelerated orientation and refresher training was given to members of the Division of Environmental Health, primarily to the staff of Radiological Health, Air Sanitation,

and Occupational Health Programs. Over 40 of the Department's key personnel attended intradepartmental training sessions on Control Center Operations and Procedures and on Radiological Factors Influencing Medical and Health Emergency Activities.

A milestone in the industry-wide interest and participation in civil defense training was reached in the January instructors' program in radiological chemical defense offered to the New Jersey Bell Telephone Company. Forty-seven key executives of the New Jersey Bell Telephone Company, on company time and at company expense, completed this course and will form a corps which will train 2,000 radchem monitors in the Bell System within the next year. In the past, individual representatives of industry have taken advantage of the training offered since 1951 by the Department, but this marks the beginning of mass enrollment by a single industrial group. The State and the Bell System received a citation from the regional and national offices of the Office of Civil and Defense Mobilization. Orientation on the impact of modern weaponology upon forest fire fighting was given to 50 federal and State forest rangers at their civil defense program. A joint Mercer County and State radchem training program was given at Trenton State College. Sixty persons, representing 15 counties from central and southern portions of the State, public utilities, and industry completed the course. Planning and recruitment for the special mass orientation of science teachers by radiological officers of the Office of Civil and Defense Mobilization were arranged. Public and private high schools have received federally allocated radiological instrument kits.

An Institute on Emergency Childbirth in Disaster was cosponsored with the Medical Society of New Jersey and Rutgers University, School of Nursing. The Department's civil defense liaison officer, and Maternal and Child Health staff, assisted in the program planning and lecturing. Thirty-five nurses, representing hospitals and industry, completed the institute and about 100 nurses from the visiting nurse associations and schools of nursing were auditors at some of the sessions. Senior students of the East Orange General Hospital, School of Nursing, received orientation of Civil Defense Medical and Health organization as part of their civil defense program. Senior students of Mercer Hospital, School of Nursing, received orientation on the impact of radiological factors on disaster nursing as part of their ten-hour civil defense program. The Department's civil defense liaison officer assisted the State Civil Defense Welfare Service in its Institute on Registration and Inquiry Services of Civil Defense. The medical and health aspects of registration for identification and registration for inquiry were developed for the group of 200 Red Cross and welfare workers.

Division of Preventable Diseases

WILLIAM J. DOUGHERTY, M.D., M.P.H., *Director*

Programs:

Communicable Disease ControlADELE C. SHEPARD, M.D., M.P.H.
Program Coordinator

Tuberculosis ControlJAMES E. PETERMAN, M.D., M.P.H.
Program Coordinator

Venereal Disease ControlADELE C. SHEPARD, M.D., M.P.H.
Program Coordinator

Division of Preventable Diseases

Communicable Disease Control Program

MORBIDITY, MORTALITY AND TRENDS OF NOTIFIABLE DISEASES

The number of cases of notifiable diseases (exclusive of cerebral palsy, epilepsy, mental deficiency, tuberculosis and venereal diseases) reported for the State of New Jersey dropped about one-sixth during 1958 as compared with 1957. The total count for 1958 was 38,437. For 1957 it was 45,830.

Chiefly responsible for this drop was a sharp decrease in the number of cases of influenza reported for 1958, a total of 219 as compared with 7,827 during 1957, which was an epidemic year. The average annual number of cases of influenza for the preceding five-year period, 1952 through 1956, was 292. During this interval the annual number of cases exceeded 200 in only one year, 1953 when 1,017 cases were reported.

Partially offsetting this decrease in reported cases of influenza was an increase in the number of cases of pneumonia reported for 1958, 4,184 as compared with 2,982 for 1957. This figure is also higher than the annual average of 2,705 cases for the period of 1952 through 1956 and exceeds the individual total for each of these years.

There were 1,655 deaths due to pneumonia during 1957 and 1,676 deaths due to pneumonia during 1958. There were 138 deaths due to influenza during 1957 and 50 deaths due to influenza during 1958.

Other diseases contributing heavily to the decrease in the number of cases of communicable diseases reported were measles, whooping cough, and food poisoning. The number of cases of measles dropped 973 from 28,519 in 1957 to 27,546 in 1958. The 239 cases of whooping cough reported for 1958 represented a decrease of 420 from the 1957 total and was also lower than the count for any of the five years immediately preceding. From a record high of 221 cases in 1957, the number of reports of food poisoning dropped to 20 in 1958. The latter figure may be compared to the annual average of 25 cases for the previous five-year period.

During 1958 there were 1,827 deaths from reportable diseases (exclusive of cerebral palsy, epilepsy, mental deficiency, tuberculosis, and venereal diseases). Omitting the 1,726 deaths from pneumonia and influenza, there were 101 deaths due to the remaining notifiable diseases. This compares with 85 deaths due to the remaining notifiable diseases during 1957.

During 1958, there were no deaths from anthrax, botulism, brucellosis, cholera, dengue, diarrhea of the newborn, diphtheria, glanders, leprosy, leptospirosis, malaria, ophthalmia neonatorum, plague, psittacosis, Q fever, human rabies, shigellosis, smallpox, trachoma, trichinosis, tularemia, typhoid fever, typhus fever, whooping cough, or yellow fever.

During 1958, New Jersey experienced a relatively high incidence of poliomyelitis. There were 266 cases and 10 deaths due to poliomyelitis reported to the State Department of Health. The epidemic began in July, reached its height in mid-September, and then slowly declined. The number of paralytic cases increased more than sixfold, from 29 in 1957 to 186 in 1958. There were 80 cases of non-paralytic poliomyelitis during 1958 as compared with 52 cases during 1957. The largest percentage of paralytic cases (35.5 percent) was in individuals under five years of age. In the period since 1953, this has been true in only one year—1956. Of the paralytic cases in 1958, 8.6 percent had been adequately vaccinated, as compared with 38.7 percent of non-paralytic cases.

Laboratory studies were obtained in 86.8 percent of the cases and showed that 80 percent of paralytic cases and only 22.4 percent of non-paralytic cases tested could be confirmed as poliomyelitis. Twenty-two cases originally reported as non-paralytic poliomyelitis and five cases originally reported as paralytic poliomyelitis were dropped as a result of isolation of ECHO or Coxsackie viruses.

High poliomyelitis incidence counties were Essex, Hudson, Mercer, and Passaic, having rates per 100,000 of 5.6, 4.7, 5.1, and 4.6, respectively. The cities of Newark and Jersey City had rates of 9.0 and 3.4, respectively.

The attack rate for paralytic poliomyelitis among non-whites was observed to be five times that of the white population. Among the 80 non-paralytic cases, the attack rate for non-whites was approximately 2.6 times that of the white population.

Among 178 paralytic cases surviving their acute illness, 155 had some residual paralysis. Over 50 percent of persons who had not received Salk vaccine suffered moderate to severe residual involvement. The number of persons who had received three inoculations of Salk vaccine and who were paralyzed was small. However, among them, approximately half had moderate to severe residual involvement.

There were 23 cases of typhoid fever reported in New Jersey during 1958 with a case rate of 0.4 per 100,000 population. This compares with a low of 18 cases reported during 1957 with a rate of 0.3. Eleven of the 23 cases of typhoid fever reported were in the age group 5 to 14 years. There were 68 typhoid fever carriers listed in the State Health Department files at the end of fiscal year 1959.

During 1958, an outbreak of six cases of typhoid fever occurred in a New Jersey community of about 1,000 population which lacked public water supplies and sewerage facilities. On October 24, 1958, a 42-year-old woman died with a tentative diagnosis of typhoid fever. This diagnosis was subsequently confirmed. By November 8, other cases had developed in five persons ranging in age from 2 to 16 years. The diagnoses were confirmed by isolation of *Salmonella typhi* from stool specimens and/or agglutination titres. The individuals knew one another and five of the six were intimately associated.

The investigation included 195 contacts and revealed three *Salmonella* organisms other than *Salmonella typhi*. Stool specimens from one contact were positive for *Salmonella typhi*, phage type, degraded Vi. The only significant association this person had was with the person first diagnosed as having typhoid fever and who died. Whether the asymptomatic contact became infected incidental to the outbreak or prior to it, is not known. It appeared possible that he infected the first case, who, in turn, proceeded to infect some or all of the other individuals.

Three of the patients recovered after therapy and became free of the organism. Two have continued to have *Salmonella typhi* positive stool specimens despite clinical recovery and two complete series of antibiotic therapy.

During the past year, an expanded program of diphtheria surveillance was undertaken by the Communicable Disease Center of the Public Health Service, in which New Jersey participated by submitting basic data on each case of diphtheria reported to the National Office of Vital Statistics. Of the five cases that were reported in New Jersey during 1958, only two had been fully vaccinated.

There were 5,225 cases of streptococcal sore throat including scarlet fever and three deaths from these diseases reported during 1958. There were 1,180 cases reported from military posts. The 1958 total of 5,225 represents an increase of 11 percent over 1957 and is higher than any of the annual totals for the preceding five years.

There were 193 cases of infectious hepatitis and 28 deaths reported during 1958. This compares with 284 cases reported during 1957. There has been a gradual decline of reported cases since 1954 when 653 cases were reported. This reduction in incidence in each succeeding year since 1954 until 1958 is similar to the experience of the United States as a whole. The reason for this trend is not apparent but, it is conceivable that the disease is approaching the low point of a cycle which had its peak in 1954.

There were five cases of tetanus and one death reported during 1958. This compares with six cases and two deaths during 1957. The occurrence of cases and deaths from tetanus emphasizes the continuing need for maintaining a high level of immunization against this disease.

New Jersey, in the last 11 years, has been free of smallpox. There was one case of smallpox reported in 1947 and that case terminated in death.

GENERAL ACTIVITIES

Poliomyelitis Immunization Promotion

In six states during 1958, New Jersey, Michigan, Virginia, Texas, West Virginia, and California, the majority of paralytic cases of poliomyelitis were among children under five years of age. Four out of five had had no vaccine. The American Medical Association considered the problem of such concern that its House of Delegates on December 5, 1958 unanimously recommended the following steps: (1) each physician assume the responsibility for making certain whenever possible that all members of families he served receive protection against poliomyelitis by having the full three doses of polio vaccine; (2) state medical organizations arrange with state health departments for a joint effort to bring together county medical society representatives and representatives of county and city health departments for the purpose of discussing the need for joint study committees at the local level to survey the problems which may exist and to work jointly to solve them; (3) county medical societies meet with county and local health department representatives to create study committees to survey the problem of immunization as it may exist in the local area and develop and implement a satisfactory program to meet the local situation.

The State Department of Health renewed its efforts to achieve a maximum number of poliomyelitis vaccinations before the polio season. Early in 1959, the Department initiated meetings with medical, health, nursing, educational, and other groups concerned to consider efforts to assure that more members of susceptible groups would be protected in 1959 against the paralytic effects of poliomyelitis. It was the decision of these groups that surveys be undertaken in Newark, Jersey City, Paterson, Elizabeth, Bayonne, Hoboken, Trenton, Camden, and Atlantic City to determine the poliomyelitis immunization status of the population and that local efforts be initiated to remedy the situation where the need for protection against paralytic poliomyelitis was indicated. These cities were chosen because a portion of their population is in a socio-economic group who have relatively less poliomyelitis protection than other groups in the population and because they include some of the centers of high incidence of paralytic poliomyelitis during 1958. Official endorsement of the survey plan was received from The Medical Society of New Jersey and from the New Jersey Health Officers' Association.

By the end of the fiscal year, several of the surveys had been conducted and the findings indicated the specific need for active poliomyelitis immunization among persons in the lower socio-economic group.

A comprehensive series of documents called "Polio Packet, 1959," provided by the Public Health Service, was distributed among local health officers. It was urged that the excellent basic material in these documents be studied and followed by cooperative effort in communities to assure immunization of individuals who needed it.

The State Department of Health assisted communities by providing vaccine for medical indigents, such limitations being imposed on the Department by law. The effect of stimulation of poliomyelitis immunization programs by the Department is revealed in the figures showing distribution of Salk vaccine by the Administrative Services Program through distributing stations, clinics, and child health stations. In the first quarter of 1959, 87,000 cubic centimeters of vaccine were distributed and in the second quarter, 245,000 cubic centimeters were distributed.

Chapter 133, Public Laws of 1957, permits local boards of education to require immunization to poliomyelitis as a prerequisite to admission. The Board of Trustees of The Medical Society of New Jersey recommended to county medical societies that they encourage local boards of education and authorities of private schools to require poliomyelitis immunization as a prerequisite to admission to school. Many boards have instituted this requirement but it applies, in almost all instances, to children entering school for the first time. Therefore, about 12 years are required for all children in an elementary system to be covered by such a requirement if it applies only to first admissions. Furthermore, it does not assure protection for those below school age, nor for those excused for religious or medical reasons.

Influenza Surveillance Program

Because of the 1957 world-wide spread of Asian influenza and interest in this new virus strain, an influenza surveillance program was developed by the Department for the winter of 1958-1959 and was conducted in cooperation with the influenza surveillance program of the Public Health Service.

A system of rapid reporting of outbreaks of influenza and influenza-like illness was developed. The Division of Laboratories offered the service of conducting virus isolation from throat washings and to determine antibody levels in acute and convalescent blood serum samples to detect the presence of specific influenza strains in cases presenting influenza-like symptoms.

During the latter part of February and early part of March, 1959, there were reports from the Northern and Central State Health Districts of increases in absenteeism from schools of 10 to 40 percent. The illness of students was characterized by fever, malaise, sore throat, dry cough, headaches, and muscle aches. Laboratory studies indicated that the illness in one of the Central Dis-

trict's high schools was due to influenza, Type B. Type B influenza is ordinarily far less severe than the Asian variety which occurred last year. It lasts about four days and mainly affects children and young adults.

INVESTIGATION OF FOOD POISONING DUE TO NITRITES

One proven death on March 24, 1959 and an undetermined number of illnesses among New Jersey residents were caused by ingestion of fish contaminated with sodium nitrite. The use of sodium nitrite on fish is illegal. The affected individuals became ill with typical signs of methemoglobinemia, including dyspnea, cyanosis, weak and thready pulse, severe abdominal pain, coma, and shock. Specimens of the fish obtained from the home of the individual who died were reported as showing nitrite ranging from 135 to 494 milligrams per hundred grams of fish.

Similar illnesses were reported in three Philadelphia women after eating fish originating from the same source as that responsible for death in the New Jersey resident.

Some illnesses following the ingestion of the fish were regarded as of psychogenic origin, and some others were attributed to decomposition of the fish.

Warnings against eating fish purchased within the critical period were released by the Department to radio stations in south Jersey, to the Associated Press, the United Press International, and to the State police. Thirteen hundred pounds of fish distributed in New Jersey were destroyed. By March 26, it was agreed that the public need have no further concern about purchasing and eating fish and appropriate publicity was disseminated.

HEALTH EDUCATION

A statement expressing the current position of the State Department of Health concerning fourth injections of poliomyelitis vaccine was prepared and distributed broadly to District and local health department personnel. This statement appeared in at least two county medical society journals. In addition, the information document "Epidemiology of Typhoid Fever" was prepared and over 400 copies were requested and distributed.

At the request of the Departments of Education and of Institutions and Agencies, an information document providing recommendations for active immunization was prepared and made available in quantity.

The Coordinator of the Program participated in teaching a course in Basic Environmental Sanitation which began at Rutgers University in June. This course is conducted each year by the State Department of Health and Rutgers University for training sanitarians for employment in health departments and as preparation for the examination for sanitary inspector's license.

A Regional Conference on the "Control of Staphylococcal Disease," sponsored by the Public Health Service, was held in Princeton in November. Key individuals from five states, representing medical associations, nurses' organizations, and hospital and health departments participated to explore what could be done to prevent and control these infections.

The September issue of *Public Health News* carried an article "Administration and Epidemiologic Uses of Morbidity Data," which was prepared by the Program Coordinator and presented at the 47th Annual Conference of State and Local Health Officials, in Trenton.

Papers concerning a staphylococcal problem in a New Jersey hospital and the New Jersey poliomyelitis problem were presented at the Annual Conference of Epidemic Intelligence Service Officers in Atlanta, Georgia.

RESEARCH

The Communicable Disease Control Program Plan and Manual of Procedures were revised and brought up to date and the annual evaluation of the Program was completed. A new approach to evaluation was evolved through the development of a set of short-term objectives for fiscal year 1959-1960.

STATISTICS

Reference may be made to statistical tables, covering reportable diseases, appearing in the Public Health Statistics Program Section of the Annual Departmental Report.

Venereal Disease Control Program

MORBIDITY, MORTALITY, AND TRENDS

Increases in both the syphilis and gonorrhea rates during 1958 continued a trend first noted the year before. The syphilis rate (113.6 per 100,000 population) was the highest reported since 1950 and the gonorrhea rate (109.4) was at its highest point in ten years. New Jersey was among the minority of 18 states reporting an increase in the total syphilis rate as well as being one of the 23 reporting a rise in primary and secondary syphilis.

The rise in venereal disease morbidity may be attributed to increased emphasis on case-finding and reporting as well as to a probable actual increase in the incidence of the diseases.

Syphilis

During 1958 there were 6,077 cases of syphilis reported. This represents a rise of 633 cases, or 11.6 percent over 1957 when 5,444 cases were reported. Increases in all stages of syphilis were noted as follows:

<i>Syphilis by Stage</i>	1958 Reported Cases	1957 Reported Cases	Percent Increase
Primary and Secondary	183	121	51 percent
Early Latent	643	467	38 percent
Late and Late Latent	5,030	4,661	8 percent
Congenital	215	181	19 percent

An analysis reveals that 10 of New Jersey's 21 counties—Atlantic, Bergen, Camden, Cumberland, Essex, Hudson, Mercer, Middlesex, Monmouth, and Union—accounted for 5,307 or 87 percent of the 6,077 syphilis cases reported during 1958. Five major cities—Atlantic City, Camden, Jersey City, Newark, and Trenton—contributed 49 percent or 2,988 of this State total.

The 10 counties noted above contain approximately 79 percent of the State's population. Four of the counties—Bergen, Essex, Hudson, and Union—and two of the major cities—Newark, in Essex County; and Jersey City, in Hudson County—are located in the densely populated Metropolitan State Health District. The remaining six counties and three cities are located in the Central and Southern State Health Districts. These counties are likewise among those most densely populated. However, population density is not the only explanation for high syphilis incidence. Special case-finding projects such as migrant and community selective serologic surveys as well as intensified epidemiologic interviewing and investigating activities were undertaken in these areas during the year. This is well illustrated by Atlantic City, Atlantic and Cumberland Counties which rank high in reported syphilis out of proportion to their percentage of population. A concentration of case-finding activities was naturally centered in areas of population density and of known or suspected high syphilis incidence during the year. These factors emphasize the fact that there is a direct relationship between case-finding activities and case rates, but more important, implies that there still remains in the State a reservoir of undiscovered and untreated syphilis.

During 1958 more effective epidemiologic techniques were applied to primary and secondary syphilis. One hundred eighty-three cases of primary and secondary syphilis were reported during the year and that, of this total, 83 cases, or approximately 45 percent, came to diagnosis and treatment as a result of field investigative activities. In addition to these assigned activities, program personnel engaged in increased personal visitation to private physicians

and hospitals which had a stimulating effect upon case reporting. The 183 reported cases of primary and secondary syphilis came from the following sources: 88 from private physicians, 82 from clinics, and 13 from military installations. This serves to illustrate the increasing importance of the role of the private physician in venereal disease control activities.

Of the State's total, 135, or 74 percent, of the primary and secondary syphilis case load was reported from the more densely populated Metropolitan State Health District with 51 of these cases from the city of Newark.

Gonorrhea

During 1958 New Jersey had 5,852 gonorrhea cases reported with a case rate of 109.4 per 100,000 population. This compares to 1957's 5,276 reported cases, with a rate of 99.9 and represents a 10.9 percent increase.

Five cities, Atlantic City, Jersey City, Newark, Paterson, and Trenton—had higher gonorrhea rates than that for the State as a whole. Their combined total gonorrhea cases constituted 66.8 percent of the State's total reported cases during 1958 with the city of Newark reporting approximately 42 percent of the State total. These cities were all areas within which increased syphilis control activities were undertaken during 1958 resulting in greater stimulation of all epidemiologic activity, including the case reporting of gonorrhea.

Mortality

There were 90 deaths attributable to syphilis during 1958.

GENERAL ACTIVITIES

CONTACT INTERVIEWING AND INVESTIGATION

Interviewing

During 1958 an attempt was made to extend better interviewing services throughout the State. A total of 2,116 patients diagnosed and treated for venereal diseases were interviewed, yielding 3,303 contacts. (See Table 5.) Particular emphasis was placed upon the interviewing of patients diagnosed as being infected with primary and secondary syphilis. Of the 183 individuals reported in these diagnostic categories, 154 or 84.1 percent were interviewed.

A comparison between contact indices for interviewing by State personnel during the year and national averages for a comparable period of time is presented below:

<i>Diagnosis of Patient</i>	<i>Source of Patient</i>	<i>Contact Index</i>	
		<i>N. J.</i>	<i>U. S.</i>
Primary and Secondary Syphilis	Private Physicians	2.10	2.98
	Clinics	3.22	4.07
Early Latent Syphilis	Private Physicians	2.55	3.05
	Clinics	2.63	3.14
Gonorrhoea	Private Physicians	1.31	1.58
	Clinics	1.34	1.39

Investigation

During 1958, 12,619 contacts and suspects of venereal disease were referred for investigation. This was 1,388 more individuals than were assigned during 1957.

Field personnel brought 10,567, or 84 percent, of the assigned total to examination. Of those examined, 3,626 were brought or returned to treatment and an additional 1,561 received epidemiologic treatment for the disease suspected.

Of the 11,929 cases of syphilis and gonorrhoea reported in New Jersey during 1958, 3,623, or 30 percent, were brought or returned to treatment as a result of epidemiologic investigations. Priority in this investigative activity was assigned to the syphilis suspects with 53 percent of the total syphilis reported during the year being brought to treatment through field investigation.

Cluster Testing

Closely identified with interviewing and investigating activity is a new case-finding method known as "cluster testing." This technique merely extends the interviewing and investigative processes in early infectious syphilis cases to include the blood testing of the patient's associates in addition to his contacts. Except for contact interviewing, this method has been found most productive as a case-finding device.

"Cluster testing" received some application in New Jersey during 1958. It was applied, as an extension of the contact interview, in 48 cases of primary and secondary syphilis with a yield of 197 cluster suspects, an index of 4.10. (For the United States the cluster named suspects index was 5.18.) Increased emphasis on this technique is contemplated.

Selected Serologic Screening.

Twenty-two selective serologic surveys were conducted for syphilis case-finding during 1958. These screening surveys were of various types—migrant, industrial, community, jail—directed at areas and population groups of known or suspected high syphilis incidence. This activity was in the following specific categories: 9 jails, 3 industries, 6 communities, and 4 with such migratory groups as agricultural, seafood, and race track workers. A total of 27,012 individuals was tested through these surveys. Of this total, 1,337 were either brought or returned to treatment. This represents 22 percent of the total number of reported syphilis cases during the year.

Program Development Activities

County Jail Blood Testing Programs

It has been shown that blood testing programs in county jails are more productive than other surveys in terms of the number of syphilitics treated for the amount of money spent. Therefore, extensive efforts were made during the year to establish testing programs in county jails where such programs were not already in operation. Screening programs were initiated in the jails of Camden, Atlantic and Salem counties during 1958. Extension of blood testing programs to additional county jails is anticipated for the coming year.

Jersey City Assignee

The northeastern metropolitan area of the State contains both a concentration of population and of reported cases of venereal disease, making adequate epidemiologic coverage in this area essential to an over-all venereal disease control program. To better provide this type of coverage during 1958, a serologic screening program within Jersey City was undertaken. This program demonstrated (1) the existence of untreated syphilis in Jersey City and (2) the effectiveness of a specially trained interviewer-investigator in working with local health department people to meet their control needs. As a result, such a person was assigned to the Jersey City Department of Health on a continuing basis.

Laboratory Reporting of Reactive Serologic Tests for Syphilis

A special study was carried out during the year as a cooperative undertaking by the Venereal Disease Control and the Public Health Statistics Programs to determine the completeness of reporting of reactive and positive venereal disease tests by approved laboratories throughout the State. Reports

from 118 approved laboratories were analyzed. 2,310 (less than 25 percent) of the 9,763 reactive or positive tests processed in these laboratories were reported to the State Department of Health. Program personnel made personal visits to the laboratories, explained procedures, and assisted in initiating more complete reporting. As a result, laboratory reporting has improved considerably and it is estimated that this follow up of unreported results could increase syphilis morbidity by 1,000 to 1,500 cases per year.

Drug Distribution

The Venereal Disease Control Program annually distributes drugs for the treatment of venereal diseases to physicians, clinics, and hospitals.

The distribution of such drugs during calendar year 1958 is summarized below:

- 4,642 vials of benzathine penicillin G (bicillin 10 cc).
- 396 disposal syringes of benzathine penicillin G (bicillin—2.4 million units).
- 175 disposal syringes of benzathine penicillin G (bicillin—1.2 million units).
- 5 bottles of aureomycin capsules (4 gram).
- 260 bottles of terramycin capsules (250 mg.).
- 30 bottles of sulfathiazole (0.5 gram).

Personnel

Continued assistance from the Public Health Service during 1958 provided New Jersey with personnel specialized in the application of venereal disease control case-finding techniques.

HEALTH EDUCATION

Training in Interviewing

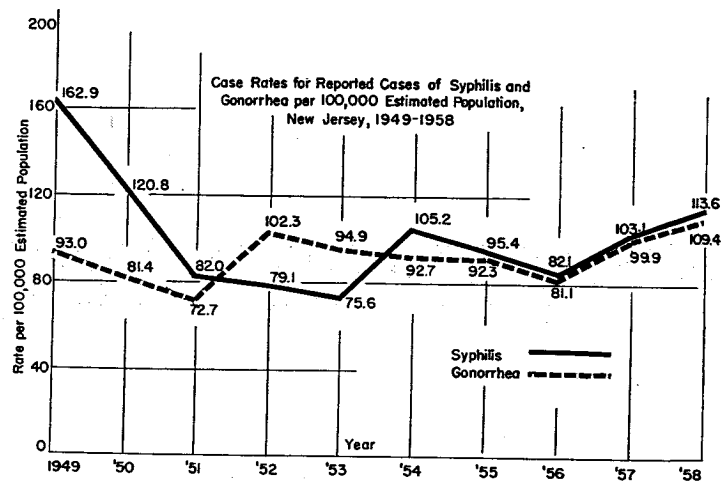
The application of successful interviewing is fundamental to venereal disease control and it requires special approaches and techniques. Therefore, during 1958 emphasis was placed upon teaching, improving, and refining interview performance throughout the State. During the year, seven members of the field staff and one nurse from the Trenton clinic attended two-week intensive training courses on the clinical aspects of venereal diseases and on control techniques with particular emphasis upon interviewing. These schools of interviewing instruction were held in Detroit and Atlanta under the joint sponsorship of their respective State Departments of Health and the United States Public Health Service.

The Venereal Disease Branch of the Communicable Disease Center of the Public Health Service, through its regional office, again in 1958 made available

to the State Department of Health a mobile interviewing school. This school employs closed circuit television in presenting actual interviewing situations for teaching purposes. It also serves as a collection and distribution agent for interviewing material throughout the United States. The school was established for one week at the Newark Health Department clinic and was well attended by venereal disease control case-finding personnel from health departments and clinics throughout the State.

STATISTICS

In addition to the following tables, reference should be made to other statistical material in the Public Health Statistics Program Section of the Annual Departmental Report.



Case Rates for Reported Cases of Syphilis and Gonorrhea per 100,000 Estimated Population, New Jersey, 1949-1958

Table 1.
EPIDEMIOLOGIC ACTIVITY REPORT FOR VENEREAL DISEASES
NEW JERSEY: 1958

DIAGNOSTIC CATEGORIES	Interviewing		Investigation		Disposition of Persons Examined											
	No. Patients Interviewed	Contacts Obtained	Contact Index	No. Investigations Assigned this Period	No. Persons Examined this Period	No. Persons Not Examined this Period	Primary and Secondary Syphilis	Early Latent Syphilis	Other Syphilis	Placed Under Rx	Infections Identified	Returned to Rx	Already Under and Adequate Rx for Disease	Other	Prophylactic or Epidemiologic Rx	Not Infected With Disease Suspected
Armed Forces																
Contacts—																
Primary and Secondary Syphilis	11	20	2.36	16	7	5	1	1								
Early Latent Syphilis				2	1	1										
Other Syphilis				2	2	2										
Gonorrhea	30	86	1.46	108	97	82										
Other Venereal Diseases				3	1	1										
Selectees and Separates				107	144	21	3	13	20							
Civilians																
Contacts—Private Physician Cases—																
Primary and Secondary Syphilis	51	107	2.10	76	64	3	4	1								
Early Latent Syphilis	42	107	2.55	62	65	1		4								
Other Syphilis				7	4	1										
Gonorrhea	1	1	1.25	1	1	1										
Other Venereal Diseases	201	263	1.31	270	197	36		1	30							
Positive S. T. S. and Other Suspects.	1	1	2.00	2	2											
Contacts—Clinic or P. and C. Center Cases—																
Primary and Secondary Syphilis	92	203	2.22	317	211	40	13	11	2							
Early Latent Syphilis	138	323	2.34	351	240	60	10	6	1							
Other Syphilis	13	23	1.77	35	34	1		3								
Gonorrhea	1,501	2,023	1.34	2,500	1,856	704	1	3	310							
Other Venereal Diseases	3	6	2.00	13	11	5										
Positive S. T. S. from Surveys				1,084	1,021	21	2	31	123	2						
Other Positive S. T. S. and Other Suspects and Associates	48	197	4.10	7,552	6,090	539	59	210	1,500	24	3	682	2,088	30	100	1,201
Cluster Suspects and Associates				102	177	9	2	1	3				32		13	106

Table 2. SUMMARY OF ALL SEROLOGIC SURVEY ACTIVITIES
CALENDAR YEAR, 1958

Group Tested	No. Specimens Taken	Number Reactive	Per Cent Reactive	Number Reactors Treated	Per Cent of Reactors Treated
All Groups	27,012	2,563	9.5	1,337	52.2
Agricultural Migrants	3,853	524	13.6	331	63.2
Seafood Workers	260	74	28.5	28	37.8
Race Tracks	818	65	7.9	29	30.8
Industrial	479	25	5.2	8	32.0
Community	15,876	1,291	8.1	712	55.1
Jails	5,726	584	10.2	238	40.8

Tuberculosis Control Program

MORBIDITY, MORTALITY AND TRENDS OF TUBERCULOSIS

Tuberculosis incidence and fatality in New Jersey reached new lows in 1958, the first year of record in which this disease was not among the 12 leading causes of death. There were reported 2,790 total new cases including 1,622 active cases, 443 deaths due to tuberculosis, and 184 other deaths with tuberculosis stated as a secondary cause. The progressive decline in morbidity and mortality in the five most recent years is apparent in Table 1.

Table 1.

TUBERCULOSIS CASES AND DEATHS, NUMBERS AND RATES, NEW JERSEY, 1954-1958

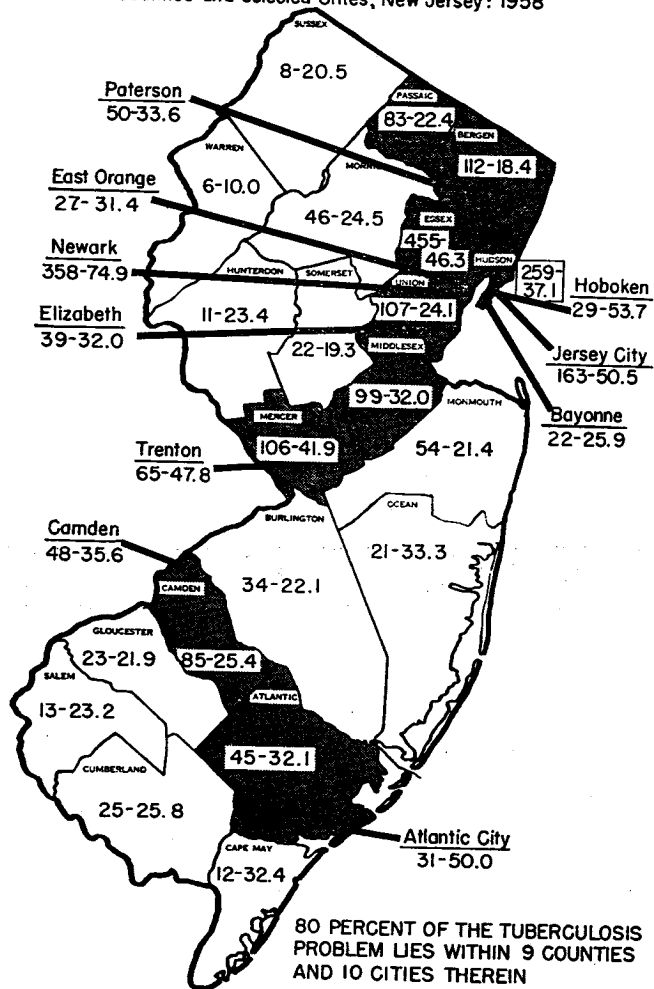
Year	Estimated Population	Deaths		Total Cases ¹		Active Cases ¹	
		Number	Rate ²	Number	Rate ²	Number	Rate ²
1954	5,071,000	558	11.0	3,650	72.0	2,104	41.5
1955	5,141,000	570	11.1	3,665	71.3	2,139	41.6
1956	5,206,000	522	10.0	3,354	64.4	1,888	36.3
1957	5,279,000	519	9.8	3,543	67.1	1,806	34.2
1958	5,351,000	443	8.3	2,790	52.1	1,622	30.0

¹ Newly reported cases only shown for each year.

² Rate per 100,000 estimated population.

In recognition of the value of measurement of active disease in planning for case-finding and case control, a new series of statistical data on newly reported active and probably active tuberculosis was prepared. These as well as other pertinent tables on cases and deaths appear in the Public Health Statistics Program Section of the Annual Departmental Report.

Newly reported active and probably active Tuberculosis, Cases and Case Rates per 100,000 estimated population, for Counties and selected Cities, New Jersey: 1958



Review of the geographic distribution of the 1,679 active and probably active tuberculosis cases newly reported in 1958 reveals that 43 percent reside in the six major cities; 80 percent are found in the nine counties of Atlantic, Bergen, Camden, Essex, Hudson, Mercer, Middlesex, Passaic and Union. Tuberculosis remains as a disease of the old central cities.

CASE-FINDING

Selective X-ray Surveys Under Department Auspices

A mobile x-ray unit sponsored by this Department x-rayed 26,740 individuals in 80 days of operation in 16 selected communities of high tuberculosis prevalence, 66 industrial plants, 2 race tracks and in follow-up of tuberculin testing projects in two counties. Brought to conclusive examination were 838 of the 1,069 persons showing x-ray evidence suggestive of pulmonary disease. There were found 166 individuals having tuberculosis in some form including 22 active cases. Also discovered were 21 neoplasms of the lung and 42 others with cardiovascular lesions. In addition, 454 other persons showing evidence of cardiovascular disease were transferred to the Heart and Circulatory Disease Program for further study. The incidence rate of active tuberculosis found was 8.2 per 10,000 persons x-rayed. A summary of State-sponsored surveys is shown in Table 4.

Community X-ray Surveys by Other Agencies

Local voluntary and official health agencies provided the major number of survey x-rays in 1958. The New Jersey Tuberculosis and Health Association, for the fiscal year ending March 31, 1959, reported 163,902 x-rays taken in 13 counties, largely by their county affiliated associations in collaboration with county sanatoria and municipal boards of health. Approximately one-third of those x-rayed were high school students in nine counties.

There were 3,945 participants with suggestive x-ray shadows. Incomplete reports indicate that, thus far, 2,057 have been re-examined yielding 47 active and 623 inactive cases of tuberculosis.

Hospital Admission Screening

A total of 44,137 screening x-rays were reported in 1958 by 14 general hospitals. Presumptive positive referrals numbered 4,768 (10.8 percent) including 399 or 0.9 percent with x-ray shadows suggesting tuberculosis. With a few exceptions, hospitals did not report diagnoses established after follow-up of referred suspects.

The Tuberculin Test

New Jersey ranks among the early State health departments to promote the intradermal (Mantoux) tuberculin test as a primary method of search for tuberculosis. Research has amply demonstrated the usefulness of the test in case-finding, epidemiological determination of prevalence, and prevention of unnecessary x-ray and exposure to radiation.

The Mantoux test, on April 1, 1959, was established as the initial procedure in examination of all persons attending state-sponsored chest clinics except known cases, those presenting symptoms or individuals over 35 years of age. Correspondingly, chest x-ray was limited to Mantoux reactors and the three excepted categories. The Maternal and Child Health Program is stimulating the inclusion of the test as a part of the services rendered in the child health stations.

This Department has recommended to the State Department of Education that, in the school year 1959-1960, the Mantoux test be applied to all children entering school for the first time and to non-reactor high school students; also that chest x-ray be limited to tuberculin reactors. Recommendations were formally approved by The Medical Society of New Jersey, The New Jersey Section of the American Academy of Pediatrics, The New Jersey Tuberculosis and Health Association, The New Jersey Congress of Parents and Teachers and the Parochial School System of the Roman Catholic Church.

The Mercer County Tuberculin Testing Pilot Study

The study, begun early in 1958 was completed on October first, with chest x-ray and diagnostic follow-up of child reactors and their families. This successful demonstration was possible only by the united support by State, county and local agencies in the fields of education and health and the untiring devotion of public health nurses.

The intradermal (Mantoux) test was applied, with parental consent, to more than 19,000 pupils of Kindergarten, 1st, 3rd, 7th and the four high school grades of all schools in every municipality. The number of completed tests represented 65.3 percent of 29,427 students in these several grades.

The overall reactor rate was computed as 3.6 percent with a range from 1.6 in Kindergarten and 1st grade to 5.7 in 9th and 6.0 percent in 12th grade. As expected, the rate increased proportionately to number of years of exposure. In Trenton, with a high reported incidence rate for Tuberculosis, tuberculin reactor rates were higher than for other areas of the county.

Participation by 23.6 percent of the 2,866 teachers and other employees of the schools produced a reactor rate of 38.0 percent. Inasmuch as these individuals are annually examined, it was not surprising that no active tuberculosis

was found among the 200 reactors followed up by x-ray. However, further examination of 532 student reactors disclosed 2 new active cases.

From student reactors, there were elicited 2,020 contacts. Examination of 1,849 of this number disclosed 13 active and 29 inactive cases of tuberculosis. The prevalence rate of active tuberculosis among contacts of tuberculin reactors was 59.2 per 10,000 persons. Among the highly selective population of contacts of reactors the prevalence of tuberculosis is 8 to 9 times that found by mass x-ray surveys in high incidence areas.

This study is summarized in Table 2.

Table 2.

TUBERCULOSIS PREVALENCE RATE PER 10,000 AMONG POPULATIONS STUDIED
TUBERCULIN TESTING PROJECT—MERCER COUNTY, N. J.—1958

Population Studied	Number of Persons Studied	TUBERCULOSIS			
		Number of Cases Total	Active	Rate Per 10,000 Total	Active
Total	22,098	46	15	20.8	6.8
Students	19,219	3	2	1.5	1.0
Staff	677	..	..	...	...
All Contacts	2,202	43	13	195.0	59.2
Contacts of 532 Student Reactors	1,849	42	13	226.0	70.5
Contacts of 200 Staff Reactors ..	353	1	..	28.4	...

CASE ACCOUNTING

Case Reporting

Neglect or delay by physicians in submitting case reports to the health departments continues to adversely affect control of tuberculosis. Of the 627 total deaths in 1958 attributable to tuberculosis, 36.8 percent were either not reported as cases or reported within one month preceding death; this was slightly higher than 35.1 percent in the preceding year. Table 3 presents the problem in greater detail.

Table 3.
TIME INTERVAL BETWEEN DATE OF CASE REPORT AND DATE OF DEATH FOR DEATHS
ASSIGNED TO TUBERCULOSIS AS A PRIMARY OR SECONDARY CAUSE, NEW JERSEY: 1958

Time Interval	Total Primary and Secondary Tuberculosis Deaths		Tuberculosis As Primary Cause of Death		Tuberculosis As Secondary Cause of Death	
	Number	Per Cent of Total	Number	Per Cent of Total	Number	Per Cent of Total
Total Deaths	627	100.0	443	100.0	184	100.0
Not Reported as Cases ..	146	23.3	94	21.2	52	28.3
Reported as Cases:						
After Death	48	7.6	43	9.7	5	2.7
Within 1 Month Before Death	37	5.9	32	7.2	5	2.7
1 Month to 1 Year Before Death	79	11.2	50	11.3	29	15.9
1-4 Years Before Death	129	20.6	86	19.4	43	23.4
5-9 Years Before Death	102	16.3	71	16.1	31	16.8
10 Years or More Before Death	95	15.1	67	15.1	28	15.2

Case Registers

County-wide case registers are operated in Bergen, Hudson, Mercer, Middlesex, Monmouth and Passaic counties. The Bergen County Tuberculosis and Health Association has taken responsibility for the register previously located in Bergen Pines Hospital. The newest register, initiated January 1, 1958 by the Hudson County Tuberculosis and Health Association, has made remarkable progress in development. Establishment of registers in four or more other counties is presently under consideration.

Program Records and Office Procedures

A modern case roster filing system has been installed within the Department in lieu of antiquated and more laborious equipment. The new tuberculosis case report form established in 1957 has been further improved by revision in 1958. Critical review of existing forms, form letters and information documents has resulted in revisions, consolidations, reductions and improvements of content, which were designed to reduce clerical workload and improve office practices.

PROMOTION OF TUBERCULOSIS SERVICES

Clinics

To assure adequate clinic facilities where needed and not totally available from local resources, the Program provides some of the essential elements of service or equipment. This assistance is being withdrawn as rapidly as increasing community resources permit. Modern X-ray equipment, on lease to the Board of Chosen Freeholders of Burlington County, was installed in the new County Chest Clinic established in Mt. Holly in 1958.

Distribution of services and equipment is indicated in Table 5.

Hospitals

This Department, in recent years, has leased to cooperating hospitals, X-ray equipment in promotion of X-ray screening of patients on admission in search for previously unrecognized diseases in the chest. In the fiscal year 1958-59 equipment was leased to Presbyterian Hospital, Newark; St. Elizabeth's Hospital, Elizabeth; and the Bayonne Hospital. Equipment, purchased from tuberculosis funds, currently on lease is shown in Table 6.

IMMEDIATE FUTURE ACTION

The Tuberculosis Control Program Plan, revised for the 1959-61 biennium, includes a series of short term objectives which will receive special attention. The objectives are concerned with contact investigation, X-ray screening, development of the tuberculin test, screening of State employees, unreported cases dying with tuberculosis, and delay in first admissions to sanatoria. They are designed to prevent the spread of infection through earlier detection, treatment and restoration of individuals already infected with tuberculosis.

Table 4.
X-RAY SURVEYS—FOLLOW-UP AND DIAGNOSIS SUMMARY, 1963

Survey No. Location	Persons X-rayed	Suspects Referred		Suspects With Established Diagnosis		Tuberculosis Rate/10,000 X-rayed		Cases of Tuberculosis Unreported		Established Diagnosis							Diagnoses Not Established	
		No.	Per Cent	No.	Per Cent	All Cases	Active Cases	No.	Per Cent	Total	Active	Inactive	Endet.	Cardias	Neoplasia	Other Path.		No Disease
New Jersey	26,740	1,000	4.0	858	78.4	62.1	8.2	74	44.6	166	22	126	18	42	21	178	431	231
State Health Districts																		
Metropolitan	9,921	333	3.4	256	76.9	51.4	8.1	33	64.7	51	8	37	6	10	5	46	138	77
Northern	963	38	4.1	26	68.4	53.6	21.4	3	0.0	5	2	2	1	1	1	5	33	12
Central	7,844	302	3.9	272	90.0	51.0	10.2	3	7.5	40	8	30	2	11	4	55	102	30
Southern	8,042	396	4.9	284	71.7	87.0	5.0	38	51.3	70	4	57	5	13	11	72	118	112
Counties																		
Atlantic	4,820	256	5.2	177	70.8	101.5	4.1	25	51.0	49	2	30	8	8	8	28	76	73
Burlington	370	14	3.7	13	92.9	52.8	0.0	2	100.0	2	0	1	1	0	0	0	11	1
Camden	1,975	93	4.7	74	79.6	81.0	5.1	10	62.5	16	1	15	0	0	0	1	28	29
Cape May	1,238	53	4.3	33	76.8	40.4	8.1	3	0.0	5	1	3	1	1	2	8	13	15
Essex	6,218	186	3.0	131	70.4	43.4	8.0	16	50.3	27	5	18	1	1	3	21	73	20
Mercer	6,238	243	4.0	225	93.0	55.4	11.4	1	2.9	31	7	23	1	8	3	45	147	17
Monmouth	1,329	45	3.4	33	73.3	30.2	7.5	0	0.0	4	1	3	0	3	2	10	14	12
Morris	933	38	4.1	26	68.4	42.9	32.2	0	0.0	5	2	3	1	1	1	5	13	12
Union	3,702	117	4.0	125	85.0	64.8	8.1	17	70.8	21	3	19	3	11	3	37	63	52

Table 5.
SERVICES OF PERSONNEL AND X-RAY EQUIPMENT PROVIDED TO CHEST CLINICS

Clinic	*Services or Equipment	Clinic	*Services or Equipment
<i>Atlantic County</i>		<i>Mercer County</i>	
Atlantic City	C-X	Trenton	C-X
Hammonton	C-T-X-S		
Mays Landing	C-T-X-S	<i>Monmouth County</i>	
<i>Burlington County</i>		Asbury Park	C
Burlington	X	Freehold	C
<i>Cape May County</i>		Long Branch	C
Cape May Court House	C-T-X-S	Middletown	C
<i>Cumberland County</i>		<i>Ocean County</i>	
Bridgeton	C	Toms River	C-X
Millville	C	<i>Salem County</i>	
Vineland	C	Elmer	C
<i>Essex County</i>		Salem	C
Newark	C	<i>Sussex County</i>	
<i>Gloucester County</i>		Newton	C-X
Woodbury	C	<i>Warren County</i>	
		Phillipsburg	C-X
* C Clinician's Services		X X-ray Equipment	
T Technician's Services		S X-ray Supplies	

Table 6.
X-RAY EQUIPMENT ON LEASE TO HOSPITALS

<i>Atlantic County</i>	<i>Mercer County</i>
Atlantic Co. Hospital for Mental Diseases, Northfield	St. Francis Hospital, Trenton
<i>Camden County</i>	<i>Middlesex County</i>
West Jersey Hospital, Camden	Middlesex General Hospital, New Brunswick
<i>Essex County</i>	<i>Monmouth County</i>
Presbyterian Hospital, Newark	Fitkin Memorial Hospital, Neptune
<i>Hudson County</i>	Monmouth Memorial Hospital, Long Branch
Bayonne Hospital, Bayonne	<i>Somerset County</i>
B. S. Pollak Hospital for Chest Diseases, Jersey City	Somerset Hospital, Somerville
	<i>Union County</i>
	St. Elizabeth Hospital, Elizabeth

X-ray film is supplied to South Amboy Memorial Hospital for Screening of Hospital admissions.

Division of Special Consultation Services

RALPH T. FISHER, M.P.H., *Director*

Programs:

Health Education FLORENCE B. FIORI, M.A.
Program Coordinator

Public Health Nursing JOHANNA E. KENNEDY, M.A.
Program Coordinator

Nutrition MARGARET P. ZEALAND, M.S.
Program Coordinator

Public Health Social Work ADRIANE V. DUFFY, M.S.
Program Coordinator

Division of Special Consultation Services

The administration of public health requires a complex of so many skills and abilities that no single person can be master of all of them. The task of this Division is to provide special consultation services to program and district personnel of the Department, to local health departments, to local nursing agencies and other local health agencies, to citizens and civic groups, to professional organizations, and to interested and active citizens. The consultant services provided include community health organization and health education, public health nutrition, medical social rehabilitation and public health social work, and public health nursing. The grouping of these consultant services in a single functional Division permits a greater degree of integration of services and a broader base of approach to a given public health problem. The counterpart of personnel of the State Consultants are members of the public health team in each of the district offices so that the consultant team within this Division has a working team in each of the four districts.

The personnel of this Division must provide leadership for public health in New Jersey in developing and applying the latest knowledge, methods and techniques in the various fields for the solution of public health problems. They must plan for and provide training, institutes, conferences, and other educational means for public health personnel. They must be alert to public health problems and activities in the State and assure that the special consultant services which they can provide are made available to Department personnel, community agencies, and others who can make effective and productive use of them. They must see where they can help, see how they can help, and make their services available in such a way that they will be readily accepted as additional resources.

Community action is the basis of all public health work. The development of community health services requires an informed and convinced group of people within the community. The consultant services in community health organization provide the kind of help which a community needs in assessing, studying, and acting to solve its health problems. With the development and anticipated prescription of recognized activities and minimum standards of performance for local health departments during the coming year, the community health organization services face a challenging and complex task in furthering the effective use of these standards for the improvement of local health services in New Jersey.

Health education is a tool needed by virtually every program within the Department. The Health Education Program is designed to provide professional and technical consultation services in order that the methods and techniques of health education may be used to best effect in securing the objectives set by the Departmental programs.

Nutrition is a necessity for optimum health at all ages and it is a vital part of such programs as Maternal and Child Health, Dental Health, Chronic Illness, Diabetes Control, Heart Disease, and others. The Program, which has been well established in recent years, with a consultant in each district, must now meet the demands for service which have developed and at the same time continue to push forward in meeting new needs. Nutrition consultant services are now being used to improve the nutrition and food service in hospitals and homes for the aged through a Chronic Illness Control grant-in-aid to the New Jersey Hospital Association for the employment of a Hospital Dietary Consultant and by providing consultant services to the field inspector of the Department of Institutions and Agencies.

Medical social rehabilitation and public health social work have made definite and vital contributions, particularly in the field of chronic illness control, in the relatively short time that the Program has been established. This program is developing greater use of the available services by community agencies and is extending services to other Department programs.

Health Education Program

The goal of the Health Education Program is to secure the individual and community actions necessary for the optimum solution of health problems defined in the various Department program plans.

The Program comprises a corps of professional specialists skilled in the application of educational techniques who provide consultation both within and outside of the Department. Professional health educators (Consultants, Community Health Organization) are located within each of the State Health Districts and at the State level. Additional professional personnel at the State level are the Department's public relations specialists and the staff of the Administrative Services Program. The District Consultants, Community Health Organization, are administratively responsible to their respective District State Health Officers and reports of their activities have been included in the report of the Division of Local Health Services. The following relates primarily to the Program activities at the State level as well as significant new activities, general trends and projections. It in no way reflects the total health education effort of the Department since, as mentioned previously, all personnel participate to some degree in health education activities.

Two Major Developments

Two major developments occurred in the Health Education Program during the past year. Incorporation of the Program in the newly established Division of Special Consultation Services resulted in closer coordination of the Program's community organization activities with those of other consultants represented in the Division. The activation, on full-time basis, of the position State Consultant, Community Health Organization, increased by one the numerical strength of health education personnel available to work with Departmental and community groups.

Workshops and Training Institutes

A major continuing trend in health education was in the direction of strengthening working relationships of numerous categorical and generalized health interest both inside and outside the Department. The Program provided consultation in the development and conduct of six workshops for people engaged in activities in the fields of maternal and child health, chronic illness control, diabetes, alcoholism, arthritis, and rehabilitation.

The Mental Health Workshop for full-time local health officers was a particularly significant contribution in that it brought together State and local health officials in an atmosphere especially conducive to the building of mutual understanding and support of efforts aimed at solution of a shared problem. Jointly developed by the New Jersey Health Officers Association, the New Jersey State Department of Institutions and Agencies, and the Divisions of Local Health Services and Special Consultation Services of the Department, the Mental Health Workshop was a continuation of a series of similar programs initiated two years ago.

Emphasis was also placed upon training needs in the field of environmental sanitation. Two institutes for full-time local health department personnel, on the subjects of food handler training and swimming pool sanitation, were planned and conducted in cooperation with the Health Education Committee of the New Jersey Health Officers Association and Training Consultants of the United States Public Health Service.

The Extension Division of Rutgers—the State University—conducted six short-term evening courses and the 144-hour Basic Environmental Sanitation Course in cooperation with this Department. The short courses were: Inspection of Meat and Meat Products (conducted in Union, Camden, and New Brunswick), Health Education in Sanitation, Introductory Sanitation, and Group Development and Leadership.

Work With Other Agencies

Health education consultation was provided to voluntary agencies and citizen groups. In cooperation with the Division of Local Health Services, increased participation of the New Jersey Tuberculosis and Health Association in the development of local health services was stimulated. A long standing relationship with the New Jersey Congress of Parents and Teachers was maintained through participation in state-wide meetings of the Congress and continuation of annual conferences of County Parent-Teacher Association Health Chairmen with district personnel. Also within the State Health Districts, numerous contacts were made with a wide variety of comparable local groups. These contacts provided opportunities to share information about common interest and focus community attention on major health problems, particularly immunization to polio and tuberculin testing of school children.

Inter-departmental Committees provided another means for combining health education effort. Relationships with the State Departments of Education and Institutions and Agencies were well established several years ago and have proven most productive. A similar relationship with the State Department of Conservation and Economic Development gained impetus during the year. It appears to have considerable merit, particularly in relation to the fields of housing and development of local health services.

Health information and public relations services of the Department continued to serve as a primary means for alerting the general public to matters of public health significance. The office of the Director of Public Relations maintained a close working relationship with press, radio, and television facilities. Numerous items of information were released through these channels. Two particularly significant contributions were the publicity prepared and disseminated following reported deaths from nitrate poisoning and publicity related to polio vaccination.

Nutrition Program

The Nutrition Program, through the State Consultant and the four District Consultant Public Health Nutritionists, has continued to provide advisory and consultative services to the staff of official and voluntary agencies on state, district, and local levels. With the changing age distribution of the population and the increasing numbers of persons with chronic illness, a great deal of emphasis, this year, has been placed on the nutritional aspects of the prevention and treatment of chronic illness. Nutrition Program personnel, working with Chronic Disease and Aging Programs, have offered to these Programs information concerning food habits of the population served, and the nutritional requirements of specific groups.

Through the services offered by the Hospital Dietary Consultant employed by the New Jersey Hospital Association on a grant-in-aid from the Division of Chronic Illness Control, a big step has been taken in bringing hospital dietitians, private physicians, and administrators to a better understanding of patient needs in relation to the food service offered by hospitals and nursing homes.

There is nothing new about a diet manual as such; most organized hospitals have long used them. However, the joint production of a diet manual by physicians, dietitians, and public health nutritionists on a state committee is an innovation. The New Jersey State Diet Manual, written so that it can be understood and used regularly by untrained as well as trained dietary personnel, was completed and published this year.

Maternal and Child Health

Program personnel have contributed to the Maternal and Child Health Program by participating in institutes, staff conferences, and case studies to assist nursing personnel in applying current knowledge of nutrition.

The Nutrition Program Leaflets "Food for Schoolagers," "Food for Growing Up," and "So You Are Having a Baby," have been widely accepted and distributed. Requests for both the Spanish and English version of these leaflets have been received from other states and foreign governments, such as Korea and South America.

Chronic Illness Control

During this year, 43 hospitals and two county homes for the aged were surveyed and received the benefit of the services of the Hospital Dietary Consultant. Because of the enthusiastic response from hospital administrators, the contract with the New Jersey Hospital Association was renewed and the services also made available to the administrators of homes for the aged.

Two two-day Institutes on Sanitation were held for hospital food service personnel, one in East Orange and the other in Camden. Seventy-six persons, representing 26 hospitals attended the East Orange Institute, and 64 representing 14 hospitals attended the Camden Institute.

Diabetes Program

The Program Coordinator of the Diabetes Program, with the District Consultant Public Health Nutritionist and Mercer County members of the New Jersey Dietetic Association contacted the county medical society to determine the interest of private physicians in obtaining the services of quali-

fied dietitians to offer diet instructions to patients whom they would refer. The Nutrition Program assisted in setting up a pilot study in patient education in the county by recruiting dietitians for the study and providing them with the necessary in-service training through a three-day institute offered in cooperation with personnel from United States Public Health Service and the Division of Special Consultation Services. A six-weeks course was offered which was well attended.

Homemaker Service

Meal planning and preparation are the usual responsibilities of homemakers. The State Consultant has contributed to their pre-employment and in-service training by acting as a consultant to the State Advisory Committee of the Homemaker Service and also assisted with the revision of the Homemaker Service Training Course Manual.

Arthritis Project

The State Consultant has been an active member of the Activities Committee of the Arthritis Project and participated as a Group Recorder at the Arthritis Demonstration and Workshop Session at the Hospital Center at Orange. Two articles jointly prepared by Dr. Margaret Edwards, Dr. Anne Caldwell, and the State Consultant on "Diet in Relation to Arteriosclerosis" were published this year. One article appeared in *Public Health News* and the other in *The Journal of The Medical Society of New Jersey*.

Division of Aging

The popular demand for the Department leaflet "Feeding Older Folks" has necessitated its reprinting.

Activity centers for the aged and the "Meals-on-Wheels Project" in East Orange have provided a new channel for nutrition services.

SPECIAL PROJECTS IN COOPERATION WITH OTHER STATE DEPARTMENTS AND COMMITTEES

State Department of Institutions and Agencies

At the request of the Bureau of Inspection, Department of Institutions and Agencies, a special in-service training program for the field representatives responsible for the inspection of food service of boarding homes for sheltered care was arranged. All District Nutrition Consultants participated in the project by visiting a selected number of homes in each district with the field representative for the purpose of evaluating the food service and determining needs for additional in-service training programs.

New Trends

Public Health Nutrition in the broadening public health setting is recognizing the need to depend on the application of other disciplines such as enzymology, endocrinology, bacteriology, and the social sciences. Characteristic food customs of all social, religious, and national groups need to be carefully considered.

There is continued concern about nutrition teaching of the adolescent. Teachers need to know what to teach and how to teach it. A need is apparent in teacher training courses for more personnel with specialized training in the science of nutrition, and its application.

In aging populations, not only the chronic diseases but the aging process itself is of mounting importance. In this group, public health nutrition programs are interested in the correlation of information and research in relation to diminished digestive and circulatory efficiency, hormonal changes, dental difficulties, as well as the influences of racial, religious, and national customs.

Many erroneous beliefs have developed because of the distortion of scientific facts by so-called "nutrition experts" and food faddists. To counteract this, public health nutrition programs are continuously emphasizing the principles of good nutrition based on sound scientific information.

Public Health Nursing Program

Program Administration

The Public Health Nursing Program was transferred from the Division of Local Health Services to the newly created Division of Special Consultation Services. This move brought the Public Health Nursing Program under the administrative direction of the new Division Director, although a very close working relationship has been maintained with the Division of Local Health Services. The Chief Public Health Nurse has continued to participate in staff conferences of the Division of Local Health Services and has continued as a member of the commissioner's staff conference group.

The District Chief Public Health Nurses and Public Health Nurse Supervisors continued to be administratively responsible to the respective District State Health Officer to whom they were assigned. Professional guidance in public health nursing, of a general nature as well as within the specialties, has been available to district nursing staff as heretofore.

The Nursing staff of the Department, as of July 1, 1959, consists of the following:

Chief Public Health Nurse	1
Part-time Assistant	1

District Chief Public Health Nurse (one in each State Health District)	4
Public Health Nurse Consultants	9
In the following specialties:	
Adult and Occupational Health	
Chronic Illness	
Chronic Illness (Cancer)	
Chronic Illness (Heart)	
Crippled Children	
Maternal and Child Health	
Maternal and Child Health—Hospital	
Maternal and Child Health—Pediatrics	
Tuberculosis	
Public Health Nurse Supervisors	16
Public Health Nurse (on loan to the Burlington County Health Association)	1
The Number of State-supervised Nurses	191
Metropolitan State Health District	69 plus 1 Grant-in-aid
Northern State Health District	37 plus 7 Grant-in-aid
Central State Health District	11
Southern State Health District	61 plus 5 Grant-in-aid
	178 plus 13 Grant-in-aid

In accordance with Departmental philosophy that direct nursing services are a local responsibility and that, in order to provide effective, economical and high quality services, nursing supervision is needed on a day-by-day basis in the local nursing agency, this Department is gradually withdrawing from direct services and supervision in order to fulfill its major responsibility of providing consultation services. The accompanying chart shows the progress which has been made in reducing the State-paid staff for direct service and supervision and at the same time increasing the consultation staff.

Program Developmental Activities

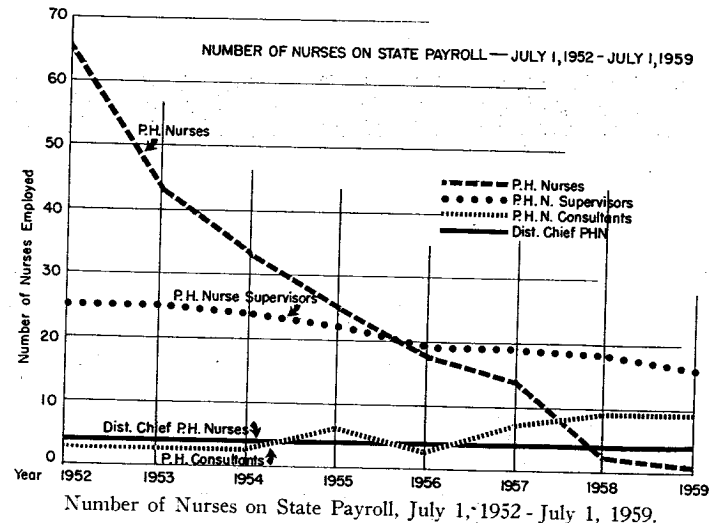
Consistent with the Public Health Nursing Program's primary objective of encouraging the development and maintenance of effective public health nursing services, the following examples give evidence that further progress has been made in this direction:

1. The Gloucester County Tuberculosis and Health Association has terminated the employment of a nurse by the Association and has contracted with the Gloucester County Visiting Nurse Association for the provision of the necessary public health nursing follow-up services. The Association considers this as a first step toward providing a generalized public health nursing service in the county.

2. The Hudson County Tuberculosis and Health League has agreed to sponsor the development of a public health nursing service in five municipalities in Hudson County which are presently lacking such service. The estimated population to be served is 113,000. Various committees appointed by the League, with consultation from the staff of the Metropolitan State Health District, have made considerable headway during the year.

3. The public health nursing service of the Community Service Society of Bound Brook has merged with the Somerset Valley Visiting Nurse Association. This is an example of recognition on the part of the board members that a two-nurse agency is not an efficient or economical way of providing nursing service and that, in order to provide high quality of service, nursing supervision is needed. Financial assistance from the Department was sought and granted to facilitate the merger.

4. The Family Nursing Service of the Hunterdon County Public Health Nursing Association began to function after the appointment of a qualified director. This was the culmination of the many years work by local citizens and Department personnel. A grant-in-aid contract between the Department and the board of the new agency was negotiated.



5. The Irvington Department of Health has requested the Newark Visiting Nurse Association to undertake the official public health nursing service in that community. This step is consistent with a proposal that was made several years ago when Department personnel and the Visiting Nurse Association Director participated in a community survey which was sponsored by the Welfare Council.

6. The study of health facilities in Bayonne, which was conducted jointly by local citizens and Department personnel, has resulted in a city appropriation to purchase nursing service from the Bayonne Visiting Nurse Association on a cost per visit basis.

7. The staff of the Southern State Health District participated in planning for and in sharing information in the survey of public health nursing services in Camden County. This survey was conducted by a survey team from the National League for Nursing and was sponsored by the Health and Welfare Council of Camden County. The recommendations of the survey have been submitted to the Council for implementation.

The public health nursing personnel of the State Department of Health have been increasingly aware of the needs expressed by community nursing agencies in the field of mental health. Although a variety of educational efforts have been under way in local agencies, need for coordinated planning on a state-wide basis has become necessary. The position of Public Health Nurse Consultant (Mental Health) was created in the Spring and recruitment efforts were undertaken to fill this position. At the same time, a close working relationship was established with the Psychiatric Nurse Consultant, Mental Health Division, Department of Institutions and Agencies and with the Public Health Nursing Consultant, Mental Health, of Public Health Service, to assist in planning for the future.

Public Health Social Work Program

The Public Health Social Work Program, at the completion of its fifth year, has shown marked evidence of growth in the broader range of services rendered to public and voluntary agencies as well as to the Departmental programs on a generalized basis. A close cooperative relationship between State and District Program personnel in joint planning for restorative services has continued with the Division of Chronic Illness Control.

Within the administrative framework of the Division of Special Consultation Services, the Public Health Social Work Program has developed new opportunities for broader participation in program planning with other Divisions and Programs. Effort directed toward developing a closer working relationship, with the State Department of Institutions and Agencies, and the

Division of Vocational Rehabilitation of the State Department of Labor and Industry, has resulted in a sharing of common interests and program goals which have complemented these joint efforts.

Social Research

At the request of the State Commissioner of Health, the Program Coordinator presented a rough summary of findings on the Restorative Services Study, Essex County Hospital, Belleville, before the Public Health Council of the State Department of Health. A paper entitled "Are Restorative Services for the Aging a Good Investment?" was presented before the Medical Care Section of the American Public Health Association.

Conferences this year included a variety of programs with a wide range of problems. At the invitation of the United States Public Health Service, the Program Coordinator attended a Workshop on "Problems of Hearing Conservation." Other workshops and conferences included Diabetes, Aging, Arthritis, New Jersey Conference on the Handicapped, National Social Welfare Assembly, Eye Symposium sponsored by the State Commission for the Blind, and the Annual Meeting of the State Consultant Homemaker Committee.

During 11 months of this year, there were two vacant positions for District Consultant, Medical Social Rehabilitation, one in the Northern and one in the Central State Health Districts. The position in the Central State Health District was filled in June of this year.

The Public Health Social Work Program in New Jersey is considered unique among State Health Department programs because of its consultative approach and stress on promotional activities in community organization and public relations activities.

A United States Public Health Service Trainee from the North Carolina School of Public Health spent a two-months observation period on assignment to this Program. This orientation period encompassed Departmental structure, at all levels, policy, and the interrelated functions and activities of the various professional disciplines within the State Department of Health, in relation to the Public Health Social Work Program. The experience of the trainee was reviewed by a representative of the United States Public Health Service and a faculty member of the North Carolina School of Public Health.

At the request of Simmons College, School of Social Work, Boston, Massachusetts, one of their post-graduate foreign exchange students, an English Almoner (Chief Medical Social Worker) visited this Program for two days to learn more of the Public Health Social Work Program and its relationship to the Chronic Illness Control Program as well as to other divisions.

Education and Recruitment

Because of the lack of opportunities for social work student placements in community hospitals in New Jersey, the Program Coordinator has worked closely with the Dean of Rutgers University, School of Social Work, and the Dean of New York University School of Social Work to develop new training resources and stimulate recruitment of students for these Schools of Social Work.

To develop interest in New Jersey for college students in social work as a career, a publicity release was prepared jointly with the Personnel Training Program on the new scholarships available from the National Foundation for under-graduate and graduate students. Twenty-four requests for applications were received, and five students were enrolled in schools of social work.

Restorative Services

The Program Coordinator attended the Executive Committee meetings of the State Consultant Committee on Homemaker Services during this year.

Consultation has been provided in the social work concepts to be incorporated in a new proposed training course for directors of homemaker services which is being developed by the Division of Chronic Illness Control and the State Committee on Community Homemaker Services.

Consultation and assistance were provided in the revision of the section on "Working With People" of the Training Manual for Homemakers. Assistance was provided in revising the material on mental illness in this Manual providing a more positive approach stressing good mental health rather than presenting the negative aspects of mental illness.

Grant-In-Aid Medical Social Work

Seven social work applicants were interviewed and screened for three proposed demonstration projects this year. Because of personnel turnover, effort was made to replace four medical social workers in existing grant-in-aid projects who have resigned to accept new positions. It is interesting to note that the total number of patients served by medical social workers in these grant-in-aid projects has increased by almost 20 percent during the past year.

At the request of the Coordinator of the Maternal and Child Health Program, specifications for a grant-in-aid position were written for a social work consultant for the new pilot project for Mentally Retarded Children in Morristown Memorial Hospital, Morristown, New Jersey. A well-qualified person was recruited for this position.

As a new way of meeting this Program need, a successful experiment was carried out at Helene Fuld Hospital, Trenton, New Jersey. By placing a well-trained and experienced psychiatric social worker drawn from the family and children's field in a hospital setting, this social worker secured practical experience which prepared her for a medical social work position in the new Restorative Services Unit in Donnelly Memorial Hospital, Trenton, New Jersey.

Division of Vital Statistics and Administration

E. POWERS MINCHER, *Acting Director*

Programs:

Administrative Services JOHN B. VAN ELLIS
Program Coordinator

Budget and Accounts GEORGE E. FORMAN
Program Coordinator

Examination and Licensing KENNETH J. CARHART
Program Coordinator

Board of Barber Examiners FRANK MARCHESI
*Secretary-Treasurer of the Board
and Program Coordinator*

Personnel and Training WILLIAM R. MONYER
Program Coordinator

Public Health Statistics ANNA P. HALKOVICH, B.A., M.B.A.
Program Coordinator

Vital Statistics Registration F. MERTON SAYBOLT, B.S., M.S.P.H.
*State Registrar and
Program Coordinator*

Division of Vital Statistics and Administration

This Division is responsible for providing administrative services essential in obtaining proper staffs and facilities for the Department and its programs. These services include budgeting, accounting, recruitment, training, warehousing, and public health statistics. There are other services which the Division provides directly to the general public. These services are required by statute and include registration of deaths, marriages and births as well as conducting examinations and issuing licenses for health officials such as health officers, sanitarians, public health laboratory technicians, meat inspectors, etc.

At the time of the reorganization of State government in 1947, the Board of Barber Examiners, then a separate agency, together with all its powers and responsibilities were transferred to and made a part of the Bureau of Licensing and Examination of this Division.

Services rendered by the Division during this past year are more particularly described in the following reports of program coordinators.

Administrative Services Program

Functions of the Administrative Services Program include the design and production of health education materials; maintenance and display of exhibits; maintenance of audio-visual aids; warehousing and distribution of printed materials and office supplies; production of printed materials, mimeographing, addressing, and mailing services. The distribution of drugs, biologics, and vaccines is also administered by this Program. Personnel at the end of the fiscal year totaled 19, including one part-time employee.

Graphic art services and consultation were rendered to several other Departments of the State, particularly with respect to television shows.

Considerable time was spent in coordinating Departmental moves, planning telephone changes, preparing office space layouts, and assisting the staff of the Office of the Commissioner on special projects. Several units of the Department, including the Office of the Commissioner, were moved into more adequate quarters at 129 East Hanover Street in Trenton. Additional space was made available at the Donnelly Memorial Hospital which presently houses both the Virology and Pathology laboratories.

While these moves represent some progress with respect to the long standing space problems of the Department, the fact remains that the Department is still located at seven different locations, several of which are completely

inadequate. The laboratories alone are split among three locations, with the main laboratory in the State House continuing to be a most serious and hazardous problem.

Health Education Services

The use of existing exhibits on a loan basis to various local health departments and other civic groups continued to increase. A total of 49 exhibit bookings were made. Several new exhibits were completed during the fiscal year and planning for additional exhibits is currently in progress.

The professional film library maintained by this Program was made available to outside professional groups in addition to the Departmental staff. There were 131 bookings for professional films. The use of health education films for lay groups increased considerably. Such films were seen by a minimum of 323,000 persons. However, the film library remains deficient in several areas due to the limited funds available for the purchase of health education materials. Lay film bookings continued to be made for the Department by the New Jersey State Museum.

Warehouse

Printed materials, office supplies, and nurses' field supplies were stored and distributed on a Department-wide basis. Refrigerated storage of perishable drugs and biologics is maintained for various Programs. A perpetual inventory was maintained for all items.

Distribution of Biologics

The distribution of drugs, vaccines, and biologics continue to represent a major function of the Program. A total of 67 distributing stations throughout the State are established for the convenience of local physicians and health officials. They are located principally in offices of local boards of health and in a few instances in hospitals. No charge for rent or personnel services is made against the Department by these stations. Materials distributed through the stations were as follows:

Diphtheria Toxoid, alum precipitated	1,000 pkgs.
Gamma Globulin (2cc)	9,930 pkgs.
Pertussis-Diphtheria-Tetanus (alum refined)	21,600 pkgs.
Pertussis-Diphtheria-Tetanus (fluid)	7,700 pkgs.
Rabies Vaccine (human)	150 pkgs.
Rocky Mountain Spotted Fever Vaccine	300 pkgs.
Smallpox Vaccine	31,000 pkgs.
Typhoid-Paratyphoid Vaccine	2,200 pkgs.

Salk Poliomyelitis Vaccine was distributed as follows:

Clinics	65,295cc
Child Health Conferences	87,633cc
Distributing Stations	311,058cc
Total	463,986cc

In addition, 25,920cc of poliomyelitis vaccine which were returned by clinics who had over ordered in the previous year were redistributed to other clinics.

Bicillin, Penicillin, Terramycin, Sulfathiazole and other drugs were distributed for the Venereal Disease Control Program as was Canine Rabies Vaccine for the Rabies Control Program.

The fine work performed by the distributing stations for the Department and the excellent cooperation of their personnel are commendable and are sincerely appreciated.

Budget and Accounts Program

This program is responsible for centralized budget and accounting services to the Department. It also embraces centralized purchasing practices. Revenue is channeled through the Program to the Department of Treasury.

The creation of new health programs, increased activity in certain others, and the planned development of a new Program during 1958-1959 necessitated additional activity in budgeting, accounting, and purchasing functions.

The major activities of the Budget and Accounts Program were the making of necessary fiscal adjustments to meet Departmental needs as well as the maintaining of existing Departmental fiscal policies and procedures.

New lease agreements, together with the relocation of several offices of the Department, required several allocation adjustments.

The recession in the spring of 1958 and the high incidence of polio during the summer of 1958 made it necessary for some children on the Crippled Children Register to apply for assistance for the first time. The resultant increase in the cost of hospitalization and convalescent care and appliances was met by adjusting accounts within the State appropriation and the Federal Crippled Children allocation.

The small State appropriation for the purchase of polio vaccine necessitated adjustments within the various accounts in order to meet the cost of vaccine required.

Moneys were appropriated for two new programs, namely the Virology Program and the Division of Aging. In cooperation with the Program Coordinator of the Virology Program and the Director of the Division of Aging,

the Budget and Accounting Program was responsible for the allocation of and accounting for the expenditure of moneys for these two new units.

A continuing grant was received from the Federal government for the continuation of the Radiation Research Project, involving additional accounting with respect to expenditures of these funds.

A project grant of Federal funds for a Lymphoma study was budgeted and accounted for during this fiscal year.

Five Federal operating accounts and fiscal procedures were audited and approved by the Federal auditors up to and including June 30, 1957.

Sixty-one project and fund control accounts and three budgetary working reserve accounts were maintained during the course of this year. The accounting of this Department was operated on an encumbrance basis.

Several accounting procedures were revised in order to effect greater economies and efficiency in the system as well as to provide increased fiscal information to the various program coordinators.

New purchase procedures, as adopted by the Division of Purchase and Property of the Department of Treasury, were initiated.

Two weekly time studies reflecting time spent on the job by each employee on each of the health programs and its relationship to the allocation of funds were initiated and analyzed by this Program during the course of this year.

Property control continued in operation and the backlog of physical inventory was materially reduced.

Herewith is a consolidated financial statement of the Department as of June 30, 1959.

STATE DEPARTMENT OF HEALTH
FINANCIAL STATEMENT
FISCAL YEAR 1958-1959
Receipts

Received for Transfer to State Treasury:	
Licenses and Permit Fees	\$219,016.73
Penalties	2,510.80
Certified Certificates	36,888.31
Examination Fees	9,681.00
Miscellaneous	3,729.61
Net Total	<u>\$271,826.45</u>
Received for Disbursement:	
State Appropriations and Transfers	\$2,835,062.00
United States Department of Health, Education and Welfare—Public Health Service	706,703.93
Children's Bureau	523,854.67
Other Federal Funds	79,730.00
Net Total	<u>\$4,145,350.60</u>

DEPARTMENTAL ALLOCATIONS

DIVISION	State	Salaries—Federal	State	Other Allocations—Federal	Total State	Total Federal	Total All Funds
Office of Commissioner	\$1,787,361.00	\$735,878.81	\$1,047,701.00	\$374,406.79	\$2,835,062.60	\$1,310,288.00	\$4,145,350.60
Vital statistics and administration	\$69,679.45	\$0,005.50	\$21,531.06	\$2,487.72	\$91,210.48	\$11,829.22	\$103,039.70
Environmental health	317,187.90	22,297.35	250,160.12	12,297.20	547,106.62	137,310.65	684,428.07
Preventive diseases	345,548.80	129,227.10	48,160.72	78,435.24	431,441.12	210,874.31	649,021.43
Chronic illness	67,803.67	65,622.00	27,040.13	78,483.97	522,374.85	117,238.10	238,737.28
Laboratories	87,500.00	35,874.10	294,984.85	81,483.47	341,064.41	154,700.60	475,765.07
Constructive health	48,010.22	11,630.95	77,009.82	33,129.71	304,815.32	330,708.88	635,704.20
Social health services	480,704.83	108,224.70	445,000.00	240,773.00	834,927.79	130,870.00	1,015,797.79
Special consultation services	78,470.37	70,800.74	5,303.37	12,710.65	83,173.74	85,016.30	167,500.13
Total allocations	\$1,787,361.00	\$735,878.81	\$1,047,701.00	\$374,406.79	\$2,835,062.60	\$1,310,288.00	\$4,145,350.60

DEPARTMENTAL EXPENDITURES

Office of Commissioner	\$1,782,104.80	\$110,374.02	\$1,026,508.87	\$548,692.50	\$2,808,068.76	\$1,285,068.61	\$4,073,076.37
Vital statistics and administration	\$69,629.42	\$0,304.25	\$21,229.12	\$2,485.80	\$90,858.54	\$11,820.38	\$102,678.92
Environmental health	317,118.77	124,782.04	250,160.12	12,108.32	544,866.54	136,952.40	681,750.00
Preventive diseases	343,477.73	123,184.20	48,160.72	77,888.07	430,151.71	200,184.44	628,078.55
Chronic illness	67,803.67	64,882.00	26,892.00	75,888.07	430,151.71	107,070.04	472,310.00
Laboratories	87,500.00	35,203.00	292,132.70	77,407.90	340,036.71	133,076.40	473,113.11
Constructive health	48,010.22	11,630.95	75,804.82	32,409.84	308,274.48	328,747.61	637,022.09
Social health services	480,690.50	108,000.00	445,000.00	240,773.00	832,744.48	128,604.49	961,348.97
Special consultation services	78,470.37	68,573.44	4,760.78	11,003.63	83,240.11	79,970.07	163,810.22
Total expenditures	\$1,782,104.80	\$110,374.02	\$1,026,508.87	\$548,692.50	\$2,808,068.76	\$1,285,068.61	\$4,073,076.37
Balances June 30, 1959	\$5,236.11	\$19,504.79	\$21,197.13	\$28,717.20	\$28,433.24	\$46,221.69	\$71,675.23

Examination and Licensing Program

The Program provides examination and licensing services necessary to enable the Department to certify to local authorities and agencies qualified personnel for essential public health services.

The number of applications processed for examinations during this period was 639, an increase of 383 over the period 1951-1952.

During the period covered by this report, there were four regular examinations conducted at the War Memorial Building in Trenton and seven practical-oral examinations for meat inspectors at various slaughterhouses in the State.

There were 278 licenses issued as a result of examinations and 1,264 licenses issued on renewal basis.

Program received and deposited to the credit of General Treasury \$9,681 which is \$7,021 greater than that deposited in fiscal year 1951-1952.

The Program and Department are grateful to the members of the various licensing boards for their cooperative services rendered during this period.

This Program is continuing its efforts to improve its examination and licensing techniques. Conferences with experts in this field, statistics on question reliability and validity, as well as examinee interviews are among the methodologies used to seek improvement.

Board of Barber Examiners

REVENUE STATEMENT FISCAL YEAR ENDED JUNE 30, 1959

Cash Receipts		\$89,443.00	
<i>License Fees:</i>			
8,554 Certificates Renewed @ \$5	\$42,770.00		
2 Certificates Renewed @ \$3	6.00		
462 Certificates by Examination @ \$5	2,310.00		
283 Certificates Restored @ \$10	2,830.00		
4,229 Shop License Renewals @ \$5	21,145.00		
108 Shop License Renewals @ \$10	1,080.00		
* 367 Shop Licenses @ \$25	9,175.00		
132 Shop Removals @ \$5	660.00		
528 Apprentice Certificates @ \$3	1,584.00		
521 Examination Applications @ \$15	7,815.00		
Miscellaneous Fees	18.00		
Penalties	50.00		
Total	\$89,443.00		
Cash Receipts Refunded		319.00	
Net Revenue Earned		\$89,124.00	

* 367 Shop Licenses @ \$25 represents:
151 New Shops
216 New Owners

367 Total of New Shop Licenses Issued

FINANCIAL STATEMENT

FISCAL YEAR ENDED JUNE 30, 1959

Received for Disbursement:

State Appropriations		\$65,231.00
Salaries	\$55,660.00	
Household Supplies	10.00	
Motor Vehicular Supplies	960.00	
Stationery and Office Supplies	468.00	
Printing	1,800.00	
Replacement, Office Equipment	172.00	
Traveling Expenses	4,500.00	
Telephone and Telegraph	380.00	
Insurance	179.00	
Subscriptions and Membership Dues	25.00	
Postage	625.00	
Miscellaneous Expenses	30.00	
Current Repairs—Office Furniture, Machines and Equipment ..	75.00	
Current Repairs—Automotive Equipment	200.00	
Office Equipment	147.00	
Net Appropriations		\$65,231.00

Expenditures:

Expended for Operation of Board		\$64,431.27
Salaries	\$55,590.97	
Household Supplies	9.83	
Motor Vehicular Supplies	830.06	
Stationery and Office Supplies	458.69	
Printing	1,354.27	
Replacement, Office Equipment	162.59	
Traveling Expenses	4,488.12	
Telephone and Telegraph	380.00	
Insurance	179.00	
Subscriptions and Membership Dues	25.00	
Postage	625.00	
Miscellaneous Expenses	14.50	
Current Repairs—Office, Furniture, Machines and Equipment ..	17.50	
Current Repairs—Automotive Equipment	152.26	
Office Equipment	143.48	
Total Expenditures		\$64,431.27
Unexpended Appropriation Balance as of June 30, 1959		\$799.73

GENERAL SUMMARY OF WHAT HAS BEEN ACCOMPLISHED BY
THE BOARD OF BARBER EXAMINERS

Number of inspection of shops	11,971
Special Investigations	1,984
Shops found with sanitary violations	224
Reinspections	224
Hearings held	20
Shop licenses suspended as a result of a hearing	6
Number of persons assessed penalties by Board	6
Court cases	6
Convictions	6
Barbers found working with expired certificates	35
Persons found working without a certificate	19
Unlicensed apprentices	3
Shops found operating with expired licenses	40
Shops operating without a license	5
Shops reported out of business	88
Complaints received from public and investigated	52
Barbers reported deceased	87
Number of applicants scheduled for examination	585
Applicants examined	523
Applicants passed examination	451
Applicants failed to pass examination	72
Applicants failed to appear for an examination	62
Number of examination days	38
Examination fees forfeited	18
Incoming mail	15,690
Outgoing mail	22,699

GERALD LATORRACA, *Chairman*

ANDREW FOHL

THOMAS J. FRINZI

FRANK MARCHESI, *Secretary-Treasurer*
Program Coordinator

Personnel and Training Program

The Personnel and Training Program is charged with the responsibility of maintaining adequate classification, recruitment and placement plans and programs; maintaining personnel records; paying salaries; maintaining retirement, resignation, suspension, and discharge procedures; analyzing training needs; making available appropriate training and training facilities; evaluating training; providing informal and supplemental training information; and, maintaining continuity of training.

Besides the ever-increasing routine workload, this staff agency is responsible for rendering advice and consultation to the administrators of the organ-

ization in personnel and training matters. In addition, an effective working relationship has been established with the Department of Civil Service, Treasury, and other allied departments in the State structure and with the United States Department of Health, Education, and Welfare. Equally effective relationships have been established with other agencies outside State government. Such liaisons contribute to the fulfillment of this Program's objectives.

During the fiscal year ending June 30, 1959, the Personnel and Training Program provided services to 506 Departmental employees, maintaining and processing approximately 24,400 records and forms relative to personnel actions and changes, and training activities. On December 29, 1958, it completed the work involved in revising and adjusting all salary ranges. This office also processed routine work such as notifying all employees of balances of sick leave and vacation credits; performance ratings; hospital and medical-surgical insurance enrollments; income and social security tax information; planning and conducting various charitable drives; savings bonds program; salary increments; reports and surveys; and other like projects, which recur annually.

In addition, an exit interview activity was established and is administered through this office. Ten such interviews were conducted of employees who voluntarily resigned their positions.

Many diversified projects are also assigned to this office. They include: the safety program; the fire inspection program; employee relations and recreation programs and coordination of payroll procedures with business machine accounting system.

During this year, 53 in-service training sessions were planned and conducted for a total of 125 classroom hours, and 2,402 man-hours. Department employees who availed themselves of this training totaled 509. Forty-four professional employees applied for and received Departmental assistance for training from the United States Public Health Service, various colleges and universities, and other institutions relating to public health.

An English teacher was employed during the summer months to instruct Departmental employees in "Business Letter Writing" and "Report Writing." This instructor assisted in developing an English Manual for clerical personnel. He also developed material so that this course may be offered to personnel on a regularly scheduled basis.

Members of this agency served on committees of the State Personnel Council and devoted much time in research on veteran's preference and sick leave programs of the State in preparation of formal reports.

During the fiscal year, eight specifications of classifications were reviewed and revised, while approximately 24 desk audits and positions surveys were conducted and recommendations advanced.

In order to pay salaries, this office was responsible for preparing the 26 payrolls during the year.

At the beginning of the fiscal year, there were 167 classifications in the Department; at the conclusion, 185. Of the 506 employees on the payroll at the end of the period, 78 were at the minimum step, 376 at intervening steps, and 52 at the maximum. Also, of this total, 388 employees had permanent status, 61 were temporary, 18 were in emergency positions, and 39 employees in the unclassified division.

There were 39 promotions and reclassifications made during the year. At the end of the year, there were approximately 72 vacant positions existing which the agency was trying to fill.

Public Health Statistics Program

The Public Health Statistics Program consists of three units which provide services to the various Departmental programs. The Business Machines Unit punched, verified, tabulated and/or listed for commitments to all programs 1,070,000 punch cards during 1958. The Statistics Unit, in addition to processing tabulations and preparing routine statistical tables, answered a total of 511 requests for statistical data. Of these, there were 342 by letter, 142 by telephone, and 27 by the applicant in person. The Morbidity Unit received for processing 5,580 tuberculosis cases, 12,799 venereal disease cases, and 38,546 case reports of other reportable diseases.

Population: The population estimate for New Jersey as of July 1, 1958 was 5,351,000. This estimate and the estimates for the counties and major cities as shown in Table 3 were obtained by adding the excess of births over deaths for the period April 1, 1950 through June 30, 1958 to the 1950 census count for the same area and rounding each estimate to the nearest thousand.

Births: Live births numbering 129,730 and a birth rate of 24.2 per 1,000 population were recorded in 1958. The 1957 live birth total was 129,257 and the birth rate was 24.5.

Of the 113,327 births in 1958 to white mothers, 1,460 or 1.3 percent were reported as illegitimate. There were 16,403 live birth to nonwhite mothers and 15.9 percent or 2,602 of this total were illegitimate.

Except where otherwise specified in the text or tables all births were allocated to the usual residence of the mother.

Of the 125,794 births occurring in New Jersey during 1958, there were 657 records having no entry for weight at birth. Therefore, only 125,137 births were used as the denominator in computing the following percentages by weight.

Weight group	Number	Percent
Over 2500 grams	115,872	92.6
2001-2500 grams, incl.	6,134	4.9
1501-2000 grams incl.	1,699	1.4
1001-1500 grams, incl.	777	0.6
1000 grams or less	655	0.5
Total with weight given	125,137	100.0

Of the 125,794 birth records on which the attendant was clearly identified, 124,850 births or 99.2 percent occurred in hospitals; 817 or 0.6 percent were attended by physicians outside of hospitals; and 42 or 0.03 percent had midwives in attendance.

Marriages: There was a drop of 4.9 percent in the number of marriages performed in 1958 as compared with the preceding year. In 1958, there were 38,398 marriages with a rate of 7.2 per 1,000 population. Marriages numbered 40,367 in 1957 and resulted in a rate of 7.6.

Of interest was the fact that 27 percent of the brides married before their twentieth birthday. Approximately seven percent of the grooms married prior to reaching age 20. There were 52 brides under 15 years of age and no grooms in this age group.

Tables 6 and 7 give information on marriages by age and previous marital status of the individuals. All marriage tabulations are by place of occurrence.

Deaths: A total of 57,552 resident deaths from all causes was recorded for New Jersey in 1958. The crude death rate of 10.8 per 1,000 estimated population was the same as was recorded for 1957. The 1949 rate of 10.0 was the lowest in the State's experience.

Table 9 on principal causes of death by age groups deserves careful study by persons interested in learning more of the health hazards facing the citizens of New Jersey.

Summarization of deaths in New Jersey revealed the following items of interest.

Of the 56,407 deaths, 5,073 or 9.0 percent were deaths of veterans. Of these, 2,812 were World War I veterans; 1,623 were World War II veterans; and 61 were veterans of both wars. Spanish-American War veterans accounted for 172 deaths and an additional eight persons who died were veterans of both the Spanish-American and First World Wars. Veterans of the United Nations Force accounted for 134 deaths and an additional 10 decedents were veterans of other wars. Of the remaining 253 death certificates, military service was indicated but war service was unspecified.

Except where otherwise specified in the text or tables, all deaths were allocated to the usual place of residence of the deceased.

Infant Mortality: Deaths of infants under one year of age numbered 3,160 in 1958 and resulted in a death rate of 24.4 per 1,000 live births. Comparable figures for 1957 were 3,161 infant deaths and a death rate of 24.5. During 1958 there were 2,392 white infant deaths with an infant mortality rate of 21.1 per 1,000 live births. The nonwhite infant deaths numbered 768 resulting in an infant mortality rate of 46.8.

Neonatal deaths (infant deaths under 28 days) numbered 2,430 in 1957 and 2,434 in 1958. The neonatal mortality rate in 1958 remained at 18.8 per 1,000 live births and was unchanged from the preceding year.

A relative new measure of risk at birth is the perinatal mortality rate which is expressed per 1,000 total births. It is computed as follows:

$$R = \frac{\text{Infant deaths under seven days plus fetal deaths of 20 or more weeks gestation}}{\text{Live births plus fetal deaths of 20 or more weeks gestation}}$$

The perinatal mortality rate in 1958 was 33.0 as compared with 32.7 in 1957. The 1958 rate is based on 2,185 fetal deaths and 2,169 infant deaths under seven days of age.

Maternal Deaths: During 1958 there were 54 maternal deaths, 36 among white mothers and 18 among nonwhite mothers. The maternal mortality rate was 0.4 per 1,000 live births; for white mothers it was 0.3 and for nonwhite mothers the rate was 1.1. In 1957 there were 44 maternal deaths, 24 to white mothers and 20 to nonwhite mothers. The maternal mortality rate in 1957 was 0.3; for white mothers it was 0.2 and 1.1 for nonwhite mothers.

The reversal in the downward trend of the maternal mortality rate in 1958 occurred for the first time since 1938 at which time the death rate of 3.3 per 1,000 live births was recorded.

Fetal Deaths: The 2,185 fetal deaths reported for 1958 accounted for a death rate of 16.8 per 1,000 live births. In 1957 there were 2,148 fetal deaths with a rate of 16.6. There were 1,751 white fetal deaths in 1958 and a fetal death rate of 15.5 per 1,000 live births. In 1957 there were 1,752 white fetal deaths and a death rate of 15.4. The nonwhite fetal deaths in 1958 totalled 423 and resulted in a fetal death rate of 25.8 per 1,000 live births. The nonwhite fetal deaths and fetal death rate in 1957 were 390 and 24.9, respectively. Race or color was not stated on 11 fetal death reports for 1958 and on six fetal death reports for 1957.

Leading Causes of Death: In 1958 heart diseases, malignant neoplasms, vascular lesions and accidents were responsible for approximately 75 percent of deaths from all causes.

Heart Disease: There were 25,038 deaths due to heart disease and a death rate of 467.9 per 100,000 population in 1958. In 1957 heart disease deaths numbered 24,623 and yielded a death rate of 466.4.

Cancer: Deaths due to malignant neoplasms totalled 10,215 in 1958 as against 10,423 deaths in 1957. The cancer death rates per 100,000 population were 190.9 and 197.4, respectively.

Vascular Lesions: In 1958 there were 5,378 deaths from vascular lesions with a death rate of 100.5 per 100,000 population. Deaths due to these causes in 1957 numbered 5,230 and resulted in a death rate of 99.1.

Diabetes: Fifth in rank among leading causes of death in 1957 and 1958, diabetes showed a slight drop in both deaths and death rates. There were 1,133 diabetes deaths with a rate of 21.2 per 100,000 population in 1958. Comparable figures in 1957 were 1,200 deaths and a death rate of 22.7.

All Accidents: A total of 2,158 fatalities were attributed to all accidents in 1958 as against 2,301 deaths in 1957. The death rates per 100,000 population were 40.3 in 1958 and 43.6 in 1957. Deaths due to motor vehicle accidents and accidental falls accounted for 1,401 fatalities or approximately 61 percent of the total for all accidental deaths.

Influenza and Pneumonia: In 1958 there were 50 deaths due to influenza and 1,676 deaths from pneumonia. Death rates for each of these diseases were 0.9 and 31.3 per 100,000 population, respectively. In 1957 the death rate from influenza was 2.6 per 100,000 population and 31.4 for pneumonia.

Tuberculosis: For the first time tuberculosis no longer appears among the principal causes of death for all ages in 1958.

A continued drop in both tuberculosis deaths and death rate was noted. Tuberculosis deaths numbered 443 in 1958 and resulted in a death rate of 8.3 per 100,000 population. Comparable figures for 1957 were 519 deaths with a death rate of 9.8.

In addition to the 443 deaths with tuberculosis as the primary cause, there were 184 deaths due to other causes with tuberculosis mentioned as a secondary cause. Of the 627 deaths with tuberculosis either as a primary or secondary cause of death, 194 deaths or 30.9 percent were unreported to the Department as tuberculosis cases prior to the date of death.

Deaths From Other Reportable Diseases: By law and regulation certain diseases are reportable as cases. Of the childhood diseases in 1958 there were five cases of diphtheria none of which terminated fatally; 27,546 measles cases with five deaths; 5,225 cases of streptococcal sore throat, including scarlet fever,

and three deaths; and 239 whooping cough cases with no fatalities. In 1958 New Jersey had 266 cases of poliomyelitis and 10 deaths (two of which were due to late effects).

Although the numbers of deaths from reportable diseases can be found in the mortality tables of the annual report, reference should also be made to the annual reports of the Communicable Disease Control, Tuberculosis Control and Venereal Disease Control Programs.

Changes in Statistical Tables: Attention is called to the renumbering of tables which appear in the section reserved for statistical tables. Previous and present table numbers appear in the index to the tables.

Vital Statistics Registration Program

HISTORICAL BACKGROUND

The State Registrar has custody of more than 12,000,000 records of births, marriages, deaths, and fetal deaths which date back to 1848. In addition, approximately 175,000 delayed reports of births have been received, examined and filed. About 100,000 corrections to original records, covering the period from 1848 through 1903, have been received and filed. In addition, about 161,000 corrections received during the period 1940 through 1956, and which pertained to original records of the years 1904 through 1930, have been filed temporarily for future attachment to the original records.

The records for the period 1848 to 1887 were collected originally by the Secretary of State and were turned over to the Bureau of Vital Statistics created when the health laws were revised by the Legislature during the session of 1887. The new law provided for a State Board of Health and a Bureau of Vital Statistics. Prior to that year statistical reports, which had been published since 1879, were prepared from records not in custody of the Bureau.

As of the date of release of this report, the following original records and indexes have been microfilmed and appear on 1,625 reels of film. The numbers of reels of film are also indicated for each type of document.

Description	Years	Reels
Birth, marriage and death records....	1848-May 31, 1878	71 (35 mm)
Birth records	June 1, 1878-1903	224 (16 mm)
Marriage records	June 1, 1878-1903	176 (16 mm)
Death records	June 1, 1878-1952	1,055 (16 mm)
Birth indexes (Alphabetic)	1848-May 31, 1878	6 (35 mm)
	June 1, 1878-1903	9 (35 mm)
	1920-1924	7 (16 mm)
Birth indexes (Geographic)	June 1, 1878-1900	26 (35 mm)
	1902-1906	2 (35 mm)

Marriage indexes (Alphabetic)	1848-May 31, 1878	4 (35 mm)
	June 1, 1878-1900 (Husbands)	2 (35 mm)
	June 1, 1878-1900 (Wives)	2 (35 mm)
Marriage indexes (Geographic)	1901-1903 (Husbands)	1 (35 mm)
	June 1, 1878-1900	14 (35 mm)
Death indexes (Alphabetic)	1848-May 31, 1878	3 (35 mm)
	1901-1903	1 (35 mm)
Death indexes (Geographic)	June 1, 1878-1900	22 (35 mm)

There are 166 duplicate reels of 35 mm. film and 1,094 duplicate reels of 16 mm. film containing the indexes and original records. These reels are stored in three steel cabinets in the Microfilm Room. The original negative films are stored at a different location for security.

The original records, with the exception of the indexes, have been transferred to the State Librarian for storage in the Switlik Building. Twenty boxes and 136 volumes of original fetal death records for the period June 1, 1878 through December 31, 1954, are also in the possession of the State Librarian and will be microfilmed before possible destruction.

The Program also has 92 other volumes of birth, marriage, death, and fetal death indexes for various time periods which should be microfilmed for security reasons. However, such microfilming requires that the bindings be removed and the paper cut. Once this has been done, the pages cannot be rebound. A process does exist by which the microfilm images can be reproduced to quality index paper of a size which can be bound, but such a project requires the allocation of extra money. The importance of doing this, however, should not be forgotten.

Since 1954, the Vital Statistics Registration Program has been responsible for the searching and issuance of transcripts from entries in the 1905 and 1915 State Census Records which are on 105 reels of microfilm.

By law, the State Registrar has supervisory power over the 567 local registrars and must furnish the forms necessary for the registration of vital events. Certain of these forms are used exclusively by the local registrar and others are distributed by him to physicians, clergymen, funeral directors or hospital administrators for the registration of pertinent vital events.

NEW LEGISLATION

During the 1958 legislative session, two bills were approved which affected the Program. One new statute removed the word "epileptic" from the list of individuals to whom a marriage license may not be issued. The other law authorizes the State Registrar and local registrar to adjust the record of birth or marriage on the basis of a change of name permitted at the time of naturalization proceedings.

WORK LOAD AND ACCOMPLISHMENTS

During 1958, the Program received and processed 223,765 original reports of vital events, 2,000 delayed reports of births, and 6,000 corrections. In addition, there were 7,621 office or telephone calls by persons who wished to file corrections to records, or who were interested in other registration procedures.

Birth certificates under new names were prepared and filed for 2,111 individuals who had been adopted. The respective local registrars were sent copies of the new certificates and instructions for sealing their copies of the original certificates.

Approximately 77,000 premarital certificate forms were examined for acceptability and were detached from the marriage certificates forwarded by local registrars.

An average of 10 requests daily were received in 1958 for searches of and transcripts from 1905 and/or 1915 State Census Records.

The State Department of Health must certify monthly the name, place, and date of burial or cremation, and the name of the war for each veteran dying in New Jersey whose death certificate indicates that burial or cremation was within New Jersey. In 1958, this required the typing of 4,345 copies, all of which were subsequently sorted by county and forwarded to the respective county supervisors of veterans' interments.

Due to the lack of clerical time from 1940 to 1956, corrections received during that period which pertained to birth records for the years 1904 through 1930 were not attached to such records. In searching birth records for those years, the clerk must make a double search, once for the original record and then in the correction file when an original record is found.

Three temporary clerks were employed to attach corrections to the original records. Although they attached approximately 21,000 corrections, about 60 percent of their time had to be used for searching to assist the regular clerks in meeting the demand for certified copies of all types of records for all years. It is estimated that 140,000 correction forms still remain unattached.

A total of 48,149 searches of the records were made during the calendar year and certified copies or No Record statements were prepared for approximately 90 percent of the requests. The remaining 10 percent were from agencies which required only a certification that the record was or was not on file.

Photostatic copies of the Ten Percent Monthly Mortality Sample were forwarded to the National Office of Vital Statistics each month.

The Business Machine Unit continued work during slack periods on the preparation of an alphabetic index of marriages by the surname of the bride

for the period January 1, 1915 through December 31, 1919. This will complete the indexes by the surname of the bride for the period June 1, 1878 to date.

A detailed study of vault space problems, particular for future birth records, led to a continuation of the microfilm program. The death records from 1931 to 1952 were surveyed and at a joint meeting of those concerned it was decided to have the volumes containing the death certificates for this period prepared for microfilming and delivered to the Microfilm Unit. The preparation of the books was started by personnel of the Program of Administrative Services on an overtime basis on September 1, 1958. By December 15, all volumes from 1931 to 1948, inclusive, had been prepared and delivered for filming. It is estimated that 850 reels of film will be necessary for the completion of the project.

During the year, 166 reels of 35 mm. positive film containing the records from 1848 to 1900 were reproduced because the old film had been badly scratched from dust and particles of plaster dropping from the ceiling. The old film was retained and is used by genealogists and other interested persons, thus permitting Program personnel to continue their searching without interruption.

Program personnel also rebound 116 volumes of births and marriage records.

An additional microfilm reader was purchased during the year which aided greatly in keeping the searching current.

A summary of the volume of the major activities of the Program follows:

I. Original Certificates Received, Processed and Permanently Filed.

Certificate Type	Calendar Year		
	1958	1957	1956
Birth	125,793	125,866	120,271
Fetal Death	2,015	2,016	1,979
Marriage	38,398	40,404	41,156
Remarriage	1,151	1,165	1,194
Death	56,408	56,064	53,348
Total	223,765	225,515	217,948

II. Searches Requested and Fees Received.

Item	Fiscal Year		
	1959	1958	1957
Searches made and/or certified copies issued for which fees were received	31,548	32,624	36,631
Searches made and/or certified copies issued for which no fees were received	16,900	16,195	16,120
Total searches	48,448	48,819	52,751
Fees received for searches and certified copies	\$36,888.31	\$34,610.56	\$36,094.52

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<i>Former</i>	<i>Present</i>	
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Former Present

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* Data on this subject in sections of other programs in previous annual reports.

Table 1. POPULATION ESTIMATES AND VITAL EVENTS: 1934-1958
(Numbers and Rates)

YEAR	Estimated Population As of July 1	BIRTHS		MARRIAGES		DEATHS	
		Number	Rate	Number	Rate	Number	Rate
1934	4,091,800	54,841	13.4	28,991	7.1	43,547	10.6
1935	4,103,700	55,059	13.4	29,724	7.2	43,297	10.5
1936	4,115,600	54,145	13.2	32,771	8.0	44,639	10.9
1937	4,127,500	55,197	13.4	36,190	8.8	45,312	11.0
1938	4,139,400	56,602	13.7	31,006	7.5	44,045	10.6
1939	4,151,300	56,839	13.7	31,895	7.7	43,837	10.6
1940	4,163,100	59,328	14.3	41,030	9.9	45,206	10.9
1941	4,199,900	67,104	16.0	46,838	11.1	43,971	10.5
1942	4,226,426	80,812	19.1	50,498	11.9	46,270	10.9
1943	4,235,223	82,358	19.4	41,045	9.7	49,781	11.8
1944	4,167,540	75,632	18.2	36,084	8.7	47,840	11.4
1945	4,200,941	78,955	18.8	39,711	9.5	47,633	11.3
1946	4,304,261	95,044	22.1	61,020	14.2	46,281	10.7
1947	4,435,000	106,086	23.9	55,802	12.6	48,276	10.9
1948	4,729,000	97,278	20.6	51,913	11.0	48,107	10.2
1949	4,789,000	97,414	20.4	44,489	9.3	47,706	10.0
1950	4,832,400	97,734	20.2	46,291	9.6	48,337	10.1
1951	4,896,000	105,215	21.5	44,564	9.1	50,098	10.2
1952	4,949,000	110,215	22.3	41,125	8.3	51,430	10.4
1953	5,006,000	112,322	22.5	40,886	8.2	52,794	10.5
1954	5,071,000	118,252	23.3	39,744	7.8	51,203	10.1
1955	5,141,000	120,969	23.5	40,327	7.8	54,055	10.5
1956	5,206,000	124,580	23.9	41,152	7.9	54,418	10.5
1957	5,279,000	129,237	24.5	40,367	7.6	57,171	10.8
1958	5,351,000	129,730	24.2	38,398	7.2	57,532	10.8

Note: Rates are per 1,000 population.
Marriage data are by place of occurrence.
For similar data for the period 1921 through 1933, see Table 1 of the Annual Report for any year from 1934 through 1954; for the years 1879 through 1920, see Table 1 of the Report for any year from 1921 through 1950.

CHART I.

BIRTH AND DEATH RATES

per 1,000 population
(Based on Five-Year Averages of Events and Population)
1880 - 1954

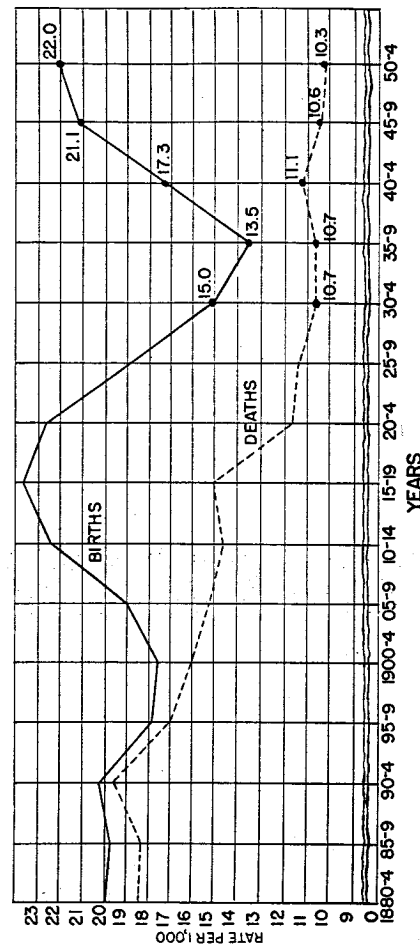


Table 2. BIRTHS, INFANT DEATHS, NEONATAL DEATHS, FETAL DEATHS AND MATERNAL DEATHS: 1934-1958
(Numbers and Rates)

Year	Births		Infant Deaths		Neonatal Deaths*		Fetal Deaths		Maternal Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1934	54,841	48.9	2,086	46.1	1,034	26.8	2,095	36.9	294	5.3
1935	55,059	44.1	2,439	44.0	1,360	28.3	1,905	34.1	282	4.7
1936	54,145	43.3	2,383	43.3	1,449	26.8	1,816	34.1	292	4.7
1937	56,197	39.3	2,357	39.3	1,327	24.0	1,781	31.4	182	3.2
1938	56,602	39.3	2,228	38.3	1,305	24.1	1,704	30.7	194	3.3
1939	56,859	38.3	2,180	35.3	1,412	24.8	1,609	29.7	198	3.3
1940	59,323	35.3	2,094	35.3	1,422	24.0	1,543	29.0	172	2.9
1941	57,522	35.6	1,651	31.4	1,051	24.6	1,732	25.8	166	2.5
1942	56,832	31.4	2,355	31.4	1,251	22.5	2,006	24.8	152	1.9
1943	52,338	33.8	2,782	33.8	1,892	23.0	1,978	24.0	151	1.8
1944	51,597	33.9	2,597	33.9	1,766	23.2	1,744	23.1	119	1.6
1945	50,352	32.5	2,367	32.5	1,630	21.8	1,827	23.7	118	1.5
1946	46,705	28.5	2,080	28.5	1,420	21.8	1,627	22.4	119	1.5
1947	42,705	27.9	2,217	27.9	1,217	20.9	2,257	22.4	119	1.5
1948	42,778	26.6	2,630	26.6	1,892	20.2	2,022	20.2	76	0.8
1949	47,414	25.0	2,425	25.0	1,875	19.4	1,974	20.2	72	0.7
1950	47,754	25.0	2,445	25.0	1,875	19.4	1,974	20.2	72	0.7
1951	46,318	25.9	2,516	25.9	1,917	18.2	1,938	18.9	70	0.7
1952	46,333	25.9	2,533	25.9	1,917	18.2	1,938	18.9	70	0.7
1953	43,522	25.6	2,954	25.6	2,043	18.2	2,043	18.2	55	0.5
1954	47,876	25.6	2,789	25.6	2,078	17.6	1,943	17.6	69	0.5
1955	47,876	24.5	2,654	24.5	2,211	18.3	2,115	17.5	69	0.5
1956	47,876	24.5	2,654	24.5	2,211	18.3	2,115	17.5	39	0.3
1957	47,876	24.4	2,654	24.4	2,211	18.3	2,115	17.5	39	0.3
1958	47,876	24.4	2,654	24.4	2,211	18.3	2,115	17.5	39	0.3

Note: Rates are per 1,000 live births.
* Beginning with 1951, neonatal deaths include only deaths under 28 days of age.

Table 3. VITAL EVENTS BY COUNTIES AND MAJOR CITIES: 1958
(Numbers and Rates)

Area*	July 1 Estimated Population	Births		Marriages†		Deaths	
		Number	Rate‡	Number	Rate‡	Number	Rate‡
STATE TOTAL	5,351,000	129,730	24.2	38,398	7.2	57,552	10.8
Atlantic County	140,000	3,012	21.5	1,157	8.3	2,069	13.0
Atlantic City	62,000	964	15.5	478	7.7	1,047	16.9
Bergen County	608,000	15,472	25.4	4,128	6.8	5,950	9.8
Burlington County	154,000	4,489	29.1	957	6.4	1,474	9.6
Camden County	335,000	8,906	26.6	2,334	7.0	3,704	11.1
Camden City	135,000	2,881	21.3	1,030	7.6	1,594	11.1
Cape May County	37,000	938	25.4	342	9.2	674	18.2
Cumberland County	97,000	2,416	24.9	712	7.3	1,120	11.5
Essex County	19,890	20.3	7.517	7.7	10,164	10.4	
East Orange	86,000	1,570	18.4	345	6.3	907	11.6
Irvington	62,000	1,102	17.8	432	7.0	673	10.9
Newark	478,000	10,434	21.8	4,175	8.7	5,905	10.5
Gloucester County	105,000	3,066	29.2	696	6.6	1,171	11.2
Hudson County	698,000	18,167	18.9	5,000	7.2	7,110	10.2
Bayonne	54,000	1,593	18.7	484	5.7	775	9.1
Hoboken	85,000	1,089	20.2	458	8.5	599	11.1
Jersey City	323,000	6,435	20.0	2,426	7.5	3,345	10.4
Union City	57,000	1,073	18.8	339	9.3	637	11.2
Hunterdon County	47,000	1,080	23.0	237	5.5	622	13.2
Mercer County	253,000	5,627	22.2	1,733	6.8	2,637	10.4
Trenton	136,000	2,466	18.1	976	7.2	1,497	11.0
Middlesex County	309,000	9,832	31.8	2,226	7.2	3,126	10.1
Monmouth County	252,000	7,761	30.8	1,884	7.5	3,258	12.9
Morris County	188,000	5,634	30.1	1,322	7.1	2,043	10.9
Ocean County	63,000	2,263	35.9	550	8.7	1,106	17.6
Passaic County	370,000	8,580	23.2	2,601	7.0	4,020	10.9
Clifton	73,000	1,639	22.6	328	4.6	650	8.9
Passaic City	59,000	993	16.8	565	9.6	634	10.7
Paterson	149,000	3,344	22.4	1,163	7.8	1,816	12.2
Salem County	56,000	1,328	23.7	374	6.7	581	10.4
Somerset County	114,000	3,056	26.8	642	5.6	1,065	9.3
Sussex County	39,000	1,046	26.8	316	8.1	491	12.6
Union County	444,000	10,368	23.4	2,943	6.6	4,335	9.8
Elizabeth	122,000	2,484	20.4	808	6.6	1,269	10.4
Warren County	60,000	1,310	21.8	405	6.8	727	12.1
State Institutions	\$	29	†			46	†
Military Posts	\$	440	†	262	†	20	†

* County figures include city data also. County and city totals exclude events charged to state institutions or military posts geographically located within county or city boundaries.

† By place of occurrence.

‡ Rates are per 1,000 estimated population.

§ Not available.

¶ Rates not computed due to lack of population base.

Table 4. BIRTHS, MARRIAGES, DEATHS, FETAL DEATHS, MATERNAL DEATHS, INFANT DEATHS AND NEONATAL DEATHS BY COUNTIES AND MUNICIPALITIES: 1958
(Marriage data by place of occurrence, all other by place of residence)

ATLANTIC COUNTY								BERGEN COUNTY—Continued							
CIVIL DIVISION								CIVIL DIVISION							
Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths		Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths	
Absecon City	123	12	65					Norwood Borough	57	12	24	1		2	1
Atlantic City	964	478	1047	26	1	43	83	Oakland Borough	225	10	43	4			5
Brigantine City	87	18	26			1	1	Old Tappan Borough	51	7	14				3
Buena Borough	53	34	31	1		2	2	Oradell Borough	109	9	57	2			3
Buena Vista Township	1	15	50			2	2	Palisades Interstate Park							
Corbin City	11		4	1		1	1	Palisades Park Borough	278	74	101	3			6
Egg Harbor City	115	54	56	1		6	4	Faramus Borough	556	74	111	7			13
Egg Harbor Township	104	19	66	1		2	2	Park Ridge Borough	139	47	38	2			10
Estell Manor City	1	3	6					Ramsey Borough	192	63	61	3			2
Folsom Borough	6	3	4	1				Ridgefield Borough	233	55	82	7			5
Galloway Township	67	35	42					Ridgefield Park Township	267	85	138	3			3
Hamilton Township	127	28	84	2		4	4	Ridgewood Village	350	162	235	9			8
Hammoncton Town	270	94	89	1		4	3	River Edge Borough	255	60	73	3			6
Linwood City	74	31	40	2				River Vale Township	135	3	29	2			4
Longport Borough	12	3	12	3				Rochelle Park Township	125	12	52	1			2
Margate City	144	44	81	4				Rockleigh Borough	25	1	22	1			2
Mullica Township	36	6	23		1	1		Rutherford Borough	380	159	252	7			6
Northfield City	119	21	58	3		4	3	Saddle River Borough	22	17	11				5
Pleasantville City	387	130	146	5		11	8	Saddle Brook Township	254	46	71	4			4
Port Republic City	10	3	10					South Hackensack Township	38	1	10				1
Somers Point City	86	42	42			3	2	Tenack Township	628	243	308	12	1		9
Ventnor City	135	88	128			2	2	Tenafly Borough	172	98	122	3			5
Weymouth Township	10	3	9					Teterboro Borough			1				1
Total	3012	1157	2009	49	1	90	70	Upper Saddle River Borough	65	5	16				1
								Waldwick Borough	238	14	49	4			1
								Wallington Borough	191	61	73	5			3
								Washington Township	125	24	43	3			3
								Westwood Borough	205	72	88	7			3
								Woodcliff Lake Borough	47	1	13				1
								Wood Ridge Borough	153	48	64				5
								Wyckoff Township	188	44	83	1			2
								Total	15472	4128	5859	261	6	268	219

BERGEN COUNTY								BURLINGTON COUNTY 1958							
CIVIL DIVISION								CIVIL DIVISION							
Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths		Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths	
Allendale Borough	75	12	23	1		1	1	Bass River Township	7	4	13				
Alpine Borough	21	3	6					Beverly City	141	27	44	2			4
Bergenfield Borough	574	102	179	10		10	8	Bordentown City	183	58	73	2			3
Bogota Borough	137	69	88	2		7	5	Bordentown Township	116	8	37	2			3
Carlstadt Borough	131	19	62			2	1	Burlington City	287	89	145	7			18
Cliffside Park Borough	311	92	175	6		4	4	Burlington Township	146	16	32	2			1
Closter Borough	153	21	54	5		2	2	Chester Township	57	18	12	2			2
Cresskill Borough	144	36	45	6		1	1	Cinnaminson Township	125	41	31	2			2
Danmora Borough	74	13	28			1	1	Delanco Township	98	12	36	1			4
Dumont Borough	352	68	139	6	1	4	4	Delran Township	51	4	25				1
East Paterson Borough	416	75	113	9	1	7	6	Eastampton Township	23	1	12				
East Rutherford Borough	157	60	82			3	2	Eastwick Township	25	13	8				
Edgewater Borough	93	42	54					Evesham Township	103	10	35				2
Emerson Borough	201	16	29	2				Fieldsboro Borough	14	1	11				
Englewood City	508	286	241	9		9	7	Florence Township	167	48	77	2			6
Englewood Cliffs Borough	34		10	2				Hainesport Township	81	24	16	2			1
Fair Lawn Borough	656	128	223	10		11	9	Lumberton Township	68	3	33	1			2
Fairview Borough	198	101	73	7		2	2	Mansfield Township	53	4	22	1			1
Fort Lee Borough	511	168	159	11		8	4	Maple Shade Township	272	70	78	1			3
Franklin Lakes Borough	72	6	27			5	4	Medford Lakes Borough	46	12	6				
Garfield Borough	629	188	267	9		10	8	Medford Township	130	33	37	1			2
Glen Rock Borough	187	56	104	2	1	1	1	Moorestown Township	263	58	125	4			8
Hackensack City	635	236	345	17		12	10	Mount Holly Township	490	76	145	11			18
Harrington Park Borough	49	19	17	1				Mount Laurel Township	92	6	33				3
Hasbrouck Heights Borough	239	79	94	3		3	2	New Hanover Township	76		12				4
Harvard Borough	32	13	24	3		1		North Hanover Township	29		16				1
Hillside Borough	137	41	65	2		4	4	Palmyra Borough	176	46	75	4			3
Hobokus Borough	45	35	28					Pemberton Borough	118	16	24	2	1		5
Leonia Borough	149	49	91	4		4	3	Pemberton Township	422	73	53	3			10
Little Ferry Borough	119	31	49			3	2	Riverside Township	276	84	87	2	1	4	8
Lodi Borough	686	99	153	10	1	12	11	Riverton Borough	113	31	33				4
Lyndhurst Borough	445	187	151	6		10	8	Shamong Township	26	4	6				
Mahwah Township	106	39	9	2		2	2	Southampton Township	92	29	32				2
Marwood Borough	213	68	94	4		5	5	Springfield Township	35	5	17				1
Midland Park Borough	155	44	61	2			2	Tabernacle Township	27	7	10				
Montvale Borough	85	9	28	1				Washington Township	7	3	9				
Moanachie Borough	81	3	6					Westampton Township	37	4	17	1			
New Milford Borough	529	54	107	4	1	12	6	Willingboro Township	13		9				
North Arlington Borough	396	93	136	6		7	5	Woodland Township	21	3	8				2
Northvale Borough	59	11	12	1				Wrightstown Borough	162	15	4	1			1
								Total	4489	987	1474	55	2	121	97

CAMDEN COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Audubon Borough	191	58	120	2	...	6	5
Audubon Park Borough	19	4	6	...	...	1	1
Barrington Borough	175	29	37	...	...	2	2
Bellmawr Borough	333	31	46	6	...	8	6
Berlin Borough	88	47	39	1	...	2	2
Berlin Township	115	5	23	1	...	1	1
Brooklawn Borough	56	11	26	1	...	1	1
Camden City	2881	1030	1504	62	...	91	67
Chesilhurst Borough	5	3	5	1	...	1	1
Clementon Borough	59	15	41	2	...	1	1
Collingswood Borough	444	117	234	7	...	3	6
Delaware Township	253	55	130	4	...	7	5
Gibbsboro Borough	51	6	13	...	...	2	1
Gloucester City	340	94	166	2	...	10	7
Gloucester Township	309	47	109	4	...	10	7
Haddonfield Borough	726	90	117	6	...	10	8
Haddon Heights Borough	165	81	87	...	...	2	2
Haddon Township	176	43	103	3	...	...	...
Hi Nela Borough	10	...	1	...	...	...	...
Laurel Springs Borough	47	11	21	1	...	1	1
Lawnside Borough	42	14	18	4	...	...	...
Lindenwood Borough	199	38	45	...	...	4	2
Magnolia Borough	143	26	30	1	...	3	2
Merchantville Borough	286	97	95	4	...	4	4
Mount Ephraim Borough	190	28	33	1	...	1	1
Oaklyn Borough	108	22	52	2	...	3	3
Pennsauken Township	737	123	229	14	...	9	5
Pine Hill Borough	77	32	48	1	...	1	1
Pine Valley Borough	...	...	...	...	...	...	...
Runnemede Borough	194	58	57	...	...	6	...
Somerdale Borough	148	23	24	1	...	1	1
Stratford Borough	84	14	20	...	...	1	1
Tavistock Borough	...	3	10	...	...	...	...
Voorthees Township	...	...	...	...	...	...	...
Waterford Township	106	28	46	...	...	...	...
Winslow Township	129	21	54	1	...	4	2
Wood Lynne Borough	63	21	35	2	...	...	...
Total	8906	2334	3704	137	...	202	151

CAPE MAY COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Avalon Borough	13	3	10	...	...	1	1
Cape May City	102	35	56	2	...	...	2
Cape May Point Borough	1	1	2	...	...	...	...
Dennis Township	50	21	34	...	...	...	...
Lower Township	138	30	82	3	...	5	7
Middle Township	138	39	81	3	...	2	1
North Wildwood City	53	8	51	1	...	1	1
Ocean City	129	43	134	2	...	4	4
Sea Isle City	23	13	22	...	...	...	...
Stone Harbor Borough	11	11	5	...	...	...	...
Upper Township	74	16	36	1	...	2	1
West Cape May Borough	18	4	19	...	...	2	1
Wildwood City	102	102	98	...	...	4	3
Wildwood Crest Borough	43	11	24	...	...	1	1
Woodbine Borough	39	5	21	1	...	1	1
Total	938	342	674	13	...	29	23

CUMBERLAND COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bridgeton City	568	212	261	16	1	31	20
Commercial Township	95	17	46	...	...	1	2
Deerfield Township	84	3	26	2	1	3	5
Downe Township	64	6	19	1	1	2	2
Fairfield Township	84	16	36	1	...	1	...
Greenwich Township	25	3	17	...	...	1	1
Hopewell Township	72	3	39	...	...	6	3
Lawrence Township	82	37	25	3	1	6	5
Maurice River Township	58	16	33	1	...	1	1
Millville City	393	153	226	6	...	11	8
Shiloh Borough	14	3	6	...	...	1	1
Stov Creek Township	56	6	40	...	...	2	2
Upper Deerfield Township	90	26	40	2	...	2	2
Vineland City	732	213	344	7	1	18	14
Total	2416	712	1120	46	5	84	64

ESSEX COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Belleville Town	752	173	275	9	1	18	17
Bloomfield Town	1039	285	517	14	1	24	22
Caldwell Borough	105	78	93	1	...	3	2
Caldwell Township	79	10	29	...	...	2	1
Cedar Grove Township	249	23	59	...	...	7	4
East Orange City	1579	545	897	25	...	42	35
Essex Falls Borough	33	16	18	...	...	...	...
Glou Ridge Borough	99	26	80	1	...	2	17
Irrington Town	1102	432	673	29	1	23	17
Livingston Township	389	58	123	2	...	12	10
Maplewood Township	265	187	245	5	...	6	5
Milburn Township	210	131	137	4	...	5	4
Monclair Town	747	323	545	11	...	21	15
Newark City	10485	4175	8005	243	7	363	274
North Caldwell Borough	49	9	13	1	...	1	1
Nutley Town	524	217	257	15	3	4	4
Orange City	930	385	436	16	1	31	26
Osseland Borough	49	14	11	1	...	1	1
Roseland Borough	172	149	179	4	...	10	8
South Orange Village	Verona Borough	218	88	90	3	1	1
West Caldwell Borough	136	5	48	2	...	1	1
West Orange Town	720	176	303	6	...	12	9
Total	19890	7517	10164	386	14	591	457

GLOUCESTER COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Clayton Borough	95	35	47	2	...	2	2
Deptford Township	236	47	90	4	...	4	4
East Greenwich Township	1	7	28	...	...	5	2
Elk Township	27	8	15	2	...	...	...
Franklin Township	129	22	59	4	...	...	...
Glassboro Borough	244	67	80	8	...	9	7
Greenwich Township	70	12	24	1	...	1	1
Harrison Township	67	11	33	...	...	1	...
Logan Township	22	8	16	1	...	1	...
Mantua Township	247	35	62	...	...	4	3
Monroe Township	198	49	67	1	...	4	2
National Park Borough	77	36	39	3	...	1	1
Newfield Borough	43	19	20	...	...	3	3
Paulsboro Borough	252	61	86	3	...	15	9
Pittman Borough	165	37	103	1	...	2	2
South Harrison Township	13	1	9	...	...	...	...
Sredesboro Borough	116	38	56	2	...	3	2
Washington Township	33	15	34	...	...	2	1
Wenonah Borough	88	14	23	1	...	2	2
West Deptford Township	115	18	56	...	...	6	4
Westville Borough	130	40	53	2	...	3	3
Woodbury City	691	98	153	7	...	9	9
Woodbury Heights Borough	35	4	12	1	...	1	1
Woolwich Township	16	...	6	1	...	...	...
Total	3066	696	1171	46	...	77	58

HUDSON COUNTY

CIVIL DIVISION	MARRIAGES			DEATHS			
	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bayonne City	1593	484	775	35	...	24	24
East Newark Borough	31	34	23	1	...	1	1
Guttenberg Town	93	26	81	2	...	1	1
Harrison Town	240	116	157	3	...	5	2
Hoboken City	1089	458	599	19	...	36	28
Jersey City	6555	2426	3345	141	2	183	148
Kearny Town	740	248	398	10	1	20	15
North Bergen Township	768	142	445	10	1	22	18
Secaucus Town	179	30	113	1	...	5	2
Union City	1973	539	637	20	1	22	16
Weehawken Township	249	38	197	1	...	10	8
West New York Town	696	442	373	12	1	14	12
Total	13167	5000	7110	255	6	343	275

HUNTERDON COUNTY

CIVIL DIVISION	MARRIAGES			DEATHS			
	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Alexandria Township	29	4	12	1	...	...	...
Bethlehem Township	15	7	10	1	...	...	...
Bloomsbury Borough	26	6	14	1	...	2	1
Califon Borough	25	6	16	...	...	1	1
Clinton Town	31	17	23	...	...	2	2
Clinton Township	43	4	22	1	...	...	...
Delaware Township	30	10	33	...	...	1	1
East Amwell Township	51	4	15	...	...	...	...
Flemington Borough	53	41	51	2	...	2	2
Franklin Township	33	4	16	...	...	...	...
Frenchtown Borough	29	3	18	1	...	...	...
Glen Gardner Borough	18	1	7	...	...	...	...
Hampton Borough	23	14	16	1	...	...	...
High Bridge Borough	31	16	27	1	...	...	...
Holland Township	49	7	10	...	...	...	...
Kingswood Township	38	7	16	1	...	...	...
Lambertville City	105	33	72	1	...	5	4
Lebanon Borough	21	6	11	1	...	...	...
Lebanon Township	53	3	25	2	...	...	...
Milford Borough	30	14	25	1	...	1	1
Raritan Township	91	2	47	1	...	1	1
Readington Township	117	28	70	...	...	2	2
Stockton Borough	15	4	10	...	...	...	...
Tewksbury Township	40	12	24	...	...	2	2
Union Township	42	4	17	2	...	...	...
West Amwell Township	43	...	15	1	...	3	2
Total	1080	237	622	20	...	23	19

MERCER COUNTY

CIVIL DIVISION	MARRIAGES			DEATHS			
	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
East Windsor Township	51	4	13	1	...	1	1
Ewing Township	519	84	189	6	...	14	9
Hamilton Township	1477	304	484	17	1	36	28
Hightstown Borough	107	48	52	1	...	1	...
Hopewell Borough	48	13	31	...	...	...	...
Hopewell Township	141	25	66	2	...	5	2
Lawrence Township	224	78	78	4	...	3	2
Pennington Borough	42	22	22	...	...	...	...
Princeton Borough	168	133	111	1	...	5	3
Princeton Township	237	15	56	1	...	5	4
Trenton City	2466	976	1497	44	...	83	63
Washington Township	67	11	19	3	...	...	...
West Windsor Township	80	20	34	...	...	1	...
Total	5627	1733	2637	82	1	155	113

MIDDLESEX COUNTY

CIVIL DIVISION	MARRIAGES			DEATHS			
	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Cartaret Borough	466	122	141	13	...	14	10
Cranbury Township	72	10	24	1	...	1	1
Dunellen Borough	163	71	66	...	...	...	...
East Brunswick Township	466	22	90	4	...	6	5
Edison Township	869	158	215	10	...	23	16
Helmetta Borough	18	6	13	...	...	1	...
Highland Park Borough	207	62	109	5	...	8	8
Jamesburg Borough	98	33	50	1	...	2	1
Madison Township	362	44	81	5	...	6	4
Mietuchen Borough	505	88	122	6	...	13	11
Middlesex Borough	239	24	70	2	...	6	5
Milltown Borough	206	49	48	1	...	3	2
Monroe Township	46	6	33	...	...	3	2
New Brunswick City	968	433	432	15	...	23	16
North Brunswick Township	204	9	57	2	...	3	3
Perth Amboy City	718	400	483	12	1	12	8
Piscataway Township	497	75	95	5	...	3	2
Plainsboro Township	23	7	15	...	1	1	1
Sarreville Borough	619	31	121	4	...	10	7
South Amboy City	231	87	116	2	...	10	10
South Brunswick Township	204	31	48	4	...	4	4
South Plainfield Borough	485	66	92	11	...	5	3
South River Borough	289	106	115	10	...	5	4
Spotswood Borough	205	22	37	1	...	5	5
Woodbridge Township	1767	244	432	34	1	30	32
Total	9832	2226	3126	151	3	208	159

MONMOUTH COUNTY

CIVIL DIVISION	MARRIAGES			DEATHS			
	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Allenhurst Borough	17	1	10	1	...	1	1
Allentown Borough	26	16	14	1	...	...	...
Asbury Park City	411	231	309	14	1	13	8
Atlantic Highlands Borough	118	39	45	...	...	...	...
Atlantic Township	36	8	18	...	...	...	2
Arvon-by-the-Sea Borough	28	26	27	...	...	...	...
Belmar Borough	93	50	85	2	...	3	3
Bradley Beach Borough	82	35	63	...	...	1	1
Brielle Borough	54	4	33	...	...	2	1
Deal Borough	22	18	17	2	...	...	...
Eatontown Borough	355	27	62	...	...	7	7
Englishtown Borough	44	17	12	1	...	...	...
Fair Haven Borough	104	20	50	2	...	5	5
Farmingdale Borough	31	24	20	2	...	2	2
Freehold Borough	204	85	108	3	...	2	2
Freehold Township	107	20	49	1	...	2	1
Highlands Borough	100	16	60	1	...	2	1
Holmdel Township	48	4	15	...	...	2	1
Howell Township	212	26	89	5	...	9	7
Interlaken Borough	17	...	11	2	...	...	...
Keansburg Borough	170	66	90	...	...	5	1
Keypoint Borough	188	94	85	2	...	1	1
Little Silver Borough	69	8	41	...	...	1	...
Long Branch City	768	173	261	5	...	11	9
Manalapan Township	93	14	38	8	...	5	4
Manasquan Borough	74	54	64	1	...	1	1
Marlboro Township	43	19	35	...	...	2	1
Matawan Borough	174	28	65	...	...	3	1
Matwan Township	142	19	45	3	...	7	3
Middletown Township	921	98	258	19	...	20	16
Millstone Township	60	8	23	1	...	2	1
Monmouth Beach Borough	84	16	16	...	...	...	...
Neptune City Borough	104	22	54	1	...	4	3
Neptune Township	478	59	247	5	...	3	8
New Shrewsbury Borough	130	14	29	5	...	3	1
Oceanport Borough	77	16	29	3	...	4	4

MONMOUTH COUNTY—Continued

CIVIL DIVISION	Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Ocean Township	224	28	90	3	...	4	3
Earlitz Township	443	23	67	3	...	6	5
Red Bank Borough	388	188	167	7	...	15	10
Roosevelt Borough	8	...	7	1	...	...	...
Rumson Borough	117	38	65	1	...	2	1
Sea Bright Borough	16	4	9	1	...	...	...
Sea Girt Borough	21	18	27	1	...	...	...
Shrewsbury Borough	67	13	20	1	...	...	...
Shrewsbury Township	56	1	3	1	...	1	1
South Belmar Borough	25	4	23	1	...	...	...
Spring Lake Borough	53	42	41	...	...	1	1
Spring Lake Heights Borough	73	10	31	...	...	3	3
Union Beach Borough	132	36	53	1	...	3	3
Upper Freehold Township	91	9	30	...	...	1	1
Wall Township	251	34	114	1	1	6	5
West Long Branch Borough	120	30	36	2	...	...	...
Total	1761	1884	3258	121	3	171	128

MORRIS COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Boonton Town	137	70	81	3	...	6	5
Boonton Township	56	10	18	...	...	3	3
Butler Borough	148	53	61	3	...	3	3
Chatham Borough	146	42	80	...	...	4	3
Chatham Township	135	7	81	...	...	3	2
Chester Borough	21	19	12	...	...	2	2
Chester Township	38	1	17	...	...	2	2
Denville Township	244	27	93	...	...	9	7
Dover Town	323	141	154	7	...	7	5
East Hanover Township	33	4	25	...	...	1	1
Florham Park Borough	166	22	32	1	...	1	1
Hanover Township	275	36	57	3	...	4	3
Harding Township	48	8	19	...	...	4	2
Jefferson Township	139	32	42	3	...	1	1
Kinnelon Borough	82	3	13	1	...	4	2
Lincoln Park Borough	147	15	39	...	...	3	1
Madison Borough	323	97	115	4	...	5	2
Mendham Borough	40	3	12	...	...	1	...
Mendham Township	45	15	25	...	...	...	...
Mine Hill Township	47	22	24	2	...	1	...
Montville Township	145	32	61	...	...	3	1
Morris Plains Borough	112	40	54	4	1	5	4
Morris Township	707	159	249	11	...	12	12
Morris Township	150	60	70	...	...	1	1
Mountain Lakes Borough	53	24	28	1	...	2	2
Mount Arlington Borough	34	17	13	...	...	1	1
Mount Olive Township	30	13	43	...	...	2	1
Netcong Borough	72	43	90	...	...	1	1
Parsippany-Troy Hills Township	443	68	116	12	...	9	6
Passaic Township	107	31	32	...	...	...	...
Pegannock Township	253	34	47	2	...	5	4
Randolph Township	185	20	44	1	...	1	1
Riverdale Borough	69	4	14	2	...	2	1
Rockaway Borough	125	55	60	...	...	5	4
Rockaway Township	221	18	62	5	...	3	3
Roxbury Township	288	38	73	3	...	3	3
Victory Gardens	29	2	...	...	...	2	1
Washington Township	69	17	36	2	...	3	2
Wharton Borough	132	30	45	1	...	4	3
Total	5654	1332	2043	78	2	123	87

OCEAN COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Barneget Light Borough	5	...	4	...	...	...	...
Bay Head Borough	9	9	10	...	1	...	...
Beach Haven Borough	22	10	17	...	...	...	...
Beachwood Borough	71	2	32	...	...	1	1
Berkeley Township	72	15	43	...	...	5	2
Brick Township	318	21	93	3	...	3	3
Dover Township	383	90	145	8	...	8	5
Eaglewood Township	11	5	8	...	...	...	...
Harvey Cedars Borough	1	...	...	...	...	...	...
Island Beach Borough	...	...	...	...	...	...	...
Island Heights Borough	18	17	13	...	...	1	1
Jackson Township	96	40	68	2	...	7	5
Lacey Township	24	7	12	...	...	...	...
Lakehurst Borough	135	10	19	...	...	3	3
Lakewood Township	345	121	192	11	...	13	9
Lavallette Borough	23	4	11	...	...	...	...
Little Egg Harbor Township	6	...	23	2	...	1	1
Long Beach Township	10	13	23	...	...	...	...
Manchester Township	58	1	12	4	...	1	1
Mantoloking Borough	1	1	4	...	...	...	...
Ocean Gate Borough	15	7	15	2	...	3	2
Ocean Township	15	2	12	...	...	1	1
Pine Beach Borough	20	4	12	...	...	...	...
Plumstead Township	185	25	31	1	1	4	3
Point Pleasant Borough	32	34	60	...	...	2	...
Point Pleasant Beach Borough	218	37	131	2	...	3	2
Seaside Heights Borough	18	7	15	1	...	...	...
Seaside Park Borough	11	18	22	1	...	...	...
Ship Bottom Borough	6	6	12	...	...	...	...
South Toms River Borough	6	1	8	...	...	1	1
Stafford Township	38	5	20	...	...	1	1
Surf City Borough	6	1	6	...	...	1	1
Tuckerton Borough	35	12	20	2	...	...	...
Union Township	19	24	16	1	...	1	1
Total	2263	550	1100	42	2	61	42

PASSAIC COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bloomington Borough	117	16	37	2	...	2	2
Clifton City	1650	338	650	27	...	26	20
Haledon Borough	88	38	83	1	...	2	2
Hartthorne Borough	327	96	172	1	...	5	5
Little Falls Township	211	32	73	1	...	...	...
North Haledon Borough	92	9	33	2	...	...	...
Passaic City	993	565	634	20	1	30	23
Paterson City	3344	1163	1816	60	1	97	70
Pompton Lakes Borough	74	49	49	3	...	...	...
Prospect Park Borough	100	40	31	1	...	1	1
Ringwood Borough	78	14	21	2	...	3	2
Totowa Borough	197	34	71	4	...	3	3
Wanaque Borough	193	17	49	4	...	7	6
Wayne Township	369	88	159	9	...	16	12
West Milford Township	191	46	64	5	1	2	2
West Paterson Borough	167	11	51	3	1	4	2
Total	8580	2901	4020	145	4	206	154

SALEM COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Alloway Township	59	28	22	...	...	...	...
Elmer Borough	31	16	22	...	...	...	...
Elsinboro Township	22	...	12	...	...	...	...
Lower Alloway Creek Township	32	11	13	...	...	1	1
Lower Penns Neck Township	246	53	69	4	1	6	5
Mannington Township	43	4	24	...	...	2	1
Oldmans Township	47	3	23	...	...	...	...
Penns Grove Borough	186	63	73	3	...	5	4
Pittsgrove Township	47	9	17	1	1	3	1
Pittsgrove Township	73	18	41	2	...	4	4
Quinton Township	53	11	15	...	...	9	7
Salem City	224	88	121	...	...	...	...
Upper Penns Neck Township	164	31	57	1	...	6	6
Upper Pittsgrove Township	50	16	23	...	...	2	2
Woodstown Borough	51	25	49	1	...	1	1
Total	1328	374	581	12	2	39	32

SOMERSET COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bedminster Township	30	11	17	1	...	...	...
Bernards Township	128	26	49	3	...	2	2
Bernardsville Borough	100	34	44	2	...	2	...
Bound Brook Borough	277	86	99	3	...	7	5
Branchburg Township	92	5	25	1	...	...	...
Bridgewater Township	264	27	91	3	...	3	2
Far Hills Borough	22	3	10	...	...	...	...
Franklin Township	462	51	112	7	...	9	7
Green Brook Township	62	6	19	...	...	1	1
Hillsborough Township	164	19	32	4	...	3	2
Manville Borough	282	73	73	11	...	5	3
Millstone Borough	6	...	8	...	...	1	1
Montgomery Township	60	10	20	...	...	1	1
North Plainfield Borough	340	72	161	3	...	8	6
Peapack Gladstone Borough	45	13	22	2	...	...	...
Raritan Borough	152	51	52	1	...	1	1
Rocky Hill Borough	14	2	4	...	...	...	...
Somerville Borough	312	94	139	5	...	3	3
South Bound Brook Borough	96	17	38	3	...	3	3
Warren Township	101	17	35	2	...	3	2
Watchung Borough	49	23	15	1	...	...	...
Total	3066	642	1065	52	...	54	39

SUSSEX COUNTY

1958

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Andover Borough	17	3	9	...	...	...	...
Andover Township	52	4	17	1	...	1	...
Branchville Borough	13	14	16	2	...	1	...
Byram Township	25	3	11	1	...	...	...
Frankford Township	67	62	14	3	...	3	...
Franklin Borough	75	32	45	...	...	1	1
Fredon Township	20	3	7	1	...	...	...
Green Township	16	9	8	...	...	...	...
Hamburg Borough	36	29	12	...	...	...	...
Hampton Township	4	9	6	...	...	...	...
Hardyston Township	48	2	13	...	...	1	1
Hopatecong Borough	54	4	24	1	...	3	3
Lafayette Township	...	...	11	...	...	...	...
Montague Township	13	3	7	...	...	...	...
Newton Town	139	61	101	1	...	5	4
Ogdenburg Borough	29	12	12	1	...	2	1
Sandyston Township	12	3	4	...	...	...	...
Sparta Township	141	26	65	2	...	6	5
Stanhope Borough	44	8	21	1	...	1	1
Stillwater Township	21	5	15	...	...	1	...
Sussex Borough	41	49	24	1	...	1	...
Vernon Township	45	16	27	1	...	1	1
Walpack Township	4	2	1	...	...	...	...
Wantage Township	89	5	21	...	...	3	3
Total	1046	316	491	16	...	28	20

UNION COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Berkeley Heights Twp.	174	14	41	3	...	4	2
Clark Township	263	70	45	...	...	7	6
Cranford Township	562	112	179	11	...	12	8
Elizabeth City	2484	898	1269	58	...	67	54
Fanwood Borough	198	8	33	3	...	4	3
Garwood Borough	139	24	39	2	...	3	3
Hillside Township	300	106	195	10	...	6	5
Kenilworth Borough	150	48	33	5	...	4	3
Linden City	819	212	281	15	...	23	20
Mountainside Borough	89	9	42	...	...	1	1
New Providence Borough	287	23	55	3	...	8	7
Plainfield City	1139	343	528	20	1	34	29
Railway City	622	204	232	11	1	15	13
Roselle Borough	481	135	172	14	...	10	9
Roselle Park Borough	201	39	112	4	...	4	3
Scotch Plains Township	417	69	107	3	...	8	4
Springfield Township	229	69	98	2	...	3	2
Summit City	428	180	237	5	...	7	7
Union Township	789	270	412	16	1	16	11
Westfield Town	322	179	220	10	...	8	5
Winfield Township	54	1	12	2	...	3	2
Total	10688	2943	4335	107	3	247	107

WARREN COUNTY							
CIVIL DIVISION	Births	Mar-riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Allamuchy Township	19	1	5	...	...	...	...
Alpha Borough	37	28	24	1	2	...	1
Belvidere Town	56	38	39	1	...	2	1
Blairstown Township	40	15	21	...	...	1	1
Franklin Township	48	9	16	...	...	...	...
Frellsburg Township	15	8	8	1	...	...	...
Greenwich Township	24	18	22	1	...	...	...
Hackettstown Town	101	40	50	2	...	2	...
Hardwick Township	9	...	3	...	...	...	...
Harmony Township	22	10	9	...	...	...	...
Hope Township	16	4	9	...	...	...	...
Independence Township	29	11	17	...	...	3	2
Knowlton Township	28	10	17	...	...	...	...
Liberty Township	7	...	6	1	...	1	1
Lopatcong Township	10	9	14	...	...	...	...
Mansfield Township	55	4	21	1	...	1	...
Oxford Township	39	16	23	1	...	...	...
Pahaquarry Township	...	...	...	...	...	...	...
Phillipsburg Town	496	130	261	6	...	12	12
Pohatcong Township	14	4	25	...	...	...	...
Washington Borough	149	47	79	...	...	3	3
Washington Township	54	8	30	...	...	...	...
White Township	21	4	20	1	...	...	...
Total	1310	405	727	17	...	27	21
STATE INSTITUTIONS	29	...	46	...	...	1	1
MILITARY POSTS	440	262	20	4	...	12	10

Table 5. BIRTHS, MARRIAGES AND DEATHS IN NEW JERSEY BY MONTH OF OCCURRENCE: 1958

Month	Births	Marriages	Deaths
TOTAL	125,794	38,398	56,407
January	10,208	2,206	5,577
February	9,620	2,570	5,057
March	10,488	1,848	4,773
April	9,970	3,165	4,612
May	11,003	3,615	4,598
June	10,458	5,167	4,335
July	10,660	2,691	4,602
August	11,033	3,724	4,244
September	11,143	4,082	4,372
October	10,854	3,494	4,629
November	9,880	3,447	4,433
December	10,477	2,389	5,175

Note: The birth and death data have not been adjusted for residence, as have other statistics on these subjects in this report, but, like the marriage figures, represent events occurring in New Jersey.

Table 6. MARRIAGES IN NEW JERSEY BY AGE OF HUSBAND BY AGE OF WIFE, 1968

Wife's Age Group	Husband's Age Group												
	ALL AGES	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
ALL AGES	38,398	2,516	15,879	8,922	3,053	2,194	1,442	1,061	826	678	569	395	299
< 15-19	10,205	2,102	6,022	1,297	1,008	41	11	...	...	...	...	...	...
20-24	15,081	283	8,478	4,888	1,068	268	62	24	6	4	...	...	...
25-29	4,691	1	3,031	2,184	1,205	439	174	68	18	7	...	...	...
30-34	1,771	1	1,071	809	509	306	297	111	60	10	...	...	...
35-39	1,231	1	721	423	289	183	133	53	185	48	...	...	...
40-44	1,263	1	806	27	86	297	336	238	153	159	...	...	...
45-49	958	...	21	62	21	131	131	249	219	159	...	...	...
50-54	701	...	1	4	2	42	42	154	154	116	...	...	...
55-59	392	...	...	...	...	19	19	112	112	139	...	...	...
60-69	188	...	...	...	...	...	...	...	...	116	...	...	...
70+	89	...	...	...	...	...	...	...	...	...	...	...	...

Note: No males under 15 years of age were married in New Jersey in 1968.

Table 7. MARRIAGES IN NEW JERSEY BY PREVIOUS MARITAL STATUS: 1958

Wife's Status	Husband's Status				
	Total	Single	Widowed	Divorced	Unknown
TOTAL	38,398	31,496	3,296	4,277	329
Single	31,875	28,922	620	2,099	234
Widowed	2,319	629	1,143	522	25
Divorced	4,064	1,896	506	1,622	40
Unknown	140	49	27	34	30

INFANT DEATHS BY CAUSE AND AGE: 1958

In 1958, there were 129,730 live births to residents of the State of New Jersey. The State lost 3,160 infants by death during the same year. This loss occurred at the rate of 24.4 infants per 1,000 live births.

The accompanying table presents the 3,160 infant deaths by cause and by age group. Causes have been divided according to the major groupings of the International Statistical Classification of Diseases and Causes of Death (seventh revision). These cause groupings are the same as those of the sixth revision used in the comparable table for 1957. Detailed causes have been indicated for deaths due to "Certain Diseases of Early Infancy" (Major Group XV of the International Statistical Classification) and for certain types of accidental deaths.

The individual cause to which the greatest number of deaths was charged was postnatal asphyxia and atelectasis. There were 727 deaths, or 23.0 percent of all deaths under one year, assigned to this cause. More than one-half of the infants whose deaths were charged to this cause were under one day old and a total of 686, or almost 95 percent were less than one week old. Immaturity was indicated on 69 percent, or 503, of the 727 death certificates for babies whose deaths were due to postnatal asphyxia and atelectasis.

Immaturity, unqualified, was the second most important single cause of death for New Jersey infants in 1958. There were 639 deaths, or 20 percent of all deaths under one year, assigned to this cause. Over two-thirds of these deaths, 438, occurred to infants less than one day old, while 155 occurred to those who were one day old but less than one week old.

As a result of congenital malformations 504 infants died. This represents 16 percent of all deaths under one year of age. Over half of these deaths occurred to infants less than one week old.

Considered together, the 264 deaths charged to diseases of the respiratory system and the 137 deaths charged to pneumonia of the newborn represent,

numerically, the fourth most important cause. While pneumonia of the newborn took the lives of infants under 28 days, primarily, most of the deaths due to diseases of the respiratory system were for infants 28 days and older. Of the 137 deaths due to pneumonia of the newborn, 133 occurred to infants less than 28 days old. Of the 264 deaths due to diseases of the respiratory system, 260 were for infants of 28 days and older.

Almost nine percent of all infant deaths in 1958 were charged to birth injuries. There were 274 deaths due to this cause, of which 183 were for babies under one day old and 82 were for babies from one day through six days old.

In 1958, accidents accounted for 84 infant deaths. Approximately two-thirds of these deaths were due to the following two groups of causes:

- Inhalation and ingestion of food or other objects causing obstruction or suffocation (34 deaths).
- Accidental mechanical suffocation in bed or cradle (23 deaths).

Most of these infant deaths occurred very early in the first year of life. Of the 3,160 deaths in 1958, under one year, 1,327, or 42 percent were for infants less than one day old. Seventy-seven percent or 2,434 infants died before they were 28 days old. Immaturity was indicated on the death certificates of 1,475 of these 2,434 infants.

Additional information is given in the following table. It is important to remember that "Certain Diseases of Early Infancy" (International Statistical Classification, Major Group XV, Code Numbers 760-776) is the only group which gives an opportunity to determine immaturity on the basis of the physician's statements in the medical certification on the death certificate. However, infant deaths from all causes were included in the tabulation. Certificates of deaths from causes which gave no opportunity for immaturity classification were counted in the group labeled "Immaturity Not Indicated."

Table 8a. INFANT DEATHS BY AGE AND IMMATURITY: 1958

Age	Total		Immaturity Indicated on Death Certificate		Immaturity Not Indicated on Death Certificate	
	No.	Percent	No.	Percent	No.	Percent
< 1 day	1,327	42.0	907	60.6	420	25.3
< 1 week	2,169	68.6	1,379	92.1	790	47.5
< 28 days	2,434	77.0	1,475	98.5	959	57.7
< 1 year	3,160	100.0	1,497	100.0	1,663	100.0

Note: Numbers of deaths for each age classification are cumulative totals from birth to the indicated age.

Table 8b. INFANT DEATHS BY CAUSE AND AGE, 1958

Cause of Death Showing International List (7th Revision) Numbers	Total	Less than 1 Day		1 Day but < 1 Week		1 Week but < 28 Days		28 Days but < 1 Year	
		1 Day	1 Week	1 Day	1 Week	1 Day	1 Week	1 Day	1 Week
		1 Day	1 Week	1 Day	1 Week	1 Day	1 Week	1 Day	1 Week
ALL CAUSES (001-5999)	3100	1327	842	205	726				
Infective and parasitic diseases (001-138)	21	1	1	1	22				
Diseases of other endocrine glands (270-277)	42	1	4	1	34				
Diseases of the respiratory system and voice organs (390-398)	264	1	1	2	260				
Diseases of the digestive system (530-587)	604	1	1	11	588				
Congenital malformations (750-769)	1190	134	126	117	158				
Birth injuries (700-760)	274	183	82	4	255				
Postnatal asphyxia and atelectasis (762)	137	398	288	37	34				
Pneumonia of the newborn (763)	12	3	6	3	4				
Other infections of the newborn (766-769)	6	2	2	2	4				
Other diseases peculiar to early infancy (770-776)	40	15	11	10	4				
Hemolytic disease of the newborn (770)	96	27	11	10	32				
Nutritional diseases of the newborn (771)	93	20	9	14	25				
III-defined diseases of early infancy (773)	14	2	0	1	2				
Immaturity unqualified (774-776)	10	2	0	1	0				
Symptoms and ill-defined conditions (780-795)	152	72	61	32	4				
A. Inhabitation and occupation of food or other objects causing obstruction or suffocation (E021, E022)	11	4	1	4	77				
B. All other accidental suffocation in bed or cradle (E024)	34	2	1	1	32				
All other accidental causes (D800-1920, E023, E025-E062)	27	2	3	3	20				
All other causes	41	6	4	4	27				

Table 8c. DEATHS FROM CERTAIN DISEASES OF EARLY INFANCY BY SPECIFIC CAUSE AND AGE GROUP: 1958

Cause of Death Showing International List (7th Revision) Numbers	Total	Less Than 1 Day		1 Day but < 1 Week		1 Week but < 28 Days		28 Days but < 1 Year	
		1 Day	1 Week	1 Day	1 Week	1 Day	1 Week	1 Day	1 Week
		1 Day	1 Week	1 Day	1 Week	1 Day	1 Week	1 Day	1 Week
Total, Certain diseases of early infancy (760-776)	2,098*	1,175	702	171	50				
Without immaturity indicated (760-773 with 0-4)	601	268	230	75	28				
With immaturity indicated (760-773 with 5-9 and 774-776)	1,497	907	472	96	22				
Birth injuries (760, 761)	274	183	82	6	3				
Without immaturity indicated	117	67	46	2	2				
With immaturity indicated	157	116	36	4	1				
Postnatal asphyxia and atelectasis (762)	227	398	288	27	14				
Without immaturity indicated	224	121	91	5	7				
With immaturity indicated	503	277	197	22	7				
Pneumonia of newborn (763)	137	9	60	64	4				
Without immaturity indicated	91	6	34	49	2				
With immaturity indicated	46	3	26	15	2				
Diarrhea of newborn (764)	12	...	2	10	...				
Without immaturity indicated	...	...	1	6	...				
With immaturity indicated	5	...	1	4	...				
Other infections of the newborn (766-769)	40	15	11	10	4				
Without immaturity indicated	20	9	6	6	2				
With immaturity indicated	20	6	5	4	2				
Hemolytic disease of the newborn (770)	93	58	31	3	1				
Without immaturity indicated	77	53	21	2	1				
With immaturity indicated	16	5	10	1	...				
Hemorrhagic disease of the newborn (771)	14	2	9	1	2				
Without immaturity indicated	10	2	6	1	...				
With immaturity indicated	4	2	3	1	...				
Nutritional maladjustment (772)	10	...	...	1	9				
Without immaturity indicated	9	...	...	1	8				
With immaturity indicated	1	...	...	...	1				
III-defined diseases of early infancy (773)	152	72	64	12	4				
Without immaturity indicated	46	13	25	4	4				
With immaturity indicated	106	59	39	8	...				
Immaturity unqualified (774-776)	639	438	155	37	9				

* Does not include two deaths at age 1 year from hemolytic disease of the newborn (International List Cause Code 770).

Table 9. PRINCIPAL CAUSES OF DEATH BY SPECIFIED AGE GROUPS: 1958
(Number and Rates)

ALL AGES

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
	TOTAL DEATHS	57,532	1,075.5
1	Diseases of the circulatory system (400-468)	27,080	506.1
2	Malignant neoplasms (140-205)	10,215	190.9
3	Vascular lesions affecting the central nervous system (330-334)	5,378	100.5
4	Influenza, pneumonia (including pneumonia of the newborn) and bronchitis (480-502, 763)	2,010	37.6
5	Diabetes (260)	1,133	21.2
6	Cirrhosis of liver (581)	888	16.6
7	Motor vehicle accidents (E810-E835)	735	13.7
8	Postnatal asphyxia and atelectasis (762)	727	13.6
9	Congenital malformations (750-759)	705	13.2
10	Accidental falls (E900-E904)	656	12.2
11	Immaturity (774, 776)*	639	11.9
12	Suicide (E970-E979)	513	9.6
	All other causes	6,873	128.4

* An additional 858 infant deaths were reported in 1958, with immaturity as a subsidiary cause (International List Code Numbers 760-773 with a fourth digit of .5 to .9). These deaths have been classified with the deaths charged to the cause indicated by the physician as the primary cause of death.

1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
	TOTAL DEATHS	444	107.8
1	Influenza, pneumonia and bronchitis (480-502)	86	20.9
2	Congenital malformations (750-759)	65	15.8
3	Malignant neoplasms (140-205)	58	14.1
4	Accidents caused by fire and explosion of combustible materials (E910)	22	5.3
5	Motor vehicle accidents (E810-E835)	20	4.8
6	Gastritis, duodenitis, enteritis and colitis (543, 571, 572)	16	3.9
7	Accidental drowning and submersion (E929)	12	2.9
8	Accidental falls (E900-E904)	9	2.2
9	Vascular lesions affecting the central nervous system (330-334)	9	2.2
	All other causes	147	35.7

5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
	TOTAL DEATHS	395	53.9
1	Malignant neoplasms (140-205)	67	9.2
2	Motor vehicle accidents (E810-E835)	64	8.7
3	Influenza, pneumonia and bronchitis (480-502)	36	4.9
4	Congenital malformations (750-759)	32	4.3
5	Accidental drowning and submersion (E929)	23	4.1
6	Accidents caused by fire and explosion of combustible materials (E910)	14	1.9
7	Diseases of the circulatory system (400-468)	10	1.4
8	Vascular lesions affecting the central nervous system (330-334)	9	1.2
9	Accidental falls (E900-E904)	7	1.0
10	Tuberculosis (001-019)	6	0.8
11	Diseases of the pancreas (587)	6	0.8
	All other causes	113	15.4

Table 9. PRINCIPAL CAUSES OF DEATH BY SPECIFIED AGE GROUPS: 1958—Continued
(Number and Rates)

15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
	TOTAL DEATHS	534	75.1
1	Motor vehicle accidents (E810-E835)	134	21.7
2	Malignant neoplasms (140-205)	67	9.4
3	Diseases of the circulatory system (400-468)	29	4.1
4	Accidental drowning and submersion (E929)	28	3.9
5	Influenza, pneumonia and bronchitis (480-502)	24	3.4
6	Suicide (E970-E979)	24	3.4
7	Nephritis and nephrosis (590-594)	22	3.1
8	Homicide (E950-E953)	18	2.5
9	Congenital malformations (750-759)	14	2.0
10	Pregnancy, childbirth and the puerperium (640-689)	13	1.8
	All other causes	141	19.5

25-44 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
	TOTAL DEATHS	3,329	191.3
1	Diseases of the circulatory system (400-468)	939	53.1
2	Malignant neoplasms (140-205)	688	39.5
3	Motor vehicle accidents (E810-E835)	182	10.5
4	Vascular lesions affecting the central nervous system (330-334)	135	8.9
5	Suicide (E970-E979)	134	7.7
6	Cirrhosis of liver (581)	131	7.5
7	Influenza, pneumonia and bronchitis (480-502)	97	5.8
8	Tuberculosis (001-019)	80	4.6
9	Nephritis and nephrosis (590-594)	78	4.5
10	Homicide (E950-E953)	55	3.2
11	Diabetes (260)	48	2.7
	All other causes	722	41.5

Table 9. PRINCIPAL CAUSES OF DEATH BY SPECIFIED AGE GROUPS: 1958—Continued
(Number and Rates)

45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
TOTAL DEATHS			
		15,805	1,295.5
1	Diseases of the circulatory system (400-468)	7,217	591.6
2	Malignant neoplasms (140-205)	3,938	322.8
3	Vascular lesions affecting the central nervous system (330-334) ..	1,075	88.1
4	Cirrhosis of liver (581)	449	36.8
5	Influenza, pneumonia and bronchitis (480-502)	387	31.7
6	Diabetes (260)	330	27.0
7	Suicide (E970-E979)	280	22.9
8	Tuberculosis (001-019)	178	14.6
9	Ulcer of stomach and duodenum (540, 541)	176	14.4
10	Motor vehicle accidents (E810-E835)	152	12.5
11	Nephritis and nephrosis (590-594)	126	10.3
12	Accidental falls (E900-E904)	122	10.0
	All other causes	1,425	116.8

65 YEARS AND OVER

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
TOTAL DEATHS			
		33,885	7,718.7
1	Diseases of the circulatory system (400-468)	18,837	4,295.4
2	Malignant neoplasms (140-205)	5,396	1,222.2
3	Vascular lesions affecting the central nervous system (330-334) ..	4,113	939.9
4	Influenza, pneumonia and bronchitis (480-502)	993	229.2
5	Diabetes (260)	749	170.6
6	Accidental falls (E900-E904)	468	106.6
7	Cirrhosis of liver (581)	362	86.8
8	Nephritis and nephrosis (590-594)	249	57.5
9	Ulcer of stomach and duodenum (540, 541)	210	47.8
10	Intestinal obstruction and hernia (560, 561, 570)	174	39.6
11	Tuberculosis (001-019)	164	37.4
12	Motor vehicle accidents (E810-E835)	161	36.5
	All other causes	2,037	469.0

Table 10. DEATHS FROM DISEASES OF THE CIRCULATORY SYSTEM BY CAUSE GROUP BY AGE, SEX AND COLOR: 1958

Age in Years Age, Sex and Color	Total (400-468)	Rheumatic Fever (400-402)	Chronic Rheumatic Heart (410-416)	Arteriosclerotic and Degenerative Heart (420-422)	Other Diseases of Heart (430-434)	Hypertension of Heart With Mention (440-443)	Hypertension of Heart Without Mention (444-447)	Diseases of Arteries (450-456)	Diseases of Veins (460-466)	Other Diseases of Circulatory System (467, 468)
Under 1	27,069	81	770	21,101	587	2,320	423	1,345	227	10
1-4	6	1	1	1	1	1	1	1	1	1
5-9	6	1	1	1	1	1	1	1	1	1
10-14	4	1	1	1	1	1	1	1	1	1
15-19	6	1	1	1	1	1	1	1	1	1
20-24	21	1	6	6	2	2	2	2	2	2
25-29	40	1	14	16	2	2	2	2	2	2
30-34	122	1	42	65	7	7	7	7	7	7
35-39	267	1	164	164	30	12	12	12	12	12
40-44	507	1	304	304	70	20	20	20	20	20
45-49	802	1	484	484	114	14	14	14	14	14
50-54	1,308	1	798	798	216	24	24	24	24	24
55-59	2,067	1	1,073	1,073	385	35	35	35	35	35
60-64	3,067	1	1,687	1,687	480	40	40	40	40	40
65-69	4,812	1	2,583	2,583	690	51	51	51	51	51
70-74	4,219	1	2,333	2,333	600	44	44	44	44	44
75 and over	10,836	1	5,300	5,300	1,888	141	141	141	141	141
Sex										
Male	15,398	50	861	12,554	290	1,061	200	687	169	6
Female	11,772	11	408	8,637	298	1,459	223	658	167	10
Color										
White	25,430	28	729	20,097	511	2,369	362	1,290	207	12
Nonwhite	1,653	3	41	1,103	40	281	66	65	20	4
Unknown	1	1	1	1	1	1	1	1	1	1

Note: Numbers following descriptive titles refer to International List (7th Revision) Codes.

Table 10b. DEATH RATES FOR DISEASES OF THE CIRCULATORY SYSTEM BY CAUSE GROUP BY AGE, SEX AND COLOR: 1958

Age, Sex and Color	Total (400-465)	Rheumatic Fever (400-402)	Chronic Rheumatic Heart (410-416)	Arteriosclerotic and Degenerative Heart (420-422)	Other Diseases (430-433)	Hypertension With Mention of Heart (440-443)	Hypertension Without Mention of Heart (444-447)	Diseases of Arteries (450-456)	Diseases of Veins (460-466)	Other Diseases of Circulatory System (467, 468)
ALL AGES	500.1	0.6	14.4	300.0	10.4	47.1	7.9	26.1	4.3	0.3
Under 1	2.0	0.5	0.0	0.5	1.0	0.0	0.0	0.0	0.0	1.0
1-4	1.4	0.2	0.2	0.5	0.6	0.0	0.0	0.0	0.0	0.2
5-9	0.9	1.6	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
10-14	2.9	0.3	0.3	0.3	0.0	0.6	0.0	0.3	0.3	0.3
15-19	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-24	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-29	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-34	27.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
35-39	61.5	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
40-44	154.2	0.6	13.1	12.1	0.4	1.6	0.4	0.2	0.2	0.2
45-49	244.2	0.6	13.1	37.8	2.3	2.8	2.8	0.7	0.4	0.4
50-54	405.9	0.6	29.9	105.2	5.0	7.6	3.5	2.3	2.0	2.0
55-59	626.0	0.6	31.4	318.4	4.3	15.6	5.4	4.9	3.0	3.0
60-64	1,065.9	1.0	30.8	583.7	28.0	57.1	6.0	3.5	3.0	0.7
65-69	1,725.6	0.8	37.8	1,068.1	100.8	21.2	20.1	30.3	10.8	0.3
70-74	2,004.2	0.8	44.6	1,073.3	44.6	218.7	48.8	60.8	22.5	0.3
75 and over	3,430.1	0.8	44.1	1,073.3	340.7	340.7	48.8	133.0	37.4	2.4
Sex	8,970.1	1.5	40.3	6,270.0	140.8	541.7	117.2	644.0	41.0	3.7
Male	480.3	0.8	13.7	475.0	11.3	40.2	7.5	20.0	4.0	0.2
Female	433.0	0.4	15.1	315.4	9.9	53.8	8.2	24.2	3.0	0.4
Color	500.2	0.6	14.0	401.2	10.2	45.5	7.3	25.0	4.1	0.2
White	460.4	0.8	11.4	323.0	12.3	60.0	15.7	18.1	5.0	3.1
Nonwhite										

Note: Rates are per 100,000 estimated population and are age, sex and color specific.

Table 11a. DEATHS FROM NEOPLASMS BY CAUSE GROUP, BY AGE, SEX AND COLOR: 1958

Age, Sex and Color	ALL NEOPLASMS (140-205) (210-239)	Malignant				Benign or Unspecified			
		Buccal Cavity and Pharynx (140-148)	Digestive and Peritoneum (150-159)	Respiratory (160-165)	Urinary (170-181)	Other and Unspecified (190-199)	Lymph and Blood (200-205)	TOTAL (210-239)	
ALL AGES	10,404	236	3,878	1,541	2,844	885	831	189	
Under 1	8	0	0	0	0	0	1	7	
1-4	61	0	3	1	10	13	31	3	
5-9	56	0	4	0	4	15	27	6	
10-14	18	0	0	0	1	3	13	1	
15-19	42	0	1	2	3	16	18	2	
20-24	33	0	2	0	6	8	11	6	
25-29	48	0	7	0	8	13	17	3	
30-34	103	2	24	8	25	16	20	8	
35-39	218	0	45	11	82	30	38	12	
40-44	352	8	72	40	126	58	58	10	
45-49	603	19	144	91	223	57	51	18	
50-54	882	18	256	160	267	73	80	19	
55-59	1,115	31	395	186	280	111	83	20	
60-64	1,412	37	550	291	337	95	85	17	
65-69	1,646	28	644	317	424	115	101	17	
70-74	1,526	31	671	310	386	110	99	19	
75 and over	2,281	62	1,060	224	653	152	109	21	
Sex									
Male	5,495	191	2,115	1,323	855	472	458	81	
Female	4,909	45	1,763	218	1,989	413	373	108	
Color									
White	9,764	225	3,651	1,442	2,652	835	792	167	
Nonwhite	640	11	227	99	192	50	39	22	

Note: Numbers following descriptive titles refer to International List (7th Revision) Codes.

Table 11b. DEATH RATES FOR MALIGNANT NEOPLASMS BY CAUSE GROUP,
BY AGE, SEX AND COLOR: 1958

Age, Sex and Color	TOTAL (140-205)	Buccal Cavity and Pharynx* (140-148)	Digestive and Peritoneum (150-159)	Respiratory (160-165)	Breast and Genitourinary (170-181)	Other and Unspecified (190-199)	Lymph and Blood (200-205)
ALL AGES	190.9	4.4	72.5	28.8	53.2	16.5	15.5
Under 1	1.0	0.0	0.0	0.0	0.0	0.0	1.0
1-4	14.1	0.0	0.7	0.2	2.4	3.2	7.6
5-9	12.1	0.0	1.0	0.0	1.0	3.6	6.5
10-14	5.3	0.0	0.0	0.0	0.3	0.9	4.1
15-19	12.3	0.0	0.3	0.6	0.9	4.9	5.6
20-24	7.0	0.0	0.5	0.0	1.6	2.1	2.8
25-29	9.9	0.0	1.5	0.0	1.8	2.9	3.7
30-34	20.9	0.4	5.3	1.8	5.5	3.5	4.4
35-39	47.5	0.0	10.4	2.5	18.9	6.9	8.8
40-44	86.4	2.0	18.2	10.1	31.8	14.7	9.6
45-49	165.7	5.4	40.8	25.8	63.2	16.1	14.4
50-54	256.1	5.3	76.0	47.5	79.2	21.7	26.4
55-59	378.9	10.7	136.7	64.4	100.0	38.4	28.7
60-64	578.8	15.4	228.2	120.7	139.8	39.4	35.3
65-69	895.1	15.4	353.8	174.2	233.0	63.2	55.5
70-74	1,225.2	25.2	543.5	170.8	313.8	89.4	80.5
75 and over	1,686.6	46.3	791.1	167.2	487.3	113.4	81.3
Sex							
Male	205.2	7.2	80.2	50.1	32.4	17.9	17.4
Female	177.0	1.7	65.0	8.0	73.3	15.2	13.8
Color							
White	192.2	4.5	73.1	28.9	53.1	16.7	15.9
Nonwhite	172.1	3.1	63.2	27.6	53.5	13.9	10.8

Note: Rates are per 100,000 estimated population and are age, sex and color specific.

CHART 2.
CANCER DEATH RATES
per 100,000 Population
(Based on Five-Year Averages of Deaths and
Population)
1880 - 1954

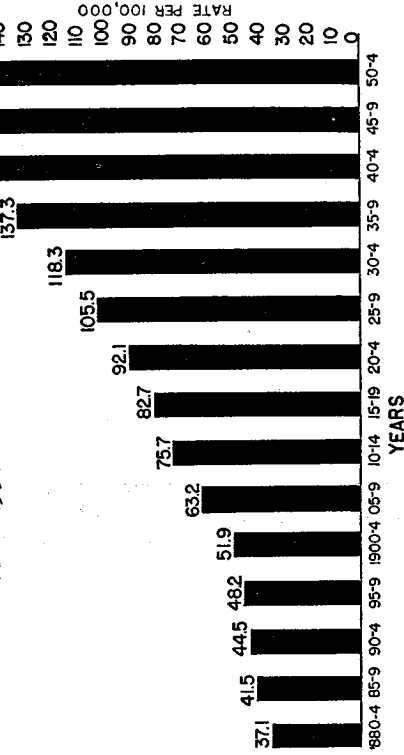


Table 12. DEATHS FROM DIABETES BY AGE, SEX AND COLOR
NUMBERS AND RATES: 1958

Age, Sex and Color	Number	Rate
<i>Age in Years</i>		
ALL AGES	1,133	21.2
Under 1	...	...
1-4	...	...
5-9	...	...
10-14	5	1.6
15-19	...	...
20-24	1	0.3
25-29	2	0.4
30-34	8	1.8
35-39	11	2.5
40-44	27	6.8
45-49	28	7.9
50-54	68	20.2
55-59	86	29.8
60-64	148	61.4
65-69	211	115.9
70-74	231	187.8
75 and over	307	229.1
<i>Sex</i>		
Male	430	16.3
Female	703	25.9
<i>Color</i>		
White	1,044	20.9
Nonwhite	89	24.8

NOTE: Rates are per 100,000 estimated population and are age, sex and color specific.

Table 13a. MOTOR VEHICLE DEATHS IN NEW JERSEY BY CAUSE OF DEATH BY AGE: 1958

Primary Cause	List No.	All Ages	Age Groups						
			Under 1 Year	1-4	5-14	15-24	25-44	45-64	65 and Over
TOTAL	ES10-ES35, ES60	781	2	20	63	150	210	103	104
Collision with									
Railway train	ES10	10	...	4	...	8	...	3	4
Street car	ES11	...	...	...	...	...	...	...	...
Automobile	ES12, ES13, ES14, ES15, ES16, ES17, ES18, ES19, ES20, ES21, ES22, ES23, ES24, ES25, ES26, ES27, ES28, ES29, ES30, ES31, ES32, ES33, ES34, ES35	280	...	18	...	34	...	11	...
Pedal cyclist	ES36, ES37, ES38, ES39, ES40, ES41, ES42, ES43, ES44, ES45, ES46, ES47, ES48, ES49, ES50, ES51, ES52, ES53, ES54, ES55, ES56, ES57, ES58, ES59, ES60	10	...	...	...	12	...	4	...
Motorcycle	ES61, ES62, ES63, ES64, ES65, ES66, ES67, ES68, ES69, ES70, ES71, ES72, ES73, ES74, ES75, ES76, ES77, ES78, ES79, ES80, ES81, ES82, ES83, ES84, ES85, ES86, ES87, ES88, ES89, ES90, ES91, ES92, ES93, ES94, ES95, ES96, ES97, ES98, ES99, ES100	223	...	...	...	8	...	29	...
Other motor vehicle	ES101, ES102, ES103, ES104, ES105, ES106, ES107, ES108, ES109, ES110, ES111, ES112, ES113, ES114, ES115, ES116, ES117, ES118, ES119, ES120, ES121, ES122, ES123, ES124, ES125, ES126, ES127, ES128, ES129, ES130, ES131, ES132, ES133, ES134, ES135, ES136, ES137, ES138, ES139, ES140, ES141, ES142, ES143, ES144, ES145, ES146, ES147, ES148, ES149, ES150, ES151, ES152, ES153, ES154, ES155, ES156, ES157, ES158, ES159, ES160	...	...	...	...	...	...	...	...
Bicycle or horse-drawn vehicle	ES161, ES162, ES163, ES164, ES165, ES166, ES167, ES168, ES169, ES170, ES171, ES172, ES173, ES174, ES175, ES176, ES177, ES178, ES179, ES180, ES181, ES182, ES183, ES184, ES185, ES186, ES187, ES188, ES189, ES190, ES191, ES192, ES193, ES194, ES195, ES196, ES197, ES198, ES199, ES200, ES201, ES202, ES203, ES204, ES205, ES206, ES207, ES208, ES209, ES210, ES211, ES212, ES213, ES214, ES215, ES216, ES217, ES218, ES219, ES220, ES221, ES222, ES223, ES224, ES225, ES226, ES227, ES228, ES229, ES230, ES231, ES232, ES233, ES234, ES235, ES236, ES237, ES238, ES239, ES240, ES241, ES242, ES243, ES244, ES245, ES246, ES247, ES248, ES249, ES250, ES251, ES252, ES253, ES254, ES255, ES256, ES257, ES258, ES259, ES260	...	...	...	...	...	...	...	...
Other and unspecified	ES261, ES262, ES263, ES264, ES265, ES266, ES267, ES268, ES269, ES270, ES271, ES272, ES273, ES274, ES275, ES276, ES277, ES278, ES279, ES280, ES281, ES282, ES283, ES284, ES285, ES286, ES287, ES288, ES289, ES290, ES291, ES292, ES293, ES294, ES295, ES296, ES297, ES298, ES299, ES300, ES301, ES302, ES303, ES304, ES305, ES306, ES307, ES308, ES309, ES310, ES311, ES312, ES313, ES314, ES315, ES316, ES317, ES318, ES319, ES320, ES321, ES322, ES323, ES324, ES325, ES326, ES327, ES328, ES329, ES330, ES331, ES332, ES333, ES334, ES335, ES336, ES337, ES338, ES339, ES340, ES341, ES342, ES343, ES344, ES345, ES346, ES347, ES348, ES349, ES350, ES351, ES352, ES353, ES354, ES355, ES356, ES357, ES358, ES359, ES360	19	...	1	...	9	...	0	...

Table 13b. NONTRANSFERT ACCIDENTAL DEATHS IN NEW JERSEY BY CAUSE OF DEATH BY PLACE OF ACCIDENT: 1958

Primary Cause	List No.	Total	Place of Accident									
			Home	Farm	Mine and Quarry	Industrial Place and Premises	Place for Recreation and Sport	Street and Highway	Public Building	Resident Institution	Other Specified Place	Place Not Specified
TOTAL		1,721	740	14	5	82	49	88	50	127	140	71
Poisoning by solid and liquid substances.....	E870-E889	23	23									0
Poisoning by gases and vapors.....	E890-E898	44	37									0
Fire.....	E899-E905	119	119									0
Choking.....	E906-E909	103	2		26	3	27	1	28	100	1	3
Mechanical suffocation in bed or cradle.....	E910	25	25		14				0	0	3	10
Drowning.....	E920	146	10	3	1				1	2	118	3
Other causes.....	E930-E999	263	98	8	5	37	1	27	3	15	10	43

Table 13c. DEATHS DUE TO ACCIDENTS BY CAUSE OF ACCIDENT FOR SELECTED AGE GROUPS; NUMBER AND RANK: 1958

Rank Order	1-4 Years		5-14 Years		15-24 Years	
	Cause of Death	Number	Cause of Death	Number	Cause of Death	Number
1	All accidental deaths (E800-E962).....	94	All accidental deaths (E800-E962).....	138	All accidental deaths (E800-E962).....	223
	Accident caused by fire and explosion of combustible material and other accidental burns and scalds (E916, E917).....	25*	Motor vehicle accidents (E810-E835).....	64	Motor vehicle accidents (E810-E835).....	154
2	Motor vehicle accidents (E810-E835).....	20	Accidental drownings and submersions (E929).....	30	Accidental drownings and submersions (E929).....	28
3	Accidental drownings and submersions (E929).....	12	Accidents caused by fire and explosion of combustible material and other accidental burns and scalds (E916, E917).....	14*	Accidents caused by fire and explosion of combustible material and other accidental burns and scalds (E916, E917).....	8*
4	Accidental poisonings (E870-E895).....	10	Accidental falls (E900-E904).....	7	Accidental falls (E900-E904).....	6
5	Accidental falls (E900-E904).....	9	Water transport accidents (E850-E858).....	5	Accidents caused by firearms (E919).....	5
	All other accidents.....	18	All other accidents.....	18	All other accidents.....	22

* Includes deaths due to "Accident caused by hot substance, corrosive liquid, and steam," International List Cause Code E917, not previously included in this series, distributed as follows: 1-4 years, 3 deaths; 5-14 years, no deaths; 15-24 years, 2 deaths.

Table 14a. BIRTHS BY LEGITIMACY BY COLOR FOR COUNTIES AND MAJOR CITIES: 1958

AREA	All Births			Legitimate		Illegitimate	
	Total	White	Nonwhite	White	Nonwhite	White	Nonwhite
State Total	129,730	113,327	16,403	111,867	13,801	1,460	2,602
Atlantic County	3,012	2,394	678	2,271	512	63	166
Atlantic City	964	474	490	439	357	35	133
Bergen County	15,472	15,047	425	14,968	387	79	38
Burlington County	4,459	4,094	395	4,043	349	51	46
Camden County	8,906	7,818	1,088	7,739	859	79	229
Camden City	2,881	1,973	908	1,936	714	37	194
Cape May County	938	827	111	815	89	12	22
Cumberland County	2,416	1,884	532	1,828	428	56	104
Essex County	19,890	14,270	5,620	14,001	4,686	269	934
East Orange	1,379	1,140	439	1,129	411	11	28
Irington	1,102	1,095	7	1,091	7	4	..
Newark	10,434	5,805	4,629	5,386	3,789	219	840
Gloucester County	3,069	2,691	378	2,661	310	30	65
Hudson County	13,167	11,621	1,546	11,394	1,312	227	294
Bayonne	1,593	1,501	92	1,487	82	14	10
Hoboken	1,089	1,032	57	1,015	47	17	10
Jersey City	6,453	3,085	3,370	4,923	1,161	162	209
Union City	1,073	1,067	6	1,055	5	12	1
Hunterdon County	1,080	1,064	16	1,046	12	18	4
Mercer County	5,627	4,533	1,074	4,444	968	109	106
Trenton	2,466	1,634	832	1,597	748	37	84
Middlesex County	9,832	9,804	528	9,245	469	59	59
Monmouth County	7,761	6,728	1,033	6,676	884	32	149
Morris County	5,654	5,507	147	5,456	129	51	18
Ocean County	2,263	2,152	111	2,181	92	21	19
Passaic County	5,380	7,371	1,099	7,455	820	118	189
Clifton	1,650	1,642	8	1,632	6	10	2
Passaic City	993	846	147	830	118	16	29
Paterson	3,344	2,521	823	2,452	689	69	154
Salem County	1,328	1,063	265	1,023	292	40	63
Somerset County	3,056	2,933	123	2,907	105	26	18
Sussex County	1,046	1,040	6	1,021	4	19	2
Union County	10,368	9,176	1,192	9,119	1,056	57	136
Elizabeth	2,484	2,067	427	2,038	371	19	56
Warren County	1,310	1,294	16	1,270	15	24	1
State Institutions	29	27	2	25	2	2	..
Military Posts	440	329	111	329	111	..	..

Table 14b. ILLEGITIMATE BIRTHS BY COLOR BY AGE OF MOTHER: 1958

Age of Mother	Total		Color			
	Number	Percent	White Number	White Percent	Nonwhite Number	Nonwhite Percent
All Ages	4,062	100.0	1,460	100.0	2,602	100.0
10-14	107	2.6	19	1.3	88	3.4
15-19	1,597	39.3	538	36.8	1,059	40.7
20-24	1,357	33.4	523	35.8	834	32.0
25-29	538	13.2	182	12.5	356	13.7
30-34	276	6.8	110	7.5	166	6.4
35-39	157	3.9	74	5.1	83	3.2
40-44	27	0.7	12	0.8	15	0.6
45-49	2	<0.1	1	0.1	1	<0.1
Unknown	1	<0.1	1	0.1	..	..

Although it is recognized that not all births to unmarried mothers are correctly reported as such, the discrepancy between actual and reported figures probably does not vary significantly between age groups. Bearing that qualification in mind and assuming that there is no race difference in the reluctance of females to give correct information, the data in the table may be studied to advantage.

Table 15. RESIDENT BIRTHS BY WEIGHT GROUP BY AGE GROUP OF MOTHER: 1958

Age in Years	Total	BIRTH WEIGHT GROUP							Weight Not Stated	
		over 2500 Grams		2001-2500 Grams		1501-2000 Grams		1001-1500 Grams		
		5 lbs. 9 ozs. and over	4 lbs. 7 ozs. to 5 lbs. 8 ozs.	3 lbs. 5 ozs. to 4 lbs. 6 ozs.	3 lbs. 5 ozs. to 4 lbs. 6 ozs.	2 lbs. 3 ozs. to 3 lbs. 4 ozs.	2 lbs. 3 ozs. to 3 lbs. 4 ozs.	less than 2 lbs. 3 ozs.		
All Ages	129,730	119,498	6,329	1,749	786	679	689			
10-14	132	112	12	3	1	3	1			
15-19	10,176	9,008	677	231	116	76	68			
20-24	37,110	34,259	1,769	486	209	184	203			
25-29	39,238	36,426	1,781	441	202	195	193			
30-34	26,907	24,884	1,267	322	156	137	141			
35-39	13,128	12,050	659	207	79	69	64			
40-44	2,886	2,621	152	57	23	15	18			
45-49	146	133	11	2	0	0	0			
50-54	0	0	0	0	0	0	0			
55-59	1	1	0	0	0	0	0			
Unknown	6	4	1	0	0	0	0	1		

Table 16. INFANT AND MATERNAL DEATHS BY COUNTY; NUMBERS AND RATES: 1958

County	Births	Infant Deaths Number	Infant Deaths Rate	Maternal Deaths Number	Maternal Deaths Rate
STATE TOTAL	129,730	3,160	24.4	54	0.4
Atlantic	3,012	90	29.9	1	0.3
Bergen	15,472	268	17.3	6	0.4
Burlington	4,489	121	27.0	2	0.4
Camden	8,906	202	22.7	..	..
Cape May	938	29	30.9	..	..
Cumberland	2,416	84	34.8	5	2.1
Essex	19,890	591	29.7	14	0.7
Gloucester	3,066	77	25.1	..	..
Hudson	13,167	343	26.0	6	0.5
Hunterdon	1,080	23	21.3	..	..
Mercer	5,627	155	27.5	1	0.2
Middlesex	9,832	208	21.2	3	0.3
Monmouth	7,761	171	22.0	3	0.4
Morris	5,654	123	21.8	2	0.4
Ocean	2,263	61	27.0	2	0.9
Passaic	8,580	206	24.0	4	0.5
Salem	1,328	39	29.4	2	1.5
Somerset	3,056	54	17.7	..	..
Sussex	1,046	28	26.8	..	..
Union	10,368	247	23.8	3	0.3
Warren	1,310	27	20.6	..	..
State Institutions	29	1	34.5	..	..
Military Posts	440	12	27.3	..	..

Note: Rates are per 1,000 live births.

Table 17a. MATERNAL DEATHS BY SPECIFIC CAUSE: 1958

TOTAL MATERNAL DEATHS	54
Total complications of pregnancy (640-649)	21
Toxemias of pregnancy (642)	10
Ectopic pregnancy (645)	10
Other complications arising from pregnancy (648)	1
Total abortions (650-652)	12
Abortion without mention of sepsis or toxemia (650)	5
Abortion with sepsis (651)	6
Abortion with toxemia, without mention of sepsis (652)	1
Total deliveries with specified complications (670-678)	13
Delivery complicated by placenta previa or antepartum hemorrhage (670)	2
Delivery complicated by other postpartum hemorrhage (672)	5
Delivery complicated by disproportion or malposition of fetus (674)	2
Delivery complicated by prolonged labor of other origin (675)	2
Delivery with other trauma (677)	2
Total complications of the puerperium (680-689)	8
Sepsis of childbirth and the puerperium (681)	1
Puerperal pulmonary embolism (684)	2
Puerperal eclampsia (685)	4
Other and unspecified complications of the puerperium (688)	1

NOTE: Cause numbers are those of International List, 7th revision.

Table 17b. MATERNAL DEATHS BY CAUSE, COLOR AND AGE GROUPS: 1958

Cause and Color	Age Group		
	All Ages	15-24	25-44
ALL CAUSES (640-689)	54	13	41
White	36	7	29
Nonwhite	18	6	12
Complications of pregnancy (640-649)	21	3	18
White	11	..	11
Nonwhite	10	3	7
Abortion (650-652)	12	5	7
White	6	2	4
Nonwhite	6	3	3
Delivery with specified complications (670-678)	13	2	11
White	11	2	9
Nonwhite	2	..	2
Complications of the puerperium (680-689) ...	8	3	5
White	8	3	5
Nonwhite .....	..	..	..

NOTE: Cause numbers are those of International List, 7th revision.

Table 20. DEATHS BY CAUSE BY SEX AND AGE GROUPS, NEW JERSEY, 1968—Continued
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE OF DEATH	Total	Male	Female	Age Groups by Years												
					<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown					
114.	Mixed malarial infections																
116.	Duckwater fever																
117.	Other unspecified forms of malaria																
120.	Recurrent falcipar malaria																
121.	Leishmaniasis																
122.	Trypanosomiasis																
123.	Other protozoal diseases																
124.	Other trachiasis																
125.	Hydatid disease																
126.	Other cestode infestation																
129.	Paritiasis																
130.	Ankylostomiasis																
131.	Infestation with worms of other, mixed and unspecified type																
132.	Dermatophytosis																
133.	Actinomycosis																
134.	Other fungal infections																
135.	Scabies																
137.	Oedocercosis																
138.	Other arthropod infestation																
140.	Malignant neoplasm of parasitic diseases																
141.	Malignant neoplasm of tonsils																
143.	Malignant neoplasm of salivary gland																
144.	Malignant neoplasm of floor of mouth																
145.	Malignant neoplasm of other parts of mouth and mouth unspecified																
146.	Malignant neoplasm of nasopharynx																
148.	Malignant neoplasm of hypopharynx																
150.	Malignant neoplasm of pharynx, unspecified																
151.	Malignant neoplasm of esophagus																
152.	Malignant neoplasm of small intestine, including duodenum																
153.	Malignant neoplasm of large intestine, except appendix																
154.	Malignant neoplasm of rectum																
155.	Malignant neoplasm of primary site																
159.	Malignant neoplasm of liver (secondary and unspecified)																
158.	Malignant neoplasm of pancreas																
160.	Malignant neoplasm of peritoneum																
157.	Malignant neoplasm of unspecified digestive organs																
160.	Malignant neoplasm of nose, nasal cavities, middle ear and accessory sinuses																

161.	Malignant neoplasm of larynx	98	84	14													35	58											
162.	Malignant neoplasm of trachea and of bronchus and lung specified as primary	831	477	54													21	260	240										
163.	Malignant neoplasm of lung, unspecified as to whether primary or secondary																												
164.	Malignant neoplasm of mediastinum	861	750	133													1	20	395	436									
165.	Malignant neoplasm of thoracic organs (secondary)	26	11	4													1	2	7	5									
170.	Malignant neoplasm of breast	278	9	98													128	452	368										
171.	Malignant neoplasm of cervix uteri	24																											
172.	Malignant neoplasm of corpus uteri	42															2	18	22	1									
173.	Malignant neoplasm of other parts of uterus, including choriocarcinoma																												
174.	Malignant neoplasm of uterus, unspecified	91															12	117	153										
175.	Malignant neoplasm of ovary	313															32	165	110										
176.	Malignant neoplasm of other and unspecified female genital organs	33															4	10	19	1									
177.	Malignant neoplasm of prostate	477															4	85	393	3									
178.	Malignant neoplasm of testis	17																											
179.	Malignant neoplasm of kidney and unspecified male genital organs	186	111	74													9	71	90	2									
180.	Malignant neoplasm of bladder and other urinary organs	310	283	86													16	20	10	10									
181.	Malignant neoplasm of bladder and other urinary organs	61	32	21													2	9	11	8									
182.	Malignant neoplasm of skin	53	31	24																									
191.	Other malignant neoplasm of skin	219	159	96													10	10	8	2									
193.	Malignant neoplasm of brain and other parts of nervous system	45	9	38													42	117	28	1									
194.	Malignant neoplasm of thyroid gland	18	13	5																									
195.	Malignant neoplasm of other endocrine glands	9	4	5																									
196.	Malignant neoplasm of bone (including jaw bone)	40	27	13													1	6	7	5									
197.	Malignant neoplasm of bone and cartilage	22	8	14																									
198.	Secondary and unspecified malignant neoplasm of lymph nodes	350	162	164													4	31	128	103									
199.	Malignant neoplasm of other and unspecified sites	180	121	78													2	6	7	24	90	64	78						
200.	Lymphosarcoma and reticulosarcoma	184	69	66													1	9	53	33	31	1	1						
201.	Gonorrheal disease, unspecified (venereal)	87	40	37													2	1											
202.	Other venereal diseases (syphilis)	57	40	37																									
203.	Leukemia and aleukemia	400	222	187													27	33	13	47	133	1	1	1	1				
204.	Mycosis fungoides	2	2																										
210.	Benign neoplasm of buccal cavity and pharynx	1																											
211.	Benign neoplasm of respiratory system	1																											
212.	Benign neoplasm of respiratory system	16	5	10																									
213.	Benign neoplasm of breast	3																											
214.	Uterine fibroma	14																											
215.	Other benign neoplasm of uterus	3																											
216.	Benign neoplasm of other female genital organs	10																											
217.	Benign neoplasm of other female genital organs	1																											
218.	Benign neoplasm of male genital organs	1																											
219.	Benign neoplasm of kidney and other urinary organs	1																											
220.	Benign neoplasm of skin	1																											
221.	Other benign neoplasm of skin	1																											
222.	Other benign neoplasm of brain and other parts of nervous system	49	20	29																									
223.	Benign neoplasm of endocrine glands	18	6	12																									
224.	Benign neoplasm of bone and cartilage	1																											
225.	Other benign neoplasm of muscular and connective tissue	1																											
227.	Other benign neoplasm of muscular and connective tissue	2	2																										
228.	Hemangioma and lymphangioma	0	4																										

Table 20. DEATHS BY CAUSE BY SEX AND AGE GROUPS, NEW JERSEY, 1958--Continued
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE OF DEATH	Total	Sex		Age Groups by Years											
			Male	Female	<1	1-4	5-14					15-24	25-44	45-64	65+ Unknown	
							5-9	10-14	15-19	20-24	25-29					
353	Other diseases of brain	13	8	5							1	2				
354	Motor disease and muscular atrophy	46	29	17							2	3				
357	Other diseases of spinal cord	4	3	1							1	2				
359	Facial paralysis	6	5	1							2	3				
362	Trigeminal neuralgia	1														
363	Sciatic neuritis	1														
364	Polyneuropitis and polyneuritis	1														
365	Erythredema polyneuriticum	1														
366	Other diseases of peripheral nerves	6	5	1							3	3				
367	Other unspecified forms of neuritis and neuritis	1														
368	Other diseases of peripheral nerves except autonomic	1														
369	Diseases of peripheral nerves except autonomic	1														
370	Conductivitis and ophthalmic nervous system	1														
371	Biopharitis	1														
372	Biopharitis and ophthalmic	1														
373	Iritis (eye)	1														
374	Keratitis	1														
375	Choroiditis	1														
376	Other inflammation of visual tract	1														
377	Inflammation of optic nerve and retina	1														
378	Inflammation of lachrymal glands and ducts	1														
379	Other inflammatory diseases of eye	1														
380	Refractive errors	1														
381	Other diseases of eye	1														
382	Cornial ulcer	1														
383	Pharyngitis	1														
384	Strabismus	1														
385	Cataract	1														
386	Attachment of retina	1														
387	Other diseases of eye	1														
389	Blindness	1														
390	Otitis externa	1														
391	Otitis media without mention of mastoiditis	1														
392	Otitis media with mastoiditis	1														
393	Mastoiditis without otitis media	1														
394	Other inflammatory diseases of otitis media	1														
395	Otitis media with mastoiditis	1														
396	Otitis media with mastoiditis	1														
397	Deaf mutism of ear and mastoid process	1														
398	Other deafness	1														
400	Rheumatic fever without mention of heart involvement	1														
401	Rheumatic fever with heart involvement	1														
402	Chorea	1														
410	Diseases of mitral valve	261	95	166												
411	Diseases of aortic valve specified as rheumatic	68	47	21												
412	Diseases of tricuspid valve	1														
413	Diseases of pulmonary valve specified as rheumatic	45	21	24												
414	Diseases of pulmonary valve specified as nonrheumatic	22	11	11												
415	Other myocarditis specified as rheumatic	411	187	224												
416	Other heart disease specified as rheumatic	1828	1117	711												
419	Arteriosclerotic heart disease, including coronary disease	1928	1117	811												
421	Chronic endocarditis nonrheumatic	2721	1345	1376												
430	Acute and subacute endocarditis	12	12	0												
431	Acute myocarditis not specified as rheumatic	14	7	7												
432	Acute pericarditis specified as nonrheumatic	194	65	129												
433	Chronic pericarditis	395	223	172												
434	Functional unspecified diseases of heart	1														
440	Essential benign hypertension with heart disease	1														
441	Essential malignant hypertension with heart disease	1														
442	Hypertensive heart disease without mention of heart disease	521	271	250												
443	Other specified hypertensive heart disease	1902	703	1199												
444	Essential benign hypertension	191	49	142												
445	Essential malignant hypertension	83	39	44												
446	Hypertension with arteriosclerosis	25	16	9												
447	Other hypertension without mention of heart disease	17	6	11												
448	Other hypertensive heart disease	1688	672	1016												
451	Aortic aneurysm, except of heart and aorta	243	163	80												
452	Other aneurysm, except of heart and aorta	11	7	4												
453	Peripheral vascular disease	18	10	8												
454	Other diseases of arteries	2	1	1												
455	Gangrene of unspecified cause	2														
456	Other diseases of arteries	22	6	16												
457	Varicose veins of lower extremities	5	2	3												
458	Other diseases of lower extremities	5	2	3												
459	Phlebitis and thrombophlebitis of lower extremities	10	6	4												
463	Phlebitis and thrombophlebitis of other sites	33	14	19												
464	Phlebitis and thrombophlebitis of other sites	32	18	14												
465	Pulmonary embolism and infarction	103	56	47												
466	Other diseases of circulatory system	12	6	6												
467	Other diseases of circulatory system	42	21	21												
468	Certain diseases of lymph nodes and lymph channels	1														
470	Acute nasopharyngitis (common cold)	1														
471	Acute sinusitis	1														
472	Acute parotitis	1														
473	Acute pharyngitis	3	1	2												
474	Acute laryngitis and tracheitis	6	3	3												
475	Acute upper respiratory infection of multiple or unspecified sites	15	10	5												
480	Influenza with pneumonia	20	10	10												
481	Influenza with other respiratory manifestations and influenza	10	6	4												
482	Influenza with digestive manifestations, but without respiratory symptoms	1														
483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	1														
490	Lobar pneumonia	332	201	131												
491	Bronchopneumonia	1156	619	537												

Table 20. DEATHS BY CAUSE BY SEX AND AGE GROUPE, NEW JERSEY, 1948—Continued
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE OF DEATH	Total	Sex		Age Groups by Years						
			Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
492.	Primary atypical pneumonia.....	173	112	81	37	14	3	4	10	60	65
493.	Pneumonia, other.....	184	121	102	14	10	1	1	10	10	12
494.	Acute bronchitis.....	57	32	25	15	8	1	1	2	9	22
502.	Chronic bronchitis.....	29	16	13	4	0	1	2	7	9	9
516.	Hypertrophic colitis.....	61	50	11	1	0	1	2	14	45	1
511.	Peritonitis associated with adenoids.....	1	1	0	1	0	0	0	0	0	0
512.	Chronic pharyngitis and tonsillitis.....	1	1	0	1	0	0	0	0	0	0
513.	Chronic sinusitis.....	1	1	0	1	0	0	0	0	0	0
514.	Dehydration of nasal septum.....	3	1	2	1	0	0	2	1	0	0
515.	Nasal polyp.....	3	1	2	1	0	0	2	1	0	0
519.	Chronic laryngitis.....	7	4	3	1	0	0	1	1	0	0
520.	Other diseases of upper respiratory tract.....	7	4	3	1	0	0	1	1	0	0
518.	Pleurisy.....	10	4	6	0	0	0	0	0	0	0
519.	Spontaneous pneumothorax.....	14	8	6	0	0	0	0	0	0	0
521.	Abscess of lung.....	14	8	6	0	0	0	0	0	0	0
522.	Alveolar congestion and hypostasis.....	10	6	4	0	0	0	0	0	0	0
523.	Other diseases due to silicosis and silicates (occupational).....	36	16	20	1	1	1	1	2	4	4
524.	Other specific pneumoconiosis and pulmonary fibrosis of occupational origin.....	43	10	33	1	1	1	3	10	21	31
525.	Other chronic interstitial pneumonias.....	81	31	50	1	1	1	1	1	8	33
526.	Other chronic interstitial pneumonias.....	101	75	26	1	1	1	1	1	13	17
527.	Dental caries of lung and pleural cavity.....	77	48	29	1	1	1	1	1	1	1
530.	Abscesses of supporting structures of teeth.....	218	187	31	4	1	1	1	4	35	61
531.	Other inflammatory diseases of teeth.....	1	1	0	1	0	0	0	0	0	0
532.	Periodontitis.....	211	167	44	1	1	1	1	1	4	24
533.	Other diseases of occlusion, eruption and tooth.....	167	99	68	1	1	1	1	1	9	83
534.	Tooth caries.....	10	4	6	1	1	1	1	1	1	1
535.	Other diseases of supporting structures.....	16	5	11	1	1	1	1	1	1	1
536.	Stomatitis.....	12	8	4	1	1	1	1	1	1	1
537.	Other diseases of buccal cavity.....	70	43	27	1	1	1	1	1	1	1
538.	Dysentery.....	4	2	2	1	1	1	1	1	1	1
539.	Dysentery of salivary glands.....	4	2	2	1	1	1	1	1	1	1
540.	Ulcer of stomach.....	2	1	1	1	1	1	1	1	1	1
541.	Ulcer of duodenum.....	12	12	0	1	1	1	1	1	1	1
542.	Enterocolitis.....	215	187	28	1	1	1	1	1	1	1
543.	Gastrojejunal ulcer.....	211	167	44	1	1	1	1	1	1	1
544.	Other diseases of abdominalis stomach.....	10	4	6	1	1	1	1	1	1	1
545.	Other diseases of stomach.....	16	5	11	1	1	1	1	1	1	1
546.	Acute appendicitis.....	12	8	4	1	1	1	1	1	1	1
547.	Other diseases of appendix.....	70	43	27	1	1	1	1	1	1	1
552.	Other diseases of appendix.....	6	4	2	1	1	1	1	1	1	1
553.	Hernia of abdominal cavity without mention of obstruction.....	44	22	22	11	1	1	1	2	19	11
561.	Hernia of abdominal cavity with obstruction.....	60	31	29	4	1	1	1	2	21	61
570.	Unspecified cholecystitis.....	184	117	67	1	1	1	1	1	1	1
571.	Chronic enteritis and colitis (except ulcerative colitis, 572).....	183	117	66	1	1	1	1	1	1	1
572.	Chronic enteritis and ulcerative colitis.....	131	62	81	39	1	1	1	1	18	41
573.	Functional disorders of intestines.....	60	35	25	1	1	1	1	1	1	1
574.	Anal fissure and fistula.....	1	1	0	1	0	0	0	0	0	0
575.	Hemorrhoids.....	24	12	12	1	1	1	1	1	1	1
577.	Peritonsillar adhesion.....	2	1	1	1	0	0	0	0	0	0
578.	Other diseases of intestines and peritoneum.....	64	39	25	3	2	2	2	2	20	39
580.	Acute and subacute yellow atrophy of liver.....	21	14	7	1	1	1	1	1	6	10
581.	Sclerosis of liver tissue and liver abscess.....	88	60	28	2	1	1	1	1	13	40
582.	Other diseases of liver.....	24	12	12	1	1	1	1	1	1	1
584.	Cholelithiasis.....	138	88	50	1	1	1	1	1	4	16
585.	Cholecystitis and cholangitis, without mention of calculi.....	42	20	22	1	1	1	1	1	2	10
586.	Other diseases of gallbladder and biliary ducts.....	59	31	28	1	1	1	1	1	1	1
589.	Other diseases of pancreas.....	33	17	16	1	1	1	1	1	1	1
590.	Acute nephritis.....	23	14	9	1	1	1	1	1	1	1
591.	Nephritis with edema, including nephrosis.....	353	182	171	1	1	1	1	1	16	70
592.	Chronic nephritis.....	69	36	33	1	1	1	1	1	1	1
593.	Nephritis not specified as acute or chronic.....	233	120	113	2	2	2	2	2	2	2
600.	Infection of kidney.....	15	10	5	3	1	1	1	1	1	1
601.	Hydronephrosis.....	602	319	283	1	1	1	1	1	1	1
602.	Calculi of kidney and ureter.....	51	29	22	1	1	1	1	1	1	1
608.	Other diseases of kidney and ureter.....	21	13	8	1	1	1	1	1	1	1
605.	Calculi of other parts of urinary system.....	11	6	5	1	1	1	1	1	1	1
606.	Other diseases of bladder.....	7	4	3	1	1	1	1	1	1	1
607.	Urethritis (nonvenereal).....	1	1	0	1	0	0	0	0	0	0
608.	Stricture of urethra.....	1	1	0	1	0	0	0	0	0	0
610.	Hyperplasia of prostate.....	164	154	10	1	1	1	1	1	1	1
611.	Prostatitis.....	1	1	0	1	0	0	0	0	0	0
612.	Other diseases of prostate.....	1	1	0	1	0	0	0	0	0	0
613.	Hydrocele and epididymitis.....	1	1	0	1	0	0	0	0	0	0
615.	Redundant prepuce and phimosis.....	1	1	0	1	0	0	0	0	0	0
617.	Other diseases of male genital organs.....	1	1	0	1	0	0	0	0	0	0
620.	Chronic cystitis.....	1	1	0	1	0	0	0	0	0	0
621.	Other diseases of urethra.....	1	1	0	1	0	0	0	0	0	0
622.	Acute salpingitis and oophoritis.....	1	1	0	1	0	0	0	0	0	0
623.	Chronic salpingitis and oophoritis.....	5	5	0	1	1	1	1	1	1	1
624.	Salpingitis and oophoritis, ununited.....	1	1	0	1	0	0	0	0	0	0
625.	Other diseases of ovary and uterus.....	1	1	0	1	0	0	0	0	0	0
626.	Dyspareunia.....	1	1	0	1	0	0	0	0	0	0
630.	Infective disease of uterus, vagina and vulva.....	1	1	0	1	0	0	0	0	0	0
631.	Uterovaginal prolapse.....	1	1	0	1	0	0	0	0	0	0
632.	Malposition of uterus.....	1	1	0	1	0	0	0	0	0	0
633.	Other diseases of uterus.....	1	1	0	1	0	0	0	0	0	0
634.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
635.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
636.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
637.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
638.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
639.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
640.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
641.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
642.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
643.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
644.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
645.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
646.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
647.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
648.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
649.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
650.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
651.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
652.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
653.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
654.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
655.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
656.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
657.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
658.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
659.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0
660.	Menstrual disorders.....	1	1	0	1	0	0	0	0	0	0

Table 20. DEATHS BY CAUSE BY SEX AND AGE GROUPS, NEW JERSEY: 1936.—Continued
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE OF DEATH	Total	Male	Female	Age Groups by Years					
					<1	1-14	15-24	25-44	45-64	65 + Unknown
637.	Other diseases of female genital organs									
641.	Ovitis and hydrosalpinx of pregnancy									
642.	Toxemia of genito-urinary tract during pregnancy									
643.	Placenta previa	10	10							
644.	Other hemorrhage of pregnancy									
648.	Azotemic pregnancy									
649.	Accomp. pregnancy	10	10							
647.	Pregnancy with retention of fetus in uterus									
648.	Other complications of fetus in uterus									
650.	Pregnancy associated with other pregnancy	1	1							
651.	Abortion without mention of sepsis or toxemia	5	5							
652.	Abortion with sepsis	6	6							
653.	Abortion without mention of sepsis	1	1							
654.	Delivery without mention of sepsis	5	5							
655.	Delivery with sepsis	6	6							
672.	Delivery complicated by placenta previa	2	2							
673.	Delivery complicated by retained placenta	2	2							
674.	Delivery complicated by other postpartum hemorrhage	6	6							
675.	Delivery complicated by abnormality of bony pelvis	5	5							
676.	Delivery complicated by abnormality of multiposition of fetus	2	2							
677.	Delivery complicated by prolonged labor, without mention of laceration	2	2							
677.	Laceration with laceration of perineum, without mention of other	2	2							
677.	Delivery with other toxemia									
678.	Delivery with other complications of childbirth	2	2							
681.	Esperal urinary infection without other sepsis									
682.	Esperal pyelitis and the puerperium	1	1							
683.	Pyrexia of unknown origin	1	1							
684.	Pyrexial pulmonary embolism	2	2							
687.	Esperal eclampsia	2	2							
687.	Cerebral toxemia of puerperal toxemia	4	4							
688.	Other and unspecified toxemia in the puerperium	1	1							
689.	Other and unspecified toxemia of the puerperium	5	5							
691.	Call and carbuncle	1	1							
692.	Other cellulitis of finger and toe	5	5							
693.	Other cellulitis and abscess, with Erysipelas	15	15							
694.	Acute lymphadenitis	20	20							
698.	Impetigo	1	1							
699.	Impetigo	1	1							
697.	Molluscum contagiosum	1	1							
698.	Other local infections of skin and subcutaneous tissue	2	2							
700.	Seborrheic dermatitis	1	1							
702.	Occupational dermatitis	1	1							

International List No.	CAUSE OF DEATH	Total	Male	Female	Age Groups by Years					
					<1	1-14	15-24	25-44	45-64	65 + Unknown
703.	Other dermatitis	3	3							
704.	Pemphigus	11	11							
705.	Erythematous conditions	1	1							
707.	Lichen planus	1	1							
708.	Pruritus and related conditions	1	1							
709.	Pruritus and related conditions	6	6							
710.	Corns and callosities	3	3							
711.	Other hypertrophic and atrophic conditions of skin	1	1							
712.	Diseases of nails	1	1							
713.	Diseases of hair and hair follicles	1	1							
714.	Diseases of sweat and sebaceous glands	2	2							
716.	Chronic ulcer of skin	10	10							
720.	Acute arthritis due to pyogenic organisms	1	1							
721.	Acute arthralgia due to pyogenic organisms	16	16							
722.	Rheumatoid arthritis and allied conditions	33	33							
723.	Gonorrheic arthritis and allied conditions	12	12							
724.	Gonorrheic arthritis and allied conditions	6	6							
725.	Arthritis, unspecified	1	1							
726.	Arthritis, unspecified	6	6							
729.	Muscular rheumatism	2	2							
727.	Rheumatism unspecified	9	9							
730.	Rheumatism unspecified	5	5							
732.	Osteitis deformans	1	1							
733.	Osteoarthritis	9	9							
734.	Other diseases of bone	1	1							
735.	Displacement of bone	1	1							
736.	Displacement of intervertebral disc	1	1							
739.	Affectio of sacro-ligament joint	4	4							
737.	Ankylosis of joint	1	1							
738.	Other diseases of joint	1	1							
740.	Synovitis, bursitis, and tenosynovitis without mention of occupational origin	2	2							
742.	Synovitis, bursitis, and tenosynovitis of occupational origin	1	1							
743.	Infective myositis and other inflammatory diseases of tendon and	2	2							
744.	Other diseases of muscle, tendon and fascia	15	15							
745.	Curvature of spine	7	7							
746.	Flat foot	3	3							
747.	Clubfoot	1	1							
748.	Clubfoot	1	1							
749.	Other deformities	24	24							
750.	Monstrosity	15	15							
751.	Spina bifida and meningocele	84	84							
752.	Other congenital malformations of nervous system and sense organs	29	29							
753.	Other congenital malformations of circulatory system	324	324							
755.	Clav. palate and harelip	15	15							
756.	Other congenital malformations of head and face	11	11							
757.	Other congenital malformations of genito-urinary system	69	69							
758.	Other congenital malformations of bone and joint	9	9							
759.	Other and unspecified congenital malformations, not elsewhere classified	8	8							
760.	Infective meningitis	67	67							
761.	Infective meningitis	44	44							
762.	Other birth injury at birth	91	91							
763.	Other birth injury	183	183							

Table 22. MALE DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, NEW JERSEY: 1948
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years							
			<1	1-4	5-14	15-24	25-44	45-64	65 +	Unknown
001-20000	ALL CAUSES	31897	1787	227	250	305	1076	9033	17382	...
001-138	Infectious and parasitic diseases	481	12	11	9	7	71	189	182	...
001-38	Tuberculosis	385	2	2	2	2	40	132	117	...
010-010	Syphilis and other forms	28	1	2	1	1	7	9	4	...
020-020	Typhoid fever	60	1	1	1	1	3	23	33	...
048	Cholera	7	1	1	1	1	1	1	2	...
040-052	Septicemia, all forms	7	1	1	1	1	1	1	2	...
050-052	Diphtheria and streptococcal sore throat	5	1	1	1	1	1	1	2	...
065	Whooping cough	7	1	1	1	1	1	1	2	...
067	Meningococcal infections	7	1	1	1	1	1	1	2	...
078	Scarlet fever	4	1	1	1	1	1	1	2	...
084	Smallpox	4	1	1	1	1	1	1	2	...
088	Measles	3	1	1	1	1	1	1	2	...
100-106	Typhus and other rickettsial diseases	3	1	1	1	1	1	1	2	...
110-117	Malaria	1	1	1	1	1	1	1	2	...
140-280	Neoplasms	78	0	0	4	9	12	20	24	...
140-280	Residual (240-245, 250-254, 270-277, 280-289)	430	0	7	1	2	12	52	74	...
200-200	Atherosclerosis	168	2	1	2	3	10	15	34	...
200-203	Residual (204-209)	47	1	1	1	1	4	7	23	...
300-320	Alcoholism	78	2	1	1	1	4	7	11	...
320-324	Alcohol and unspecified neoplasms	2420	2	2	16	20	116	868	1874	...
340	Nonmalignant neoplasms	384	14	4	9	15	40	65	89	...
400-468	Diabetes mellitus	587	0	7	4	2	41	170	245	...
400-472	Residual (404-409, 411, 432, 044, 049, 052-054)	168	0	7	1	2	12	52	74	...
410-412	Arteriosclerosis	41	1	1	1	1	4	7	11	...
420-422	Chronic degenerative heart disease	301	1	1	1	1	4	7	11	...
430-434	Other diseases of heart disease	12354	1	1	1	1	4	7	11	...
440-443	Hypertension with heart disease	239	1	1	1	1	4	7	11	...
444-447	Residual (440-446, 460-468)	813	1	1	1	1	4	7	11	...

470-527	Diseases of the respiratory system	1489	45	20	32	75	413	776	...
480-483	Influenza	5	1	1	1	1	1	1	...
484-487	Residual (484-487)	925	126	37	6	68	236	463	...
500-502	Streptococcal infections	98	8	7	4	2	15	163	245
500-502	Residual (470-475, 510-527)	433	8	7	4	2	15	163	245
530-537	Diseases of the digestive system	1466	43	11	10	4	167	623	616
540, 541	Ulcer of stomach and duodenum	929	1	1	1	1	32	153	20
560-567	Intestinal obstruction and hernia	157	17	1	2	1	10	43	80
568, 569, 570	Gastritis	185	17	1	2	1	10	43	80
543, 571, 572	Diarrhea of newborn	114	21	6	1	1	8	12	29
581	Cirrhosis of liver	601	2	1	1	1	7	30	43
582-587	Residual (582-587)	382	2	1	1	1	7	30	43
590-597	Diseases of the genitourinary system	223	5	3	5	22	84	104	...
590-594	Nephritis and nephrosis	669	3	3	4	11	70	147	371
610	Hyperplasia of prostate	249	1	2	4	9	49	70	114
640-680	Residual (640-680)	104	1	1	1	1	1	1	...
600-718	Diseases of the skin and cellular tissue	20	1	1	1	1	1	1	...
700-709	Diseases of the bones and organs of movement	53	3	2	1	3	6	16	23
720-749	Congenital malformations	1215	2	1	2	1	1	2	...
750-769	Birth injuries, postnatal asphyxia and atelectasis	570	570	570	570	570	570	570	...
760-763	Infections of the newborn	104	104	104	104	104	104	104	...
763-768	Other diseases peculiar to early infancy and immaturely unqualified and ill-defined conditions	541	541	541	541	541	541	541	...
769-776	Accidents, poisonings and violence	1013	42	107	218	483	664	487	...
8500-8590	Motor vehicle accidents	555	42	12	43	131	143	110	116
8590-8592	All other accidents except falls	606	37	41	83	55	134	158	88
8590-8592	Falls	312	8	7	6	8	31	87	176
8590-8594	Suicide	394	2	3	18	80	188	99	...
8900-8953	Homicide	80	2	2	8	6	21	20	...
9304-9309	Police intervention, execution and operations of war	6	1	1	1	1	1	1	...

Table 22. FEMALE DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, NEW JERSEY: 1958
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years								
			<1	1-4	5-14	15-24	25-44	45-64	65 +	Unknown	
001-2000	ALL CAUSES	20053	1773	217	150	170	13654	6870	16508	86 +	Unknown
001-138	Infective and parasitic diseases	244	12	8	12	8	51	68	85		
001-005	Tuberculosis, all forms	109	1	1	1	1	3	33	32	4	
001-006	Tuberculosis, other forms	1	1	1	1	1	1	1	1	1	
020-029	Syphilis	30	1	1	3	2	2	14	16		
040	Typhoid fever	30	1	1	3	2	2	14	16		
048	Cholera	1	1	1	1	1	1	1	1		
043-048	Dysentery, all forms	1	1	1	1	1	1	1	1		
060-061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1		
060-058	Diphtheria	1	1	1	1	1	1	1	1		
056	Whooping cough	1	1	1	1	1	1	1	1		
057	Meningococcal infections	16	6	3	1	1	3	3	1		
058	Scarlet fever	4	1	1	1	1	1	1	1		
084	Scarlet polymyelitis	2	1	1	1	1	1	1	1		
085	Measles	2	1	1	1	1	1	1	1		
100-106	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1		
110-117	Malaria	1	1	1	1	1	1	1	1		
140-230	Residual (690-699, 641, 642, 644, 649, 692-694, 695-697, 683-685, 688-696, 720-193)	66	4	28	36	9	13	14	25		
140-205	Neoplasms	4000	8	28	86	9	12	1038	2438		
210-230	Malignant neoplasms	4801	1	27	20	29	418	2471	1711		
240-250	Benign and unspecified neoplasms	108	7	1	7	2	54	407	27		
260	Diabetes mellitus	823	5	4	4	1	34	245	529		
290-299	Residual (240-245, 246-254, 270-277, 280-289)	708	5	4	2	2	1	203	478		
300-293	Diseases of the blood and blood-forming organs	119	5	4	2	2	4	9	11		
300-299	Anemias	61	1	1	2	2	3	4	5		
300-320	Mental, mental, and personality disorders	16	1	2	2	3	4	2	10		
300-300	Diseases of the nervous system	23	1	2	2	3	4	2	10		
300-308	Vascular lesions affecting central nervous system	314	15	17	8	13	80	608	2319		
330-334	Nonmeningococcal meningitis	2038	2	2	4	5	100	549	1382		
340	Encephalitis	168	8	12	5	16	28	49	82		
400-468	Rheumatic fever	1172	6	6	16	16	28	49	82		
400-402	Chronic rheumatic heart disease	11	2	2	1	1	1	1	1		
400-416	Chronic mitral heart disease	11	2	2	1	1	1	1	1		
400-422	Chronic aortic heart disease	8027	1	1	1	1	84	250	877		
400-432	Hypertension without mention of heart	238	1	3	2	2	11	148	7018		
440-443	Hypertension with mention of heart	1450	1	1	3	2	20	57	176		
444-447	Residual (450-465, 460-468)	223	1	1	1	1	18	53	153		
470-527	Diseases of the respiratory system	963	110	51	94	17	48	108	542		
480-483	Pneumonia	743	100	40	17	13	23	117	423		
500-502	Bronchitis	49	7	1	1	1	4	5	24		
530-557	Residual (470-475, 510-527)	146	6	3	4	3	11	39	80		
550-553	Diseases of the digestive system	142	36	15	8	5	95	226	463		
550-563	Diseases of the mouth and duodenum	67	1	1	1	1	3	13	48		
560, 561, 570	Intestinal obstruction and hernia	20	2	1	1	1	1	3	8		
543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	145	6	1	1	1	6	37	94		
581	Residual (530-539, 542, 544, 545, 575-578, 580, 582-587)	132	18	10	3	2	11	30	59		
590-637	Diseases of the genito-urinary system	257	1	1	1	1	1	14	146		
610	Nephritis and nephrosis	262	10	3	3	3	17	63	169		
610-680	Residual (600-609, 611-617, 620-626, 630-637)	496	3	4	1	1	13	57	108		
690-716	Pregnancy, childbirth and the puerperium	170	7	2	2	1	24	47	98		
720-749	Diseases of the skin and cellular tissue	74	2	1	1	1	9	12	20		
750-776	Diseases of the bones and organs of movement	51	2	1	1	1	1	1	3		
780-776	Certain diseases of early infancy	348	23	14	17	7	18	16	0		
780-702	Birth injuries, postnatal asphyxia and atelectasis	885	23	14	17	7	18	16	0		
783-708	Infections of the newborn	431	43	41	41	41	41	41	41		
780-795	Other diseases peculiar to early infancy and immaturity	64	64	64	64	64	64	64	64		
800-830	Symptoms, senility and ill-defined conditions	300	300	300	300	300	300	300	300		
830-838	Accidents, poisonings and violence	887	47	37	39	50	140	175	400		
830-835	Motor vehicle accidents	190	3	8	21	23	29	42	44		
830-836	All other accidents except falls	201	39	24	14	8	27	49	40		
830-834	Falls	344	2	2	2	2	8	8	26		
830-833	Suicide	13	1	1	1	1	1	1	1		
830-832	Police intervention, execution and operations of war	133	3	3	2	10	18	15	4		

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, CAMDEN COUNTY, 1955
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Male		Female		Age Groups by Years									
			Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown				
001-2000	ALL CAUSES	3704	1964	1710	202	37	24	35	200	1030	2178	.....	.....	.....	.....	.....
001-108	Infective and parasitic diseases	50	32	18	2	1	2	2	0	11	23	.....	.....	.....	.....	.....
001-108	Tuberculosis of respiratory system	20	14	6	1	1	1	1	0	2	11	.....	.....	.....	.....	.....
010-013	Typhoid and other forms	25	16	9	1	1	1	1	0	2	13	.....	.....	.....	.....	.....
020-029	Syphilis and congenital syphilis	7	5	2	1	1	1	1	0	2	2	.....	.....	.....	.....	.....
040	Typhoid fever	8	5	3	1	1	1	1	0	2	3	.....	.....	.....	.....	.....
043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
045-048	Zyrantery, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
050-051	Diphtheria, diphtheritic fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
065	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
067	Meningococcal infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
068	Legionnaires' disease	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
069	Scarlet fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
084	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
085	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
100-108	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
110-117	Scarlet fever (001-068, 084, 042, 044, 040, 052-054, 059-074, 081-082, 080-090, 120-125)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
140-280	Neoplasms	9	5	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
140-205	Malignant neoplasms	693	352	320	1	2	2	4	1	2	1	.....	.....	.....	.....	.....
200-200	Benign and unspecified neoplasms	683	352	320	4	4	4	4	4	4	4	.....	.....	.....	.....	.....
240-250	Diseases of endocrine system, metabolic and nutritional diseases	15	9	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
280	Diabetes mellitus	85	43	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
290-290	Residual (240-245, 250-254, 270-277, 280-289)	56	25	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
300-300	Diseases of the blood and blood-forming organs	12	18	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
300-320	Leukemia	19	9	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
320-320	Residual (301-309)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
330-330	Mental, psychoneurotic and personality diseases	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
330-330	Diseases of the nervous system and sense organs	372	162	217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
340-340	Accidental lesions affecting central nervous system	342	145	217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
340-340	Nonaccidental lesions affecting central nervous system	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
400-408	Diseases of the circulatory system (370-380, 390-398)	27	14	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
400-402	Cardiac rheumatic fever	1787	980	801	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
400-402	Cardiac rheumatic heart disease	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
420-422	Arteriosclerosis, arteriosclerotic degenerative heart disease	49	14	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
430-434	Other diseases of heart disease	1336	717	619	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
440-444	Hypertension with heart disease	56	27	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
444-447	Hypertension without mention of heart disease	267	144	123	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	Residual (450-405, 400-408)	90	52	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

470-527	Diseases of the respiratory system	170	104	75	23	9	21	21	12	37	14	.....	.....	.....	.....	.....
480-482	Influenza	4	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
490-493	Pneumonia	110	65	54	1	1	1	1	1	1	1	.....	.....	.....	.....	.....
500-502	Bronchitis	11	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
500-502	Residual (470-475, 510-527)	145	77	68	6	2	2	2	2	2	2	.....	.....	.....	.....	.....
540-541	Clonus of stomach and duodenum	16	13	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
550-557	Appendicitis	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
560-561, 570	Intestinal obstruction and hernia	10	7	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
541, 571, 572	Gastritis, duodenitis, enteritis and colitis, except circumscribed of liver	14	5	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
581	Residual (530-539, 542, 544, 545, 575-578, 680-582-587)	38	28	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
590-627	Diseases of the circulatory system	11	13	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
600-611	Myocardial infarction	32	17	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
610	Hypertension of proximate	18	11	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
640-660	Pregnancy, childbirth and the puerperium	5	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
670-716	Diseases of the bones and organs of movement	8	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
700-700	Congenital malformations	53	24	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
700-770	Certain diseases of early infancy	128	81	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
700-782	Birth injuries, postnatal asphyxia and atelectasis	67	4	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
783-788	Other diseases peculiar to early infancy and immature	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
789-776	turty unqualified	52	32	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
780-706	Symptoms, senility and ill-defined conditions	15	3	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
800-830	Accidents, poisonings and violence	41	32	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
830-832	Motor vehicle accidents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
850-850	All other accidents except falls	35	24	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
890-890	Falls	36	16	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
890-890	Accidents, poisonings and violence	24	21	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
890-890	Home accidents	5	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
890-890	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, EAST ORANGE: 1935
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years						
			<1	1-4	5-14	15-24	25-44	45-64	65+
001-2000	ALL CAUSES	907	42	8	1	6	47	240	040
001-138	Infective and parasitic diseases	8	8	8	8	8	8	8	8
001-008	Tuberculosis of respiratory system	4	4	4	4	4	4	4	4
010-019	Tuberculosis, other forms	1	1	1	1	1	1	1	1
020-029	Septicemia and its sequelae	1	1	1	1	1	1	1	1
030-039	Cholera	1	1	1	1	1	1	1	1
040-049	Cholera, infantile	1	1	1	1	1	1	1	1
045-048	Dysentery, all forms	1	1	1	1	1	1	1	1
050-051	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1
055	Diphtheria	1	1	1	1	1	1	1	1
060-069	Whooping cough	1	1	1	1	1	1	1	1
070	Measles	1	1	1	1	1	1	1	1
075	Scarlet fever and streptococcal infections	1	1	1	1	1	1	1	1
080	Plague	1	1	1	1	1	1	1	1
085	Acute poliomyelitis	1	1	1	1	1	1	1	1
090	Smallpox	1	1	1	1	1	1	1	1
100-109	Measles	1	1	1	1	1	1	1	1
110-117	Malaria and other rickettsial diseases	1	1	1	1	1	1	1	1
110-117	Residual (030-039, 041, 042, 044, 046, 052-054, 059-074, 081-083, 090-090, 120-128)	3	3	3	3	3	3	3	3
140-200	Neoplasms	183	87	88	88	88	88	88	88
140-200	Residual (140-200)	183	87	88	88	88	88	88	88
210-239	Heart and blood vessels	14	11	11	11	11	11	11	11
240-289	Allegic, endocrine system, metabolic and nutritional diseases	3	3	3	3	3	3	3	3
200	Diabetes mellitus	14	11	11	11	11	11	11	11
290-300	Diseases of the eye, ear, nose and throat	3	3	3	3	3	3	3	3
290-293	Amebiasis	3	3	3	3	3	3	3	3
300-309	Residual (291-299)	3	3	3	3	3	3	3	3
300-309	Mental, psychoneurotic and personality disorders	112	43	60	60	60	60	60	60
300-309	Neurotic system and nervous system	104	40	64	64	64	64	64	64
300-309	Nonmeningeal meningitis	7	7	7	7	7	7	7	7
310-319	Residual (311-315, 330-337, 330-339, 370-389, 800-308)	408	201	211	211	211	211	211	211
400-465	Diseases of the circulatory system	6	6	6	6	6	6	6	6
410-410	Chronic rheumatic heart disease	6	6	6	6	6	6	6	6
420-422	Atherosclerotic and degenerative heart disease	410	228	182	182	182	182	182	182
430-434	Other diseases of heart	10	10	10	10	10	10	10	10
440-444	Hypertension with heart disease	30	11	24	24	24	24	24	24
440-444	Residual (450-456, 460-465)	20	12	12	12	12	12	12	12

470-527	Diseases of the respiratory system	25	10	10	10	10	10	10	10
480-483	Influenza	10	10	10	10	10	10	10	10
490-493	Pneumonia	10	10	10	10	10	10	10	10
500-502	Residual (470-475, 510-527)	11	8	8	8	8	8	8	8
530-587	Diseases of the digestive system	43	19	24	24	24	24	24	24
540, 541	Ulcer of stomach and duodenum	6	2	3	3	3	3	3	3
550-567	Alimentary tract infection and hernia	8	3	5	5	5	5	5	5
570-572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	6	1	4	4	4	4	4	4
581	Cirrhosis of liver	15	11	11	11	11	11	11	11
580-599	Diseases of the genito-urinary system	10	2	8	8	8	8	8	8
600-601	Nephritis and nephrosis	17	8	6	6	6	6	6	6
610	Hyperplasia of prostate gland	4	1	1	1	1	1	1	1
640-649	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1
720-749	Diseases of the skin and cellular tissue	8	5	5	5	5	5	5	5
750-799	Congenital malformations	32	23	6	6	6	6	6	6
800-804	Birth injuries, postnatal asphyxia and atelectasis	17	11	6	6	6	6	6	6
810-819	Other diseases peculiar to early infancy and infancy	15	12	12	12	12	12	12	12
820-829	Sturdy unqualified and ill-defined conditions	3	3	3	3	3	3	3	3
830-839	Accidents, poisonings and violence	32	20	20	20	20	20	20	20
840-850	Motor vehicle accidents	12	9	9	9	9	9	9	9
860-869	All other accidents except falls	6	4	4	4	4	4	4	4
870-879	Falls	22	13	6	6	6	6	6	6
880-889	Suicide	11	6	6	6	6	6	6	6
890-899	Homicide	2	2	2	2	2	2	2	2
900-909	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, NEWARK, 1945
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years							
			Male			Female				
			<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
091-15000	ALL CAUSES	5065	306	69	30	51	448	1542	2014	.....
091-150	Infective and parasitic diseases	93	72	21	2	1	21	32	52	.....
001-008	Diseases of the respiratory system	66	57	9	2	1	1	27	21	.....
010-010	Tuberculosis, other	2	1	1	.....	.....	.....	.....	.....	.....
030-020	Syphilis and its sequelae	11	8	3	.....	.....	.....	.....	.....	.....
040	Typhoid fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
045-048	Dysentery .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
050, 051	Diphtheria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
055	Scarlet fever and streptococcal sore throat .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
060	Whooping cough .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
065	Pneumococcal infections .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
080	Acute poliomyelitis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
085	Measles .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
100-108	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
110-117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
110-239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
200-200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
200-203	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
300-320	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
330-333	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
340	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
400-408	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
410-411	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
420-421	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
430-431	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
441-447	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
470-527	Diseases of the respiratory system	130	131	65	30	15	4	16	51	75
480-483	Influenza	4	4	.....	.....	.....	.....	.....	.....	.....
490-493	Whooping cough	9	6	3	1	1	.....	.....	.....	.....
500-502	Readjust (470-478, 510-527)	49	40	9	2	1	1	3	20	22
530-537	Diseases of the digestive system	227	132	75	8	4	1	41	69	82
540, 541	Ulcer of stomach and duodenum	10	9	4	.....	.....	.....	.....	.....	.....
550, 561, 570	Intestinal obstruction and hernia	28	17	11	2	1	.....	.....	.....	.....
573, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	17	9	8	.....	.....	.....	.....	.....	.....
581	Chronic diarrhoea of newborn	17	9	8	.....	.....	.....	.....	.....	.....
582-587	Headaches (530-539, 542, 544, 545, 573-578, 580, 582-587)	30	10	20	1	1	.....	.....	.....	.....
590-593	Diseases of the genito-urinary system	91	52	39	1	1	2	18	30	43
610	Nephritis and nephrosis	16	10	21	1	1	.....	.....	.....	.....
610-659	.....	37	19	18	.....	.....	.....	.....	.....	.....
640-659	Pregnancy, childbirth and the puerperium	7	.....	7	.....	.....	.....	.....	.....	.....
690-710	Diseases of the skin and cellular tissue	10	2	8	.....	.....	.....	.....	.....	.....
720-749	Diseases of the bones and organs of movement	48	23	25	8	1	1	2	2	3
700-776	Certain diseases of early infancy	235	136	110	255	.....	.....	.....	.....	.....
760-762	Birth injuries, postnatal asphyxia and atelectasis	133	66	67	133	.....	.....	.....	.....	.....
763-768	Infections of the newborn	11	2	9	11	.....	.....	.....	.....	.....
768-776	Other diseases of the newborn	8	68	48	111	.....	.....	.....	.....	.....
780-785	Other diseases similar to early infancy and immaturity	11	5	3	.....	.....	.....	.....	.....	.....
780-785	Symptoms, senility and ill-defined conditions	8	5	3	.....	.....	.....	.....	.....	.....
780-785	Accidents, poisonings and violence	390	208	122	19	14	21	67	74	113
780-785	Motor vehicle accidents	68	48	10	6	8	12	13	14	.....
780-785	All other accidents except falls	77	47	30	10	5	6	11	17	10
800-800	Falls	112	67	65	3	2	1	1	18	16
800-800	Suicide	68	30	31	.....	.....	.....	.....	.....	.....
800-800	Police intervention, execution and operations of war	46	5	.....	.....	.....	.....	.....	.....	.....

Table 92. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, UNION CITY, 1968
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years								
			Male			Female					
			<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown		
001-2600	ALL CAUSES	637	345	292	29	1	2	1	35	502	376
001-188	Infective and parasitic diseases	6	4	2	1	1	1	1	2	2	1
001-189	Tuberculosis of respiratory system	3	2	1	1	1	1	1	1	1	1
010-011	Tuberculosis of other forms	3	2	1	1	1	1	1	1	1	1
020-029	Syphilis and its sequelae	1	1	1	1	1	1	1	1	1	1
040	Typhoid fever	1	1	1	1	1	1	1	1	1	1
041	Cholera	1	1	1	1	1	1	1	1	1	1
042	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1
050-051	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1
052	Diphtheria	1	1	1	1	1	1	1	1	1	1
066	Whooping cough	1	1	1	1	1	1	1	1	1	1
057	Meningococcal infections	1	1	1	1	1	1	1	1	1	1
067	Scarlet fever	1	1	1	1	1	1	1	1	1	1
680	Smallpox	1	1	1	1	1	1	1	1	1	1
084	Measles	1	1	1	1	1	1	1	1	1	1
085	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1
100-108	Residual (690-699, 701, 945, 944, 949, 952-954, 959-974, 981-983, 986-996, 999-998)	2	1	1	1	1	1	1	1	1	1
110-117	Neoplasms	182	60	52	5	8	47	67	1	1	1
140-269	Malignant neoplasms	108	38	32	2	7	44	57	1	1	1
200-209	Benign neoplasms and unspecified neoplasms	4	2	2	1	1	3	1	1	1	1
210-239	Allergic, toxicologic system, metabolic and nutritional diseases	22	5	17	1	2	5	15	2	5	15
240-269	Diabetes mellitus	22	5	17	1	2	5	15	2	5	15
290	Residual (240-243, 260-264, 270-277, 280-289)	22	5	17	1	2	5	15	2	5	15
290-299	Diseases of the blood and blood-forming organs	1	1	1	1	1	1	1	1	1	1
291-293	Anemia	1	1	1	1	1	1	1	1	1	1
300-309	Residual (291-296)	1	1	1	1	1	1	1	1	1	1
310-329	Mental, psychoneurotic and personality disorders	55	10	32	1	1	1	1	1	1	1
330-339	Alcoholism	51	18	33	1	1	1	1	1	1	1
339-343	Nonalcoholic mental diseases	4	2	2	1	1	1	1	1	1	1
340	Residual (341-345, 350-357, 360-369, 370-389, 390-399)	321	184	137	2	10	86	223	2	2	2
400-409	Chronic fevers	10	4	6	1	1	1	1	1	1	1
410-416	Chronic fevers, infectious disease	10	4	6	1	1	1	1	1	1	1
420-422	Other diseases of heart	263	158	105	2	6	69	188	2	2	2
430-434	Arteriosclerosis and degenerative heart disease	23	11	12	1	1	1	1	1	1	1
444-447	Hypertension with heart disease	23	11	12	1	1	1	1	1	1	1
448-449	Hypertension without mention of heart disease	15	8	7	1	1	1	1	1	1	1
449-449	Residual (430-436, 440-448)	15	8	7	1	1	1	1	1	1	1

470-527	Diseases of the respiratory system	23	18	10	1	1	1	1	1	1	1
480-483	Influenza	1	1	1	1	1	1	1	1	1	1
490-493	Pneumonia	20	11	9	1	1	1	1	1	1	1
500-502	Bronchitis	2	2	1	1	1	1	1	1	1	1
580-587	Diseases of the digestive system	30	17	18	1	1	1	1	1	1	1
610, 611	Ulcer of stomach and duodenum	2	2	1	1	1	1	1	1	1	1
550-553	Appendicitis	3	2	1	1	1	1	1	1	1	1
560-561, 570	Intestinal obstruction and hernia	5	3	2	1	1	1	1	1	1	1
543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except chronic	8	5	3	1	1	1	1	1	1	1
681	Cirrhosis of liver	11	6	5	1	1	1	1	1	1	1
682-687	Residual (680-639, 642, 644, 645, 673-678, 680, 682-687)	11	6	5	1	1	1	1	1	1	1
690-697	Diseases of the genitourinary system	6	2	4	1	1	1	1	1	1	1
698-699	Neuritis	2	1	1	1	1	1	1	1	1	1
810	Hyperplasia of prostate	2	2	1	1	1	1	1	1	1	1
610-699	Residual (600-609, 611-617, 620-626, 630-637)	5	4	1	1	1	1	1	1	1	1
600-719	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1
720-729	Diseases of the birth and cellular development	1	1	1	1	1	1	1	1	1	1
750-759	Congenital malformations	6	4	2	1	1	1	1	1	1	1
760-778	Certain diseases of early infancy	13	9	4	1	1	1	1	1	1	1
780-782	Birth injuries, postnatal asphyxia and atelectasis	4	2	2	1	1	1	1	1	1	1
763-768	Infections of the newborn	2	2	1	1	1	1	1	1	1	1
769-770	Infantile convulsions, early infancy and infantile tetany	1	1	1	1	1	1	1	1	1	1
780-785	Symptoms, sequelae and ill-defined conditions	7	5	2	1	1	1	1	1	1	1
800-809	Accidents, poisonings and violence	24	15	9	1	1	1	1	1	1	1
810-855	Motor vehicle accidents	24	15	9	1	1	1	1	1	1	1
860-869	All other accidents except falls	8	0	2	1	1	1	1	1	1	1
870-894	Falls	0	0	0	1	1	1	1	1	1	1
890-894	Home accidents	0	0	0	1	1	1	1	1	1	1
895-898	Homicide	0	0	0	1	1	1	1	1	1	1
899-904	Police intervention, execution and operations of war	0	0	0	1	1	1	1	1	1	1

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, HUNTERDON COUNTY: 1933
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Year		Female	Male	Total
			Age Groups by Year				
			<1	1-4				5-14	15-24	25-44	45-64	65+ Unknown
001-0909	ALL CAUSES	622	26	4	283	337	622
001-138	Infective and parasitic diseases	7	1	0	2	5	7
001-008	Tuberculosis, other forms	3	1	0	2	1	3
010-019	Septicemia and its sequelae	1	1	0	0	1	1
020-029	Cholera	1	1	0	0	1	1
040	Dysentery, all forms	1	1	0	0	1	1
045-048	Scarlet fever and streptococcal sore throat	1	1	0	0	1	1
050, 001	Diphtheria	1	1	0	0	1	1
055	Whooping cough	1	1	0	0	1	1
060	Meningococcal infections	1	1	0	0	1	1
065	Plague	1	1	0	0	1	1
080	Acute poliomyelitis	1	1	0	0	1	1
084	Smallpox	1	1	0	0	1	1
100-107	Typhus and other febrile diseases	1	1	0	0	1	1
110-117	Malaria	1	1	0	0	1	1
140-290	Residual (030-030, 041, 042, 044, 040, 052-054, 059-074, 081-083, 086-090, 120-138)	2	1	0	2	37	103
140-205	Nephritis	102	37	2	65	37	102
210-239	Arteriosclerosis and degenerative diseases	16	4	12	4	4	16
240-289	Allergic, endocrine system, metabolic and nutritional diseases	13	4	11	4	4	13
290-209	Diabetes mellitus	1	1	0	0	1	1
200-203	Diseases of the blood and blood-forming organs	1	1	0	0	1	1
300-330	Anemias	1	1	0	0	1	1
330-334	Residual (291-296)	82	44	38	44	38	82
340	Mental, psychoneurotic and personality disorders	7	1	2	1	1	7
400-402	Vascular lesions affecting central nervous system	3	1	1	1	1	3
410-412	Nonmeningococcal meningitis	2	2	0	0	2	2
420-422	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	209	177	122	177	122	209
430-433	Rheumatic fever, circulatory system	1	1	0	0	1	1
440-442	Chronic rheumatic heart disease	1	1	0	0	1	1
440-410	Arteriosclerotic and degenerative heart disease	258	148	30	3	148	258
450-452	Other diseases of heart	25	8	17	8	17	25
460-463	Myocarditis	1	1	0	0	1	1
470-477	Myocardium without mention of heart	2	1	2	1	2	2
481	Residual (450-456, 460-468)	2	1	1	1	1	2
480-483	Diseases of the respiratory system	15	8	14	8	14	15
490-493	Influenza	18	6	10	6	10	18
500-504	Pneumonia	11	7	4	7	4	11
500-602	Residual (470-475, 510-527)	18	10	2	10	2	18
530-537	Diseases of the digestive system	3	1	2	1	2	3
540, 541	Ulcer of stomach and duodenum	2	2	0	0	2	2
550-553	Obstruction of the alimentary canal	2	2	0	0	2	2
560-561, 570	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	2	2	0	0	2	2
573, 574, 575	Cholera of liver	4	1	3	1	3	4
581	Residual (580-580, 542, 544, 545, 573-578, 582-587)	1	4	1	4	1	1
590-597	Diseases of the genito-urinary system	5	4	1	4	1	5
590-504	Nephritis and nephrosis	2	3	1	3	1	2
610	Hyperplasia of the prostate gland	1	1	0	0	1	1
600-609	Pregnancy, childbirth and the puerperium	15	10	5	10	5	15
640-680	Diseases of the skin and cellular tissue	4	4	1	4	1	4
700-716	Diseases of the bones and organs of movement	15	10	5	10	5	15
720-749	Congenital malformations of infancy	5	2	3	2	3	5
750-769	Birth injuries, postnatal asphyxia and atelectasis	3	2	1	2	1	3
780-788	Infections of the newborn	7	0	1	7	0	7
790-776	Other diseases peculiar to early infancy and infancy	1	1	0	1	0	1
790-795	Scrub typhus	1	1	0	0	1	1
800-800	Accidents, poisonings and ill-defined conditions	41	27	14	27	14	41
810-833	Motor vehicle accidents	13	9	5	9	5	13
830-834	Accidents, poisonings and ill-defined conditions	13	12	1	12	1	13
840-850	All other accidents except falls	6	3	3	3	3	6
850-850	Falls	9	4	5	4	5	9
850-850	Self-inflicted injuries	1	1	0	1	0	1
850-850	Suicide	1	1	0	1	0	1
850-850	Homicide	1	1	0	1	0	1
850-850	Force intervention, execution and operations of war	1	1	0	1	0	1

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, MIDDLESEX COUNTY, 1898
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Male		Age Groups by Years							
			Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
001-2000	ALL CAUSES	3128	1763	1363	208	27	30	20	212	880	1740	...
001-138	Infective and parasitic diseases	32	20	12	1	2	1	1	5	13	0	...
001-008	Tuberculosis, other primary system	12	9	3	1	1	1	1	2	4	0	...
010-019	Tuberculosis, other secondary system	2	1	1	1	1	1	1	1	1	1	...
020-029	Syphilis and its sequelae	3	1	2	1	1	1	1	1	1	1	...
030	Cerebrovascular diseases	...	...	...	...	...	...	...	...	...	...	...
040	Dysentery, all forms	...	...	...	...	...	...	...	...	...	...	...
045-048	Scarlet fever and streptococcal sore throat	...	...	...	...	...	...	...	...	...	...	...
050-001	Diphtheria	...	...	...	...	...	...	...	...	...	...	...
055	Whooping cough	...	...	...	...	...	...	...	...	...	...	...
060	Measles	...	...	...	...	...	...	...	...	...	...	...
065	Measles, other	...	...	...	...	...	...	...	...	...	...	...
070	Measles, other	...	...	...	...	...	...	...	...	...	...	...
075	Measles, other	...	...	...	...	...	...	...	...	...	...	...
080	Measles, other	...	...	...	...	...	...	...	...	...	...	...
085	Measles, other	...	...	...	...	...	...	...	...	...	...	...
090	Measles, other	...	...	...	...	...	...	...	...	...	...	...
095	Measles, other	...	...	...	...	...	...	...	...	...	...	...
100-108	Malaria and other rickettsial diseases	...	...	...	...	...	...	...	...	...	...	...
110-117	Residual (000-039, 041, 042, 044, 046, 052-084, 089-074, 081-083, 089-006, 120-183)	...	...	...	...	...	...	...	...	...	...	...
140-280	Nephritis	...	...	...	...	...	...	...	...	...	...	...
140-205	Nephritis	...	...	...	...	...	...	...	...	...	...	...
210-250	Bone and unossified tissue	...	...	...	...	...	...	...	...	...	...	...
240-280	Allergic, endocrine system, metabolic and nutritional diseases	...	...	...	...	...	...	...	...	...	...	...
290	Diseases of the blood and blood-forming organs	...	...	...	...	...	...	...	...	...	...	...
200-200	Residual (290-294, 270-277, 280-289)	...	...	...	...	...	...	...	...	...	...	...
200-203	Anemias	...	...	...	...	...	...	...	...	...	...	...
300-320	Diseases of the circulatory system	...	...	...	...	...	...	...	...	...	...	...
330-380	Diseases of the heart	...	...	...	...	...	...	...	...	...	...	...
380-384	Chronic rheumatic heart disease	...	...	...	...	...	...	...	...	...	...	...
340	Chronic rheumatic heart disease	...	...	...	...	...	...	...	...	...	...	...
400-468	Arteriosclerotic and degenerative heart disease	...	...	...	...	...	...	...	...	...	...	...
410-416	Arteriosclerotic and degenerative heart disease	...	...	...	...	...	...	...	...	...	...	...
420-421	Arteriosclerotic and degenerative heart disease	...	...	...	...	...	...	...	...	...	...	...
430-443	Hypertension with or without heart disease	...	...	...	...	...	...	...	...	...	...	...
444-447	Hypertension with or without heart disease	...	...	...	...	...	...	...	...	...	...	...
444-447	Residual (430-436, 430-438)	...	...	...	...	...	...	...	...	...	...	...

470-527	Diseases of the respiratory system	139	79	60	23	8	4	2	8	27	67	...
480-483	Influenza	98	64	34	1	10	1	1	9	17	46	...
490-493	Pneumonia	37	17	20	1	1	1	1	1	1	5	...
500-502	Residual (470-475, 510-527)	139	79	60	23	8	4	2	8	27	67	...
530-587	Diseases of the digestive system	3	3	0	1	1	1	1	1	1	1	...
540-541	Ulcer of stomach and duodenum	3	3	0	1	1	1	1	1	1	1	...
550-559	Intestinal obstruction and hernia	17	8	9	3	1	1	1	1	1	1	...
560-561, 570	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	16	7	9	2	2	1	1	1	1	1	...
543, 571, 572	Diarrhoea of newborn	59	37	22	18	2	1	1	10	23	21	...
581	Residual (530-539, 542, 544, 545, 573-578, 580-582, 587)	139	79	60	23	8	4	2	8	27	67	...
600-637	Diseases of the genito-urinary system	28	19	9	1	1	1	1	1	1	1	...
630-634	Nephritis and nephrosis	50	37	13	1	1	1	1	1	1	1	...
610	Residual (600-604, 606-607, 630-637)	28	19	9	1	1	1	1	1	1	1	...
640-680	Diseases of the skin and cellular tissue	24	10	14	8	1	1	1	2	8	13	...
690-710	Diseases of the bones and organs of movement	3	2	1	1	1	1	1	1	1	1	...
720-740	Congenital malformations	3	1	2	1	1	1	1	1	1	1	...
750-760	Other diseases of infancy	138	81	57	138	3	4	1	5	2	2	...
760-770	Other diseases of infancy	138	81	57	138	3	4	1	5	2	2	...
780-788	Infections of the newborn	16	8	8	15	1	1	1	1	1	1	...
708-718	Other diseases peculiar to early infancy and lunacy	16	8	8	15	1	1	1	1	1	1	...
780-785	Other diseases peculiar to early infancy and lunacy	16	8	8	15	1	1	1	1	1	1	...
785-788	Other diseases peculiar to early infancy and lunacy	16	8	8	15	1	1	1	1	1	1	...
790-795	Symptoms, senility and ill-defined conditions	92	57	35	92	1	1	1	1	1	1	...
800-805	Symptoms, senility and ill-defined conditions	92	57	35	92	1	1	1	1	1	1	...
810-820	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
820-825	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
830-835	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
840-845	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
850-855	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
860-865	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
870-875	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
880-885	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
890-895	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
900-905	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
910-915	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
920-925	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
930-935	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
940-945	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
950-955	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
960-965	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
970-975	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
980-985	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...
990-995	Motor vehicle accidents	173	140	33	3	5	12	15	44	53	43	...

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, OCEAN COUNTY, 1958
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years								
			Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
ALL CAUSES											
001-8900	Infective and parasitic diseases	1100	645	461	01	8	8	11	43	281	004
001-133	Tuberculosis of respiratory system	6	5	1				1			2
001-008	Syphilis, other forms	3	3								1
020-020	Cholera	1		1							1
043	Dysentery, all forms	1									1
043-048	Scarlet fever and streptococcal sore throat	1									1
060-061	Whooping cough	1									1
055	Meningococcal infections	1									1
067	Plague	1									1
083	Scarlet fever	1									1
084	Scarlet polyomyelitis	1									1
085	Measles	1									1
100-108	Typhus and other rickettsial diseases	1									1
110-117	Malaria	1									1
140-220	Residual (590-639, 641, 642, 644, 646, 649, 652-653)	177	98	79							1
140-303	Neoplasms	174	96	78							102
140-305	Malignant neoplasms	3	2	1							1
240-289	Benign and unspecified neoplasms	171	94	77							101
200	Diabetes mellitus	32	12	20							2
300-309	Diseases of the blood and blood-forming organs	4	1	3							1
300-303	Residual (240-245, 250-254, 270-277, 280-289)	1		1							1
300-328	Mental, psychoneurotic and personality disorders	2	2								1
300-338	Diseases of the nervous system and sense organs	121	56	65							1
300-334	Nervous system	120	55	65							1
340	Residual (294-299)	1		1							1
400-468	Diseases of the circulatory system	21	10	11							1
400-402	Chronic rheumatic heart disease	540	230	310							4
420-422	Coronary atherosclerosis and degenerative heart disease	1		1							1
430-434	Other diseases of heart disease	445	285	160							6
440-443	Hypertension with heart disease	4	3	1							1
444-447	Hypertension without mention of heart	48	38	10							4
	Residual (450-456, 400-408)	29	14	15							28
470-527	Diseases of the respiratory system	45	27	18							20
480-483	Influenza	30	20	10							10
490-493	Pneumonia	10	10								7
500-502	Bronchitis	15	15								1
530-537	Residual (470-473, 481-487)	8	8								7
540-541	Ulcer of stomach and duodenum	1		1							1
550-553	Appendicitis	1		1							1
560-561, 570	Intestinal obstruction and hernia	3	3								3
543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except chronic of liver	5	4	1							1
581	Residual (530-539, 542, 544, 545, 573-575, 580, 582-587)	19	10	9							8
590-687	Diseases of the genito-urinary system	7	4	3							2
600-604	Neuritis and neuralgia	23	16	7							13
610	Hypertrophy of prostate	6	6								6
640-680	Residual (600-606, 611-617, 620-623, 630-637)	8	5	3							1
690-718	Pregnancy, childbirth and the puerperium	2	2								2
700-709	Diseases of the skin and cellular tissue	1	1								1
720-729	Congenital malformations of organs of movement	15	10	5							3
700-776	Certain diseases of early infancy	38	20	18							2
700-782	Birth injuries, postnatal asphyxia and atelectasis	15	9	6							6
700-788	Infections of the newborn	3	2	1							1
700-776	Other diseases of newborn similar to early infancy and infancy	18	9	9							18
780-785	Symptoms, sensility and ill-defined conditions	54	40	14							1
800-809	Accidents, poisonings and violence	20	16	4							13
810-829	Motor vehicle accidents	18	13	5							4
830-839	All other accidents except falls	2	3								6
840-849	Falls	6	2	4							5
850-859	Stupeor	8	8								8
860-869	Police intervention, execution and operations of war	2	1	1							1
880-899	Residual	2	1	1							1

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, CLIFTON: 1938
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years							
			<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
001-8000	ALL CAUSES	650	20	1	5	0	56	192	884	.....
001-135	Infective and parasitic diseases	0	.....	.....	.....	.....	.....	.....	.....	.....
001-008	Tuberculosis of respiratory system	4	.....	.....	.....	.....	.....	.....	.....	.....
010-019	Tuberculosis, other forms	2	.....	.....	.....	.....	.....	.....	.....	.....
020-029	Typhus and its sequelae	1	.....	.....	.....	.....	.....	.....	.....	.....
030-039	Cholera	1	.....	.....	.....	.....	.....	.....	.....	.....
043-048	Dysentery, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....
050-051	Scarlet fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....
055-059	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....
065-067	Meningococcal infections	.....	.....	.....	.....	.....	.....	.....	.....	.....
070-079	Septic polyomyelitis	.....	.....	.....	.....	.....	.....	.....	.....	.....
080-084	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....
100-108	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....
110-117	Malaria	.....	.....	.....	.....	.....	.....	.....	.....	.....
120-129	Residual (890-899, 911, 912, 944, 949, 952-954, 959-969)	1	.....	.....	.....	.....	.....	.....	.....	.....
140-230	Neoplasms	133	.....	.....	.....	.....	.....	.....	.....	.....
140-205	Malignant neoplasms	123	.....	.....	.....	.....	.....	.....	.....	.....
210-239	Benign and unspecified neoplasms	6	.....	.....	.....	.....	.....	.....	.....	.....
240-280	Allergic, endocrine system, metabolic and nutritional diseases	1	.....	.....	.....	.....	.....	.....	.....	.....
200	Diabetes mellitus	19	.....	.....	.....	.....	.....	.....	.....	.....
290-299	Diseases of the blood and blood-forming organs	14	.....	.....	.....	.....	.....	.....	.....	.....
300-320	hemias (301-309)	5	.....	.....	.....	.....	.....	.....	.....	.....
300-320	Mental, psychoneurotic and personality diseases	7	.....	.....	.....	.....	.....	.....	.....	.....
330-398	Diseases of the nervous system and sense organs	70	.....	.....	.....	.....	.....	.....	.....	.....
390-394	Vascular lesions affecting central nervous system	72	.....	.....	.....	.....	.....	.....	.....	.....
340	Nonmeningococcal meningitis	3	.....	.....	.....	.....	.....	.....	.....	.....
400-468	Diseases of the circulatory system	29	.....	.....	.....	.....	.....	.....	.....	.....
400-402	Rheumatic fever	11	.....	.....	.....	.....	.....	.....	.....	.....
410-410	Chronic rheumatic heart disease	11	.....	.....	.....	.....	.....	.....	.....	.....
420-424	Arteriosclerotic and degenerative heart disease	223	.....	.....	.....	.....	.....	.....	.....	.....
430-442	Myocardial infarction	3	.....	.....	.....	.....	.....	.....	.....	.....
440-443	Hypertension with heart disease	17	.....	.....	.....	.....	.....	.....	.....	.....
444-447	Hypertension without mention of heart	14	.....	.....	.....	.....	.....	.....	.....	.....
450-456	Residual (450-456, 490-498)	20	.....	.....	.....	.....	.....	.....	.....	.....
470-827	Diseases of the respiratory system	32	.....	.....	.....	.....	.....	.....	.....	.....
480-483	Influenza	15	.....	.....	.....	.....	.....	.....	.....	.....
490-493	Pneumonia	17	.....	.....	.....	.....	.....	.....	.....	.....
500-502	Bronchitis	7	.....	.....	.....	.....	.....	.....	.....	.....
580-587	Diseases of the larynx (570-577, 610-627)	9	.....	.....	.....	.....	.....	.....	.....	.....
540, 541	Ulcer of stomach and duodenum	28	.....	.....	.....	.....	.....	.....	.....	.....
550-553	Appendicitis	5	.....	.....	.....	.....	.....	.....	.....	.....
560, 561, 570	Intestinal obstruction and hernia	8	.....	.....	.....	.....	.....	.....	.....	.....
583, 571, 572	Strabismus, conjunctivitis, enteritis and colitis, except strabismus of liver	4	.....	.....	.....	.....	.....	.....	.....	.....
581	Residual (580-589, 542, 544, 545, 575-578, 580, 582-587)	10	.....	.....	.....	.....	.....	.....	.....	.....
590-607	Diseases of the genitourinary system	8	.....	.....	.....	.....	.....	.....	.....	.....
590-594	Nephritis and neuritis	18	.....	.....	.....	.....	.....	.....	.....	.....
610	Hyperplasia of prostate	10	.....	.....	.....	.....	.....	.....	.....	.....
640-680	Pregnancy, childbirth and the puerperium	7	.....	.....	.....	.....	.....	.....	.....	.....
700-710	Diseases of the bones and cartilage	4	.....	.....	.....	.....	.....	.....	.....	.....
750-760	Congenital malformations	4	.....	.....	.....	.....	.....	.....	.....	.....
700-776	Certain diseases of early infancy	16	.....	.....	.....	.....	.....	.....	.....	.....
700-762	Birth injuries, postnatal asphyxia and atelectasis	10	.....	.....	.....	.....	.....	.....	.....	.....
780-786	Other diseases of the newborn	2	.....	.....	.....	.....	.....	.....	.....	.....
780-785	Other diseases of the newborn to early infancy and infancy	4	.....	.....	.....	.....	.....	.....	.....	.....
800-809	Symptoms, senility and ill-defined conditions	4	.....	.....	.....	.....	.....	.....	.....	.....
820-829	Accidents, poisonings and violence	24	.....	.....	.....	.....	.....	.....	.....	.....
830-832	Motor vehicle accidents	3	.....	.....	.....	.....	.....	.....	.....	.....
8340-8395	All other accidents except falls	10	.....	.....	.....	.....	.....	.....	.....	.....
8910-8995	Falls	4	.....	.....	.....	.....	.....	.....	.....	.....
8900-8904	Accidents, poisonings and violence	4	.....	.....	.....	.....	.....	.....	.....	.....
8900-8905	Motor vehicle accidents	3	.....	.....	.....	.....	.....	.....	.....	.....
8900-8908	Falls	7	.....	.....	.....	.....	.....	.....	.....	.....
8984-8989	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, PATTERSON: 1985
(According to the 7th Revision of the International Classification of Diseases)

International LHK No.	CAUSE GROUPS	Total	Sex		Age Groups by Years								
			Male	Female	<1	1-4	5-14	15-24			45-64	65+ Unknown	
								25-44	25-44	65+			
001-0099	ALL CAUSES	1310	1087	770	97	15	8	21	80	447	1185	85+	Unknown
001-158	Infective and parasitic diseases	28	18	10	4	8	1	1	6	10	5		
001-008	Tuberculosis of respiratory system	13	9	4	1	1	1	4	7	2	1		
010-010	Tuberculosis, other forms	2	1	1	1	1	1	1	1	1	1		
030-030	Syphilis and its sequelae	3	3	1	1	1	1	1	1	1	1		
040-040	Cholera	1	1	1	1	1	1	1	1	1	1		
045-048	Dysentery, all forms	65	65	1	1	1	1	1	1	1	1		
060, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1		
088	Diphtheria	1	1	1	1	1	1	1	1	1	1		
089	Whooping cough	1	1	1	1	1	1	1	1	1	1		
089	Measles	2	2	2	2	2	2	2	2	2	2		
089	Scarlet fever	1	1	1	1	1	1	1	1	1	1		
084	Smallpox	1	1	1	1	1	1	1	1	1	1		
084	Measles	1	1	1	1	1	1	1	1	1	1		
100-107	Malaria	1	1	1	1	1	1	1	1	1	1		
100-117	Residual (450-455, 456-458)	0	0	0	0	0	0	0	0	0	0		
140-230	Neoplasms	208	178	123	3	1	3	1	1	1	1	1	1
140-230	Malignant neoplasms	208	178	123	3	1	3	1	1	1	1	1	1
210-230	Benign and unspecified neoplasms	0	0	0	0	0	0	0	0	0	0	0	0
240-280	Alleged, endocrine system, metabolic and nutritional diseases	56	30	26	1	1	1	1	2	20	34		
280	Residual (240-243, 245-251, 270-277, 280-285)	48	24	24	1	1	1	1	2	18	28		
290-290	Anemia	9	9	2	1	1	1	1	1	2	6		
290-293	Residual (294-299)	0	0	0	0	0	0	0	0	0	0		
300-300	Diseases of the blood and blood-forming organs	182	181	1	1	1	1	1	1	1	1		
300-308	Vascular lesions affecting central nervous system	173	83	93	1	1	1	1	1	1	1		
330-334	Nonmeningococcal meningitis	12	9	3	1	1	1	1	1	1	1		
340	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	846	472	374	1	1	1	1	1	1	1		
400-088	Rheumatic fever	2	2	2	2	2	2	2	2	2	2		
400-402	Chronic rheumatic heart disease	28	15	13	1	1	1	1	1	1	1		
410-416	Arteriosclerotic and degenerative heart disease	609	382	227	1	1	1	1	1	1	1		
420-422	Other diseases of heart, disease	14	11	9	1	1	1	1	1	1	1		
440-443	Hypertension without mention of heart	92	57	35	1	1	1	1	1	1	1		
444-447	Residual (450-455, 456-458)	57	29	28	1	1	1	1	1	1	1		
470-527	Diseases of the respiratory system	104	64	40	11	4	1	1	1	1	1	23	62
480	Influenza	3	2	1	1	1	1	1	1	1	1	1	1
480-488	Pneumonia	77	43	34	1	1	1	1	1	1	1	1	1
500-502	Bronchitis	21	18	3	1	1	1	1	1	1	1	1	1
530-537	Diseases of the digestive system	93	53	40	3	1	1	1	1	1	1	1	1
540-541	Ulcer of stomach and duodenum	14	14	2	1	1	1	1	1	1	1	1	1
540-545	Intestinal obstruction and hernia	10	4	6	1	1	1	1	1	1	1	1	1
560, 561, 570	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	6	3	3	1	1	1	1	1	1	1	1	1
583, 571, 572	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	29	23	6	1	1	1	1	1	1	1	1	1
590-687	Diseases of the genito-urinary system	22	11	11	1	1	1	1	1	1	1	1	1
590-694	Nephritis and nephrosis	11	10	1	1	1	1	1	1	1	1	1	1
610	Residual (600-605, 611-617, 620-629, 630-637)	16	6	10	1	1	1	1	1	1	1	1	1
610-680	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1	1
690-716	Diseases of the skin and cellular tissue	6	2	4	1	1	1	1	1	1	1	1	1
720-710	Diseases of the bones and organs of movement	10	7	3	1	1	1	1	1	1	1	1	1
740-740	Certain diseases of early infancy	64	38	26	1	1	1	1	1	1	1	1	1
760-762	Birth injuries, postnatal asphyxia and atelectasis	27	17	10	2	1	1	1	1	1	1	1	1
768-768	Infections of the newborn	4	2	2	1	1	1	1	1	1	1	1	1
760-776	Other diseases similar to early infancy and neonatal diseases	33	19	14	3	1	1	1	1	1	1	1	1
790-795	Symptoms, senility and ill-defined conditions	8	3	5	1	1	1	1	1	1	1	1	1
830-839	Accidents, poisonings and violence	84	56	28	1	1	1	1	1	1	1	1	1
850-858	Motor vehicle accidents	18	15	3	1	1	1	1	1	1	1	1	1
860-869	All other accidents except falls	28	21	7	2	8	2	3	4	9	5	6	12
870-876	Falls	14	7	7	1	1	1	1	1	1	1	1	1
880-883	Suicide	20	12	8	1	1	1	1	1	1	1	1	1
890-898	Homicide	4	2	2	1	1	1	1	1	1	1	1	1
900-900	Forces intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, SALEM COUNTY: 1963
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years		Male	Female	Unknown
			<1	1-4				5-14	15-24	25-44	45-64	65+
ALL CAUSES							
001-8000	Infective and parasitic diseases	581	30	7	317	204	352
001-185	Tuberculosis of respiratory system	1	1	1	1	1	1
001-008	Tuberculosis of other organs	1	1	1	1	1	1
010-010	Syphilis and its sequelae	1	1	1	1	1	1
020-020	Typhoid fever	1	1	1	1	1	1
040	Dysentery	1	1	1	1	1	1
042-048	Dysentery, all forms	1	1	1	1	1	1
050-051	Scarlet fever and erythrocytic sore throat	1	1	1	1	1	1
055	Diphtheria	1	1	1	1	1	1
035	Whooping cough	1	1	1	1	1	1
065	Measles	1	1	1	1	1	1
068	Parotiditis	1	1	1	1	1	1
080	Acute poliomyelitis	1	1	1	1	1	1
084	Smallpox	1	1	1	1	1	1
085	Measles	1	1	1	1	1	1
100-108	Scabies and other ectoparasitic diseases	1	1	1	1	1	1
110-117	Scabies and other ectoparasitic diseases	1	1	1	1	1	1
110-117	Residual (630-039, 641, 642, 644, 649, 652-054, 659-074, 081-083, 089-096, 120-153)	1	1	1	1	1	1
140-230	Neoplasms	80	13	1	43	16	50
140-200	Benign neoplasms	80	13	1	43	16	50
210-230	Malignant neoplasms	80	46	40	46	40	50
240-280	Allergic, endocrine, metabolic and nutritional diseases	17	1	1	5	14	6
200	Diabetes mellitus	17	1	1	5	14	6
200-200	Diabetes mellitus	17	1	1	5	14	6
200-203	Diseases of the blood and blood-forming organs	4	1	1	2	3	6
200-203	Residual (294-296)	4	1	1	2	3	6
300-330	Mental, psychoneurotic and personality disorders	1	1	1	1	1	1
330-330	Alcoholism	1	1	1	1	1	1
330-334	Vascular lesions affecting central nervous system	77	43	31	51	31	62
340	Nonmeningeoencephal meningitis	72	42	30	42	30	62
400-402	Residual (341-345, 350-357, 360-366, 370-389, 390-398)	72	42	30	42	30	62
410-410	Rheumatic fever	204	148	116	148	116	187
410-410	Chronic rheumatic heart disease	204	148	116	148	116	187
410-410	Arterioelectric and degenerative heart disease	204	148	116	148	116	187
420-422	Other diseases of heart	204	148	116	148	116	187
440-443	Hypertension without mention of heart	12	1	1	10	9	6
444-447	Hypertension without mention of heart	12	1	1	10	9	6
444-447	Residual (450-456, 460-468)	12	1	1	10	9	6

International List No.	CAUSE GROUPS	Total	Age Groups by Years		Male	Female	Unknown
			<1	1-4				5-14	15-24	25-44	45-64	65+
Diseases of the respiratory system							
470-527	Diseases of the respiratory system	31	4	1	19	12	14
480-483	Pneumonia	31	4	1	19	12	14
480-483	Bronchitis	22	1	1	12	10	11
500-502	Residual (470-475, 510-527)	6	1	1	5	1	3
530-537	Diseases of the digestive system	26	3	2	16	10	13
530-537	Dysentery	1	1	1	1	1	1
540-543	Appendicitis	1	1	1	1	1	1
560-561, 570	Intestinal obstruction and hernia	1	1	1	1	1	1
515, 571, 573	Gastritis, duodenitis, enteritis and colitis, except chronic of newborn	8	4	2	4	5	4
581	Residual (530-539, 542, 544, 545, 575-578, 580, 582-587)	8	4	2	4	5	4
590-637	Diseases of the genito-urinary system	4	1	1	4	3	4
590-594	Nephritis and nephrosis	4	1	1	4	3	4
610	Residual (600-609, 611-617, 620-626, 630-637)	2	1	1	2	1	2
640-680	Pregnancy, childbirth and the puerperium	2	1	1	2	1	2
690-716	Diseases of the skin and cuticular tissue	1	1	1	1	1	1
720-749	Diseases of the mouth and organs of the mouth	1	1	1	1	1	1
700-710	Certain diseases of early infancy	27	16	17	16	12	17
700-762	Birth injuries, postnatal asphyxia and atelectasis	13	4	2	9	5	14
763-798	Infections of the newborn	4	2	2	2	2	4
708-776	Other diseases peculiar to early infancy and immature children	10	6	10	6	4	10
780-786	Symptoms, sequelae and ill-defined conditions	4	3	1	3	1	3
800-800	Accidents, poisonings and violence	24	17	1	17	1	17
810-830	Motor vehicle accidents	6	5	1	6	1	6
840-860	All other accidents except falls	6	5	1	6	1	6
870-885	Falls	2	1	1	2	1	2
890-894	Suicide	4	1	1	4	1	4
895-899	Police intervention, execution and operations of war	2	1	1	2	1	2
898-899	Police intervention, execution and operations of war	2	1	1	2	1	2

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, UNION COUNTY, 1988
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Male		Female		Age Groups by Years								
			1-4	5-14	15-24	25-44	45-64	65+	Unknown						
001-E099	ALL CAUSES	4885	2336	1009	247	32	40	239	1243	2011	...	...	...	...	...
001-188	Infective and parasitic diseases	37	37	20	1	2	1	2	4	20	23	...	...	...	...
010-019	Tuberculosis of respiratory system	31	31	9	2	1	1	2	4	12	15	...	...	...	...
010-020	Tuberculosis of other organs	6	6	2	1	1	1	1	1	1	1	...	...	...	...
020-029	Syphilis and its sequelae	7	4	5	1	1	1	1	1	1	1	...	...	...	...
040	Typhoid fever	7	4	5	1	1	1	1	1	1	1	...	...	...	...
043	Cholera	1	1	1	1	1	1	1	1	1	1	...	...	...	...
048	Scarlet fever	1	1	1	1	1	1	1	1	1	1	...	...	...	...
069-081	Scarlet fever and streptococcal sore throat	2	1	1	1	1	1	1	1	1	1	...	...	...	...
066	Diphtheria	1	1	1	1	1	1	1	1	1	1	...	...	...	...
087	Whooping cough	1	1	1	1	1	1	1	1	1	1	...	...	...	...
088	Streptococcal infections	2	1	1	1	1	1	1	1	1	1	...	...	...	...
089	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	...	...	...	...
084	Smallpox	1	1	1	1	1	1	1	1	1	1	...	...	...	...
085	Measles	1	1	1	1	1	1	1	1	1	1	...	...	...	...
100-108	Typhus and other tick-bite diseases	1	1	1	1	1	1	1	1	1	1	...	...	...	...
110-117	Headail (030-030, 041, 042, 044, 046, 082-084, 089-074, 081-083, 080-086, 170-185)	1	1	1	1	1	1	1	1	1	1	...	...	...	...
140-239	Neoplasms	311	8	8	2	2	2	2	2	2	2	...	...	...	...
150-205	Malignant neoplasms	440	440	440	4	4	4	4	4	4	4	...	...	...	...
210-229	Benign neoplasms	864	4	4	4	4	4	4	4	4	4	...	...	...	...
240-289	Allergic and immune system, metabolic and nutritional diseases	10	3	19	1	1	1	1	1	1	1	...	...	...	...
290	Diabetes mellitus	90	49	60	1	2	2	2	2	2	2	...	...	...	...
291-309	Endocrine system	28	28	40	1	1	1	1	1	1	1	...	...	...	...
200-200	Residual (240-243, 250-254, 270-277, 280-289)	14	10	10	1	1	1	1	1	1	1	...	...	...	...
200-203	Arteriosclerosis	9	9	3	1	1	1	1	1	1	1	...	...	...	...
300-329	Mental, psychoneurotic and personality disorders	435	293	257	3	2	2	2	2	2	2	...	...	...	...
330-339	Diseases of the nervous system and sense organs	455	215	240	3	2	2	2	2	2	2	...	...	...	...
340	Noncommunicable diseases	6	6	3	1	1	1	1	1	1	1	...	...	...	...
400-468	Residual (311-315, 330-335, 380-385, 370-380, 390-395)	33	17	18	1	2	2	2	2	2	2	...	...	...	...
470-527	Diseases of the circulatory system	1088	6	868	1	2	2	2	2	2	2	...	...	...	...
480-519	Ischemic heart disease	67	32	85	1	1	1	1	1	1	1	...	...	...	...
410-411	Arteriosclerotic heart disease	1517	904	613	1	1	1	1	1	1	1	...	...	...	...
420-421	Coronary artery disease	23	12	12	1	1	1	1	1	1	1	...	...	...	...
430-434	Other diseases of heart disease	12	12	12	1	1	1	1	1	1	1	...	...	...	...
440-443	Hypertension with heart disease	139	12	138	1	1	1	1	1	1	1	...	...	...	...
444-447	Hypertension without mention of heart disease	134	12	122	1	1	1	1	1	1	1	...	...	...	...
510-519	Residual (400-406, 460-468)	130	50	64	1	1	1	1	1	1	1	...	...	...	...
530-537	Diseases of the respiratory system	168	87	71	10	1	1	1	1	1	1	...	...	...	...
470-527	Influenza	4	4	4	1	1	1	1	1	1	1	...	...	...	...
480-483	Pneumonia	105	55	50	17	5	1	1	1	1	1	...	...	...	...
500-502	Bronchitis	14	9	5	1	1	1	1	1	1	1	...	...	...	...
530-537	Residual (470-475, 510-527)	35	23	12	1	1	1	1	1	1	1	...	...	...	...
540-541	Chronic obstructive pulmonary disease	131	97	80	2	3	3	3	3	3	3	...	...	...	...
550-563	Ulcer of stomach, duodenum	34	27	31	1	1	1	1	1	1	1	...	...	...	...
560-561, 570	Appendicitis	25	9	10	1	1	1	1	1	1	1	...	...	...	...
543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except cirrhosis of liver	10	6	11	1	1	1	1	1	1	1	...	...	...	...
581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	42	27	16	1	1	1	1	1	1	1	...	...	...	...
590-637	Diseases of the genito-urinary system	47	22	23	1	1	1	1	1	1	1	...	...	...	...
600-604	Prostatitis	70	58	38	1	1	1	1	1	1	1	...	...	...	...
610	Hyperplasia of prostate	3	3	28	1	1	1	1	1	1	1	...	...	...	...
640-689	Residual (600-600, 611-617, 620-629, 630-637)	15	13	10	1	1	1	1	1	1	1	...	...	...	...
690-719	Pregnancy, childbirth and the puerperium	3	2	3	1	1	1	1	1	1	1	...	...	...	...
720-729	Diseases of the skin and cellular tissue	5	2	3	1	1	1	1	1	1	1	...	...	...	...
730-739	Diseases of the eye and ear	69	25	34	4	4	4	4	4	4	4	...	...	...	...
740-749	Congenital malformations	171	100	71	170	1	1	1	1	1	1	...	...	...	...
750-762	Certain diseases of early infancy	96	48	37	85	1	1	1	1	1	1	...	...	...	...
760-762	Birth injuries, perinatal asphyxia and atelectasis	12	10	2	12	1	1	1	1	1	1	...	...	...	...
760-769	Infections of the newborn	74	42	32	78	1	1	1	1	1	1	...	...	...	...
770-779	Other diseases of the newborn	10	3	7	1	1	1	1	1	1	1	...	...	...	...
780-785	Other diseases of early infancy	10	3	7	1	1	1	1	1	1	1	...	...	...	...
790-795	Symptoms, senility and ill-defined conditions	177	127	50	5	3	5	3	5	3	5	...	...	...	...
E800-E899	Accidents, poisonings and violence	40	40	6	3	1	3	1	3	1	3	...	...	...	...
E900-E904	Motor vehicle accidents	44	37	7	5	3	1	5	7	13	10	...	...	...	...
E910-E915	All other accidents except falls	37	12	23	1	1	1	1	1	1	1	...	...	...	...
E920-E924	Falls	42	35	12	1	1	1	1	1	1	1	...	...	...	...
E930-E935	Fire, lightning, and other natural causes	7	1	6	1	1	1	1	1	1	1	...	...	...	...
E940-E945	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	...	...	...	...

Table 22. DEATHS BY CAUSE GROUPS BY SEX AND AGE GROUPS, MILITARY POSTS, 1938
(According to the 7th Revision of the International Classification of Diseases)

International List No.	CAUSE GROUPS	Total	Age Groups by Years								
			Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
001-3969	ALL CAUSES	20	14	6	1	1	1	2	1	8	...
001-138	Infective and parasitic diseases .....	...	...	...	...	...	...	...	...	...	...
001-008	Tuberculosis of respiratory system .....	...	...	...	...	...	...	...	...	...	...
010-019	Syphilis and its sequelae .....	...	...	...	...	...	...	...	...	...	...
020-029	Typhoid fever .....	...	...	...	...	...	...	...	...	...	...
040	Dysentery, all forms .....	...	...	...	...	...	...	...	...	...	...
045-048	Dysentery, shigellosis .....	...	...	...	...	...	...	...	...	...	...
060, 061	Scarlet fever and streptococcal sore throat .....	...	...	...	...	...	...	...	...	...	...
065	Diphtheria .....	...	...	...	...	...	...	...	...	...	...
067	Whooping cough .....	...	...	...	...	...	...	...	...	...	...
068	Streptococcal infections .....	...	...	...	...	...	...	...	...	...	...
069	Plague .....	...	...	...	...	...	...	...	...	...	...
084	Acute poliomyelitis .....	...	...	...	...	...	...	...	...	...	...
088	Smallpox .....	...	...	...	...	...	...	...	...	...	...
100-108	Typhus .....	...	...	...	...	...	...	...	...	...	...
110-117	Malaria and other rickettsial diseases .....	...	...	...	...	...	...	...	...	...	...
140-230	Residual (680-689, 041, 042, 044, 046, 052-054, 059-074, 081-085, 090-096, 120-138)	4	2	2	1	1	1	1	2	2	...
140-230	Leptospirosis	4	2	2	1	1	1	1	2	2	...
210-239	Botulism .....	...	...	...	...	...	...	...	...	...	...
240-289	Benign and unspecified neoplasms .....	...	...	...	...	...	...	...	...	...	...
280	Allergic, endocrine system, metabolic and nutritional diseases .....	...	...	...	...	...	...	...	...	...	...
290-299	Diseases of the circulatory system .....	...	...	...	...	...	...	...	...	...	...
290-200	Residual (240-249, 250-251, 270-271, 330-339) .....	...	...	...	...	...	...	...	...	...	...
290-203	Diseases of the blood and blood-forming organs .....	...	...	...	...	...	...	...	...	...	...
290-200	Anemias .....	...	...	...	...	...	...	...	...	...	...
300-350	Residual (291-299) .....	...	...	...	...	...	...	...	...	...	...
300-300	Diseases of the nervous and personality disorders .....	...	...	...	...	...	...	...	...	...	...
300-308	Alzheimer's disease .....	...	...	...	...	...	...	...	...	...	...
300-308	Nonmeningeococcal meningitis .....	...	...	...	...	...	...	...	...	...	...
320-334	Vascular lesions affecting central nervous system .....	...	...	...	...	...	...	...	...	...	...
340	Nonmeningeococcal meningitis .....	...	...	...	...	...	...	...	...	...	...
340	Residual (341-343, 350-357, 360-369, 370-389, 390-398) .....	...	...	...	...	...	...	...	...	...	...
400-405	Rheumatic fever .....	...	...	...	...	...	...	...	...	...	...
400-402	Rheumatic fever .....	...	...	...	...	...	...	...	...	...	...
410-410	Chronic rheumatic heart disease .....	...	...	...	...	...	...	...	...	...	...
410-422	Chronic rheumatic heart disease .....	...	...	...	...	...	...	...	...	...	...
420-422	Chronic rheumatic heart disease .....	...	...	...	...	...	...	...	...	...	...
430-433	Chronic rheumatic heart disease .....	...	...	...	...	...	...	...	...	...	...
440-443	Hypertension with heart disease .....	...	...	...	...	...	...	...	...	...	...
444-447	Hypertension without mention of heart disease .....	...	...	...	...	...	...	...	...	...	...
444-447	Residual (450-456, 460-468) .....	...	...	...	...	...	...	...	...	...	...
470-677	Diseases of the respiratory system	1	1	1	1	1	1	1	1	1	...
480-483	Influenza .....	...	...	...	...	...	...	...	...	...	...
480-483	Pneumonia .....	...	...	...	...	...	...	...	...	...	...
500-502	Bronchitis .....	...	...	...	...	...	...	...	...	...	...
520-527	Residual (470-473, 510-527) .....	...	...	...	...	...	...	...	...	...	...
530-534	Diseases of the digestive system .....	...	...	...	...	...	...	...	...	...	...
530-533	Diseases of the digestive system .....	...	...	...	...	...	...	...	...	...	...
560-570	Appendicitis .....	...	...	...	...	...	...	...	...	...	...
560, 561, 570	Intestinal obstruction and hernia .....	...	...	...	...	...	...	...	...	...	...
570, 571, 572	Gastritis, duodenitis, enteritis and colitis, except chronic .....	...	...	...	...	...	...	...	...	...	...
580	Diseases of the newborn .....	...	...	...	...	...	...	...	...	...	...
580-587	Residual (530-539, 542, 544, 545, 573-575, 580, 582-587) .....	...	...	...	...	...	...	...	...	...	...
590-637	Diseases of the genito-urinary system .....	...	...	...	...	...	...	...	...	...	...
600-604	Diseases of the genito-urinary system .....	...	...	...	...	...	...	...	...	...	...
610	Hypertrophy of prostate .....	...	...	...	...	...	...	...	...	...	...
640-689	Pregnancy, childbirth and the puerperium .....	...	...	...	...	...	...	...	...	...	...
690-719	Diseases of the skin and cellular tissue .....	...	...	...	...	...	...	...	...	...	...
700-700	Diseases of the skin and cellular tissue .....	...	...	...	...	...	...	...	...	...	...
700-710	Congenital malformations of organs of movement .....	...	...	...	...	...	...	...	...	...	...
700-710	Certain diseases of early infancy .....	...	...	...	...	...	...	...	...	...	...
700-702	Birth injuries, postnatal asphyxia and atelectasis .....	...	...	...	...	...	...	...	...	...	...
705-708	Infections of the newborn .....	...	...	...	...	...	...	...	...	...	...
705-716	Other diseases of the newborn .....	...	...	...	...	...	...	...	...	...	...
780-795	Symptoms, senility and ill-defined conditions .....	...	...	...	...	...	...	...	...	...	...
8200-8209	Accidents, poisonings and violence .....	...	...	...	...	...	...	...	...	...	...
830-839	Motor vehicle accidents .....	...	...	...	...	...	...	...	...	...	...
8340-8343	All other accidents except falls .....	...	...	...	...	...	...	...	...	...	...
8900-8904	Falls .....	...	...	...	...	...	...	...	...	...	...
8905-8909	Accidents .....	...	...	...	...	...	...	...	...	...	...
8980-8983	Police intervention, execution and operations of war .....	...	...	...	...	...	...	...	...	...	...

DEPARTMENT OF HEALTH

Table 23. CASES OF REPORTABLE DISEASES BY COUNTY OF RESIDENCE: 1968
(Exclusive of Cerebral Palsy, Tuberculosis and Venereal Diseases)

COUNTY	Amebiasis	Brucellosis	Diphtheria of Newborn	Epilepsy	Food Poisonings	Hepatitis Infections	Influenza	Leptospirosis	Malaria	Measles	Meningococcal Meningitis
State Total	513	4	6	901	20	193	210	1	1	27,646	69
Albany	0	0	0	0	0	0	23	0	0	76	3
Berkshire	1	0	1	0	0	1	4	0	0	8,172	5
Burlington	1	0	1	0	0	1	4	0	0	1,445	3
Camden	1	0	1	0	0	22	1	0	0	1,132	0
Cape May	1	0	0	0	0	1	0	0	0	32	0
Cumberland	0	0	0	0	0	0	0	0	0	0	0
Essex	0	0	0	0	0	0	0	0	0	38	1
Gloucester	0	0	0	19	4	32	58	0	0	9,901	14
Hudson	0	0	0	0	0	1	1	0	0	878	1
Hunterdon	0	0	0	0	0	16	0	1	0	12	4
Mercer	1	0	0	0	2	0	0	1	0	0	0
Mid Sussex	18	0	2	10	2	11	4	0	0	6,031	8
Monmouth	8	0	2	0	0	0	0	0	0	409	3
Morris	0	1	0	0	0	6	11	0	0	2,164	5
Morris	1	0	0	0	0	1	1	0	0	1,941	6
Ocean	1	0	0	0	0	0	8	0	0	24	0
Passaic	0	0	0	0	1	5	16	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
Somerset	7	0	0	1	0	1	1	0	0	58	1
Sussex	0	0	0	0	0	4	0	0	0	9	2
Union	0	0	0	0	0	1	0	0	0	11	1
Warren	2	0	0	0	0	31	27	0	0	1,817	2
Westerly	0	0	0	0	0	0	0	0	0	0	0
State Institutions	208	0	0	2	0	35	1	0	0	20	2
Military Units	0	0	0	12	0	16	1	0	0	27	1
										25	1

DIV. OF VITAL STATISTICS & ADMINISTRATION

Table 23. CASES OF REPORTABLE DISEASES BY COUNTY OF RESIDENCE: 1968—Continued
(Exclusive of Cerebral Palsy, Tuberculosis and Venereal Diseases)

COUNTY	Mental Deficiency	Ophthalmia Neonatorum	Pneumonia	Polymyositis	Psittacosis	Rocky Mountain Spotted Fever	Salmonellosis	Shigellosis	Streptococcal Sore Throat Including Scarlet Fever	Tetanus	Trichinosis	Typhoid Fever	Whooping Cough
State Total	6	5	4,181	107	2	9	25	14	5,272	51	11	23	612
Albany	0	0	3	3	0	0	4	0	14	0	0	1	0
Berkshire	0	0	46	22	0	0	1	0	0	0	0	1	0
Burlington	0	0	25	2	0	0	0	0	0	0	0	0	0
Camden	0	0	164	13	1	1	1	1	320	0	1	2	12
Cape May	0	0	1	0	0	0	1	0	0	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	10	0	0	0	0
Essex	0	0	1,291	67	0	0	0	0	62	2	4	1	2
Gloucester	0	0	14	2	0	0	2	0	68	0	0	0	0
Hudson	0	0	101	43	1	0	1	4	37	0	1	1	7
Hunterdon	0	0	13	1	0	1	0	0	0	0	0	0	0
Mercer	0	0	148	20	1	2	6	0	62	1	0	1	2
Mid Sussex	0	0	112	11	1	0	0	0	108	0	0	0	0
Monmouth	0	0	137	13	0	0	0	0	85	1	0	1	12
Morris	0	0	11	2	0	0	0	0	129	0	1	0	0
Ocean	0	0	8	0	0	0	0	0	8	0	0	0	0
Passaic	0	0	35	20	0	0	4	0	388	0	3	1	36
Salmon	0	0	1	0	0	0	0	0	8	0	0	0	0
Somerset	0	0	1	0	0	0	0	0	0	0	0	0	0
Sussex	0	0	32	3	0	0	0	0	47	0	0	0	4
Union	0	0	174	0	0	1	6	0	321	0	0	0	12
Warren	0	0	23	3	0	0	0	0	28	0	0	0	0
Westerly	0	0	0	0	0	0	0	0	0	0	0	0	0
State Institutions	3	0	33	1	0	1	1	1	1,180	0	0	0	0
Military Units	0	0	1,615	0	0	1	0	0	0	0	0	0	0

Note: There were no reported cases of Anthrax, Botulism, Cholera, Dengue, Glanders, Leprosy, Plague, Q Fever, Rabies (human), Smallpox, Trachoma, Tularemia, Typhus Fever, or Yellow Fever.

Table 24a. DEATHS FROM REPORTABLE DISEASES BY COUNTY OF RESIDENCE: 1968
(Exclusive of Cerebral Palsy, Tuberculosis and Venereal Diseases)

COUNTY	Amplasia (948)	Diphtheria Newborn (794)	Diphtheria (325)	Food Poisoning (948.2)	Infectious Mononucleosis (925, 926)	Infectious Hepatitis (992)	Influenza (490-493)	Meningococcal (967.0)
State total	7	21	50	1	82	82	90	15
Atlantic	0	1	3	0	1	1	0	0
Bergen	0	1	3	0	1	1	0	0
Burlington	0	1	3	0	1	1	0	0
Camden	0	1	3	0	1	1	0	0
Cape May	0	0	0	0	0	0	0	0
Cumberland	0	1	0	0	0	0	0	0
Essex	0	1	0	0	0	0	0	0
Gloucester	0	2	5	0	4	4	6	0
Hudson	0	0	1	0	1	1	0	0
Hunterdon	0	0	4	0	1	1	0	0
Mercer	1	2	4	0	1	1	1	0
Middlesex	1	0	1	0	0	0	0	0
Monmouth	1	0	1	0	0	0	0	0
Morristown	0	0	1	0	0	0	0	0
Ocean	0	0	1	0	0	0	0	0
Passaic	0	1	0	0	0	0	0	0
Summit	0	0	0	1	0	0	0	0
Sussex	0	0	2	0	0	0	0	0
Union	2	0	3	0	0	0	0	0
Warren	0	0	0	0	0	1	1	0
State Institutions	0	0	0	0	0	0	0	0
Military Posts	0	0	0	0	0	0	0	0

Table 24b. DEATHS FROM REPORTABLE DISEASES BY COUNTY OF RESIDENCE: 1968—Continued
(Exclusive of Cerebral Palsy, Tuberculosis and Venereal Diseases)

COUNTY	Mental Deficiency (325)	Pneumonia (490-493)	Polymyositis (980, 981)	Rocky Mountain Spotted Fever (104)	Salmonellosis (942)	Streptococcal Sore Throat, Including Scarlet Fever (920, 961)	Tetanus (961)
State total	10	1,070	10	1	1	2	1
Atlantic	0	68	0	0	0	0	0
Bergen	1	138	1	0	0	0	0
Burlington	1	138	0	0	0	0	0
Camden	0	110	0	0	0	0	0
Cape May	0	19	0	0	0	0	0
Cumberland	0	21	0	0	0	0	0
Essex	1	38	0	0	0	0	0
Gloucester	1	271	0	1	0	0	0
Hudson	0	18	0	0	0	0	0
Hunterdon	0	1	0	0	0	0	0
Mercer	0	91	3	0	0	0	0
Middlesex	0	86	0	0	0	0	0
Monmouth	0	73	1	0	0	0	0
Morris	0	36	0	0	0	0	0
Ocean	0	124	2	0	0	1	0
Passaic	1	112	0	0	0	0	0
Samuelson	0	11	0	0	0	0	0
Somerset	0	102	0	0	0	0	0
Sussex	0	102	0	0	1	0	0
Union	0	82	0	0	0	0	0
Warren	0	0	0	0	0	0	0
State Institutions	0	3	0	0	0	0	0
Military Posts	0	0	0	0	0	0	0

Note: There were no deaths from Anthrax, Botulism, Brucellosis, Cholera, Dengue, Diphtheria, Glaucoma, Leprosy, Leptospirosis, Malaria, Meningitis, Meningococcal Meningitis, Pertussis, Plague, Psittacosis, Q Fever, Rabies (human), Shigellosis, Smallpox, Trachoma, Trichinosis, Tularemia, Typhoid Fever, Typhus Fever, Whooping Cough, or Yellow Fever.

Table 24b. DEATHS FROM REPORTABLE DISEASES BY SEX BY COLOR AND AGE GROUP: 1958

International List No.	Disease and Sex	Total	Color		Age Group in Years								
			White	Nonwhite	<1	1-4	5-14		15-24		25-44	45-64	65+
							10-14	15-19	20-24	25-29			
001-019	Tuberculosis— Male	318	200	58	3	2	2	47	141	121			
	Female	135	87	38	3	1	2	33	47	43			
020-029	Syphilis— Male	69	45	15	1		3	23	33	33			
	Female	30	23	5				14	10	10			
042	Scarlet fever— Male	1		1				1					
	Female												
046	Amebiasis— Male	0											
	Female	1	1					1	2	2			
040.2	Food Poisoning— Male	1	1										
	Female												
050, 051	Strep. Sore throat, including Scarlet Fever— Male	3	2	1	1	1	1	1	1	1			
	Female	6	3	3	1	1							
007.0	Meningococcal Meningitis— Male	9	7	2	3								
	Female	1	1										
061	Tetanus— Male	5	4	1									
	Female	15	14	1									
089, 081	Polioomyelitis— Male	13	12	1									
	Female	8	8										
082, 083	Infectious Encephalitis— Male	2	2										
	Female	13	13										
085	Measles— Male	1	1										
	Female	8	8										
092	Rocky Mountain Spotted Fever— Male	2	2										
	Female	13	13										
104	Mental Deficiency— Male	1	1										
	Female	8	8										
325	Epilepsy— Male	2	2										
	Female	42	42										
363	Toothache— Male	25	25										
	Female	25	25										
480-483	Paracanthosis— Male	933	785	148	126	31	12	8	58	205	403		
	Female	743	645	98	100	40	17	13	33	117	423		
400-403	Diarrhea of Newborn— Male	8	8										
	Female	4	4										
704	Other	4	4										

Note: There were no deaths from Anthrax, Botulism, Brucella, Cholera, Dengue, Diphtheria, Glaucoma, Leprosy, Leptospirosis, Malaria, Ophthalmia Neonatorum, Plague, Psittacosis, Q Fever, Rabies (human), Shigellosis, Smallpox, Trachoma, Trichinosis, Tularemia, Typhoid Fever, Typhus Fever, Whooping Cough, or Yellow Fever.

Table 25. POLIOMYELITIS CASES AND DEATHS BY SEX BY AGE GROUP: 1958

Age Group	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
ALL AGES	266	10	165	5	101	5
Under 1 year	3	..	..	..	3	..
1-4 years	70	1	41	..	29	1
5-14 years	90	1	60	..	30	1
15-24 years	44	2	29	1	15	1
25-44 years	55	5	33	4	22	1
45-64 years	4	1	2	..	2	1
65 years and over..	..	..	..	..	..	..
Unknown .....	..	..	..	..	..	..

Table 26a. REPORTED CASES OF POLIOMYELITIS BY PARALYTIC STATUS BY COUNTY: 1958

County	Total	Paralytic Status	
		Paralytic	Nonparalytic
STATE TOTAL	266	186	80
Atlantic	3	3	..
Bergen	32	15	17
Burlington	2	1	1
Camden	13	12	1
Cape May .....	..	..	..
Cumberland	2	2	..
Essex	67	55	12
Gloucester	2	2	..
Hudson	43	33	10
Hunterdon	1	1	..
Mercer	16	13	3
Middlesex	21	11	10
Monmouth	15	5	10
Morris	8	4	4
Ocean	2	1	1
Passaic	20	17	3
Salem .....	..	..	..
Somerset	3	2	1
Sussex	3	2	1
Union	9	7	2
Warren	3	..	3
State Institutions	1	..	1
Military Posts .....	..	..	..

Table 26e. PARALYTIC POLIOMYELITIS CASES BY VACCINATION STATUS BY AGE GROUP: 1958

Age Group	Total	Number of Vaccinations				
		0	1	2	3	4
TOTAL	186	144	11	16	14	1
Under 1	3	2	..	1	..	..
1-4	61	49	3	8	1	..
5-9	42	35	1	2	4	..
10-14	13	8	1	1	2	1
15-19	15	9	2	1	3	..
20-24	13	7	2	2	2	..
25-44	37	32	2	1	2	..
45-64	2	2	..	..	..	..

Table 26f. NONPARALYTIC POLIOMYELITIS CASES BY VACCINATION STATUS BY AGE GROUP: 1958

Age Group	Total	Number of Vaccinations				
		0	1	2	3	4
TOTAL	80	39	..	10	27	4
Under 1	..	..	..	..	..	..
1-4	9	5	..	3	..	1
5-9	21	8	..	3	10	..
10-14	14	2	..	3	8	1
15-19	8	5	..	1	2	..
20-24	8	6	..	..	2	..
25-44	18	13	..	..	3	2
45-64	2	..	..	..	2	..

Table 27. TUBERCULOSIS CASES AND DEATHS; NUMBERS, RATES AND CASE-DEATH RATIOS FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Deaths			Cases*			Case-Death Ratio†
	Number	Rate‡	S.E.‡	Number	Rate‡	S.E.‡	
New Jersey	443	8.3	0.4	2,790	52.1	1.0	6.3
Atlantic County	13	9.3	2.6	95	67.9	7.0	7.3
Atlantic City	8	12.9	4.6	49	79.0	11.3	6.1
Bergen County	31	5.1	0.9	428	70.4	3.4	13.8
Burlington County	11	7.1	2.2	49	31.8	4.5	4.5
Camden County	32	9.8	1.7	97	29.0	2.9	3.0
Camden City	21	13.6	3.4	32	88.5	5.3	2.5
Cape May County	7	18.9	7.2	21	56.8	12.4	3.0
Cumberland County	9	9.3	3.1	49	50.5	7.2	5.4
Essex County	87	8.9	0.9	581	59.2	2.5	6.7
East Orange	5	5.8	2.6	31	36.0	6.5	6.2
Irvington	0	0	..	15	24.2	6.2	..
Newark	68	14.2	1.7	437	95.6	4.5	6.7
Gloucester County	12	11.4	3.3	32	30.5	5.4	2.7
Hudson County	86	12.3	1.3	377	54.0	2.8	4.4
Bayonne	12	14.1	4.1	29	34.1	6.3	2.4
Hoboken	8	14.8	5.2	48	88.9	12.5	6.0
Jersey City	48	14.9	2.1	231	71.5	4.7	4.8
Union City	3	5.3	3.0	8	14.0	5.0	2.7
Hunterdon County	3	6.4	3.7	14	29.8	8.0	4.7
Mercer County	33	13.0	2.3	170	67.2	5.2	5.2
Trenton	23	16.9	3.5	99	72.8	7.3	4.3
Middlesex County	14	4.5	1.2	139	45.0	3.8	9.9
Monmouth County	9	3.6	1.2	70	27.8	3.3	7.8
Morris County	11	5.9	1.8	65	34.6	4.3	5.9
Ocean County	3	4.8	2.7	41	65.1	10.2	13.7
Passaic County	23	7.6	1.4	234	63.2	4.1	8.4
Clifton	4	5.5	2.7	34	46.6	8.9	8.5
Passaic City	4	6.8	3.4	39	66.1	10.6	9.8
Paterson	16	10.7	2.7	108	72.5	7.0	6.8
Salem County	1	1.8	1.8	16	28.6	7.1	16.0
Somerset County	6	3.3	2.1	36	31.6	5.3	6.0
Sussex County	8	20.5	7.3	9	23.1	7.7	1.1
Union County	35	7.9	1.3	128	28.8	2.5	3.7
Elizabeth	13	10.7	3.0	46	37.7	5.6	2.5
Warren County	2	3.3	2.4	12	20.0	5.8	6.0
Institutions	2	†	..	58	†	..	29.0
Military Posts	0	..	..	8	†	..	..
Aliens	0	..	..	61	†	..	..

* Cases, regardless of activity, reported for first time in 1958.

† Rate per 100,000 estimated population.

‡ Standard error of rate. Must be considered for comparison of rates.

§ Number of cases reported per death reported.

¶ Rates not computed due to lack of population base.

Table 28a. SYPHILIS AND GONORRHEA CASES AND RATES BY DISTRICT, COUNTY AND MAJOR CITIES: 1958

AREA	Syphilis		Gonorrhoea*	
	Number	Rate†	Number	Rate†
New Jersey (Total Cases)	6,077	113.6	5,552	109.4
Northern District	102	22.8	54	12.1
Hunterdon County	15	31.9	5	10.6
Morris County	46	24.5	33	17.8
Somerset County	19	16.7	11	9.6
Sussex County	11	28.2	2	5.1
Warren County	11	18.3	3	5.0
Metropolitan District	2,550	82.2	3,716	119.8
Bergen County	192	31.6	79	13.0
Essex County	1,150	117.1	2,597	264.5
East Orange	86	100.0	52	60.5
Irvington	23	37.1	3	4.8
Newark	882	184.5	2,446	511.7
Hudson County	806	115.5	904	72.2
Baronne	20	30.6	8	9.4
Hoboken	46	85.2	19	35.2
Jersey City	645	199.7	449	139.0
Union City	33	57.9	10	17.5
Passaic County	178	48.1	329	88.9
Clifton	16	21.9	4	5.5
Passaic	25	42.4	22	37.3
Paterson	119	79.9	290	194.6
Union County	224	50.5	207	46.6
Elizabeth	90	81.1	113	92.6
Central District	1,609	156.1	1,133	109.9
Burlington County	142	92.2	78	49.4
Mercer County	593	234.4	603	238.3
Trenton	425	312.5	525	386.0
Middlesex County	313	101.3	158	51.1
Monmouth County	498	197.6	105.2	105.2
Ocean County	63	100.0	31	49.2
Southern District	1,783	231.6	584	75.8
Atlantic County	667	476.4	226	161.4
Atlantic City	567	914.5	199	321.0
Camden County	584	174.3	127	37.9
Camden City	469	347.4	101	74.8
Cape May County	46	124.3	8	21.6
Cumberland County	280	288.7	124	127.8
Gloucester County	132	125.7	54	51.4
Salem County	74	132.1	45	80.4
Institutions	9	†	6	†
Military Posts	24	†	359	†

* Includes 60 cases reported as having epidemiologic treatment for gonorrhoea.

† Rates expressed per 100,000 estimated population.

‡ Rates not computed due to lack of population base.

Table 28b. CASES OF VENEREAL DISEASES BY STAGE (FOR SYPHILIS ONLY) BY REPORTING AGENCY: 1960-1968

DISEASE	1958			1957			1956		
	Total*	Private and Doctor	Chinews and Others†	Total*	Private and Doctor	Chinews and Others†	Total*	Private and Doctor	Chinews and Others†
Syphilis (All Stages)	6,077	2,715	3,540	22	2,404	3,025	15	4,274	2,437
Primary and Secondary	133	88	82	13	48	71	7	100	42
Late and Latent	5,944	2,627	3,700	9	2,356	2,954	8	4,174	2,395
Congenital	213	121	84	0	101	80	0	313	2,077
Not Stated	6	0	0	0	4	10	0	5	2
Gonorrhoea	5,652	1,697	3,890	359	1,445	3,394	487	4,222	1,840
Granuloma Inguinale	3	0	0	0	0	0	0	21	0
Lymphogranuloma Venereum	5	3	2	0	3	5	1	8	1

* Includes all military cases, all resident cases reported in New Jersey and those occurring to New Jersey residents reported in other states and referred to the Public Health Statistics program.

† Hospital, jail, reformatory, and other institutions.

Table 28c. PRIMARY AND SECONDARY SYPHILIS CASES OF CIVILIANS BY SOURCE, AGE, RACE AND SEX: 1935

Age Group	All Sources		Private Physicians				Clinics, Hospitals, Other Institutions				Not Stated			
	Total	Male	White		Nonwhite		Total	Male	White		Nonwhite		Male	Female
			Male	Female	Male	Female			Male	Female	Male	Female		
All ages	170	88	30	6	28	13	2	82	10	4	50	12		
Under 10	5	9	..	..	..	..	..	3	..	..	..	..	..
10-14	27	9	2	1	4	..	..	18	..	..	1	3	..
15-19	42	18	6	1	6	5	..	28	4	1	11	2	..	
20-24	39	23	10	2	9	2	..	26	1	1	10	0	..	
25-29	17	10	6	1	5	..	..	10	..	..	6	..	..
30-34	13	8	5	1	2	..	..	8	..	..	3	..	..
35-39	7	3	1	..	1	..	..	5	1	1	3	1	..
40-44	13	8	4	1	1	1	..	4	..	..	3	1	..
45-49	4	3	1	..	1	..	..	1	..	..	1	..	..
50 and over	7	6	4	1	1	1	..	1	..	..	1	..	..
Unknown	2	1	..	..	..	..	..	1	..	..	1	..	..

Table 28d. GONORRHEA CASES OF CIVILIANS BY SOURCE, AGE, RACE AND SEX: 1935

Age Group	All Sources		Private Physicians				Clinics, Hospitals, Other Institutions				Not Stated			
	Total	Male	White		Nonwhite		Total	Male	White		Nonwhite		Male	Female
			Male	Female	Male	Female			Male	Female	Male	Female		
All ages	5,493	1,807	348	72	783	223	60	3,694	153	141	2,090	1,483	23	23
Under 10	44	17	..	..	2	..	..	54	..	..	4	21	..	..
10-14	68	12	1	..	6	..	..	77	..	1	1	21	..	2
15-19	107	47	1	..	11	..	..	113	..	..	..	39	..	..
20-24	1,110	391	71	11	217	8	2	1,413	59	28	791	525	3	5
25-29	1,068	236	55	6	136	36	3	1,432	36	15	441	309	4	6
30-34	350	96	24	11	45	11	2	224	29	15	106	80	3	4
35-39	120	27	13	..	17	..	..	87	6	8	39	23	1	..
40-44	86	21	13	2	4	2	..	32	6	18	23	12	1	..
45-49	59	24	13	1	4	..	..	23	..	..	11	10	..	..
50 and over	21	13	12	1	2	4	..	23	..	..	13	10	..	..
Unknown	97	74	..	..	23	..	..	23	..	..	11	11	..	..

Table 29a. TUBERCULOSIS CASES BY SEX AND BY COLOR FOR COUNTIES AND MAJOR CITIES: 1935

AREA	Total	Sex		Color		
		Male	Female	White	Nonwhite	Not Stated
New Jersey	2790	1792	998	2124	660	6
Atlantic County	95	56	29	66	29	..
Atlantic City	49	31	18	26	23	..
Bergen County	428	266	162	415	12	1
Burlington County	49	37	12	39	10	..
Camden County	97	73	24	75	22	..
Camden City	52	37	15	35	17	..
Cape May County	21	15	6	15	6	..
Cumberland County	49	33	16	35	14	..
Essex County	381	380	201	301	279	1
East Orange	31	18	13	12	19	..
Irrington	15	8	7	15	..	..
Newark	437	307	150	212	244	1
Gloucester County	32	19	13	18	14	..
Hudson County	377	244	133	292	84	1
Bayonne	29	23	6	24	5	..
Hoboken	45	27	21	47	1	..
Jersey City	231	153	78	156	74	1
Union City	8	3	5	8	..	..
Hunterdon County	14	5	9	14	..	..
Mercer County	170	103	64	122	48	..
Trenton	96	63	34	59	40	..
Middlesex County	139	90	49	120	18	1
Monmouth County	70	40	30	47	23	..
Morris County	63	41	24	61	4	..
Ocean County	41	27	14	33	8	..
Passaic County	234	149	85	205	28	1
Clifton	34	23	11	34	..	..
Passaic City	39	26	13	34	5	..
Faterson	108	74	34	85	22	1
Salem County	16	12	4	10	5	1
Somerset County	36	23	13	34	2	..
Sussex County	9	8	1	9	..	..
Union County	128	87	41	90	38	..
Elizabeth	46	32	14	30	16	..
Warren County	12	8	4	11	1	..
Institutions	58	36	22	46	12	..
Military Posts	8	8	..	6	2	..
Allens	61	29	32	60	1	..

Notes: (1) Newly reported tuberculosis cases.
 (2) Alien cases—aliens admitted to the United States during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

Table 29b. TUBERCULOSIS CASES BY AGE GROUPS FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Age Group										Not Stated
	All Ages	Under 1 Year	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	
New Jersey	2790	19	67	75	222	439	471	479	515	497	6
Atlantic County	95	..	..	1	6	15	20	19	12	22	..
Atlantic City	49	..	..	..	2	10	10	8	9	10	..
Bergen County	428	..	3	4	20	51	62	73	59	125	1
Burlington County	49	..	1	..	5	4	8	5	14	12	..
Camden County	97	..	2	1	9	11	15	19	22	18	..
Camden City	52	..	1	1	4	7	10	11	11	7	..
Cape May County	21	..	1	..	1	7	1	2	5	4	..
Cumberland County	49	..	1	2	8	8	6	6	9	9	..
Essex County	581	12	31	37	47	107	111	87	78	71	..
East Orange	31	..	2	2	4	6	3	4	5	5	..
Irrington	15	..	2	..	4	4	3	4	1	1	..
Newark	457	12	25	31	35	78	93	66	68	51	..
Gloucester County	32	1	3	3	2	4	6	5	2	6	..
Hudson County	377	3	10	4	35	68	49	72	87	49	..
Bayonne	29	..	..	..	4	4	8	6	3	4	..
Hoboken	48	..	1	..	6	8	6	9	17	1	..
Jersey City	231	3	9	4	19	45	25	47	48	31	..
Union City	8	..	..	..	3	2	..	1	2	..	..
Hunterdon County	14	..	..	1	1	3	1	6	..	2	..
Mercer County	170	2	4	2	14	23	23	28	30	35	..
Trenton	99	2	4	2	8	13	19	10	15	26	..
Middlesex County	139	..	2	..	12	23	33	24	23	21	1
Monmouth County	70	..	3	8	10	12	12	13	12	..	..
Morris County	65	..	1	5	4	15	16	14	10	..	..
Ocean County	41	..	2	1	3	4	7	7	5	12	..
Passaic County	234	1	2	4	9	40	39	40	59	39	1
Clifton	34	..	..	..	1	8	8	4	8	5	..
Passaic City	39	..	1	2	1	7	7	7	8	6	..
Paterson	108	1	1	..	7	22	13	16	27	20	1
Salem County	16	..	..	1	3	2	1	6	2	1	..
Somerset County	36	..	..	2	7	5	5	5	6	6	..
Sussex County	9	..	..	1	1	..	..	2	1	4	..
Union County	128	..	5	7	8	17	25	26	19	21	..
Elizabeth	46	..	2	5	4	6	8	11	7	3	..
Warren County	12	..	..	..	..	..	3	2	2	5	..
Institutions	58	..	..	..	9	11	11	7	11	9	..
Military Posts	8	..	..	..	3	4	1	..	..	..	..
Aliens	61	..	..	..	6	18	8	10	12	4	3

Notes: (1) Newly reported tuberculosis cases.
 (2) Alien cases—aliens admitted to the United States during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

Table 29c. TUBERCULOSIS CASES BY CLINICAL STATUS FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Total	Clinical Status				
		Active	Inactive	Probably Active	Probably Inactive	Not Stated
New Jersey	2790	1622	1028	57	50	33
Atlantic County	95	45	48	..	..	2
Atlantic City	49	31	17	..	..	1
Bergen County	428	100	288	12	23	5
Burlington County	49	31	12	3	2	1
Camden County	97	80	10	5	2	..
Camden City	52	45	3	3	1	..
Cape May County	21	11	9	1	..	..
Cumberland County	49	24	24	1	..	..
Essex County	581	447	120	8	4	2
East Orange	31	25	4	2	..	..
Irrington	15	9	3	2	..	..
Newark	457	356	97	2	1	1
Gloucester County	32	23	9	..	..	..
Hudson County	377	253	112	6	2	4
Bayonne	29	21	7	1	..	..
Hoboken	48	28	18	1	..	1
Jersey City	231	161	65	2	2	1
Union City	8	6	2	..	..	..
Hunterdon County	14	10	3	1	..	..
Mercer County	170	104	62	2	1	1
Trenton	99	64	32	1	1	1
Middlesex County	139	97	30	2	3	5
Monmouth County	70	48	14	6	..	2
Morris County	65	44	19	2	..	..
Ocean County	41	20	20	1	..	..
Passaic County	234	83	146	..	2	3
Clifton	34	7	27	..	..	..
Passaic City	39	15	28	..	1	..
Paterson	108	59	54	..	1	3
Salem County	16	13	3	..	..	..
Somerset County	36	20	8	2	4	2
Sussex County	9	7	1	1	..	..
Union County	128	105	17	2	2	2
Elizabeth	46	39	5	..	1	1
Warren County	12	6	6	..	..	..
Institutions	58	40	17	1	..	..
Military Posts	8	4	2	1	..	1
Aliens	61	7	48	..	3	3

Notes: (1) Newly reported tuberculosis cases.
 (2) Alien cases—aliens admitted to the United States during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

Table 29d. ACTIVE AND PROBABLY ACTIVE TUBERCULOSIS CASES AND CASE RATES FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Number ^a	Rate ^b	AREA	Number ^a	Rate ^b
New Jersey	1679	31.4	Mercer County	106	41.9
Atlantic County	45	32.1	Trenton	65	47.8
Atlantic City	31	50.0	Middlesex County	99	32.0
Bergen County	112	18.4	Monmouth County	54	21.4
Burlington County	34	22.1	Morris County	46	24.5
Camden County	85	25.4	Ocean County	21	33.3
Camden City	48	35.6	Passaic County	83	22.4
Cape May County	12	32.4	Clifton	7	9.6
Cumberland County	25	25.8	Passaic City	15	25.4
Essex County	435	48.3	Paterson	50	33.6
East Orange	27	31.4	Salem County	13	28.2
Irvington	11	17.7	Somerset County	22	19.3
Newark	353	74.9	Sussex County	8	20.5
Gloucester County	23	21.9	Union County	107	24.1
Hudson County	259	37.1	Elizabeth	39	32.0
Bayonne	22	25.9	Warren County	6	10.0
Hoboken	29	53.7	Institutions	41	†
Jersey City	163	50.5	Military Posts	5	‡
Union City	6	10.5	Allens§	7	‡
Hunterdon County	11	23.4			

^a Newly reported tuberculosis cases.

^b Rate per 100,000 estimated population.

† Rates not computed due to lack of population base.

‡ Rates not computed during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

Table 29e. TOTAL TUBERCULOSIS CASES AND ACTIVE AND PROBABLY ACTIVE CASES BY AGE GROUP; NUMBER AND RATE: 1958

Age Group	Total Cases		Active and Probably Active Cases	
	Number ^a	Rate ^b	Number ^a	Rate ^b
ALL AGES	2,790	52.1	1,679	31.4
Under 1	19	19.8	19	19.8
1-4	67	16.3	60	14.6
5-14	75	10.2	63	8.6
15-24	222	31.2	171	24.1
25-34	439	48.2	278	30.5
35-44	471	56.7	293	35.3
45-54	479	69.4	282	40.9
55-64	515	97.2	259	48.9
65 and over	497	113.2	253	57.6
Not Stated	6	...	1	...

^a Newly reported tuberculosis cases.

^b Rate per 100,000 estimated population.

Table 29f. ACTIVE AND PROBABLY ACTIVE TUBERCULOSIS CASES BY SEX AND BY COLOR FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Total	Sex		Color		
		Male	Female	White	Nonwhite	Not Stated
		New Jersey	1679	1189	540	1121	556	2
Atlantic County	45	34	11	28	17	..
Atlantic City	31	22	9	16	15	..
Bergen County	112	76	36	106	6	..
Burlington County	34	30	4	26	8	..
Camden County	85	66	19	64	21	..
Camden City	48	35	13	32	16	..
Cape May County	12	9	3	8	4	..
Cumberland County	25	16	9	13	12	..
Essex County	435	300	135	204	251	..
East Orange	27	14	13	10	17	..
Irvington	11	5	6	11	..	..
Newark	368	246	112	138	220	..
Gloucester County	23	13	10	9	14	..
Hudson County	259	170	89	189	69	1
Bayonne	22	17	5	18	4	..
Hoboken	29	17	12	28	1	..
Jersey City	163	114	49	100	62	1
Union City	6	1	5	6	..	..
Hunterdon County	11	4	7	11	..	..
Mercer County	106	68	38	68	38	..
Trenton	65	41	24	32	33	..
Middlesex County	99	67	32	83	15	1
Monmouth County	54	33	21	33	21	..
Morris County	46	35	11	42	4	..
Ocean County	21	16	5	15	6	..
Passaic County	83	58	25	62	21	..
Clifton	7	6	1	7	..	..
Passaic City	15	12	3	12	3	..
Paterson	50	34	16	32	18	..
Salem County	13	9	4	8	5	..
Somerset County	22	16	6	21	1	..
Sussex County	8	7	1	8	..	..
Union County	107	74	33	74	33	..
Elizabeth	39	28	11	24	15	..
Warren County	6	4	2	5	1	..
Institutions	41	23	18	33	8	..
Military Posts	5	5	..	4	1	..
Allens	7	6	1	7	..	..

Notes: (1) Newly reported tuberculosis cases.

(2) Alien cases—aliens admitted to the United States during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

Table 29g. ACTIVE AND PROBABLY ACTIVE TUBERCULOSIS CASES BY AGE GROUPS FOR COUNTIES AND MAJOR CITIES: 1958

AREA	Age Group										Not Stated
	All Ages	Under 1 Year	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	
New Jersey	1679	19	60	63	171	278	293	282	259	253	1
Atlantic County	45	..	..	1	5	8	6	10	6	9	..
Atlantic City	31	..	..	..	2	6	5	7	6	5	..
Bergen County	112	..	2	3	9	16	16	15	14	37	..
Burlington County	34	..	1	..	3	2	7	3	10	8	..
Camden County	53	..	1	1	7	10	13	19	21	13	..
Camden City	48	..	1	1	4	6	8	11	11	6	..
Cape May County	12	..	1	..	1	4	1	1	2	2	..
Cumberland County	25	..	1	2	5	5	3	2	3	4	..
Essex County	455	12	20	33	41	82	90	68	51	48	..
East Orange	27	..	2	2	4	6	2	4	3	4	..
Irington	11	..	2	..	..	..	..	..	..	..	..
Newark	358	12	25	28	31	62	75	50	44	31	..
Gloucester County	23	1	3	3	1	3	4	..	..	4	..
Hudson County	256	3	9	2	29	47	36	50	55	28	..
Baronne	22	..	..	..	4	3	4	6	2	3	..
Hoboken	29	..	1	..	4	5	4	5	9	1	..
Jersey City	168	3	8	2	16	31	21	33	32	17	..
Union City	6	..	..	..	3	2	..	..	1	..	..
Hunterdon County	11	..	..	1	1	2	1	4	..	2	..
Mercer County	106	2	3	1	13	16	19	16	16	20	..
Trenton	65	2	3	1	5	9	12	6	9	15	..
Middlesex County	90	..	2	..	7	15	22	19	15	18	1
Monmouth County	54	..	..	3	7	7	9	10	11	7	..
Morris County	46	..	..	1	5	2	9	13	10	6	..
Ocean County	21	..	2	1	2	3	4	2	2	4	..
Passaic County	82	1	1	..	8	24	17	11	12	9	..
Clifton	7	..	..	..	1	3	..	1	2	..	..
Passaic City	15	..	..	..	1	2	6	3	2	1	..
Faterson	50	1	1	..	6	18	8	5	4	7	..
Salem County	13	..	..	1	3	2	1	4	1	1	..
Somerset County	22	..	..	2	6	2	2	2	4	4	..
Sussex County	8	..	..	1	..	..	..	2	1	4	..
Union County	107	..	4	7	5	16	23	21	14	17	..
Elizabeth	39	..	2	5	2	5	7	10	5	3	..
Warren County	6	..	..	..	..	..	2	..	2	2	..
Institutions	41	..	..	..	..	8	7	5	8	5	..
Military Posts	5	..	..	..	2	3	..	..	..	..	..
Allens	7	..	..	..	2	1	1	1	1	1	..

Notes: (1) Newly reported tuberculosis cases.

(2) Alien cases—aliens admitted to the United States during the calendar year with pulmonary tuberculosis and hospitalized or placed under medical supervision on arrival in New Jersey.

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