

SEVENTY-FOURTH ANNUAL REPORT

OF THE

Department of Health

OF THE

STATE OF NEW JERSEY

1951



MacCrellish & Quigley Co
Printers
Trenton, New Jersey

1952

DEPARTMENT OF HEALTH OF THE STATE OF NEW JERSEY
PUBLIC HEALTH COUNCIL

RICHARD E. SHOPE, M. D., D. V. M., *Chairman*Kingston
FREDERICK P. LEE, M. D., *Vice-Chairman*Paterson
HARRY N. LENDALL, C. E., *Secretary*New Brunswick
WALTER G. ALEXANDER, M. D.,Orange
MARCUS W. NEWCOMB, M. D.,Browns Mills
J. RAYMOND PRIDEAUXMorristown

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

STATE OF NEW JERSEY,

DEPARTMENT OF HEALTH,

TRENTON, N. J., July 1, 1951.

*To His Excellency Governor Alfred E. Driscoll:
To the Senate and General Assembly of the State of New Jersey:
To the Public Health Council:*

GENTLEMEN—I have the honor of submitting herewith the Annual Report of the Department of Health for the fiscal year ending June 30, 1951.

Respectfully submitted,

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

Table of Contents

SEVENTY-FOURTH ANNUAL REPORT OF THE DEPARTMENT OF
HEALTH OF THE STATE OF NEW JERSEY, 1951

	PAGE
Report of the State Commissioner of Health.....	7
Report of the Division of Constructive Health.....	29
Report of the Division of Environmental Sanitation.....	109
Report of the Division of Laboratories.....	139
Report of the Division of Local Health Services.....	161
Report of the Division of Preventable Diseases.....	175
Report of the Division of Vital Statistics and Administration.	219

Report of the State Commissioner of Health

July 1, 1950—June 30, 1951

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

Last year my annual report dealt primarily with three problems of state public health administration: reorganization of the structure and services of the State Department of Health, the need for adequate and comprehensive coverage of local health services throughout New Jersey and the need for developing plans to meet emergency medical and health civil defense preparedness needs. During the past year we have made good progress in all three of these needs.

The reorganization of the Department has been virtually completed with the progressive establishment of the four state district health offices. The organization of the six divisions of the Department accomplished in the preceding two years has permitted the further development of plans and programs. There have been additional changes within Divisions as our experience has indicated the need for these adjustments, demonstrating the value of flexibility not only in program planning but in organization as well. The nomenclature of the Departmental units has been changed in accordance with law to one of bureaus, sections and programs as sub-units of the six divisions.

HEALTH AND MEDICAL CARE PREPAREDNESS PLAN

In civil defense we had an active and able Medical and Health Preparedness Committee, and we now have a basic plan for emergency medical and health preparedness, the product of a full year of intensive work. It has been my happy privilege to work with the members of this Committee and the many people who served on the various sub-committees in my capacity as Chairman.

The basic planning contained in the New Jersey Plan will serve as the guide in building our civil defense program of medical and health services in the next few years. It may, if we are subject to direct attack, be the most significant of all the work done during the past year in the saving of lives. Our state will benefit from it, however, even though, as we all so

fervently hope, we are not attacked, for the planning will be used effectively in developing our public health services and it is also ready in event of any major disaster. The need for and usefulness of effective planning was demonstrated in the South Amboy explosion, the Woodbridge railroad wreck and the flood in Cumberland County.

Many of our departmental employees contributed substantially in the preparation of the New Jersey plan and have served in other capacities in civil defense activities. Two staff physicians received special training in radiological medicine and an engineer was trained in radiation monitoring and control. This training has had a direct application in services provided to New Jersey industries having industrial X-ray installations, electrostatic eliminators or using radioactive isotopes as well as in civil defense planning.

An in-service training course was conducted early in the year for departmental personnel on public health aspects of radiological monitoring. A four-day training course on civil defense aspects of atomic explosions for physicians, health officers and other local civil defense personnel was presented in November, 1950 and a second training course for science teachers was conducted at Princeton in January, 1951. In June, 1951 the civil defense activities in health and medical preparedness had increased to the point where it was necessary to assign a physician within the Department to devote full time to this work.

In all of the civil defense activities we have been most fortunate in having the help and active cooperation of a large number of able persons who have been willing to volunteer for the exacting task of developing plans and conducting advanced courses in radiological and chemical defense.

LOCAL HEALTH DISTRICT ACT PASSED

More than 25 years of effort by health officials, health agencies and civic groups to secure workable legislation for local health districts culminated in the signing of the Local Health District Act of 1951 by Governor Driscoll on May 14, 1951. The Governor's Committee on Local Health Administration, a group of competent and dedicated workers under the dynamic chairmanship of Mrs. Gloanna W. MacCarthy spearheaded the move in which they drafted the proposed legislation, held a public hearing on the proposal, secured introduction of the bill as an administration measure, sponsored the five-state Eastern States Conference on Local Health Administration and Civil Defense in January 1951, and held local meetings county-by-county throughout New Jersey to secure public support for the legislation.

This act, the result of the thinking and working together of the professions and the people, provides a permissive method for local municipalities to pool their resources to form consolidated local health districts or county local health

districts which can provide all participating municipalities with full-time local health services measuring up to present-day standards. The act preserves our municipal principle of home rule, it keeps the responsibility and control of local public health services at the local governmental level where it belongs and it makes it possible for local municipalities to provide themselves with the services they need through an inter-municipal organization which they can afford to support.

Its task so well done, the Governor's Committee has been discharged with the appreciation of the Governor, the State Department of Health and the people of New Jersey. Enactment of the law does not, however, solve the problem. Our needs today for local public health services are even greater than before the passage of the legislation, for we face now the additional task of organizing for local civil defense medical and health preparedness with its dependence on adequate local public health facilities and personnel. We must now tackle the long-range work of helping people to learn their public health needs, of showing them how they can utilize this new provision to their advantage, and of stimulating municipal interest and action.

ACTIVE CITIZEN PARTICIPATION EFFECTIVE

Realizing this need, a group of citizens, former members of the Governor's Committee, are already planning to call the interested people and agencies together to consider how the interest and enthusiasm developed during the past year can be maintained and channeled to further the use of the Local Health District Act. This group, acting under the leadership of Mrs. Frances Mancusi-Ungaro who served as County Meeting Chairman for the Governor's Committee is already making long range plans to meet this need.

The active and willing support of so many people here in New Jersey who are ready to give time and money and energy to support efforts for better public health has made our progress possible. The State Department of Health and I as Commissioner could not function as we do without this productive assistance from individuals, from civic groups, from the professions and from health agencies.

No one person can possess all of the knowledge of a particular health need and no person can, by himself, develop the best answer for that need. Group thinking and group planning by a competent group can be superior to individual thinking and planning.

We have utilized this philosophy in the State Department of Health through the appointment of a number of advisory committees to study and recommend courses of action or legislation in a number of specialized fields. Here too, we have been fortunate in securing the ready assistance of a number of technical and professional persons who have been willing to give their services.

During the past year the following committees have been actively engaged in helping the Department: Advisory Committee on State and Local Health Services, Advisory Committee on Animal Diseases Transmissible to Man, Advisory Committee on State Plumbing Code, Advisory Committee on Mosquito Control and Advisory Committee for Crippled Children Program.

In addition to these, there are advisory committees at work drafting codes to be recommended to the Department on the following subjects: eating and drinking establishments, fluoroscopic shoe fitting devices, industrial and commercial water supplies, individual sewage disposal systems, nuisances, smoke control, swimming pools, tourist and trailer camps and weeds detrimental to health. These codes, when developed and enacted, will be available for adoption by reference by local boards of health under the law.

BUILDING LOCAL HEALTH SERVICES AT HOME

The Division of Local Health Services and its four state health district offices provide the means through which the technical and professional services of the Department are made available to local health agencies. Reorganization of the Department with the objective of helping local boards of health to do their own job better rather than supplying personnel to do it for them has required a complete reorganization of the local health services of the Department. Each state health district office as it receives its supplemental staff provides the means of decentralizing all service activities of the Department.

Securing properly trained professional personnel to staff these offices has proven difficult. Rather than lower our standards of personnel, which would ultimately require a parallel reduction in performance, we have chosen to delay appointments until qualified personnel could be found. The wisdom of this procedure has been justified by the personnel we have eventually secured for these positions. At the close of the fiscal year, the Central State Health District Office at Trenton had been staffed with 26 persons and the Southern State Health District Office at Haddonfield was staffed with the exception of the State District Health Officer. Filling of this position was assured before the close of the fiscal year. Activation of the Metropolitan and Northwest State Health District Offices is anticipated shortly.

Meanwhile, development of new programs and plans and revision of established activities is proceeding throughout all six divisions so that the completed plan of coordinating and integrating activities through the state health district offices will be ready for their guidance.

No one can make an intelligent estimate of what public health services a community has need of unless he has complete and accurate information about the public health resources and the public health needs of that community. This can be secured only through means of an evaluation survey. The state

health district office staffs are teams which are also trained in methods of conducting community public health surveys. They will, upon request, provide help to local community groups wishing to make such surveys. Two county-wide surveys were begun this year; one, that of Hunterdon County, has been completed, and one still under way in Hudson County.

Following the established policy of getting the Department out of the business of giving direct local health services, a new system of grants-in-aid to local health departments has been established. In past years the Department has assigned field personnel, particularly public health nurses, paid in full or in part by the State to local boards of health for direct health services. Under the new method, a money grant is made to the local board of health to assist it to employ the needed personnel, thus placing the responsibility and function of providing local health services where it rightfully belongs—with the local board of health.

A further step in the reorganization of the Division of Local Health Services was achieved by the transfer of the Bureau of Public Health Nursing to that Division from the Division of Constructive Health. The task of decentralizing public health nursing services from a headquarters program basis to four state health districts and the transition of public health nursing program from a specialized to a generalized program were thus facilitated.

WORKING FOR TOTAL HEALTH

The promotion of optimum health for New Jersey's people and communities is the challenging task of the Division of Constructive Health. Functionally related activities in this field of positive health promotion are now closely integrated in this Division. By bringing these activities together under a single division director, a fundamental change in thinking and planning has been achieved so that we now think in terms of building good health for the whole individual and the entire community in addition to freedom from one or another specific disease or cause of death.

The organization of the Division of Constructive Health was expanded by the transfer of the Bureau of Crippled Children and the Bureau of Dental Health to that Division from the Division of Preventable Diseases.

THE AIR AROUND US

More effective procedures for the investigation of atmospheric pollution are being developed. During the past year, the practice of using an investigating team of physician, nurse and industrial engineer has been continued, thus providing close correlation of medical findings with engineering knowledge of plant manufacturing processes. A broader approach in planning such studies to include local health officials and industries is now followed rather than dissipating the time of personnel in answering individual complaints.

Air pollution studies were made in 49 New Jersey communities with a total population of over two million; 67,450 people in these communities are known to have been actually affected by the pollution. The mobile laboratory equipped last year has been in operation for 24-hour sampling in zones of atmospheric contamination. Atmospheric pollution may be a local problem, an area problem or a regional one. A localized problem may involve one industry or public dump affecting a limited number of people in adjacent occupied properties; an area pollution problem involves one or more industrial, community or individual operations affecting all or part of surrounding neighborhoods; a regional problem involves one or more operations affecting a large number of surrounding communities.

Each year research extends our knowledge of atmospheric pollution and of control methods, but we are still vitally handicapped by incomplete knowledge of this newer health hazard. We face also the constant problem of establishing in each air pollution case the presence of a hazard to the public health as distinct from the fact that the pollution is undoubtedly a public nuisance.

Atmospheric pollution is but one of a number of industrial health problems which were the subject of special work and study during the year. Studies were made of industrial plant cafeterias and box lunch concessionaires, and training of food handlers in plant cafeterias was conducted for better nutrition of industrial workers. A study of the chromate industries with special reference to possible carcinogenic properties of chrome and its compounds was undertaken in one city.

Two community-wide industrial health surveys were completed upon request of the local boards of health. Follow-up investigations for environmental factors which might have been predispositional to pneumoconiosis were made in three large industrial plants.

DIVIDENDS FROM CHILDREN'S HEALTH SERVICES

The work of the Crippled Children Program in prevention and alleviation of crippling in our children has continued to pay us dividends in rehabilitation of these young lives. We have many needs in this regard which are still to be met, among them: the need for hospital and convalescent care to meet the specialized needs of adolescent patients with rheumatic fever; educational facilities for the cerebral palsied child and the mentally alert but physically handicapped; summer camp opportunities for the handicapped; and greater employment possibilities for the handicapped young person.

There was a considerable increase in the number of visits and investigations of crippled children made by local official and non-official agencies, and in cerebral palsy; much assistance was given in helping health and welfare

agencies in communities to realize and develop facilities to provide total care for these children. The Crippled Children Program provided follow-up public health nursing service for cases of acute poliomyelitis. These services included: nursing care in the home, referral to private physicians, orthopedic surgeons, orthopedic clinics and physical therapy facilities, and, when indicated, arranging for convalescent care and securing braces.

Preventive measures against dental caries, a disease affecting all of our people, are now available to us in: topical application of sodium fluoride solution to the teeth by the dentist and less expensive and more effective addition of fluorides in controlled amounts to the public water supply. Topical application is becoming a routine in private dental practice and is an established procedure of the dental care programs supervised by this Department.

The Public Health Council approved fluoridation of public water supplies at its meeting in May, 1951 and rules and regulations governing fluoridation of public water supplies were adopted by the State Department of Health on June 15, 1951. One New Jersey community is already fluoridating its supply, four others have purchased the necessary equipment and it is under consideration in a number of municipalities.

Children from districts in 18 counties are now participating in the dental care programs. These dental programs are developed on the basis of local needs, local request, local support and local administration through the local dental health committee. The chief function of the State Department of Health is that of providing technical supervision of the dental services rendered to maintain high standards. The New Jersey Dental Society and its component societies participate in planning the program and in providing professional personnel.

Public health workers share with the medical and nursing professions the pride of accomplishment in the continued low maternal and infant mortality rates. We have now reached a point where the immature baby accounts for 42 per cent of the total infant deaths. Further reduction in the mortality from prematurity can come from more effective prenatal care and better care of the prematurely born in hospitals.

The nutrition program has been applied in a number of divisions and bureaus within the Department, since nutrition is an important factor in many preventive health measures. The nutritionist has, for example, provided consultation and other services to the Bureau of Tuberculosis Control, the Heart Program, the Bureau of Dental Health, the Crippled Children Program and a number of other units, indicating the importance of free interchange of information, of skills and of knowledge within the Department. This is a direct demonstration of the results which can be achieved by a Department of Health in which the thinking and planning are directed toward the whole of public health rather than separate pieces.

PREVENTION—KEYSTONE OF PUBLIC HEALTH

Prevention of illness and premature death is the goal of public health. We have a number of causes of illness and premature death which are wholly or partially preventable and since their control calls for the same basic philosophy and similar means of attack, the efforts of the Department to reduce the preventable diseases have been brought together in the Division of Preventable Diseases. Some of these diseases we have virtually under complete control, others we have reduced appreciably and still others we are just beginning to fight. Education and research are two important phases of this work.

There has been much interest on the part of both the public and the professions in the possibilities which multiphasic screening offers in early detection of certain diseases. By giving a series of screening tests to a large number of individuals it is possible to find unknown cases of tuberculosis, diabetes, syphilis and certain heart conditions. In addition to this, determination can be made of the blood group Rh type and hemoglobin. A demonstration screening program which included these tests was conducted at the 1950 State Fair.

Alcoholism is now regarded as a disease and the State Department of Health is concerned with it as a preventable disease. Out-patient clinic services for persons with alcoholism are being established in a few hospitals and the results are being carefully evaluated as a guide for further development. Authoritative published materials on alcoholism have been supplied to free public libraries, and to public and private secondary school libraries. Digests of scientific articles supplied by the Commission on the Study of Alcoholism of Yale University are supplied to physicians.

Use of our present knowledge of causes and means of transmission of communicable diseases, and application of proven preventive measures have reduced cases and deaths from these causes to a point where some communicable diseases have been eliminated as a serious threat to our health, and others have been brought under control. Public health has only the maintenance job to do in this field—a job without end, but one which offers no serious obstacle.

TUBERCULOSIS—A SPECIAL PROBLEM

In tuberculosis, however, although we have the knowledge available to bring it under control, the progress which we have a right to expect has not been made. Thousands of persons are developing new cases of this preventable disease each year and hundreds of deaths from this cause are occurring in New Jersey. An average of over three persons die from tuberculosis in New Jersey

every day of the year. We have the knowledge to prevent this unnecessary death toll. We need await no answers from research. New Jersey has not yet applied available knowledge and skill to the fullest possible extent to control tuberculosis. As a result, New Jersey citizens through their State, County and Municipal Governments expend millions of dollars yearly. Much of this could be saved.

Major changes in the tuberculosis control program of the State Department of Health have been made during the past year to help meet this problem. Chest X-ray surveys are now scheduled on the basis of relative incidence of tuberculosis infection, rather than upon a request basis only. This procedure is followed in making industrial surveys as well as community surveys. Use of commercial X-ray facilities was begun to supplement the work done by X-ray technicians employed by the Department. This has accomplished a significant reduction in the cost per new case of tuberculosis discovered.

Furthermore, a new morbidity card for use by physicians in reporting cases of tuberculosis has been developed and put into use, providing better and more complete information. Follow-up of suspected and known cases and contacts has been intensified with greater use of local health agency personnel. X-ray and accessory equipment was provided for another chest clinic—the twelfth.

This much is necessary and fine, but it is not enough. Tuberculosis is a chronic and insidious disease. A program of intensified selective mass X-raying is needed in areas of high incidence, intensified individual epidemiological follow-up is needed in most areas of the State, good case registers must be maintained on a current basis and intensive follow-up of known cases and X-ray suspects is imperative. This requires an "ounce" of cash for prevention so that the well known "pound" of cash now spent for hospital care can be saved. The present State, county and municipal expenditures for treatment of tuberculosis total millions of dollars each year. The need for at least half of this could be eliminated by a scientifically conducted and modestly financed tuberculosis preventive program. It is conservatively estimated that if only 10% of present expenditures for tuberculosis were provided for prevention, in less than 10 years a 50% saving on total cost would result every year thereafter. This is good business, good judgment plus good health. New Jersey citizens and their representatives must act soon and resolutely to stop this preventable tragedy.

The simplicity of modern therapy and the downward trend of venereal disease have resulted in a relaxation of control efforts which cannot be justified. The progress we have made can be maintained only by persistent and sustained control techniques. We must increase our efforts in case-finding and, as in tuberculosis, we are concentrating on the geographical areas showing the highest rates of incidence. We have passed through the spectacular and more

dramatic days of 20 years ago when venereal disease control was growing in public opinion and public support. We now have the less dramatic, but equally important job to do of maintaining and extending our control of these diseases.

Education and research were two important phases of the work for cancer control in New Jersey during the last year.

The study of possible relationship between occupation and cancer of certain selected body sites which was begun in November 1948 was continued throughout the year. From 4,113 death certificates reporting the selected cancer mortality during the period January 1, 1947 to August 30, 1949, 1,918 cases have been selected for occupational follow-up. This significant public health research project is jointly sponsored by the Department of Health and the U. S. Public Health Service.

Heart disease is one of the causes of premature death which can be reduced by the application of knowledge and techniques which we now have, while research continues to enlarge our knowledge and the probability of developing still further preventive measures. Earlier case-finding is the goal of our work and we have concentrated on this phase during the past year by providing equipment for diagnostic centers and by participating in the training of physicians.

The demonstration cardiac diagnostic and consultation center at St. Michael's Hospital in Newark, is now being matched with a similar center at West Jersey Hospital in Camden and a third at McKinley Memorial Hospital in Trenton. In a further expansion of cardiac case-detection facilities, eight vertical fluoroscopes have been placed in hospital cardiac clinics. The demonstration centers serve also as teaching centers for the medical profession in heart disease.

PUBLIC HEALTH LABORATORY SERVICES EXPANDED

One of the phases of the reorganization program was the grouping of all laboratory services in the Division of Laboratories, resulting in a closer functional relationship and savings in personnel and facilities. Certain additional laboratory services were provided for physicians and health departments for the first time this year and the established laboratory services were in increased use. A considerable saving in clerical work was effected by returning original negative serologic examination reports in window envelopes, eliminating the necessity of addressing separate envelopes. The cost of duplicating and filing over 300,000 reports yearly also has been eliminated.

The number of tumor specimens submitted for the tumor registry and for consultation services increased during the year, with the Section of Pathology serving as a clearing house for the pathologists' consulting board. Rh type

determinations made on prenatal blood specimens doubled over the previous year.

Research and investigation in air pollution have required increased laboratory work. Adaptation of present analytical methods to the analysis of low concentration samples collected in environmental studies and development of new methods have become important activities. In combating air pollution we are dealing with a new field, one in which much of the pioneer research is still to be done.

Public health is not a static field; it continues to move and grow in extent and complexity. We long ago passed the point where any individual could know all the phases of this science intimately and public health is developing its specialties as our knowledge and skills advance. Because of this constant change, it is necessary that state and local public health personnel be kept abreast of these changes through in-service training opportunities.

This Department has conducted public health courses in cooperation with Rutgers University, since 1925. During the past year the 144 hour Basic Public Health Course for preparing persons for the sanitary inspectors license examination was held and eight short term courses were conducted in the evenings. These courses included plumbing regulation and inspection, food-vending sanitation, introductory sanitation, milk sanitation, mental health, and health education. The total registration for the short courses was 219.

A special in-service training course was conducted for sanitation personnel of the Department to prepare them for the generalized sanitation program they are to carry out as assigned to the State District Health Offices. A number of special training institutes were sponsored throughout the state. There was also the professional training program of the Bureau of Dental Health and the Bureau of Cancer Control to provide courses in oral cancer for practicing dentists. Other courses and fellowships were provided with cancer and heart control funds. Professional training of selected personnel at schools of public health and at specialized training courses was continued.

STATISTICS WHICH ARE VITAL

The Division of Vital Statistics and Administration provides services to all of the Department and is sometimes referred to as our housekeeping division. During the last year these services have been increased to meet the expanding needs of a reorganized department; at the same time they have effected economies of time, personnel and expenditures throughout the Department by introduction of standard operating procedures, by more effective statistical control, by better inventory control and by application of modern business methods.

As the Department has increased its work following the reorganization, the need for graphic and visual health education materials has also increased. The needs of the Department in this field have been met by the Bureau of Administrative Services which was moved during the year from four separate locations in down-town Trenton to a single building. The administration of examinations and the issuance of all licenses, formerly done by two divisions is now done by the Bureau of Examination and Licensing.

The public health statistical services introduced in 1949 have been increased and an improvement in quality has been achieved.

A HEALTHY ENVIRONMENT FOR ALL

The revitalization of environmental sanitation activities which was achieved through the reorganization showed productive results during the last year. In all of its activities, both in long established programs and in new fields, the Division of Environmental Sanitation has placed emphasis on stimulating local health departments to accept their responsibilities to perform local health functions in this field to the end that the combined effort would be adequate to maintain a healthful environment for all. This has placed the Department in the position of providing leadership and technical and consultative services as needed by the local officials who are doing the local work.

A broad program to control animal diseases affecting man is being developed with the help of the Advisory Committee on Animal Diseases Transmissible to Man. Organization of the Bureau of Veterinary Public Health in the Division of Environmental Sanitation in June 1951 marked another advance in this field.

Adequate dog control facilities are essential to the control of rabies. During the last year three joint community programs formed by adjoining municipalities were placed in operation. This plan of joint effort by local municipalities can provide effective dog control at a shared cost which does not place an undue burden on any municipality. There were six cases of rabies in animals reported during 1950.

The lake bathing sanitation work begun in the previous year was continued, working toward the goal of uniform standards of sanitary control. Weed control programs by municipalities are increasing in number and it is now estimated that over a million people live in communities having some protection for those who are sensitive to ragweed pollen. The Division of Environmental Sanitation has furnished training and leadership in this field.

Active cooperation with the Federal Housing Administration, the Veterans Administration, municipal officials, realty developers and others has been developed for control of private sewage disposal systems at all large housing developments. With our growing population and the trend to building in large tracts of communities without public sewage disposal systems, a public health hazard of pressing importance is facing a number of municipalities. Work towards developing better insect and rodent control by municipalities and use of sanitary landfill for waste garbage and refuse disposal has progressed.

Development and administration of these new activities has required additional time of our trained public health engineers. Three sanitary engineers were awarded degrees of Master of Public Health during the year, thus expanding our staff of trained personnel.

An aggressive stream pollution control program aided by funds from the U. S. Public Health Service with five full time engineers was carried on through the year. Inspections of waste disposal facilities of industries located in the Delaware river basin, the Atlantic coastal basin, the lower Hackensack river basin and the Passaic river basin were made. Plans for 51 water supply projects representing an estimated cost of \$6,106,154 and plans for 145 sewage and industrial wastes projects representing an estimated cost of \$21,111,172 were examined.

New legislation governing the refrigerated warehouse industry was enacted by the Legislature providing for better control of this important New Jersey industry. A vigorous program of sampling, testing, investigating and prosecuting to stamp out the fraudulent practice of selling horseflesh as beef was instituted. In the course of this drive, 15,000 horsemeat steaks and 1,000 pounds of horsemeat filets and chunks destined for sale as beef were seized.

A survey of all narcotic manufacturing and wholesale establishments in New Jersey was completed to ensure compliance with the Uniform Narcotic Drug Act and to ensure proper safeguarding of narcotic drugs in the raw or finished state.

Permits were issued, under the provisions of R. S. 4:22-16, to the following foundations to carry on scientific experiments and investigations on animals in connection with investigation into the causes, nature, prevention and cure of diseases in men and animals and to make this knowledge available for the protection of the public health: December 4, 1950, Johnson and Johnson Research Foundation, New Brunswick; February 26, 1951, Ortho Research Foundation, Raritan.

The 40th Annual Conference of State and Local Health Officials of New Jersey was held in the War Memorial Building, Trenton, on Friday, March 30, 1951. The program of the Conference was as follows:

DEPARTMENT OF HEALTH

MORNING SESSION

Presiding: Dr. Daniel Bergsma, State Commissioner of Health

Civil Defense and the Health Department

- 10:30 A. M. Panel: *Environmental Sanitation and Civil Defense*
 Rodent and Insect Control—Mr. Alfred H. Fletcher, Director Division of Environmental Sanitation, Panel Leader
 Food and Drug Safety—Dr. Louis M. Lounsbury, Chief Bureau of Food and Drugs
 Water and Sewage—Mr. Robert S. Shaw, District Chief Public Health Engineer

11:00 A. M. *Questions and Answers*

- 11:15 A. M. Panel: *Health and Civil Defense*
 Biological Defense—Dr. Geoffrey W. Esty, Director Division of Constructive Health, Panel Leader
 Drug and Biological Supplies in the Civil Defense Program—Mr. Edward A. Thorne, Chairman Subcommittee on Emergency Supplies
 The Blood Program—Dr. Eugene M. Katzin, Chairman Subcommittee on Civilian Bloodtyping and Supply.
 The Role of the Local Health Officer—Mr. Edward Gerner, Chairman Subcommittee on Integrated Local Health Services Plan.

11:55 A. M. *Questions and Answers*

12:15 P. M. *Adjournment*

AFTERNOON SESSION

Presiding: Dr. G. Frederick Moench, Director, Division of Local Health Services

The State Department of Health and the Local Health Departments—A Working Partnership

- 2:00 P. M. *The Division of Environmental Sanitation*
 Mr. Alfred H. Fletcher, Director
- 2:45 P. M. *The Division of Constructive Health*
 Dr. Geoffrey W. Esty, Director
- 3:30 P. M. *The State District Health Office*
 Dr. J. B. Aronson, State District Health Officer, Central District
- 4:15 P. M. *Adjournment*

The annual meeting of the Public Health Council was held on July 17, 1950. The following officers were elected for the fiscal year 1950-1951: Dr. Richard E. Shope, Chairman; Dr. Frederick P. Lee, Vice-Chairman; Mrs. Florence M. Farr, Secretary. At the meeting of April 9, 1951, following Mrs. Farr's withdrawal from the Council by reason of her change of residence to New York, Mr. Harry N. Lendall was elected secretary to complete her unexpired term in this capacity. Dr. Walter G. Alexander of Orange was reappointed by the Governor on March 26, 1951 to succeed himself as a member of the Council, effective July 1, 1951. This nomination was confirmed by the Senate on April 2, 1951. Mr. J. Raymond Prideaux of Springbrook, Morris Township, was appointed to membership on the Council and confirmed by the Senate on May 4, 1951, to replace Mr. Wheeler McMillen.

The membership of the Public Health Council is as follows:

Name	Address	Expiration Term
Marcus W. Newcomb	Browns Mills	June 30, 1952
Harry N. Lendall	New Brunswick	June 30, 1954
Richard E. Shope	Kingston	March 13, 1957
Frederick P. Lee	Paterson	June 30, 1957
Walter G. Alexander	Orange	June 30, 1958
J. Raymond Prideaux	Springbrook, Morris Twp.	May 4, 1958

There was one vacancy on the Council at the close of the fiscal year, inasmuch as no appointment had been made of a successor to Mrs. Farr.

HEALTH LEGISLATION OF 1951

The following legislation of interest to health officials was enacted by the 1951 Legislature:

S-22, Chap. 309 (Bodine). Authorizes county physicians or a physician duly licensed to practice in this State to make, or order an autopsy in violent or sudden death cases.

S-71, Chap. 127 (Vogel). Permits sewerage authorities to construct facilities for collection and treatment of sewerage from outside of sewerage district, with approval of outside municipality or property owner when such action will prevent pollution within district; permits service contracts between authorities and two or more municipalities; permits municipalities to join county sewerage system despite prior refusal; broadens eminent domain power of authorities to allow taking lands of State or any political subdivision; broadens power of authorities to raise revenue and adjust working capital and reserves.

S-72, Chap. 126 (Vogel). Validates appointments to sewerage authorities made prior to filing creation proceedings with Secretary of State; validates such creation proceedings if not heretofore questioned in any legal action.

- S-114, Chap. 141 (Young). Authorizes construction and repair, by municipality, of roads and water mains on lands of camp meeting associations, with approval of governing bodies of both municipality and association, where lands of such association lie wholly within municipality.
- S-115, Chap. 333 (Young). Provides that appointment of municipal Board of Health employees be made in accordance with Civil Service requirements, if Civil Service adopted by such municipality; confers Civil Service status without examination, upon such employee holding office prior to July 1, 1950.
- S-135, Chap. 283 (Littell). Creates Delaware River Basin Water Commission of three members each from New Jersey, New York and Pennsylvania to develop water resources of Delaware River basin under a compact with those States to be entered into by their Governors.
- S-202, Chap. 143 (Wallace). Provides that covenants made with holders of municipal bonds, authorized by ordinance for enlargement, reconstruction or other lawful work on any municipal sewer or water system, be performed by municipality, and revenue be used for payment of said bonds whether derived from that particular system, or any other municipal system or sewer.
- S-203, Chap. 175 (Wallace). Permits construction, reconstruction, enlargement or extension of any water main or other works for distribution of water supplied by the State, any political subdivision, or any agency thereof, to be undertaken by a municipality as a local improvement, assessable against benefited abutting owners.
- S-214, Chap. 261 (Bodine). Requires permit to dig wells, at fee of \$3, and report of well completion, within 60 days, under penalty of \$25; exempts from "Well Diggers Act," drive point and hand dug wells; permits State Geologist and Division Officers to enter lands containing wells for inspection purposes.
- S-234, Chap. 260 (Summerill). Permits certain rural cemetery associations, whose corporate existence has terminated by lapse of time, to reinstate charters of incorporation in perpetuity.
- S-267, Chap. 232 (Young). Increases salaries of State Board of Barber Examiners from \$3,300 to \$3,800, and from \$3,500 to \$4,000 for secretary-treasurer; requires full time.
- S-276, Chap. 72 (Hannold). Supplements the State Civil Defense Act by permitting mutual aid agreements regarding civil defense, between this State and other States, or political subdivisions thereof, or between two or more political subdivisions of this State; permits civil defense forces of such agreed states and subdivisions to exercise the duties, powers and privileges authorized in their own area, within this State in areas covered by such mutual agreement; authorizes the State and political subdivisions to accept gifts, grants or loans for civil defense purposes.
- S-308, Chap. 287 (Wallace). Authorizes the construction, operation and maintenance of a vehicular bridge, or tunnel, across the Delaware River, between points in Camden and Philadelphia, by the Delaware River Joint Commission.
- S-309, Chap. 288 (Wallace). Redesignates the Delaware River Joint Commission as the Delaware River Port Authority; extends powers.
- S-327, Chap. 336 (Young). Amends law governing creation of sewerage districts.

- SCR-9 (Hess). Reconstitutes and continues commission on prevention and abatement of air pollution, created by ACR-16, 1950; reappoints existing commission members.
- SJR-4, Chap. JR. 4 (Cafiero). Designates April as "Cancer Control Month."
- A-1, Chap. 69 (Cavinato, Haines, Wilson and Snediker). Permits municipalities to join in creation of consolidated local health districts within a county, or to join in creation of county local health districts.
- A-2, Chap. 8 (Cavinato). Authorizes Governor to enter interstate civil defense and disaster compacts with other states; U. S. territories, possessions, or District of Columbia.
- A-30, Chap. 56 (Cavinato, Marggraff, Dwyer, Freeman, M. D. Haines, Pilger and Savage). Specifies degrees of punishment for violation of uniform narcotics law.
- A-32, Chap. 58 (Tompkins). Repeals section of "narcotic drug law" which prevents prosecution of violators who have been convicted or acquitted of the same violation under the Federal Narcotic Laws.
- A-104, Chap. 228 (A. M. Smith and Wegner). Includes children afflicted with cerebral palsy in act concerning county assistance to crippled children.
- A-123, Chap. 316 (C. W. Haines). Defines "economic poison," provides for regulation of manufacture, redistribution, sale or transportation of insecticides.
- A-234, Chap. 30 (Wilson). Provides that cattle must be tuberculin tested within 60 days before sale, heretofore 30 days.
- A-273, Chap. 144 (Pilger). Amends act concerning beauty culture control.
- A-297, Chap. 38 (A. M. Smith). Includes children afflicted with cerebral palsy in the terms "crippled children and physically-handicapped children" as used in act concerning pupils and conduct of schools.
- A-298, Chap. 319 (Kurtz). Declares a given list of named persons, supposedly killed in South Amboy explosion, May 19, 1950, to be legally dead.
- A-299, Chap. 227 (A. M. Smith). Includes children afflicted with cerebral palsy in the term "crippled children" as used in act concerning State school moneys and appropriation thereof.
- A-327, Chap. 42 (Russell). Changes the name of the "Section of Examination, Licensing and Registration" in the State Department of Health to the "Bureau of Examination and Licensing"; requires all agencies and boards within Bureau to submit annual budget requests to the Commissioner of Health.
- A-335, Chap. 265 (N. C. Smith). Increases number of members of a "Sanitary Sewer District Authority" from 5 to 7; authorizes board of chosen freeholders to reduce number to 5; makes changes in terms of members.
- A-389, Chap. 82 (Russell). Simplifies "transit permits," required for transportation of dead human bodies.
- A-390, Chap. 84 (Russell). Amends act listing contents of death and birth certificates by permitting State Department of Health to determine contents.

A-421, Chap. 298 (Jones). Increases amount counties or municipalities may contribute to first-aid and emergency associations, from \$1,000 to \$3,000; includes volunteer ambulance or rescue squad.

A-427, Chap. 225 (Saiber). Makes one year practical experience with registered pharmacist a prerequisite for examination as registered pharmacist.

A-442, Chapter 136 (Field). Amends act concerning burial of members of armed forces dying on active duty, to include those dying while serving in present national emergency.

A-488, Chap. 85 (Russell). Purposes to clarify law regulating reporting of still-births.

A-508, Chap. 299 (Simmill). Permits newly-formed municipalities to adopt ordinances of the municipality, which it was formerly a part of, without publishing such ordinances at length.

A-529, Chap. 248 (Joya). To define "blighted area" in Chapter 187, P. L. 1949.

A-644, Chap. 269 (Simmill). Permits granting of licenses to residents of New York to take clams in waters of Raritan Bay in this State provided reciprocity is extended by New York.

A-649, Chap. 199. Provides for regulation and licensing of "Dental Clinics"; defines same; provides penalties for violations.

A-651, Chap. 341 (Salsburg). Permits person to practice dentistry as an interne or resident of a public hospital, provided such person furnish proof that he can fulfill requirements; may practice not to exceed three years (now one year) fee \$10 for certificate.

A-656, Chap. 342 (Hillery). Regulates storage of food or drink used by man or animals, in refrigerated warehouses and locker plants; provides for licensing of such warehouses and plants; penalties for violations.

A-672, Chap. 97 (Simmill). Permits State Commissioner of Health, with approval of Director of Division of Budget and Accounting, to make charges for statistical data or services requested by interested persons.

A-709, Chap. 330 (Tompkins). Amends act concerning "disorderly persons" to redefine "common drug addicts."

A-713, Chap. 83 (Simmill). Requires that State Registrar furnish birth, marriage or death certificate without fee for public pension requirements; likewise furnish U. S. Public Health Service with microfilm images of marriage and transcripts of death certificates.

AJR-2, Chap. JR. 3 (Shannon). Continues the commission created last year to study the problems and needs of mentally-deficient persons. (JR. 15, P. L. 1950).

AJR-12, Chap. JR. 5 (Wilson). Declares week of May 1st "Correct Posture Week."

AJR-14, Chap. JR. 8 (Tompkins). Creates commission of seven—2 Senators, 2 Assembly members, 3 by Governor—to study narcotic laws and illegal narcotic traffic; report to next session.

BILLS WHICH DID NOT PASS

The following bills were introduced in the 1951 Legislature, but did not become laws:

S-35 (Hannold). Permits chiropodists to treat simple fractures and bone resections anterior to the mid-tarsal joint.

S-54 (Bodine). Provides that only licensed veterinarian shall clip dogs ears; violation a misdemeanor, penalty not more than \$250.

S-101 (Davis). To bring auxiliary volunteer firemen and volunteer fire policemen, first aid or rescue squad workers, air raid wardens and other persons aiding in the Civil Defense Program under the Workmen's Compensation Act.

S-126 (Wallace). Permits embalming license be given, without examination to honorably discharged veterans of the U. S. armed forces, who have graduated from a college of embalming approved in New Jersey, and who have served required apprenticeship.

S-228 (Bodine). To amend the act regulating chiropractic; prescribes the kind of treatments which chiropractors may give.

S-254 (Farley). Creates State Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians, composed of five members, with power to regulate practice of ophthalmic dispensing, to license persons thereunder, and to examine applicants therefor; provides penalties for violations. (Vetoed.)

S-273 (Littell). To create a N. J. Water Authority for the construction of water supply and distribution systems to be used in connection with the future Delaware River Basin Water Commission systems.

S-282 (Davis). Regulates production and sale of milk and dairy products; authorizes Secretary of Agriculture to license persons engaged in production of milk; establishes fees; provides health and sanitation requirements.

S-304 (Vogel). To create a bonded debt of \$25,000,000 to construct and maintain a State college of medicine, dentistry and veterinary medicine to be paid through a stock transfer tax of 3¢ a share.

A-17 (Cavinato and Shershin). Establishes "New Jersey Public Assistance Code"; provides for administration thereof by Department of Institutions and Agencies and by county and municipal departments of welfare; establishes method of financing; prescribes penalties for violations.

A-21 (Cavinato). Authorizes payments by counties and municipalities to hospitals for establishment and maintenance of special facilities and services.

A-24 (C. W. Haines). To establish a South Jersey Water Authority for the development of additional water supply.

DEPARTMENT OF HEALTH

- A-120 (Marggraff). To define "building code"; provides a method for the adoption of building codes.
- A-174 (Tumulty). Repeals act concerning Interstate Sanitation Commission.
- A-175 (Tumulty). Sets aside court orders pertaining to Interstate Sanitation Commission rulings relative to pollution of waters until the end of the National Emergency is proclaimed.
- A-189 (Litvany). Amends act concerning contract to provide public health service in municipalities or school districts, by permitting municipalities of school districts to separately enter into such contracts; heretofore only joint contract permitted. (Vetoed.)
- A-197 (Wilson). Provides procedure for recovery of damages caused by dogs to sheep, lambs, domestic animals or poultry, except to other dogs and cats.
- A-209 (Tompkins). Permits municipalities to increase fee for dog license from \$2 to \$3.
- A-210 (Salsburg). Amends act concerning Board of Barber Examiners by increasing board membership from 4 to 5; the additional member to be a master barber.
- A-226 (Musto). Gives municipalities regulatory powers in connection with furnished apartments.
- A-230 (Musto). To prohibit the disclosure by physicians, dentists and nurses of confidential communications of patients.
- A-241 (Wilson). Establishes a Division of Dairy Economics in the Department of Agriculture to gather information concerning costs in dairy industry for public use, appropriates \$25,000.
- A-301 (A. M. Smith). Permits local Boards of Health to enforce adequate heating standards in buildings occupied or designed to be occupied as dwellings for two or more families, previously restricted to more than two families.
- A-307 (Tumulty). Establishes State Medical College; prescribes methods for administration; prefers Jersey City Medical Center as location; appropriates \$2,000,000.
- A-318 (Joya). To require that all livestock, hay, grain, feed, stone, chemicals, oils, milk, metals and scrap materials sold by weight in amounts exceeding one hundred pounds shall be weighed by a public weighmaster or certified weigher.
- A-329 (Saiber). Regulates practice of dental laboratory technology; provides for licensing dental laboratory technicians; prescribes penalties for violations.
- A-331 (N. C. Smith). Establishes necessary qualifications for admission to the examination for a license to practice medicine and surgery.
- A-355 (Neutze). Prohibits vivisection or experimenting with live animals in elementary or secondary schools; prohibits exhibiting of such animals; violation a misdemeanor.

REPORT OF THE STATE COMMISSIONER OF HEALTH 27

- A-406 (Wegner). Requires mouthpieces of all public telephones be equipped with disinfecting device, or be disinfected and sterilized every two weeks.
- A-409 (Thomas). Requires regulations assuring health of employees, sanitation of plant and equipment in connection with pasteurization of milk.
- A-411 (Jones). To authorize counties to create air pollution prevention and abatement authorities under the administration of the State Department of Health.
- A-414 (Joya). To regulate the sale and distribution of ice cream, ices and related frozen products.
- A-415 (Joya). To regulate the sale of meat, meat products and poultry.
- A-423 (Saiber). Empowers Board of Pharmacy, without hearing, to revoke temporary permit to operate a pharmacy.
- A-428 (M. Haines). To regulate the practice of psychology.
- A-443 (Wegner). Permits New Jersey Society for the Prevention of Cruelty to Animals to establish and maintain shelter for cats and dogs; makes it a misdemeanor to permit a female dog in season to run at large.
- A-468 (Wegner). Prescribes safety measures for operation of swimming pools; enforcement by local health board.
- A-479 (Marggraff). Amends act concerning practice of medicine and surgery, so that it shall not apply to practice of "healing by mental means."
- A-486 (Marggraff). To require the annual registration of persons licensed to practice medicine and surgery, osteopathy or chiropractic.
- A-491 (Fowler). Prohibits selling or dispensing of medicines or medicinal devices in vending machines; restricts sale and distribution of prophylactic devices to registered pharmacists or persons employed under their supervision in pharmacies.
- A-520 (Glenn). To define "blighted area" in Chapter 187, P. L. 1949.
- A-541 (Russell). Requires that plans for development of realty subdivisions, including proposed water and sewerage systems, be filed with the State Department of Health, and that said department supervise, inspect and control all such development and construction.
- A-582 (Tumulty). Requires grading and classification of "hot dogs" under supervision of Department of Health.
- A-606 (Wilson). Limits license fee for "seeing eye" dogs to 25 cents.
- A-618 (M. Haines). To regulate the issuance of licenses under the Beauty Culture Control Act.

DEPARTMENT OF HEALTH

A-643 (C. W. Haines). Permits fixing by ordinance of 50 cents fee for hunting dog license.

A-657 (Wilson). Increases schedule of license fees for operating a plant for manufacture of ice cream and related products.

A-671 (Salsburg). To give County Courts jurisdiction of violations of the act regulating medicine and surgery; increases the penalties for such violations.

A-689 (Cavinato). Authorizes county and municipal payments to hospitals for establishment and maintenance of special facilities and services.

A-694 (Riley). Places expense of burial, of indigent persons dying in a county almshouse or welfare house, on county providing for said indigent.

A-711 (M. D. Haines). Provides for licensing and regulating of psychologist and psychological technicians; creates five-member Board of Examiners of Psychologists; defines practice of psychology; prescribes qualifications; fixes penalties for practicing without a license; extends to psychologist the privileged communication doctrine.

Report of the Division of Constructive Health

July 1, 1950—June 30, 1951

 GEOFFREY W. ESTY, M. D., F.A.A.P., *Director*

Bureau of Adult and Industrial Health	MARIE A. SENA, M. D., M. P. H. <i>Chief</i>
Bureau of Crippled Children (Crippled Children Commission)	GERTRUDE BUCH <i>Executive Director</i>
Bureau of Dental Health	EARL LUDLAM, D. D. S., M. P. H. <i>Chief</i>
Bureau of Maternal and Child Health	JULIUS LEVY, M. D. <i>Chief</i>
Nutrition Program	MARGARET P. ZEALAND <i>Nutritionist</i>

Division of Constructive Health

The year ending June 30, 1951 has been marked by continuing organizational changes within the Division of Constructive Health. The Bureau of Public Health Nursing was transferred to the Division of Local Health Services. The Bureau of Crippled Children (State Crippled Children Commission) and the Bureau of Dental Health were transferred from the Division of Preventable Diseases to this Division. In order to emphasize the positive nature of the work of the Dental Bureau, its name was changed from Dental Diseases to Dental Health.

The program activities within the Division are now all functionally related in that they stress the cultivation of optimum health for the individual or the community rather than satisfaction only with the absence of specific disease. This evolutionary point of view has been particularly marked in the changing attitudes toward the handicapped or crippled child in recent years. We no longer look upon the cerebral palsied child, for example, as an abnormal child with a diseased body or mind in need of treatment. Such attitudes often resulted in chronic invalidism, dependency and continued emotional immaturity. Instead such a child is looked upon and considered as a whole, living within a limiting framework, but capable of doing so productively, happily and socially.

During the year the Director has had innumerable conferences not only with his Bureau Chiefs but with the Division Directors and Bureau Chiefs throughout the Department and especially with the Division of Local Health Services in order to assist in both program and reorganization activities. With the formation of the Central and Southern State Health Districts, a gradual decentralization of activities has been affected as these Districts were able to assume operational, supervisory and administrative responsibilities.

During the year the public health nursing programs of the Bureau of Maternal and Child Health were absorbed by the Central and Southern State Health Districts, and the ground work laid for these activities in the other two districts, the Northern and Metropolitan. With the completion of this process shortly, and with the advent of new leadership, a new and expanded Maternal and Child Health program can be anticipated during the next fiscal year.

Much of the Director's time has been spent working with the Executive Secretary of the Crippled Children Bureau, and with many ramifications and widespread activities of this Bureau throughout the State. This has

been done for the purpose of assisting the Crippled Children Commission to adapt itself to State Health Department policy, organization and integration, and to lay the ground-work for decentralization of activities and responsibilities into the District Health pattern, while maintaining the morale and the effectiveness of the Commission and its splendid work. Considerable time and attention has also been directed toward the organizational problems and programs of the Bureau of Adult and Industrial Health, which, as the year closes, has now gained a new effectiveness and efficiency.

In addition to his divisional and departmental activities, the Director again gave a two-semester course at Seton Hall University at the Urban Division in Newark and off campus in Camden for public health nurses in Understanding, Care and Guidance of Children. A special course on Mental Hygiene for Health Officers was also given under Rutgers sponsorship.

The Director believes that one of his most important responsibilities lies in the field of establishing wholesome public relations and assisting the citizens of the State to understand the overall program of the Division of Constructive Health and the State Department of Health. Consequently, the year has witnessed continued activities of the Director with lay and professional organizations as well as liaison with other State Departments. There have been nine informal and four formal conferences with members of the Department of Institutions and Agencies on Mental Health subjects, and six meetings with the Department of Education. The Director has met eight times with members of the Children's Bureau and seven times with members of the U. S. Public Health Service. As Chairman of the Mental Health Committee of the New Jersey Welfare Council, the Director has had 13 meetings with this organization. He has had four meetings with the Parent's Group for Retarded Children; attended five meetings of the N. J. State Council for the Improvement of Child Health Services; five meetings of the Nutrition Council; five meetings with the White House Conference Committees; three with nursing organizations; two with Child Study Association groups. He has attended the Eastern States Health Education Conference at the N. Y. Academy of Medicine; the Trenton State Teachers Workshop; the National Industrial Hygiene Conference; the National Conference on Social Work; the American Medical Association Convention; and the New Jersey Safety Council Conference. The Director has spoken either privately or officially to 11 P. T. A. or parent groups during the year.

Civil Defense matters have absorbed considerable amount of the Director's time. As Chief of Health Services Section for the Medical and Health Preparedness Committee in Civil Defense, he has attended or held 21 committee meetings. He has also attended five meetings of the Civil Defense Protection Group in New York. Representing the Commissioner

of Health, the Director of Constructive Health addressed the Bergen County Medical Society and on another occasion the Passaic Medical Society on Civil Defense, and appeared as speaker for a large public civil defense meeting in Hackensack. He also spoke on civil defense at the annual dinner of the Daughters of American Colonists.

Bureau of Adult and Industrial Health

INTRODUCTION

During the past year two major activities greatly influenced the program of the Bureau of Adult and Industrial Health. These activities were participation in the New Jersey State Civil Defense planning, and the investigations of atmospheric pollution problems and complaints.

Two members of the Bureau of Adult and Industrial Health staff, a physician and an engineer, had received special training in radiological medicine and radiation monitoring and control. Because of their special knowledge, much of their time was employed in civil defense activities.

Their specialized training was of extreme value to the Bureau because of the many problems in industry with the ever-increasing use of industrial X-ray installations, electrostatic eliminators and radioactive isotopes.

In the field of atmospheric pollution, the Bureau made tremendous advancements in developing procedures for the investigation of local, area, and regional atmospheric pollution complaints. This work was combined with the routine industrial planned activities of the Bureau. The customary team procedure of physician and/or nurse and industrial engineer conducting plant surveys was followed in atmospheric pollution studies. The medical member of the team was, therefore, able to discuss medical problems and recommendations in relation to normal plant production while the engineering member of the team was correlating plant manufacturing processes with the waste and by-products which might be a source of air pollution. A separate section of this report summarizes the atmospheric pollution activities for the year.

ROUTINE ACTIVITIES

The routine activities of the Bureau are summarized in the statistical summary sheet. The preparation of this summary has revealed the necessity of changing the record and filing system of the Bureau, and of simplifying and clarifying the monthly activity report forms. It was almost impossible to correlate the various activities reported. The total number of different plants serviced was 356, and the total number of plant visits was 449.

DEPARTMENT OF HEALTH

SPECIAL PROJECTS

NUTRITION PROGRAM

With the state nutritionist and the public health veterinarian, a special study was conducted of plant cafeterias and box lunch concessionaires. In addition, special courses in food handling for cafeteria workers in industries were conducted at several large plants. Emphasis was placed on the necessity for refresher courses in nutrition for medical and nursing personnel of industrial plants, and on the special effort needed to keep workers at the peak of health and working efficiency, in these times of national emergency.

CHROMATE INDUSTRY

SURVEY IN JERSEY CITY

In cooperation with the Division of Industrial Hygiene of the U. S. Public Health Service, a special study was made of the chromate industries in the Jersey City area with particular attention to the carcinogenic properties of chrome and its compounds.

PNEUMOCONIOSIS STUDIES

Follow-up investigations for environmental factors that might have been predispositional to pneumoconiosis, were undertaken in three large industrial plants. In each of these plants, chest X-ray surveys by the Bureau of Tuberculosis Control, had disclosed X-ray evidence of more than average incidence of pneumoconiosis.

These plants are in the heavily industrialized area and will be further studied for possible significance in morbidity studies related to atmospheric pollution.

CIVIL DEFENSE PROGRAM

The entire staff of the Bureau cooperated in, and attended a Civil Defense Training Course at Princeton University.

A special Civil Defense mission, extending over a period of 6-8 weeks, took the full time of the Bureau's medical staff. The purpose and plan of this assignment must remain confidential.

OCCUPATIONAL CANCER

An engineer assigned by the Bureau of Cancer Control was oriented and trained in industrial plant survey methods. Twenty tar and asphalt plants were studied and spot-mapped as part of the joint program between the Bureau of Cancer Control and the Bureau of Adult and Industrial Health.

DIVISION OF CONSTRUCTIVE HEALTH

The Bureau's staff has attended several meetings with Dr. W. C. Hueper, chief, Cancerigenic Studies Section, National Cancer Institute of the National Institutes of Health, Public Health Service, Federal Security Agency, and has assisted with the industrial coding of cancer mortality statistics.

INDUSTRIAL HEALTH BULLETINS

Regrettably, only one new Industrial Health Bulletin was published by the Bureau this year. There was insufficient time and personnel to abstract and write proposed additional bulletins.

COMMUNITY INDUSTRIAL HEALTH SURVEYS

Two community-wide industrial health surveys requested by respective local Boards of Health were completed and reported. Each survey served to emphasize the almost complete lack of medical care in small industries. The surveys were made in

Rutherford — 17 plants
Burlington — 27 plants

ATMOSPHERIC POLLUTION STUDIES

- I. EQUIPMENT—The Bureau's mobile trailer laboratory was completed during this year. Many of its fittings were constructed and installed by the engineering staff. After several trial runs for the purpose of calibrating instruments and checking methods, 24-hour sampling in zones of atmospheric contamination were begun.
- II. CONFERENCES—Two meetings were held with the legislative committee on atmospheric pollution to discuss problems of mutual interest and concern.
A member of the engineering staff was appointed to the Interstate (New York—New Jersey) Atmospheric Pollution Committee and participated in the conferences of this group.
- III. ATMOSPHERIC POLLUTION INVESTIGATIONS—The Bureau has advanced enormously in its methods of handling and investigating atmospheric pollution complaints. The surveys have progressed from the simple answering of complaints to the broader aspects of working with local health officials and orienting them and industries in means of appraisal of the situation and control of offending substances.
The attached summary sheets only partially indicate the scope of the investigations. No accurate record has been kept of the number of visits to boards of health for planning purposes, and of visits to the homes of complainants and their neighbors for the purpose of eliciting possible symptoms or health implications.
Frequently a local health officer has requested aid in solving a local area problem and while listed or tallied as *one* complaint by our Bureau may be the reflection of *one hundred* or *one thousand* citizen complaints to the local health officer. Research in atmospheric pollution may well include research in keeping records and statistics in order to present a true picture of the problem.

DEPARTMENT OF HEALTH

Activities Bureau of Adult and Industrial Health

SUMMARY OF TABLES

COMMENT

A. Extent of Complaints

Local 28

Area 28

Regional 9

A.

Local—one industrial or commercial operation affecting a limited number of persons in adjacent occupied properties.

Area—one or more industrial or commercial operations affecting all or part of surrounding neighborhoods.

Regional—one or more industrial or commercial operations affecting a large number of surrounding communities which extend geographically beyond the confines of an individual community.

B. Distribution of Complaints

District	Extent of Complaint		
	Local	Area	Regional
Northern ..	2	3	..
Metropolitan	20	18	5
Central	5	5	4
Southern ..	1	2	..
	—	—	—
	28	28	9

B. These figures are self-explanatory, in that the Metropolitan District has the most highly concentrated industrial establishments, affecting large geographical areas and regions.

C. Population Affected

No. of communities 49
No. of people 67,450

C. The total population of the 49 communities is 2,028,275; of this number about 67,450 were actually affected by the sources of pollution surveyed during the fiscal year 1950-51.

D. Subject of Complaints

Odor 37
Smoke 20
Fumes and vapors 22
Dust 18
Noise 17

D. Many complaints involve more than one subject of complaint; and often hundreds of citizens complain of the same, single fume or odor.

E. Classification of Complaints

Alleged damage to health 59
Alleged damage to crops or property 17

E. Many complaints are of damage to health and property.

DIVISION OF CONSTRUCTIVE HEALTH

F. Number of Plants Investigated ... 78

G. Action and Results

1. Atmospheric sampling 28
2. Letters written 60
3. Plant surveys 54
4. Corrections made by industry .. 5
5. Specific recommendations 12

H. Physiological Effects

Atmospheric Pollution Factor	Symptom Complained of					
	Headache	Nausea	Respiratory	Hearing	Nervous- ness	Miscel- laneous
Fumes	8	10	5	..	6	7
Odors	10	14	7	..	6	16
Dust	3	2	2	..	4	8
Noise	4	2	1	7	14	7
Smoke	3	5	1	..	1	10
	—	—	—	—	—	—
Total ...	28	33	16	7	31	48

These are subjective reports of symptoms and are not confirmed medical diagnoses.

TOTAL—FISCAL YEAR 1950-51

STATISTICAL SUMMARY OF INDUSTRIAL HYGIENE ACTIVITIES

Plant Activities:

Total number of different plants serviced 356
Total number of workers in plants serviced 117,891
Total number of plant visits made 449

Source of Service:

Self-initiated 75
Request from management, labor, etc. 276
Official reports of occupational diseases 5

Total 356

General Type of Service Given:	No. of Plants		No. of Times Service Was Given
	In Which Service Was Given	Was Given	
Introductory or promotional visits	83		85
Surveys of working environment	158		173
Technical studies of potential health hazards	109		148
Appraisals of plant medical department	47		47
Assistance with o.d. diagnosis (in plant)	3		3
Consultations regarding:			
Problems of the working environment	16		16
Medical programs	9		9
Nursing services specifically	12		12
Dental services specifically	2		2
Other services specifically	11		13
Nuisance complaints investigated	25		27
Follow-up on compliance with recommendations	8		8
Improvements Recommended Regarding:			
	No. of Improvements	No. of Plants	No. of Workers Affected
Working environment	88	47	2,693
Health and welfare services	81	42	4,416
Improvements Carried Out:			
Working environment	15	4	449
Health and welfare services	11	3	2,029
Estimated cost of improvements to industry			*\$6,200
Specific Services:			
Samples collected for laboratory analysis or examination			193
Number of laboratory analyses and examinations			375
Field determinations of atmospheric contaminants			714
Field determinations of physical conditions			1,351
Medical examinations of workers .....			...
Examination of plans for control equipment			13
Occupational diseases reported (officially) .....			...
Occupational diseases investigated or found on investigation .....			...
Chest X-rays taken (or read) .....			...
Other Activities:			
Professional meetings attended			104
Lectures and talks given			15
Publications			1
Inquiries on industrial hygiene answered			64
Literature distributed to industry			755

* This figure denotes installations or changes made by plants on Bureau recommendations. These changes are noted on follow-up visits, which totaled only 8 (eight) for the entire year.

Bureau of Crippled Children (Crippled Children Commission)

ADMINISTRATIVE REPORT

The office of the Executive Director is a clearing house through which come requests for various kinds of information regarding services. Appropriate responses dealing with techniques to be applied, or the services available, are given by the Executive Director. These requests may be met by sending letters, copies of the annual report, or, by special bulletins, which have been prepared. In other cases, the information can only come from conferences with consultants, field workers, or with the Director of Constructive Health, State Department of Health.

When a number of requests are received dealing with subjects which are obviously of general interest, it is necessary to plan an institute, or a demonstration, which will give the required information to a large number of interested people at one time. Not only is information requested about the types of services available but the actual services as well. The types of services available include consultations in several professional fields; psychological, medical social, nursing; medical services include hospitalization, convalescent care, appliances, special medicines not found in Hospital Pharmacy and blood transfusions, which are paid through federal and state funds, in cooperation with the Boards of Freeholders, if the child has a county residence. Others who cooperate are the Chapters of the National Foundation for Infantile Paralysis, various organizations and individuals.

Requests for information and services come from physicians, hospitals, state and private agencies and individuals. Children born with congenital deformities, all polio cases and cerebral palsy cases are reportable by law, through the State Department of Health. If a case not known to the Commission is reported, information is immediately sent to the Public Health Nurse Supervisor in the field; the nurse contacts the physician, and secures all information regarding care to be provided.

When the report concerns a child previously known to the Commission the Executive Director first studies the case, notes what previous services have been given, and if necessary a request is sent out for further study or investigation. When complete information has been provided, the Executive Director transmits the information to the physician or agency concerned, arranging for services and suggesting specific resources. In cases which are not of a routine nature, such as cerebral palsy and rheumatic fever, specialized examinations and consultation services may be available.

Frequent conferences are held between the Executive Director and the Director of the Division of Constructive Health. Weekly conferences are

held with the consultants, regarding specific problems, and other conferences are held, where all the nurses and other field workers participate. In some instances the Executive Director attends meetings in the field to discuss special problems with the Commission workers throughout the State.

Numerous agencies and organizations, both professional and lay, assist in carrying out the work of the Commission. The Executive Director must always be available to confer with the Commissioner of the Department, the Program Director and Director of the Commission, a representative of a service club, the directors of visiting nurse associations, the executive of the National Foundation for Infantile Paralysis, or any other group or individual concerned with problems of crippled children.

In addition to these activities the Executive Director prepares the agenda and attends all Commission meetings; is responsible for the preparation of budget requests and administration of all details of expenditures; supervises and directs the preparation of the annual report, consolidates the separate reports into final form, and makes numerous other reports, as required.

The Executive Director desires to express her sincere thanks and appreciation to the following who have contributed materially to the success of the program, and without whose assistance we could not have functioned so well.

The Governor and members of the Legislature.

Members of the Children's Bureau and their staff.

Members of all cooperating State Departments.

The County Boards of Freeholders.

The National Foundation for Infantile Paralysis and their County Chapters.

The National Society for Crippled Children and Adults, Inc.

The Hospitals and Schools which have opened their doors to us.

The orthopedic, plastic and neuro-surgeons who, since the inception of the Commission, have rendered extensive service without cost, and

All other cooperating agencies and individuals.

NURSING

This report is a summary of the work done by the Nursing Division of the Bureau of Crippled Children for the fiscal year from July 1, 1950, to June 30, 1951, which includes:

The Public Health Nurse Consultant (Orthopedic);

The five Public Health Nurse Supervisors;

The 31 public health nursing agencies which hold contracts with the Bureau;

Other official and non-official agencies that have cooperative working relationships with the Bureau.

SUMMARY OF NURSING PROGRAM

During the period covered by this report, various changes in program and personnel have occurred due to the reorganization of the State Department of Health. As compared with previous years the nursing program shows a considerable increase in cases admitted to nursing service and visits made by contract agencies, and a decrease in cases admitted and visits made by direct service to patients by the five Public Health Nurse Supervisors. The increase in the contract service did not compensate for the decrease in direct services. There was a total decrease of 108 cases admitted and 531 visits. There was, however, a considerable increase in visits made by official and non-official local agencies which do not hold contracts with the Bureau and whose counts of cases and visits are not included in the official count but are tabulated as a separate item. In addition, the program was carried by a decreased staff. During the year there was one less Public Health Nurse Supervisor and for five months one less consultant. It, therefore, became necessary for one of the Public Health Nurse Supervisors to assume some of the duties previously carried by the pediatric consultant, consequently less of her time was available for servicing the orthopedic and plastic programs.

During the Fall and Winter the Central and Southern State Health Districts were established. This change necessitated redistricting some of the counties covered by the Regional offices of the Bureau and the re-assignment of supervisory nursing staff. One supervisor was transferred to the Central State Health District and one transferred to the Southern State Health District.

In accordance with the policy of the State Department of Health of generalizing the work of the public health nurses the consultants and supervisors attended a series of all day in-service training programs in civil defense, venereal disease and maternal and child health.

The long established policy of the Bureau of developing the work through the use of approved local visiting nurse associations and other official and non-official cooperating agencies was continued.

FOLLOW-UP PUBLIC HEALTH NURSING SERVICE TO ACUTE POLIOMYELITIS PATIENTS

The Bureau is charged with the responsibility of providing medical and surgical care, hospitalization, convalescent care, prostheses and public health nursing services to *eligible* crippled children under 21 years of age. The Bureau is required to maintain a state register of crippled children. All children under 21 years of age, who come under the Bureau's definition of a crippled child and are reported, whether under private or clinic care, are added

to the register. It is the policy of the Bureau to register every reported case of acute poliomyelitis. It is also the policy of the Bureau to provide follow-up public health nursing services in the home for every poliomyelitis patient. Over a period of years close cooperative working relationships have been established with the New Jersey State office of the National Foundation for Infantile Paralysis and its county chapters. The services provided by the county chapters have become an integral part of all follow-up services of poliomyelitis patients.

During the calendar year of 1950, 897 cases of acute poliomyelitis were reported to the Bureau. Of these, 175 cases were over 21 years of age and 24 cases were incorrectly diagnosed. The remaining 698 patients were followed up by the nursing division of the Bureau. All cases were registered and follow-up public health nursing service provided for every case. These services included: nursing care in the home, referral to private physicians, orthopedic surgeons, orthopedic clinics and physical therapy facilities, and, when indicated, arranging for convalescent care and securing braces.

POLICIES AND PROCEDURES OF THE BUREAU IN REGARD TO THE REPORTING, REGISTERING AND FOLLOW-UP OF CASES OF ACUTE POLIOMYELITIS

REPORTING OF CASES OF ACUTE POLIOMYELITIS

The Sanitary Code of the New Jersey State Department of Health sets forth laws and regulations governing the reporting, isolation and quarantine of poliomyelitis patients which are briefly summarized as follows:

Poliomyelitis is listed as a communicable disease.

The incubation period is designated as 14 days.

The physician is required to report in writing to the local board of health within 12 hours after his first professional visit, the name, age, sex, color and precise location of the person suffering from poliomyelitis. The report must be signed by the physician.

The local health officer is required within 24 hours to transmit in writing to the State Department of Health the information reported by the physician.

For poliomyelitis patients who remain at home, the local health officer is required to placard the home and isolate the patient.

The minimum period of isolation for persons suffering from acute poliomyelitis is 14 days after the onset of the disease.

POLICIES AND PROCEDURES REGARDING REFERRAL, REGISTRATION AND FOLLOW-UP OF POLIOMYELITIS PATIENTS

1. The diagnosing physician reports the case in writing to the local health officer within 12 hours after his first professional visit.
2. The local health officer reports the case in writing on Form 573-L.H. to the State Department of Health, Division of Preventable Disease, within 24 hours.

3. On the day the report is received, the Division of Preventable Disease tabulates statistical information and sends the original report to the Bureau of Crippled Children.
4. Cases of acute poliomyelitis over 21 years of age are not taken up by the Bureau because the State law limits the program to crippled children under 21 years of age. All average poliomyelitis cases are referred simultaneously to the State office of the National Foundation for Infantile Paralysis and the State office of the Rehabilitation Commission for follow-up services.
5. Patients who are stricken in New Jersey, but live in other states, are referred by the District State Health Offices or in areas where the State Districts are not yet established by the Regional offices of the Bureau to the official State Crippled Children's Agency in which they reside. In accordance with the State law, the Bureau cannot accept responsibility for care of patients who reside in other states.
6. The Bureau considers acute poliomyelitis cases to be emergency cases. On the same day the report is received in the Trenton office of the Bureau, the case is processed and referred to the two established District State Health offices or to the Regional offices of the Bureau.

PROCEDURES REGARDING INITIAL REFERRAL AND FOLLOW-UP OF CASES

A form letter is sent by the Bureau to the physician who reported the case and booklets regarding poliomyelitis are enclosed.

A Supervisor's Call Slip (CC-39) giving instructions and triplicate Registration forms (CC-0) containing the information on Form 573-L.H., are sent to the District State Health Office, or to the Regional office of the Bureau.

An individual case record is opened in the Trenton office. The original form (573-L.H.) is filed in it and copies of the form letter and Call Slip. As Form (573-L.H.) does not contain sufficient information to add the case to the State Register, the case is given to the statistical department and marked pending.

A follow-up card is made for the nursing section.

Upon receipt of the Call Slip and Registration Forms (CC-0), the District Chief Public Health Nurse or the Public Health Nurse Supervisor opens an individual case folder.

In areas where the Bureau holds a "Contract for Public Health Nursing Services to Crippled Children," the Public Health Nurse Supervisor issues an authorization for a nursing visit to the agency. The authorization letter gives the nurse instructions which includes the name and address of the family physician and requests that the nurse secure his permission and orders before making a home visit. The triplicate Registration Forms (CC-0) are attached to the authorization.

In areas where the Bureau does not have a contract, a form letter and the triplicate Registration Forms (CC-0) are sent to the Public Health Nurse

Supervisor in the area who in turn refers the case to the local public health nurse.

The public health nurse employed by the contract agency or the local official public health nurse visits the home and secures the necessary information for completing the CC-0 forms. The content of the nursing visit is recorded on line 16 of the Registration Form (CC-0).

The contract agency or the local public health nurse retains one Registration Form (CC-0) and returns two completed copies to the District State Health Office or to the Regional office of the Bureau of Crippled Children.

The District Chief Public Health Nurse or the Public Health Nurse Supervisor files one completed form in the local individual case file and sends the other one to the Trenton office of the Bureau.

When the completed CC-0 form is received in the Trenton office of the Bureau, the case is taken out of the pending file and added to the State Register.

Only the first nursing visit is reported on Registration Forms (CC-0). Subsequent visits are reported on Progress Report (CC-40).

CONTRACT AGENCIES

During the year 30 "Contracts for Public Health Nursing Services to Crippled Children" were renewed. One new qualified agency was issued a contract which became effective February 1, 1951. On June 30, 1950, the Red Cross discontinued its local public health nursing services. Contracts were held with five Red Cross Services. All five services were successful in establishing local visiting nurse services and qualifying for contracts. The contracts were transferred to these five new agencies.

The contract service covered by the 31 agencies includes 326 of the 566 municipalities of the State. Of the remaining 244 municipalities, a large number are covered by official and non-official cooperating agencies. Where no cooperating agency is available, direct nursing service is given by the Public Health Nurse Supervisor.

To insure competent nursing care for crippled children, the Bureau requires that a visiting nurse association have on its staff a nurse who has had specified training in orthopedic nursing, if the agency is to be eligible for a contract. For the past two years Seton Hall College scheduled a four point course in Orthopedic Nursing that met the Bureau's requirements. This year the course was not given because a qualified nurse instructor was not available. It, therefore, became necessary for public health nurses to attend universities outside the State. Arrangements were made in several instances for local nurses to take the necessary courses.

Effective July 1, 1951, payment of nursing visits to crippled children was increased from \$1.50 to \$2.00 per visit.

The following is a list of the contract agencies, including the number of municipalities covered:

<i>County</i>	<i>Name of Organization</i>	<i>Municipalities Covered</i>
<i>Bergen</i>	Central Bergen Visiting Nurse Service	28
	Englewood Hospital Public Health Services	26
	Northern Bergen Nursing Service	6
	Nursing Service, Inc., Ridgewood	7
	Passaic Visiting Nurse Association (covers Garfield and Wallington in Bergen County)	2
<i>Burlington</i>	Moorestown Visiting Nurse Association	4
<i>Camden</i>	*Collingswood Community Nursing Service	4
	Haddonfield Visiting Nurse Association	13
	Merchantville-Pennsauken Visiting Nurse Association ..	2
	Visiting Nurse Association of Camden	1
<i>Essex</i>	Nutley Public Health Nursing Association	1
	Public Health Nursing Association of Bloomfield and Glen Ridge	2
	Neighborhood Association of Millburn Township	1
	Visiting Nurse Association of the Oranges and Maplewood	5
	West Essex Public Health Nursing Association, Inc. ...	9
	<i>Gloucester</i>	Visiting Nurse Association of Woodbury, Inc. ....	7
<i>Hudson</i>	Bayonne Visiting Nurse Association	1
<i>Hunterdon</i>	Hunterdon County Public Health Association	26
<i>Mercer</i>	Visiting Nurse Association of Trenton	34
<i>Middlesex</i>	Visiting Nurse Association of New Brunswick	12
<i>Monmouth</i>	Monmouth County Organization for Social Service, Inc.	51
<i>Morris</i>	Morristown Visiting Nurse Association	34
<i>Somerset</i>	Community Service Society of Bound Brook	6
	Somerset Valley Visiting Nurse Association	8
	Visiting Nurse Association of Somerset Hills	8
<i>Union</i>	Cranford Visiting Nurse Association	2
	District Nursing Association of Westfield	2
	Rahway Visiting Nurse Association	2
	Visiting Nurse Association of Eastern Union County ..	9
	Visiting Nurse Association of Plainfield and North Plainfield	10
	Visiting Nurse Association of Summit and Vicinity	3
	Total	326

* New contract granted February 1, 1951.

PUBLIC HEALTH NURSING SUPERVISORY STAFF

During the first half of the fiscal year the nursing staff consisted of five Public Health Nurse Supervisors which was one less than previous years. Due to this shortage of staff, the Orthopedic Public Health Nurse Consultant was assigned one day a week to the Newark office.

On December 29, 1950, the Central State Health District was established and one Public Health Nurse Supervisor was transferred to it. When the Southern State Health District was established on February 9, 1951, the second Public Health Nurse Supervisor was transferred there.

CHANGES IN COUNTIES COVERED BY THE REGIONAL OFFICES OF THE BUREAU OF CRIPPLED CHILDREN

Due to the establishment of the Central and Southern State Health Districts, it was necessary for the Bureau to redistrict three of their five regional offices. During January, 1951, Burlington County was transferred from the Southern State Health District to the Central State Health District. Somerset County was transferred from the Central State Health District to Regional Office III in Hackettstown of the Bureau of Crippled Children.

INSTITUTES FOR NURSES

During the year three Poliomyelitis Institutes for nurses were held. These institutes were jointly sponsored by the New Jersey State Department of Health, Bureau of Crippled Children, and the New Jersey State Office of the National Foundation for Infantile Paralysis. The attendance included public health nurses (official and non-official), hospital nurses, physical therapists and representatives from the State Department of Health and the State Office and County Chapters of the National Foundation for Infantile Paralysis. The following is a list of the institutes and the attendance:

May 10, 1951—1-day institute, Essex House	Attendance 210
May 13, 14, 15, 1951—3-day institute, St. Peter's Hospital, New Brunswick, N. J.	Attendance 161
June 29, 1951—1-day institute, Kenny's Restaurant and Camden Municipal Hospital, Camden, N. J.	Attendance 116

Exhibits were set up for all three institutes. The exhibits included visual aids such as charts, graphs and photographs. Samples of reference material were available, also considerable material was obtained from various sources for free distribution.

As an example of the content of the instruction given to the nurses at the institutes, the following is the program of the three-day institute given at St. Peter's Hospital, New Brunswick.

WEDNESDAY, JUNE 13, 9:30 A. M.

Chairman—Miss Julia Peterscak, R. N., B. S., Public Health Coordinator, St. Peter's Hospital

Welcome—Sister Rose Lethiacq, R. N., Superintendent, St. Peter's Hospital
Sister George LeDuc, R. N., M. A., Director of School of Nursing

Introduction—Purpose of Course—Mrs. Gladys Wilson, R. N., M. P. H., Chief, Bureau of Public Health Nursing, New Jersey State Department of Health
Clinical Aspects of Acute Poliomyelitis, Including Diagnosis and Pathology; Bulbar and Respiratory Involvement—Martha Leonard, M. D., F. A. A. P.

DISCUSSION PERIOD

The Orthopedic Care of the Poliomyelitis Patient Including the Acute and Convalescent Aspects—William G. Kuhn, M. D., F. A. C. S.

DISCUSSION PERIOD

LUNCHEON PERIOD—12:00—1:00

P. M. SESSION—1:00 P. M.

Reporting of Poliomyelitis and the Role of the Public Health Nurse—Mary Nevin, R. N., M. A., R. P. T., Public Health Nurse Consultant, New Jersey State Department of Health

DISCUSSION PERIOD

Review of Main Muscle Group, Joint Motion and Terminology (Patient Demonstration)—Clara Weigle, R. N., B. S., R. P. T., Public Health Nurse Consultant, New Jersey State Department of Health

DISCUSSION PERIOD

The Role of the Physical Therapist During the Acute and Convalescent Stages of Poliomyelitis—Mrs. Charlotte Patterson, B. S., R. P. T., Trenton Orthopedic Hospital

THURSDAY, JUNE 14, 1951—9:30 A. M.

Chairman—Mrs. Gertrude McLaughlin, R. N., B. S., District Chief Public Health Nurse, Central State Health District, New Jersey State Department of Health

Program and Policies of the National Foundation for Infantile Paralysis—Mr. Thomas Peyton, New Jersey Representative, National Foundation for Infantile Paralysis

DISCUSSION PERIOD

Technicolor Film—Poliomyelitis

DISCUSSION OF FILM

LUNCHEON PERIOD—12:00—1:00

P. M. SESSION—1:00 P. M.

Nursing Care of Bulbar Patients, Including Oxygen Therapy and Tracheotomy Care (Demonstration of Nursing Care of the Patient in the Respirator)—Miss Theresa Libonati, R. N., Miss Grace Thompson, R. N., Essex County Isolation Hospital, Belleville, N. J.

DISCUSSION PERIOD

Local Facilities for the Care of the Poliomyelitis Patient and the Coordinator of Community Resources—Miss Mary Frances Davioud, R. N., B. S., P. T., Public Health Nurse Supervisor, Central State Health District, New Jersey State Department of Health

DISCUSSION PERIOD

FRIDAY, JUNE 15, 1951—9:30 A. M.

Chairman—Miss Mary F. Davioud, R. N., B. S., P. T., Public Health Nurse Supervisor, Central State Health District, New Jersey State Department of Health

Introduction—Mrs. Gertrude Buch, Executive Director, Bureau of Crippled Children, New Jersey State Department of Health

Epidemiology and Public Health Aspects of Poliomyelitis—Jesse B. Aronson, M. D., M. P. H., District State Health Officer, Central State Health District, New Jersey State Department of Health

DISCUSSION PERIOD

Nursing Care of the Acute Poliomyelitis Patient (Demonstration of Cutting and Applying Hot Packs)—Miss Alma Seber, R. N., B. S., Public Health Nurse Supervisor, New Jersey State Department of Health

LUNCHEON PERIOD—1:00—2:00

P. M. SESSION

Practice in Applying Hot Packs—Miss Alma Seber, R. N., B. S., Miss Mary F. Davioud, R. N., B. S., P. T.

STAFF EDUCATION (ORTHOPEDIC)

The Bureau of Crippled Children held six full day staff meetings. The morning sessions were devoted to discussions of policies, procedures, discussion of reorganization and other problems, and revision of records and reports. An educational committee planned the programs for the afternoon sessions. These included:

The showing of two films—"First as a Child" which outlines a State Crippled Children's Program, and a film on "Rheumatic Fever, depicting a State Rheumatic Fever Program."

A report of the White House Conference on Child Health and Protection given by Miss Elizabeth Brown, President, New Jersey State Nurses' Association.

Discussion of electro-encephalograms—illustrated by slides by Dr. Ira Ross, Menlo Park, given at Presbyterian Hospital Nurses' Home, Newark.

Discussion and demonstration of hearing tests and audiograms given by Miss Ethel Warfield at the New Jersey School for the Deaf, Trenton, New Jersey.

The Public Health Nurse Supervisors assigned to the State Health Districts attended six district staff meetings.

REPORT OF THE WORK DONE BY THE PUBLIC HEALTH NURSE CONSULTANT (ORTHOPEDIC)

Consultant and supervisory visits to regional offices of Bureau of Crippled Children	29
Consultant and supervisory conferences with Public Health Nurse Supervisors (Orthopedic)	36
Relief work—Newark office	27½ days
Office interviews with patients—Newark office	13
Visits to hospitals, clinics, schools	14
Conferences with Nursing Directors and staff of Visiting Nurse Associations	9
Talks given	4

CONFERENCES WITH STATE DEPARTMENT OF HEALTH PERSONNEL

Division Directors, Bureau Chiefs, District and local Health Officers	18
Chief, Bureau of Public Health Nursing	29
Executive Director, Bureau of Crippled Children	48
District Chief Nurses, Consultants, public health nurse supervisors and others	30

STAFF MEETINGS ATTENDED

Bureau of Public Health Nursing	11
Planning and Policy Committee of Bureau of Public Health Nursing	16
Bureau of Crippled Children	6

IN-SERVICE TRAINING

Full-day sessions attended	8
(Civil defense, venereal disease, maternal and child health)	
Moving pictures and slides reviewed	5

MEETINGS AND INSTITUTES

Institutes attended	3
Professional nursing meetings attended	3
Other meetings attended	3

During the year the functions of the consultant were materially changed. More emphasis was placed on purely consultant services and considerable time was spent working on assignments in the Bureau of Public Health Nursing and the Bureau of Crippled Children. The following projects were completed.

Compiled annual report covering fiscal year 1949-50 for the Nursing Section of the Bureau of Crippled Children, which included statistical and narrative reports of the public health nurse consultant, 5 public health nurse supervisors and 30 contract agencies.

In cooperation with the Executive Director of the Bureau of Crippled Children revised and simplified the following nursing records and guides relating to the District State Health Offices, the Regional Offices of the Bureau and the contract agencies:

CC-O, Registration Form. Procedure for the use of this form was changed.

Regional Office Daily Program Sheet.

Nurse's Guide for Home Visits to Orthopedic and Plastic Patients.

Wrote a "Nursing Manual for Public Health Nursing Organizations Holding Contracts for Public Health Nursing Services to Crippled Children" and revised the "Contract for Public Health Nursing Services to Crippled Children."

The Nursing Manual, revised contract and Nurse's Guide were sent and interpreted to 31 contract agencies. The changes became effective July 1, 1951.

Under the direction of the Director of the Bureau of Vital Statistics and Administration and the Chief of the Bureau of Public Health Nursing, and in cooperation with three District Chief Public Health Nurses, and a Supervisor, planned and completed the 1949 public health nurse census for the State.

Under the direction of the Chief of the Bureau of Public Health Nursing completed a N. O. P. H. N. State-wide survey of graduate and undergraduate experience given to public health nurses.

As Chairman of the Planning and Policy Committee of the Bureau of Public Health Nursing conducted 16 all-day group conferences. The objective of this Committee is to compile a Public Health Nursing Manual for the Bureau of Public Health Nursing. Considerable progress has been made in formulating policies, procedures, studying and evaluating records and setting up criteria for generalized nursing visits. Two sub-committees, Uniform and Bag, and Record, have been appointed and are functioning.

REPORT OF THE WORK DONE BY THE FIVE PUBLIC HEALTH NURSE SUPERVISORS

A comparison of the work with that of the previous year shows a decrease of 108 cases admitted to nursing service and a decrease of 531 nursing visits. Although the cases admitted to nursing service and the visits made by contract agencies showed an increase over the previous year, it was not sufficient to compensate for the decrease in direct services given by the Public Health Nurse Supervisors. The reasons for this decrease are given in the beginning of this report.

Cases

New cases admitted to nursing service given by Public Health Nurse Supervisors	718
New cases admitted to nursing service through authorizations issued to contract agencies	1,210
Total new cases	1,928
Cases readmitted to nursing service through direct service given by Public Health Nurse Supervisors	591
Cases readmitted to nursing service through authorizations issued for nursing visits	3,027
Total cases readmitted	3,618
Total cases admitted	5,546
Total cases admitted previous year	5,654
Decrease over previous year	108

NURSING VISITS

The following table shows a total of 8,291 nursing visits which is a decrease of 531 visits over the previous year.

Nursing visits through direct service by Public Health Nurse Supervisors	2,135
Authorized nursing visits made by contract agencies	6,156
Total visits made	8,291
Total visits made previous year	8,822
Decrease over previous year	531

This count does not include the many free visits made by contract agencies for which authorizations were not requested.

STATE DEPARTMENT OF HEALTH, BUREAU OF CRIPPLED CHILDREN CLINICS ATTENDED BY PUBLIC HEALTH NURSE SUPERVISORS

Cerebral palsy	32
Rheumatic fever	51
Nursing interviews in rheumatic fever clinics	132

SUPERVISORY AND EDUCATIONAL WORK OF THE PUBLIC HEALTH NURSE SUPERVISORS

Supervisory nursing visits made with nurses (includes contract agencies and official and non-official cooperating agencies)	201
Case conferences and supervisory visits to offices of contract visiting nurse associations	74
Number of cases reviewed	4,969
Case conferences and supervisory visits to cooperating, official and non-official agencies that do not hold contracts	79
Number of cases reviewed	1,421
Visits to hospitals, convalescent homes, clinics and schools	55
Talks and lectures given	25
Institutes attended	22
Meetings attended	78

All supervisors attended one or two days of the annual convention of the New Jersey State Nurses' Association or the S. O. P. H. N.

IN-SERVICE PROGRAM FOR VISITING NURSE ASSOCIATION OF THE ORANGES AND MAPLEWOOD

This program which was begun the previous year was completed. Four sessions were given which were as follows:

Lecture on cerebral palsy illustrated by slides and the pediatric aspects of the treatment of cerebral palsy.

The role of the physical therapist, speech therapist, and occupational therapist in the treatment of cerebral palsy.

Explanation of tests used in giving psychological examinations to physically-handicapped and educational methods used for the physically-handicapped in nursery classes.

Inspection of the new-born baby for orthopedic and plastic defects.

MEDICAL SOCIAL SERVICE

The Crippled Children Commission has one medical social consultant whose services during 1950-1951 have included:

1. *Medical social consultant services* to the Commission staff, the contract agencies, hospitals, and other social service agencies in the State. The major portion of this service was with the contract visiting nurse associations throughout the State, and with hospitals in Essex County.

2. *Direct service* to the Rheumatic Fever Program and the other programs of the Crippled Children Commission.

A considerable share of the medical social worker's efforts have been directed to the Rheumatic Fever Program. Under this program the medical social worker, in cooperation with the entire clinic and the hospital team, has given service to the patients and their families. Not only in the Rheumatic Fever Program, but in all other programs under the Crippled Children Commission, a varied field of services have been rendered relating to:

- | | |
|----------------------------------|--|
| a. Family problems | k. Special problems requiring referral to private agencies. |
| b. Emotional problems | |
| c. Convalescent care | l. Recording of a medical history on all new patients, and interpreting the services and procedures of the clinic to new patients and their families. |
| d. Housing problems | |
| e. Nutritional problems | m. Arranging for hospitalization, prosthesis; and in the Rheumatic Fever Program arranging also for dental care, tonsillectomy and special medication. |
| f. Securing financial aid | |
| g. Summer camp placement | n. Completion of the necessary commission forms for the registration and admission of patients to the Rheumatic Fever Clinic. |
| h. Rehabilitation and employment | |
| i. Legal aid | |
| j. Behavior problems | |

3. *Attendance at cerebral palsy clinics and consultation services* to patients and families attending these clinics.

4. *Consultive services and visits* to other types of orthopedic cases as requested by Commission staff and contract agencies throughout the State.

5. *Attendance at social service conferences and meetings* aimed toward the improvement of community facilities for greater social service in the area: Among these were:

Council for the Handicapped, Newark.
American Association of Medical Social Workers.
National Conference of Social Work, Atlantic City.
Staff Conferences and Polio Institute, Newark.
Council of Social Agencies, Newark.

6. *Consultations with the professional staff* at convalescent homes that are recognized by the Commission for the care of children under its program. Special service was given to the United Order of True Sisters Cardiac Home which was opened this year and approved by the Commission for the care of children referred under our Rheumatic Fever Program. In addition, we use the excellent facilities at Betty Bacharach Home, Longport, Victoria Foundation, Morris Plains, and the Children's Country Home, Westfield.

7. *Arranging a camp program* for those of our children whom our medical staff recommended for a camp vacation. Among the camps our children attended were Bonnie Brae, Millington, and Kittatiny, Newton, for boys, and Birch Ridge, Blairstown, for girls.

ANNUAL REPORT, 1950-1951

Total cases carried	252
Clinic interviews	290
Office interviews	328
Home visits	60
Telephone consultations	118

Visits

Cardiac unit	43
Convalescent homes	4
Cerebral palsy unit and clinic	10
Hospital	2
Schools and social agencies	4
Hospital rounds—(cardiac program)	43
Consultations with staff members of commission	201
Participation in conference and round tables	12
Meetings attended	11
Consultation—staffs of other agencies	168

Community Needs Observed

1. Although it is possible occasionally to place an adolescent child in a convalescent home, and although their hospital needs are arranged for on the adult wards of most hospitals, there are still no facilities that have been set up primarily for the care of these cases. In other words, none of these institutions has taken into consideration the social and emotional needs of the adolescent child.
2. There is only one resident school in the State for the care, either free or at a nominal fee, of cerebral palsied children serious in need of in-patient training and teaching. Although there are an increasing number of day-school programs being opened for cerebral palsied children, there are still many areas that do not provide adequate training or proper educational facilities commensurate with present-day knowledge of the needs of the cerebral palsied child.
3. The summer camp program has improved. For the first time we have had facilities for handicapped girls at summer camps. This is a very limited program. There are still only a few placements for either handicapped boys or girls in most communities. There are still very inadequate facilities for negro children in any summer camp program.
4. There are almost no housekeeping or home services at nominal fees for temporary care in households where the homemaker has become incapacitated or temporarily overburdened. To the best of my knowledge Essex County is the only county with a reasonably well-established home service program.
5. Employment opportunities for handicapped children of employable age are extremely limited. Although there are State and private organizations for counselling and vocational services for the handicapped, there is a great need for a comprehensive placement program.
6. We have met with some success in securing three- to five-room apartments in housing projects for some of the families under our Rheumatic Fever Program in Essex County. To date, however, the housing program has not been able to give assistance to any of our larger families with low incomes needing more than five rooms. There is a tremendous need for adequate dwelling space for large families.
7. There are still long waiting lists and a great need for adequate State institutional care with suitable training programs for all types of severely-handicapped children, particularly the mentally alert handicapped cases.

CEREBRAL PALSY

Progress in meeting the needs of the Cerebral Palsied has continued during the past year. Under the reorganization of the State Department of Health, it is the aim of the program to have the needs of the people met locally. The Cerebral Palsied is part of the community in which he lives and the responsibility for care should be accepted there. New Jersey had the first State Organized Cerebral Palsy Program, under the Crippled Children Commission. This program has been functioning since 1937 and has demonstrated the needs to be met in these children. Many other States have observed and developed from this program and within the State many parents groups have organized to aid in furthering the development of facilities. *The staff mem-*

bers connected with the present State program are giving much assistance in helping other health and welfare agencies in a community, to realize and develop the necessary facilities to provide total care for these children.

The cerebral palsy statistics, on a county basis, as reported to the Crippled Children Commission is as follows:

FROM BIRTH—21 YEARS OF AGE—JULY, 1951

County	Total Caseload Registered
Atlantic	24
Bergen	269
Burlington	48
Camden	134
Cape May	9
Cumberland	22
Essex	485
Gloucester	43
Hudson	279
Hunterdon	42
Mercer	91
Middlesex	117
Monmouth	92
Morris	64
Ocean	16
Passaic	155
Salem	18
Somerset	61
Sussex	16
Union	167
Warren	26
Total	2,178

This is an increase of 245 over last year's count. This points out that case recognition is continuing to develop. And generally that there is more awareness of the condition.

Cerebral Palsy presents a big problem in the field of the disabled and also in public health. The handicaps of these people may be multiple. But it is important not to segregate these children, especially those who have potentialities of fitting into society. To avoid segregation, it is important to consider this condition as part of the pediatric field. While the needs may be multiple, they are the same as those found in any other child. Along with this consideration, it is important, from the public health aspect, to consider the family as a whole. Depending on the degree of disability of an individual with a handicapping condition, the lives of the members of the family are affected accordingly. In a family where a member is totally disabled and dependent,

there are at least two other persons handicapped by this condition. It is important that the interpretation of this disability or degree of it be made to all members of the family and also that assistance to adjustment be given. *In accord with this objective, it has always been the policy of this program to consider the child as a whole and advise total care.*

Medical diagnostic and reexamination clinics are held by this program for cerebral palsied children. All children in these clinics are seen upon the approval or referral of their local or family physician. This past year, two approved Orthopedists, specially trained in cerebral palsy, were added to the program. This makes a total of four doctors—the Medical Director and three Assistants holding clinic. The State is broken down so that each doctor covers a certain area.

New cases of Cerebral Palsy are examined promptly and reexaminations are made as required. In treatment centers periodic check-ups are spaced according to needs. At the medical clinics all aspects relating to Cerebral Palsy are followed through; other conditions requiring medical care, or follow-up on medications is done by the local physician.

All clinic schedules are completed by the consultant of this program in cooperation with the nurse supervising the work in the respective area.

Cerebral Palsy Medical Clinics for fiscal year June 30, 1950-July 1, 1951 have been as follows:

Date	Location	New Cases	Reexaminations
July 7, 1950	C. P. Treatment Unit, Red Bank	9	12
July 13, 1950	C. P. Treatment Unit, Jr. School No. 2, Trenton	8	9
July 14, 1950	C. P. Treatment Unit, Jr. School No. 2, Trenton	4	18
September 14, 1950	A. Harry Moore School, Jersey City	14	7
September 15, 1950	A. Harry Moore School, Jersey City	..	24
September 29, 1950	C. P. Treatment Unit, Jr. School No. 2, Trenton	6	14
October 6, 1950	Paterson General Hospital, Paterson	1	16
October 20, 1950	C. P. Treatment Unit, Jr. School No. 2, Trenton	5	18
November 3, 1950	St. Michael's Hospital, Newark	14	3
November 9, 1950	Alexian Bros. Hospital, Elizabeth	7	7
November 10, 1950	Alexian Bros. Hospital, Elizabeth	8	12
November 17, 1950	C. P. Treatment Unit, Bonsall School, Camden	6	13

Date	Location	New Cases	Reexaminations
January 4, 1951	Cooper Hospital, Camden	2	15
January 5, 1951	Cooper Hospital, Camden	14	2
January 11, 1951	St. James Hospital, Newark	12	2
January 19, 1951	C. P. Treatment Unit, High St. School, Somerville	5	12
February 8, 1951	C. P. Treatment Unit, Jr. School No. 2, Trenton	6	12
February 16, 1951	C. P. Treatment Unit, MCOSS Bldg., Red Bank	7	12
March 2, 1951	Branch Brook School, Newark	..	16
March 16, 1951	St. James Hospital, Newark	4	6
April 10, 1951	C. P. Treatment Unit, Sussex County Service Bldg., Newton	3	10
April 19, 1951	A. Harry Moore School, Jersey City	10	10
April 20, 1951	A. Harry Moore School, Jersey City	1	19
April 27, 1951	C. P. Treatment Unit, Bonsall School, Camden	5	7
May 1, 1951	Branch Brook School, Newark	3	17
May 8, 1951	C. P. Treatment Unit, High St. School, Somerville	3	13
May 18, 1951	C. P. Treatment Unit, Jr. School No. 2, Trenton	5	16
June 1, 1951	Beth Israel Hospital, Newark	5	8
June 12, 1951	C. P. Treatment Unit, MCOSS Bldg., Red Bank	4	12
June 15, 1951	Betty Bacharach Home, Longport	3	8
June 26, 1951	Alexian Bros. Hospital, Elizabeth	4	12
Total cases seen		178	362

There are 12 cerebral palsied treatment units in New Jersey in which the State Department of Health is participating. This participation may be either medical or nursing supervision, or providing physical therapists, or psychological examinations. There are two of these treatment centers in schools; two of them are in hospital setups, one is operated by the Elks and a parents group is very active in it and there is also one other operated by the Elks; there are two other centers that are operated by parents groups. There are also other interested organizations actively participating in the unit.

The treatment centers operated directly by the Crippled Children Commission of the State Department of Health are located at:

Bonsall School, Mt. Ephraim Avenue, Camden, N. J.
 Junior School No. 2, Cuyler Avenue, Trenton, N. J.
 MCOSS Building, Riverside Drive, Red Bank, N. J.
 Sussex County Service Building, Newton, N. J.

The Red Bank Center is being covered on a monthly basis by the consultant due to the difficulty of locating a replacement physical therapist. The consultant is also handling the Newton Treatment Center on a monthly basis.

In the past year a total of 3,665 treatments were given by the physical therapists under the Crippled Children Commission. The out-patient treatment centers are operated on a parent instruction treatment basis. The therapist gives the patient a treatment, and also instructs the mother in what treatment she is to carry on at home and supervises this. The consultant also coordinates the working relationship between the local nurse and the therapist.

Activities of the consultant during the past year were as follows:

1. During the past year this consultant gave monthly supervisory visits to all the treatment units directly under the State. The purpose of these supervisory visits were to keep the therapist informed on new ideas or methods and to help her continue to expand the facilities of the center, and increase the awareness of the therapist to the aspects of good public health.

2. The consultant arranged for and attended all Cerebral Palsy Medical Clinics. Most of these clinics were followed by post-clinical conferences discussing the general aspects of the program. In connection with setting up the clinic list, the consultant made visits to Regional or District offices to discuss cases and make up clinic lists.

3. The consultant had numerous meetings during the year with professional people with problems related to the program and also with other interested people concerning the program.

4. The consultant arranged for one Cerebral Palsy Institute which was held at the A. Harry Moore School in Jersey City, December 1, 1950. This was sponsored by New Jersey League of Nursing Education.

5. Consultant attended Cerebral Palsy Institute in New York, November 15th and 16th. Report was submitted.

6. Consultant visited Edith Hartwell Clinic in LeRoy, New York and observed new methods of motivation in Cerebral Palsy. Report was submitted.

7. Consultant also carried on many other activities in relation to Public Health Nursing. These will be submitted in a separate report.

Objectives for Coming Year:

1. Plan education program.
2. Continue to develop more public health awareness in Cerebral Palsy Treatment Centers.
3. To continue to develop awareness of responsibility of care in local community.
4. Encourage therapists to develop and understand new methods of motivation and treatment.

RHEUMATIC FEVER PROGRAM

In accord with the philosophy of the staff of the Rheumatic Fever Program, the Demonstration Unit and Clinic, St. Michael's Hospital has continued to fulfill definite needs and expand its services. The following are some of the services provided during the fiscal year:

1. Diagnostic examinations and treatment for children of Essex County from birth to twenty-one years of age who suffer from rheumatic fever, rheumatic heart disease, acquired heart disease, and congenital heart disease.
2. A weekly Out-Patient Clinic was maintained at St. Michael's Hospital.
3. Staff conferences are held weekly.
4. Ten to fifteen beds were available for patients with rheumatic fever on the Pediatric Ward.
5. Hospitalization, convalescent care, public health nursing supervision, psychological evaluations, and medical social consultant's services were given on problem cases.
6. Dental services were provided to the rheumatic fever patients.
7. Occupational therapy was provided by the National Society for Crippled Children and Adults. A school teacher was provided by the Newark Board of Education.
8. Children afflicted with congenital heart disease were presented at the Heart Conference, St. Michael's Hospital, for diagnostic workup prior to surgery.

MEMBERS OF THE STAFF

The Rheumatic Fever Clinic is staffed by a pediatrician who is medical director of the clinic, a public health nurse supervisor who acts as coordinator of the Rheumatic Fever Program, a public health nurse, a medical social consultant, and a medical secretary. The staff of St. Michael's Hospital provides cardiologists, pediatricians, and other physicians to carry on the work.

STATISTICAL REPORT

The following is a statistical report of the activities of the Clinic and Unit from July 1, 1950, to June 30, 1951:

Number of clinics held	43
New Patients examined	65
Patients reexamined	596
Staff evaluations	150
Dental examinations	163
Number of hospital days paid for at Rheumatic Fever Unit.....	1,851
Number of convalescent days	4,153
Children who have been hospitalized	61
Number of children who have had convalescent care	26
Number of children who have received ACTH or Cortisone....	8

OCCUPATIONAL THERAPY

An occupational therapist is provided by the National Society for Crippled Children and Adults. She reported 383 children receiving 2,725 diversional treatments. A group of volunteers called the Children's Volunteer has been organized; they work under the direct supervision of the occupational therapist. These volunteers tell stories, distribute and collect toys, play games with the children, and in other ways help them pass the time.

EDUCATION

A school teacher was provided by the Newark Board of Education; she reported 24 girls and 11 boys had received 710 days of instruction while hospitalized. Many others attended special schools or classes and if home bound, a home teacher was provided.

CONGENITAL HEART PROGRAM

The staff of the Rheumatic Fever Program is part of the Congenital Heart Program at St. Michael's Hospital. The hospital assumed the financial responsibility for the cardiac surgeon and his assistant. Hospitalization was provided by the Crippled Children Commission for patients registered with the Rheumatic Fever Program and living in Essex County. However, patients from the entire state may apply for surgical treatment for congenital and rheumatic heart disease.

During the fiscal year the following services were rendered to children with congenital heart disease:

Catheterization	4
Angiogram	4
Surgery	6

CAMPS

During the fiscal year children from the Rheumatic Fever Program, at the doctors' recommendations, were sent to the following camps:

1. Bonnie Brae, Millington, New Jersey.
2. Kittatinny, Newton, New Jersey.
3. Birch Ridge, Blirstown, New Jersey (for girls).

CONVALESCENT HOMES

The United Order of True Sisters opened the Cardiac Home for children in Orange. In addition, rheumatic fever children can obtain convalescent care at the Betty Bacharach Home, Longport, New Jersey, Children's Seashore Home, Atlantic City, and Victoria Foundation at Morris Plains.

DENTAL CLINIC

The Dental Clinic has continued to function every Wednesday and the patients under the Rheumatic Fever Program receive dental care. Standards for prophylactic care against subacute bacterial endocarditis caused by dental surgery, have been written by our pediatrician and Dr. Nicholas Antonius.

NURSING STAFF IN THE RHEUMATIC FEVER PROGRAM

The Public Health Nurse Consultant left the State Department of Health in January 1951. The duties of nursing coordinator of the Rheumatic Fever Program were taken over by the Public Health Nurse Supervisor. These duties were assumed in addition to the orthopedic program which the Public Health Nurse Supervisor has been performing.

The Crippled Children Commission purchased the services of a public health nurse from the Newark Visiting Nurse Association. The functions of the Assistant Supervisor from the Newark Visiting Nurse Association were to assist the Nursing Coordinator with clinic management, clinic interviews, and act in a liaison capacity between her agency and the Rheumatic Fever Program. She was directly responsible for the supervision of the public health nurses who were carrying out clinic recommendations in the home.

In the interest of simplicity, all figures in this report will indicate the combined work of the Public Health Nurse Consultant and the Public Health Nurse Supervisor.

The clinic continued to serve as a teaching center for public health nurses from Essex, Passaic, Morris, and other counties.

TEACHING PROGRAM FOR DOCTORS

A course in cardiology was offered at St. Michael's Hospital to private practitioners through Seton Hall. Courses were directed by the staff of St. Michael's Hospital as well as eminent cardiologists from New York and Philadelphia. Practical experience was obtained by observation at the Rheumatic Fever Clinic. Since there were 600 applicants and only 75 could be accommodated, the course will be repeated during 1951-1952.

A course in cardiac nursing is also being considered.

VOCATIONAL COUNSELING

As need is indicated, the staff of the Rheumatic Fever Program referred children requiring vocational or rehabilitation services to the psychologist, staff of Crippled Children Commission, and the Rehabilitation Commission. A close working relationship was maintained with the Rehabilitation Commission by the Public Health Nurse Supervisor and the Medical Social Consultant.

The following is a list of the Contract Agencies and the number of municipalities:

<i>County</i>	<i>Name or Organization</i>	<i>Municipalities Covered</i>
Essex—	Bloomfield Chapter of the American Red Cross Nursing Service	2
	Nutley Chapter of the American Red Cross Nursing Service	1
	Visiting Nurse Association of the Oranges and Maplewood	5
	Visiting Nurse Association of Millburn Township	1
	West Essex Chapter of the American Red Cross Public Health Nursing Service	9
	Total	18

The school nurses and the Newark Visiting Nurse Association also have a close working relationship with the Rheumatic Fever Program and the Newark Visiting Nurse Association carries a heavy load.

REPORT OF THE WORK DONE BY THE PUBLIC HEALTH NURSE CONSULTANT (PEDIATRIC) AND PUBLIC HEALTH NURSE SUPERVISOR

CASES

New cases admitted to nursing service through direct service given by consultant and public health nurse supervisor	77
New cases admitted to nursing service through authorization issued to contract agencies	21
Total new cases	98
Readmitted cases admitted to nursing service through direct service given by consultant and public health nurse supervisor	84
Readmitted cases admitted to nursing service through authorization issued for nursing visits	23
Total readmitted cases	107
Total cases admitted	205

ANALYSIS OF VISITS AND INTERVIEWS

Homes	8
Clinic and hospital	353
Physician	88
School	10
Nursing agency	11
Authorized contract	73
Convalescent home	18
Interviews in office	16
Total	577

INTERVIEWS

Clinic	189
Consultation	55
Office conference	72
Total	316

NUMBER OF CLINICS ATTENDED

Cardiac Clinic	43
----------------	----

CONSULTATION SERVICES AND CONFERENCES

1. <i>Commission Staff</i>	
a. Executive Director	71
b. Cerebral Palsy Consultant	5
c. Medical Social Consultant	62
d. Psychologist	3
e. Physicians	57
f. Public Health Nurse Supervisor	24
g. Statistician	11
Total	233
2. <i>Staffs of Other Agencies</i>	
a. Public Health Nursing Agency	31
b. Social Agency	3
c. Hospital or Convalescent Center Personnel	25
d. Physicians	14
e. School Personnel	8
f. Occupational Therapist	23
Total	104

ORIENTATION TO THE RHEUMATIC FEVER PROGRAM

The clinic continued to function as a teaching center for public health nurses. Seven public health nursing students from Seton Hall observed at the Rheumatic Fever Clinic. Directors of various Visiting Nurse Associations, public health nurses from other Heart Associations, members of the executive staff of the New Jersey Heart Association, members of the staff of the Children's Bureau and the State Department of Health attended the clinic at various times when routines, procedures, and policies were discussed.

 PSYCHOLOGY

The activities of the Psychologist for the year and the major results are summarized in the accompanying tables.

This year has differed from previous years largely because of the extensive research program which has been undertaken. The Crippled Children Commission approved of a study of all active cases of crippled children in the files. Valuable information has been secured on the numbers of children in the various sub-classifications, on etiology, family position and the mental status of the cerebral palsied child. The significance of these findings for education is being studied at the present time.

Reports of the several counseling series with parents (a series that has been continued during the present year) have been consolidated and are in the course of publication.

The psychologist has assisted the State Chapter of the National Society for Crippled Children and Adults, Inc., by examining and classifying children for an educational project.

He has cooperated with the National Society by addressing public school teachers interested in the education of the cerebral palsied and with the United Cerebral Palsy Association by serving on their national Educational Advisory Board.

Plans have been made in such a way that services to national organizations have been offered outside the hours regularly devoted to State work. The same is true of the greater part of the time spent in research.

The psychologist participated in the White House Conference and preliminary meetings whose purpose was to prepare for it.

He attended the meeting of the State Council on the Handicapped and has assisted in their effort to plan more effective education for all the handicapped.

One of the most promising projects for the complete education and training of the cerebral palsied who are severely handicapped is continuing its development as a private but non-profit enterprise; we refer to the Walter D. Matheny School at Far Hills. We have cooperated with this project by examining children and suggesting training procedures. In turn, the School has tried out several procedures recommended and thus provides a valuable experimental unit in which better methods can be developed and employed.

Cooperation with an outstanding out-patient training project; that is, the A. Harry Moore School in Jersey City, has continued. While the latter is a much longer established project it may be said that the two supplement each other in helping to care for groups of New Jersey children.

While the A. Harry Moore School is an example of a project for the handicapped only, Garfield has established a small unit in one of its schools to demonstrate the way in which the cerebral palsied can be educated when the more elaborate facilities are not available. We have cooperated with this project by examining all applicants and giving suggestions regarding training measures.

All other agencies that cooperate with the Commission in providing services for the cerebral palsied, including the Treatment Center of the Cerebral Palsy League of New Jersey-Essex County, 261 Summer Avenue, Newark; the New Jersey Orthopedic Hospital Cerebral Palsy Clinic in Orange; the Bergen County Cerebral Palsy Association's unit in Ridgewood; the Middlesex County Cerebral Palsy Treatment Center in Perth Amboy, operated by the Middlesex County Cerebral Palsy League; and the Elks' Cerebral Palsy Treatment

DEPARTMENT OF HEALTH

Center in Somerville, New Jersey, have requested and received consultant services.

<i>Conferences on Cases:</i>	<i>Concurrent</i>	<i>Other</i>
Parents	219	3
Physicians	1	37
Schools	48	23
Nurses	64	11
Social Workers	32	30
Physiotherapists	6	0
Others	20	3
	<hr/>	<hr/>
	390	107
 <i>Places of Examinations:</i>		
Homes	88	
Hospitals	47	
Schools	55	
Regional Offices	24	
Units	37	
Trenton Office	16	
Other	21	
	<hr/>	<hr/>
	288	

Major Problems Involved:

General Mental Development	147
Education and Training	104
Institutional Placement	10
Behavior	4
Emotional	11
Vocational	10
Handedness	1
Other	1
	<hr/>
	288

Diagnoses:

Superior	6
Normal	53
Dull Normal	39
Deferred	19
Borderline	29
Feeble-minded	142
	<hr/>
	288

DIVISION OF CONSTRUCTIVE HEALTH

TABLE I—CHILDREN ON STATE REGISTER

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Line No.</i>	<i>Register Items</i>	<i>Sub-Total</i>	<i>Total</i>
1	Cases on State Register July 1, 1950		16,262
2	New cases placed on State Register during year		2,501
3	Cases on State Register during year		18,763
4	Cases removed from State Register		2,143
	a. Crippling condition cured	1,142	
	b. Age of 21 reached	477	
	c. Residence established in another state	161	
	d. Death of registrant	146	
	e. Registrant found ineligible	167	
	f. Registration found misspelled name duplicate	50	
5	Cases on State Register June 30, 1951		16,620
6	Cases reported for registration but eligibility not determined at end of year		421

TABLE II—AGENCY SOURCE OF CRIPPLED CHILDREN'S REFERRALS

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Line No.</i>	<i>Agency</i>	<i>Sub-Total</i>	<i>Total</i>
1	All agencies		2,501
2	Crippled Children's Commission personnel	305	
3	Elks lodges	42	
4	Health agency	166	
5	Hospital or clinic	443	
6	New Jersey state, county and municipal departments	742	
7	Others	46	
8	Out-of-state	28	
9	Physicians	37	
10	School cards	257	
11	Visible congenital deformity birth certificates	435	

TABLE III—COUNTY OF RESIDENCE: CRIPPLED CHILDREN'S REGISTRATIONS

1	2	3	4
Line No.	County	Sub-Total	Total
1	State Total		2,501
2	Atlantic	23	
3	Bergen	280	
4	Burlington	42	
5	Camden	94	
6	Cape May	14	
7	Cumberland	28	
8	Essex	763	
9	Gloucester	44	
10	Hudson	247	
11	Hunterdon	20	
12	Mercer	96	
13	Middlesex	94	
14	Monmouth	138	
15	Morris	83	
16	Ocean	29	
17	Passaic	125	
18	Salem	30	
19	Somerset	58	
20	Sussex	26	
21	Union	212	
22	Warren	55	

TABLE IV—COLOR, SEX AND AGE OF CRIPPLED CHILDREN'S REGISTRATIONS

1	2	3	4	5	6	7	8	9	10
Line No.	Color and Sex	Total	Under 1	1-4 Years	5-9 Years	10-14 Years	15-19 Years	20 Years	Age Unknown
1	Grand Total	2,501	592	656	660	393	190	10	0
2	White, total	2,166	474	573	601	343	166	9	0
3	White, male	1,235	259	310	368	192	101	5	0
4	White, female	931	215	263	233	151	65	4	0
5	White, sex unknown... ..	0	0	0	0	0	0	0	0
6	Colored, total	335	118	83	59	50	24	1	0
7	Colored, male	188	61	52	32	29	13	1	0
8	Colored, female	147	57	31	27	21	11	0	0
9	Colored, sex unknown... ..	0	0	0	0	0	0	0	0
10	Other, total	0	0	0	0	0	0	0	0
11	Other, male	0	0	0	0	0	0	0	0
12	Other, female	0	0	0	0	0	0	0	0
13	Other, sex unknown... ..	0	0	0	0	0	0	0	0

TABLE V—INTERNATIONAL STATISTICAL CLASSIFICATION OF DISEASES, INJURIES AND CAUSES OF DEATH

1	2	3	4	5
Detailed Category	List	International Categories	Sub-Total	Total
All		Categories Total		2,501
I		Infective and Parasitic Diseases		741
	012	Tuberculosis of bones and joints, active or unspecified	12	
	080	Acute poliomyelitis	648	
	081	Late effects of acute poliomyelitis	81	
II		Neoplasms		30
	193	Malignant neoplasm of brain and other parts of nervous system	3	
	196	Malignant neoplasm of bone (including jawbone)	1	
	197	Malignant neoplasm of connective tissue	1	
	199	Malignant neoplasm of other and unspecified sites	1	
	220	Benign melanoma of skin	1	
	221	Pilonidal sinus	1	
	223	Benign neoplasm of brain and other parts of nervous system	1	
	225	Benign neoplasm of bone and cartilage	3	
	226	Lipoma	2	
	228	Hamangioma and lymphangioma	13	
	237	Neoplasm of unspecified nature of brain and other parts of nervous system	1	
	238	Neoplasm of unspecified nature of skin and musculoskeletal system	1	
	239	Neoplasm of unspecified nature of other and unspecified organs	1	
III		Allergic, Endocrine System, Metabolic and Nutritional Diseases		19
	272	Diseases of pituitary gland	1	
	284	Late effects of rickets	17	
	289	Other metabolic diseases	1	
IV		Diseases of the Blood and Blood Forming Organs.. ..		4
	292	Other anemias of specified type	4	
V		Mental, Psychoneurotic and Personality Disorders		0
VI		Diseases of the Nervous System and Sense Organs		356
	351	Cerebral spastic infantile paralysis (modified to include all "cerebral palsy")	351	
	357	Other diseases of spinal cord	1	
	364	Polyneuritis and polyradiculitis	1	
	368	Other diseases of cranial nerves	3	

DEPARTMENT OF HEALTH

1	2	3	4	5
<i>Category</i>	<i>Detailed List</i>	<i>International Categories</i>	<i>Sub-Total</i>	<i>Total</i>
VII		Diseases of the Circulatory System		149
	400	Rheumatic fever without mention of heart involvement (includes suspected)	93	
	401	Rheumatic fever with heart involvement (includes possible and potential)	31	
	434	Other and unspecified diseases of heart (includes possible and potential)	24	
	468	Certain diseases of lymph nodes and lymph channels	1	
VIII		Diseases of the Respiratory System		2
	514	Deflected nasal septum	1	
	517	Other diseases of upper respiratory system	1	
IX		Diseases of the Digestive System		0
X		Diseases of the Genito-Urinary System		0
XI		Deliveries and Complications of Pregnancy, Child-birth, and the Puerperium		0
XII		Diseases of the Skin and Cellular Tissue		9
	716	Other diseases of skin	9	
XIII		Diseases of the Bones and Organs of Movement ..		665
	722	Rheumatoid arthritis and allied conditions	15	
	723	Osteo-arthritis (arthrosis) and allied conditions ..	1	
	724	Other specified forms of arthritis	2	
	725	Arthritis unspecified	1	
	730	Osteomyelitis and periostitis	48	
	732	Osteochondrosis	57	
	733	Other diseases of bone	22	
	734	Internal derangement of knee	1	
	738	Other diseases of joint	4	
	741	Synovitis, bursitis and tenosynovitis without mention of occupational origin	3	
	744	Other diseases of muscle, tendon, and fascia	20	
	745	Curvature of spine	44	
	746	Flat foot (operation required)	8	
	747	Hallux valgus and varus	7	
	748	Club foot	376	
	749	Other deformities	56	

DIVISION OF CONSTRUCTIVE HEALTH

1	2	3	4	5
<i>Category</i>	<i>Detailed List</i>	<i>International Categories</i>	<i>Sub-Total</i>	<i>Total</i>
XIV		Congenital Malformations		433
	751	Spina bifida and meningocele	72	
	752	Congenital hydrocephalus	14	
	753	Other congenital malformations of nervous system and sense organs	22	
	754	Congenital malformations of circulatory system ...	20	
	755	Cleft palate and harelip	109	
	756	Congenital malformations of digestive system	2	
	758	Congenital malformations of bone and joint	130	
	759	Other and unspecified congenital malformations not elsewhere classified	64	
XV		Certain Diseases of Early Infancy		44
	761	Other birth injury	44	
XVI		Symptoms, Senility and Ill-Defined Conditions ...		0
XVII		Accidents, Poisonings and Violence		49
	805	Fracture and fracture dislocation of vertebral column without mention of spinal cord lesion	2	
	806	Fracture and fracture dislocation of vertebral column with spinal cord lesion	6	
	{N810	Fracture of upper limb (malunion)	3	
	{N819	Fracture of lower limb (malunion)	6	
	{N820	Dislocation of elbow	1	
	{N829	Dislocation of hip	1	
	N832	Other multiple and ill-defined dislocations	1	
	N835	Other and unspecified laceration of face	1	
	N839	Open wound of hand, except finger(s)	1	
	N873	Traumatic amputation of other fingers	2	
	N883	Traumatic amputation of arm and hand	2	
	N887	Traumatic amputation of toe(s)	1	
	N896	Traumatic amputation of foot	1	
	N897	Traumatic amputation of leg	4	
	N898	Traumatic amputation of foot	1	
	N907	Multiple wounds of face	1	
	{N940	Burns	14	
	{N949	Injury to nerve in forearm	1	
	N953	Spinal cord lesion without evidence of spinal injury ..	1	
	N958			

DEPARTMENT OF HEALTH

TABLE VI—STANDARD CLASSIFIED NOMENCLATURE OF DISEASE
ETIOLOGIC CATEGORIES OF CRIPPLED CHILDREN'S REGISTRATIONS

1 Paragraph No.	2 Code	3 Standard Etiological Categories	4 Sub-Total	5 Total
1	All	All categories		2,501
2	0	Diseases due to prenatal influences	1,056	
3	1	Diseases due to <i>lower</i> plant and animal parasites...	815	
4	2	Diseases due to <i>higher</i> plant and animal parasites...	0	
5	3	Diseases due to intoxication	1	
6	4	Diseases due to trauma or physical agents	87	
7	5.0	Diseases secondary to circulatory disturbance	1	
8	5.5	Diseases secondary to disturbance of innervation or psychic control	81	
9	6	Diseases due to or consisting of static mechanical ab- normality (obstruction, calculus, displacement or gross change in form) due to unknown cause	4	
10	7	Diseases due to disorder of metabolism, growth or nutrition	20	
11	8	New growths	16	
12	9	Diseases due to unknown or uncertain cause with the <i>structural reaction</i> (degenerative, infiltrative, inflam- matory, proliferative, sclerotic or reparative) alone manifest; hereditary and familial diseases of this nature	148	
13	X	Diseases due to unknown or uncertain causes with the <i>functional reaction</i> alone manifest; hereditary and familial diseases of this nature	0	
14	Y	Diseases of undetermined cause	272	

TABLE VII—SERVICES PROVIDED REGISTERED CRIPPLED CHILDREN

1 Line No.	2 Services Clinics	3 Sub-Total	4 Total
1	Admissions		246
2	Visits by children to clinics		1,515
3	Field or office visits in lieu of service at clinic		0
<i>Hospital Care</i>			
4	Children under care July 1, 1950		200
5	Admissions to care during year		563
	A. Of children not previously under care during year...	467	
	B. Of children previously under care during year	96	
6	Total care during year		763
7	Discharges during year		629
8	Children under care June 30, 1951		134
9	Days care provided during year		16,600

DIVISION OF CONSTRUCTIVE HEALTH

1 Line No.	2 Services Clinics	3 Sub-Total	4 Total
<i>Convalescent Care</i>			
10	Children under care July 1, 1950		113
11	Admissions to care during year		104
	A. Of children not previously under care during year...	102	
	B. Of children previously under care during year	2	
12	Total under care during year		217
13	Discharge during year		156
14	Children under care June 30, 1951		61
15	Days care provided during year		13,589
<i>Foster Home Care</i>			
16	Foster home care		Pending
<i>Public Health Nursing Service</i>			
17	Admissions		5,546
18	Field or office visits purchased		8,291
<i>Physical-Therapy Service</i>			
19	Admissions		178
20	Visits by children to treatment centers		3,665
21	Field or office visits		0
<i>Medical Social Service</i>			
22	Admissions		252
<i>Vocational Rehabilitation</i>			
23	Children referred for vocational services		1,912
<i>Prosthetic Appliances</i>			
24	Purchased		415
<i>Blood Transfusions</i>			
25	Fees		3
<i>Biologicals and Drugs</i>			
26	Purchases		140
<i>Psychological Services</i>			
27	Examinations		288
28	Consultations		497
<i>Over-Age Rehabilitation</i>			
29	Over-age 21 cases referred to Rehabilitation Commission..		477

DEPARTMENT OF HEALTH

TABLE VIII—BUDGETED EXPENDITURES FOR REGISTERED CRIPPLED CHILDREN

1	2	3	4	5	6	7	8
Line No.	Budget Items	Total All Funds	State Funds	County Funds	Federal Fund A	Federal Fund B	Federal Fund R. B.
1	Hospital and convalescent care	\$125,245.84	\$42,461.57	\$55,810.10	\$1,562.53	\$4,663.44	\$20,748.20
2	Prosthetic appliances	24,448.75	7,155.41	13,540.76	161.00	3,245.60	345.98
3	Contract nursing agencies	9,655.50	.....	.....	393.00	9,181.50	81.00
4	Clinic fees	1,950.00	.....	.....	.....	.....	1,950.00
5	Biologicals and drugs	3,808.18	1,033.20	.....	448.36	407.62	1,919.00
6	Blood transfusions	44.00	.....	.....	44.00	.....	.....
7	Cleft palate surgical evaluation	1,250.00	.....	.....	1,250.00	.....	.....
8	Office supplies	1,275.99	658.82	.....	617.17	.....	.....
9	Scientific supplies	272.20	.....	.....	95.93	.....	176.27
10	Office equipment, new	245.00	.....	.....	125.00	61.00	59.00
11	Office equipment, replacement	650.50	.....	.....	650.50	.....	.....
12	Scientific equipment	108.90	.....	.....	.....	.....	108.90
13	Communication	3,750.00	750.00	.....	2,500.00	.....	500.00
14	Printing and binding	1,244.64	.....	.....	1,109.64	45.00	30.00
15	Educational, recreational and library	76.85	15.00	.....	22.50	4.50	34.85
16	Miscellaneous expenses	50.49	.....	.....	31.29	.....	19.20
17	Postage	1,105.54	850.00	.....	255.54	.....	.....
18	Rent, central offices	4,500.00	3,500.00	.....	1,000.00	.....	.....
19	Rent, district offices	2,640.00	.....	.....	2,040.00	.....	.....
20	Rent, file storage	60.00	60.00	.....	.....	.....	.....
21	Current repairs and maintenance office equipment	245.23	.....	.....	204.33	.....	40.90
22	Subscriptions	24.00	.....	.....	24.00	.....	.....
23	Freight, express and cartage	11.51	.....	.....	11.51	.....	.....
24	Tuition	50.00	.....	.....	.....	.....	50.00
25	Salaries	113,598.61	14,382.36	.....	65,357.03	.....	33,859.22
26	Travel	3,936.22	387.95	.....	2,090.95	.....	1,457.32
27	Fees	3,580.00	.....	.....	.....	.....	3,580.00
	Totals	\$303,827.95	\$71,254.31	\$69,350.86	\$80,054.28	\$17,608.66	\$65,559.84

DIVISION OF CONSTRUCTIVE HEALTH

TABLE IX—FREEHOLDERS' APPROPRIATION CALENDAR YEAR 1950

1	2	3	4
Line No.	County	Sub-Total	Total
1	State Total .....	.....	\$189,250.00
2	Atlantic	\$10,000.00	.....
3	Bergen	18,000.00	.....
4	Burlington	2,700.00	.....
5	Camden	6,000.00	.....
6	Cape May	1,000.00	.....
7	Cumberland (not matchable)	3,900.00	.....
8	Essex	30,000.00	.....
9	Gloucester	4,000.00	.....
10	Hudson	11,000.00	.....
11	Hunterdon	1,500.00	.....
12	Mercer	30,000.00	.....
13	Middlesex (not matchable)	6,000.00	.....
14	Monmouth	5,000.00	.....
15	Morris	4,000.00	.....
16	Ocean	21,350.00	.....
17	Passaic	15,000.00	.....
18	Salem	800.00	.....
19	Somerset	9,000.00	.....
20	Sussex	1,500.00	.....
21	Union	5,500.00	.....
22	Warren (not matchable)	3,000.00	.....

YEARLY POLIOMYELITIS STATISTICAL REPORT No. 9
 CALENDAR YEAR 1950

SUMMARY

Item	Polio	
	Sub-Total	Total Per Cent
1. Total number of cases reported as poliomyelitis	897	
2. Incorrect diagnosis cases	24	
A. Alive	22	
B. Deceased	2	
3. Poliomyelitis cases	873	100.00
A. Poliomyelitis cases deceased	44	5.04
B. Poliomyelitis cases alive	829	94.96
C. Poliomyelitis cases notified by physician as being discharged cured	50	5.73
D. Active poliomyelitis cases	779	89.23
E. Active poliomyelitis cases not paralyzed	362	41.47
F. Active poliomyelitis cases paralyzed	417	47.76
4. Poliomyelitis cases by age, sex and race	873	100.00
A. Age		
Under 1 year	15	1.72
1-4	189	21.65
5-9	269	30.81
10-14	142	16.27
15-20	83	9.51
21-30	114	13.06
31-40	50	5.73
41-50	10	1.14
Over 50 years	1	.11
B. Sex		
Male	505	57.85
Female	368	42.15
C. Race		
White	834	95.53
Colored	39	4.47

DETAIL

Item	Polio	
	Sub-Total	Total Per Cent
5. Incorrect diagnosis cases total	24	
A. Alive	22	
Abscess of brain	1	
Acute rheum fever and arthritis hip joint, rt.	1	
Congenital subluxated hip joint with septic involvement	1	
Choriomeningitis lymphocytic	1	
Encephalitis	1	
Encephalitis parotitis (mumps)	1	
Encephalitis, rabies vaccinal	1	
Fatigue myalgia, calf muscles	1	
Hysteria	1	
Influenza	1	
Influenza-spinal meningitis	1	
Inflammation of hip joint, right	1	
Pleurodynia—acute	2	
Progressive muscular dystrophy	1	
Tonsillitis	1	
Trauma, unspecified	1	
Tumor of brain	1	
Undiagnosed disease	4	
B. Deceased	2	
Guillain-Barre Syndrome (virus encephalomyelitis)	1	
Influenza-spinal meningitis	1	
6. Poliomyelitis cases by place where care was received during acute period.		
Total	873	100.00
In hospitals	782	89.58
In patient's residences	91	10.42
A. Deceased	44	5.04
In hospitals	44	5.04
In patient's residences .....	..	..
C. Cured	50	5.73
In hospitals	41	4.70
In patient's residences	9	1.03
E. Not Paralyzed	362	41.47
In hospitals	325	37.23
In patient's residences	37	4.24
F. Paralyzed	417	47.76
In hospitals	372	42.61
In patient's residences	45	5.15

GEOGRAPHICAL COUNTY DISTRIBUTION OF POLIOMYELITIS AND CHANGED DIAGNOSIS CASES BY AGE GROUPS

COUNTY	TOTAL	Under 1	1-4	5-9	10-14	15-20	21-30	31-40	41-50	Over 50
Atlantic County	9		2	2	2	2	1			
Changed Diag.										
Bergen County	180	5	36	51	33	17	23	15		
Changed Diag.	3		1	1	2					
Burlington County	7		1	2		1	2	1		
Changed Diag.	1		1							
Camden County	24	1	4	7	4	4	3	1		
Changed Diag.										
Cape May County	6		2	1	1	1	1			
Changed Diag.										
Cumberland County	2					2				
Changed Diag.										
Essex County	164	3	36	57	27	10	20	10	1	
Changed Diag.	7		2	4					1	
Gloucester County	9			4	2	2	1			
Changed Diag.										
Hudson County	102	4	30	35	18	4	6	3	2	
Changed Diag.	4		2	2						
Hunterdon County	4		2	1			1			
Changed Diag.										
Mercer County	44		8	12	7	6	5	5	1	
Changed Diag.										
Middlesex County	41		7	16	7	1	6	2	2	
Changed Diag.	1		1							
Monmouth County	45		9	18	5	6	4	3		
Changed Diag.										
Morris County	68	1	12	20	5	6	17	4	3	
Changed Diag.	1				1					
Ocean County	12		3	3	4		1	1		
Changed Diag.										
Passaic County	33		9	7	9	3	5			
Changed Diag.										
Salem County	17		3	5	5		4			
Changed Diag.	1		1							
Somerset County	15		1	2	2	3	4	2	1	
Changed Diag.	1				1					
Sussex County	3		1				2			
Changed Diag.										
Union County	66		17	24	7	7	7	3		1
Changed Diag.	2			1			1			
Warren County	12	1	4	1	2	3	1			
Changed Diag.	3		3							
Sub-Total	863	15	187	288	140	78	114	50	10	1
Changed Diag.	24		9	8	5		11	1	1	
Out-of-State	10		2	1	2	5				
Changed Diag.										
Total Polio	873	15	189	289	142	83	114	50	10	1
Changed Diag.	24		9	8	5		11	1	1	
GRAND TOTAL	897	15	198	277	147	83	114	51	11	1

GEOGRAPHICAL COUNTY DISTRIBUTION OF POLIOMYELITIS AND CHANGED DIAGNOSIS CASES BY SEX, RACE, DECEASED AND CURED

COUNTY	Male	Female	White	Colored	Deceased	Cured
Atlantic County	4	5	7	2	1	3
Changed Diagnosis						
Bergen County	97	83	186		12	15
Changed Diagnosis	2	1	3		1	
Burlington County	2	5	7			
Changed Diagnosis	1			1		
Camden County	12	12	21	3	1	
Changed Diagnosis						
Cape May County	2	4	6			1
Changed Diagnosis						
Cumberland County	1	1	2			
Changed Diagnosis						
Essex County	102	62	152	12	4	7
Changed Diagnosis	4	3	6	1		
Gloucester County	6	3	6	3	1	
Changed Diagnosis						
Hudson County	47	55	99	3	6	11
Changed Diagnosis	3	1	4			
Hunterdon County	4		4			
Changed Diagnosis						
Mercer County	31	13	41	3	5	1
Changed Diagnosis						
Middlesex County	25	16	41		1	1
Changed Diagnosis	1		1			
Monmouth County	30	15	43	2		
Changed Diagnosis						
Morris County	38	30	67	2	1	
Changed Diagnosis	1					
Ocean County	8	4	12		1	
Changed Diagnosis						
Passaic County	23	10	32	1	4	
Changed Diagnosis						
Salem County	8	9	15	2	1	1
Changed Diagnosis		1	1		1	
Somerset County	11	4	15		2	
Changed Diagnosis	1			1		
Sussex County	1	2	3		1	
Changed Diagnosis						
Union County	37	29	62	4	2	9
Changed Diagnosis	1	1	1			
Warren County	9	3	12		1	
Changed Diagnosis	2	1	3			
Sub-Total	498	365	826	37	44	49
Changed Diagnosis	16	8	20	4	2	
Out-of-State	7	3	8	2		1
Changed Diagnosis						
Total Polio	505	368	834	39	44	50
Changed Diagnosis	16	8	20	4	2	
GRAND TOTAL	521	376	854	43	46	50

Bureau of Dental Health

In the accompanying report of the Bureau of Dental Health for the fiscal year 1950-51, every effort has been made to present, as concisely as possible, a description of the activities, relationships and statistical recordings of this Bureau, in the attempt to secure in the future both "more and better" dentistry for children in the State of New Jersey. It is hoped that this report may be the means of conveying to the public, in general, an adequate conception of the scope of the work, the accomplishments, the limitations, and the plans for the future. Before proceeding further, I would like to express my gratitude to all office personnel, supervisors, field representatives, dental operators, committee members and all contributors who have worked together in the Bureau to make possible the activities herein described. People make the news, people make the nation, people make the Bureau of Dental Health. It is YOUR Bureau. It is what you have made it. It thrives upon your interest, your enthusiasm, your support, and only with your help can it continue to be successful.

Beginning the fiscal year, July 1, 1950, the Bureau of Dental Health was transferred, according to the new organizational plan, from the Bureau of Preventable Diseases under the directorship of Dr. Carl Weigele, where it was known as Section on Dental Diseases, to the Division of Constructive Health under the directorship of Dr. Geoffrey Esty. During this past year, Dr. Esty has extended the same courtesies, consideration and help to this Bureau, as did Dr. Weigele in previous years, and it is expected that under Dr. Esty's directorship the Dental Bureau will continue to report considerable progress in the years ahead.

The fine working relationships between this Bureau and the New Jersey State Dental Society were continued during the year and were strengthened in many ways. Much time and effort was spent in arranging the program for the Third Annual Children's Dental Health Day held on Monday, February 5, 1951. This Bureau was responsible for the preparation and presentation of a kit of guides, posters, source materials, lectures and radio scripts which were distributed in conjunction with the State Society's Council on Dental Health, to members for use in their own communities. The Chief of the Bureau of Dental Health broadcasted over Station WCAM on this date. Children's Dental Health Day, this past year, proved very successful.

The New Jersey State Dental Health Committee has also been quite active this past year. This Committee, officially designated as the Advisory Committee for the Dental Bureau, includes representatives from State health, welfare and educational agencies, both official and non-official. Also on this Committee are representatives of local and county dental health committees who help to administer the various dental health programs of the State De-

partment of Health. Under the excellent leadership of the President, Mrs. Elizabeth Pomeroy of Montclair, New Jersey, a meeting was held in Trenton on October 18, 1950, another in Elizabeth on April 18, 1951, and a meeting of the Executive Committee of this organization was held in the Office of the Bureau of Dental Health on March 28, 1951. This organization has been of great value in making the Dental Health Program of the Bureau of Dental Health function successfully.

ORGANIZATION

Successful management can only be attained through competent organization.

Organization is not accidental in character. It is the planning of one's labors according to a system. In the first place there must be a "thinking out" process which carefully calculates one's future actions and how they can be controlled. Translated into action, this thought-out plan should comprise many mutually dependent parts, each one fulfilling its own characteristic function, but nevertheless cooperating the one with the other, so that there is complete and efficient working of the whole. Unless a dentist organizes every phase of his work he wastes time, money and material. A man setting up in business, say, for example, a trading business, must organize his venture completely. He must ensure that there is a continuous flow of goods through his premises. His goods must be high grade or his reputation suffers. His staff must be directed so that their time is profitably employed. He must keep proper accounts, and the conditions of work must be right. Unless he satisfies these requirements the ending may be in the Bankruptcy Court or, at best, he will fail to show an adequate profit.

There are marked points of similarity in conducting our Dental Program. We must maintain a steady flow of patients through the offices and clinics, appointments properly organized, so that time is used to the best advantage—materials must be organized to avoid wastage—and records must be organized so that they are kept in their place, that is, they must not be allowed to dominate to such an extent that they encroach on operating time. Unless we plan our daily routine, whether chairside procedures, instructions to patients in home care, or just the ordinary everyday cleaning jobs in the clinic, much valuable time may be lost, and through mismanagement the formerly balanced project of work will indicate that it is now "in the red." In these days of large clinical numbers, all personnel will help the program to a major degree if care is taken in organizing work to the best advantage.

EDUCATIONAL PHASES

In addition to the continuation of phases as listed in the Annual Report of 1949-50, the Bureau of Dental Health has participated in the following educational activities during 1950-51:

1. Five courses in Oral Cancer were set up and supervised by the Bureau of Dental Health for members of the New Jersey State Dental Society. Federal funds earmarked for Cancer Control were assigned to the Bureau of Dental Health through the Bureau of Cancer Control for this purpose. A total of 94 practicing dentists from New Jersey, making a grand total to date of 174, have thus far participated in these courses. The participants have served as a focus of interest in their local dental groups, in the early recognition of oral malignancies. These courses were conducted at the Columbia University School of Dental and Oral Surgery and the Presbyterian Hospital in New York; the University of Pennsylvania School of Dentistry and University Hospital and the American Oncologic Hospital in Philadelphia; the New York University College of Dentistry and Bellevue Hospital in New York. All comments received from the questionnaires mailed to the participating dentists regarding these courses have been very favorable, and we in the Dental Bureau are hopeful that further funds will be allocated by Cancer Control that we may continue this excellent postgraduate-in-service dental education program.

2. Lectures on Public Health Dentistry have been given before the senior classes in the dental schools of New York University, Columbia University, Temple University, and before a postgraduate dental group at the University of Pennsylvania. A paper was presented at the annual meeting of the American Society of Dentistry for Children and the American Dental Association in Atlantic City. A paper entitled, "Nutrition in Relation to Dental Health" by Dr. Neal W. Chilton, was published in the Journal of the American Dietetic Association in November 1950 and was reprinted in the April 1951 issue of the Public Health News.

3. A questionnaire survey of local public health dental facilities throughout New Jersey was conducted and completed by this Bureau.

4. This Bureau assisted in writing a section of the Maple Shade Nutrition Report. In addition, a talk was presented to the Maple Shade Parent-Teacher Association.

5. This Bureau assisted in setting up a local dental program in Lawrence Township Schools.

6. Attended and participated in many dental health committee meetings, such as Hunterdon County, Union County, Monmouth County, Camden County, Maple Shade, North Arlington, etc.

7. All meetings of the New Jersey State Dental Society, Board of Trustees, and Council on Dental Health were attended.

8. A lecture was given to students of Health Officers' class at Rutgers University on October 19.

9. Visitations were made to many clinics, all mobile clinics, and many private offices; such as Paterson, Matawan, Collier's Foundation, and Orange Clinics.

10. A meeting was attended on December 4, 5 and 6, in the Regional Offices of the United States Public Health Service, New York City, with New England and Middle Atlantic States Dental Directors. The subject of the conference was "Fluoridation of Communal Water Supplies."

11. Many conferences were held relating to the Dental Program with Dr. Moench, Director, Division of Local Health Services, Mr. Coffey, Dr. Frank Law and Mr. Cornelius Bowen of the United States Public Health Service.

12. On January 10, the New Jersey State Society of Dentistry for Children held an all day (and evening) meeting in the Hotel Walt Whitman, Camden, New Jersey. Ten table clinics were presented by members of the dental profession, the latest dental films were presented, and the meeting was well received and attended. The Bureau of Dental Health actively assisted in the setting up of this meeting.

13. On January 30, the Chief and the Assistant Chief of the Dental Bureau attended a meeting of the Pennsylvania State Dental Society held in Philadelphia, Pennsylvania.

14. The annual meeting of the New Jersey State Dental Society was held in Atlantic City on April 10-13, at which time the Chief and the Assistant Chief were in attendance.

15. The Chief attended the annual meeting of the State and Territorial Dental Directors in Washington, D. C., on June 5-8.

16. Participation on June 21 in the "Workshop" conference at the Trenton State Teachers College. The Camden County Mobile Dental Clinic was driven there for exhibition and inspection.

17. Many other meetings and visitations were made by the Chief of the Dental Bureau, and many talks were presented on the subject of "Fluoridation of Water Supplies."

THE PREVENTIVE PHASES

A. Topical Applications of two per cent Sodium Fluoride Solution:

A solution of sodium fluoride, a colorless, odorless liquid, applied by a dentist in a series of four applications at intervals of three days to a week is the health safeguard that science has brought to children. Ideally, sodium

fluoride should first be applied when the baby teeth first erupt into the mouth, and then applied to all new teeth as they erupt. Preceding each series of four applications, the teeth should be thoroughly cleaned. In general, however, it is most convenient to apply the solution, in a series of four applications after cleaning, at the ages of 3, 7, 10 and 13 years. Endorsements of the established procedure by such authorities as the American Dental Association and the United States Public Health Service are reliable assurances that this new preventive is safe and effective. It will definitely curb decay in children's teeth by an average of 40%. We in the Bureau of Dental Health for the past three years have instructed all of our operators to follow this procedure, and abide by the endorsement of the American Dental Association; namely, "Sodium fluoride therapy should be used routinely in private dental offices and in school and community health programs."

B. Fluoridation of Public Water Supplies:

This by far has been the most vital topic handled by the Dental Bureau this past year. Due to the wide publicity received from magazines, newspapers, health departments and dental groups, it still continues to be a very "live" subject. Just what is meant by the expression "Fluoridation of a Water Supply?" This refers to the application of fluorides in the proper amounts to the public water supply as it is pumped for distribution in that area. Many cities in the United States are already adding fluoride to their water supplies. They use fluoride in the form of sodium fluoride or sodium silicofluoride. Either of these chemicals is fed into the water by mechanical feeders. When fluoride is added to the community water supply in proper concentrations, tooth decay in young children can be reduced up to 65%; protection to the teeth of young children is afforded throughout life; the cost of dental care is reduced by reducing the number of fillings needed—the final result, healthier children.

The addition of fluoride to community water supplies has been endorsed by the American Dental Association, State and Territorial Dental Health Directors, American Association of Public Health Dentists, United States Public Health Service, State and Territorial Health Officers, American Public Health Association, American Water Works Association, and the New Jersey State Department of Health. At a meeting held on June 9-17 of this year at Brussels, Belgium, the Federation of International Dentists, representing 20 nations, passed a resolution favoring fluoridation for all nations throughout the world.

In New Jersey, the subject of fluoridation has been one of vital interest. In 1950, the City of Morristown purchased equipment and began fluoridating its water supply. In the past year, Allenhurst, Rahway, Ventnor and Summit have purchased fluoridation equipment. Many communities, such as

Newton, Fairlawn, Belmar are about ready to purchase the necessary equipment. Much interest is being shown in such cities as Atlantic City, East Orange, Paterson and 20 communities in Monmouth County.

On May 7, 1951, the Public Health Council of the State Department of Health approved fluoridation of public water supplies for "partial control of dental caries." On June 15, 1951, the New Jersey State Department of Health filed with the Secretary of State, rules and regulations governing fluoridation of public water supplies in the State of New Jersey, to become effective June 25. Copies of these resolutions and rules and regulations may be obtained from the Bureau of Dental Health, as well as the latest literature and statistics on costs and results of fluoridation throughout the United States. Volumes could be written on this subject, but I leave with you this final thought. Remember, the addition of fluoride to your community water supply is not a cure-all. For better, more attractive teeth, children should continue to see their dentists at periodic intervals, brush their teeth regularly, and reduce their consumption on candy, soft drinks, and other sweets.

DENTAL CARE PROGRAMS

At the present writing, the dental treatment program of the State Department of Health has progressed to the stage where children from districts in 18 counties are provided with necessary extractions, fillings, prophylaxis and fluoride treatments. As previously reported, six mobile units have been assigned to sparsely populated areas. These include two trailers and four motorized auto trucks, and they are assigned to Warren, Ocean, Somerset, Camden, Gloucester and Atlantic-Cape May Counties. The program also includes private offices and clinics. One station wagon is utilized in transporting children to private dental offices. The techniques followed for the program are as follows:

1. Programs are instituted at the request of a local or county administrator after the dental needs of the children in the community have been ascertained and plans formulated for the administration of such a program.
2. The first step in establishing a dental program is the organization of a dental health committee made up of representatives of both unofficial and official agencies, such as schools, health departments, parent-teacher groups, the local dental society, Red Cross, public health nurses, welfare groups and Department of Institutions and Agencies.
3. Local committees designate administrative policies for their program.
4. Local agencies contribute toward cost of program.
5. Members of the New Jersey State Dental Health Committee and representatives of local committees meet semi-annually to share their experiences.

6. The New Jersey State Dental Society, as well as its component societies, participate in the planning and accept the responsibility of providing adequate personnel for the program.

7. The chief function of the Bureau of Dental Health is to provide technical supervision of the dental services rendered for the program. High standards of dental care are maintained because of this supervisory service. Uniform records are kept to compare and evaluate the various programs.

8. Each local program is activated by what may be termed "the community approach." Authority is vested not in one agency or one person, but in a committee representing health, welfare and educational resources in the community.

9. Policies for selecting children for treatment are formulated by the local communities with the advice of the local dental societies.

10. Reports of achievements and costs are regularly submitted by the Bureau of Dental Health of the State Department of Health, informing each committee of its own accomplishments and the cost of its program.

11. Local and county committees conduct educational programs to improve dental conditions among all children.

12. Policies pertaining to technical procedures are recommended and approved by the New Jersey State Dental Society.

The treatment reports, which follow, are presented here to show:

- 1. Attainments of all the county and local programs during the fiscal year 1950-51.
- 2. Attainments of the State-wide program from July 1, 1940 to June 30, 1951.
- 3. Breakdown of source of funds of the Bureau from inception to June 30, 1951.

PERSONNEL

- 1—Chief of Bureau of Dental Health
- 1—Assistant Chief
(part-time basis)
- 4—Dental Supervisors
- 1—Dental Aide
- 1—Mobile Dental Clinic Operator
- 1—Public Health Nurse
- 1—Senior Clerk-Stenographer
- 2—Clerk-Typists
- 107—Operating Dentists
(9—full-time Dentists)
(98—part-time Dentists)

REPORT—DENTAL TREATMENT PROGRAM
July 1, 1950, to June 30, 1951

Program	Inflated	Type of Program*	Dentists	Committees	Operating Time (Hours)	Children Treated	Visits	Examinations	Permanents	Deciduous	Tooth Filled	Surface Filled	Amalgam	Silicate	Temporary	Material	Propyltaxis	X-ray	Others and	Phrasing Treatment	Total Operations	Cases Completed	Percent of Completions	
Atlantic County Program...	1947	Mo. Cl.	1	7	409	275	750	1,470	45	399	570	331	251	20	80	259	269	..	179	313	1,881	188	95.4	
Bergen County Program...	1943	P. O.	3	3	182	68	328	494	23	93	1,574	1,040	154	11	0	1,611	11	..	12	179	81	515	33	48.5
Burlington County Program...	1940	P. O.	1	1	699	355	1,901	1,570	7	93	1,654	1,960	154	31	0	1,915	31	..	105	310	3,008	310	37.4	
Burlington County Program...	1941	P. O., Cl.	1	1	590	58	163	1,515	119	18	1,656	2,225	156	15	18	1,815	15	..	1,033	283	3,038	310	37.4	
Camden County Program...	1943	Mo. Cl.	11	10	482	734	1,832	2,326	119	359	491	625	471	68	76	1,253	11	..	384	558	1,348	88	28.2	
Cape May County Program...	1944	P. O.	1	1	44	70	139	68	10	65	377	373	247	0	17	73	0	..	556	6,638	630	48.6		
Cape May County Program...	1945	Mo. Cl.	1	10	468	245	591	2,103	80	155	922	451	282	59	1	222	59	..	333	230	1,122	149	60.5	
Cumberland County Program...	1942	P. O.	1	1	36	30	43	29	6	3	87	89	77	7	4	28	4	..	3	31	1,071	11	30.6	
Essex County Program...	1912	P. O.	10	12	697	278	402	384	90	460	679	716	636	53	48	208	12	..	139	381	1,924	132	47.4	
Orange County Program...	1944	Cl.	5	1	898	480	1,581	817	28	293	1,660	2,285	1,375	147	310	828	108	..	538	68	3,012	445	61.0	
Montclair County Program...	1947	Cl.	4	1	295	140	517	517	12	49	417	449	389	21	31	311	31	..	18	113	1,001	132	30.6	
Gloucester County Program...	1945	Mo. Cl.	1	1	690	703	1,010	1,460	22	24	412	540	431	44	10	689	44	..	108	978	1,851	634	90.1	
Hammonton County Program...	1940	Cl.	1	22	842	298	1,425	637	63	154	352	430	327	57	4	1,089	57	..	571	7,801	634	90.1		
Middlesex County Program...	1942	P. O.	4	1	279	147	543	121	41	128	395	358	327	57	55	54	1	..	359	639	1,472	74	27.6	
Kiddle Keep Well Camp Program...	1942	P. O.	4	1	315	105	395	315	13	242	337	454	438	1	4	257	28	..	64	183	1,232	102	35.3	
Deans County Program...	1945	Cl.	1	1	115	35	108	80	1	225	194	225	211	0	10	62	0	..	24	..	313	28	90.3	
Monmouth County Program...	1941	P. O.	10	12	875	947	1,622	2,808	61	929	1,168	2,047	1,152	300	183	365	305	..	184	53	3,228	293	88.5	
Monmouth County Program...	1946	P. O.	1	1	123	41	197	1,188	81	20	168	297	1,152	10	30	30	10	..	115	..	296	11	28.8	
Union County Program...	1945	Cl.	1	1	76	42	142	37	4	44	172	172	203	4	33	12	4	..	60	..	..	31	78.0
Union County Program...	1946	Cl.	1	1	429	175	625	82	16	698	2,121	2,951	2,280	179	207	593	376	..	905	907	5,424	860	62.0	
Morris County Program...	1943	P. O.	20	20	1,423	589	2,713	829	37	96	1,631	2,951	2,280	80	28	311	61	..	118	114	1,097	70	32.1	
Ocean County Program...	1944	P. O.	0	1	298	218	556	171	37	96	1,631	2,951	2,280	80	28	311	61	..	118	114	1,097	70	32.1	
Atlantic County Program...	1946	Tr.	2	2	662	213	1,275	101	65	237	1,046	1,318	968	61	101	263	0	..	576	633	2,491	139	73.0	
Fussie County Program...	1946	Tr.	2	2	662	213	1,275	101	65	237	1,046	1,318	968	61	101	263	0	..	576	633	2,491	139	73.0	
Risingdale County Program...	1946	Cl.	1	1	95	27	159	62	18	55	177	243	238	15	..	..	..	..	60	..	421	18	66.0
Wanaque County Program...	1944	Cl.	1	1	80	46	173	56	18	55	177	243	238	15	..	..	..	..	60	..	421	18	66.0
Paterson County Program...	1941	Cl.	3	1	1,740	963	3,421	1,034	100	671	3,124	3,505	198	49	..	77	416	12	30.0
Somerset County Program...	1941	Cl.	3	1	10	883	4,446	1,649	4,734	7	871	834	2,925	3,041	30	1,001	493	..	225	864	7,109	833	62.0	
Sussex County Program...	1942	P. O.	1	12	453	216	877	670	2	243	840	1,012	968	63	28	132	1	..	378	620	3,793	383	55.8	
Union County Program...	1943	P. O.	1	1	210	51	256	670	2	4	123	149	103	13	3	3	3	..	18	90	197	12	55.1	
Clark Township Program...	1948	Cl.	2	1	162	381	323	675	1	23	104	215	191	8	21	58	54	..	72	84	419	35	68.8	
Kenilworth County Program...	1945	Cl.	2	8	884	167	1,151	2,017	15	105	632	1,010	670	41	200	145	27	..	131	106	500	23	63.8	
Warren County Program...	1947	Mo. Cl.	2	8	884	167	1,151	2,017	15	105	632	1,010	670	41	200	145	27	..	131	106	500	23	63.8	
TOTALS (18 counties)...	107		189	15,062	7,800	23,142	29,027	1,130	5,784	27,064	34,659	26,860	1,008	2,021	8,316	3,984	6,272	7,408	61,310	8,570	70.8			

* Code for Type of Program: P. O.—Private Office; Cl.—Clinic; Mo. Cl.—Truck Mobile with complete dental equipment; Tr.—Trailer with dental equipment.
** Includes Miscellaneous Treatment such as Vincent's Infection, Gutta-percha, Post Operative Root Canal, Abutments for extraction or cavity preparation.

REPORT—DENTAL TREATMENT PROGRAM

July 1, 1940, to June 30, 1951

Number of Counties	Year	Type of Program	Number of Dentists	School Districts	Dentist Hours	Number of Children Treated	Percentage of Completed Cases	Number of Permanent Extractions Per 100 Children Treated	Number of Operations Per Child	Number of Fluoride Treatments
2	1940-41	Cl.	2	25	1,322	839	30.2	50.4	7.8	...
8	1941-42	P. O. Tr. Cl.	15	48	3,153	2,680	60.2	20.3	6.0	...
11	1942-43	P. O. Tr. Cl.	25	109	4,739	2,846	68.9	30.8	6.7	...
16	1943-44	P. O. Tr. Cl.	49	150	6,277	3,328	68.9	20.6	6.3	...
16	1944-45	P. O. Tr. Cl. Mo. Cl.	67	171	8,540	5,084	64.0	11.8	5.4	...
17	1945-46	P. O. Tr. Cl. Mo. Cl.	80	171	10,575	5,732	68.6	19.5	6.0	...
17	1946-47	P. O. Tr. Cl. Mo. Cl.	108	188	15,821	7,713	69.0	17.9	6.3	...
18	1947-48	P. O. Tr. Cl. Mo. Cl.	100	180	14,801	8,539	60.4	12.0	7.1	2,519
18	1948-49	P. O. Tr. Cl. Mo. Cl.	107	170	16,314	8,782	60.7	12.0	8.4	18,604
18	1949-50	P. O. Tr. Cl. Mo. Cl.	110	191	16,407	8,340	67.3	13.1	8.0	11,351
18	1950-51	P. O. Tr. Cl. Mo. Cl.	107	189	15,062	7,869	70.8	14.3	7.7	7,496

* NOTE—During the early stage of the program, the number of communities in the program was obtained with some difficulty. The cause of the confusion was the use of school districts, townships, boroughs and schools as units for reporting. After July 1, 1945, it was decided to list only school districts.

BUDGET—BUREAU OF DENTAL HEALTH
NEW JERSEY STATE DEPARTMENT OF HEALTH—1939-1951

Year	Federal Contributions		State Contributions		Local Contributions		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
1939-40	\$5,240	100	.....	.....	.....	.....	\$5,240	100
1940-41	12,968	80	.....	.....	\$3,200	20	16,168	100
1941-42	14,613	48	\$12,000	38	4,900	18	31,515	100
1942-43	14,872	46	13,187	37	4,900	17	32,059	100
1943-44	15,021	29	51,795	69	8,500	11	75,316	100
1944-45	16,270	21	50,900	66	9,967	13	77,137	100
1945-46	19,369	18	64,707	61	22,800	21	106,876	100
1946-47	23,223	13	101,017	65	30,000	20	154,250	100
1947-48	20,049	17	65,406	55	34,150	28	119,605	100
1948-49	20,227	15	74,080	53	41,377	30	135,684	100
1949-50	12,450	8	79,379	50	67,367	42	139,196	100
1950-51	13,627	9	76,369	49	64,897	42	154,893	100

Bureau of Maternal and Child Health

MATERNAL MORTALITY

The maternal mortality rate in New Jersey remains consistently low. In 1950 there were 70 maternal deaths which makes a rate of less than one (0.7) per 1,000 live births.

If the 1940 rate of 2.9 had prevailed, there would have been 213 more maternal deaths in 1950, or a total of 283 instead of 70.

If the 1930 rate of 5.7 had prevailed, there would have been 487 more maternal deaths in 1950.

New Jersey continues to present one of the lowest maternal mortality rates in the country, and its medical profession can take justifiable pride in this achievement.

TABLE I—MATERNAL DEATHS BY SPECIFIC CAUSE

Toxemias of pregnancy	14
Ectopic pregnancy	6
Other complications arising from pregnancy	3
Total complications of pregnancy	23
Abortion without mention of sepsis or toxemia	1
Abortion with sepsis	4
Total abortions	5
Delivery complicated by retained placenta	1
Delivery complicated by other postpartum hemorrhage	6
Delivery complicated by disproportion or malposition of foetus	5
Delivery complicated by prolonged labor of other origin	3
Delivery with other trauma	3
Delivery with other complications of childbirth	6
Total delivery with specified complications	24

Puerperal phlebitis and thrombosis	1
Puerperal pulmonary embolism	7
Puerperal eclampsia	7
Other forms of puerperal toxemia	1
Cerebral hemorrhage in the puerperium	1
Other and unspecified complications of the puerperium	1
<hr/>	
Total complications of the puerperium	18
<hr/>	
All causes	70

TABLE II—MATERNAL DEATHS BY COLOR, CAUSE AND AGE GROUPS

Cause ¹ and Color	Age Group			
	All Ages	10-14	15-24	25-44
Complications of Pregnancy (640-649)	23	1	7	15
White	15	..	4	11
Non-white	8	1	3	4
Abortion (650-652)	5	..	2	3
White	2	..	..	2
Non-white	3	..	2	1
Delivery with Specified Complications (670-678) ..	24	..	7	17
White	17	..	4	13
Non-white	7	..	3	4
Complications of the Puerperium (680-689)	18	..	3	15
White	13	..	1	12
Non-white	5	..	2	3
All Causes (640-689)	70	1	19	50
White	47	..	9	38
Non-white	23	1	10	12

¹ Cause numbers are those of International List, 6th revision.

TABLE III—LIVE BIRTHS, INFANT AND MATERNAL DEATHS AND RATES BY COUNTY OF RESIDENCE

	Live	Infant Deaths		Maternal Deaths	
	Births	No.	Rates	No.	Rates ^a
New Jersey	97,734	2,445	25.0	70	0.7
Atlantic County	2,536	84	33.1	4	1.6
Bergen County	11,197	248	22.1	7	0.6
Burlington County	2,727	78	28.6	4	1.5
Camden County	6,280	157	25.0	4	0.6
Cape May County	636	24	37.7	..	..
Cumberland County	1,859	54	29.0	3	1.6
Essex County	17,435	430	24.7	16	0.9
Gloucester County	2,032	43	21.2	1	0.5
Hudson County	12,801	319	24.9	6	0.5
Hunterdon County	806	20	24.8	..	..
Mercer County	4,638	125	27.0	3	0.7
Middlesex County	5,740	159	27.7	3	0.5
Monmouth County	4,610	117	25.4	2	0.4
Morris County	3,308	66	20.0	..	..
Ocean County	1,268	33	26.0	2	1.6
Passaic County	6,596	143	21.7	4	0.6
Salem County	1,081	30	27.8	3	2.8
Somerset County	2,133	58	27.2	1	0.5
Sussex County	729	21	28.8	..	..
Union County	8,075	189	23.4	6	0.7
Warren County	1,063	42	39.5	1	0.9
State Institutions	9	1	b	..	..
Military establishments	175	4	b	..	..

a Rates expressed per 1,000 live births. If based upon small numbers, rates are unreliable for comparative purposes unless standard errors of rates are considered.

b Because of small numbers, rates not computed.

(Tables I, II and III prepared by the Division of Vital Statistics and Administration.)

INFANT MORTALITY

In 1950 New Jersey acquired 97,734 live-born babies. During the same year, the State lost by death, 2,445 infants. This loss occurred at the rate of 25 infant deaths for each 1,000 live births as compared with 25.9 per 1,000 live births in 1949.

The lowest infant mortality rate for 1950 among the counties of the State was 20 in Morris County. The highest rate of 39.5 occurred in Warren County.

If the 1940 rate of 35 had prevailed, there would have been 973 more infant deaths in 1950. If the 1930 rate of 56 had prevailed, there would have been 3,116 more infant deaths in 1950 or a total of 5,563 deaths instead of 2,445 in 1950.

In 1950, the incidence of prematurity, based on the weight under 2,500 grams, was 7.4% as compared to 8.8% in the year 1949.

TABLE IV. RESIDENT INFANT DEATHS BY CAUSE AND AGE GROUPS
(Separated into Those With and Without Public Health Significance)

New Jersey—1960

Cause of Death Showing International List (6th Revision) Numbers	Total Deaths	Under 1 Day	1 Day < 1 Wk.	1 Week < 1 Mo.	1 Month < 2 Mo.	2 Months but < 3 Mo.	3 Months and Over
ALL CAUSES (001-887, 690-906)	2445	947	693	359	110	85	369
Total causes with public health significance	1886	840	645	333	110	85	321
Infective and parasitic diseases (001-138)	539	333	174	51	4	1	2
Accidental mechanical asphyxiation in bed or cradle (1024)*	159	258	168	20	1	1	1
Congenital aplasia and stenosis (762)	279	170	92	8	1	1	1
Without immaturity	261	145	100	10	1	1	4
With immaturity	151	80	56	7	1	1	1
Without immaturity	131	65	41	3	1	1	1
With immaturity	237	109	28	36	28	30	105
Pneumonia of the newborn (708)	67	10	25	20	4	1	1
Without immaturity	48	3	19	20	4	1	1
With immaturity	19	7	8	4	1	1	1
Other diseases of the respiratory system (470-527)	10	7	8	4	1	1	1
Diseases of the digestive system (580-687, 764)	102	2	6	21	4	7	22
Diarrhea of the newborn (764)	15	11	11	11	11	11	11
Without immaturity	11	11	11	11	11	11	11
With immaturity	4	4	4	4	4	4	4
Hemolytic disease of the newborn (710)	80	2	6	6	4	7	22
Without immaturity	79	20	42	3	1	1	2
With immaturity	6	2	2	3	3	3	36
External causes other than mechanical asphyxiation (900-923, 925-999)	61	5	12	4	4	3	30
Hemorrhagic disease of the newborn (771)	16	1	1	1	1	1	1
Without immaturity	16	1	1	1	1	1	1
With immaturity	8	2	5	3	1	1	4

Infective and parasitic diseases (001-138)	22	..	..	5	2	2	14
Other causes of public health significance	14	..	41	10	17	9	26
Accidental mechanical asphyxiation in bed or cradle (1024)*	34	..	..	1	8	9	10
Asthma (241)	2	..	..	..	..	..	1
Epilepsies and other metabolic diseases (280-288)	1	..	..	..	..	..	1
Hemorrhagic disease of early infancy (772-775)	104	43	33	13	7	..	8
Without immaturity	65	32	25	8	4	..	8
With immaturity	20	9	8	5	3	..	..
Other diseases of early infancy (755-769)	10	3	5	1	1	..	..
With immaturity	10	3	5	1	1	..	..
Without immaturity	10	6	5	1	1	..	..
Total causes without public health significance	569	107	127	83	62	52	158
Congenital malformations and congenital diseases of the nervous system (924, 750-769)	438	104	122	71	43	21	92
Diseases without public health significance	106	3	5	12	9	11	66
Diseases with public health significance	22	1	..	3	3	5	10
Toxic diffuse goitre (252.0)	1	..	..	..	..	..	1
Neoplasms (140-239)	1	..	..	..	..	..	1
Diseases of the nervous system and sense organs (330-398)	16	1	1	3	1	1	6
Diseases of the musculo-skeletal system and organs of movement (720-740)	3	..	..	..	..	..	1
Diseases of the skin and cellular tissue (680-715)	2	..	..	..	..	..	2
Diseases of the genito-urinary system (590-637)	4	..	..	..	..	..	1
Diseases of the internal glands (274)	4	..	..	..	..	..	1
Diseases of the endocrine and blood-forming organs (260-296)	4	..	..	..	..	..	1
Symptoms and ill-defined conditions (780-788, 795)	9	1	2	2	1	1	4

* On the basis of studies made, it has been found that diagnoses in this category are subject to great error unless substantiated by careful autopsy.

Note: Diseases in which prematurity was either the only cause or a contributory cause represented a grand total of 1,639 infants. The age distribution was as follows: under 1 day, 617; 1 day but under 1 week, 354; 1 week but under 1 month, 62; 1 month but under 2 months, 41; 2 months and over, 2.

TABLE IV prepared by the Division of Vital Statistics and Administration.)

In Table IV, the total 2,445 infant deaths are considered in terms of causes with and without public health significance. Almost four-fifths or 1,886 of the deaths were charged to causes which should continue to be of concern to public health workers. Of these, over one-fourth was classified as "prematurity unqualified," really no cause at all. However, an additional 500 deaths designated with immaturity had assigned causes. This continued advance in cause assignment was made possible through the use of the 6th Revision of the International List.

More than one-tenth of the deaths assigned, which are thought to have public health significance, were charged to birth injuries. This continues to be a medical problem which should be reviewed as rigidly by a medical committee as have been the maternal deaths.

Furthermore, public health workers should be concerned with the 170 deaths which constituted two-thirds of the deaths classified as diseases of the respiratory system. These deaths accounted for 12% of the deaths considered to have public health significance.

Of the 559 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for better than four-fifths of this group. Recent medical knowledge continues to indicate that many of these deaths may be preventable.

In 1950, New Jersey lost 34 infants by accidental mechanical suffocation in bed or cradle and an additional 22 with causes classified as diseases of the thymus gland. As the diagnoses in these categories are subject to great error unless substantiated by careful autopsy, a medical committee could consider these deaths from the autopsy record in the hospitals.

TABLE V—INFANT DEATHS BY AGE AND IMMATURITY

Time alive	Total		Immature on death certificate		Not designated immature	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	2,445	100.0	1,039	100.0	1,406	100.0
1 day	947	38.7	617	59.4	330	23.5
1 week	1,639	67.0	971	93.5	668	47.5
1 month	1,875	76.7	1,033	99.4	842	59.9

(Table V prepared by the Division of Vital Statistics and Administration.)

Nearly two-fifths of those babies who died in 1950 failed to live beyond the first day of life. Before one week elapsed, two-thirds of the 2,445 babies had died. Before the end of the first month of life, the usually designated neonatal period, three-fourths of the 2,445 babies had completed their short lives.

The immature babies so designated on their death certificates contributed 1,039 or 42% of the total infant deaths in 1950. Of these 1,039, three-fifths died within the first day of life. The immature babies dying within their first day of life accounted for two-thirds of all infant deaths occurring within the first day of life. Before attaining one week of age, over 93% of these 1,039 immature babies had failed to survive. Over 99% of the immature babies who died had died before attaining one month of age. This contrasts sharply with the nearly 60% of the mature babies who died during their neonatal period.

Since most of the births occur in hospitals, a reduction in the mortality from prematurity will have to come primarily through two sources: (1) more effective prenatal care; (2) better care of the new-born in hospitals.

HOME DELIVERY NURSING SERVICE

The use of the home delivery nursing service continues to decrease. Nine registered nurses assisted physicians in 50 home deliveries.

BABY-KEEP-WELL STATIONS

There were 142 Baby-Keep-Well Stations in operation throughout the State under the supervision of the Bureau of Maternal and Child Health. Physicians served in 108 of these stations. Doctors in 97 of these stations were paid by the State Department of Health; in 11 stations, physicians in attendance were paid locally or served without compensation.

These physicians made 11,470 examinations of infants and 6,587 of pre-school children. They advised all mothers in the care, feeding and management of their infants. Efforts have been made through films and personal conferences to stimulate knowledge and interest in the well baby and in teaching mothers.

EDUCATIONAL ACTIVITIES

The education of public health nurses under the supervision of the Bureau has continued with special emphasis on Anticipatory Guidance in relation to parent-child relationships. For this purpose new nurses have taken special courses in Understanding, Care and Guidance of Children given under the auspices of Seton Hall College. Our psychologist has continued discussions of special situations with small groups for the purpose of helping nurses properly to present the Anticipatory Guidance program to the mothers. We continue to receive gratifying reports of the effectiveness of this method of approaching mental hygiene. Our work continues to be particularly recognized by the School of Public Health at Johns Hopkins University. They have assigned

two nurses for field training for two or three days to become familiar with our program. Their orientation included home visiting with our nurses. Interest has also been manifested by several departments of health, including the World Health Organization, who have requested us to send them our material for guidance.

Selected pamphlets have been given to the nurses for distribution to mothers. This has served the purpose of enabling the nurse to discuss various phases of behavior in emotional and mental development.

We have been using about 12 carefully selected films. The District Supervisors of Public Health Nurses have arranged for the showing of these films before nurse groups, Parent-Teachers' groups, and special groups organized through the baby-keep-well stations. All films have stressed and emphasized the general theme of the understanding of emotional and mental development of children and the improvement of parent-child relations through anticipatory guidance.

BOARDING HOMES FOR CHILDREN

In 1919 an ordinance requiring the licensing of Boarding Homes was incorporated in the State Sanitary Code. In the beginning the licensing was done by the State Department of Health, but later the responsibility was placed on local boards of health. District supervisors of public health nurses give advisory service, upon request, to the local health officer to help him in the evaluation of boarding homes to determine which really should be permitted to board children.

In addition to determining the sanitary and housing standards, it has been found desirable to make certain that the person wishing to board children is capable of giving proper care from an emotional, physical and social standpoint. This method has successfully eliminated "baby farms" from New Jersey and it has made available to social agencies a list of licensed boarding homes. The newspapers of the State have helped by refusing advertisements to those wishing to board children unless they could show a license from the local board of health.

MATERNITY HOMES

There were 12 maternity homes inspected by the physician on the staff of the Bureau. Eleven of these homes were recommended to the Licensing Board of the Department of Institutions and Agencies for licensing. One was discontinued. One home was licensed by the State Department of Health without fee. Homes with one bed only are licensed by the State Department of Health.

During the past year arrangements were made with the Department of Institutions and Agencies to assume full responsibility for the licensing of all maternity homes. It is understood that the Bureau would continue to make available, for the maternity homes, special advisory service in regard to maternity and nursery techniques, and to cooperate with the Licensing Board of the Department of Institutions and Agencies.

EXTENSION OF ACTIVITIES

During the year the Central and Southern State Health Districts began to operate and gradually to assume the responsibility of supervision of public health nurses and the administration of the maternal and child health programs within their boundaries. However, because such district activities were so recently initiated, statistics and program activities are here reported as state-wide.

Of the 264 field nurses under the supervision of the Bureau of Maternal and Child Health, 202 were paid entirely by the communities in which they work, 54 were paid partly by the state and partly by the communities in which they work, and eight were paid entirely by the State.

The following communities assumed a portion of the balance of the nurses' salaries:

<i>Atlantic County</i>	<i>Bergen County</i>	<i>Camden County</i>	<i>Gloucester County</i>
Mullica Twp.	Englewood	Somerdale	Elk Twp.
	New Milford	Bellmawr	Washington Twp.
	East Paterson	Bellmawr Park	East Greenwich Twp.
<i>Hunterdon County</i>	<i>Somerset County</i>	<i>Sussex County</i>	<i>Warren County</i>
East Amwell Twp.	South Bound Brook	Hopatcong Twp.	Greenwich Twp.
West Amwell Twp.	Hillsborough Twp.		
Clinton Twp.			
Clinton Boro.			
Kingwood Twp.			

As a result of the demonstration of effective maternal and child health work, communities assumed salaries of the M. C. H. supervised public health nurses each year as follows:

1944	\$10,642.00
1945	26,262.36
1946	12,848.00
1947	10,621.00
1948	8,759.00
1949	29,829.40
1950	9,105.00
1951	8,866.00

STATISTICAL SUMMARY OF THE WORK OF THE 264 NURSES

These nurses had under their supervision 13,641 expectant mothers, 21,219 postpartums, 46,773 infants, 62,935 children between one and six, and 146,062 school children.

Home visits made by the nurses	510,678
To expectant mothers	40,122
To postpartums	49,676
To infants	196,124
To children 1 to 6	177,036
To school children	47,720
Visits to Baby-Keep-Well Stations	34,027
By babies	21,701
By children 1 to 6	12,326
Child Hygiene Leagues (classes conducted)	101
Mothers' classes conducted	72
Dental sessions, nurse assisting	459
Children under one year of age immunized	12,626
Children one to five years of age immunized	7,840
Children vaccinated	18,255
School children supervised	146,062
Inspections (annual, assisting doctor or general)	599,066

Immunizations

Among the many valuable activities of the public health nurses, special attention has been directed to the importance of having babies immunized against diphtheria and whooping cough before one year of age. Our records indicate that of 18,552 infants, reaching the age of one year, 78% were immunized. This, of course, does not guarantee that babies will not develop whooping cough as the protection is far from being as effective as the immunization against diphtheria.

Supervision

During the year, the Central and Southern State Health Districts assumed the supervision of the state and locally paid nurses as follows:

<i>Central State Health District</i>	<i>Southern State Health District</i>		
Burlington County	8	Atlantic County	14
Mercer County	10	Camden County	13
Middlesex County	25	Cape May County	4
Monmouth County .....	..	Cumberland County	11
Ocean County .....	..	Gloucester County	13
.....	—	Salem County	8
Total	43	.....	—
		Total	63

ILLEGITIMATE BIRTHS

There were 2,291 births out-of-wedlock among New Jersey residents. This represented 2.3% of the total births for the State.

<i>Percentage of Illegitimate Births by Age of Mothers</i>					
<i>Under 15</i>	<i>15-19</i>	<i>20-24</i>	<i>25-29</i>	<i>30-34</i>	<i>Over 35</i>
2%	39%	33%	15%	8%	3%

The proper care of unmarried mothers and their babies would tend to reduce the so-called black market in adoptions and would influence favorably the proper placing of infants in foster homes. There still is not adequate provision for unmarried mothers of various groups and there is insufficient and inadequate follow-up work with such mothers.

MIDWIFERY

There are now only 133 licensed, registered midwives in New Jersey of whom only 67 were active during the year. The midwives delivered 382 of the 97,734 births in New Jersey. This is less than one-half of one per cent of the births. When supervision of the midwives was assumed by the State Department of Health in 1919, the midwives numbered about 900 and delivered 49% of the State's births.

The maximum number of births delivered by one midwife was 48. Twenty-five midwives delivered one birth each. There were no births delivered by midwives in eight of the counties of the State. Births delivered by midwives by area of the State were:

Atlantic County	24	Mercer County	1
Camden County	47	Middlesex County	74
		Monmouth County	48
		Ocean County	2
Bergen County	4	Morris County	3
Essex County	47	Somerset County	23
Hudson County	29		
Passaic County	9		
Union County	70		

ADVISORY SERVICE TO HOSPITALS

While the licensing of hospitals is carried on by a special Licensing Board under the Department of Institutions and Agencies, this Bureau has continued to make available to the hospitals a special advisory service under a physician and public health nurse. This concerns itself entirely with maternity services

and the care of the newborn. Many improvements have been made in the hospitals in techniques and facilities. Close cooperation has been maintained with the representatives of the Licensing Board.

PREMATURE INFANTS

During the year an Institute was conducted for physicians and nurses in the care of premature infants, one in Newark and one in Camden. The attendance and interest shown made the project worthwhile. Early in July 1950, plans were initiated for the establishment of a teaching center in a hospital for the training of nurses who have charge of premature infants in hospitals. Through cooperation with the Secretary of the Hospital Association, arrangements were made with the Mountainside Hospital in Montclair to establish the demonstration center for the course here. The course has not started pending the employment of a qualified Nurse Instructress.

Nutrition Program

The Nutrition Program under the general direction of the Director of Constructive Health has continued to follow out its goal to stimulate and establish good food habits for every citizen in New Jersey by bringing him a better understanding of nutrition and proper foods for optimum health. An additional Nutritionist added to the State Staff in August of 1950 has helped to extend the services of the Program considerably. After a period of orientation and in-service training in the State Office, this individual was assigned to the Southern State Health Office when it opened in March 1951.

It has been the responsibility of the State Nutritionist in charge of the State program to direct, develop, integrate, evaluate and formulate plans and policies for the overall state program. The State Nutritionist has been an active member of the State Nutrition Council and serves as Chairman of the Bibliography Committee of that group. She has represented the State Health Department at various conferences and meetings in which there was a nutritional component. The State Nutritionist has kept in close touch with national programs and has reviewed new literature and visual aids as they have become available. She has contributed to in-service training through personal contacts, written material, staff conferences, and meetings. The nutrition program is a broad program that crosses many lines in the administrative structure of the health department. It has been important for the nutrition program of the State Health Department to be closely geared to nutrition activities of the Extension Service, Department of Agriculture, Department of Institutions and Agencies, and the Department of Education and the Red Cross on National, State, and local levels so that overlapping is avoided whenever possible and there is better use of available resources. This has involved continuous interagency conferences and planning.

ACTIVITIES

There are three general types of activities through which the State Nutrition Program has promoted better nutrition for the public.

First: Those planned to benefit directly or indirectly the population as a whole.

1. CIVIL DEFENSE

Because of the increasing demand from public and interested professional groups in the role of nutrition in civil defense planning, the State Nutritionist participated in the following activities for civil defense.

a. Committee membership:

The State Nutritionist accepted active membership on the Sub-committee of Food Safety of the State Health and Medical Planning Committee and the Sub-committee of Mass Feeding of the State Welfare Planning Committee.

b. Lecturer:

The State Nutritionist participated as a lecturer in the four-day training program in November held at the War Memorial Building, Trenton. She was principal speaker at the Annual Spring Meeting of the County Home Agents of Extension Service in May at Rutgers University. She also spoke at the Civil Defense meeting sponsored by Red Cross, Defense Councils, Health Departments, and Women's Club of Orange and Maplewood, New Jersey.

The State Nutritionist with Mr. Earle, Chairman of Mass Feeding, spoke at the Spring Meeting of the New Jersey Food Service Organization in Moorestown, New Jersey.

The State Nutritionist also lectured to the women attending "The Cook's School" which is sponsored by the State Department of Education and the State P.-T. A. for School Lunch Managers and Cooks at New Jersey College for Women in July. The District Nutritionist spoke to a similar group at Glassboro on Mass Feeding in June.

2. HANDBOOK ON COMMUNITY PROMOTION OF NUTRITION PUBLISHED

"The Community Promotion of Nutrition in Maple Shade, New Jersey" was published as a handbook and guide for other communities in the state who might be interested in carrying on a similar project. The publication has been sent to every local board of health and to every public library in New Jersey. It was favorably reviewed in the Journal of the American Public Health Association in August, and letters commenting upon it and requests for copies have come from all over the United States as well as Puerto Rico and Canada. A number of schools of Public Health have requested copies to use in their classes in Health Education as well as Nutrition. Many states have written they are going to use the book as a guide for similar projects in their states. It is gratifying to know the handbook has filled a real need.

Second: Those activities designed to promote better nutrition for members of specific groups.

Special attention has been given to the food needs and nutrition problems at different age levels and around those of special groups with common interest and similar problems.

Examples:

1. *Pregnant and nursing women:* Thousands of copies of leaflets and pamphlets on nutrition have been distributed through our Public Health Nurses as well as our nutritionists to pregnant and nursing women.

2. *Pre-school children:* Our District Nutritionist has found that the Baby-Keep-Well Stations are an excellent place to teach nutrition to individuals and groups. They are also a logical place to put up well planned nutrition exhibits. The "Summer-Round-Ups" are also being investigated as a medium for a nutrition program for this age group.

3. *School-agers:* Channels for nutrition instruction are available throughout the state but methods in some instances are not the best to make the teaching of nutrition the most effective. Very often the teachers in public as well as private schools have not had sufficient or up-to-date training in nutrition to conduct a good program. A large number of our Public Health Nurses are responsible for work in schools. Through conferences, in-service training courses and the like the nutritionists have been endeavoring to point out to the nurses how they can best benefit the school age group. The State Nutritionist spoke at the Spring Executive Meeting of the State P.-T.A. and found them extremely anxious to have better cooperation with the State Health Department, P.-T.A. and schools. Through the interagency committee of the State Department of Health and the State Department of Education, we are hoping to have better cooperation. In this way a great deal can be done to improve the health condition of the school age children.

4. *Industrial Workers:* As a result of the Survey on In-plant Feeding Programs conducted by the Bureau of Adult and Industrial Health, the State Nutritionist was asked to present a paper on the results of the survey at a Joint Session of the Food and Nutrition and Industrial Hygiene Sessions of the American Public Health Association at the Seventy-eighth Annual Meeting in St. Louis, Mo., November 3, 1950. This paper was published in the July 1951 American Journal of Public Health with an editorial on the survey in the same Journal by Dr. C. E.A. Winslow. Several national magazines have asked permission to reprint the article and a number of requests for reprints have been received from large industries such as the Standard Oil Company, Oakridge National Laboratory, Kettering Laboratory, Cincinnati, Ohio, American Mutual Liability Insurance Company, Eastman

Kodak Company, as well as other State Health Departments and Schools of Public Health.

A number of industries have requested nutrition material and several thousand pamphlets have been sent them.

5. *Homemakers:* Realizing that homemakers who do the buying and preparing of foods are an important key for a good nutrition program, the State and District Nutritionists have been working on the preparation of material on budgeting with the Nutrition Specialist, Extension Service, Rutgers University, and the Home Economist Advisor for Institutions and Agencies. When the material is completed it will be made available for use throughout the state to Public Health Workers, Welfare Workers, Extension Workers, Red Cross Workers, for use with the Homemaker group.

6. *Older People:* The State Nutrition Council has had as one of its leading projects "The Nutrition for Older Adults," and the State Nutritionist has served as an active member on that Committee. The State Nutritionist in cooperation with the Public Relations Office of the New Jersey Department of Conservation and Economic Development helped prepare a script "Food for Thought" which was presented as one of the Spring Broadcasts of the "This Is New Jersey" Series. This radio series, designed for Junior and Senior high school students, dramatizes subjects of significance to New Jersey residents. The broadcasts and radio manuals are endorsed by the New Jersey Department of Education and the New Jersey Manufacturing Association, and are presented as a public service by radio stations.

In cooperation with Institutions and Agencies the District Nutritionist in the Southern Health District has been assisting the Gloucester County Institute for the Aged to set up a needed nutrition program.

7. *Preventable Disease:* Nutrition is important in the preventable disease program because nutritional disorders such as overweight, underweight, anemia may serve as auxiliary factors in predisposition to certain diseases.

(1) *Tuberculosis Control.* The nutritionist had several consultations with the Chief Physician and Consultant Nurse of Public Health in Tuberculosis. These consultations showed the need for material to assist the Public Health Nurses in their work with the T.B. patients and their families. Material was prepared by the nutrition program and has been reviewed and approved by the Chief Physician and Consultant Nurse and is now awaiting approval of the Chief of the Bureau of Public Health Nursing.

(2) *Heart Program.* The nutritionists had several conferences with the Chief Physician of the Heart Program to discuss suitable material for physicians and Public Health workers that could be used and distributed by the Heart Program in relation to Nutrition.

8. *Migrant Labor*: In May the District Nutritionist in the Southern District was asked to visit a migrant labor camp in her district. As a result of this, other camps have asked for aid and the State Nutritionist and the District Nutritionist are making every effort to secure educational material and possible films in the language of Puerto Rico. Information on this subject is now available through the office of the State Nutritionist.

9. *Refugee—Displaced Persons*: In the past few years many persons from other lands have come to the United States in the hope of bettering their living conditions. In certain areas of the Southern State Health District as well as Trenton and Newark, there are many new people and families. Many of these Displaced Persons and Refugees find it very difficult to adjust to our habits and standards. This is due in part to the language difficulty. The State Nutritionist is making an effort to obtain nutrition material in a language (Yiddish, German, Polish, and Ukrainian) which will help them to overcome some of their difficulties in understanding our ways and assist our Public Health Workers who come in contact with them.

10. *Dental Health*: The Nutrition Program has continued to work closely with the Dental Program by discouraging the sale of candy in the schools. In Maple Shade as a result of the Nutrition Pilot Study this year the Board of Education voted to discontinue the sale of all candy in the public schools and, as a result, the fruit carts are doing a thriving business.

The District Nutritionist has visited the Dental Trailer in the Southern District and has suggested nutritional material suitable for distribution there.

11. *Handicapped*: The cerebral palsy, rheumatic fever and poliomyelitis groups all have special specific nutrition problems that need attention.

1. *Cerebral Palsy*—With the State Nurse Consultant of the Cerebral Palsy program the State and District Nutritionists have attended a number of State Crippled Children Commission clinics. Nutrition discussions at these clinics have been carried out on an individual basis with parents of C.P. children. The parents (in many instances the father was present) were extremely interested.

As a demonstration, a mother's class was arranged at the C.P. Clinic at Junior No. 2 in Trenton. This Clinic has very fine facilities and many of the C.P. children attend regular classes through the special handicap program arranged at the school. The Trenton Supervisor of School Lunch has arranged for a special lunch program for the handicapped children and she and the teacher in charge of the class were most cooperative and anxious for suggestions and material. With the cooperation of the school nurse a record was kept of the children's health and parents and teachers alike noticed an improvement in the children after their lunch program was started. A series

of classes for the mothers was planned for one afternoon a week for several weeks but although there was great interest it was difficult for the mothers to arrange to come to an afternoon class because there was no one to leave younger children with at home. Through the mothers' interest, however, the Mercer County Cerebral Palsy Parents group asked to have evening classes arranged for their club meeting night. This was done and was most successful. At these meetings one or both parents are usually present and they all show great interest in the feeding of their handicapped child. There is a need for more special material for this group.

2. *Rheumatic Fever*—The nutritionists have had conferences with the State Nurse Consultant to the Rheumatic Fever Program to discuss special problems in this group. Material has been distributed through the clinics and exhibits set up in nutrition for this group.

3. *Polio*—The National Foundation requested help in setting up in-service training programs for volunteer aids being trained in the convalescent care of infantile paralysis victims. The Nutritionists lectured to the group and suggested nutrition material and visual aids for the program.

Third: Direct Services to individuals or families.

Direct service from the State Nutrition Program is only given on a demonstration basis where these services might be in the nature of a demonstration related to special projects or demonstrations that are being carried on by state staff in a limited area. A demonstration by the nutritionist of dried skim milk, for example, to a group of nurses and welfare workers may give each agency worker much to pass on to the people with whom she is directly concerned and may indirectly benefit hundreds.

Home Visits—In the Southern District, the Nutritionist visited each of her counties and did home visits with various Public Health nurses. These were most helpful to both the nutritionist and the nurse. They have shown there is a great need to continue direct in-service training for nurses. Many of the nurses visited were not on "speaking terms" with nutrition and therefore had a tendency either to side-step or overlook nutrition problems or make it appear as if they were private matters.

The nutritionists feel that no matter how much education an individual has been given in nutrition, if she makes little or no effort to practice good nutrition for herself and for her family, she is unable to give sound sensible advice to others. An overweight nurse certainly is in no position to advise another person to reduce. An individual must recognize her own likes and dislikes and she must realize these are not to be used as criteria for advising others.

Surveys—Since the State Nutrition Program does not have the personnel, facilities, or funds to conduct research projects in this Department, the nutrition program has not undertaken any surveys except one—a resurvey of the school children in Maple Shade as a follow-up for the community promotion of nutrition. This survey was conducted by the same local committee that did the Survey in December 1950. They contacted the High Schools in Moorestown and Camden where the former eighth grade children transferred to and all children were thus resurveyed. The results are now being compiled by the State Vital Statistics section. This information will be useful in planning future education programs for the community.

Education—In-service training for the staff of the State Health Department and of other health agencies which give or should give some nutritional service has been given. The State Nutritionist taught an accredited college course in Public Health Nutrition for the School of Nursing of Seton Hall University, at the Cooper Hospital, Camden. Twenty-three School, V.N.A., and Public Health Nurses took the course. Our nurses are in great need of more in-service training in nutrition. However, the nutritionists feel that rather than arranging for separate institutes on nutrition, a great deal more could be accomplished by integrating nutrition in other in-service courses set up by the Department for nurses. For example, nutrition in relation to heart conditions could be included in the training programs set up for the Heart Program, etc.

The State Nutritionist represented the Department at the Fifth Community Nutrition Institute held at Syracuse University, June 1951. This was a two-week In-service Course in Public Health Nutrition for Nutritionists, Public Health Nurses, Public Health Physicians, etc. There were representatives from all over the United States and Canada at the Institute and one week was devoted entirely to Civil Defense Problems in relation to Nutrition.

Both the District and State Nutritionist have been taking turns attending the Monthly Seminars on Problems in Nutrition which have been arranged to keep Nutritionists up-to-date on nutrition research and developments and are sponsored by the Nutrition Bureau of the New York City Department of Health under Dr. Norman Jolliffe.

Students Field Training—Two students from Teachers College, Columbia University, N. Y., who were completing their graduate work in Public Health Nutrition did two weeks of field work with the State Nutritionist in April.

In June another student did a week of field work with the District Nutritionist in the Southern District.

Information Service—Information on nutrition facts and visual aids have been made available by the Nutrition Program in cooperation with Health

Education to all parts of the state. The Nutrition Program has helped plan and prepare materials such as leaflets, posters, exhibits, radio scripts, etc., to be used for public education.

Thousands of copies of leaflets and pamphlets on nutrition have been placed in the six counties of the Southern District since this district has been organized. The district nutritionist has noted however that the nurses need more training in the proper use of educational pamphlets and visual aids in working with their families. Some nurses have excellent ideas for the use and display of such material in the Baby-Keep-Well Stations whereas others unfortunately feel every poster, book, pamphlet and leaflet must be on display at one time.

The Nutrition Program has acquired a number of good nutrition films which have been used in all sections of the state.

Information has been furnished to the following groups:

- (a) Personnel in the State Health Department.
- (b) Personnel in the District Health Office.
- (c) Personnel in restaurants and industrial establishments through the Bureau of Adult and Industrial Health.
- (d) Members of the medical profession.
- (e) Individuals requesting advice on nutrition.
- (f) Maternal and Child Health, Dental Health, Crippled Children, Chronic Disease, Tuberculosis, Communicable Diseases, etc.

The Nutrition Program has endeavored to cooperate with nutrition activities of other agencies to develop a broad and well planned state program so that the services available are adequate to protect and promote the health of all citizens.

Report of the Division of Environmental Sanitation

July 1, 1950—June 30, 1951

ALFRED H. FLETCHER, M. S., *Director*

Bureau of Food and Drugs.....LOUIS M. LOUNSBERY, D. V. M.
Chief

Bureau of Public Health Engineering.....ROBERT S. SHAW, B. S. E., M. P. H.
Acting Chief

Rabies Control Program.....J. S. McDANIEL, D. V. S.
Veterinarian in Charge

Division of Environmental Sanitation

The Division of Environmental Sanitation includes the Bureau of Public Health Engineering, the Bureau of Food and Drugs and a Program of Rabies Control. In addition a number of activities are being carried on under the supervision of the Director of the Division.

VETERINARY PUBLIC HEALTH

A Senior Public Health Veterinarian has been laying the foundation for a broad program to control animal diseases transmissible to man. Special attention has been given to poultry and meat inspection and the development of a written outline for such a program.

Under the Chairmanship of Dr. Ernest Smillie the Advisory Committee on Animal Diseases Transmissible to Man has met several times to discuss various problems and to make recommendations to the Department.

ADVISORY CODE COMMITTEES

Advisory committees to draft codes to be recommended by the State Department of Health for adoption, by reference, in local communities have been set up during the past year in the following fields: Eating and Drinking Establishments, Fluoroscopic Shoe Fitting Devices, Industrial and Commercial Water Supplies, Individual Sewage Disposal Systems, Nuisances, Smoke Control, Swimming Pools, Tourist and Trailer Camps, and Weeds Detrimental to Health. A plumbing code committee working in cooperation with other committees has continued its work toward the development of a State Building Code. Plumbing is to be Chapter 3 of this code.

The membership of these Advisory Code Committees is composed of Departmental representatives, educators, health officers, sanitarians and laymen or professional people familiar with the problems involved. One Committee has completed its recommended code and several others will soon be in a position to present their recommendations. The completed code is presently being reviewed by the State Department of Law and Public Safety. All recommended codes will be similarly reviewed before publication. Each code will be printed in a form that lends itself to adoption by reference and will be distributed to local boards of health as soon as they are available.

LAKE SANITATION

An engineer was again assigned during the summer months on a part time basis to promote and direct a program in lake sanitation in cooperation with a committee from the Health Officers' Association and with the active cooperation of local health officers and laboratories in North Jersey. Its ultimate goal is to develop uniform standards for judging the safety of lakes for bathing and to encourage operators of lakes to take advantage of this program to insure safe bathing for the many vacationers in North Jersey. The present status and plans for this project have been outlined for publication in the Public Health News.

POLLEN CONTROL

The Division has continued to promote ragweed control programs throughout the State. In a State-wide survey during 1950, 70 municipalities were found to be conducting weed control programs. These municipalities are in 16 of the 21 counties of New Jersey. Bergen, Essex and Union Counties were particularly active in this type of public health program. Most of the municipalities carried on spraying operations on private as well as public property. It is estimated that over a million people live in these communities that provide some protection to those persons who are sensitive to the ragweed pollen.

A very recent move on the part of the Commissioner of the State Department of Health is the formation of an Interdepartmental Committee made up of representatives from the State Departments of Agriculture, Highway, Health, and Conservation and Economic Development and from the Agricultural Research Experiment Station at Rutgers. This Committee has already met and a report outlining the weed control work now being carried on by various Departments and recommendations for improving the work of the various Departments, together with a plan for coordinating their efforts in a State-wide program is in preparation.

PRIVATE SEWAGE DISPOSAL

The Division has continued its active cooperation with the Federal Housing Administration and during this year has developed a similar cooperative program with the Veterans Administration. Approval of all large housing projects (of 50 or more housing units) depends on investigations and reports as to suitability of the soil for the installation of individual cesspools and septic tanks. At times there have been as many as three engineers working on such problems at one time; one engineer devotes full time on this project. The program depends on the active cooperation of this Division and the District Offices of the Department. A proposed law granting certain powers to the State Department of Health to control realty subdivisions was introduced into the Legislature but failed to pass.

GARBAGE AND REFUSE DISPOSAL

Work in this field has continued during the past year. Two sanitary landfill demonstrations using equipment furnished by manufacturers were held to illustrate the proper methods of garbage and refuse disposal. The first was held in Cranford Township for all municipalities north of Trenton. Boards of health and municipal officials, including the municipal public works officials, were invited to the demonstration. The second demonstration was held in Ardmore, Pennsylvania for all municipalities below Trenton. It is confidently expected that several well designed sanitary landfill disposal programs will be in use very soon in this State, and these will serve for the first time as practical demonstrations as to how such projects should be operated. This should be of great assistance in convincing other municipalities as to the proper methods of handling garbage and refuse.

INSECT AND RODENT CONTROL

Rodent surveys have been completed during the past year in Plainfield, North Arlington, and Rutherford. A survey has been initiated in Jersey City and will be completed soon. The purpose of these surveys is to locate the sources of rodent breeding and estimate their prevalence as well as to train local sanitarians in the latest methods of rodent control. This work is a continuation of the work started last year which was made possible by the loan from the United States Public Health Service of a Rodent Control Specialist.

CIVIL DEFENSE

Considerable time has been devoted to the problem of Civil Defense. The New Jersey Plan for sanitation services is outlined in Chapter 7 of a recent pamphlet released by the Division of Civil Defense of the State of New Jersey entitled: "New Jersey Plan for Emergency Medical and Health Preparedness."

Bureau of Food and Drugs

During the current year the Section on Food and Drugs was redesignated and is now known as the Bureau of Food and Drugs in the Division of Environmental Sanitation.

PERSONNEL

Personnel of the Bureau has undergone a considerable change for various reasons. During the departmental reorganization process in which two State Health Districts were activated, one Assistant Sanitarian and a Public Health Veterinarian were transferred to the Southern State Health District and two

Assistant Sanitarians and a Public Health Veterinarian were transferred to the Central State Health District.

PLANNING AND TRAINING

Administrative personnel of the Bureau participated in numerous training programs and planning sessions during the past year. A series of indoctrination lectures was given to personnel of the Southern and Central State Health Districts covering activities of the Bureau in the field of food and drug enforcement. Bureau personnel also participated in a two-day program at Plainfield, N. J., on the subject of "Training for Safe Food Handling," held in conjunction with the New Jersey Health Officers Association.

Civil Defense involved numerous conferences and committee meetings in which administrative personnel of the Bureau were required to furnish technical advice and information, and assist with the preparation of material to be incorporated in the New Jersey Plan for Emergency Medical and Health Preparedness.

School Lunch Bulletin No. 2, published by the Division of Health, Safety and Physical Education of the New Jersey Department of Education, was reviewed and evaluated by personnel of the Bureau prior to publication and several suggestions were made regarding technical material in the Manual.

Numerous requests were received from local boards of health for assistance with training of new employees. Inspection techniques and food and drug sampling techniques were demonstrated to the trainees, departmental policy was explained and suggestions made in connection with the handling of special problems. In turn, field employees of the Bureau received excellent cooperation from local boards of health especially in the collection of special information on the sale of horseflesh as beef.

Meetings of the Committee on Sanitation appointed by the Interdepartmental Committee on Health for the Departments of Institutions and Agencies and Health were also attended.

Personnel of the Bureau attended few conferences and trade meetings sponsored by local, state, federal and trade associations, due to the shortage of personnel and press of other duties.

LEGISLATION

Refrigerated Warehouses:

Food and Drug Bureau personnel attended a series of meetings sponsored by the Department to draft new legislation governing the Refrigerated Warehouse Industry. Invited to attend were representatives of the New Jersey Health Officers Association, New Jersey Frozen Food Locker Association, and the New Jersey Association of Refrigerated Warehouses. The resulting act,

Assembly Bill 656, was introduced in the current legislative session after approval by all participating officials.

The proposed act creates new definitions for Cold Storage Warehouses, and for Articles of Cold Storage. Submission of monthly tabulations of articles in storage at the end of the month has been discontinued. Date of storage and withdrawal on each package of food is no longer required and placarding of articles as "Cold Storage" when offered for sale has been abolished. The act also provides for the expiration of all licenses on June 30 of each year instead of one year from date of issuance and raises the cost of a license. Under the present law, a flat fee of \$10.00 is charged per license. The new act places a graduated fee on each licensed establishment, dependent upon the amount of gross refrigerated space in the plant. The minimum fee is \$25.00 and the maximum is \$150.00. The act is reproduced in its entirety below.

CHAPTER 342, LAWS OF 1951

AN ACT concerning public health, regulating the storage of food or drink used by man or animals in refrigerated warehouses and locker plants, providing for the issuance of licenses for the conduct of such warehouses and plants, and repealing chapter nine of Title 24 of the Revised Statutes.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. As used in this act:

a. "Article" means any food or drink used for man or animals;

b. "Refrigerated warehouse" shall mean any place artificially or mechanically cooled to or below a temperature of forty-five degrees Fahrenheit in which articles, other than fresh unprocessed fruits and vegetables, are placed and held for thirty days or more, except a restaurant, store, home, or eating club utilizing its refrigerated warehouse space exclusively for its own use.

c. "Locker plant" shall mean any refrigerated storage warehouse or the portion thereof which provides separate individual lockers, cabinets, boxes, baskets, or other receptacles, for the storage of food products for home or personal use only and not for purpose of sale.

d. "State department," "department of health" and "department" mean the State Department of Health.

e. "Commissioner" means the State Commissioner of Health who is the chief administrative officer of the State Department of Health.

2. Any person desiring to operate or to continue to operate a refrigerated warehouse or locker plant shall make application in writing to the State department, upon forms supplied by the said State department stating the location of his plant or plants.

Upon such application accompanied by the proper fee, the department shall examine into the sanitary condition of the plant or plants, and if found to be in a sanitary condition and otherwise properly equipped for the business of a refrigerated warehouse or locker plant, the department shall issue a license authorizing the applicant to operate such refrigerated warehouse or locker plant, which license shall expire June thirtieth of each year.

3. The State department shall collect from each applicant for each license granted under the provisions of this act for each refrigerated warehouse or locker plant the following fees: for each refrigerated warehouse or locker plant with gross refrigerated space not in excess of one hundred thousand cubic feet, twenty-five dollars (\$25.00); for each refrigerated warehouse or locker plant with gross refrigerated space in excess of one hundred thousand cubic feet but not in excess of one million cubic feet, seventy-five dollars (\$75.00); for each refrigerated warehouse or locker plant with gross refrigerated space in excess of one million cubic feet, one hundred fifty dollars (\$150.00). If a locker plant is operated as part of a refrigerated warehouse and upon the same premises, no additional license shall be required.

Any license issued pursuant to this section may be suspended, or revoked upon hearing, for any violation of this act or of any rule or regulation of the State department.

4. Licensed refrigerated warehouses shall upon request submit reports to the commissioner setting forth the quantity of each and every food product stored in the refrigerated warehouse of the licensee.

5. The department shall notify any licensee when his refrigerated warehouse or locker plant or any part thereof shall be deemed to be in an insanitary condition, and if the licensee fails to put such warehouse or locker plant or the specified part thereof in a sanitary condition within the time designated by the department, it shall prohibit the use of such warehouse or locker plant or part thereof until such time as it may be put in a sanitary condition.

6. No person or corporation shall keep or permit to remain in any refrigerated warehouse or locker plant any article beyond the time when it is sound and wholesome and fit to remain in storage. If any article is found to be fit for immediate consumption, but unfit for further storage, such article shall at once be removed from storage and not again stored. No article shall be kept or permitted to remain in any refrigerated warehouse for a longer aggregate period than twenty-four calendar months, except by order of the commissioner. Upon evidence satisfactory to him that the article is sound and wholesome and fit for further storage, the commissioner may, in his discretion, grant an extension of the storage period.

7. In the event that any article is held in a refrigerated warehouse for a period of longer than twenty-four calendar months without extension having been applied for and granted by the commissioner, and neither the operator of the refrigerated warehouse nor the commissioner can locate the owner of the said article, after ten days' notice by registered mail directed to the last known address of such owner, by the officials of the refrigerated warehouse and a copy of the said notice to the commissioner, then and in that event, the commissioner shall have the power to order the disposition and sale of the said article for the purpose of payment of charges for storage or other valid liens against same. If a sale as herein provided is ordered by the commissioner, the proceeds of such sale shall be applied, first, to the payment of any and all charges for storage and service in connection with said property, and second, for any other valid liens against the said property. Any balance then remaining from the proceeds of the sale shall be paid to the owner of the said property, if such owner can be located; and, in the event the owner cannot be located within one year of the date of notification, then any balance shall be paid into the treasury of the State of New Jersey.

In carrying out any order of the commissioner for sale or disposition of any property under the provisions of this section, the owners or operators of the refrigerated warehouse are hereby relieved from any liability to the original owner or any other person or persons for the custody of said property, and from any legal liability under any warehouse receipt issued and outstanding covering the said property.

8. No article which has once been released from storage in a refrigerated warehouse and placed on the market for sale to consumers, shall again be placed in a refrigerated warehouse.

9. An article may be transferred from one refrigerated warehouse to another if all prior stamping, marking, and tagging remain thereon, and such transfer is not made for the purpose of evading any provision of this act.

10. No article shall be placed, received or kept in a refrigerated warehouse or locker plant unless the same is in an apparently pure and wholesome condition.

11. The refrigerated warehouse licensee shall assign to each lot of food and drink, when received for storage in a refrigerated warehouse, a distinguishing lot number for the purpose of identification, and shall keep an accurate record of such lot number, and shall also make and keep a record of the date of the receipt and of the date of removal of each lot of food and drink.

12. No person or corporation shall place, receive or keep in a refrigerated warehouse any article, unless plainly marked or tagged, either upon the container in which it is stored or upon the article itself, with the identification lot number assigned and recorded pursuant to the foregoing section; except that where products are bulk piled, palletized or piled in unit loads, it will be in order to have the outside of the bins in which the bulk is piled or the outside containers of the palletized or unit piled loads properly marked pursuant to the foregoing section.

13. No person shall alter, obliterate, mutilate, destroy, remove or eradicate any stamp, tag, or mark placed upon any package, container, or article to indicate that the article was received for refrigerated storage either from within or from out of State in order to evade any of the provisions of this act.

14. Any person who shall violate any provision of this act, or any rule or regulation of the State department made pursuant thereto, or who shall refuse to comply with any lawful order or direction of the department, shall be liable to the following penalties:

- a. One hundred dollars (\$100.00) for the first offense;
- b. Two hundred dollars (\$200.00) for the second offense; and
- c. Five hundred dollars (\$500.00) for the third and each subsequent offense, which shall be sued for and recovered in a civil action by, and in the name of, the State Department of Health or by and in the name of the local board of health, as the case may be, as plaintiff.

15. The local board of health shall enforce the provisions of this act within its jurisdiction.

The State Department of Health and the local board, and any officer or employee thereof shall, in the performance of any duty imposed by this act, at all times have full access to any refrigerated warehouse or locker plant for purposes of inspection and enforcement of the provisions of this act, and may examine and open any package or container which is believed to contain any article in violation of this act.

16. Any penalty recovered in an action brought under the provisions of this act shall be paid to the plaintiff therein. When the plaintiff is the State Department of Health, the penalty shall be paid by the department into the treasury of the State. When the plaintiff is a local board of health, the penalty shall be paid by the local board into the treasury of the municipality within which the local board has jurisdiction.

17. Chapter nine of Title 24 of the Revised Statutes is repealed.

18. This act shall take effect immediately.

Narcotic Drugs:

The current Legislature also amended the provisions of Chapter 18, Title 24, Subtitle 2, the Uniform Narcotic Drug Law, by adopting Chapters 56, 57 and 58 of the Public Laws of 1951. The new act increases the penalty for violation of Chapter 18 of Title 24, Revised Statutes, from \$50.00 to \$2,000.00 for a first offense and provides for jail sentences for each succeeding offense. The legislation also provides for the seizure and forfeiture of motor vehicles, boats, vessels and other vehicles, and all articles, implements, paraphernalia or other personal property used in, for, or in connection with the violation of any of the provisions of Chapter 18 of Title 24 of the Revised Statutes.

Code Committees:

Bureau personnel have been named to serve on committees that are drafting codes covering the following fields of Environmental Sanitation:

Eating and Drinking Establishments
Industrial and Commercial Water Supplies
Tourist and Trailer Camps

FOOD AND DRUG CONTROL PROGRAM

The Bureau of Food and Drugs of the Division of Environmental Sanitation enforces legislation and departmental regulations to prevent the adulteration of foods, drugs, devices and cosmetics as well as certain licensing laws which control specific industries such as milk, non-alcoholic beverages, cold storage warehouses, goat milk, ice cream, slaughterhouses, egg-breaking establishments and narcotic drug manufacture and wholesale distribution. The wholesale handling and shucking of shellfish is also regulated by the Department through the issuance of shellfish handling certificates. During previous years, it was customary for agents of this Bureau to inspect, as often as facilities permitted, all of the above types of licensed establishments in addition to bakeries, restaurants, retail establishments and other similar food businesses which are not licensed by this Department. With the establishment of State District Health Offices manned by competent personnel, inspection of licensed establishments is being integrated into the District programs as rapidly as practicable. Emphasis upon the routine control of retail food establishments is being decreased and the time saved is being directed toward supervising wholesale establishments where mass lots of foods are produced and stored.

Foods:

Considerable time and money were expended by the Bureau in an effort to stamp out a practice that appears to be nationwide in scope—the substitution of horseflesh for beef. Newspaper accounts of this profitable activity have

been published from California to Florida to New York, and New Jersey has its share of fraudulent sales. Preliminary investigations were made of the sale of horseflesh for beef in this State and it was found that peddlers were rumored to be active in practically every county from Sussex to Ocean. Of the first 100 samples of meat purchased as beef and analyzed, it was found that approximately 20 per cent contained horseflesh. By interviewing the vendors of the product, it was determined that a great number of the persons in whose possession improperly marked horsemeat was found, had also been victimized. Those vendors who cooperated with the Department by furnishing accurate information regarding the peddlers of horsemeat were not prosecuted for violation of our statutes.

The activities of the Department produced immediate results as evidenced by the percentage of positive samples found in the next series of 100 collected. Of the second hundred samples of meat analyzed, approximately 10% were found to be horsemeat and the third hundred samples of meat analyzed contained 8% positive samples of horsemeat. During this campaign, approximately 15,000 steaks were seized and removed from the channels of human food and approximately 1,000 pounds of horsemeat fillets and chunks were confiscated. One known peddler of fraudulent beef after having his activities curbed in Northern New Jersey was apprehended by Federal authorities in the State of Florida. Another alleged horsemeat peddler who covered a large portion of Metropolitan New Jersey transferred his activities to Long Island where he was finally apprehended and sentenced to jail for the same offense.

The penalty for a first violation of the laws governing the marking and sale of horsemeat in New Jersey is \$50.00, an insignificant amount considering the profit involved in substituting cheap horseflesh for currently scarce and expensive beef. A recommendation is being prepared stiffening the penalties for violating the statutes governing the labeling of horsemeat—24:5-21 of the Revised Statutes.

During the year 2,161 samples of milk, cream, foods and drugs were collected for analyses by agents of this Bureau. Of the total, approximately 184 samples failed to meet established standards and 122 samples were misbranded in violation of laws or regulations enforced by this Department. Warning letters were issued to vendors of unsatisfactory products where the violations were of minor nature. The warnings were then followed by reinspections and in all but a few instances compliance was secured and it was not necessary for the Department to take further action.

Drugs:

During the year a survey was made of all narcotic manufacturing and wholesale establishments in New Jersey to determine if plant procedures, sanitation and safeguarding of raw and finished products were satisfactory. All

but a small number of the licensees were found to be operating in substantial compliance with the Uniform Narcotic Drug Act. Further steps are being taken in conjunction with the Bureau of Narcotics of the U. S. Treasury Department to bring these establishments in full compliance with necessary requirements. Most of the unsatisfactory conditions noted were in connection with the handling and storage of narcotic drugs in the raw or finished state and instructions have been issued regarding the proper safeguarding of the drugs.

The Bureau has continued to cooperate with the drug manufacturing industry with respect to aiding manufacturers export their products to certain foreign countries. A number of governments require import shipments of drugs to be accompanied by certificates of inspection from health authorities certifying that the drugs have been produced in compliance with state laws and the products are freely sold in the state or country of origin. When requests have been received for such certificates from New Jersey manufacturers, rigid inspections of the premises are made, records are examined and certificates of approval are issued after evidence is found that the drugs do comply with the laws and regulations enforced by this Department.

The Bureau of Food and Drugs has also cooperated with the State Board of Pharmacy, New Jersey Pharmaceutical Association, New Jersey Department of Institutions and Agencies, State Police, New Jersey Hospital Association and the United States Food and Drug Administration on several occasions supervising the recall of contaminated and dangerous foods and drugs which have been placed on the market and reported to have caused injury to consumers. When called upon, numerous local boards of health have given the Department excellent cooperation supervising the recall programs on a local level.

MILK AND ICE CREAM PROGRAM

Title 24, Chapter 10, governs the production, handling and distribution of milk, cream and milk products offered for sale and distribution in this State and provides for a licensing system which places upon the State Health Department the responsibility for assuring the fitness of these articles of food.

These statutes place upon local boards of health the responsibility for enforcement within their own jurisdiction. Of the 571 local boards of health, very few are adequately equipped with funds or personnel necessary to meet the demands of the law. In order to sustain effective control over these articles, the Department has adopted a policy of holding the licensees responsible for the fitness of same and continues with increasing vigilance to direct attention to those sources of these articles which are of questionable repute.

Local boards of health are encouraged to cooperate with this Department by enforcing the law within the limits of their facilities and to advise this Department in such a manner that will avoid duplication of effort.

Acting on the principle that our chief purpose is to secure compliance by education rather than to build a record for prosecution of violators of the law, it has been and still is our policy to criticize with tolerance, chastise as a matter of duty when necessary, prosecute chronic violators of the law and exclude those supplies from sale and distribution in this State when necessary to safeguard public health.

During the year sanitarians in this Bureau inspected 974 milk plants and 4,601 dairies.

The following table shows the number of reports of inspections of out-of-state milk plants and dairy farms received from local boards of health of this State:

<i>State</i>	<i>Number of Inspections of Milk Plants</i>	<i>Number of Inspections of Dairies</i>
Maryland	1	...
New York	4	244
Pennsylvania	7	215
	—	—
	12	459

SHELLFISH CONTROL PROGRAM

The establishment of the Southern and Central State Health Districts did not affect the program previously outlined for control of the production, shipping and handling of shellfish. Until further notice the activities of the shellfish industry will be regulated by the Bureau of Food and Drugs, with, perhaps, occasional assistance from the Bureau of Public Health Engineering and either of the established districts.

The shellfish industry in this State operates on a year round basis, inasmuch as a number of varieties of shellfish are harvested. The oyster shipping and shucking plants operate from September to April. Hard Bay clams and Sea (Skimmer) clams are harvested during most of the summer and during as much of the winter as weather conditions permit. Soft clams are similarly handled during as much of the year as weather conditions allow.

In order to properly supervise the growing and taking of shellfish in New Jersey waters, the Department operates three motor boats and three laboratories located in the major shellfish producing areas. Locations of the laboratories and boat harbors are Leonardo, Tuckertoft and Bivalve. An employee of the Bureau of Food and Drugs is stationed at each laboratory to cooperate with an employee of the Division of Laboratories in the supervision of shellfish plants and waters in their respective areas. Besides participating in the shellfish program, employees of the Bureau cooperate with the Bureau of Public Health Engineering and District personnel in the collection of bathing beach samples and also collect samples of milk and cream for bacteriological analyses. As part of their regular duties, the shellfish sanitarians patrol con-

demmed shellfish waters to prohibit the taking of shellfish, make sanitary inspections of all types of shellfish establishments, collect samples of shellfish and shellfish waters, maintain their boats and motors in proper condition, post condemned shellfish waters with signs warning the public that waters are polluted and numerous other duties incidental to the operation of a shellfish program meeting the standards established for such programs by the United States Public Health Service.

During the year the Bureau received a new 28-foot motor boat for use in the Raritan Bay area. The shellfish laboratory servicing the Raritan Bay area was removed from its former location in Newark and transferred to Leonardo in the immediate vicinity of the State Yacht Basin where the new craft is to be stored.

Two shellfish areas—Toms River and Metedeconk River in Ocean County—were surveyed by agents of the Bureau of Public Health Engineering and the Bureau of Food and Drugs during the past year. Bacteriological survey of the waters was made in connection with a physical survey and the information was consolidated into a report which was subsequently reviewed. It was found that the waters were still in an unsatisfactory condition due to pollution from a number of sources. Steps are being taken to abate the causes of pollution in order to prevent further restriction after which condemnation may be given to lifting the ban on the taking of shellfish for human consumption in areas presently restricted.

Three hundred and seventy-three establishments were granted shipping certificates during the year.

COLD STORAGE WAREHOUSES

The present Cold Storage Act limits the storage of articles of cold storage food to 12 months, excepting in those cases in which permission is requested of the Department and granted after the articles have been examined and found suitable for additional storage.

During the year extensions of time were granted for the storage of articles in cold storage as follows:

Quantity	Article	Extension Granted
14 cases	Cheese	6 months
9,074 30-lb. cans	Eggs (whites)	3 months
189 barrels	Fish	3 months
70 barrels	Herring milt	3 months
9 boxes	Meat	3 months
16 pieces	Meat	3 months
30 cartons	Meat	3 months
77 boxes	Poultry	3 months

Each of the above lots of food was inspected by an agent of the Bureau of Food and Drugs to determine its suitability for additional storage.

ANNUAL COLD STORAGE REPORT 1950 - 1951

Article	July 1950	August 1950	September 1950	October 1950	November 1950	December 1950	January 1951	February 1951	March 1951	April 1951	May 1951	June 1951
Eggs, broken, lbs.	174,855	135,107	74,861	35,001	8,864	2,735	9,303	14,511	28,841	51,393	108,750	287,112
Eggs, fresh, lbs.	8,351,012	9,290,714	7,632,112	5,098,688	4,888,828	3,416,890	2,792,911	2,275,787	2,652,317	4,727,410	6,217,065	7,514,419
Poultry, lbs.	3,362,312	3,567,021	5,073,217	4,861,682	4,229,774	3,398,322	3,418,113	3,005,071	3,080,673	3,110,811	2,965,233	3,257,798
Poultry, cases	3,291,469	4,039,868	6,068,488	6,337,763	5,670,845	4,360,641	1,750,018	1,157,263	1,090,868	1,529,277	2,150,060	4,868,720
Fresh Meats, lbs.	42,275,818	44,943,647	45,842,240	43,842,240	43,842,240	43,842,240	43,842,240	43,842,240	43,842,240	43,842,240	43,842,240	43,842,240
Fresh fish, lbs.	9,428,425	9,221,474	8,161,864	9,257,456	12,731,713	11,140,861	11,140,861	11,140,861	11,140,861	11,140,861	11,140,861	11,140,861
Fresh milk products, lbs.	1,460,072	1,333,733	1,333,913	1,429,466	973,654	725,849	824,761	837,804	623,859	1,300,118	1,711,352	2,868,738
Butter, lbs.	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450
Condensed milk, lbs.	1,093,622	967,283	967,463	1,062,916	607,204	359,399	458,311	471,354	257,409	934,668	1,344,902	2,502,288
Ice, lbs.	1,460,072	1,333,733	1,333,913	1,429,466	973,654	725,849	824,761	837,804	623,859	1,300,118	1,711,352	2,868,738
Game, lbs.	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450	366,450
Miscellaneous articles and packages	188,925	107,822	173,694	140,259	29,075	140,008	180,741	188,075	174,170	246,227	153,782	48,908

SANITARY INSPECTIONS MADE OF ESTABLISHMENTS WHERE FOODS AND DRUGS ARE
PRODUCED, PREPARED, PACKED, STORED OR OTHERWISE HANDLED

	<i>Inspections</i>
Auction markets	2
Bakeries	918
Box lunch establishments	25
Candy factories	57
Canning factories	59
Cider plants	48
Cold storage warehouses	52
Dairies	4,601
Drug manufacturing establishments	41
Drug stores	14
Egg-breaking establishments	6
Fish markets	133
Flour warehouses	23
Food markets	108
Food processing plants	117
Frozen food plants	3
Goat dairies	12
High temperature-short time milk units	40
Ice cream manufacturing plants	884
Meat markets	38
Meat processing plants	26
Milk plants	974
Miscellaneous	390
Non-alcoholic beverage establishments	330
Pickling plants	26
Poultry slaughterhouses	11
Restaurants	678
Retail shellfish establishments	194
Roadside markets	5
Shellfish shipping plants	1,030
Shellfish shucking plants	75
Slaughterhouses	607
Wholesale grocery warehouses	5
	<hr/>
	11,532

Since activation of the Central and Southern State Health Districts, sanitary inspections performed by sanitarians assigned to the districts have not been reported to this Bureau. Therefore, they are not listed in the above tabulation.

SAMPLES OF MILK, CREAM, FOODS, DRUGS COLLECTED FOR ANALYSES

	<i>Above Standard</i>	<i>Below Standard</i>	<i>Misbranded</i>	<i>Total</i>
Milk and Cream	510	4	35	549
Foods	1,158	156	41	1,355
Drugs	187	24	46	257
	<hr/>	<hr/>	<hr/>	<hr/>
	1,855	184	122	2,161

SHELLFISH CONTROL SAMPLES

Hard clams	548
Soft clams	52
Oysters	221
Mussels	7
Shucked clams	3
Shucked oysters	211
Frozen clams	90
Frozen oysters	64
Shellfish waters	2,649
	<hr/>
	3,845

During sanitary inspections and collection of samples of foods and drugs for analyses, the following articles were found to be adulterated and were condemned and destroyed under the supervision of agents of this Department and, in certain instances, accompanied by representatives of local boards of health:

<i>Article</i>	<i>Amount</i>
Bakery ingredients	849 pounds
Candy	79 pounds
Canned goods	139 pounds
Canned goods	4,347 cans
Cereal products	170 pounds
Dried fruits and vegetables	608 pounds
Drugs	105 packages
Flour	1,815 pounds
Meats	153 pounds
Milk and milk products	781 pounds
Miscellaneous pounds	1,675 pounds
Miscellaneous bottles	1,896 bottles
Poultry	10 pounds
Soft drinks	13 quarts
Spices	15 pounds
Sugar	50 pounds

PENALTIES

During the year, \$1,875.00 was collected in penalties for violations of the Food and Drug Laws.

FEES

The following fees were collected during the year for licenses and permits:

577 Milk permits	@	\$25.00	\$14,425.00
17 Goat milk permits	@	10.00	170.00
1 Goat milk permit	@	7.67	7.67
1 Goat milk permit	@	3.33	3.33
32 Ice cream plant licenses	@	100.00	3,200.00
13 Ice cream plant licenses	@	50.00	650.00
13 Ice cream plant licenses	@	25.00	325.00
51 Ice cream plant licenses	@	10.00	510.00
684 Ice cream plant licenses	@	5.00	3,420.00
86 Cold storage licenses	@	10.00	860.00
1 Narcotic drug license	@	50.00	50.00
46 Narcotic drug licenses	@	5.00	230.00
<hr/>			
1,522			\$23,851.00

Bureau of Public Health Engineering

The Bureau has carried on its usual general program of assisting water and sewage plants in meeting their problems through investigations and reports with recommendations and has examined plans for 51 water supply projects representing an estimated cost of \$6,106,154 and for 145 sewage and industrial wastes projects representing an estimated cost of \$21,111,172.

The Bureau has also carried on an aggressive stream pollution control program aided by funds from the United States Public Health Service with five engineers devoting full time to this activity. Three sanitary engineers and one chemical engineer, in addition to the Chief, have been actively engaged in the past year in making inspections of waste disposal facilities of industries located principally in the Delaware River Basin, Atlantic Coastal Basin, the lower Hackensack River Basin and the Passaic River Basin.

On the Delaware River Basin 131 industries were investigated; 63 were discharging wastes considered polluting to the main river or its tributaries. Warning letters were forwarded to 57. Eight sources of pollution were abated and 32 have work on abatement or engineers engaged or their own staff of chemists and engineers studying treatment or abatement measures.

Twenty-one sewage treatment plants were investigated. Two notices were issued. Measures to correct unsatisfactory conditions found at certain other plants are being considered.

On the Coastal Basin 85 industries were investigated. Eight were found discharging wastes to the waters of the basin. Warning letters were forwarded to seven considered polluting. Two industries have engineers engaged studying methods of treatment.

Sixteen sewage treatment plants were investigated. One new plant is under construction. Two notices were issued requiring additions and alterations.

On the Passaic River Basin 72 industries were investigated. Twenty-seven were found discharging wastes to waters comprising the basin. Eleven warning letters were forwarded to those industries discharging wastes considered polluting. One source of pollution was abated and nine others have engaged consulting engineers or are studying methods of abatement of the pollution with their own staff of chemists and engineers.

On the lower Hackensack River Basin 55 industries were investigated. Forty-four were found discharging industrial wastes to the streams comprising the basin. Not all of the waste discharges were considered polluting.

Six sewage treatment plants were inspected. Besides industrial wastes and inadequately treated sewage in municipalities in the lower Hackensack River, pollution exists from piggeries and garbage dumps. Action has been started against the municipalities to provide better sewage treatment facilities, to adequately provide for garbage disposal and through local ordinances to "clean up" the piggeries. Until the municipalities have made some definite commitments toward a program to solve their pollution problems, the Department will not press the industries for pollution abatement.

Sixteen industries discharging polluting matter into the lower Raritan River and 19 municipal sewage treatment plants in this area were investigated to furnish up-to-date data for the Middlesex County Sewerage Authority.

Thirty-one industries were investigated in other drainage basins. Four were found to be discharging wastes to watercourses. One source of pollution has been abated.

In all, 390 industries were investigated, 162 were found to be discharging waste to the watercourses of New Jersey. Seventy-five industrial discharges were found to be polluting. Fifty-two have consulting engineers or the companies' chemists and engineers studying methods for treatment or abatement of the pollution. The work done by the stream pollution unit is included in the summary in the tables which are shown in the report of this Bureau.

A considerable amount of engineering guidance has been given to several new programs that have been developed to meet the needs of local health departments. These can be listed here as including housing, weed control, land fills, the provision and maintenance of sanitary facilities at housing develop-

ments and in directing several of the advisory committees that have been set up to develop codes which can be recommended for adoption by local communities, by reference. These activities were outlined in the introductory statement as to the work of the Division of Environmental Sanitation.

Three sanitary engineers in the Bureau of Public Health Engineering completed graduate courses in Public Health during the past year and were awarded M. P. H. degrees from the Schools of Public Health; one from the University of Michigan, one from the University of North Carolina, and one from Columbia University.

NUMBER OF WATER AND SEWERAGE PROJECTS EXAMINED AND APPROVED FROM
JULY 1, 1950, TO JUNE 30, 1951

Type of Projects	Number of Projects	Number of Plans	Engineers' Estimates of Costs
<i>Water:</i>			
Alterations, improvements and additions to waterworks	36	166	\$4,381,092.84
New systems and supplies	15	41	1,725,062.00
Total	51	207	\$6,106,154.84
<i>Sewage:</i>			
Sewer extensions	85	152	\$879,792.00
Alterations and additions to sewerage systems, sewage and/or industrial waste treatment plants	25	188	3,731,580.00
New sewage and/or industrial waste treatment plants, systems and appurtenances	35	309	16,499,800.00
Total	145	649	\$21,111,172.00

MAN-HOURS IN FIELD ON: SEWAGE, INDUSTRIAL WASTES,
STREAM POLLUTION

The Department's activities in Stream Pollution Control are governed by certain laws, rules and regulations and policies lodged within the State Department of Health for enforcement. There follows a summary of the man-hours spent by representatives of the Bureau of Public Health Engineering of the Division of Environmental Sanitation in the enforcement of said activities:

MAN-HOURS IN FIELD ON SEWAGE, INDUSTRIAL WASTES AND STREAM POLLUTION

Drainage Basin	Sewage and Industrial Waste Treatment Plants	Special Surveys	Investigation of Pollution of Stream Surveys	Special: Factory Sites (a) Single enterprises (b) Bathing Waters (c)	Conferences: Sanitation Commission, Federal and State Agencies, Incidents and Other Bodies	Total Hours All Activities
Delaware River	172½	13¾	43½	1½ (a)	104	334¾
Raritan River	263½	141½	19¾	22½ (a)	144	591½
Passaic River	74½	431	..	17¾ (b)	59	581¾
Hackensack River ..	27½	325	..	..	86	438½
Atlantic Coastal Plain	222½	505	18¾	75½ (c)	72	893¾
Interstate Sanitation Commission	5	..	..	..	89	94
Other Rivers	4	10	5	..	75½	94½
Special Works .....	..	..	16¾	..	300	316¾
Total hours ..	769½	1,425¾	103¾	116¾	929½	3,345¾

MAN-HOURS IN FIELD ON WATER SUPPLY SOURCES AND TREATMENT

<i>Public Water Supplies</i>	
Inspections, including water treatment plants	190½
Inspections on potable watersheds	246
Investigations of complaints	78
Conferences	89½
<i>Cross-connections</i>	
Inspections of installations	11¾
<i>Certification of Interstate Carriers</i>	
Inspections	7¾
<i>Rural School Supplies</i>	
Inspections	16¾
Total hours	640

SUMMARY OF MAN-HOURS

(1) In field on sewage, industrial wastes, stream pollution	3,345¾
(2) In field on water supplies and supply sources	640
(3) Man-hours required in office on plans, reports, conferences, etc.	11,272
(4) Travel time	2,020
(5) Total man-hours overtime, field and office	2,130

Total man-hours expended

19,407¾

NOTICES, ORDERS AND OTHER LEGAL ACTIONS

Routine activities of the Bureau require the preparation of various legal documents, including resolutions, notices and orders necessary in the enforcement of certain public health statutes. There follows a summary of such documents prepared in the Bureau of Public Health Engineering during the year, with reference being made to the statutes involved:

Notices or Orders issued:

R. S. 58:10 et seq.	3
R. S. 58:11 et seq.	6
R. S. 58:12 et seq.	13
Title 32—Chapter 20	2
Orders of Necessity issued (R. S. 40:1-16 "g")	19

ORDERS OF NECESSITY

Based upon the provisions of R. S. 40:1-16, subdivision "g" and in consideration of the fact that certain statutory requirements have been complied with, the State Department of Health may order qualifying municipalities to exceed their statutory limitations of debt and proceed with the construction of sewerage and/or water facilities considered necessary to prevent or suppress present menaces to the public health.

There follows a summary of the orders issued:

August, 1950—Borough of Bergenfield.

The order requires the construction of the proposed additions and alterations to the sewage treatment plant consisting of the installation of a sludge digester and vacuum filter.

August, 1950—Borough of Dumont.

The order requires the construction of the proposed additions and alterations to the sewage treatment plant consisting of the installation of a sludge digester and vacuum filter.

August, 1950—Township of East Brunswick.

The order requires the construction of the proposed new source of water supply consisting of a deep well of a gravel filter type and appurtenances.

August, 1950—Borough of East Paterson.

The order requires the construction of the proposed 12-inch inverted siphon designed to discharge sewage from the Borough of East Paterson into an existing trunk sewer.

September, 1950—Borough of Lavallette.

The order requires the construction of the proposed sewer extensions, additions and alterations to the existing sewage treatment plant consisting of a new manual solution type chlorinator of 750 lbs. per day capacity; and additions and alterations to the existing pumping station consisting of a new venturi meter and recorder.

September, 1950—Township of Livingston.

The order requires the construction of the proposed partial sewer system.

September, 1950—City of Perth Amboy.

The order requires the construction of the proposed sewer extensions.

October, 1950—Township of Hamilton.

The order requires the construction of the proposed sewage treatment works consisting of the installation of a 50.0 gallons per minute centrifugal sludge pump to be connected to an existing plunger type sludge pump and proposed sewer system.

December, 1950—Borough of Edgewater.

The order requires the construction of the sewage treatment works.

December, 1950—Borough of South River.

The order requires the construction of the proposed 500,000 gallon elevated storage tank.

February, 1950—Borough of Fort Lee.

The order requires the construction of the proposed additions and alterations to the sewer system.

February, 1950—Borough of Lodi.

The order requires the construction of the proposed additions and alterations to the existing sewage treatment works.

February, 1950—Borough of Spring Lake Heights.

The order requires the construction of the comprehensive water system consisting of two wells, receiving basin, chlorinator, pumping station and appurtenances.

March, 1950—Borough of Mountainside.

The order requires the construction of the proposed sewage collecting system and for the disposal of the sewage collected construct an intercepting sewer.

April, 1950—Borough of Bay Head.

The order requires the construction of additions and alterations to the existing sewage treatment works.

April, 1950—Borough of Cliffside Park.

The order requires the construction of the proposed new sewage treatment works.

May, 1950—Borough of Carteret.

The order requires the construction of the proposed sewage treatment plant.

May, 1950—Borough of Cliffside Park.

The order requires the construction of the proposed new sewage treatment works.

May, 1950—Borough of New Providence.

The order requires the construction of the proposed sewage pumping station and force main.

CROSS-CONNECTIONS

Original cross-connection permits were issued pursuant to Chapter 308, P. L. 1942, to the following companies:

<i>Municipality</i>	<i>Permit Holder</i>	<i>Permit No.</i>
Millville	Wheaton Glass Company	226
New Brunswick	Monte Carlo Wine Industries, Ltd.	227
Spring Lake	Spring Lake Hotel and Realty Company T/A The Monmouth Hotel	228
Passaic	Botany Mills, Inc.	229
Lambertville	Diamond Silversmiths, Ltd.	230
Perth Amboy	Puritan Dairy	231
Plainfield	Adolph Miron	232
Plainfield	International-Plainfield Motor Co.	96-A
Paterson	Jersey Dyeing Company, Inc.	233
Clifton	Fritzsche Brothers, Inc.	234
Trenton	Homasote Company (Ewing Township)	236

ESTABLISHMENT OF FACTORIES WITHIN POTABLE WATERSHEDS

In conformity with the provisions of R. S. 58:10-17, et. seq., any industry (factory, workshop or place for the manufacture of materials or goods) desiring to locate or establish on any watershed in this State, above the point at which any public supply of potable water is taken, must make application to the State Department of Health for a written permit to so locate or establish the same. The aforementioned statute was enacted to prevent wet process and certain dry process industries from polluting the potable waters of the State.

There follows a list of permits issued during the year. It will be noted that all of the permits issued are for the establishment of factories located on potable watersheds in the northern section of New Jersey, continuing an expansion trend which has been in evidence for the past several years.

<i>Location</i>	<i>Name of Concern</i>	<i>Permit No.</i>
Park Ridge	R & G Trico Corporation	309
Park Ridge	William Hirsch & Co., Inc.	310
North Haledon	Paintex Body Works	311
Belle Mead	Consumer-Farmer Milk Co-operative, Inc. (Montgomery Township)	312
Frelinghuysen	Sussex Milk and Cream Company, Inc.	313
Carmel	John Kobrich (Deerfield Twp.)	314
Whippany	Rowe Manufacturing Co., Inc. (Hanover Twp.)	315
Norwood	Dy-Co Mills, Inc.	316
Tenafly	Robert A. Carter, III, The Tenafly Workshop	317
Flemington	Preservaline Manufacturing	318
West Trenton	Oxzyn Company (Ewing Township)	319
West Trenton	Mercer Beverages, Inc. (Ewing Twp.)	320
West Trenton	Franklin Machine Products Co., Inc. (Ewing Twp.)	321
Clinton	Frank Fiore	323
Alpha	New York Transformer Company	324
Westwood	Everest Machine & Tool Co., Inc.	325
Rockaway	Daniel Klockner, Jr., Inc.	326
Hillsdale	Broadway Clothing Manufacturing Co., Inc.	327
Closter	William A. Wilson	328
Dover	Dover Glass Corporation	329
Washington	Sun Tube Corporation	330
Denville	Globe-Union Inc.	331
Denville	General Box Company	332
Clark	Lewis Asphalt Engineering Corp.	333
Wharton	Wharton Holding Corporation	334
Clark	Bestway Products, Inc.	335
Denville	Central Sales and Manufacturing Co.	336
North Haledon	Paterson Rack Manufacturing Co.	337
Westwood	L. Marguerite Gorrell	338
Rockaway	Denway Corporation	339

Rabies Control Program

During the calendar year ending December 31, 1950, the personnel changes consisted of the resignation of two Rabies Control Wardens. A third experienced man was appointed for temporary service pending his certification for the position.

REVENUE

Registration tag fees collected by the State Department of Health amounted to \$80,143.95; total expenditures for the same period were:

INCIDENCE OF RABIES

Six cases of rabies were reported to the State Department of Health during the year. Five cases occurred in the enzootic area of Middlesex County and one isolated case was reported from Passaic County; the former cases had no conceivable relationship to the latter.

An investigation of each case as it occurred revealed a predominance of the dumb form of the disease. In fact, only one dog developed the furious type of rabies. This animal ran at large for several hours and while it was seen attacking other dogs of the community, contact animals were either promptly destroyed or placed under quarantine, thereby preventing the development of secondary cases.

History of the prevalence of rabies in Middlesex County covering the five-year period from 1946 to 1950 shows that the incidence of rabies amounted to 15+ cases annually. However, at the beginning of the calendar year, the application of basic phases of the program evolved for the control of rabies had already substantially reduced the rabies enzootic area. The continued prevalence of the disease among domestic dogs, together with the educational work, stimulated public consciousness about the disease and a determined desire to control animals that are known to spread it. The fifth and final case of rabies in the Middlesex area was reported, and investigated on March 7, 1950. At the close of the year the maximum incubation period of rabies elapsed with no recurrence of the disease. Presumably, all traces of infection have been wiped out.

Within the year, a case of rabies was diagnosed in Passaic County. Since this was an isolated case that had no opportunity to spread to other animals, there was obviously only slight possibility of a general outbreak in the County. Two human beings bitten by the Passaic County dog were given antirabies preventive therapy by the local physician with no subsequent ill effects.

MOBILE UNIT ACTIVITIES

The mobile unit services, inaugurated in 1945, have played an important role in fostering the concept of good dog management and rabies control. The original functions of Rabies Control Wardens were confined largely to the indoctrination of local wardens; demonstration of effective methods of apprehending and impounding dogs; serving as witnesses in court cases in support of local officials. When fully integrated into regional health districts, Rabies Control Wardens will unquestionably become a significant part of the Public Health team and should be qualified to assume a major part of the responsibilities connected with dog and rabies control problems. Solving such problems as are associated with licensing and registration, maintaining quarantines, making surveys, setting up dog vaccination clinics and many other useful projects under the supervision of the Regional Health Officer are important duties of this unit.

VACCINATION OF DOGS AND CATS

The plan of conducting mass vaccination of dogs remained unchanged from the previous year. 198,815 cc. of canine rabies vaccine were distributed by the State Department of Health for use by local veterinarians in clinics, supervised and directed by local officials. The general acceptance of dog vaccination as prophylaxis against rabies is adequately manifested by a significant increase in the size and number of mass vaccination clinics carried out during the year. These clinics were offered as a voluntary free service, although two municipalities, each having an ordinance requiring vaccination, have succeeded in eliminating rabies among animals.

EDUCATION

Informative material relating to rabies is directed toward both juvenile and adult groups. These groups comprise service and business organizations, public and private schools. Special agents of the Rabies Control Program, through careful program planning, were able to reach a larger number of citizen and school groups than any previous year. There were no significant changes in personnel and material during the year.

COMMUNITY DOG CONTROL

Local municipal and health officials have long recognized the potential danger to the health of a community caused by stray and improperly managed dogs and other pet animals. Animal bites constitute a special hazard if rabies happens to be enzootic in the immediate vicinity of the occurrence of such injuries.

The time-honored defense against local hazards within a community lies in the establishment of adequate dog control facilities. The great majority of municipalities in New Jersey being financially unable to furnish effective service have pooled their resources with adjoining municipal officials to form a community dog control program. Three such community control programs were activated during 1950, and appear to have been the solution to the problem.

Community dog control programs unanimously endorsed by the mayors of participating municipalities and organized on a firm monetary foundation, comprise the most advanced methods of procedure in attaining satisfactory dog management. The objective of such organizations is to reduce the hazards created by homeless, stray and unvaccinated dogs.

The first community to complete an organization of this type was Neptune Township, Monmouth County, and six surrounding municipalities. Later during the year a similar plan was activated at Plainfield, Union County, and a third and final organization was created at Clementon in Camden County.

The above mentioned programs were actively serving their respective municipalities at the close of the year, and are available by special arrangement for inspection by any group of municipalities contemplating the initiation of such a program.

WILD LIFE RABIES CONTROL ACTIVITIES

As early as 1946 rabies among wild life species in States adjoining New Jersey reached epizootic proportions. Although rabies cases were reported within county width of New Jersey during 1947, 1948 and 1949, the actual threat of invasion occurred during the early months of 1950. Since timely case reports indicated that the outbreak was not contained, the Rabies Control Program instituted the only practical preventive procedure yet devised to check rabies among wild life; viz., reducing the host species most likely to become involved and spread the infection.

Accordingly, the State Department of Health entered into contract with expert fox trappers in a program designed to create a partial fox vacuum in an area roughly 50 miles in length and 10 miles in width along the northern boundary of the State. The trapping program resulted in the capture of 396 animals, none of which showed clinical symptoms of rabies. Three foxes manifesting abnormalities when caught and one fox found dead were examined by the Bureau of Bacteriology of the Division of Laboratories of the State Department of Health, and they too contained no evidence of rabies infection. The following table summarizes the fox trapping project:

<i>Location</i>	<i>Fox</i>	<i>Raccoon</i>	<i>Opossum</i>	<i>Skunk</i>	<i>Normal</i>	<i>Diseased</i>	<i>Cost</i>
High Point Park.....	27	53	19	17	115	1	
High Point Park to Passaic County	72	32	66	63	233	..	
Passaic and Bergen Counties	49	1	..	..	49	1	
Totals	148	86	85	80	397	2	\$2,337.12

Report of the Division of Laboratories

July 1, 1950—June 30, 1951

A. J. CASSELMAN, M. D., DR. P. H., *Director*

Bureau of Bacteriology—JOHN H. SPOONER, JR., *Chief*

Bureau of Chemistry—JOHN E. BACON, *Chief*

Section of Pathology—ELMER L. SHAFFER, Ph.D., *Principal Histologist*

Section of Serology—CLARENCE H. BUNTING, *Principal Serologist*

Division of Laboratories

During the year additional services were offered to physicians and health authorities on certain specimens submitted for examination. Cultures identified as *S. typhosa* are being sent to the regional center established by the United States Public Health Service for bacteriophage typing. Phage typing provides information which may aid the physician and epidemiologist in establishing the source of typhoid fever. In the past the Salmonella organisms were identified by their respective groups and then the cultures were sent to the Salmonella Typing Center for further identification. Since the Public Health Service made complete Salmonella and Shigella typing kits available, the laboratory has been performing the typing tests and only occasional specimens are sent to the Salmonella Typing Center for check. More complete techniques in the tuberculosis culture work and pre-tuberculin testing of laboratory animals have been started.

The laboratory has been successful in the identification of horsemeat samples submitted by department sanitarians, who discovered same being sold as beef. A precipitin test is employed as a check on results obtained in a screening glycogen test.

During the year Joseph M. Olex, bacteriologist, attended the Public Health Service rabies course and Miss Catherine Jedynek, assistant bacteriologist, attended the two-week tuberculosis course. This special training has enhanced the level of competence among the staff.

A satisfactory evaluation study on ova and enteric parasites supplied as unknowns by the Communicable Disease Center was completed. The laboratory work for an evaluation on tuberculosis specimens was also completed but the results of the final evaluation have not been returned to us to date.

Samples of Marihuana were delivered to the laboratory for study. This reflects the increased interest and activity in the control of narcotics and related problems.

The Section of Pathology, under its present organization, completed its first full fiscal year. During this time, it obtained the complete and vitally necessary support of the practicing pathologists of this State, and in return rendered many services to them on a cooperative basis. The educational features of this program, by way of instructive scientific seminars on the subject of malignant and benign tumors, received wide recognition and participation. Technological developments were made known and utilized by various hospital laboratories throughout the State. The tumor registry was greatly enlarged and consultation services were provided. Library facilities

in the field of cancer were kept up-to-date by the purchase of the latest reference books. Altogether, a coordinated program aiding physicians in the study of cancer and allied diseases has been developed, which has proved itself by its complete acceptance.

Over 300,000 specimens of blood and spinal fluid were received for examination during the year ending June 30, 1951. This is an increase of 17% compared with the previous year. Because of this increase the personnel and laboratory facilities were taxed to the limit.

Routine determination of the Rh factor on all prenatal blood specimens and the determination of the total protein content of all spinal fluids are new policies instituted this year.

The application of streamlined business efficiency principles yielded results. Files are no longer kept on negative serologic examinations and the original laboratory report form is returned to the physician in a window envelope. This action has resulted in considerable savings in clerical personnel, who were transferred to other work in the Department of Health.

During the past year the laboratories were evaluated by representatives of the United States Public Health Service. The fine showing of the V.D.R.L. evaluation, the histology program, and the overall service of the laboratory in water bacteriology and milk procedures were particularly commented on by the evaluation committee. It was suggested that more personnel were needed in the laboratories, in general bacteriology, and that better quarters and more storage space were needed for the laboratories.

Bureau of Bacteriology

The work of the Bureau of Bacteriology may be summarized in a general way by the description of the following examinations made: makes smears, cultures, concentration method and animal inoculations for tuberculosis; examines smears for gonorrhea; cultures and identifies pathogenic bacteria, performs agglutination and culture tests for the enteric diseases; examines stools for intestinal parasites, ova and cysts; makes animal brain and mice inoculations for rabies; examines blood smears for malarial and other tropical diseases; conducts investigations of food products suspected of food poisoning; makes virulence tests; prepares antigens, vaccines and media; inspects laboratories desiring approval for bacteriological examinations and premarital and prenatal blood tests and analyzes shellfish waters, shellfish products, milk, cream and milk products in the branch laboratories at Bivalve, Newark and Tuckerton.

A total of 45,796 bacteriological and parasitological specimens were examined during the fiscal year in the central bureau and 5,784 shellfish waters, shellfish products, milk, cream and milk products in the branch laboratories, total 51,580.

TABLE I

NUMBER OF SPECIMENS EXAMINED DURING YEAR ENDING JUNE 30, 1951

Diphtheria	4,506
Tuberculosis (sputum)	14,739
Tuberculosis (body fluids)	1,184
Blood agglutinations	7,259
Enteric diseases (feces and urine)	8,695
Gonorrhea	6,454
Miscellaneous specimens	2,959
Total	45,796

"Diphtheria" refers to the number of throat cultures examined for *Corynebacterium diphtheriae* during the fiscal year.

"Tuberculosis" refers to the number of smear specimens examined for *Mycobacterium tuberculosis* during the fiscal year.

"Blood agglutinations" refers to the number of blood specimens examined for such diseases as typhoid fever, paratyphoid fever, undulant fever, Rocky Mountain spotted fever and tularemia. See also Table VIII.

"Enteric pathogens" refers to the examination of feces and urine specimens for the presence of *Eberthella typhosa*, *Salmonella* and *Shigella* organisms.

"Miscellaneous" refers to a number of various examinations showing positive, negative and unsatisfactory results as outlined in Table II.

TABLE II

MISCELLANEOUS SPECIMENS EXAMINED DURING YEAR ENDING JUNE 30, 1951

Specimen for	Positive	Negative	Unsatisfactory
Rabies .....	..	186	13
Bacterial infection (blood, body fluids, pus, sputum, urine, etc.)	349	50	6
Gonococcus infection (eye smears)	2	14	..
Hemolytic streptococci	179	656	..
Malaria	1	26	..
Occult blood	3	4	..
Pneumonia	2	5	..
Ova and parasites	29	973	4
Vincent's angina	16	224	2
Horseflesh identification	37	15	..
Other unusual examinations	86	70	7
Total	704	2,223	32

RABIES SPECIMENS (SPECIES OF ANIMALS) EXAMINED DURING YEAR ENDING
JUNE 30, 1951

Dogs	negative, 131; unsatisfactory, 6.
Cats	negative, 31; unsatisfactory, 4.
Rabbits	negative, 5.
Hamsters	negative, 1; unsatisfactory, 1.
Foxes	negative, 8; unsatisfactory, 1.
Weasels	negative, 1.
Squirrels	negative, 4.
Rats	negative, 4.
Raccoons	unsatisfactory, 1.
Woodchucks	negative, 1.

There were 55 less animal heads received for examination during the year and none were found positive, as compared with 14 last year. There was one positive smear for malaria found as compared with none in 1950.

YEARLY TOTALS OF ANIMALS EXAMINED FOR RABIES FROM 1942 TO 1951, INCLUSIVE

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
Positive	45	8	8	12	60	114	62	87	14	..
Negative	129	103	90	104	94	237	294	289	232	186
Unsatisfactory	17	15	7	18	8	28	10	19	8	13
Totals	191	126	105	134	162	379	366	395	254	199

Where no evidence of rabies is found in the nerve cells of the brain on microscopic examination, and the animal has bitten or exposed a human being. Swiss mice are inoculated intradurally and kept under observation for three to four weeks. The following table shows the source of material inoculated into Swiss mice.

TABLE III
MICE INOCULATIONS FOR RABIES

Material	Positive	Negative	Unsatisfactory
Dog brain	119	..
Cat brain	24	..
Rabbit brain	4	..
Hamster brain	2	..
Fox brain	3	..
Squirrel brain	4	..
Rat brain	3	..
Raccoon brain	1	..
Woodchuck brain	1	..
	..	161	..

There were 6,454 smear examinations for gonorrhoea made during the year. Approximately 11% were reported as containing typical intracellular Gram negative diplococci.

TABLE IV
SPECIMENS EXAMINED FOR NEISSERIA GONORRHEA (PUS SMEARS) DURING YEAR
ENDING JUNE 30, 1951, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July	77	469	19	565
August	85	563	20	668
September	75	462	9	546
October	77	557	16	650
November	71	496	10	577
December	43	380	9	432
January	68	483	10	561
February	44	389	10	443
March	37	474	20	531
April	32	446	8	486
May	54	427	9	490
June	56	442	7	505
	719	5,588	147	6,454

The number of throat culture specimens examined for *C. diphtheriae* showed an increase over last year; 4,506 for 1951 as compared with 4,061 for 1950. Animal inoculations and bio-chemical culture reactions were performed on all specimens showing organisms microscopically and morphologically similar to *C. diphtheriae* before they were reported positive. There were 51 animal inoculation virulence tests performed as compared with only 23 for last year. There were 162 positive specimens obtained for *C. diphtheriae*, whereas there were only nine for the last fiscal year.

TABLE V

SPECIMENS EXAMINED FOR CORYNEBACTERIUM DIPHTHERIAE DURING YEAR
ENDING JUNE 30, 1951, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July	14	325	38	377
August	67	289	52	408
September	4	301	33	338
October	2	347	61	410
November	15	303	18	336
December	3	305	13	321
January	4	304	23	331
February	2	264	10	276
March	12	342	51	405
April	11	325	23	359
May	23	466	41	530
June	5	385	25	415
Virulence tests	51			
	162	3,956	388	4,506

The decrease in requests for sputum examinations for tuberculosis was compensated for by additional work performed on the 14,739 specimens received, as noted in the first part of the report. Because of the time-consuming procedure necessary in tuberculosis examinations it is estimated that more than 50% of the working day of the Bureau of Bacteriology is devoted to tuberculosis work, which includes sputa examinations and culture work with the preparation of culture media and guinea pig inoculations.

TABLE VI

SPECIMENS EXAMINED FOR MYCOBACTERIUM TUBERCULOSIS (SPUTUM) DURING YEAR
ENDING JUNE 30, 1951, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July	103	1,021	20	1,144
August	107	972	24	1,103
September	70	726	15	811
October	137	1,474	84	1,695
November	96	1,131	33	1,260
December	54	775	39	868
January	190	1,158	47	1,395
February	70	973	19	1,062
March	161	1,245	37	1,443
April	117	1,155	36	1,308
May	115	1,152	60	1,327
June	81	1,207	35	1,323
	1,301	12,989	449	14,739

Results of animal inoculations and cultures for *M. tuberculosis* are shown in the following tables:

TABLE VII (A)

GUINEA PIG INOCULATIONS FOR MYCOBACTERIUM TUBERCULOSIS

Material	Positive	Negative	Unsatisfactory
Sputa	2	47	..
Urine	4	229	3
Gastric contents	3	109	..
Pleural fluid	9	74	2
Spinal fluid	..	24	..
Other body exudates	1	41	..
Total—548	19	524	5

In addition to the above there were 160 laboratory animals inoculated with acid fast organisms for virulence check on cultures and for routine check.

Positive	Negative	Unsatisfactory
66	78	16

Tuberculosis culture work continued to increase during the fiscal year. In February Petragani's culture method was discontinued and Lowenstein's modified culture media with additional cultures on each specimen was substituted.

TABLE VII (B)

Material	Petragani's			Lowenstein's		
	Positive	Negative	Uns.	Positive	Negative	Uns.
Sputa	24	204	3	60	458	19
Urine	..	165	2	11	257	7
Gastric contents	7	204	5	10	304	15
Pleural fluid	8	38	1	10	66	1
Spinal fluid	..	18	..	1	23	1
Other body exudates	1	20	1	2	29	2
	40	649	12	94	1,137	45

Blood agglutination tests are performed for typhoid O and H antigens, paratyphoid A and B, undulant fever, tularemia and the Weil-Felix reaction for typhus and Rocky Mountain spotted fever. The laboratory prepared its own antigens for these tests and used both OX19 and OX2 for the Weil-Felix reaction. There was a slight increase in the number of blood agglutination tests requested during the year; 8,695 this year and 8,444 in the year ending June 30, 1950.

TABLE VIII

BLOOD AGGLUTINATION TESTS DURING YEAR ENDING JUNE 30, 1951				
	Positive	Negative	Unsatisfactory	Total
Typhoid fever	35	2,319	81	2,435
Paratyphoid fever	21	1,746	26	1,793
Undulant fever	40	2,736	26	2,802
Rocky Mountain spotted and typhus fevers	22	150	15	187
Tularemia	1	41	..	42
	<u>119</u>	<u>6,992</u>	<u>148</u>	<u>7,259</u>

Cultural examinations (feces and urine) for enteric pathogens decreased during the year, 11,071 in 1950 as compared with 8,695 this year.

TABLE IX

SPECIMENS OF FECES AND URINE EXAMINED FOR ENTERIC PATHOGENS DURING YEAR ENDING JUNE 30, 1951				
	Positive	Negative	Unsatisfactory	Total
Eberthella typhosa	17	2,707	155	2,879
Salmonellas	30	2,694	155	2,879
Shigellas .....	..	2,724	155	2,879
No examination .....	..	...	58	58
	<u>47</u>	<u>8,125</u>	<u>523</u>	<u>8,695</u>

This work includes the more complete identification of the Salmonellas into their respective groups. Cultures so identified are as follows:

S. adelaide	1
S. anatum	1
S. cholerae-suis, var. kuzendorf	4
S. derby	12
S. newport	1
S. oranienburg	9
S. senftenburg	1
S. typhosa	16
Total	<u>45</u>

Specimens analyzed at the three branch laboratories, Tuckerton, Bivalve and Newark are shown in Table X. In addition to shellfish work these specimens also include the performance of bacterial counts on milk, cream and milk products.

TABLE X

Type of Sample Analyzed	Number of Samples Analyzed at:		
	Tuckerton	Bivalve	Newark
Milk and milk products	795	508	623
Shellfish	608	542	59
Shellfish waters	1,844	427	378
	<u>3,247</u>	<u>1,477</u>	<u>1,060</u>
Total—5,784			

The New Jersey Laws of 1938, Chapter 126, state that blood tests for premarital serology shall be made in a laboratory approved by the State Commissioner of Health. (R. S. 37:1-23.)

The New Jersey Laws of 1938, Chapter 41, state that blood tests for prenatal serology shall be made in a laboratory approved by the State Commissioner of Health.

Chapter VI, Reg. 12, of the Sanitary Code, states that cultures made for release from quarantine for diphtheria shall be made in a laboratory approved by the State Commissioner of Health.

Chapter VI, Reg. 3-4a, states that cultures taken for release from quarantine for typhoid fever shall be made in a laboratory approved by the State Commissioner of Health.

Rules and regulations have been incorporated for such laboratory approval in the Sanitary Code, Chapter VI, Reg. 41. There are 105 such approved laboratories in New Jersey. These laboratories consist of one State laboratory, one United States laboratory, 13 municipal or county laboratories, 52 hospital laboratories and 38 private laboratories. These laboratories were all visited during the last fiscal year by a representative of the Bureau of Bacteriology. From 25 to 100 check specimens were submitted to each laboratory and results compared with the findings of the Section of Serology and the United States Public Health Service, Venereal Disease Control, Communicable Disease Center at Atlanta, Georgia. The approved laboratories of the State, other than the New Jersey State laboratories and the one United States laboratory mentioned above, examined a total of 591,412 specimens during the last fiscal year, divided as follows:

SYPHILIS

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	13,913	3,042	202,407
Hospital laboratories	6,206	2,697	155,994
Private laboratories	360	90	21,376
	<u>20,479</u>	<u>5,829</u>	<u>379,777</u>

In the above classification the number of premarital and prenatal examinations and results were as follows:

PREMARITAL

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	444	125	33,886
Hospital laboratories	119	20	5,534
Private laboratories	109	24	5,865
	<u>672</u>	<u>169</u>	<u>45,285</u>

PRENATAL

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	202	69	24,196
Hospital laboratories	335	68	22,110
Private laboratories	21	12	6,447
	<u>558</u>	<u>149</u>	<u>52,753</u>

Frequency and results of other tests were as follows:

EXAMINATIONS FOR DIPHTHERIA

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	29	5	7,037
Hospital laboratories	165	3	11,068
Private laboratories	11	4	588
	<u>206</u>	<u>12</u>	<u>18,693</u>

EXAMINATIONS FOR ENTERIC PATHOGENS

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	16	7	3,086
Hospital laboratories	626	9	10,042
Private laboratories	52	7	1,218
	<u>694</u>	<u>23</u>	<u>14,346</u>

EXAMINATIONS FOR TUBERCULOSIS (SMEARS)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	1,879	1	30,996
Hospital laboratories	2,484	28	33,444
Private laboratories	83	2	1,141
	<u>4,446</u>	<u>31</u>	<u>65,581</u>

EXAMINATIONS FOR TUBERCULOSIS (CULTURES)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	5	..	54
Hospital laboratories	730	..	30,070
Private laboratories	6	..	247
	<u>741</u>	<u>..</u>	<u>30,371</u>

EXAMINATIONS FOR GONORRHEA (SMEARS)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	2,347	175	24,413
Hospital laboratories	619	124	10,419
Private laboratories	192	26	1,723
	<u>3,158</u>	<u>325</u>	<u>36,555</u>

EXAMINATIONS FOR GONORRHEA (CULTURES)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories	701	..	5,243
Hospital laboratories	118	..	3,891
Private laboratories	24	1	158
	<u>843</u>	<u>1</u>	<u>9,293</u>

TOTAL NUMBER OF EXAMINATIONS

State Laboratory, Bureau of Bacteriology	45,976
State Laboratory, Section of Serology	391,321
State Laboratories, Tuckerton, Bivalve and Newark	5,784
Municipal laboratories	354,278
Total—New Jersey Public Health Laboratories	797,359
Hospital laboratories	296,923
Private laboratories	39,787
Grand Total	1,134,069

MAILING CASES FOR THE COLLECTION AND TRANSMISSION OF SPECIMENS SUPPLIED TO
PHYSICIANS AND LOCAL HEALTH DEPARTMENTS THROUGHOUT THE
STATE DURING YEAR ENDING JUNE 30, 1951

Diphtheria mailing cases	6,270
Tuberculosis mailing cases	19,239
Typhoid fever mailing cases	1,253
Malaria mailing cases	360
Gonorrhoea mailing cases	7,664
Feces and urine mailing cases	4,658
Syphilis mailing cases	331,900
Ophthalmia neonatorum mailing cases	4
Total	371,354

The Bureau of Bacteriology supplies media to other Units in the Division of Laboratories and to local and private laboratories throughout the State. The Bureau prepared and supplied 2,540,350 c.c. of various kinds of media during the fiscal year.

Bureau of Chemistry

The Bureau of Chemistry performs chemical, bacteriological, microscopical and toxicological examinations of samples of food, drugs, water, sewage and trade wastes collected by the Department's representatives in the enforcement of the public health laws of New Jersey. Studies of health hazards within industrial plants are made in cooperation with the engineering personnel of the Bureau of Adult and Industrial Health, and samples of dust and possible air contaminants are collected and analyzed to assist in safeguarding the health of the workers. The facilities of the laboratory are also extended to local boards of health, State Department of Education, Department of the Treasury, Department of Law and Public Safety, State Department of Agriculture, State Department of Institutions and Agencies, and the State Department of Conservation and Economic Development. Analyses are also made of various samples of foods and supplies purchased under specifications for institutional use, rural school waters submitted by local boards of education: drinking water, lakes and streams from camps maintained by benevolent associations and other miscellaneous samples.

Increased activity in the evaluation of pollutants in the air of industrial communities resulted in an increase in preparation of test equipment and reagents to be used in the field for collection of samples, and for determinations to be made in the mobile laboratory. Adaptation of present analytical methods to the analysis of samples having much lower concentrations, taken in environmental studies, and development of new methods have become an im-

portant phase of activity. The Toxicologists in the Industrial Hygiene Laboratory collected 27 samples in the field, and inspected 12 industrial plants. The engineering staff of the Bureau of Adult and Industrial Health submitted 166 samples.

There were 23,791 samples examined during the past year, consisting of 4,539 samples of food, of which 457 were determined to be below the legal standards; 246 samples of drugs, of which 28 were below standard; 952 samples classed as miscellaneous; 7,693 samples of water; 1,119 samples of sewage and trade wastes; and 215 miscellaneous and experimental samples. The Industrial Hygiene Laboratory examined 193 samples, on which 477 determinations were made. The determination of atmospheric lead headed the list with 57; free silica determinations increased from 10 to 37, and various sulfur-containing materials totaled 57. A total of 38 different categories were analyzed during the year, and weather data noted. The grand total of samples examined in the Bureau of Chemistry was 23,984.

NUMBER AND CHARACTER OF SAMPLES EXAMINED IN FOOD AND DRUG LABORATORY
JULY 1, 1950, TO JUNE 30, 1951

<i>Foods</i>	<i>Above Standard</i>	<i>Below Standard</i>	<i>Total</i>
Milk—chemical	901	6	907
Milk—phosphatase	586	10	596
Milk—bacteriological	766	178	944
Cream—chemical	177	1	178
Cream—phosphatase	120	9	129
Cream—bacteriological	156	21	177
Goat's milk	10	0	10
Skim milk	7	1	8
Chocolate milk—chemical	47	1	48
Chocolate milk—phosphatase	44	1	45
Chocolate milk—bacteriological	6	0	6
Cheese—chemical	6	0	6
Cheese—phosphatase	3	4	7
Cheese—bacteriological	1	0	1
Chocolate drink—chemical	37	0	37
Chocolate drink—phosphatase	39	0	39
Butter	122	3	125
Ice cream—chemical	51	0	51
Ice cream—phosphatase	7	0	7
Sausage	20	17	37
Beef	26	18	44
Horsemeat	2	0	2
Ground meat	222	26	248
Crabmeat—chemical	22	2	24
Crabmeat—bacteriological	20	4	24
Dried fruits	52	12	64

<i>Foods</i>	<i>Above Standard</i>	<i>Below Standard</i>	<i>Total</i>
Carbonated beverages	285	38	323
Tomato products	100	73	173
Olive oil	60	0	60
Vegetable and salad oils	8	1	9
Candies	69	14	83
Flour	0	3	3
Peanut products	34	2	36
Apple ciders	54	6	60
Miscellaneous foods	22	6	28
	4,082	457	4,539
 <i>Drugs</i>			
Arom. spirits of ammonia	27	4	31
Hydrogen peroxide	56	4	60
Insecticides	4	0	4
Burrows solution	51	0	51
Sat. sol. pot. iodide	13	11	24
Sat. sol. boric acid	10	4	14
Boric acid lotion	1	0	1
Tincture green soap	15	5	20
Ess. peppermint	41	0	41
	218	28	246
 <i>Miscellaneous</i>			
Thermometers tested .....	..	..	46
Blood counts .....	..	..	47
Blood—sugar .....	..	..	292
Blood—thiocyanate .....	..	..	1
Urinalyses .....	..	..	460
Urinalyses (State Police) .....	..	..	101
Liquid soap .....	..	..	1
Milk bottle rinse .....	..	..	1
Experimental—peppers .....	..	..	3
	..	..	952
Total	4,300	485	5,737

SAMPLES ANALYZED IN WATER AND SEWAGE LABORATORY—JULY 1, 1950—JUNE 30, 1951

<i>Months</i>	<i>Public Water Supplies</i>	<i>Pay Samples</i>	<i>Miscellaneous Samples</i>	<i>Camp Samples</i>	<i>State and County Instruction Samples</i>	<i>School Supplies</i>	<i>Bottled Water Samples</i>	<i>Dairy Samples</i>	<i>Bathing Waters and Swimming Pools</i>	<i>Stream Samples</i>	<i>Sewage Samples</i>	<i>Trade Waste</i>	<i>Soft Samples</i>	<i>Sand Samples</i>	<i>Experimental</i>	<i>Total</i>
1950																
July	245	21	118	76	13	0	2	0	30	363	60	11	275	0	21	1,235
August	418	14	135	29	7	1	0	3	1	568	247	143	292	0	32	1,919
September	286	27	108	3	14	41	0	1	1	84	55	11	6	0	10	593
October	376	8	126	0	14	35	0	1	0	13	42	6	0	0	20	641
November	246	20	78	0	16	39	0	1	0	24	38	26	0	3	30	501
December	271	17	81	0	11	23	0	2	1	0	2	17	0	0	19	444
1951																
January	345	24	117	0	17	35	0	0	0	1	3	1	0	0	0	543
February	177	2	92	0	8	20	0	0	0	7	3	8	0	1	5	323
March	267	4	81	1	7	46	0	2	1	22	15	38	0	2	23	509
April	290	7	118	2	19	25	0	0	1	16	163	21	0	0	13	675
May	335	16	119	2	9	43	20	2	10	11	36	23	188	3	24	841
June	263	38	125	29	9	5	2	0	30	44	127	23	99	0	9	803
Totals	3,519	198	1,298	142	134	293	25	32	85	1,103	791	328	864	9	206	9,027

Section of Pathology

Under its present organization, the Section of Pathology has operated its first full fiscal year. When the report for the fiscal year ending June 30, 1950 was submitted, an outline was prepared as to the projects to be undertaken by this Section. In the present report, it will be seen that its operations during the year 1950-51 were carried out as planned.

One of the most important activities leading to the successful operation of the Section was the field work consisting of visitations to various hospitals throughout the State whereby personal contacts were made with pathologists. This was successful in obtaining their complete cooperation in the joint program outlined in the report 1949-1950. As a result, during the past year, over 300 tumor specimens were submitted to the Section of Pathology by the pathologists of this State, about 60 of these being referred as consultation problems. The Section of Pathology acted as a clearing-house for the Pathologists' Consulting Board, preparing slides for review by consultants, and all the clerical services and recording of results incident thereto. The Section cooperated with the officers of the New Jersey Society of Clinical Pathologists in arranging four seminars during the past year. In order that the pathologists could study cases to be presented at the meetings, the Section prepared and mailed to all members, slides in advance of each meeting. This entailed the making of some 3,000-4,000 slides for such distribution, together with clinical abstracts of the cases. Through a budgetary allotment, the Section also paid out-of-state moderators of these important meetings. The participation of the pathologists was enthusiastic at all meetings and requests have come in for their continuation.

In the last year's report, it was projected that the general educational series of tumor slides might be issued by the year-end. It can be reported that this series is now completed, but the descriptive data to accompany these sets of slides has not been prepared, due to pressure of current operations of the Section. However, it is hoped that time will be available to complete this project within six months.

During the year, practical research was engaged in by the Section in evaluating certain technical procedures. After adequate experience in utilizing newly recommended histological procedures, technical bulletins (three in number) have been issued and sent to all pathologists. This has resulted in the adoption by many of the improved techniques. This type of work by the Section is being carried forward and forms an important field of operation. Samples of new stains and reagents were given to those pathologists requesting them.

The library was increased by the addition of about 20 important new books relating to cancer. Subscriptions to scientific journals were continued. We

feel that we are maintaining one of the most up-to-date reference libraries in the field of cancer, and we hope to strengthen this by the purchase of new books on the subject during the coming year.

The Section has responded to the requests of many pathologists of the State for special staining processes. We have offered this service so that pathologists may have available means of studying cancer cells microscopically utilizing the more involved staining procedures not readily at hand in the average pathological laboratory.

Microphotography has been carried out in the Section, as well as some gross photography on requests of pathologists. This area of our operations needs further development, and we must look to the time when personnel trained in this type of work will be available to us.

During the year much new equipment has been acquired by the Section, so that little in the way of major apparatus is at present needed. Scientific supplies are being adequately maintained to fill all needs. The Commissioner of Health has assigned additional space for the operation of the Section, so that at present all facilities are adequate.

Since the last report, additional personnel was acquired by the addition of an Assistant Histologist. This enabled us to carry out the volume of work of the Section. Despite the increase of technical assistance, there is a considerable back-log of slide preparation and particularly microphotography that is being increased from month to month due to need of additional personnel.

As we enter the new fiscal year, the greatest need apparent is for additional personnel, in the way of a histologist-photographer. We have ample facilities in the way of equipment and supplies. We have attained excellent public relations with the pathologists of this State in support of our program. However, much pathological material continues to come in as a result of our field work that cannot be processed currently, resulting in continued accumulations. Consequently, the field work has had to be curtailed. This curtailment results into a gradually diminished interest on the part of the pathologists; thus a "vicious circle" is generated. Since the field work is an important element in maintaining the success of our program, we feel that it is not in the best interest to curtail this function. With the addition of one histological technician, this program can be carried out in its entirety. In addition, it will enable us to carry out on a larger scale, the practical research projects to be undertaken, which we consider of great importance in our general program.

Section of Serology

The activities of this Section included the serodiagnostic examination of blood and spinal fluids for syphilis; determination of the total protein content of spinal fluids; testing for the blood groups A, B and O, the Rh factor and the presence of Rh antibodies; testing for heterophile antibodies as an aid in the diagnosis of infectious mononucleosis; the preparation and distribution of test sera of known reactivity for the purpose of evaluating serological tests performed in approved laboratories throughout the State; the preparation and distribution of Mazzini antigen to laboratories within the State; and testing new techniques and methods.

TABLE I

NUMBER OF EXAMINATIONS MADE BY THE SECTION DURING YEAR
ENDING JUNE 30, 1951

Syphilis	346,249
Rh factor	40,885
Infectious mononucleosis	879
Blood type	1,664
Globulin	23
Total protein	1,158
Colloidal gold	194
Rh immunization	269
Total	391,321

There were 311,262 blood and spinal fluid specimens examined for syphilis during the year, on which 346,249 separate tests were made. Of this number 4.9% were reported as positive, 1.7% as doubtful and 91.9% as negative. There were 1.5% of the specimens received in an unsatisfactory condition for examination.

The tests used in the serodiagnosis of syphilis were the standard qualitative and quantitative Mazzini, the standard qualitative V.D.R.L. slide test and the two-tube qualitative and quantitative Kolmer tests. In this group were represented two microscopic flocculation tests, one of which employs a cardio-lipin-lecithin antigen, and a complement fixation test. The Mazzini flocculation test was performed on all specimens. All specimens which showed a reaction of 3+ or 4+ in the qualitative test had a quantitative Mazzini test performed on them. Those specimens which gave a doubtful Mazzini result were tested by the V.D.R.L. slide test and the Kolmer complement fixation test. The results of all the tests performed were reported to the physician with an interpretation of positive, doubtful or negative.

A quantitative Kolmer test and a protein determination were made on all spinal fluids. Colloidal gold reactions were reported when requested.

TABLE II

SPECIMENS OF BLOOD AND SPINAL FLUID EXAMINED FOR SYPHILIS DURING THE
YEAR ENDING JUNE 30, 1951, BY MONTHS

Month	Positive	Doubtful	Negative	Unsatisfactory	Total
July	1,277	412	21,633	451	23,773
August	1,851	654	28,256	548	31,309
September	1,295	421	23,490	335	25,541
October	1,539	468	25,939	391	28,337
November	1,323	458	23,077	432	25,290
December	1,063	325	16,895	327	18,610
January	1,182	423	27,497	422	29,524
February	827	345	20,336	598	22,106
March	1,044	520	23,448	290	25,302
April	1,192	637	23,520	280	24,629
May	1,328	549	24,633	282	26,792
June	1,466	394	26,831	358	29,049
	15,387	5,606	285,555	4,714	311,262

TABLE III

NUMBER OF TESTS PERFORMED FOR SYPHILIS DURING YEAR ENDING JUNE 30, 1951

Number of qualitative Mazzini tests	304,544
Number of quantitative Mazzini tests	10,847
Number of V. D. R. L. tests	21,786
Number of qualitative Kolmer tests	6,947
Number of quantitative Kolmer tests	2,125
Total	346,249

TABLE IV

PREMARITAL AND PRENATAL SPECIMENS EXAMINED FOR SYPHILIS DURING
YEAR ENDING JUNE 30, 1951

Number of premarital specimens	47,662
Number of positive premarital specimens	561
Number of prenatal specimens	46,815
Number of positive prenatal specimens	504

Rh factor determinations were made on 40,885 of the prenatal specimens received. This is an increase of 100% over the number last year. Of the total number 15.9% were Rh negative. The determination of blood groups A, B and O was requested and honored on 1,664 prenatal specimens. There were 269 Rh negative blood specimens tested for the presence of the Rh antibody because of special requests from physicians. Isoimmunization was indicated in 54 cases. The presence of saline and/or albumin agglutinins was reported in the highest titer demonstrated.

Tests for the detection of the heterophile antibody of infectious mononucleosis were performed on 879 specimens of blood. All specimens which gave a positive reaction (above 1:56 dilution) were absorbed with guinea pig kidney antigen, retested and the true titer of the reaction reported to the physician.

The Section of Serology prepared and distributed 84 sets of control serums, consisting of 24 specimens each, to various laboratories throughout the State. Laboratories seeking State approval for the serodiagnosis of syphilis must report 90% sensitivity and 99% specificity on the control specimens.

Mazzini antigen is prepared and standardized in the Camden branch laboratory of the Section of Serology. There were 358 bottles of Mazzini antigen distributed free to municipal and private laboratories in the State. The distribution of standardized Mazzini antigen is an aid in producing more uniform Mazzini test results in the various laboratories of the State.

Report of the Division of Local Health Services

July 1, 1950—June 30, 1951

G. FREDERICK MOENCH, M. D., M. P. H., *Director*

WILLIAM H. MACDONALD, M. S., *Assistant Director*

Bureau of Grants-in-Aid WALLACE T. EAKINS, M. S.,
Chief

Bureau of Public Health Nursing GLADYS J. WILSON, R. N., M. P. H.,
Chief

STATE HEALTH DISTRICTS

Central JESSE B. ARONSON, M. D., M. P. H.,
District State Health Officer

Metropolitan Position Vacant

Northern Position Vacant

Southern Position Vacant

Division of Local Health Services

Reorganizing activities of the Division of Local Health Services to comply with the studied plan of reorganization of the Department of Health has been stressed during the year ending June 30, 1951.

The office headquarters of the Division of Local Health Services was moved in May, 1951, from 172 West State Street to the First-Mechanics Bank Building. The former quarters were taken over by the Central State Health District. The new quarters permitted the housing of the Bureau of Public Health Nursing, transferred to the Division of Local Health Services at the beginning of the year. This Bureau had been in the Division of Constructive Health located in the Broad Street Bank Building.

The Division of Local Health Services now lists personnel composed of a Director and an Assistant Director, the Chiefs of the Bureau of Public Health Nursing and the Bureau of Grants-in-Aid in the State office of the Department, and eight clerical office personnel, plus the personnel of the State Districts.

One of the major problems facing the Division during this year was the creation of the four State District Health Offices. It was proposed that the function of such offices would be one to coordinate and decentralize the activities of the State Department of Health; to improve relationships between the State Department of Health and local health agencies, and to strengthen local autonomy in government by the formation of consolidated local health departments capable of assuming a broader responsibility for the administration of the seven basic local health services. Two of the four Districts were established within the year.

Another important problem was that of staffing the organized Districts. A sufficient number of qualified personnel was not readily available. This resulted in need for training personnel and requesting civil service examinations. At the close of the year the Central and Southern Districts were practically completely staffed.

The Division of Local Health Services assists the Commissioner to integrate the services of the other Divisions through the District Offices. The objective of decentralization of direct services to local communities required attention to a review of all State Division program plans, requiring many hours of conference with other Divisions. Written plans and procedures by program have been initiated and progressed to varying stages of completion. These programs are being applied as soon as they reach a workable stage in the planning. In this manner the State Department of Health makes expert

advice, counsel and specialized technical knowledge available to local boards of health.

Community health education was stressed during the year. The staff of the Division of Local Health Services attended each one of the county-wide meetings organized through the efforts of the Governor's Committee on Local Health Administration. The purpose of these meetings, sponsored by local county-wide organizations, was to acquaint local citizens of the need for basic public health services, through adequate local health units. The presence of State Health District staff at these meetings was to inform people of the technique in the community approach to the solution of local health problems. The technique of accomplishments is by the organization of county-wide community health councils, which include school health councils and the use of the New Jersey adaptation of the American Public Health Association Evaluation Schedule in a survey of community health status.

Through the Division of Local Health Services, the District Office staffs comprise a team of people, trained in the science and art of conducting surveys on community public health. These teams are available to assist community health councils in making their surveys. The teams are available to local communities only upon request. Two such county-wide surveys were begun this year. The Hunterdon County Survey was completed and the Hudson County Survey is well under way. This Evaluation Project of the State Department of Health is financed jointly by the State and the Commonwealth Fund. The joint plan of operation continues for three years.

Civil Defense organization in New Jersey was an unexpected event. The entire Division staff spent many hours of both official and voluntary time participating in conferences for the purpose of planning and organizing with other Divisions and State agencies. The Division Director served as the Deputy Chairman of the State Medical and Health Preparedness Committee. Local Civil Defense organization for medical, health, and hospital preparedness requires an over-all community-wide public health survey. The Evaluation teams of the District State Health Offices are available to assist local communities in this need. The effort consumed by our staff is completely justified because every detail has both peacetime and war emergency value. If a community does not have adequate health services and facilities in peacetime, it would be impossible to meet the problems in time of war disaster.

In spite of reorganization of the Department, moving the Division, lack of personnel and establishing District Offices, a spirit of high morale predominates and continues to improve.

A brief report by Bureaus and Districts in the Division of Local Health Services shows in more detail some of the year's activities.

Bureau of Grants-in-Aid

As part of the reorganization plan of the State Department of Health, recommended by the Commissioner of Health, and approved by the Public Health Council in June, 1948, there was established in the Division of Local Health Services a Bureau of Grants-in-Aid.

The function of the Bureau is to make financial grants to local health departments for their use in employing personnel needed for the improvement of local health services. In the past, the State Department of Health made a practice of assigning State-paid field personnel, particularly in the public health nursing category, to perform services which were really local board of health functions. In some instances, the State paid all the salary of such employees, while in other cases part was paid by the community. This type of program was designed as a demonstration, with the objective of having the community eventually support it without State aid.

The new plan under which the Bureau operates provides that instead of furnishing State-paid personnel to perform local services, a money grant may be made to the local board of health to enable it to employ personnel. In this way the personnel become employees of the local board of health, that board assuming its true responsibility for performing local services.

Execution of the functions of the Bureau has been necessarily slow due to a number of factors, including the limitation of funds available, the scarcity of qualified persons for local positions, and the integration of the plan into the reorganization of the Department's field operation through the four State Health Districts.

During the fiscal year ending June 30, 1951, two grant-in-aid contracts with local boards of health were signed. One contract was with the Board of Health of New Milford Borough, Bergen County, and the other with the Board of Health of Pequannock Township, Morris County. Under the terms of these contracts the local boards were granted, for a one-year period, funds to enable each to employ a public health nurse. The contracts provide that the persons so employed shall meet the qualifications of public health nursing standards as established by the State Department of Civil Service. It is also provided that the nurse perform her duties in conformity with the program and standards of public health nursing of the State Department of Health and subject to the nursing supervision furnished by the Department.

The Chief of the Bureau also served as representative of the Department in the distribution of Federal Surplus Property to hospitals. He also served by appointment of the Commissioner of Health as the Department's liaison officer to the Office of Civil Defense, and as alternate on the Civil Defense sub-committee on Integrated Local Health Services.

Bureau of Public Health Nursing

With the opening of the fiscal year, the Bureau of Public Health Nursing was transferred from the Division of Constructive Health to the Division of Local Health Services and at the same time the Acting Chief became the permanent Chief of the Bureau after certification by Civil Service.

At the beginning of the year the Bureau was faced with the problems involved in the actual reorganization of nursing services in order that these may be in line with over-all departmental plans for reorganization. The first steps have now been taken toward the establishment of a generalized public health nursing program for services wherein the State Health Department participates on the local level. In addition to the transition from specialization to generalization, the change from centralization to decentralization of nursing services was partially accomplished with the setting up of the Southern and Central State Health Districts. This entailed the transfer of the large number of nurses involved from the special programs to the State Health Districts. Consultative services rather than supervisory services by the members of the Bureau staff were emphasized.

Encouragement of public health nursing services on the local level was substantiated through payment by the newly-established Grants-in-Aid program.

The integration and coordination of nursing services within the Department and with local health agencies continued as a primary function of the Bureau along with the increased activity for the interpretation of public health nursing.

Shortage of personnel during the entire year greatly affected accomplishment of the Bureau.

Efforts in behalf of recruitment of qualified public health nurses comprised a share of the Bureau activities. Three (3) District Chief Public Health Nurses were assigned to the departmental nursing staff, with one position yet to be filled.

Educational and professional experience of Department nurses has been encouraged through the continuation of study privileges involving time and tuition granted according to policy.

Nursing Institutes on Venereal Disease and Poliomyelitis were conducted in cooperation with the Division of Preventable Diseases and in-service training for departmental nurses included a conference on Maternal and Child Health.

Procedures have been established for State Health Department nurses to participate in the activities of the New Jersey State Organization for Public Health Nursing. Nurses from this Department have served on the Personnel Policies Committee, the Education Committee, and the Membership Commit-

tee, while the Chief of the Bureau represented the Department on the Board of this organization. Bureau representatives participated in many other organizational activities both on a State-wide and local basis, toward the improvement of nursing services.

Current information regarding meetings, institutes, and courses of interest to public health nurses in the State, in addition to other pertinent literature, was disseminated through available channels.

Varied requests for public health nursing consultative services from outside agencies and from within the Department were filled. These activities will continue to the degree that staff is available. Definite plans for educational services to public health nurses on a State-wide basis are being consummated along with a study of the needs and requests.

Five (5) major State-wide surveys were completed which included the Annual Public Health Nurse Census and the Annual Industrial Nurse Census. The Public Health Nurse Census, completed through the cooperation of local agencies, showed a total of 1,459 full-time public health nurses actively employed in New Jersey. This was an increase of 126 over the previous year. Industrial Nurse Census showed that 185 nurses were employed full-time in industry.

In response to the urgent need for integrating the specialized nursing services into a generalized program and developing a unified State-wide public health nursing service, a Planning and Policy Committee has been set up and is currently functioning.

This Committee is composed of the Chief of the Bureau, District Chief Public Health Nurses, and Public Health Nurse Consultants. The Committee began its work in March, 1951, and by the end of the fiscal year 16 all-day conferences were held. The objective of the Committee is to compile a Public Health Nursing Manual for the Bureau of Public Health Nursing.

Some of the immediate problems facing the Committee were: The need for the adoption of policies and procedures for the guidance of public health nurses; delineating the functions and duties of various types of positions; establishing a uniform generalized record system and recommending policies for adoption regarding uniforms and nursing bags. Considerable progress has been made in formulating policies, procedures, in studying and evaluating records and setting up criteria for the generalized nursing visit. Two sub-committees, Uniform and Bag Committee and Records Committee, have been appointed and are now functioning. These Committees are composed of representation on a geographical, program and position level basis and include staff nurses.

Needs of nursing to be met are: Continuation of activities toward the establishment of departmental policies and procedures relative to public health nursing based on departmental and local needs; recruitment of qualified public

health nurses for positions on all levels throughout the State; concentrated efforts toward in-service training of departmental nurses; continued efforts toward the improvement of nursing standards, and correlation of nursing services with allied services.

In order adequately to meet demands both on the State and local levels, additional nursing consultants are urgently needed.

COMMITTEE ON PROFESSIONAL EDUCATION AND TRAINING

In April, 1951, there was organized within the New Jersey State Department of Health a Committee on Professional Education and Training. This Committee is concerned with the professional growth of personnel of the Department and is composed of a Planning Group and an Advisory Group.

All Divisions of the Department are invited to participate in and avail themselves of the services of this Committee. The activities will be arranged to fit into the programs of the four State District Health Offices.

A few of the functions of the Committee on Professional Education and Training are: In-service training by means of institutes, workshops and courses; formal accredited training through university courses; informal training through on-the-job observations and experiences; compilation of training manuals; arrangement of orientation tours; furnishing of testing services, and making available library facilities, source materials and training aids.

While the primary purpose of the Committee is that of in-service training of departmental personnel, the activities will not be confined to the Department but will have ramifications to other public and private agencies and to individuals interested in the furtherance of public health and welfare.

Northern Area—Local Public Health Activities

During July and August, 1950, the personnel of the Northern District Office in cooperation with the Division of Environmental Sanitation engaged in a research study of the purity of lake water. Stations were established at various lakes, and samples were collected and delivered to the Passaic Valley laboratory. Further help with the Bureau of Public Health Engineering was given in securing abatement of six sources of pollution at Clove Acre Lake in Wantage Township and Sussex Borough.

At the request of the Superintendent of State Parks, a system was inaugurated periodically to collect water samples from the following State Parks: High Point Park, Stokes State Park, Voorhees State Park and Hackelbarney State Park.

The Sanitarian attended the in-service training course at Trenton, and the District Health Officer taught Sanitation at the Rutgers Summer Course.

This Office cooperated with the Morris County Health and Tuberculosis Association and the Warren County Tuberculosis Association in organizing the Mobile X-ray Program. Several conferences were held to urge the Sussex County Medical Society to accept the use of these mobile clinics in the County. The trailer was used for the first time in Sussex County.

Following the 1950 hurricane, personnel from this District assisted in purifying many polluted wells in the Southern District.

During the increased incidence of poliomyelitis in Morris County this Office cooperated with the National Poliomyelitis Foundation in supplying case histories and checking the quarantine of contacts with local health officials. Much effort was expended on obtaining the facts in a misleading newspaper report concerning the Morristown Memorial Hospital.

In the Spring of 1951 this Office rendered assistance to Lincoln Park Borough, Pequannock Township, and Riverdale Borough in the evacuation of persons made homeless by the Passaic River flood. The temporary shelters were checked for sanitation and food dispensing procedures.

At the request of the Governor's Committee on Local Health Administration, public meetings were arranged in Morris, Warren and Sussex Counties to gain support for the new legislation. Clergymen, school officials, physicians, nurses and interested members of Boards of Health attended these meetings.

Aid was obtained by Jersey City water officials from this Office in assisting their watershed inspectors in dealing with violations found at several housing developments.

Metropolitan Area—Local Public Health Activities

During the fiscal year of 1950-1951 the Metropolitan Area Health Office had considerable activity with realty subdivisions. It was known that many towns were having subdivisions constructed as they had been doing in the preceding year, and additional towns were having increased activity in residence construction. This activity increased the problem of individual sewage disposal situations as so many of the towns did not possess municipal sewerage systems.

Bergen County appointed a Bergen County-Hackensack Sewer Authority with the plan of eventually constructing trunk line sewers that would allow various towns in the eastern and central portions of the County to build municipal sewer lines for connection to the trunk lines.

Relevant to sewage, as such, at a subdivision in Moonachie the problem became so acute that the Division of Environmental Sanitation, at the direction of the Commissioner, held a Department Hearing. Similarly, Saddle River

Township and Waldwick received orders from the Department to abate sewage nuisances.

The problem of garbage and refuse dumps in the towns of Kearny, Saddle River Township and Little Ferry, to name a few, required considerable effort to obtain reasonable care, coverage and control.

The Venereal Disease Control program that had been so successfully carried on in past years was suddenly modified by reduction of Federal funds and in part transferred to the District Office and to local health departments.

A period of excessive rain for a few days caused flood conditions in Pompton River, Ramapo River, and Saddle River. Considerable damage was done to new realty subdivisions that had been built in low lands, and to certain food establishments in Haledon and Passaic City bordering the Passaic River.

The control of rodents was the subject of an interesting meeting at North Arlington, at which time the United States Public Health Service joined the Division of Environmental Sanitation in making known pertinent data and control procedures to health officials in the area.

The Local Health Unit Bill known as A-1 was successfully popularized with the result that the bill was passed in the Legislature.

Fluoridation of Water Supply was an important activity engaged in jointly by the State Department of Health and Dental Society groups. A few municipal water supply officials became interested, but so far only one water supply is actively fluoridated.

The Trailer Camp problem remains, and probably will remain, until some State-wide control bill is formulated and put into operation.

Short courses were held during the year by the Department at Trenton and Newark to inform District and local health officials about radiological health problems and techniques.

During the year the District underwent the usual rise and fall of diseases such as chicken-pox, measles and mumps. An unusual situation was the great number of adult chicken-pox cases. The incidence of poliomyelitis was greater than usual in the period from July, 1950, through December, 1950. However, it was comparatively light from January, 1951, through June, 1951. Tuberculosis case and contact control continue to be of interest in this District. As a result of the large number of Tuberculosis Survey Projects carried on in the District by the State and Bergen County Tuberculosis and Health Association, a large number of initially reported arrested and active cases was added to our vital statistics records.

During the year there was only one food poisoning outbreak of significance. There were the normal scattered cases of trichinosis, undulant fever, amoebic dysentery, typhoid, and tularemia.

Central State Health District

On September 1, 1950, a District State Health Officer for the Central State Health District was appointed. During the remaining four months of 1950, a staff was organized and headquarters established at 172 West State Street, Trenton. On December 29, 1950, the Central State Health District Office was activated. Its area of jurisdiction included Burlington, Mercer, Middlesex, Monmouth and Ocean Counties. As of June 30, 1951, the office had a total staff of 26 persons, including a District State Health Officer, a District Chief Public Health Engineer, a District Chief Public Health Nurse, a District Consultant on Community Health Organization, a District Veterinarian, a Principal Sanitarian, a Sanitarian, two Assistant Sanitarians, one Physical Therapist, three Public Health Nurse Supervisors, seven Public Health Nurses, and six clerical workers. Of this staff, two were promotions from within the Department, two were new appointees to the Department, and 22 were transferees from other Bureaus or Divisions.

The problems of organizing a District State Health Office were as follows: Obtaining staff, office space, and office equipment, together with the developing office and personnel procedures; establishing relationships with the several Bureaus, including an agreement on the definition of the administrative functions of a District Office; and establishing rapport with local health agencies based on the new organizational framework. While these functions were being undertaken, it was necessary to maintain without interruption routine activities and services. These services included programs of environmental sanitation, public health nursing, maternal and child health, preventable disease control, and community organization. The highlights of these activities follow.

The Division of Environmental Sanitation assisted in re-training the Sanitarians. These staff members, formerly engaged in specialized inspectorial activity, were given a course of lectures and planned field experience with environmental sanitation problems. During the training period there were performed routine inspections of milk, ice cream, and bottling plants to make possible the issuing of the annual licenses. Sanitation problems found in children's summer camps required correction. There arose, also, a number of emergency problems. Thorough investigations were made of public water supplies when quarterly water samples or information received at the District Office suggested contamination. These included the Monmouth Consolidated Water Company, the Browns Mills water supply, the East Brunswick Township water supply, and the Farmingdale water supply. Some of the individual sewage disposal facilities installed in a number of new housing developments were inadequate, resulting in raw sewage being deposited on the ground in closely settled areas. The sanitary facilities at the State Fair grounds in Hamilton Township required complete renovation and extensive additions.

Surf waters off some of the bathing beaches in the Raritan Bay area were found to be seriously polluted. Food and drink-vending establishments in the extra-cantonment area adjacent to Fort Dix were not inspected or regulated by the local health authorities, and presented a serious sanitary hazard to both the military and civilian population. Industrial plants were alleged to have caused air and or stream pollution responsible for nuisances and dangerous to health. Such problems required extended surveys and investigations and involved conferences with local health officials, citizen representatives, management, engineering consultants and attorneys, and sometimes resulted in informal and formal hearings, as well as numerous intra-departmental conferences. As a consequence of these activities, local authorities became more aware of their responsibilities. A standing committee of local health officers and sewage treatment plant operators was organized to coordinate efforts to control pollution of bathing beaches. The Borough of Wrightstown, near Fort Dix, enacted a restaurant code and employed a full-time Sanitary Inspector.

The public health nursing program of the Central State Health District included diverse activities. The new nursing policies of the Department had to be assimilated; working relationships with agencies engaged in public health nursing were furthered; and orientation and in-service training activities were undertaken. Nurses attended institutes concerned with poliomyelitis, venereal disease, and maternal and child health. A three-day intensive State-wide program on Civil Defense was attended by the supervisory staff.

To stimulate public interest in problems of public health and support for public health programs, efforts were made to foster the organization of health councils. With the assistance of the District Consultant on Community Health Organization, contacts were made with representatives of official and non-official agencies, and with interested citizens. Assistance was given in the collection of material on local health conditions and services.

Staff members of the Central State Health District served on a team involving a joint evaluation study of local health services sponsored by the New Jersey State Department of Health and the Commonwealth Fund.

The first six months of activity of the Central State Health District could be characterized as a period of experimentation in new organizational procedure, participation in varied phases of public health activity, and orientation with a revised perspective.

Southern State Health District

The Southern State District Office was opened February 16, 1951. The staff at that time comprised the District Chief Public Health Engineer, District Chief Public Health Nurse, Nutritionist, two Sanitarians, one Assistant Sanitarian, a staff of Supervisory and Field Nurses and two Clerk Stenographers. The former District Office at Mays Landing was made a branch office for the Southern District under the direction of a Medical Assistant. One temporary Sanitarian was assigned to that office.

The former District Office at Pitman was closed on March 1, 1951, and its staff and furnishings transferred to Haddonfield. The Burlington County files were moved to Haddonfield from the former district office at Mount Holly.

Administration of this District was assigned to the District Chief Public Health Engineer, pending the appointment of a District State Health Officer. The District Engineer was assigned also the function of Principal Sanitarian, since no sanitarian in a supervisory capacity had been assigned to the District. Such program developments as were accomplished in the short period of four months were essentially in three fields, namely; Public Health Nursing, Nutrition, and Public Health Engineering. The Veterinary Public Health work done by the District Office was in the field of slaughterhouse inspection, conducted from the Central Office in Trenton in 1951. A Public Health Veterinarian was assigned to the District in June, as was the Consultant on Community Health Organization. There were no reports of accomplishment in those programs prior to the end of the fiscal year.

Orientation of personnel in additional phases of Public Health Nursing was made necessary by the transition from a highly specialized service to a more generalized one. This was facilitated by weekly supervisors' conferences, and by staff meetings and institutes.

Institutes were conducted on Venereal Disease Control and Poliomyelitis. One Supervisor attended a workshop on school health problems, and another attended a course on Venereal Disease at the Medical Center in Alto, Georgia. Reports of these conferences were given at Supervisors' meetings for interpretation to the staff nurses at monthly conferences held in each county.

Meetings have been held to interpret nursing needs to vitalize community interest. Accomplishments to date seem intangible, although one community sought guidance in developing a bedside nursing program to supplement its present service. Nursing needs were studied in other communities toward developing a more comprehensive service.

An effort was made to develop among the personnel of the District Office an awareness of nutritional problems and the inter-relationship of nutrition with other aspects of the program. This has been done by means of personal contacts, staff meetings, educational materials, demonstrations, and talks.

The Sanitarians attended in-service training courses one day each week, supplemented by field training concerned with established practices in the field of sanitation. The Sanitarians, each having been more or less a specialist prior to the activation of the Southern District Office, aided one another in the training program. This was the most important single accomplishment in the field of sanitation during this brief period.

Almost the full program in the fields of water supply, sewage treatment, milk sanitation, non-alcoholic bottling plants, cold storage and other phases of environmental sanitation were assumed by the District Chief Public Health Engineer and the staff of Sanitarians. Deadlines relating to the renewal of licenses and permits in these fields were met by inspections of various types of establishments under State licensure. As soon as these deadlines had been met, the staff began the development of a planned program in the field of Environmental Sanitation.

The important field of Realty Subdivision received considerable attention and at the close of the fiscal year a suggestion had been made to the Central Office that the responsibility for investigation and recommendation in this field be decentralized and placed with the District Engineer.

The full program in the Southern State Health District has been directed toward the promotion of more complete local health services. Wherever practicable, local health authorities have been made aware of their responsibility in the program and their participation has been encouraged. At the close of the fiscal year, the permanent staff of the District was almost complete with the exception of the District State Health Officer and the full clerical staff.

Report of the Division of Preventable Diseases

July 1, 1950—June 30, 1951

—————
 CARL E. WEIGELE, M.D., M.P.H., *Director*
 —————

Bureau of Acute Communicable Diseases	Vacant
Bureau of Cancer Control	EDWIN D. MERRILL, M.D., M.P.H., <i>Chief</i>
Bureau of Chronic Diseases—	
Alcoholism Program	HENRY T. TESCH, <i>Confidential Agent</i>
Section of Heart Diseases	MARIAN R. STANFORD, M.D., <i>Chief</i>
Bureau of Tuberculosis	THOMAS F. PUGE, M.D., M.P.H., <i>Chief</i>
Bureau of Venereal Disease Control	ADELE C. SHEPARD, M.D., M.P.H., <i>Chief</i>

Division of Preventable Diseases

July 1, 1950—June 30, 1951

CARL E. WEIGELE, M.D., M.P.H., *Director*

Administrative changes in the State Department of Health were made July 1, 1950, and the Division of Preventable Diseases composed, as follows:

Bureau of Acute Communicable Diseases
Bureau of Cancer Control*
Bureau of Chronic Diseases
Alcoholism Program
Section of Heart Diseases*
Bureau of Tuberculosis Control*
Bureau of Venereal Disease Control*

Personnel problems continued to hamper the program. Several vacancies have not been filled and new appointees to other positions have required a period of orientation before assuming full responsibility for a program. Re-assignments of personnel were made in the Bureau of Tuberculosis Control, including the appointment of Thomas F. Pugh, M.D., as chief on October 1, 1950. At the end of the year he resigned as chief to accept another position. The public health nurse consultant assigned to the Bureau of Tuberculosis Control resigned May 15, 1951 and has not been replaced. In the Bureau of Cancer Control a medical assistant, Edwin D. Merrill, M.D., was assigned on July 1, 1950 and appointed chief in December 1950. A 40% decrease in allotment of federal funds to the Bureau of Venereal Disease Control necessitated a drastic reduction of personnel in that program. The Bureau of Chronic Diseases has not been activated, but the Section of Heart Diseases and the Alcoholism Program of that Bureau have carried on active programs.

During the calendar year 1950, there were recorded 81,016 cases of the 39 diseases declared reportable by State regulations, exclusive of tuberculosis and venereal diseases. Chickenpox, measles and whooping cough accounted for 71% of the total number.

* Individual reports of these units follow.

Fifty cases of diphtheria were reported, continuing the downward trend noted during the previous year. No deaths from diphtheria were recorded. The high level of immunization maintained against diphtheria can be considered responsible for the favorable trend.

There was a decrease in the number of cases of poliomyelitis during 1950, there being 866 cases reported and 70 deaths were recorded.

There were 1,407 cases of scarlet fever reported in 1950, or about 43% less than in the previous year.

Twenty per cent of the total deaths from measles and all the deaths from whooping cough (3) were among children under five years of age.

The number of reported cases of whooping cough (6,201) is higher than the number recorded in 1949 (4,563) and higher than the average for the five-year period 1945-1949. The high incidence of whooping cough indicates a need for protecting children by early vaccination and periodic booster doses.

One case of leprosy was reported and, when the diagnosis was confirmed, the individual left New Jersey for the Leprosarium at Carville, Louisiana.

Thirty-two of the 35 cases of typhoid fever reported in Hudson County occurred at the Mental Hospital in Secaucus. The investigation emphasized the need for maintaining the patients and personnel in mental hospitals, and other institutions where custodial care is provided, at a high level of protection against typhoid fever by primary immunization and periodic stimulating doses.

In November 1950, a hurricane struck the eastern seaboard and, as a result of the winds, rain, and high tides, approximately 15 miles of the Cumberland County shore along the Delaware Bay were so seriously inundated that some 800-1,000 migrant workers and their dependents were evacuated.

Personnel of the Department assisted local and State authorities in establishing emergency housing and health facilities. Immunization against typhoid was provided for 672 individuals.

MULTIPHASIC TESTS

A battery of tests was offered at the State Fair in Trenton, September 24—October 1, 1950. Encouraged by the public interest in capillary blood sugar tests last year, a clinitron was secured again for testing capillary blood specimens to detect diabetes. Hemoglobin determination was also made on these specimens. Two thousand, two hundred and sixty-eight persons were tested, of whom 224 were referred to their physicians for further study for diabetes.

The booth was staffed with doctors and nurses to collect venous blood specimens, which were tested for syphilis, and Rh factor and type determined. There were 1,438 persons who participated.

Height and weight checks were also done and attention called to the standard height and weight table. A Snellens eye chart was on exhibit for self-check of vision.

The public interest in multiphasic testing was very gratifying, but further study of costs and results obtained are needed before this type of service is expanded.

ALCOHOLISM PROGRAM

After two years of effort to interest hospitals in setting up a clinic service for alcoholics in the out-patient department, a pilot clinic was established at McKinley Hospital, Trenton, in November 1950. The physician in charge was selected by the medical staff of the hospital because of his excellent training in the field of internal medicine. At first cases were limited to referrals by the hospital staff, then selected industrial plants were invited to refer cases, also community social agencies, practicing physicians, and the courts. Patients are screened carefully and only those who give evidence of cooperation receive a medical examination, including laboratory studies, and general therapy as indicated. The resources of social agencies, church groups, and Alcoholic Anonymous are used for those patients who are willing to take advantage of the services. Although only a few patients (20) have been treated in the clinic this year and it is too soon to measure results, the service is growing. Other hospitals are watching with interest this pioneer attempt to help the alcoholic through the out-patient services of a general hospital.

To stimulate interest and public understanding of the problem of alcoholism, more than 700 packets of educational materials (books and pamphlets) have been purchased and will be distributed to public libraries, high school libraries, and private secondary school libraries. This library project has been carried on with the assistance of the Commission on the Study of Alcoholism of Yale University.

The concept of the alcoholic as a "sick" person, makes it essential for practicing physicians to be kept informed of advances in therapy. A contract has been entered into with the Yale group for the digest of scientific articles now being published every two months by that group, which will be sent with New Jersey news items to all physicians.

MIGRANT HEALTH

As has been the practice for many years, special clinics for migrant agricultural workers were held during July, August, and September. Clinic attendance doubled over last year, with 3,478 patients who made 5,665 clinic visits.

Clinics were located in Imlaystown, Freehold, and Prospect Plains to serve workers in Monmouth, Middlesex, and Mercer Counties. These clinics were operated one evening a week. The increase in attendance was due largely to the convenient location of the new clinic at Prospect Plains, which replaced the clinic formerly operated at Cranbury.

In Cumberland County, clinics were operated again at Orchard Center and Gelston Village with a nurse in attendance full time. A physician attended evening clinics twice a week in Orchard Center and once a week at Gelston Village.

A public health nurse was added to the staff for field work in Monmouth and Middlesex Counties. As in the past, the follow-up of venereal disease cases was done by nurses on the staff of the Bureau of Venereal Disease Control.

The routine examination at these clinics included inspection of eyes, ears, nose, mouth, and throat, examination of heart and lungs, blood pressure, serologic tests for syphilis and inspection of the genitalia. Following is a classification of diseases and abnormalities found:

Venereal diseases	651
Syphilis	463
Gonorrhoea	179
Other	5
Allergic, Endocrine, Metabolic Diseases	2
Penicillin allergy	1
Bronchial asthma	1
Anemia	1
Bones and Organs of Movement	3
Circulatory System	49
Digestive System	14
Infective and Parasitic Diseases	18
Neoplasms	24
Nervous Systems and Sense Organs	4
Respiratory System	17
Skin and Cellular Tissue—	
Burns, Lacerations, etc.	22
Female Diseases, Leucorrhoea, etc.	46
Genito-urinary System	4
	855

As always, the venereal diseases were the principal infections found. Treatment was given to 146 cases of early syphilis (less than four years) in the clinics and to 179 cases of clinical gonorrhoea. For syphilis, treatment consisted of six million units of procain penicillin given in two doses, a week apart. Gonorrhoea was treated immediately with one injection of three hundred thousand units of penicillin.

About \$7,200 was expended on the migrant program from funds allotted to the State Department of Health by the Migrant Labor Board. In addition, regular staff members, particularly of the Bureau of Venereal Disease Control, assisted in this program.

A more detailed report prepared at the close of the migrant season in September was submitted to the Migrant Labor Board.

BOARD OF EXAMINERS OF HEALTH OFFICERS, INSPECTORS,
AND PUBLIC HEALTH LABORATORY TECHNICIANS

The Director continued to serve as Chairman of the Board of Examiners of Health Officers, Inspectors, and Public Health Laboratory Technicians. This Board participated in the development of new licensing examinations and procedures, and conducted the scheduled examinations.

DISABILITY INSURANCE SERVICE

The Disability Insurance Service of the Division of Employment Security is in the State Department of Labor and Industry, but the medical services needed to authorize the payments of benefits continued to be provided by personnel of the Division of Preventable Diseases. Statistical services are provided by the Division of Vital Statistics and Administration. The two divisions render assistance to the Disability Insurance Service in the preparation of medical and statistical reports, establishment of standards for duration of disabling illnesses, development of procedures and forms relating to medical care.

REPORTED CASES AND DEATHS FROM TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	0	0	0	0	0	0
1 to 4 years	5	0	3	0	2	0
5 to 14 years	6	0	4	0	2	0
15 to 24 years	4	0	2	0	2	0
25 to 44 years	32	2	2	0	29	2
45 to 64 years	13	0	3	0	11	0
65 years and over	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
State total	60	2	14	0	46	2

REPORTED CASES AND DEATHS FROM SCARLET FEVER IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	7	0	4	0	3	0
1 to 4 years	382	1	214	0	168	1
5 to 14 years	946	0	495	0	451	0
15 to 24 years	46	0	24	0	22	0
25 to 44 years	22	0	7	0	15	0
45 to 64 years	3	0	1	0	2	0
65 years and over	0	0	0	0	0	0
Age unknown	1	0	1	0	0	0
State total	1,407	1	746	0	661	1

REPORTED CASES AND DEATHS FROM STREPTOCOCCIC SORE THROAT IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	0	1	0	1	0	0
1 to 4 years	2	1	1	1	1	0
5 to 14 years	28	2	11	0	17	2
15 to 24 years	26	0	6	0	20	0
25 to 44 years	27	3	10	4	17	1
45 to 64 years	1	0	0	0	1	0
65 years and over	1	2	0	1	1	1
Age unknown	4	0	0	0	4	0
State total	89	11	28	7	61	4

REPORTED CASES AND DEATHS FROM DIPHTHERIA IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	1	0	0	0	1	0
1 to 4 years	11	0	7	0	4	0
5 to 14 years	13	0	6	0	7	0
15 to 24 years	12	0	5	0	7	0
25 to 44 years	9	0	3	0	6	0
45 to 64 years	4	0	1	0	3	0
65 years and over	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
State total	50	0	22	0	28	0

REPORTED CASES AND DEATHS FROM WHOOPING COUGH IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	454	2	214	1	238	1
1 to 4 years	1,911	1	914	1	996	0
5 to 14 years	3,684	0	1,707	0	1,977	0
15 to 24 years	73	0	24	0	39	0
25 to 44 years	60	0	9	0	51	0
45 to 64 years	14	0	7	0	7	0
65 years and over	2	0	1	0	1	0
Age unknown	3	0	2	0	1	0
State total	*6,201	3	2,888	2	3,310	1

* Total cases include: 3 sex unknown.

REPORTED CASES AND DEATHS FROM MENINGOCOCCAL MENINGITIS IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	6	2	3	0	3	2
1 to 4 years	28	0	17	0	9	0
5 to 14 years	24	2	11	2	7	0
15 to 24 years	13	1	9	1	4	0
25 to 44 years	5	1	3	0	2	1
45 to 64 years	5	2	4	2	1	0
65 years and over	0	0	0	0	0	0
Age unknown	1	0	0	0	1	0
State total	80	8	53	5	27	3

REPORTED CASES AND DEATHS FROM ACUTE ANTERIOR POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1950, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	15	1	6	0	9	1
1 to 4 years	184	8	102	4	82	4
5 to 14 years	409	24	261	17	148	7
15 to 24 years	123	12	70	5	53	7
25 to 44 years	127	25	62	12	65	13
45 to 64 years	6	0	3	0	3	0
65 years and over	1	0	0	0	1	0
Age unknown	1	0	1	0	0	0
State total	866	70	505	88	361	32

REPORTED CASES OF ACUTE ANTERIOR POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1950, by County and Month

COUNTY	Total	NUMBER OF CASES											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Atlantic	9	0	0	0	0	0	0	0	1	3	5	0	0
Bergen	177	0	0	0	0	4	17	29	47	45	17	14	4
Burlington	3	0	0	0	0	0	0	1	0	0	2	0	0
Camden	24	1	0	0	0	0	0	4	3	4	12	0	0
Cape May	7	0	0	0	0	0	0	1	1	2	2	1	0
Cumberland	2	0	0	0	0	0	0	0	0	1	2	0	1
Essex	166	2	0	0	0	0	4	24	41	59	21	12	3
Gloucester	10	0	0	0	0	0	0	0	0	1	6	3	0
Hudson	101	2	2	0	0	1	0	4	16	35	16	18	7
Hunterdon	6	0	0	0	0	0	0	0	1	2	2	1	0
Mercer	42	0	1	0	0	1	0	0	5	15	13	6	1
Middlesex	38	0	0	0	0	0	1	0	8	16	10	2	1
Monmouth	48	0	1	1	1	0	3	3	11	12	10	5	1
Morris	68	0	1	0	0	0	3	2	9	27	15	8	3
Ocean	12	0	0	0	0	0	0	1	3	6	2	0	0
Passaic	31	0	0	0	0	0	0	2	4	13	8	4	0
Salem	18	0	0	0	0	0	0	0	1	8	6	1	2
Somerset	15	0	0	0	0	0	0	1	5	4	4	0	0
Sussex	3	0	0	0	0	0	0	0	2	0	1	0	0
Union	96	1	0	0	1	0	5	9	16	18	15	0	1
Warren	16	0	0	1	0	0	1	0	1	8	4	1	0
*State institutions	1	0	0	0	0	0	0	0	0	1	0	0	0
*Military posts	3	0	0	0	0	0	0	0	0	1	2	0	0
State total	866	6	5	2	2	6	84	81	175	280	172	79	24

* Cases reported by State institutions and military posts not included in county total.

REPORTED CASES AND DEATHS; CASE AND DEATH RATES OF TOTAL REPORTABLE DISEASES* BY COUNTY FOR 1950

COUNTY	Estimated† Population	Cases		Deaths	
		Number	Rate‡	Number	Rate‡
Atlantic	153,000	794	597.0	38	28.6
Bergen	538,000	14,090	2613.4	115	21.4
Burlington	136,000	1,256	923.5	42	20.9
Camden	300,000	4,947	1649.0	95	31.7
Cape May	37,000	380	1027.0	9	24.3
Cumberland	59,000	507	569.7	26	29.2
Essex	904,000	21,169	2341.7	202	22.3
Gloucester	92,000	1,041	1131.5	23	25.0
Hudson	647,000	3,443	532.1	188	29.1
Hunterdon	43,000	263	611.6	17	39.5
Mercer	228,000	2,102	921.9	62	27.2
Middlesex	265,000	4,584	1739.8	63	23.8
Monmouth	225,000	3,084	1370.7	58	25.8
Morris	165,000	2,803	1698.8	31	18.8
Ocean	56,000	788	1407.1	13	23.2
Passaic	358,000	4,907	1363.3	60	17.8
Salem	59,000	434	868.0	9	18.0
Somerset	99,000	1,541	1556.6	29	29.3
Sussex	34,000	182	535.3	4	38.2
Union	399,000	11,871	2975.2	78	19.5
Warren	54,000	401	742.6	19	35.2
State Institutions	§	570	§	0	§
Military posts	¶	729	¶	1	¶
State total	4,832,000	81,016	1676.7	1,191	24.6

* Exclusive of tuberculosis and venereal disease.

† Rounded to nearest thousand.

‡ Rate expressed per 100,000 estimated population.

§ Method of charging cases and deaths to institutions would make rates very misleading.

¶ Not available.

REPORTED CASES AND DEATHS; CASE, DEATH AND CASE FATALITY RATES FOR CERTAIN REPORTABLE DISEASES FOR 1950

DISEASE	Cases	*Cases per 100,000 Population	Deaths	*Deaths per 100,000 Population	Per Cent Fatality
Chickenpox	21,148	437.7	1	<0.1	<0.1
Diphtheria	50	1.0	0	...	...
German measles	6,644	137.5	0	...	...
Influenza	204	4.2	76	1.6	37.3
Measles	30,797	637.4	25	0.5	0.1
Meningitis, meningococcal	80	1.7	8	0.2	10.0
Mumps	10,539	214.0	1	<0.1	<0.1
Pneumonia	2,901	60.0	940	19.6	32.7
Poliomyelitis, acute anterior	898	17.9	70	1.4	8.1
Rocky Mountain spotted fever	11	0.2	1	<0.1	9.1
Scarlet fever	1,407	29.1	1	<0.1	0.1
Typhoid fever	80	1.2	2	<0.1	3.3
Whooping cough	6,201	128.3	3	0.1	<0.1

* Rates figured on an estimated population of 4,832,000

<0.1 indicates less than 0.1.

CASES AND DEATHS FROM OTHER REPORTABLE DISEASES FOR 1950

DISEASE	Cases	Deaths	DISEASE	Cases	Deaths
Anthrax	7	0	Paratyphoid fever	14	1
Botulism	0	0	Psittacosis	0	0
Brucellosis	35	2	Rabies in human	0	0
Dysentery, amoebic	52	2	Smallpox	0	0
Bacillary	9	0	Streptococcal sore throat	89	11
Unspecified	1	0	Tetanus	6	4
Encephalitis, infectious	42	13	Trachoma	0	0
Food poisonings	5	1	Trichinosis	16	0
Infectious diarrhea of the new born	1	15	Tularemia	2	0
Leprosy	1	0	Typhus fever	0	0
Malaria	11	0			
Ophthalmia neonatorum	6	0			

MALARIA IN NEW JERSEY—1941-1950

Year	Total No. Reported Cases	No. Cases in Military Personnel	No. Cases in Civilians	Probable Place of Infection of Civilian Cases		Doubtful
				Out of State	New Jersey	
1941	13	0	13	13	0	0
1942	20	4	16	9	7	0
1943	20	16	4	3	0	1
1944	826	788	38	32	5	1
1945	1,412	1,397	15	10	5†	0
1946	931	917	14	8	5†	1
1947	99	49	50	48	2	0
1948	36	23	13	11	2*	0
1949	26	16	10	5	5	0
1950	11	5	6	3	1*	2
Totals	3,394	3,215	179	142	32	5

* One of these cases infected through blood transfusion.

† Two of these cases infected through blood transfusion.

DEPARTMENT OF HEALTH

REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1960

COUNTIES	Anthrax	Breccellosis	Chickpox	Diphtheria	Dysentery, Amoebic	Dysentery, Bacterial	Dysentery, Unspecified	Encephalitis, Infectious	Food Poisonings & Infectious Diarrhea of New Born	Infuenza	Leprosy	Malaria	Measles	Measles, German
Atlantic	0	0	160	1	0	0	0	1	0	2	0	5	31	140
Bergen	0	0	4,220	0	0	0	0	0	0	0	0	0	1,337	1,491
Burlington	0	0	1,600	0	0	0	0	0	0	0	0	0	2,750	3,597
Camden	0	0	125	1	0	0	0	0	0	24	0	0	102	127
Cape May	0	0	171	1	0	0	0	0	0	0	0	0	302	312
Cumberland	0	0	4,171	0	0	0	0	0	0	68	0	4	7,000	4,000
Essex	0	0	244	2	0	0	0	0	0	0	0	0	509	5
Hudson	0	0	1,625	10	4	7	0	0	0	20	0	0	1,135	1,212
Hunterdon	0	0	102	0	0	0	0	0	0	0	0	0	82	187
Mercer	0	0	200	1	0	0	0	0	0	0	0	0	1,011	84
Middlesex	0	0	1,332	4	0	0	0	0	0	0	0	2	1,611	84
Monmouth	0	0	1,281	0	0	0	0	0	0	0	0	0	1,777	401
Morris	0	2	1,478	0	0	1	0	0	0	0	0	0	1,682	1,227
Ocean	0	0	68	0	0	0	0	0	0	40	0	0	1,330	87
Passaic	0	0	1,478	0	0	0	0	0	0	0	0	0	1,682	40
Paterson	0	0	329	2	0	0	0	0	0	0	0	0	752	35
Salmon	0	4	46	1	0	0	0	0	0	0	0	0	35	604
Somerset	0	0	2,915	3	3	0	0	0	0	0	0	0	1,419	35
Sussex	0	0	171	0	0	0	0	0	0	0	0	0	262	32
Union	0	0	172	0	43	0	0	0	0	2	0	0	313	13
Warren	0	0	173	1	0	0	0	0	0	0	0	0	262	32
Washington	0	0	173	0	0	0	0	0	0	0	0	0	313	13
Military posts	0	0	173	1	0	0	0	0	0	0	0	0	262	32
State total	1	35	21,148	50	52	9	1	42	6	204	1	11	30,707	6,614

DIVISION OF PREVENTABLE DISEASES

REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1960--Continued

COUNTIES	Mumps	Optic Nerve Neuritis	Paratyphoid Fever	Pneumonia	Acute Anterior Poliomyelitis	Rocky Mountain Spotted Fever	Scarlet Fever	Streptococcal Sore Throat	Tetanus	Trichinosis	Typhoid Fever	Typhoid Cough	
Atlantic	35	0	0	4	0	0	23	1	0	1	0	11	
Bergen	2,402	0	2	70	177	1	191	3	0	8	4	778	
Burlington	190	0	1	28	23	1	37	0	0	0	1	70	
Camden	3	0	0	10	27	1	26	0	0	0	1	45	
Cape May	87	0	0	40	2	3	16	0	0	0	0	57	
Cumberland	10	0	0	40	2	3	16	0	0	0	0	45	
Essex	12	4	3	1,450	106	0	281	11	1	2	0	6	
Hudson	40	0	0	30	10	0	10	0	0	0	0	1,200	
Hunterdon	2	0	0	11	10	0	20	0	0	0	0	126	
Mercer	35	0	0	11	10	0	20	0	0	0	0	36	
Middlesex	2	0	1	164	42	1	73	3	0	0	1	170	
Monmouth	316	0	1	99	38	0	67	0	1	0	1	100	
Morris	326	0	1	166	48	1	102	0	1	0	2	244	
Ocean	119	0	0	49	12	0	28	0	0	0	0	36	
Passaic	4	0	0	13	31	0	73	1	0	0	0	89	
Salmon	140	0	0	3	18	0	20	0	1	0	0	37	
Somerset	216	0	1	33	15	0	28	0	1	0	0	110	
Sussex	5	1	1	153	68	0	84	0	2	1	0	70	
Union	1,427	1	1	153	68	0	142	12	0	0	0	37	
Warren	0	0	0	13	10	0	6	0	0	0	0	0	
State Institutions	0	0	0	0	1	0	0	41	0	0	0	0	
Military posts	0	0	0	308	3	2	4	0	0	0	0	0	
State total	10,330	6	14	2,901	898	11	1,407	89	6	16	2	60	6,201

No reported cases of Adaptic cholera, Filariasis, Glaucoma, Plague, Psittacosis, Rabies in Humans, Smallpox, Trachoma, Typhus fever nor Yellow fever.

RECORDED DEATHS FROM COMMUNICABLE DISEASES BY COUNTIES FOR 1960

COUNTIES	Anthrax	Brucellosis	Chickenpox	Diphtheria	Dysentery, Amebic	Dysentery, Bacillary	Dysentery, Unspecified	Epileptitis, Infectious	Food Poisonings & Infectious Diarrhea of New Born	Influenza	Leprosy	Malaria	Measles	Measles, German
Atlantic	0	2	1	0	2	0	0	81	1	76	0	0	12	0
Bergen	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Burlington	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Camden	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cape May	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Essex	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloucester	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hudson	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hunterdon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middlesex	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monmouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morris	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ocean	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passaic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Somerset	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sussex	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Union	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warren	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warren Institutions	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State total	0	2	1	0	2	0	0	81	1	76	0	0	12	0

RECORDED DEATHS FROM COMMUNICABLE DISEASES BY COUNTIES FOR 1960—Continued

COUNTIES	Meningococcal Meningitis	Mumps	Ophthalmia Neonatorum	Paratyphoid Fever	Pneumonia	Acute Anterior Polyomyelitis	Rocky Mountain Spotted Fever	Scarlet Fever	Strepptococcal Sore Throat	Tetanus	Triblucosis	Typhoid Fever	Whooping Cough
Atlantic	0	0	0	0	18	1	0	0	1	0	0	0	2
Bergen	0	0	0	0	37	0	0	0	0	0	0	0	0
Burlington	0	0	0	0	37	0	0	0	0	0	0	0	0
Camden	0	0	0	0	4	0	0	0	0	0	0	0	0
Cape May	0	0	0	0	1	0	0	0	0	0	0	0	0
Cumberland	0	0	0	0	19	0	0	0	0	0	0	0	0
Essex	0	0	0	0	107	14	0	0	0	0	0	0	0
Gloucester	1	0	0	0	107	14	0	0	0	0	0	0	0
Hudson	0	0	0	0	17	7	0	0	0	0	0	0	0
Hunterdon	0	0	0	0	197	1	0	0	0	0	0	0	0
Mercer	0	0	0	0	52	2	0	0	0	0	0	0	0
Middlesex	0	0	0	0	52	2	0	0	0	0	0	0	0
Monmouth	1	0	0	0	50	2	0	0	0	0	0	0	0
Morris	0	0	0	0	25	3	0	0	0	0	0	0	0
Ocean	0	0	0	0	48	3	0	0	0	0	0	0	0
Passaic	0	0	0	0	48	3	0	0	0	0	0	0	0
Salmon	0	0	0	0	7	2	0	0	0	0	0	0	0
Somerset	0	0	0	0	21	4	0	0	0	0	0	0	0
Sussex	0	0	0	0	62	1	0	0	0	0	0	0	0
Union	1	0	0	0	32	2	0	0	0	0	0	0	0
Warren	0	0	0	0	0	0	0	0	0	0	0	0	0
Warren Institutions	0	0	0	0	1	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	946	70	1	1	21	4	0	2	0
State total	8	1	0	1	946	70	1	1	21	4	0	2	0

No recorded deaths from Asiatic cholera, Filariasis, Glaucoma, Phlegm, Tetanus, Rabies in Humans, Smallpox, Trachoma, Typhus fever nor Yellow fever.

Bureau of Cancer Control

During this fiscal period the Bureau devoted its efforts chiefly to professional education and to the Occupational Cancer Survey.

LAY EDUCATION

A modest amount of activity in lay education was maintained. Written matter was distributed on request. New cancer literature in the form of a simple one-page hand bill was prepared for distribution in the migrant worker clinics. A portable kit of speakers' aid charts on cancer was purchased. The following films were purchased for loan to lay and professional groups: "Breast, Self-Examination"; "Challenge: Science Against Cancer"; "Gastro-Intestinal Cancer—the Problem of Early Diagnosis"; "What is Cancer."

CANCER FELLOWSHIP

The Fellowship providing for one year of resident training in oncology at the James S. Green Memorial Tumor Clinic, Elizabeth, N. J., for a qualified New Jersey physician was maintained.

ORAL CANCER COURSES

Intensive one-week university courses in the detection and treatment of oral cancer were made available to New Jersey dentists. The Bureau of Dental Health in cooperation with the New Jersey State Dental Society organized the courses. The Bureau of Cancer Control provided the moneys to pay tuition and a per diem expense allowance for the students enrolled.

Five courses in all were offered: two at the University of Pennsylvania, Evans' Dental Institute; two at New York University School of Dentistry; one at Columbia University School of Dental and Oral Surgery.

Enrollment is limited to 20 students per course. All courses have been well attended. A total of 174 students have attended these courses since the first one was given in January 1950.

CANCER NURSING MANUAL

Four thousand copies of "Cancer Nursing—a manual for public health nurses" have been purchased and plans have been readied for their distribution in New Jersey early in the coming fiscal year.

"Cancer Nursing" was produced by the National Cancer Institute and the New York State Department of Health. It is an up-to-date ready reference for nurses engaged in the care and supervision of cancer patients and in the teaching of cancer control and nursing care.

Present plans call for distribution of "Cancer Nursing" to district health officers, licensed local health officers, State supervised public health nurses, unofficial health agencies employing nurses, visiting nurse associations, State nursing organizations, certain State and Federal agencies, colleges, hospital schools of nursing, State institutions, general hospitals, tumor clinics.

CANCER TRAINING FOR NURSES

Considerable thought has been given to the question of cancer education for nurses. Cancer nursing courses available at New Jersey, New York City and Philadelphia teaching centers were investigated. Adoption of a program of cancer training for nurses in the coming fiscal year is being proposed.

MATERIALS PREPARED FOR PROFESSIONAL EDUCATION

The Section on Pathology of the Division of Laboratories has continued its program of tissue consultation service for pathologists and the preparation of pathologic study materials. The Bureau of Cancer Control purchased a substantial amount of new equipment needed by the Section on Pathology in the provision of these services.

MISCELLANEOUS ACTIVITIES

The Bureau of Cancer Control transferred Cancer Control moneys to the Section of Heart Diseases as a share in the purchase of a multiphasic screening X-ray unit. The expenditure of these moneys is considered a contribution toward the early detection of intrathoracic cancer.

The Bureau of Cancer Control sponsored and arranged a meeting to discuss a formula for the evaluation of New Jersey cancer clinics in terms of adequacy of population coverage. The formula was proposed by the American College of Surgeons, and the U. S. Public Health Service and was presented at the meeting by representatives of these organizations. Also represented at the meeting were the New Jersey State Medical Society, the State Department of Health, the American Cancer Society, N. J. Division. The consensus of the meeting was that the application of the proposed formula in New Jersey would not be feasible.

OCCUPATIONAL CANCER SURVEY

The study of the possible relationship between occupation and cancer of certain selected body sites (respiratory system, urogenous system, osseous system, hematopoietic system, oropharyngeal region and skin) begun in November 1948, was still in progress at the end of the fiscal year. The study is jointly sponsored by the Department and the U. S. Public Health Service

and supported with Federal Grant funds. The first three phases of the study have been completed.

The first phase of the study was the extraction and photostating of selected cancer mortality data from 4,113 death certificates covering the period January 1, 1947 to August 30, 1949, inclusive. These data were compiled, coded and placed on punch cards.

In the second phase of the study, families or close friends of the subjects of the study were interviewed by nurses temporarily employed for this purpose. These nurses attempted to obtain additional data regarding habits, occupation and sources of medical care. Employment histories also were obtained through the cooperation of the Bureau of Old Age Pension and Survivors Benefits of the Federal Security Agency.

The third phase of the study was verification of the death certificate diagnosis. Additional medical data to support the diagnosis were sought by studying hospital records and through questionnaires and telephone calls to hospitals and physicians who had given medical care to the cases in the study. The verification work was done by physicians on the staff or temporarily employed for the study, and by a staff nurse.

After all available medical data were obtained the degree of accuracy of each diagnosis was evaluated and designated by use of one of five code numbers, as follows: 4—conclusive; 3—highly reliable; 2—probable but unconfirmed; 1—unconfirmed; 0—not cancer.

A diagnosis was deemed acceptable if the diagnosis could be rated either "conclusive" or "highly reliable." All others were not acceptable. Cancer diagnoses confirmed by histopathologic examination were considered the most reliable. Of the original 4,113 cancer diagnoses it was possible to verify the diagnosis for 3,062. The remainder could not be verified because either the diagnostic work done gave insufficient proof or a complete history of what was done could not be obtained.

Following verification, all diagnoses were recoded and reviewed. Cases not acceptable with respect to primary site of the cancer or to accuracy of diagnosis were weeded out leaving a balance of 2,567 cases suitable for further study.

The 2,567 cases selected for further study have been spotted on maps of New Jersey by primary site of cancer and by county. No attempt has yet been made to interpret the spot maps. Distribution of the cases by organ site and place of residence on an industrial map of New Jersey is contemplated.

Occupational histories of the 2,567 cases selected were scanned to determine what cases could feasibly be followed up in industry or other place of occupation. As a result, 1,918 were picked out for which follow-up of occupational experience was deemed practicable.

For the 1,918 cases selected for occupational follow-up, identifying data, code of diagnosis and employment history are being recorded on 4" x 6" cards. Employers or occupations shown in the employment history on the cards, are being given an industry code number. These cards will be convenient for future hand sorting analysis of data and in transfer of information to the Bureau of Adult and Industrial Hygiene for study in industry.

A complete code of New Jersey industries has not so far been obtainable. The chief reference to industry codes used in this survey is the Dunn and Bradstreet code listing. Other references used are the New Jersey Industrial Directory and the Standard Industrial Classification Manual. The New Jersey Department of Labor will supply names, addresses and code numbers of 45,000 New Jersey industries. Efforts have been made to obtain complete codes on New Jersey industries either from the Bureau of the Census or from the Bureau of Old Age and Survivors Insurance.

The State Disability Insurance Service has made available to our Division of Vital Statistics and Administration certain data concerning 2,000 completed claims for disability due to neoplasm. The question of using some of these data in the Occupational Cancer Survey is being explored. Five hundred and eighty-three of these claimants are living cases of benign and malignant neoplasms primary in those organ sites to which this cancer study is restricted. In anticipation of further study of these 583 cases the Bureau of Old Age and Survivors Insurance has been requested to supply employment data concerning them.

A study of current disability insurance claims due to neoplasm also is contemplated.

Section of Heart Diseases

Earlier cardiac case-finding is the goal of the program. Early diagnosis makes it possible to prescribe treatment that will enable an individual to have a longer, more productive and more enjoyable life. The responsibility for early diagnosis of heart disease rests upon the family physician. To help make early diagnosis possible, the heart disease control program has endeavored to place at the disposal of physicians the newer diagnostic aids and knowledge gained through research. Expenditure of heart funds for this fiscal year has included \$15,590 for training courses for physicians.

DEMONSTRATION CARDIAC DIAGNOSTIC AND CONSULTATION CENTERS

Laboratory and other specialized equipment and facilities are required to carry out the complex diagnostic techniques essential for the accurate evaluation of certain cardiac cases. Because it is not practicable for the private physician to have all this special equipment in his office, heart funds have been

used to assist in the establishment of demonstration cardiac diagnostic and consultation centers in various areas of the State. Physicians may refer patients to these centers for further cardiac study or for consultation if the patient is unable to afford private consultation.

The first cardiac demonstration center was established at St. Michael's Hospital in Newark, and this is the only center in New Jersey fully equipped at present for the diagnostic work-up which is necessary before undertaking cardiac surgery. At this hospital pioneer work in the diagnostic study of cardiovascular abnormalities had been started through the cooperation of the cardiology staff and hospital administrators. Every effort has been made to augment this pioneer beginning and to render financial aid in the purchase of the necessary equipment. This cardiovascular surgical service is available to all physicians and their cardiac patients in New Jersey. During the past 18 months, 72 patients having different types of congenital heart abnormalities have undergone successful surgery at St. Michael's Hospital.

The second cardiac demonstration center is being developed at McKinley Memorial Hospital in Trenton. This center has been provided with an electrocardiograph machine and vertical fluoroscope and a basic X-ray unit for multiphasic screening. The report from the cardiac clinic indicates a 30% expansion in its activities this year. The multiphasic screening program is scheduled to start November 1, 1951, when the new addition to the outpatient department is to be completed.

The third cardiac demonstration center situated in the District Health Office at Mays Landing is being developed to provide a cardiac disease control program for the surrounding rural counties. In February the district nurse supervisor attended a two-week workshop on cardiovascular diseases which was given at Teachers College, Columbia University, New York City. A showing of the films, "Guard Your Heart," accompanied by talks on cardiovascular diseases by Dr. Newbury, District Health Officer, and one of the local physicians was enthusiastically received by members of the Rotary Club. Plans for a cardiac consultation service for rural physicians are being formulated.

To further expand cardiac case-detection, eight vertical fluoroscopes were purchased and placed in the following hospital cardiac clinics:

Muhlenberg Hospital, Plainfield
Lutheran Memorial Hospital, Newark
St. Michael's Hospital, Newark
St. Vincent's Hospital, Montclair
Fitkin Memorial Hospital, Neptune
Elizabeth General Hospital, Elizabeth
St. Francis Hospital, Trenton
McKinley Memorial Hospital, Trenton

PROFESSIONAL EDUCATION FOR PHYSICIANS

A two-year period of training of two surgeons associated with St. Michael's Hospital has been provided by State heart funds in order to prepare them to serve as consultants in the screening of cardiac surgical cases and to carry on the program of cardiovascular surgery in this State. Dr. Charles Bailey, Chief of Thoracic Surgery at Hahnemann Medical College and Hospital, Philadelphia, supervises their training.

Provision was also made for the surgical staff at St. Michael's Hospital to receive training under the guidance of Dr. Claude Beck, who originated the Beck operative technique for the surgical treatment of coronary heart disease. During the past year Dr. Beck and his staff made nine visits to St. Michael's Hospital, at which times Dr. Beck and the surgical team successfully performed a number of operations on eight patients suffering from coronary heart disease.

Other phases of demonstration and training made possible by the State Department of Health heart funds were visits to Johns Hopkins Hospital, Baltimore, and Michael Reese Hospital, Chicago, so that two physicians in charge of the cardiac catheterization projects at St. Michael's Hospital could exchange experiences with physicians working in the same field in other institutions.

COURSE IN CARDIOLOGY FOR THE GENERAL PRACTITIONER

Because of the wealth of clinical material at St. Michael's Hospital and the highly trained staff of cardiologists, this hospital has developed into an education center where the general practitioner may receive a training course in the newer knowledge and techniques of early cardiac case-finding. Such a course was held on Wednesday afternoons from 4 to 6 p. m. for 30 weeks, from October, 1950 to May, 1951. Eminent cardiologists lectured on their respective fields. Mimeographed copies of their lectures were prepared for the convenience of the course participants. In addition to the lectures, the physicians attending the course were given an opportunity to make rounds on the wards and to observe the cardiac clinics. Groups of seven physicians were given four special training sessions in each of the following: Fluoroscopy, electrocardiography and pathology. Our only regret is that facilities at St. Michael's Hospital could accommodate only 75 of the 600 who applied. A geographical selection of applicants was made.

For physicians who exhibited unusual interest and regularly attended the cardiology course, additional short courses in electrocardiography and other special aspects of cardiology have been provided. Six of these physicians are now contributing their services to the St. Michael's heart clinics, the attend-

ance of which has greatly expanded due to the increased number of referrals from physicians from all parts of the State.

Course participants were also invited to attend the diagnostic consultation conference which is held at St. Michael's Hospital every Wednesday from 12:00 to 2:00 p. m. At this conference cardiac patients are presented after a routine work-up and preliminary screening to determine their amenability to surgical correction. The history, physical findings and laboratory data are carefully reviewed and recommendations for further diagnostic procedures are discussed. After the definitive studies are completed the patients are again presented at the conference and the final decision as to the best form of therapy for each individual patient is made. This conference is open to physicians, nurses and social workers.

At each of the two weekly cardiac clinics at St. Michael's Hospital, staff conferences have been conducted in which all of the attending physicians review every case. Wednesday's clinic from 9 to 11 a. m. is limited to cardiac patients, referred by physicians, who are residents of Essex County. This clinic is conducted by cardiologists and pediatricians of the hospital in cooperation with the staff of the Crippled Children's Commission of the State Department of Health. Physicians may refer any child or adult cardiac patient residing anywhere in the State of New Jersey to the Friday clinic which is held from 9 to 11 a. m.

The majority of cases evaluated at the Friday General Heart Clinic have been referred by physicians from all over the State of New Jersey.

MULTIPHASIC SCREENING

The routine use of a number of diagnostic tests at one time and in one place has been encouraged. Through multiphasic screening it is anticipated that unknown cardiac cases will be discovered earlier, and also other remedial conditions. In this way the patient may be referred to the family physician for further study before permanent disability develops.

St. Michael's Hospital has undertaken a multiphasic screening program which includes serology tests for syphilis, hemoglobin and Rh factor determinations and a 70 mm. chest X-ray for patients, hospital personnel and employees.

The following table indicates the scope of the work:

MULTIPHASIC SCREENING, JANUARY 1 TO JUNE 15, 1951 ST. MICHAEL'S HOSPITAL, NEWARK	
Number of patients X-rayed	2,344
Clinic patients	1,377
Hospital in-patients	912
O. P. D. private patients	55
Number of patients with cardiac pathology	109
Previously known cardiac pathology	42
Previously unknown cardiac pathology	67
The disposition of the 67 newly-discovered cases with cardiac pathology is as follows:	
Cases being followed at clinic	38
Cases being followed by Pvt. Dr.	6
Cases awaiting evaluation in cardiac clinic	23
Number of patients with suspected lung pathology	83
From this number, after re-X-ray on large film, 5 were diagnosed as active lung pathology. However, after more complete study of the patients the total number of active cases was reduced to 2.	
Blood serology tests: (Total for April 1 to June 15)	104
Positive cases—None.	
All in-patients and a considerable number of clinic patients have routine serology tests.	
Hemoglobin determinations made	122
Hemoglobin determinations below 80%	31

At St. Michael's Hospital each additional test has been added to the screening program only after it appeared that arrangements for the essential follow-up of a screening test were satisfactory and the hospital personnel had become adapted to the screening procedures. Arrangements are presently being made to include urine tests for diabetes. As soon as personnel is adequate it is hoped that the Health-Index Questionnaire may be introduced.

MASS CHEST X-RAY SCREENING

Referral of abnormal cardiac findings to the family physician for further study was instituted for the mass chest X-ray screening of the State Bureau of Tuberculosis Control. A form letter has been sent to the physician and to the individual. To our knowledge to date at least 35% of these cases have complied with the request to report to their physicians for a complete physical examination and are under the observation of their family physician. A number of physicians have expressed gratitude for these referrals and have reported definite improvement in heart conditions following therapy.

COMMUNITY PUBLIC HEALTH PROGRAMS

Plans are being formulated to build community public health programs around the cardiac demonstration and training centers. Because heart disease is difficult to detect and is chronic in nature, the full use of community facilities is a necessity. The community problems arising from heart disease are many and are influenced by the long periods of incapacitation and the social, emotional and economic adjustments of the patient. The general practitioner would find it difficult to provide family counseling, home nursing, psychiatric guidance and rehabilitation service for his cardiac patients. Yet, without these services, the physician's finest effort may not be effective. To meet the total needs of the patient, there should be coordinated efforts by the general physician, cardiologist, psychiatrist, pediatrician, other specialists, nurse, social worker, nutritionist, occupational therapist, rehabilitation worker, and other health workers. For coordinating community health services, a planning body representing all interested agencies, public, private and interested individuals is essential. Such a planning body is presently being organized.

A better understanding of heart disease by the public is one of the present needs. Pamphlets and films are now available from the State Department of Health for use in community education.

Bureau of Tuberculosis Control

REPORT FOR THE 18 MONTHS PERIOD JANUARY 1, 1950—JUNE 30, 1951

Major changes in the tuberculosis control program have been instituted following a series of inter-departmental conferences for critical examination and revision of the program. Instead of scheduling mass chest X-ray surveys as they were requested, preference has been given to areas which have a relatively high incidence of tuberculosis as shown by morbidity and mortality reports and experience in previous surveys. Industrial surveys are being limited to demonstrations in industries never before surveyed and located in high prevalence areas.

A reasonable price having been secured from a commercial concern for chest X-ray service, the Bureau began in May 1951 to use this service to supplement, and to replace in part, the work formerly carried on by State employees using state-owned equipment. If the commercial service proves to be economical and satisfactory, an increased use of commercial facilities is planned.

Also in May 1951, the replacement of two out-moded X-ray units with a new bus equipped with a new X-ray machine was accomplished. This modern equipment should reduce loss of time due to breakdowns.

Follow-up of suspected and known cases and contacts has been intensified in an effort to secure necessary medical care and public health supervision. A new morbidity report card has been designed which requires information about the clinical status of the disease and the organ affected. The use of this new report will make possible more comprehensive studies regarding the extent of the tuberculosis problem as it exists in New Jersey and will enable public health workers to determine more readily which cases require priority for follow-up.

As a part of Departmental reorganization, the Tuberculosis Control Program was designated as the Bureau of Tuberculosis Control in July 1950. In October 1950 administrative changes were made within the Bureau. Having completed work for a Masters Degree in Public Health, Dr. Thomas F. Pugh was appointed chief of the Bureau. Dr. A. Joseph Hughes has continued to interpret survey X-ray films. Medical service to clinics has been divided among Dr. Hughes, Dr. Max Gross and Dr. Alan J. Stalow. One X-ray technician was assigned full time to the Trenton clinic and another continued to assist in several clinics in the southern part of the State. Also in October 1950, Mrs. Sara Errickson, Nurse Consultant in Tuberculosis, was assigned to the Bureau full time. She resigned from the Department in May 1951 and has not been replaced.

The following major activities were continued: (a) transmission to local health departments of current information on tuberculosis cases, contacts and suspects involving veterans, Selective Service rejectees, and out-of-state persons; (b) referrals of chest X-ray suspects from state conducted surveys for local follow-up; (c) coding and editing of survey referral cards preliminary to key punching; (d) receipt, filing and coding preliminary to key-punching of tuberculosis morbidity reports; (e) maintenance of tuberculosis index files; (f) requests for reports by local boards of health on unreported cases of tuberculosis; (g) making arrangements for mass chest X-ray surveys with representatives of industries, Tuberculosis Leagues, community leaders, etc., and following through to the conclusion of the survey.

HOSPITAL AND CLINIC FACILITIES IMPROVED

X-ray and accessory equipment was provided in January 1950 for a new chest clinic at the Elmer Medical Center, making 12 clinics using state-owned equipment. The new clinic was made possible through the cooperative efforts of the Salem County Health Association, the directors of the Elmer Medical Center, interested local physicians, and the New Jersey State Department of Health. Operation of the new clinic began in March under the direction of a State clinician.

In July 1950 photofluorographic apparatus was delivered to Our Lady of Lourdes Hospital, a new hospital in Camden, with a view toward establishing routine chest X-raying of in-patients, out-patients and hospital personnel.

The St. Francis Hospital, Trenton, continued its use of a state-owned photofluorograph for the routine chest X-raying of its admissions, out-patients, and personnel.

INTER-DEPARTMENTAL COMMITTEES

The Inter-departmental Committee of the State Departments of Education and Health reviewed chest X-ray surveys in State Teachers Colleges and agreed on the substitution of tuberculin patch tests for mass X-ray surveys of this low prevalence group.

In November the first meeting of the Tuberculosis Committee of the Inter-departmental Council (State Department of Health and State Department of Institutions and Agencies) was held. At this session tuberculosis control in State institutions, factors related to resistance on the part of tuberculous persons in obtaining sanatorium care, and the management of recalcitrant infectious cases of tuberculosis were discussed and recommendations made. Succeeding meetings have been concerned with specific problems of State institutions.

The Bureau participated in the formulation of tuberculosis control measures for the State Civil Defense Medical and Health Preparedness Committee from the viewpoint of recommended pre-disaster and disaster activities.

OBSERVATIONS FROM STATISTICAL DATA

Mass chest X-ray survey service performed by the Bureau in 1950 is presented in Table 1 for the various types of surveys. It should be noted that referrals indicated on Table 1 do not include referrals for follow-up primarily because of cardiovascular abnormalities. Since August 1950, persons with suspected cardiovascular abnormalities discovered in chest X-ray surveys have been referred to the Section of Heart Diseases for follow-up. The high referral rates for mental institutions and institutions for defectives remain disquieting indications of the severity of the tuberculosis problem in such institutions.

TABLE 1. TYPES OF CHEST X-RAY SURVEYS CONDUCTED BY THE NEW JERSEY STATE DEPARTMENT OF HEALTH, READABLE X-RAYS AND SUSPECTS REFERRED FOR FOLLOW-UP BECAUSE OF PULMONARY AND OTHER NON-CARDIOVASCULAR ABNORMALITIES, JANUARY 1 TO DECEMBER 31, 1950

Survey Type	Readable X-rays	Suspects	
		Number	Per Cent
Industrial	77,303	2,971	3.8
Community	62,488	2,433	3.9
Colleges	10,268	194	1.9
Mental hospitals	10,095	868	8.6
Reformatories and penal institutions	2,089	81	3.9
Training schools, institutions for defectives	7,625	387	5.1
Government employees, State, Federal, local welfare organizations	3,044	67	2.2
Homes for aged	61	15	24.6
Fairs	1,695	42	2.6
Total	174,668	7,058	4.0

Table 2 is presented so that the total extent of reported chest X-ray survey work in the State can be appreciated. The relative emphasis that surveys in schools and colleges received in New Jersey in 1950 deserves attention; greater emphasis on other types of surveys would probably result in more rewarding proportions of cases found.

TABLE 2. TYPES OF CHEST X-RAY SURVEYS REPORTED TO HAVE BEEN CONDUCTED¹ AND NUMBER OF X-RAYS, NEW JERSEY, JANUARY 1 TO DECEMBER 31, 1950

Survey Type	X-rays
Industrial	90,811
Community	125,456
Schools and colleges	100,826
Other	30,768
Total	347,861

Table 3 shows county distributions of industrial and community surveys conducted by the Department, and pulmonary and other non-cardiovascular referral rates. The counties indicated are the counties in which the surveys were conducted. The observed variability of referral rates from county to county is not necessarily related only to the variability of the severity of the tuberculosis problem in the counties. In addition this observed variability is

¹ Includes surveys conducted by New Jersey State Department of Health, American X-ray Surveys, National X-ray Surveys, Inc., Powers X-ray Service and the Bergen County Tuberculosis and Health Association, Inc.

probably related to the nature of the group from which participation was obtained by local community organizers, to variability on the part of X-ray readers, and to differences in sample size.

TABLE 3

Counties of Industrial and Community Chest X-ray Surveys Conducted by the New Jersey State Department of Health. Readable X-rays and Suspects Referred for Follow-up Because of Pulmonary and Other Non-cardiovascular Abnormalities, January 1 to December 31, 1950

County	Industrial Suspects			Community Suspects			Total Suspects		
	Readable X-rays	No.	Per Cent	Readable X-rays	No.	Per Cent	Readable X-rays	No.	Per Cent
Atlantic	.....	.....	.....	3,811	206	5.4	3,811	206	5.4
Bergen	1,978	105	5.3	3,370	121	3.7	5,348	226	4.3
Camden	9,866	369	3.9	3,040	108	3.6	12,406	477	3.8
Cape May	168	12	7.1	3,063	125	4.1	3,233	137	4.2
Cumberland	4,288	132	3.1	683	29	4.2	4,973	161	3.2
Essex	6,788	260	3.8	101	9	8.9	6,889	269	3.9
Gloucester	403	6	2.0	985	30	4.0	1,388	47	3.4
Hudson	5,265	228	4.3	.....	.....	.....	5,265	228	4.3
Hunterdon	1,020	39	3.8	.....	.....	.....	1,020	39	3.8
Mercer	2,906	123	4.2	3,760	102	2.7	6,666	225	3.4
Middlesex	9,462	320	3.4	2,515	98	3.9	11,977	418	3.5
Monmouth	2,357	56	2.8	972	28	2.9	3,329	84	2.5
Morris	4,824	177	3.7	7,432	283	3.8	12,256	460	3.8
Ocean	.....	.....	.....	1,063	53	5.0	.....	.....	.....
Passaic	15,630	639	4.2	17,971	689	3.8	33,621	1,348	4.0
Salem	1,908	87	4.4	1,948	90	4.6	2,856	157	4.5
Somerset	2,415	61	2.5	4,948	181	3.6	7,363	242	3.3
Sussex	136	4	2.9	640	27	4.2	776	31	4.0
Union	5,687	232	4.1	3,172	117	3.7	8,859	349	3.9
Warren	3,682	119	3.9	3,110	128	4.1	6,192	247	4.0
Total	77,303	2,971	3.8	62,488	2,433	3.9	139,791	5,404	3.9

There were 5,293 chest photofluorograms taken by St. Francis Hospital during the year, an increase of almost 1,000 over last year.

In addition to 7,058 referrals to local agencies for follow-up from chest X-ray surveys, the office staff transmitted to local agencies 136 X-ray reports on Selective Service rejectees, and transmitted 439 reports originating from the Veterans' Administration dealing with tuberculosis cases and contacts. There were 380 requests made for official reports on unreported cases.

Table 4 presents a summary of selected activities of chest clinics operating X-ray equipment owned by the Department. There were 287 persons admitted to sanatoria from these clinics in 1950.

TABLE 4. SELECTED ACTIVITIES OF CHEST CLINICS OPERATING X-RAY EQUIPMENT OWNED BY THE NEW JERSEY STATE DEPARTMENT OF HEALTH, JANUARY 1 TO DECEMBER 31, 1950

Number of chest X-rays taken	13,372
(a) Number of persons X-rayed for first time	8,124
(b) Number of persons re-X-rayed	5,248
Number of sputum specimens collected for examination for tubercle bacilli	2,687
Number of persons with one or more sputum specimens positive for tubercle bacilli	74
Number of persons admitted to sanatoria	287

Tuberculosis morbidity data for 1950 is shown in Table 5. In keeping with mortality data for New Jersey presented elsewhere in the Department's Annual Report, the male disadvantage in tuberculosis is noteworthy. The ratio of male to female cases was 1.65. The seriousness of the tuberculosis problem among non-white persons is apparent. Of all newly reported cases, 708 or 20.0% occurred among non-white persons, but the non-white group comprised only about 5.5% of New Jersey's total 1950 population. It is suspected that non-white environmental disadvantages largely account for this difference in prevalence. White males were reported in greatest numbers in the 45 to 64 year age group; white females in the 25 to 44 year age group, and non-white males and females in the 25 to 44 year age group. It is of interest that there were no reports of cases of tuberculosis in children less than one year of age.

TABLE 5
Newly Reported Cases of Tuberculosis by Age, Sex and Color—New Jersey—
January 1 to December 31, 1950

Age in Years	Male				Female				Both Sexes			
	White	Non-white	Un-known	Total	White	Non-white	Un-known	Total	White	Non-white	Un-known	Total
<1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1-4	18	12	.....	30	17	15	.....	32	33	27	.....	62
5-14	31	12	.....	43	22	14	.....	36	53	26	.....	79
15-24	131	63	.....	194	161	86	1	248	292	149	1	442
25-44	539	183	.....	727	481	127	.....	608	1,020	315	.....	1,335
45-64	771	111	1	883	261	38	.....	299	1,032	149	1	1,182
65 and over	294	25	.....	319	101	8	.....	109	395	33	.....	428
Unknown	8	6	.....	14	3	3	.....	6	11	9	.....	20
Total	1,792	417	1	2,210	1,046	291	1	1,338	2,838	708	2	3,548

CONTRIBUTIONS OF CLINICIAN SERVICES, X-RAY EQUIPMENT OR BOTH TO CHEST CLINICS,
JANUARY 1 TO DECEMBER 31, 1950

<i>Location of Clinic</i>	<i>Clinician Services</i>	<i>X-ray Equipment</i>
Atlantic County:		
Atlantic City	x	
Hammonton	x	x
Mays Landing	x	x
Bergen County:		
Cliffside Park		x
Garfield		x
Burlington County:		
Burlington		x
Cape May County:		
Cape May Court House	x	x
Cumberland County:		
Bridgeton	x	
Millville	x	
Vineland	x	
Essex County:		
Newark	x	
Gloucester County:		
Pitman	x	
Woodbury	x	
Mercer County:		
Princeton	x	
Trenton	x	x
Monmouth County:		
Asbury Park	x	
Freehold	x	
Keansburg	x	
Keyport	x	
Long Branch	x	
Matawan	x	
Middletown	x	
Neptune	x	
Red Bank	x	
Ocean County:		
Lakewood	x	x
Passaic County:		
Paterson		x
Salem County:		
Salem	x	
Sussex County:		
Newton	x	x
Warren County:		
Phillipsburg	x	x

Bureau of Venereal Disease Control

In the last year, the Bureau of Venereal Disease Control has directed its emphasis toward case-finding. The simplicity of modern therapy and the downward trend of venereal disease incidence has resulted, in some quarters, in an unwarranted relaxation of control activity. The progress which has been made can be maintained only through the persistent and sustained application of control techniques.

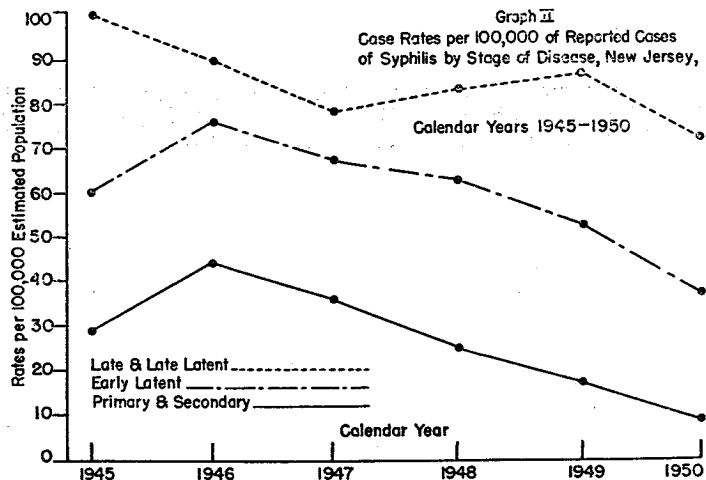
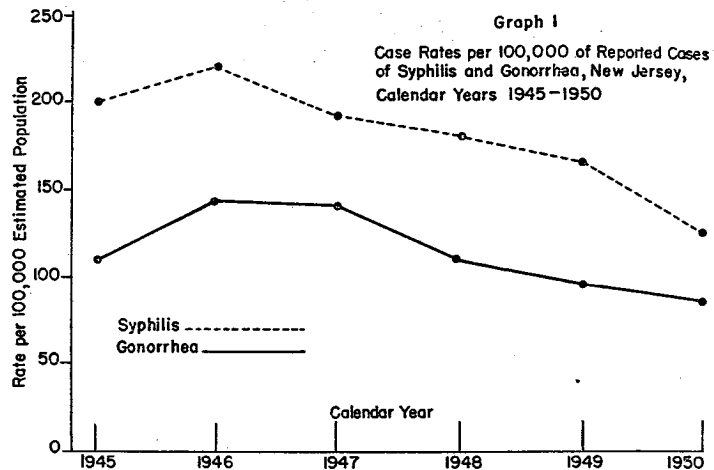
MORBIDITY TRENDS

Any observations or conclusions with regard to morbidity must be predicted on the assumption that the percentage and accuracy of reporting are the same for all areas of the State. The value of collection of morbidity statistics depends upon the accuracy of the reported data and the extent of under-reporting.

The reporting of the total incidence of syphilis in New Jersey continued its downward trend in 1950 (Graph I). On the basis of the data in Table I, it can be shown that the decline in the reported cases of all classifications of syphilis was 25.1% in 1950, compared with a 21.1% decline in 1949. However, it must be noted that the per cent decline in reported cases of primary and secondary syphilis was 53.3% while that for 1949 was only 34.8%. In 1950, as in 1949, not only has the number of late and late latent cases reported actually exceeded the number of infectious cases reported, but the degree of excess has increased by 11% over last year. Successful control of communicable disease depends upon the recognition and the elimination of sources of infection. More cases than are found are still being missed at the time of greatest communicability.

Although the reported incidence of syphilis has decreased, the venereal disease problem is still a serious one. As military and industrial mobilization efforts are intensified and as the attendant dislocation of population and separation of young people from their home influences increases, the venereal disease problem will become more serious. While progress in the field of treatment of venereal disease has been remarkable, it must be remembered that antibiotics do not prevent infections, do not confer immunity to repeat infections, and do not even reach many persons who are infected. Moreover, it has been pointed out that the long term trends in the incidence of syphilis have not been importantly altered by antibiotic therapy. From the present rate of decline it cannot yet be said that eventual complete control will be reached.

For the first time, physicians in private practice reported a higher number of cases of primary and secondary syphilis than did clinics and other agencies. This change in proportion may be explained, in part, by a greater tendency



to refer venereal disease suspects to private physicians for diagnosis and treatment. It may also be reasonably assumed that the health education efforts of field personnel is beginning to play a more important role in stimulating the public to seek the attention of physicians.

In Table I it is of interest to note that there was very little decrease in the reported incidence of congenital syphilis. However, it must be remembered that the morbidity figures probably do not give a true picture of the occurrence of this disease. It cannot be assumed that there is adequate follow-up activity in instances of women who, while in the child-bearing age, have a positive serology. While there is an increasing cognizance of the congenital syphilis problem, not enough diagnoses are made in early infancy. Only 18% of the reported cases of congenital syphilis were in children under 10 years of age, yet it is an accepted fact that symptoms usually appear before that age. Furthermore, only 28.6% of reported congenital syphilis was detected in children before the age of 15. An outstanding apparent inconsistency is the fact that 15.9% of the reported cases of congenital syphilis were reported to be in the 20-24 year age group. This is the group which yields more early acquired syphilis than any other. It is almost a certainty that many asymptomatic infections in young adults are believed to be congenital syphilis because the patients do not readily give a history of sexual exposure.

There is a relatively small group of individuals who contributed substantially to the syphilis morbidity figures in Table I. The non-white, 20-29 year age group accounted for 864 (40.6%) of the total 2,128 cases of primary, secondary, and early latent syphilis. This relatively small segment of the population thus assumes tremendous proportions in the planning of the control program.

According to Table I, gonorrhoea constituted a significant part of the total venereal disease problem during 1950. The 3,933 cases reported by clinics and private physicians during the year represent a decline of 11.6% when compared to 4,449 cases reported in 1949. Table II-B shows that Newark accounted for 1,447 of the reported infections.

In order to further the control of infectious venereal disease, it is necessary to select those areas in the State which demonstrate the highest incidence figures and attack the problem in those areas. Toward this end the Bureau has tabulated cases according to the county and selected cities of residence for the purpose of comparison. All rates are expressed per 100,000 estimated (1950) population. Table II-A indicates that the Central and Southern State Health Districts with case rates of 178.7 and 160.4, respectively, have the greatest syphilis problems in the State. It is interesting to note that the reported gonorrhoea rate is comparable in all Districts except the Northern District, where the rate was only 18.5 as compared to 80.8 for the State as a whole.

TABLE I.—REPORTED CASES OF ALL VENEREAL DISEASES BY STAGE AND REPORTING AGENCY, NEW JERSEY, 1940-1950

Disease	1950			1949			1948			1947			1946		
	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total
Syphilis	2,566	5,882	8,448	3,069	3,824	6,893	4,126	4,224	8,350	4,355	4,380	8,735	4,810	5,071	9,881
Primary	1,804	4,208	6,012	2,173	2,362	4,535	2,711	2,711	5,422	2,711	2,711	5,422	2,711	2,711	5,422
Early Latent	804	1,415	2,219	1,282	1,415	2,697	1,415	1,415	2,830	1,415	1,415	2,830	1,415	1,415	2,830
Late and Late Latent	97	1,615	1,712	1,088	1,388	2,476	94	1,122	1,216	98	1,122	1,220	1,063	1,490	2,553
Congenital	0	227	227	0	138	138	0	117	117	0	94	94	0	137	137
Gonorrhea	0	0	0	98	98	196	25	69	94	41	22	63	33	21	54
Acute	0	0	0	1,220	3,220	4,440	1,505	2,504	4,009	2,215	4,214	6,429	2,785	3,082	5,867
Chronic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Granuloma inguinale	4	19	23	0	0	0	0	0	0	0	0	0	0	0	0
Lymphogranuloma venereum	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0
Venereum	1	20	21	0	0	0	0	0	0	0	0	0	0	0	0

* Hospitals, jails, reformatories, other institutions.

In the Metropolitan District, Essex County appears to have the highest syphilis and gonorrhea rates. This high rate is traceable to the city of Newark (Table II-B), where the attack rates were 244.9 for syphilis and 329.6 for gonorrhea. The gonorrhea rate was the highest in the State and the syphilis rate was third highest for the selected cities. Similarly, Mercer and Monmouth Counties, which represent approximately 50% of the population of the Central State Health District, reported nearly 70% of the total syphilis in that District. As seen in Tables II-A and II-B the city of Trenton reported

TABLE II-A—SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND COUNTY OF RESIDENCE, NEW JERSEY, 1950

AREA	Syphilis		Gonorrhea	
	Number	Rate	Number	Rate
New Jersey	5,758	119.4	3,903	80.8
Northern District	153	39.1	73	18.3
Hunterdon County	14	37.2	8	18.6
Morris County	39	23.6	15	26.1
Somerset County	69	69.7	12	17.2
Sussex County	14	41.2	2	5.0
Warren County	17	31.5	5	9.3
Metropolitan District	2,877	101.2	2,365	83.8
Bergen County	194	36.1	121	22.1
Essex County	1,351	149.4	1,598	178.8
Passaic County	796	113.8	329	50.9
Union County	218	64.5	215	62.6
Central District	358	89.7	158	35.5
Burlington County	1,627	178.7	780	41.9
Mercer County	162	75.0	37	16.9
Middlesex County	324	229.8	352	154.4
Monmouth County	330	124.5	105	39.6
Ocean County	352	235.1	251	111.6
Southern District	79	141.1	15	28.8
Atlantic County	1,128	100.4	685	97.7
Camden County	387	201.0	166	147.4
Cape May County	291	87.0	39	70.0
Cumberland County	61	164.9	39	135.1
Gloucester County	223	237.3	110	129.6
Salem County	110	119.6	69	65.2
	75	136.0	32	64.0

* Rates expressed per 100,000 estimated population.

TABLE II-B—SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND SELECTED CITY OF RESIDENCE, NEW JERSEY, 1950

AREA	Syphilis		Gonorrhea	
	Number	Rate	Number	Rate
New Jersey	5,758	119.4	3,903	80.8
Northern District	153	39.1	73	18.3
Metropolitan District	2,877	101.2	2,365	83.8
Bayonne	11	124.7	5	6.5
Clifton	96	46.9	3	4.6
East Orange	59	114.1	11	12.8
Elizabeth	44	127.4	32	46.0
Hoboken	44	86.3	7	12.7
Irvington	19	16.9	2	2.4
Jersey City	456	161.3	294	101.0
Newark	1,073	244.9	1,447	320.6
Passaic	56	96.0	20	51.7
Paterson	138	91.4	170	121.4
Union City	28	30.9	4	7.3
Central District	1,627	178.7	780	78.9
Trenton	427	333.6	368	249.6
Southern District	1,128	160.4	685	97.7
Atlantic City	391	485.5	164	264.5
Camden	183	148.0	105	150.0

* Rates expressed per 100,000 estimated population.

more than 80% of the total syphilis in Mercer County during 1950. The attack rate for syphilis in Trenton was 333.6, which was the second highest rate for the selected cities. Atlantic City maintained its previous status as the city of highest syphilis incidence, with a reported rate of 485.5. Its gonorrhoea rate, 264.5, was second only to that of Newark. As a matter of interest, Cumberland County, also in the Southern District, had a syphilis case rate of 257.3, which represents 74 more cases than were reported from the entire Northern Health District which is composed of five counties. Considered from another aspect, 339 cases of syphilis and gonorrhoea were found in an area having 89,000 population, while only 228 cases of syphilis were found in an area of 395,000 population.

These comparisons are made for the purpose of pinpointing the "areas of greatest need" in New Jersey. Only when the areas of highest incidence are known is it possible to institute effective and efficient control measures. In a period when funds were drastically reduced, it was necessary to shift emphasis to those areas which yield cases at a relatively low unit cost.

BASIC MAINTENANCE CONTROL

The question as to when New Jersey will reach Basic Maintenance Control—one fresh case of syphilis per 5,000 persons per year—is constantly being raised. It is felt that this answer cannot be given at this time with any validity because of the multiplicity and uncontrollability of variables affecting the incidence of syphilis. Moreover, the full impact of the present industrial and military mobilization has not yet been reflected in reported venereal disease morbidity. It can be said, however, that it is believed that New Jersey will reach Basic Maintenance Control, although it is about two times above this goal at present.

EPIDEMIOLOGIC INVESTIGATIONS

By way of definition, the human objects of venereal disease epidemiological search are separated into two categories, sexual contacts and other suspects. In the first category, 2,248 persons were assigned to field personnel and local health departments for investigation. Patients in clinics, patients of physicians in private practice and patients in military installations constituted clinical material for contact interviewing. It must be remembered that many of these contacts became known to health departments in other states and were referred to New Jersey for investigation.

Contacts of military personnel increased considerably during the last few months of 1950, but the greatest influx was noted early in 1951, when mobilization resulted in the usual pattern of population shifts and unstable environment. In the first five months of 1951 well more than twice as many contacts

of military personnel were reported for investigation than during the same period in 1950. The Bureau of Venereal Disease Control may reasonably anticipate a minimum of 500 reported contacts of military personnel in 1951.

A total of 524 suspects were referred to local health departments for further diagnostic observation because of positive serological tests for syphilis. Of 46,815 prenatal tests performed during fiscal year 1951, only 504 tests, or 1.07%, were positive. Only nine positive premarital tests were investigated and only one untreated infection, early latent syphilis, was found.

Analyzing the data presented in Table III it becomes apparent that only 2,248 sexual contacts became known to health departments although 5,838 cases of venereal disease were reported as treated during the year. Of all contacts and suspects referred for investigation, only 47.2% were actually examined. In spite of the low rate of location, approximately 25% of the total number assigned for investigation were actually infected. The epidemiological objectives of the Bureau of Venereal Disease Control, therefore, are to more fully investigate cases, especially early syphilis, with regard to the elicitation of contacts and to promote greater efficiency in contact tracing to bring a higher percentage of named contacts to examination.

VENEREAL DISEASE AND THE MIGRANT PROGRAM

It is conservatively estimated that 20,000 migrant farm laborers enter the state each year. This figure does not include the large groups of industrial migrants who are likewise candidates for examination. Of the farm labor group, 2,980 persons were examined by us for venereal disease in fiscal year 1951 and 369 persons were brought to treatment as a result of these examinations, a rate of 12.5%. If one projects this rate into the entire estimated migratory agricultural population approximately 2,500 infections actually existed. However, several thousand of these migrants were Puerto Ricans who were examined and blood tested before leaving Puerto Rico by plane.

Various methods of approaching this problem are under consideration. The apathetic or openly uncooperative attitude of many farmers is a contributing factor in the low clinic populations. On the other hand, the workers are a highly disinterested group, in addition to being exceedingly transient. In many instances, the clinics are stated to be prohibitive—distances from some farms.

The first logical step toward improving present conditions appears to be that of urging more farmers to comply with the law in requiring migrants to show evidence of an examination for venereal disease before beginning work. If this approach were successful, clinic facilities, already inadequate, would prove entirely insufficient. The establishment of adequate local health units will aid tremendously in solving this problem.

TABLE III
Venereal Disease Epidemiologic Activity
New Jersey, 1950

Type of Suspect	Infections Identified— Brought to Treatment First Time—					Previously Treated—					Other Dispositions—					No Disposition
	P. and S.	E. L.	Other	Gonorrhea	Other V. D.	Syphills	Gonorrhea	Other V. D.	Not Infected	Unable to Locate	Out of Jurisdiction	Insult. Information	Uncooperative and Other			
Contacts of Civilians:																
Syphills	882	38	17	3	1	89	1	597	200	9	59	14	80			
Gonorrhea	1,131	5	1	204	...	4	38	240	311	21	128	21	131			
Other V. D.	29	...	...	...	...	1	...	7	10	...	3	...	3
Contacts of Military:																
Syphills	21	...	3	42	...	2	4	6	6	2	1	1	17			
Gonorrhea	317	...	...	...	...	...	...	34	59	8	48	2	17
Other V. D.	2	...	...	...	...	...	...	1	...	...	...	...	1
Selectees	103	38	12	...	...	62	...	21	10	8	...	8	32	
Positive S/S:																
Prenatal	21	4	0	1	...	7	...	...	...	1	...	...	1
Maternal	...	...	...	...	...	...	...	...	...	...	...	...	...
Other S/S	391	15	35	22	...	69	10	50	27	15	2	7	60			
Totals	2,172	103	67	272	1	227	53	720	624	64	289	14	228			

PLANNING FOR CIVIL DEFENSE

In accordance with the objective of controlling preventable diseases under circumstances of a major catastrophe such as would be caused by an atomic bomb, the Bureau gave assistance to the State Civil Defense Medical and Health Preparedness Committee in developing a plan for venereal disease control in such an emergency. The disabling nature of the late manifestations of the venereal diseases and the economic burden upon society and the individual emphasize the urgency of immediate control measures. In order to minimize the potential dangers following a disaster, the objectives of the planning were twofold; first, to lower the present reservoir of infectious disease and, second, to suggest specific measures to meet expected post-disaster increases in venereal disease rates.

The proposals covered the following aspects of the problem:

1. Integration with general public health planning
2. Finances
3. Penicillin supplies
4. Treatment of gonorrhea and syphilis including epidemiologic indications for treatment
5. Emergency medical auxiliary personnel and their training
6. Venereal disease services in temporary dispensaries, outpatient departments, and hospitals
7. Control of prostitution
8. Records

PREVENTION OF LATE SYPHILIS IN VETERANS

The Veterans Administration has requested the assistance of the New Jersey State Health Department in the evaluation of the medical status and the further treatment, when indicated, of 2,749 New Jersey veterans who were treated for syphilis during World War II. The purpose of the project is to prevent or treat the late complications of syphilis thereby minimizing invalidism, death, and community cost. This is especially important at a time when conservation of manpower and economic resources is so necessary. Of the 2,749 follow-up forms sent to New Jersey, 644 have been returned reporting the results of investigation. Tabulations of returned reports are now in progress. This program will continue through fiscal year 1952.

VENEREAL DISEASE EDUCATION AND INFORMATION

The Bureau, in cooperation with the Bureau of Administrative Services and the Division of Local Health Services, promotes educational activities relative to venereal disease control for both the lay public and for professional

groups. Numerous venereal disease and sex education pamphlets, motion picture films, posters and other educational media were made available to local health departments, community groups, and individuals. More than 23,900 pieces of printed material were distributed.

Informational material on the diagnosis and treatment of venereal disease is distributed among physicians as new developments occur. The Bureau has prepared for issue to the medical profession a leaflet entitled "Venereal Disease Control: Materials and Services Available to Physicians." In addition, currently recommended treatment schedules for syphilis and gonorrhea, and the pamphlet "The Diagnosis of Syphilis by the General Practitioner" by Dr. Joseph Earle Moore will be included.

The Bureau keeps abreast of research being carried on throughout the world, and staff members lecture on various aspects of venereal disease control at Rutgers University and Seton Hall University.

In an organized program of cooperation with the State Department of Institutions and Agencies, an Institute on Social Hygiene and Venereal Disease Control for the personnel of the adult correctional institutions was presented with the assistance of the American Social Hygiene Association. The purpose of the meetings was to offer ways and means of providing appropriate sex-character education for inmates of adult correctional institutions as basic preparation for personal adjustment leading to sound marriage and family life by:

1. Providing the personnel of the adult correctional institutions with basic information concerning the physiological and psychological development of human beings as it relates to sex and social hygiene.
2. Presenting techniques which might be used to integrate this information into the established training programs of the institutions.

Due to the unheralded reduction in Federal Grant-in-Aid allotments and the resultant transfer of the epidemiologic nursing staff to other bureaus, the Venereal Disease Control Bureau was faced with the immediate problem of instituting a training program for field personnel unfamiliar with procedures for venereal disease control. A series of institutes designed to emphasize the medical and public health aspects of venereal disease control, services available to local health departments, and records and procedures was held for supervising nurses, staff nurses, and local health officers. Mimeographed manuals explaining these aspects of the program were prepared and distributed.

There were 10 films utilized during the year for educational purposes. They had 207 showings with an attendance of 9,523 persons

The intensive course in contact interviewing techniques given at Alto Medical Center, Alto, Georgia, under the joint sponsorship of the U. S.

Public Health Service and the Georgia Health Department continued to be a facility offered to nurses, health officers, and others engaged in epidemiological activities. While the Bureau initiated and encouraged attendance at this course, actual registrations were taken over by the Division of Local Health Services.

FINANCES

In October, 1950, a reduction of 28.2% in Federal Grant Allotments for the Venereal Disease Program in New Jersey was announced necessitating a marked reduction in personnel. Seventeen nurse-epidemiologists and four clerks were transferred to other programs of the Health Department. However, the nurses continue to utilize their knowledge and experience in their contacts with families while performing maternal and child health or other services.

This reduction in Federal Grant-in-Aid moneys was not offset by increases in other federal and local funds. Although the incidence of syphilis continued its downward trend the budget for the venereal disease program was not sufficient to meet the needs of a good control program. It is generally agreed that less than half of the existing cases are discovered. With the advent of rapid military and industrial mobilization and concomitant population shifts, this reservoir of venereal disease is especially dangerous. In such times, expansion, rather than contraction, of venereal disease control activity is indicated.

PERSONNEL

At the end of the fiscal year, the Bureau consisted of the staff noted below:

Administrative

Chief

Public Health Nursing Consultant (available from Bureau of Public Health Nursing)

Health Program Representative (on loan from U. S. P. H. S.)

Clerical

Senior Clerk Stenographer

Senior Clerk

Clerk Stenographer

Clerk Typists (2)

Clerks (2)

Field

Field Representative

As compared with last year this represents a transfer to another Division of the Health Department of 17 specialized venereal disease nurses and four clerks. The Senior Investigator resigned after 24 years of service.

In July the U. S. Public Health Service assigned Mr. Robert Jensen to the venereal disease program as Health Program Analyst. At the request of the U. S. Public Health Service he was released from this assignment on April 6 to serve as instructor at the Venereal Disease Contact Interviewer's School in Alto, Georgia. On May 7 Mr. William Page, Jr. was assigned by the Public Health Service to New Jersey as Health Program Representative.

HOSPITALIZATION

The rapid treatment program of the New Jersey State Health Department, utilizing private hospital facilities on a per diem basis, was continued in this fiscal year. While there has been a de-emphasis of the rapid treatment activity, the Bureau has felt that there still exist in New Jersey some indications for in-patient care. Contract beds have been retained in part to meet those exigencies which may arise as a result of young persons away from home with limited recreational opportunities who frequent military areas. In fiscal year 1951 only 317 cases were hospitalized for the treatment of syphilis as compared with 572 cases in 1950 and 1,335 cases in 1949.

Since there seemed no longer to be any justification for the frequent injections required with aqueous penicillin, daily injections with procaine penicillin in oil were advocated for in-hospital use beginning this fiscal year.

DRUG DISTRIBUTION

Penicillin and other antibiotics and drugs for the treatment of the venereal diseases are distributed without charge to hospitals, clinics, and private physicians. These include penicillin, streptomycin, aureomycin, sulfathiazole, and bismuth. The latter drug is being provided only until the present supplies are exhausted.

Procaine penicillin in oil with 2% aluminum monostearate is considered to be the drug of choice for the treatment of syphilis and gonorrhea. The Bureau will continue to distribute this preparation in recommended dosages upon the receipt of a case report with a request for drugs.

Table IV demonstrates the extent of the drug distribution program in New Jersey during this fiscal year. More than 23,000 million units of penicillin were distributed to private physicians, public clinics, and hospitals, with clinics absorbing the greatest bulk of the penicillin. In comparing this distribution with that of the previous year a decrease of 13.5% is noted.

This may be accounted for by the following facts: first, the reported incidence of syphilis and gonorrhea has decreased; second, the amount of penicillin routinely recommended for the treatment of neurosyphilis has decreased from 12 million units to 9 million units; third, since penicillin has become relatively inexpensive many doctors do not request this medication from the health department.

During fiscal year 1951, 21,411 million units of penicillin were utilized for syphilis in comparison with 24,982 million units for the previous year. For the treatment of gonorrhea, 1,776 million units of penicillin were administered during fiscal 1951, compared with 1,836 million units in the preceding year.

TABLE IV—DISTRIBUTION OF DRUGS TO TREATMENT AGENCIES BY TYPE OF DRUG, NEW JERSEY, JULY 1950-JUNE 1951

Type of Drug	Treatment Agency			Total
	Private Physicians	Clinics*	In-Hospital	
Penicillin (in millions of units)	6,597	14,676	1,914†	23,187
Streptomycin calcium chloride complex (grams)	0	303	20	323
Aureomycin hydro-chloride (grams)	0	204	0	204
Sulfathiazole (grams)	0	50	0	50
Bismuth (grams)	630	900	0	1,530

* Includes institutions. County and state institutions are expected to and have purchased their own drugs for the treatment of the venereal diseases. In exceptional circumstances, where treatment practices have not been up-to-date and where a change to more modern treatment schedules would have been facilitated by a gift from the Bureau of Venereal Disease Control, such has been made.

† Includes 93 million units of crystalline penicillin (aqueous).

Report of the Division of Vital Statistics and Administration

July 1, 1950—June 30, 1951

MARGUERITE F. HALL, PH.D., *Director*

Bureau of Administrative Services JOHN B. VAN ELLIS,
Chief

Bureau of Examination and Licensing KENNETH J. CARHART,
Chief

Bureau of Personnel and Accounts E. POWERS MINCHER,
Chief

Bureau of Public Health Statistics F. MERTON SAYBOLT, M. S. P. H.,
Assistant Chief

State Registrar of Vital Statistics WALTER R. SCOTT,
State Registrar

The Division of Vital Statistics and Administration

In the year 1950, foundations were laid by the Division which marked progress beyond the experimental gains of 1949.

Reclassification of many positions, economies effectuated by abolishing positions no longer needed in the reorganized Department and new personnel time records recording hours worked per week represented advances in the personnel area of the Division. Amending accounting and budgetary procedures in line with the further unification of the Department and initiating standard operating procedures for more effective control of travel costs and material inventories were important contributions of the account section of the Bureau of Personnel and Accounts. The above progress has been made in spite of changes in the Bureau leadership arising because of the military recall of reservists.

The Bureau of Administrative Services achieved consolidation of its four separate locations, thus adding to its efficiency and economy in operation. More health education services were given for the increased needs of the Division of Local Health Services. Warehousing and shipping facilities afforded Department consolidation of many items. An increase of approximately 10% was recorded in the distribution of biologicals, drugs and vaccines.

The Bureau of Examination and Licensing functions under a new name and was given the responsibility for the administration of examinations and the issuance of all individual licenses, a duty formerly performed by two other Divisions. The Bureau now houses in one suite of offices, the functions of three of the four Boards administratively responsible to the Chief. Economies were effected through revisions of examining techniques and the standardization of forms used by the Board of Beauty Culture Control.

During the fiscal year, the State Registrar's office made 46,571 searches. Total fees for searches and certificates amounted to \$28,115.39. Receipts exceeded the preceding year by \$5,335.63. Approximately 196,000 current certificates were handled through registration for the calendar year, 1950. Four bills improving vital statistics laws and procedures were approved and became law.

The Statistics Section of the Bureau of Public Health Statistics continued to improve the quality of services initiated in 1949. Progress was made in mechanical indexing of records. Linkage of tuberculosis records was facilitated mechanically by merging alphabetically the IBM cards from

case reports, survey suspects, deaths and institutionalized cases. The Bureau increased its statistical services for the Disability Insurance Section of the State Department of Labor and Industry. Weekly and monthly morbidity tabulations were furnished for distribution and use by the Division of Local Health Services and the Division of Preventable Diseases. Lists and tabulations of personnel, budget and expenditure records were made for the Bureau of Personnel and Accounts. Special services were afforded the Occupational Cancer Survey team. By analyzing previous requests, the Bureau has been able to prepare, in advance, data for release to other Divisions, voluntary agencies and individual consumers.

New Jersey facts for 1950 available through the Bureau are of interest:

1. The July 1, 1950 population estimate for the State was 4,832,000.
2. The 97,734 live births came at a rate of 20.2 per 1,000 estimated population.
3. The crude marriage rate for 1950 was 9.6 per 1,000 estimated population.
4. Resident deaths from all causes were recorded at the rate of 10.1 deaths per 1,000 estimated population.
5. The infant mortality rate of 25.0 per 1,000 live births was the lowest ever experienced in New Jersey since such rates were first computed in 1921.
6. Maternal mortality continued at its low level of 0.7 maternal deaths per 1,000 live births.
7. Stillbirths accounted for a rate of 18.8 per 1,000 live births.
8. Cancer mortality has steadily increased. In 1950, the rate was 173.4 cancer deaths per 100,000 estimated population.
9. Deaths from all forms of tuberculosis during 1950 occurred at the rate of 24.2 per 100,000 estimated population.

The Bureau engaged in two projects initiated by the 1950 Census:

1. The Birth Registration Test, results of which will be completed and presented in next year's annual report.
2. The Index which will measure the accuracy of age reporting in the Census. This project is in progress.

Bureau of Administrative Services

Functions of the Bureau of Administrative Services continued to include production of health education materials, maintenance and display of health education exhibits, maintenance of films and audio-visual aids, distribution of printed materials, warehousing and distribution of Department supplies, distribution of biologics, operation of Department print shop, mimeographing and mailing services, and preparation of specifications for departmental printing and other graphic needs.

A notable step toward over-all efficiency and economy was achieved by consolidating the four separate locations of the Bureau into one central location. The new location adequately houses the Bureau office, the art,

exhibit and print shops, and the warehouse, which is equipped to safely store large quantities of biologicals.

One position was eliminated by the consolidation of space, and was accomplished by not replacing a recent resignation. Personnel at the end of the year totaled thirteen with two vacancies existing.

HEALTH EDUCATION SERVICES

The production of health education materials increased during the year as the newly organized units of the Department began to function. The close relationship with the Community Health Organization Consultant of the Office of the Commissioner continued.

New visual aids including posters, signs, graphs, charts, etc., were produced, in addition to original art work, which was used for reproduction purposes. Three permanent displays were designed and constructed at the request of the Bureaus concerned.

The Bureau of Administrative Services installed and maintained twenty-two major exhibits throughout the State in addition to several smaller exhibits.

Departmental photographic equipment for both still photography and X-ray processing is stored at the new location, although a dark room has not been installed. Adequate space for the installation of this equipment, however, can be made when needed. A few photographic needs were filled through commercial sources, although funds did not permit frequent use of these sources.

Plans for the installation of a paint shop were completed, and the necessary materials, including an exhaust system, have been ordered.

Placement of audio-visual equipment in the District Health Offices continued. A 16mm sound film projector and a 35mm sound film-strip projector have now been placed in eight locations throughout the State.

Again this year, sufficient funds were not available to notably increase the lay film library of the Department, although a few new films were purchased. The lay film library continues to remain deficient in several fields. Lay film bookings were made for the Department by the New Jersey State Museum. Attendance reports received from the Museum indicate that these films were seen by an audience of at least 177,000. Many film showings were provided for various Bureaus of the Department and for other health agencies.

Departmental mailing lists on addressograph plates are maintained by this Bureau. In addition to the regular mailings of Public Health News, the Project Reporter, the Annual Report and news releases, many special mailings were prepared for other offices of the Department.

The print shop produced several new pieces of health education material. Requests for such items as departmental forms, regulations, etc., have increased. A considerable amount of printed materials was produced for use in conjunction with the promotion of the local health district act.

WAREHOUSE

Warehousing and shipping facilities were provided for many items on a Department-wide basis. These items included printed materials, office supplies and Maternal and Child Health field supplies. Perpetual inventories were maintained for all items in the warehouse. Office supplies valued at over \$6,000 were handled by the warehouse personnel and a new system for payment of these supplies by the using units of the Department was initiated.

Considerable time was expended in providing many additional services to the Department. They include mimeographing, special truck deliveries, storage of office equipment, and supervising Departmental moving activities by commercial movers.

BIOLOGICS

The distribution of biologicals, drugs and vaccines by this Bureau increased by approximately 10% during the past year. Diphtheria toxoid (alum precipitated); smallpox vaccine, pertussis-diphtheria-tetanus (fluid); pertussis-diphtheria-tetanus (alum refined); typhoid vaccine; measles globulin, and rocky mountain spotted fever vaccine were made available to physicians, and also to local boards of health for clinic purposes, at 66 distributing stations located at strategic points throughout the State. Rabies vaccine (human) was made available at key distributing stations.

During the fiscal year, our distributing stations released over 10,000 packages of smallpox vaccine; 1,800 packages of diphtheria toxoid (alum precipitated); 4,500 packages of diphtheria-tetanus-pertussis (fluid); 7,200 packages of diphtheria-tetanus-pertussis (alum refined); 16,000 packages of immune serum globulin and 1,300 packages of typhoid vaccine.

There was a noticeable increase of requests by physicians for the diphtheria-tetanus-pertussis (fluid) over previous years and a marked decline in requests for diphtheria toxoid (alum precipitated).

The immune serum globulin (measles) was provided without charge to the Department by the American Red Cross. During the year, a total of 16,000 packages containing 2 c.c. each were distributed.

Four hundred and seventy-six packages of rocky mountain spotted fever vaccine were released and sufficient anti-rabies vaccine (human) was distributed to cover a complete treatment of 14 doses each for 212 individuals.

Responsibility for storing and shipping penicillin and other venereal disease drugs and canine rabies vaccine continued.

All distributing stations throughout the State were visited periodically, at which time expired materials were collected, supplies checked, and local problems regarding biologic distribution were corrected. These distributing stations are located in hospitals, local boards of health, drugstores, and in one case, a county jail. It is interesting to note that these distributing stations receive no remuneration either for rent or for services rendered. The cooperation between this Bureau and the distributing stations was most noteworthy.

Bureau of Examination and Licensing

Continued reorganization under the provisions of Chapter 177, P. L. 1947 and Chapter 444, P. L. 1948 during the year has consolidated in this Bureau the responsibility for administration of examinations and issuance of all individual operating licenses as provided by law.

Certain revisions made this year in examining techniques of the Board of Beauty Culture Control resulted in such increased efficiency and accuracy of results that consideration is now being given to application of the same or similar techniques in the administration of all operating units of this Bureau. Increased efficiency was also obtained through revision and standardization of forms used by that Board. Similar action has been initiated throughout the other units of this Bureau to the end that a maximum of standardization be obtained.

An in-service-training program directed primarily to the enforcement aspects of legislation passed this year was conducted for Inspectors of the Board of Beauty Culture Control. This program proved so beneficial that further in-service-training is to be given all Inspector employees covering both legal and public health aspects of the administration of this Bureau.

Total revenues of the Bureau, including fines paid for violations of Beauty Culture laws, amounted to \$154,459.25; total expenditures of the Bureau were \$97,003.94.

Bureau of Personnel and Accounts

Continued reorganization of the State Department of Health during the year 1950-1951 created unusual fiscal and reclassification problems which were attended to by the Bureau of Personnel and Accounts.

Through the efforts of the personnel unit of this Bureau and the cooperation of the Department of Civil Service, considerable progress was made in the reclassification of many positions. Certain titles and positions no longer considered useful or needed in the light of economies effectuated

through reorganization were abolished. Some salary ranges were adjusted upward or downward, dependant upon conditions existent, to reflect equity or parity between positions in the state classification plan. Several specifications were written in conjunction with, and adopted by, the Department of Civil Service. Personnel time record forms considered inadequate were discontinued and replaced by new ones which in addition to providing for more accurate recording, indicate hours worked per week. Studies were made of our present merit rating system and recommendations made with respect thereto for its revision. A manual of procedure explaining varied personnel forms and basic Civil Service rules and regulations was promulgated.

The accounts unit of this Bureau continued to assist in reorganization of the Department through its accounting and budgetary procedures which were amended as required by further unification of the Department. Standard operating procedures were initiated and administered which resulted in more efficient and accurate control of travel costs and material inventories. With the assistance of the Department of the Treasury a plan was established for the accounting and administration of "Local Grant-in-Aid Services" contracts.

Project control accounts by funds were maintained as was a budgetary working reserve account. The accounting of the Department was operated on an encumbrance basis.

Immediately below is a consolidated financial statement of the Department as it was constituted on June 30, 1951.

STATE DEPARTMENT OF HEALTH—FINANCIAL STATEMENT
FISCAL YEAR 1950-1951
Receipts

Received for Transfer to State Treasury:

License and permit fees	\$255,633.00
Penalties	1,875.00
Certified certificates	27,565.21
Examination fees	2,702.50
Miscellaneous (including analysis)	5,020.67

Net total

Received for Disbursement:

State appropriation and transfers	\$1,175,499.71
Federal Security Agency, United States Public Health Service	821,597.02
United States Children's Bureau	439,588.78
Commonwealth Fund	16,262.15

Net total

DEPARTMENTAL ALLOCATIONS

	Subtotals		Other Accounts		Total State	Total Federal	Total All Funds
	State	Federal	State	Federal			
Office of the Commissioner	\$39,937.54	\$15,810.25	\$0,917.40	\$0,505.05	\$49,210.29	\$22,221.90	\$68,532.19
Vital statistics and administration	189,063.03	67,382.69	67,115.46	33,037.20	256,501.15	139,680.86	377,189.51
Preventable diseases	178,630.15	40,466.65	65,311.50	23,017.20	243,900.15	128,698.06	374,598.21
Laboratories	68,360.60	189,275.51	39,939.60	174,298.51	108,300.20	353,597.02	461,897.22
Constructive health	116,668.80	101,662.53	68,480.04	110,472.30	186,948.08	224,949.62	411,897.70
Local health services	118,068.17	184,126.10	25,947.01	101,146.55	144,015.16	226,196.17	370,211.33
Totals	\$800,000.91	\$807,482.58	\$309,800.16	\$453,703.22	\$1,191,701.86	\$1,261,385.80	\$2,453,087.66

DEPARTMENTAL EXPENDITURES

	Subtotals		Other Accounts		Total State	Total Federal	Total All Funds
	State	Federal	State	Federal			
Office of the Commissioner	\$39,937.57	\$16,467.00	\$0,250.03	\$0,253.05	\$56,274.70	\$22,718.65	\$89,005.05
Vital statistics and administration	177,544.53	65,392.48	62,668.40	28,004.08	240,613.38	127,700.79	368,314.17
Preventable diseases	173,135.43	40,301.04	17,759.91	10,655.37	229,805.37	109,353.17	339,158.54
Laboratories	62,036.49	183,301.04	37,023.82	142,628.80	84,330.70	303,031.97	417,362.67
Constructive health	114,661.46	105,454.70	69,277.23	58,247.81	183,938.46	119,100.00	303,038.46
Local health services	100,182.42	187,100.35	24,991.59	60,586.05	155,174.01	202,132.23	357,306.24
Totals	\$809,406.97	\$772,817.55	\$200,420.82	\$291,177.70	\$1,127,724.79	\$1,102,093.00	\$2,230,310.81
Balance, June 30, 1951	\$24,870.64	\$34,065.23	\$30,877.13	\$23,205.52	\$61,497.67	\$158,106.75	\$222,627.82

Bureau of Public Health Statistics

STATISTICS FOR THE CALENDAR YEAR 1950

During 1950, an attempt has been made to improve the quality of the services initiated in 1949 and to expand into other related fields as machine and personnel time permitted.

Monthly and annual indexes of birth, marriage, death, and stillbirth records for use of the State Registrar's Office have required a large amount of machine time. As a result of securing a new collator with special attachments for alphabetic merging, the time required for the production of the annual indexes was spread over the months. A duplicate card system for next year's work was adopted. This will permit indexes and statistical tabulations to be worked upon simultaneously.

The Bureau is truly one of service and exists only because of the assistance it gives to personnel responsible for planning and carrying out the various health programs. The Bureau helps in determining the extent of public health problems, controlling the operation of the programs designed to solve these problems, and evaluating the results of such operations.

The research and statistics force is divided into two units. One unit mans the electrical tabulation machinery and a smaller unit prepares materials for machine processing, analyzes the tabulations made and determines the best method of presenting the results. This research unit consults with other sections and divisions of the Department in an effort to devise proper forms for the collection of data.

The linking of tuberculosis records from case reports, survey suspects, deaths and institutionalized cases in the files of the State Department of Institutions and Agencies has been continued but an improved mechanism was used. All cards were reproduced to a similar form and alphabetically merged. By this device, it was possible for one person, instead of three, to study the interrelation of the reports and arrive at some conclusion regarding the effectiveness of the survey follow-ups and the morbidity reporting system.

Special tabulations and analyses of results of the tuberculosis surveys were released to the Bureau of Tuberculosis Control. From a careful study of correlated factors, better planning of future surveys can be done.

Monthly lists of death from tuberculosis and cancer by place of residence were made and released to official or voluntary agencies having a legitimate interest therein.

The Bureau retained its cooperative venture with the Disability Insurance Section of the State Department of Labor and Industry. The previously computed standards for duration of each illness in the employed group covered by the State Insurance Plan were re-examined and adjusted to a

greater accuracy from an analysis of the disability claims received and terminated since the first study. Special tabulations needed for administrative purposes were also made at the request of the State Department of Labor and Industry.

Weekly and monthly tabulations of morbidity reports were furnished for distribution and use by the Division of Local Health Services. The work involved in handling an annual amount of approximately 90,000 cards is so great that studies are presently under way to devise some method for the consolidation of reporting of certain diseases. Monthly lists of municipalities not forwarding any reports of any reportable disease, when compared over a period of time, have indicated areas where field investigations of the lack of reporting should be made. If morbidity reporting is to be useful, it is necessary that it be either complete or that its percentage of completeness be known.

The Bureau of Personnel and Accounts again relied upon the machine section for lists and tabulations of personnel, budget and expenditure records.

From an analysis of previous requests, the Bureau of Public Health Statistics was able to anticipate requests for data and have those data available in tables for release to other divisions, voluntary agencies and individuals.

Special lists were made for the Occupational Cancer Survey team, and coding of industries to better relate all data was a major consideration in this work. Through cooperation with the Bureau of the Census, the State Department of Labor and Industry and Dun and Bradstreet, it is hoped that New Jersey's industries may be more adequately delineated and described in codes.

The amount of service which can be given is naturally dependent upon the machine and personnel permitted by the budget. The present commitments of the Bureau are such that even a maintenance of these places a severe and continuous strain upon the physical resources. The quarters in which the IBM Unit is housed do not lend themselves to efficient operation and in fact are too small to properly accommodate even the present equipment and personnel. Efforts will continue to be made to secure additional personnel and more adequate housing.

Population:—With the release of the preliminary census figures for 1950, more accurate population data became available. The population estimate for New Jersey as of July 1, 1950 was 4,832,000. This figure and the estimates for the counties and major cities as shown at the end of Table 22 were obtained by adding the three months' excess of births over deaths for the period April 1 through June 30, 1950 to the 1950 census count and rounding each estimate to the nearest thousand.

Births:—The 97,734 live births reported in 1950 represented a crude birth rate of 20.2 per 1,000 estimated population. This was the fifth con-

secutive year in which the annual number of births exceeded 95,000 and the birth rate was greater than 20.0. The all-time high of 106,086 live births reported in 1947 was almost double the number of births registered in each of the years 1933 through 1939. Boards of education have become increasingly concerned with the school problems which consistent increases present.

Of the 88,235 births in 1950 to white mothers, 1,082 or 1.2 per cent were reported as illegitimate. Of the 9,493 births to non-white mothers, 1,207 or 12.7 per cent were listed as illegitimate. On 6 birth records, the race or color was not stated. Although the percentage figure for total illegitimate births has not appreciably changed over the past decade, such births in 1950 were 730 or almost 47 per cent greater than the 1940 figure. Efforts of social agencies and nurses to help these mothers and babies must accordingly receive greater consideration.

Except where otherwise specified, all births have been allocated to the usual residence of the mother.

Births occurring in New Jersey have been tabulated and analyzed monthly for certain characteristics. Annual totals are accumulated from the monthly data. Of the 94,431 births occurring in New Jersey during 1950, there were 1,052 records having no entry for weight at birth. Therefore only 93,379 births were used as the denominator in computing the following percentages by weight.

<i>Weight Group</i>	<i>Number</i>	<i>Per Cent</i>
Over 2,500 grams	86,367	92.4
2,001-2,500 grams, incl.	4,733	5.1
1,501-2,000 grams, incl.	1,293	1.4
1,001-1,500 grams, incl.	543	0.6
1,000 grams or less	443	0.5
Total with weight given	93,379	100.0

Of the 94,058 births on which records the attendant was clearly identified, 91,366 or 97 per cent occurred in hospitals, 1,827 or 2 per cent were attended by physicians outside of hospitals, and 383 or 0.5 per cent had midwives in attendance. The balance was attended by other persons of a specific or unknown category.

There were 1,016 sets of twins born, but in 60 of these, only one was born alive. Mothers in New Jersey gave birth to 16 sets of triplets. In 12 instances, all three were born alive; in 1 case, two were born alive and in the other 3 sets, only one was born alive.

As resource information, Tables 1c and 1d have been included. The text accompanying these tables will be of interest to those persons wishing to know some measure of hospital facilities for births in this state.

Marriages:—The crude marriage rate for 1950 was 9.6 per 1,000 estimated population. The total of 46,291 marriages reported was 1,822 or 4.1 per cent greater than in 1949. Although, prior to 1950, the number of marriages had decreased each year since 1946 when the number reached an all-time high of 61,020, the marriage rates for those years were consistently higher than the rates prior to 1940.

Appearing for the second time in an annual report are two Tables, Numbers 7 and 7a, giving information on marriages by age and previous marital status of the individuals. The text associated with the Tables may contain information of interest to many agencies.

All marriage tabulations are by place of occurrence.

Deaths:—A total of 48,837 resident deaths from all causes was recorded for New Jersey in 1950. The crude death rate of 10.1 per 1,000 estimated population was slightly greater than the 1949 rate. That rate of 10.0 was the lowest in the state's experience.

As of January 1, 1949, two important changes occurred in the mortality registration and classification system. A new standard certificate of death form was put in use and the 6th Revision of the International Classification of Diseases, Injuries and Causes of Death was used in selecting the underlying cause of death. The introduction of these changes, with their accompanying rules and regulations for use may have resulted in making some totals for certain causes or groups of causes not strictly comparable to prior years.

Table 19 and its text on principle causes of death by age groups deserve careful study by persons truly interested in learning more of the health hazards facing the citizens of New Jersey.

As a by-product of the mechanical grouping of deaths into the abridged list of causes of death, it is possible for the first time to offer as resource data available in the state office, a tabulation of deaths by the detailed four digit International List of Causes of Death for each incorporated municipality in the state.

Tables 1e and 1f have been included purely as resource data. The text accompanying these tables indicates the ratios of deaths by place of occurrence versus place of residence.

Summarization of monthly tabulations of deaths in New Jersey reveals the following items of interest:

Of the total deaths, 2,821 or about 6 per cent were of veterans. Of these deaths, 1,785 were World War I veterans, 637 were World War II veterans and 31 were veterans of both wars. Spanish-American War veterans

accounted for 196 deaths and an additional 8 persons who died were veterans of both the Spanish-American and First World Wars.

Approximately 51 per cent of all deaths in New Jersey occurred in hospitals or institutions. Of these 24,477 deaths, 18,835 or 77 per cent took place in general hospitals. There were 735 deaths in tuberculosis hospitals and sanatoria.

Except where otherwise specified in the titles of the Tables, all deaths have been allocated to the usual place of residence of the deceased.

Infant Mortality:—During 1950 there were 2,445 infant deaths for New Jersey. The resulting mortality rate of 25.0 per 1,000 live births was the lowest ever experienced in New Jersey since rates were first computed. When New Jersey in 1921, by virtue of its meeting high standards of reporting, was admitted to the United States Birth Registration Area, its infant mortality rate was 73.8. The rapid and consistent decrease in the rates as shown in Table 4 has been tremendously influenced by the extensive baby welfare work carried on in New Jersey. Since most infant deaths occur in the first day or week of life, no great reduction in New Jersey's infant mortality rate can be expected unless the neonatal rate is reduced. This will need adequate staffing and equipment for the care of immature babies in hospitals and continued efforts to get expectant mothers under the care of physicians soon enough to increase the babies' chances of survival.

The white infant mortality rate in 1950 was 20.3 and for non-white infants, the rate was 48.2.

Table 18, and its text point out those fields in which greater effort must be placed if a further reduction in infant mortality is to be achieved.

Maternal Mortality:—In 1950, there were 70 maternal deaths, representing a rate of 0.7 per 1,000 live births, identical with the 1949 rate. These were the lowest rates since 1906 when such rates were first computed. The non-white maternal mortality rate was 2.4.

Tables 6 and 6a may serve to indicate more clearly where greater emphasis can be placed if fewer mothers are to die as a result of conceiving and bearing children.

Stillbirths:—The 1,845 stillbirths reported for 1950 accounted for a rate of 18.8 per 1,000 live births. In 1949, the rate was 20.2.

The 1950 rate for the non-white population was 28.5. On 13 reports, race or color was not stated.

Cancer:—The number of deaths from malignant neoplasms in 1950 was 8,470 and the rate was 173.4 per 100,000 estimated population. The mortality from this cause, with few exceptions, has steadily increased since records were first kept in New Jersey. (See Chart 2.) This may be due, in some measure, to the higher proportion of persons in the older age groups

and to more accurate diagnosis of the disease by physicians. Tables 12 and 12a give the mortality detail by site, sex, color and age.

Tuberculosis:—The number of deaths from all forms of tuberculosis during 1950 was 1,170 of which 1,075 were charged to tuberculosis of the respiratory system. The rates per 100,000 estimated population were 24.2 and 22.2 respectively.

There were 880 deaths of white persons from all forms of tuberculosis and 290 deaths of non-white persons. Per 100,000 estimated population, the white rate was 19.3 and the non-white rate was 109.1. Reference to Tables 14, 15, 17 and 20 is recommended. Additional discussion of the disease may be found in the report of the Tuberculosis Control Program in this volume.

Deaths From Other Reportable Diseases:—By law and regulation, morbidity reports of certain diseases are required. Although the number of deaths from these diseases can be found in the mortality tables following, reference should also be made to the reports in this volume by the Division of Preventable Diseases.

TABLES AND CHARTS—1950

- | | |
|-----------|---|
| Table 1. | Population: Numbers and rates for births, marriages, and deaths, 1900-1950. (Births and deaths adjusted for residence.) |
| Chart 1. | Births and deaths per 1,000 population, 1880-1949. |
| Table 1a. | Births, marriages and deaths in New Jersey by month of occurrence, 1950. |
| Table 1b. | Births, marriages, deaths, stillbirths, maternal deaths, infant deaths and neonatal deaths by counties and municipalities, 1950. (Births, deaths and stillbirths adjusted for residence.) |
| Table 1c. | Births by place of occurrence versus place of residence by counties, 1949-1950. |
| Table 1d. | Births by place of occurrence versus place of residence by major municipalities, 1949-1950. |
| Table 1e. | Deaths by place of occurrence versus place of residence by counties, 1949-1950. |
| Table 1f. | Deaths by place of occurrence versus place of residence by major municipalities, 1949-1950. |
| Table 2. | Deaths by age groups; number and percentage for past decade. |
| Table 3. | Illegitimate births by color and age of mother, 1950. |
| Table 4. | Number of births, deaths under one year, deaths under one month, stillbirths and maternal deaths, with rates per 1,000 live births, 1906-1950. |
| Table 5. | Total stillbirths by weight by age of mother, 1950. |
| Table 5a. | White stillbirths by weight by age of mother, 1950. |
| Table 5b. | Non-white stillbirths by weight by age of mother, 1950. |
| Table 6. | Maternal deaths by specific cause, 1950. |
| Table 6a. | Maternal deaths by color, cause and age groups, 1950. |
| Table 7. | Marriages by age of husband versus age of wife, 1950. |
| Table 7a. | Marriages by previous marital status, 1950. |

- Table 11. Poliomyelitis deaths, cases and case fatality rates by sex and age groups, 1925-1950.
- Table 11a. Age-specific case fatality rates for poliomyelitis peak years and warming-up years, 1925-1949.
- Table 11b. Per cent of total cases and deaths by age for poliomyelitis peak years and warming-up years, 1925-1949.
- Table 12. Deaths from malignant neoplasms by site, sex, color and age groups, benign and unspecified neoplasms by sex, color and age groups, 1950.
- Table 12a-1. Deaths from neoplasms by sex, color and age groups for each site group, 1950.
- Table 12a-2. Deaths from malignant neoplasms; percentage distribution by age, site, sex and color, 1950.
- Table 12a-3. Cancer death rates by age, sex and color per 100,000 specific population, 1950.
- Chart 2. Deaths from malignant neoplasms per 100,000 population, 1880-1949.
- Table 13a-1. Deaths in New Jersey from transportation accidents by cause groups and month of death, 1950.
- Table 13a-2. Deaths in New Jersey from non-transportation accidents by cause groups and month of death, 1950.
- Table 13a-3. Deaths in New Jersey from suicide, homicide and other violence by cause groups and month of death, 1950.
- Table 13b. Motor vehicle deaths in New Jersey by primary cause of death, sex and age groups, 1950.
- Table 13c. Accidental deaths in New Jersey by immediate cause of death and type of accident, 1950.
- Table 13d. Accidental deaths in New Jersey by immediate cause of death and county of accident, 1950.
- Table 13e. Non-transportation accidental deaths in New Jersey by primary cause of death and place of accident, 1950.
- Table 13f. Accidental deaths in New Jersey by immediate cause of death by age groups, 1950.
- Table 13g. Motor vehicle deaths in New Jersey by type of vehicle by age groups, 1950.
- Table 14. Causes of death (abridged list) as percentage of total deaths; with percentage by sex for each cause, 1950.
- Table 15. Death rates: total, white and non-white by abridged list cause, 1950.
- Table 17. Deaths by abridged list cause by sex, color and age groups, 1950.
- Table 18. Infant deaths by cause and age groups, 1950.
- Table 18a. Infant deaths by age and immaturity, 1950.
- Table 19. Principal causes of death by age groups; numbers and percentages, 1950.
- Table 20. Deaths from each cause, detailed international list, by sex, color and age groups, 1950.
- Table 22. Deaths by abridged list cause by sex, color and age groups for each county, cities having estimated populations of 50,000 or more, State institutions and military posts, 1950.

TABLE 1. POPULATION: NUMBERS AND RATES FOR BIRTHS, MARRIAGES AND DEATHS
(Births and deaths adjusted for residence): 1900-1950

YEAR	Estimated Population	BIRTHS		MARRIAGES		DEATHS	
		Number of births reported	Birth rate per 1,000 population	Number of marriages	Marriage rate per 1,000 population	Number of deaths	Death rate per 1,000 population
1900	1,889,184	82,270	17.0	14,611	7.7	31,474	16.6
1901	1,955,361	84,812	17.8	16,539	8.4	31,739	16.2
1902	2,021,539	85,116	17.3	18,150	8.9	31,319	15.4
1903	2,087,716	87,242	17.8	19,512	9.3	31,820	15.2
1904	2,158,893	88,751	17.9	18,919	8.7	35,298	16.3
1905	2,229,070	90,689	17.9	20,572	9.2	35,864	15.2
1906	2,298,247	92,677	18.6	21,330	9.3	35,670	15.3
1907	2,352,424	94,651	18.9	23,649	10.0	37,408	15.9
1908	2,419,601	97,405	19.6	26,155	10.8	35,597	14.7
1909	2,484,778	97,508	19.1	26,724	11.9	36,359	14.6
1910	2,550,445	93,942	21.1	27,912	10.9	39,494	15.4
1911	2,614,177	88,133	22.2	25,914	9.5	35,612	14.7
1912	2,677,900	90,073	22.4	26,821	10.0	37,772	14.1
1913	2,741,642	91,432	22.4	27,697	10.1	39,425	14.3
1914	2,805,374	93,403	23.3	28,528	10.1	39,907	14.2
1915	2,869,108	96,476	23.1	27,694	9.6	39,435	13.7
1916	2,932,838	99,211	23.9	31,189	10.6	43,376	14.7
1917	2,996,569	75,309	25.1	30,060	10.0	43,332	14.5
1918	3,060,301	74,549	24.3	23,989	7.8	60,852	19.8
1919	3,124,034	70,935	22.7	29,251	9.3	39,979	12.7
1920	3,189,092	76,431	23.8	31,327	9.7	40,820	12.7
1921	3,253,475	78,172	23.7	27,815	8.4	37,362	11.3
1922	3,317,859	74,479	22.0	27,114	8.0	40,086	11.8
1923	3,458,243	74,611	21.5	26,730	8.3	41,294	11.9
1924	3,544,627	76,530	21.5	27,601	7.7	40,531	11.4
1925	3,631,011	74,168	20.4	27,672	7.6	41,749	11.4
1926	3,717,395	72,396	19.4	28,424	7.6	44,396	11.9
1927	3,803,779	72,799	19.1	28,316	7.4	41,562	10.9
1928	3,890,163	70,076	18.0	29,120	7.4	44,555	11.4
1929	3,976,546	68,297	17.1	30,257	7.6	45,746	11.5
1930	4,044,506	68,252	16.9	28,499	7.0	43,180	10.7
1931	4,056,400	64,078	15.8	26,468	6.5	44,135	10.9
1932	4,068,100	61,215	15.0	22,840	5.6	42,826	10.5
1933	4,080,000	56,972	13.7	24,453	6.0	43,380	10.6
1934	4,091,800	54,841	13.4	23,991	7.1	43,547	10.6
1935	4,103,700	55,059	13.4	29,724	7.2	43,267	10.5
1936	4,115,600	54,145	13.2	32,771	8.0	44,659	10.9
1937	4,127,500	55,197	13.4	36,190	8.8	45,812	11.0
1938	4,139,400	56,002	13.7	31,006	7.5	44,045	10.6
1939	4,151,300	56,859	13.7	31,895	7.7	43,837	10.6
1940	4,163,100	59,328	14.3	41,069	9.9	45,206	10.9
1941	4,189,900	67,104	16.0	46,538	11.1	45,971	10.9
1942	4,226,425	80,812	19.1	50,498	11.9	46,270	10.9
1943	4,235,233	82,356	19.4	41,045	9.7	49,781	11.8
1944	4,167,840	75,657	18.2	36,054	8.7	47,340	11.4
1945	4,206,411	76,995	18.3	39,711	9.5	47,623	11.3
1946	4,204,261	95,044	22.1	61,020	14.2	46,291	10.7
1947	4,435,000	106,086	23.9	53,502	12.6	48,276	10.9
1948	4,729,000	97,278	20.6	51,913	11.0	48,107	10.2
1949	4,786,000	97,414	20.4	44,469	9.3	47,706	10.0
1950	4,832,000	97,734	20.2	46,291	9.6	48,837	10.1

Note: Similar data for period 1879-1890 last appeared in 73rd Annual Report on 1949 statistics.

**NEW JERSEY
BIRTHS AND DEATHS
FIVE YEAR AVERAGE RATES
PER 1,000 POPULATION**

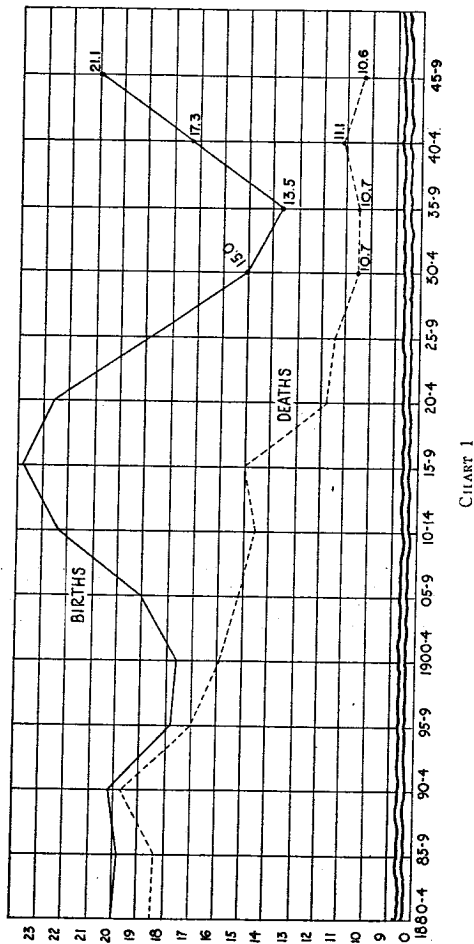


CHART 1

TABLE 1a. BIRTHS, MARRIAGES AND DEATHS: 1950

Month	Births	Marriages	Deaths
January	7,797	2,715	4,243
February	7,118	3,099	3,882
March	7,888	1,842	4,818
April	7,096	4,113	4,164
May	7,327	3,553	3,985
June	7,896	5,463	3,788
July	8,560	3,941	3,779
August	8,430	3,563	3,542
September	8,412	6,089	3,603
October	8,302	4,480	3,959
November	7,701	4,097	3,901
December	7,904	3,336	4,275
Total	94,431	46,291	47,939

The birth and death data have not been adjusted for residence but, like the marriage figures, represent events occurring in New Jersey. The environmental conditions responsible for the seasonal influence on the occurrence of these events exist in New Jersey. It would be illogical to include in New Jersey's seasonal trend those events occurring to New Jersey residents in other States where the natural conditions may differ.

TABLE 1b. BIRTHS, MARRIAGES, DEATHS, STILLBIRTHS, MATERNAL DEATHS, INFANT DEATHS AND NEONATAL DEATHS BY COUNTIES AND MUNICIPALITIES: 1950

(Births, deaths and stillbirths adjusted for residence)

ATLANTIC COUNTY, 1950

NAME OF PLACE	Births	Marriages	Deaths	Stillbirths	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Absecon City	60	18	46	1	...	...	...
Atlantic City	1119	769	997	35	3	43	34
Brigantine City	23	7	12	1	...	2	...
Buena Borough	33	27	17	...	...	1	...
Buena Vista Township	28	9	22	1	...	1	...
Corbin City	7	...	2	...	...	...	...
Egg Harbor City	107	82	36	5	1	5	4
Egg Harbor Township	74	18	52	...	1	3	3
Estelle Manor City	5	2	2	...	...	...	...
Folsom Borough	...	2	2	...	...	...	...
Galloway Township	52	18	40	1	...	2	1
Hamilton Township	86	34	41	1	...	1	1
Hammonetown	171	67	75	2	...	5	2
Linwood City	47	23	17	1	...	...	...
Longport Borough	12	...	4	...	...	...	...
Margate City	116	24	57	...	...	4	2
Mullica Township	20	16	16	1	...	2	1
Northfield City	81	19	40	2	...	1	...
Pleasantville City	298	123	135	6	...	9	5
Port Republic City	9	5	9	...	...	...	...
Somers Point City	32	33	39	2	...	1	1
Ventnor City	114	86	108	4	...	4	3
Weymouth Township	17	1	10	1	...	1	...
Total	2536	1383	1791	64	4	84	57

BERGEN COUNTY

NAME OF PLACE	Marriages	Deaths	Infant Deaths by Age at Death		Total	Under 1 month
			Still-births	Maternal Deaths		
Aitendale Borough	57	8	29	1	2	1
Alpine Borough	18	4	7	1	9	0
Lergenfield Borough	479	115	133	8	1	9
Bogert Borough	105	69	78	4	3	3
Carlstadt Borough	117	33	58	1	1	1
Citfence Park Borough	298	116	157	6	3	3
Clester Borough	67	26	37	2	1	1
Cresskill Borough	72	29	29	2	1	1
Demarest Borough	39	9	9	2	1	1
Danmont Borough	320	91	103	5	7	3
East Paterson Borough	458	53	106	6	13	12
East Rutherford Borough	150	73	81	3	2	2
Edgewater Borough	72	129	46	1	3	2
Emerson Borough	24	13	15	3	1	1
Englewood City	463	320	209	10	7	6
Englewood Cliffs Borough	12	5	6	1	1	1
Fair Lawn Borough	648	64	145	8	15	17
Fairview Borough	178	161	74	4	5	4
Fort Lee Borough	274	192	107	4	5	5
Franklin Lakes Borough	39	5	15	1	1	1
Garfield Borough	503	237	211	9	13	10
Hackensack City	129	28	67	2	6	5
Hackensack Township	387	485	219	16	23	16
Harrington Park Borough	36	11	16	1	1	1
Hasbrouck Heights Borough	189	50	77	1	2	2
Haworth Borough	21	11	13	1	1	1
Hillsdale Borough	84	15	33	1	1	1
Hobokus Borough	31	32	17	1	1	1
Leonia Borough	133	54	64	1	6	6
Little Ferry Borough	81	42	48	2	3	2
Lodi Borough	878	99	112	6	9	8
Lradhurst Township	188	179	3	1	11	8
Mahwah Township	57	30	48	2	5	3
Marwood Borough	248	43	62	1	4	3
Midland Park Borough	106	36	57	2	2	1
Montvale Borough	35	7	16	1	1	1
Moonachie Borough	49	8	17	2	1	1
New Milford Borough	171	21	46	5	1	1
North Arlington Borough	354	82	104	4	2	2
Northvale Borough	32	17	14	1	1	1
Norwood Borough	29	16	9	1	1	1
Oakland Borough	41	6	13	1	1	1
Old Tappan Borough	16	2	5	1	1	1
Oradell Borough	58	21	28	1	2	2
Palisade Interstates Park Borough	1	1	1	1	1	1
Palisade Park Borough	190	81	75	7	3	2
Paramus Borough	177	25	53	1	3	2
Park Ridge Borough	60	32	31	2	1	1
Ramsey Borough	86	54	47	1	1	1
Ridgefield Borough	296	58	71	3	3	3
Ridgefield Park Village	207	91	110	2	6	5
Ridgewood Village	233	169	221	4	7	6
River Edge Borough	241	36	53	6	4	2
River Vale Township	32	4	16	1	1	1
Rochelle Park Township	131	37	25	1	1	1
Rockleigh Borough	4	1	1	1	1	1
Rutherford Borough	324	152	210	2	6	5
Saddle River Borough	16	17	12	2	2	2
Saddle River Township	149	13	29	1	4	3
South Hackensack Township	20	3	12	3	2	2
Tenack Township	371	204	273	3	16	14
Tenafly Borough	136	63	90	1	1	1
Teterboro Borough	13	1	1	1	1	1
Upper Saddle River Borough	139	2	20	1	3	3
Walldwick Borough	104	60	69	2	3	2
Washington Township	17	1	7	1	1	1
Westwood Borough	114	88	58	2	4	4
Woodcliff Lake Borough	24	2	2	1	2	2
Wood Ridge Borough	117	64	50	1	2	2
Wreckoff Township	111	33	47	1	2	2
Total	11197	4421	4670	169	7	248

BURLINGTON COUNTY - 1950

NAME OF PLACE	Births	Marriages	Deaths	Infant Deaths by Age at Death		Total	Under 1 month
				Still-births	Maternal Deaths		
Bass River Township	8	9	10	1	1	1	1
Beverly City	98	38	29	3	1	1	1
Bordentown City	135	90	64	1	4	1	1
Bordentown Township	59	3	25	1	3	2	2
Burlington City	271	114	140	5	1	3	5
Burlington Township	43	26	1	1	2	2	2
Chesterfield Township	30	7	19	2	1	2	2
Cinnaminson Township	23	27	23	1	3	3	3
Delanco Township	53	16	36	1	2	2	2
Delran Township	36	9	23	1	3	2	2
Eastampton Township	7	3	3	1	1	1	1
Edgewater Park Township	7	6	13	1	1	1	1
Evesham Township	44	7	29	1	2	1	1
Fieldsboro Borough	3	5	5	1	1	1	1
Florence Township	123	53	68	4	3	3	3
Hainesport Township	42	7	12	1	1	1	1
Lumberton Township	29	4	11	1	1	1	1
Mansfield Township	47	13	16	1	1	1	1
Maple Shade Township	158	85	67	3	2	2	2
Medford Lakes Borough	13	24	3	1	1	1	1
Medford Township	77	18	81	1	3	2	2
Moorestown Township	229	73	104	5	1	5	2
Mount Holly Township	264	68	102	6	10	9	9
Mount Laurel Township	33	6	19	1	3	2	2
New Hanover Township	19	1	8	1	1	1	1
North Hanover Township	7	6	7	1	2	1	1
Palmyra Borough	136	47	62	7	2	3	2
Penbentown Borough	42	15	21	2	2	2	2
Penbentown Township	184	46	43	2	6	4	2
Riverside Township	137	96	73	2	3	2	2
Riverton Borough	91	35	45	1	2	1	1
Shamong Township	7	1	4	1	1	1	1
Southampton Township	51	26	27	1	2	1	1
Springfield Township	32	9	13	1	1	1	1
Tabernacle Township	24	2	11	1	1	1	1
Washington Township	6	1	11	1	1	1	1
Westampton Township	18	3	5	1	1	1	1
Willingboro Township	6	1	3	1	1	1	1
Woodland Township	17	7	7	1	1	1	1
Wrightstown Borough	78	41	4	1	1	1	1
Total	2727	1096	1240	48	4	78	56

CAMDEN COUNTY - 1950

NAME OF PLACE	Births	Marriages	Deaths	Infant Deaths by Age at Death		Total	Under 1 month
				Still-births	Maternal Deaths		
Abundon Borough	171	66	119	2	6	6	6
Audubon Park Borough	22	1	7	1	3	3	3
Barrington Borough	65	15	20	1	1	1	1
Bellmawr Borough	166	5	27	2	5	5	5
Berlin Borough	47	54	17	1	4	3	3
Berlin Township	54	10	22	1	4	4	4
Brooklawn Borough	44	16	32	1	2	1	1
Camden City	2686	1592	1431	59	82	57	57
Chesilhurst Borough	6	2	2	1	1	1	1
Clementon Borough	59	21	26	1	2	1	1
Collingswood Borough	338	15	187	2	5	4	4
Delaware Township	161	13	78	1	2	1	1
Gibbsboro Borough	19	5	8	1	2	1	1
Gloucester City	264	130	163	4	2	2	2
Gloucester Township	164	41	61	2	7	6	6
Hadfield Borough	353	123	171	8	4	4	4
Haddon Heights Borough	145	61	1	1	2	2	2
Haddon Township	110	52	92	5	4	2	2
Hi Nella Borough	2	1	3	1	1	1	1
Laurel Springs Borough	41	18	12	1	1	1	1
Lawnside Borough	30	5	21	1	1	1	1
Lindenwald Borough	62	63	37	1	1	1	1

1960
 CAMDEN COUNTY—Continued

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Magnolia Borough	42	16	21	2	...	...	5
Merchantville Borough	284	93	84	7	...	5	2
Mount Ephraim Borough	137	33	27	...	...	2	...
Oaklyn Borough	138	35	51	1	...	4	3
Pennsauken Township	292	111	175	2	...	4	3
Pine Hill Borough	44	9	20	1	...	2	1
Pine Valley Borough	...	...	...	...	...	...	...
Runnemede Borough	112	48	21	4	...	1	1
Somerdale Borough	29	10	9	1	...	1	1
Stratford Borough	35	11	11	...	...	2	2
Tavistock Borough	...	...	...	...	...	...	...
Voorhees Township	8	3	14	...	...	1	1
Waterford Township	61	28	34	...	...	2	2
Winslow Township	75	20	37	1	...	2	1
Wood Lynne Borough	56	23	28	2	...	1	1
Total	6280	2920	3144	111	4	137	128

CAPE MAY COUNTY

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Avalon Borough	10	6	7	...	...	...	...
Cape May City	67	48	50	1	...	2	...
Cape May Point Borough	3	...	3	...	...	...	...
Dennis Township	35	15	27	2	...	2	1
Lower Township	28	16	26	1	...	1	...
Middle Township	40	40	75	1	...	4	3
North Wildwood City	46	13	41	2	...	1	1
Ocean City	95	61	106	1	...	1	1
Sea Isle City	13	11	15	1	...	1	1
Stone Harbor Borough	10	4	13	1	...	1	1
Upper Township	32	9	24	...	...	1	1
West Cape May Borough	13	...	18	1	...	...	...
West Wildwood Borough	4	...	4	...	...	...	...
Wildwood City	115	88	108	4	...	7	6
Wildwood Crest Borough	25	9	27	...	...	2	1
Woodbine Borough	32	8	23	...	...	1	1
Total	638	328	565	15	...	24	18

CUMBERLAND COUNTY

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Bridgeton City	453	213	234	11	...	12	8
Commercial Township	85	22	42	5	...	5	3
Deerfield Township	18	11	16	...	...	1	1
Downe Township	34	11	18	...	...	1	1
Fairfield Township	67	26	35	2	1	4	2
Greenwich Township	27	7	10	...	...	1	1
Hopewell Township	52	4	21	...	...	4	3
Lands Township	339	155	158	4	...	11	9
Lawrence Township	61	10	23	1	...	1	...
Maurice River Township	50	13	36	1	...	1	1
Millville City	306	138	201	4	1	9	7
Shiloh Borough	...	...	...	...	...	...	...
Stow Creek Township	28	1	10	...	...	...	...
Upper Deerfield Township	162	40	34	2	...	3	2
Vineland Borough	193	80	113	6	1	1	...
Total	1859	736	1005	38	3	54	38

ESSEX COUNTY : 1950

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Bellerive Town	651	313	268	23	3	10	6
Bloomfield Town	691	317	455	12	1	20	17
Caldwell Borough	118	91	70	3	...	1	1
Caldwell Township	28	5	17	...	...	...	...
Cedar Grove Township	124	11	39	2	...	4	...
East Orange City	1499	660	336	26	4	33	24
Essex Falls Borough	10	22	18	...	...	2	1
Glen Ridge Borough	95	33	97	...	...	1	...
Irlington Town	1018	539	543	19	...	18	13
Livingston Township	233	50	73	4	...	5	3
Maplewood Township	398	173	237	3	...	4	4
Millburn Township	162	125	117	4	...	3	3
Montclair Town	768	446	495	18	...	14	9
Newark City	9094	5654	3013	186	7	275	217
Nutley Town	492	246	211	4	...	6	5
Orange City	828	477	389	21	1	13	9
Roseland Borough	37	12	23	...	...	...	...
South Orange Village	169	187	155	8	...	5	3
Verona Borough	177	86	96	4	...	6	6
West Caldwell Borough	75	11	31	2	...	2	2
West Orange Town	531	161	275	8	...	8	5
Total	17435	9637	9568	339	16	430	322

GLOUCESTER COUNTY - 1950

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Clayton Borough	61	17	42	2	...	1	1
Deptford Township	167	45	72	2	...	2	1
East Greenwich Township	36	14	20	2	...	1	...
Elk Township	23	15	15	2	...	...	...
Franklin Township	83	24	59	4	...	2	1
Glassboro Borough	128	51	72	3	...	3	3
Greenwich Township	55	16	16	1	...	...	...
Harrison Township	53	10	30	2	...	2	2
Logan Township	42	11	10	1	...	1	1
Mantua Township	231	22	47	1	...	2	2
Monroe Township	129	39	39	2	...	3	2
National Park Borough	55	18	27	3	1	2	1
Newfield Borough	44	20	11	2	...	...	...
Parisboro Borough	232	83	76	5	...	4	3
Pitman Borough	135	61	71	4	...	2	2
South Harrison Township	6	1	6	...	...	...	...
Swedesboro Borough	96	28	32	3	...	2	2
Washington Township	28	16	12	...	...	2	2
Westboro Borough	83	13	10	...	...	...	...
West Dentford Township	124	48	42	2	...	1	2
Westville Borough	93	70	44	1	...	4	...
Woodbury City	337	104	113	6	...	7	7
Woodbury Heights Borough	28	5	8	1	...	...	...
Woolwich Township	10	...	11	...	...	2	1
Total	2682	764	905	47	1	43	33

HUDSON COUNTY 1950

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Bayonne City	1855	687	782	27	1	34	26
East Newark Borough	42	15	14	...	...	...	...
Guttenberg Town	79	49	63	1	...	1	1
Harrison Town	274	168	151	...	...	11	9
Hoboken City	1014	982	627	21	1	36	29
Jersey City	6254	3995	3908	101	4	166	135
Keany Town	745	298	371	15	1	19	15
North Bergen Township	772	219	397	16	...	19	15
Secaucus Borough	119	61	104	2	...	2	1
Union City	988	673	621	15	...	16	11
Weehawken Township	238	139	176	8	...	6	6
West New York Town	656	703	332	8	...	9	8
Total	12801	7599	6890	219	7	310	236

HUNTERDON COUNTY

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Alexandria Township	17	5	12	1	...	1	...
Bethlehem Township	13	2	8	...	...	...	...
Bloomsbury Borough	14	7	5	...	...	...	...
Calton Borough	21	14	12	...	...	...	...
Clinton Town	31	25	13	...	...	...	...
Clinton Township	33	7	22	1	...	1	1
Delaware Township	23	8	13	...	...	2	...
East Amwell Township	43	8	22	...	...	1	1
Flemington Borough	79	45	46	2	...	...	...
Franklin Township	32	4	15	1	...	4	3
Frenchtown Borough	26	14	22	1	...	1	...
Glen Gardner Borough	19	4	18	...	...	3	...
Hampton Borough	23	22	16	...	...	1	1
High Bridge Borough	28	28	29	1	...	1	1
Holland Township	21	1	9	...	...	...	...
Holland Township	23	5	13	...	...	...	...
Lambertville City	102	43	58	3	...	3	3
Lebanon Borough	20	10	14	...	...	...	...
Lebanon Township	31	7	17	...	...	...	...
Midford Borough	31	20	4	...	...	1	1
Raritan Township	31	3	27	1	...	...	...
Rendlington Township	72	34	56	1	...	1	1
Stockton Borough	7	2	6	...	...	...	...
Tewksbury Township	27	4	18	1	...	1	1
Union Township	17	6	14	...	...	...	...
West Amwell Township	11	2	13	...	...	...	...
Total	806	329	505	12	...	20	14

MERCER COUNTY - 1950

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
East Windsor Township	22	1	18	...	...	1	1
Ewing Township	378	67	115	3	...	11	10
Hamilton Township	907	273	337	16	...	29	22
Hightstown Borough	108	55	47	...	...	2	2
Hopeville Borough	43	22	22	...	...	...	...
Hopeville Township	92	16	40	1	...	...	...
Lawrence Township	149	48	90	2	...	2	1
Pennington Borough	26	31	18	1	...	1	...
Princeton Borough	135	149	91	4	...	4	4
Princeton Township	7	7	30	...	...	2	2
Trenton City	2495	1414	1370	52	3	66	44
Washington Township	34	6	23	...	...	1	...
West Windsor Township	56	29	14	1	...	2	1
Total	4638	2115	2224	85	8	125	89

MIDDLESEX COUNTY

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Carteret Borough	248	139	126	6	...	13	10
Cranbury Township	46	17	30	1	...	4	4
Dunellen Borough	183	121	68	4	...	6	6
East Brunswick Township	128	38	26	2	...	2	1
Helmetta Borough	10	9	2	...	...	3	...
Highland Park Borough	173	101	80	...	...	2	...
Jamesburg Borough	86	36	28	2	...	3	2
Madison Township	144	39	74	4	...	6	3
Metuchen Borough	228	59	85	5	...	3	3
Middlesex Borough	111	31	43	1	...	4	4
Milbourn Borough	79	43	23	2	...	1	1
Monroe Township	58	4	26	...	...	1	...
New Brunswick City	881	560	393	25	1	22	15
North Brunswick Township	143	26	42	2	...	3	...
Perth Amboy City	735	479	452	26	2	22	17
Piscataway Township	185	16	68	6	...	9	6
Plainboro Township	229	3	9	...	...	...	...
Raritan Township	345	78	116	...	...	10	4
Sarreville Borough	198	86	73	4	...	6	2
South Amboy City	217	72	96	3	...	4	3
South Brunswick Township	76	15	51	3	...	...	...
South Plainfield Borough	199	39	51	6	...	4	3
South River Borough	239	161	90	6	...	1	1
Spotswood Borough	86	19	21	...	...	4	2
Woodbridge Township	869	227	296	18	...	28	19
Total	5740	2531	2371	132	3	159	109

MONMOUTH COUNTY

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Allenhurst Borough	15	3	16	...	...	...	...
Allentown City	18	18	15	...	...	1	...
Asbury Park City	331	303	253	5	...	15	12
Atlantic Highlands Borough	94	37	36	1	...	...	...
Atlantic Township	19	2	11	...	1	1	1
Avon Borough	29	21	31	...	...	1	1
Belmar Borough	90	51	66	1	...	1	1
Bradley Beach Borough	70	35	38	...	...	2	2
Bridle Borough	13	3	15	...	...	...	...
Deal Borough	27	22	15	...	...	...	...
Eatontown Borough	134	35	22	...	...	1	1
Englishtown Borough	47	24	17	...	...	...	...
Fair Haven Borough	83	14	30	2	...	1	...
Farmingdale Borough	18	8	15	...	...	1	1
Freehold Borough	159	89	91	1	...	2	2
Freehold Township	85	3	31	4	...	1	1
Highlands Borough	79	26	46	2	...	2	1
Holmdel Township	22	6	16	...	...	1	1
Howell Township	76	33	58	2	...	2	1
Interlaken Borough	2	18	2	...	...	...	...
Keansburg Borough	148	69	71	3	...	5	4
Keypoint Borough	124	111	78	2	...	2	1
Little Silver Borough	82	21	19	...	...	2	2
Long Branch City	226	220	204	11	...	13	11
Manalapan Township	77	11	28	2	...	1	1
Manasquan Borough	59	43	45	1	...	1	1
Marlboro Township	42	23	23	...	...	5	3
Matawan Borough	121	29	84	...	...	1	1
Matawan Township	59	13	32	...	...	1	1
Middletown Township	263	84	146	...	...	11	6
Millstone Township	34	6	16	2	...	2	...
Monmouth Beach Borough	75	8	12	...	...	...	...
Monmouth Borough	19	22	28	...	...	3	1
Neptune City Borough	263	89	218	4	...	7	7
Neptune Township	6	4	8	1	...	...	...
New Shrewsbury Borough	6	4	8	...	...	1	...
Oceanport Borough	69	28	14	...	...	1	...

MONMOUTH COUNTY—Continued

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Ocean Township	129	24	62	6	...	2	2
Raritan Township	66	1	31	1	...	1	1
Red Bank Borough	311	197	144	5	...	14	12
Roosevelt Borough	18	1	2	...	...	...	...
Rumson Borough	89	31	49	...	...	3	3
Sea Bright Borough	15	3	10	1	...	...	...
Sea Girl Borough	25	9	13	...	...	1	1
Shrewsbury Borough	33	13	15	...	...	1	...
Shrewsbury Township	49	3	18	1	...	2	2
South Belmar Borough	21	3	18	1	...	1	1
Spring Lake Borough	28	39	44	...	...	1	1
Spring Lake Heights Borough	43	7	13	5	...	1	1
Union Beach Borough	66	19	28	1	...	3	3
Upper Freehold Township	4	39	4	...	...	...	...
Wall Township	162	24	53	3	...	4	3
West Long Branch Borough	50	21	23	...	...	1	1
Total	4610	1940	2369	73	2	117	90

MORRIS COUNTY : 1950

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Boonton Town	132	82	81	5	...	1	1
Boonton Township	27	6	10	...	...	...	...
Butler Borough	98	42	89	4	...	4	3
Chatham Borough	159	39	56	5	...	2	1
Chatham Township	23	10	11	...	...	...	...
Chester Borough	47	5	11	...	...	...	...
Chester Township	18	1	10	...	...	...	...
Deville Township	151	31	53	2	...	2	2
Dover Town	231	138	134	2	...	5	3
East Hanover Township	32	13	19	...	...	3	3
Florham Park Borough	59	10	27	1	...	1	1
Hanover Township	101	47	49	4	...	2	1
Harding Township	18	9	17	1	...	1	1
Jefferson Township	68	15	24	2	...	2	1
Kinnelon Borough	24	1	7	...	...	...	...
Lincoln Park Borough	61	22	27	2	...	...	...
Madison Borough	212	109	100	3	...	3	2
Mendham Borough	28	26	19	...	...	...	...
Mendham Township	18	5	12	...	...	...	...
Mine Hill Township	49	12	25	2	...	3	3
Montville Township	78	27	38	3	...	2	2
Morris Plains Borough	31	37	32	3	...	2	2
Morristown Town	437	225	227	17	...	7	7
Morris Township	190	23	59	2	...	...	...
Mount Arlington Borough	14	7	7	...	...	...	...
Mountain Lakes Borough	48	27	30	1	...	3	2
Mount Olive Township	68	19	32	...	...	...	...
Netcong Borough	46	10	32	...	...	2	2
Parsippany-Troy Hills Township	161	39	70	2	...	1	1
Passaic Township	68	27	33	1	...	3	3
Pequanock Township	122	34	32	...	...	4	4
Randolph Township	50	6	11	...	...	...	...
Riverdale Borough	7	34	15	3	...	3	2
Rockaway Borough	71	56	49	...	...	2	2
Rockaway Township	80	9	41	...	...	1	...
Rocky Hill Township	142	36	55	3	...	2	1
Washington Township	41	8	22	1	...	1	1
Wharton Borough	94	59	53	...	...	2	2
Total	3398	1312	1584	73	...	66	54

OCEAN COUNTY - 1950

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Barnegat City Borough	12	2	2	...	...	...	...
Bay Head Borough	19	10	9	...	...	...	...
Beach Haven Borough	14	17	13	1	...	...	...
Beachwood Borough	44	7	19	1	...	3	3
Berkely Township	22	18	11	1	...	1	1
Brick Township	97	20	89	2	...	2	2
Dover Township	202	73	78	3	...	5	4
Eagleswood Township	11	5	13	...	...	...	...
Harvey Cedars Borough	...	1	2	...	...	...	...
Island Beach Borough	...	...	1	...	...	...	...
Island Heights Borough	16	5	8	...	...	1	1
Jackson Township	48	16	19	...	...	2	1
Lacey Township	19	4	6	1	...	...	...
Lakelurst Borough	96	14	11	...	...	3	3
Lakewood Township	251	154	137	6	1	6	4
Lavallette Borough	18	7	12	...	...	...	...
Little Egg Harbor Township	5	2	3	1	...	...	...
Long Beach Township	6	6	15	1	...	...	...
Manchester Township	15	15	6	...	...	1	...
Mantoloking Borough	1	...	...	...	...	...	...
Ocean Gate Borough	4	3	11	1	...	...	...
Ocean Township	6	4	14	...	...	1	1
Pine Beach Borough	12	1	6	...	...	1	1
Plumstead Township	76	17	29	2	1	3	3
Point Pleasant Beach Borough	34	53	27	1	...	...	...
Point Pleasant Borough	110	22	61	...	...	1	1
Seaside Heights Borough	17	12	13	...	...	...	...
Seaside Park Borough	13	8	18	...	...	1	1
Ship Bottom Beach Arlington Borough	4	7	8	...	...	...	...
South Toms River Borough	10	6	7	...	...	...	...
Stafford Township	23	5	15	3	...	...	...
Surf City Borough	4	...	3	...	...	...	...
Tuckerton Borough	39	16	26	1	...	1	1
Union Township	14	18	14	2	...	1	1
Total	1288	546	654	27	2	33	26

PASSAIC COUNTY : 1950

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Bloomingsdale Borough	69	21	39	4	...	4	4
Clifton City	1437	307	498	23	1	23	20
Haledon Borough	78	46	61	...	...	...	...
Hawthorne Borough	279	121	146	6	...	6	4
Little Falls Township	144	64	53	3	1	1	1
North Haledon Borough	69	15	23	...	...	...	...
Passaic City	1068	781	628	21	2	27	23
Paterson City	2094	1539	1613	55	...	69	48
Pompton Lakes Borough	180	86	33	1	...	2	2
Prospect Park Borough	118	70	47	...	...	1	1
Ringwood Borough	39	5	12	1	...	1	1
Totowa Borough	100	35	53	3	...	2	2
Wanaque Borough	189	31	36	3	...	3	2
Wayne Township	227	53	97	4	...	2	2
West Milford Township	31	48	38	2	...	1	...
West Paterson Borough	68	23	28	2	...	1	...
Total	6566	3228	3414	126	4	143	110

SALEM COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Alloway Township	30	18	13	1	...	2	1
Elmer Borough	37	14	26	1	...	2	1
Elsinboro Township	22	1	5	...	...	1	1
Lower Alloway Creek Township	27	6	13	...	...	...	...
Lower Penns Neck Township	146	32	44	1	...	2	2
Mannington Township	32	4	22	...	...	...	...
Oldmans Township	42	13	12	...	...	...	...
Penns Grove Borough	179	90	64	2	...	3	2
Pilesgrove Township	42	13	10	...	...	...	...
Pittsgrove Township	51	15	24	1	...	...	...
Quitton Township	37	5	14	4	...	2	2
Salem City	211	90	114	3	2	9	5
Upper Penns Neck Township	105	33	45	1	...	3	2
Upper Pittsgrove Township	50	11	32	1	1	3	3
Woodstown Borough	70	34	29	...	...	5	5
Total	1081	379	467	18	3	30	23

SOMERSET COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Bedminster Township	25	11	12	1	...	1	1
Bernards Township	73	38	34	1	...	...	...
Bernardsville Borough	67	26	47	...	...	2	2
Bound Brook Borough	215	113	86	6	...	7	4
Branchburg Township	48	4	15	...	...	2	2
Bridgewater Township	163	31	75	1	...	7	4
Far Hills Borough	23	12	7	2	...	1	1
Franklin Township	179	40	82	2	...	4	3
Green Brook Township	32	3	15	...	...	2	2
Hillsborough Township	90	16	37	...	...	4	3
Hillsville Borough	236	98	50	6	...	9	7
Millstone Borough	8	...	2	...	...	...	...
Montgomery Township	51	14	20	1	...	...	...
North Plainfield Borough	237	133	114	8	...	3	1
Peapack Gladstone Borough	27	16	18	1	...	...	...
Raritan Town	110	85	48	1	...	1	...
Rocky Hill Borough	13	6	6	...	...	...	...
Somerville Borough	344	95	113	5	1	11	9
South Bound Brook Borough	94	19	10	2	...	1	1
Warren Township	70	18	32	...	...	3	3
Watchung Borough	29	26	8	...	...	...	...
Total	2183	804	849	37	1	58	43

SUSSEX COUNTY 1950

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Andover Borough	16	2	4	...	...	...	...
Andover Township	19	1	12	...	...	1	1
Branchville Borough	23	9	12	1	...	...	...
Byram Township	7	...	7	...	...	1	...
Frankford Township	40	3	13	1	...	...	...
Franklin Borough	67	23	35	1	...	2	1
Fredon Township	10	5	3	...	...	...	...
Green Township	16	14	9	...	...	1	1
Hamburg Borough	30	17	11	...	...	...	...
Hampton Township	16	3	7	...	...	...	...
Hardiston Township	29	3	13	...	...	1	1
Hopatcong Borough	19	3	13	...	...	...	...
Lafayette Township	16	12	11	...	...	...	...
Montague Township	11	1	13	...	...	1	1
Newtown	113	59	61	...	...	4	4
Ogdensburg Borough	28	4	17	1	...	3	2
Sandyston Township	17	3	8	...	...	3	2
Sparta Township	61	40	40	1	...	1	1
Stanhope Borough	28	11	23	...	...	...	...
Stillwater Township	14	7	15	...	...	...	...
Sussex Borough	39	28	19	...	...	...	...
Vernon Township	32	16	14	...	...	1	...
Walpack Township	5	...	6	...	...	...	...
Wantage Township	73	4	24	2	...	1	1
Total	729	278	391	7	...	21	16

UNION COUNTY 1950

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Clark Township	117	29	27	4	...	4	3
Cranford Township	369	116	161	7	...	10	8
Elizabeth City	2219	1300	1174	58	2	57	49
Fanwood Borough	67	13	23	2	...	...	...
Garwood Borough	103	37	42	3	...	3	3
Hillside Township	362	132	153	7	...	6	5
Kentworth Borough	135	27	22	3	...	4	4
Linden City	640	225	191	13	...	13	11
Mountainside Borough	40	17	14	...	...	1	1
New Providence Borough	67	23	28	...	...	...	...
New Providence Township	77	9	24	...	...	...	...
Plainfield City	959	448	471	22	1	24	19
Rahway City	305	182	198	7	1	13	8
Roselle Borough	406	183	130	10	...	4	3
Roselle Park Borough	221	60	118	5	...	5	5
Scotch Plains Township	216	48	62	...	...	2	2
Springfield Township	114	53	52	3	...	10	7
Summit City	285	171	185	7	2	13	12
Union Township	686	282	244	14	...	12	11
Westfield Township	411	190	182	9	...	1	1
Winfield Township	62	...	12	2	...	3	1
Total	8075	3424	3518	133	6	189	153

WARREN COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Allamuchy Township	15	..	3	..	..	..	..
Alpha Borough	55	32	19	..	..	3	3
Belvidere Town	45	29	25	1	..	1	..
Blairstown Township	36	19	22	1	..	2	1
Franklin Township	31	11	17	..	..	2	..
Frelinghuysen Township	12	1	7	..	..	2	..
Greenwich Township	46	12	15	1	..	2	1
Hackettstown Town	89	42	60	3	..	1	..
Hardwick Township	5	..	3	..	..	3	1
Harmony Township	38	15	19	1	..	1	1
Hope Township	9	10	7	1	..	2	1
Independence Township	18	16	17	..	..	1	..
Knowlton Township	20	6	15	..	..	1	..
Liberty Township	3	1	5	..	..	..	..
Lopatcong Township	11	6	10	..	..	..	..
Mansfield Township	18	7	17	1	..	1	..
Oxford Township	27	14	23	1	..	1	1
Palaquarry Township	..	177	..	5	1	12	11
Phillipsburg Town	381	177	243	..	..	4	3
Polacong Township	31	6	22	..	..	..	..
Washington Borough	101	56	72	..	..	3	3
Washington Township	40	9	25	2	..	1	..
White Township	22	4	18	..	..	..	..
Total	1063	473	660	17	1	42	27
STATE INSTITUTIONS	9	1	37	1	..	1	1
MILITARY POSTS	175	295	16	2	..	4	2

In the accompanying Tables 1c., 1d., 1e. and 1f., certain birth and death data and ratios have been presented by counties and major municipalities for the years 1949 and 1950. They show what counties or municipalities exceed, in service, the amount necessary to take care of their usual residents. The similarity in the ratios for both years clearly indicates the constancy of the pattern under existing conditions.

Since most births in New Jersey occur in hospitals, the ratio of births by place of occurrence to births by place of residence is a fair measure of the availability of hospital facilities. It is not contended that the births in a county are necessarily those of residents of that county, but it does hold that the county has facilities to care for its residents should they choose to use them.

The statistics confirm and clarify what has been suspected. Hunterdon County, with ratios of 0.14 and 0.13 for the two years, is dependent upon the surrounding counties and will continue to be so until the planned hospital is in operation. Cape May County's ratios also indicate that it is a "dependent" county rather than what might be called a "service" one. After its recently built hospital has been in operation a while the ratio for the county may change. Mercer, Passaic and Sussex are the greatest "service" counties. For certain of the "dependent" counties, such as Burlington, the ratios may be misleading if there are large military installations in the counties. It may be well to point out, however, that the continuance of any installation and its hospital facilities is influenced by world conditions. Such counties should

not rely too greatly upon the military installation hospital facilities. It might be wise to encourage the building of more proprietary or voluntary hospitals.

The ratios developed for births for major municipalities merely indicate that the hospital facilities usually tend to be in larger cities. The story of the county is the story of the major municipalities within the county. In the metropolitan counties the cities are so near one another that it might be unwise for any "dependent" city to expand its hospital services. Unless there has been a great increase in population in the entire area, it might result in decreasing the demands upon the "service" cities and thus upset the financial condition of hospitals within those "service" cities.

It is more difficult to interpret the ratios developed for deaths. Except for violent or accidental deaths, persons usually die where they live. For both 1949 and 1950 about fifty per cent of the deaths in New Jersey occurred at home. The increasing age of the population and the accompanying increase in the number of deaths from circulatory diseases may account for this percentage. With long term illnesses there is usually no need to draw upon the hospital facilities for care. The death ratios in the tables approach unity in almost every case. For the few exceptions the nearness of hospital facilities in other counties may account for the variations.

For New Jersey as the State, the birth and death ratios are less than one. There are more New Jersey residents utilizing the hospital facilities in metropolitan areas outside of this State than there are residents of other States using the facilities of New Jersey. The proximity of Philadelphia and New York City to our heavily populated areas and the ready access to these cities probably accounts for this trend.

TABLE 1c. BIRTHS BY PLACE OF OCCURRENCE VERSUS PLACE OF RESIDENCE, COUNTIES OF NEW JERSEY: 1949-1950

	1949			1950		
	Occurrence	Residence	Ratio O/R	Occurrence	Residence	Ratio O/R
New Jersey	04622	97414	0.97	94431	97734	0.97
Atlantic County	2621	2566	1.02	2028	2336	1.04
Bergen County	0026	10343	0.38	6272	11197	0.57
Burlington County	1350	2416	0.61	1599	2727	0.59
Camden County	3117	6320	0.97	3928	6289	0.94
Cape May County	289	439	0.45	294	636	0.46
Cumberland County	1961	1343	1.06	1950	1859	1.03
Essex County	10999	17766	1.13	10980	17435	1.15
Gloucester County	1558	1979	0.79	1576	2032	0.78
Hudson County	13440	13337	1.01	12967	12301	1.01
Hunterdon County	117	826	0.14	104	806	0.13
Mercer County	5479	4339	1.24	5393	4638	1.21
Middlesex County	4625	3798	0.84	4825	5740	0.84
Monmouth County	3571	4544	0.93	3571	4610	0.94
Morris County	2500	3201	0.78	2317	3398	0.76
Ocean County	1996	1191	0.90	1055	1293	0.86
Passaic County	9394	6439	1.45	9336	6396	1.45
Salem County	998	1085	0.64	686	1081	0.63
Somerset County	1628	2133	0.77	1687	2133	0.79
Sussex County	963	785	1.26	987	729	1.29
Union County	8081	8142	0.99	8104	8073	1.00
Warren County	891	1128	0.79	810	1063	0.78
State Institutions	74	6	12.33	88	9	5.78
Military Establishments	1507	235	6.33	1294	175	7.36

TABLE 1d. BIRTHS BY PLACE OF OCCURRENCE VERSUS PLACE OF RESIDENCE, MAJOR MUNICIPALITIES OF NEW JERSEY: 1949-1950

	1949			1950		
	Occurrence	Residence	Ratio O/R	Occurrence	Residence	Ratio O/R
Atlantic City	1691	1173	1.44	1667	1110	1.49
Camden	3734	2824	2.03	3581	2689	2.08
East Orange	783	1459	0.54	773	1490	0.53
Irrington	538	1036	0.53	618	1018	0.63
Newark	13330	9384	1.44	13406	9094	1.48
Bayonne	1217	1615	0.75	1233	1855	0.78
Hoboken	862	1002	0.86	887	1014	0.87
Jersey City	10449	6373	1.59	9920	6294	1.58
Union City	16	1068	0.01	18	988	0.02
Trenton	4845	2501	1.94	4949	2495	1.98
Clifton	7	1253	0.01	7	1437	0.00
Passaic	3859	1998	3.51	3825	1998	3.58
Faterson	5473	2769	2.02	5672	2694	2.13
Elizabeth	3728	2373	1.57	3614	2219	1.63
Total	52784	36066	1.46	52285	35081	1.49

TABLE 1e. DEATHS BY PLACE OF OCCURRENCE VERSUS PLACE OF RESIDENCE, COUNTIES OF NEW JERSEY: 1949-1950

	1949			1950		
	Occurrence	Residence	Ratio O/R	Occurrence	Residence	Ratio O/R
New Jersey	48833	47706	0.98	47939	48837	0.98
Atlantic County	1910	1813	1.05	1874	1791	1.05
Bergen County	3598	4278	0.84	3821	4670	0.82
Burlington County	1091	1199	0.91	1093	1240	0.88
Camden County	3098	3114	0.97	3122	3144	0.99
Cape May County	448	312	0.88	457	365	0.81
Cumberland County	944	962	0.98	989	1005	0.98
Essex County	9033	9391	0.96	9245	9388	0.97
Gloucester County	731	927	0.79	885	995	0.78
Hudson County	6636	6260	0.95	6534	6890	0.95
Hunterdon County	347	486	0.71	353	505	0.70
Mercer County	2385	2266	1.04	2322	2224	1.03
Middlesex County	2125	2274	0.93	2192	2371	0.92
Monmouth County	2326	2383	0.98	2313	2369	0.98
Morris County	1393	1449	0.96	1323	1384	0.96
Ocean County	715	689	1.07	751	654	1.15
Passaic County	3372	3191	1.06	3651	3414	1.07
Salem County	350	498	0.76	367	467	0.79
Samerset County	836	838	0.83	734	849	0.86
Sussex County	372	371	1.00	381	391	0.97
Union County	3225	3431	0.94	3293	3518	0.94
Warren County	558	608	0.92	605	690	0.92
State Institutions	1899	51	27.43	1463	87	39.54
Military Establishments	151	20	7.55	136	16	8.50

TABLE 1f. DEATHS BY PLACE OF OCCURRENCE VERSUS PLACE OF RESIDENCE, MAJOR MUNICIPALITIES OF NEW JERSEY: 1949-1950

	1949			1950		
	Occurrence	Residence	Ratio O/R	Occurrence	Residence	Ratio O/R
Atlantic City	1076	975	1.10	1121	997	1.12
Camden	1886	1395	1.21	1802	1451	1.24
East Orange	559	906	0.62	546	936	0.58
Irrington	474	356	0.85	450	543	0.83
Newark	5092	4965	1.01	5105	5018	1.02
Bayonne	569	768	0.80	583	732	0.80
Hoboken	662	628	1.05	692	627	1.06
Jersey City	3349	2319	1.47	3239	3303	1.07
Union City	260	604	0.48	292	621	0.47
Trenton	1640	1437	1.14	1592	1379	1.15
Clifton	244	450	0.54	284	498	0.57
Passaic	389	599	1.56	377	628	1.46
Faterson	1765	1965	1.10	1868	1813	1.18
Elizabeth	1275	1147	1.11	1322	1174	1.13
Total	19700	19329	1.02	20071	19513	1.03

TABLE 2. DEATHS BY AGE GROUPS, NUMBER AND PERCENTAGE FOR PAST DECADE

YEAR	Total Deaths		Under 1 year		1 to 4		5 to 14		15 to 24		25 to 44		45 to 64		65 and over		Unknown
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1941	45,071	100.0	2,392	5.3	417	0.9	513	1.1	1,088	2.3	4,703	10.2	15,324	33.3	21,562	47.9	.....
1942	46,270	100.0	2,556	5.5	476	1.0	493	1.0	1,022	2.1	4,007	8.4	14,158	30.5	25,138	54.3	.....
1943	47,340	100.0	2,607	5.5	493	1.0	489	1.0	1,022	2.1	4,364	9.2	15,358	32.4	22,927	48.5	.....
1944	47,683	100.0	2,470	5.2	473	1.0	481	1.0	941	2.0	4,364	9.2	15,870	33.3	23,354	49.0	.....
1945	46,291	100.0	2,706	5.8	459	0.9	398	0.9	872	1.9	3,968	8.6	13,006	28.1	24,220	52.3	.....
1946	48,106	100.0	2,859	5.9	449	0.9	371	0.8	882	1.8	3,710	7.7	15,489	32.2	24,848	51.6	.....
1947	47,769	100.0	2,621	5.5	414	0.9	355	0.7	686	1.4	3,585	7.5	15,295	31.9	24,848	52.1	.....
1948	48,837	100.0	2,445	5.0	392	0.8	323	0.7	590	1.2	3,517	7.2	15,958	32.6	26,210	53.7	.....
1949	48,837	100.0	2,445	5.0	392	0.8	323	0.7	590	1.2	3,517	7.2	15,958	32.6	26,210	53.7	.....
1950	48,837	100.0	2,445	5.0	392	0.8	323	0.7	590	1.2	3,517	7.2	15,958	32.6	26,210	53.7	.....

TABLE 3. ILLEGITIMATE BIRTHS BY COLOR AND AGE OF MOTHER: 1950

Age of Mother	Total		Color of Child					
	No.	%	White No.	%	Non-white No.	%	Unknown No.	%
All Ages	2291	100.6	1082	100.0	1207	100.0	2	100.0
10-14	45	2.6	5	0.5	40	3.3	1	50.0
15-19	891	39.1	399	33.3	536	44.5	1	50.0
20-24	735	33.0	399	34.0	384	32.0	1	50.0
25-29	235	14.8	189	17.5	148	12.1	1	50.0
30-34	177	7.7	110	10.2	67	5.6	1	50.0
35-39	64	2.8	37	3.4	26	2.2	1	50.0
40-44	15	0.7	10	0.9	5	0.4	1	50.0
45-49	3	0.1	2	0.2	1	0.1	1	50.0

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 most age groups. Bearing that qualification in mind and assuming that there is probably no race difference in the reluctance of females to give correct information, the data in the table may be studied to advantage.

As in 1949, the non-white females who became mothers out of wedlock were relatively younger than those of the white race.

The non-white races, although constituting no more than approximately 6 per cent of New Jersey's population, accounted for more than 50 per cent of the total illegitimate births. On the basis of total births by color, the percentage of illegitimate children born to white mothers was 1.2. The figure for non-white mothers was 12.7 per cent.

It is disturbing to note that almost 15 per cent of the illegitimate births to white mothers occur after the age of 29 years. This is a greater percentage than the 8.3 per cent born to the non-white mothers over 29 years.

TABLE 4. NUMBER OF BIRTHS, DEATHS UNDER ONE YEAR, DEATHS UNDER ONE MONTH, STILLBIRTHS AND MATERNAL DEATHS WITH RATES PER 1,000 LIVE BIRTHS: 1906-1950

Year	Births Reported	Deaths 1 Year of Age	Rates per 1,000 Live Births	Deaths 1 Month of Age	Rates per 1,000 Live Births	Stillbirths	Rates per 1,000 Live Births	Maternal Deaths	Rates per 1,000 Live Births
1906	42,677	7,773	182.1	2,545	59.8	2,890	67.9	392	9.2
1907	44,051	7,723	173.2	2,402	54.5	2,590	58.8	385	8.7
1908	47,608	7,658	161.2	2,655	56	2,617	56	329	6.9
1909	53,312	7,302	137.3	2,661	50	2,639	53	311	6.3
1910	53,312	7,302	137.3	2,881	54	2,751	58.7	377	7.3
1911	60,078	7,437	124.1	2,836	47	2,953	49	415	6.9
1912	61,432	7,542	122.7	2,893	47	2,880	46	400	7.4
1913	65,493	7,421	113.4	2,895	45	3,074	45	410	6.3
1914	69,211	7,348	106.7	2,895	42	3,074	45	406	5.8
1915	70,211	7,582	107.7	3,075	43	3,221	45	383	5.4
1916	74,549	8,372	112.3	3,176	42	3,625	47	417	5.5
1917	76,431	8,372	109.5	3,091	40	3,921	46	470	6.1
1918	76,431	8,372	109.5	2,893	38	3,242	41	404	5.0
1919	78,172	8,778	112.3	2,830	36	3,434	41	466	6.2
1920	74,479	8,864	119.0	2,778	37	3,033	40	424	5.4
1921	74,611	8,368	112.1	2,621	35	3,199	42	424	5.4
1922	74,611	8,368	112.1	2,621	35	3,199	42	424	5.4
1923	74,611	8,368	112.1	2,621	35	3,199	42	424	5.4
1924	74,611	8,368	112.1	2,621	35	3,199	42	424	5.4
1925	74,611	8,368	112.1	2,621	35	3,199	42	424	5.4
1926	72,886	8,000	109.7	2,537	35	3,018	41	394	5.4
1927	72,799	4,464	61.3	2,462	33	3,074	42	450	6.1
1928	69,211	4,190	60.5	2,335	33	2,597	40	367	5.3
1929	68,262	4,190	61.3	2,107	30	2,647	38	390	5.7
1930	64,078	3,649	56.9	2,064	29	2,878	40	378	5.7
1931	64,078	3,649	56.9	2,064	29	2,878	40	378	5.7
1932	61,215	3,089	50.4	1,892	29	2,643	38	351	5.7
1933	54,841	2,688	48.9	1,633	26	2,025	30	299	5.3
1934	54,841	2,688	48.9	1,633	26	2,025	30	299	5.3
1935	55,050	2,589	46.1	1,560	28	1,905	34	249	4.5
1936	54,145	2,388	44.0	1,449	26	1,846	34	202	3.7
1937	53,095	2,593	49.0	1,367	24	1,704	30	182	3.2
1938	53,095	2,593	49.0	1,367	24	1,704	30	182	3.2
1939	50,828	2,186	38.3	1,412	25	1,609	28	202	3.7
1940	50,828	2,094	35.3	1,422	24	1,543	28	172	2.9
1941	67,104	2,392	35.0	1,651	25	1,732	28	166	2.6
1942	67,104	2,392	35.0	1,651	25	1,732	28	166	2.6
1943	82,356	2,782	33.8	1,863	23	1,978	23	152	1.8
1944	82,356	2,567	32.0	1,756	23	1,748	23	110	1.6
1945	76,995	2,470	32.0	1,680	22	1,627	24	118	1.5
1946	83,044	2,706	28.5	2,020	21	1,327	22	119	1.3
1947	83,044	2,706	28.5	2,020	21	1,327	22	119	1.3
1948	97,784	2,683	26.6	1,961	20	1,064	20	79	0.8
1949	97,784	2,645	25.0	1,910	20	1,072	20	72	0.7
1950	97,784	2,445	25.0	1,875	20	1,845	20	76	0.7

TABLE 5. TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1950

WEIGHT	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 0 oz. and over	537	....	17	123	146	130	89	44	1	2
over 2500 grams										
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	155	....	12	27	44	40	23	8	....	1
2001-2500 grs. incl.										
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	153	....	6	36	53	34	17	5	2	....
1501-2000 grs. incl.										
2 lbs. 8 oz. to 3 lbs. 4 oz. incl.	103	1	11	37	53	40	12	8	....	1
1001-1500 grs. incl.										
less than 1000 grs.	270	....	16	65	86	68	33	9	....	2
less than 1000 grs.										
Unknown	538	2	23	116	137	129	87	26	....	18
Total	*1345	3	55	404	518	417	261	100	3	24

* includes 13 stillbirths of unknown color.

TABLE 5a. WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1950

WEIGHT	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 oz. and over	489	....	14	100	130	117	77	43	1	1
over 2500 grams										
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	129	....	6	22	39	32	21	8	....	1
2001-2500 grs. incl.										
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	127	....	2	30	48	26	14	5	2	....
1501-2000 grs. incl.										
2 lbs. 8 oz. to 3 lbs. 4 oz. incl.	131	....	4	28	40	35	19	8	....	....
1001-1500 grs. incl.										
less than 1000 grs.	231	....	8	53	73	62	27	8	....	....
less than 1000 grs.										
Unknown	451	....	14	37	129	104	84	25	....	9
Total	1561	....	48	330	405	378	229	97	3	11

TABLE 5b. NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1950

WEIGHT	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 oz. and over	67	.....	3	23	0	19	12	1	.....	.....
2500 grams over										
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	26	.....	0	5	5	8	2	.....	.....	.....
2000-2500 gms. incl.										
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	26	.....	4	0	5	8	8	.....	.....	.....
1500-2000 gms. incl.										
2 lbs. 3 oz. to 3 lbs. 4 oz. incl.	28	1	7	0	4	5	2	.....	.....	.....
1000-1500 gms. incl.										
less than 2 lbs. 3 oz.	46	.....	8	12	13	6	0	1	.....	.....
less than 1000 gms.										
Unknown	74	2	8	18	17	23	7	1	.....	2
Total	271	3	35	73	53	69	32	3	.....	2

TABLE 6. MATERNAL DEATHS BY SPECIFIC CAUSE: 1950

Toxemias of pregnancy	14
Ectopic pregnancy	6
Other complications arising from pregnancy	3
Total complications of pregnancy	23
Abortion without mention of sepsis or toxemia	1
Abortion with sepsis	4
Total abortions	5
Delivery complicated by retained placenta	1
Delivery complicated by other postpartum hemorrhage	6
Delivery complicated by disproportion or malposition of fetus	5
Delivery complicated by prolonged labor of other origin	3
Delivery with other trauma	3
Delivery with other complications of childbirth	6
Total delivery with specified complications	24
Puerperal phlebitis and thrombosis	1
Puerperal pulmonary embolism	7
Puerperal eclampsia	7
Other forms of puerperal toxemia	1
Cerebral hemorrhage in the puerperium	1
Other and unspecified complications of the puerperium	1
Total complications of the puerperium	18
All causes	70

TABLE 6a. MATERNAL DEATHS BY COLOR, CAUSE AND AGE GROUPS: 1950

Cause* and Color	All Ages	Age Group		
		10-14	15-24	25-44
Complications of Pregnancy (640-649)	23	1	7	15
White	15	..	4	11
Non-white	8	1	3	4
Abortion (650-652)	5	..	2	3
White	2	..	..	2
Non-white	3	..	2	1
Delivery with Specified Complications (670-678)	24	..	7	17
White	17	..	4	13
Non-white	7	..	3	4
Complications of the Puerperium (680-689)	18	..	3	15
White	13	..	1	12
Non-white	5	..	2	3
All Causes (640-689)	70	1	19	50
White	47	..	9	38
Non-white	23	1	10	12

* Cause numbers are those of International List (6th Revision).

TABLE 7. MARRIAGES BY AGE GROUPS: 1860

WIFE'S AGE GROUP	HUSBAND'S AGE GROUP										Total												
	10-17		18-19		20-24		25-29		30-34			35-39		40-44		45-49		50-59		60-69		70 plus	
	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent		Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent	Judicial Consent	Parents' Consent
10-17	24	52	21	40	6	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18-19	47	70	45	121	137	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20-24	6	248	811	1,983	3,200	1354	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25-29	11	11	37	125	2,065	2,065	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30-34	1	1	1	1	1,317	1,317	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35-39	1	1	1	1	408	408	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40-44	1	1	1	1	147	147	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45-49	1	1	1	1	31	31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50-59	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60-69	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70 plus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	131	1,452	2,030	10,171	11,601	5,478	1,596	1,882	3,011	2,062	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596	1,596

* Includes 2 New York City marriages, for which New Jersey licenses were incorrectly used. Certificates filed with New Jersey State Department of Health pending legal clarification.

TABLE 7a. MARRIAGES BY PREVIOUS MARITAL STATUS: 1950

Wife's Status	Total	Husband's Status			
		Single	Widowed	Divorced	Unknown
Single	38,004	33,953	729	2,870	452
Widowed	2,674	850	1,142	648	34
Divorced	5,425	2,719	631	2,020	55
Unknown	190	53	38	41	58
Total	46,293*	37,575	2,540	5,579	599

DISCUSSION OF TABLES 7 AND 7a

The age groups below 21 years in Table 7 differ for males and females because this variation is necessary to correctly reflect the legal requirements of marriage in New Jersey.

Of 46,293 married males, 3,637 or 7.9 per cent were less than 21 years of age and had to furnish parental consent. There were 1,784 or 3.9 per cent of the 46,293 females who, being under 18 years of age, had to receive consent.

Of the 3,637 males who were required to furnish parental consent, 135 or 3.7 per cent, being less than 18 years old, had to receive judicial approval of the parental consent. Of the 1,784 females under 18 years of age, 154 or 8.6 per cent were less than 16 years old and so had to receive similar judicial approval of parental consent.

It is interesting to note that there is not too great a disparity between the ages of the individuals involved. However, after males reach 25 years, they seem to prefer to marry females in the next lower age group. The only departure from this pattern occurred for males in the age group 50-59 years who tended to select mates in the same age group. More marriages of both males and females occur in the 20-24 age group than in any other. This fact was also evident in the analysis of data for 1949.

Using the basic data it would be possible to develop percentages by sex, within each age group to determine whether females of a particular age group have a greater tendency to marry younger males than do males of the same age group to marry younger females.

From a study of Table 7a, one may make some interesting observations. In 33,953 marriages, or 73.3 per cent, both parties were single. Of those who had been married before, there was a fairly consistent pattern for both males and females in remarrying. In computing the following percentages, all unknown items were eliminated from the denominators. Of the 5,538 divorced males, 52 per cent married single women, 36 per cent married divorcees, and

* Includes two New York City marriages, for which New Jersey licenses were incorrectly used. Certificates filed with New Jersey State Department of Health pending legal clarification.

12 per cent married widows. Of the 5,370 divorced females, 50 per cent married single males, 38 per cent married divorced males, and 12 per cent married widowers. Of the 2,502 widowers, 46 per cent married widows, 29 per cent married single females, and 25 per cent married divorcees. Of the 2,640 widows, 43 per cent married widowers, 32 per cent married single males, and 25 per cent married divorced males.

TABLE 11. POLIOMYELITIS DEATHS, CASES AND CASE FATALITY RATES*
BY SEX AND AGE GROUPS: 1925-1950

Year	Total	Sex		Age Groups						
		M	F	<1	1-4	5-14	15-24	25-44	45+	
1950	70	38	32	1	8	24	12	25	...	
Cases	1566	505	361	15	184	409	123	127	7	
Fatality Rate	8.1	7.5	8.9	6.7	4.3	5.9	9.8	19.7	...	
1949	121	84	37	1	14	50	22	30	4	
Cases	11513	858	654	25	380	708	214	168	7	
Fatality Rate	8.0	9.8	5.7	2.9	3.7	7.1	10.8	17.9	57.1	
1948	44	25	19	...	5	18	10	11	...	
Cases	809	464	345	14	197	389	151	88	...	
Fatality Rate	5.4	5.4	5.3	...	2.5	4.7	7.6	13.3	...	
1947	10	8	2	...	...	6	2	2	...
Cases	296	192	104	4	61	163	55	13	...	
Fatality Rate	3.4	4.2	1.9	...	...	3.7	8.6	15.4	...
1946	24	11	13	...	5	7	7	4	1	
Cases	257	147	110	5	50	137	51	14	...	
Fatality Rate	9.3	7.6	11.8	...	19.0	5.1	13.7	28.6	...	
1945	102	54	48	2	15	55	18	12	...	
Cases	952	514	438	15	242	526	176	67	2	
Fatality Rate	10.7	10.5	11.0	13.3	6.2	11.0	14.3	17.9	...	
1944	54	31	23	1	8	28	9	6	2	
Cases	552	322	230	6	131	309	79	30	...	
Fatality Rate	9.8	9.6	10.0	16.7	6.1	9.1	11.8	20.0	...	
1943	10	5	5	1	...	3	3	1	2	
Cases	85	50	35	3	16	52	9	4	1	
Fatality Rate	11.8	10.0	14.3	33.3	...	5.8	33.3	25.0	200.0	
1942	25	14	11	1	5	13	4	1	1	
Cases	250	143	107	2	79	143	19	7	...	
Fatality Rate	10.0	9.8	10.3	50.0	6.3	9.1	21.1	14.3	...	
1941	22	14	8	1	...	9	1	7	4	
Cases	1351	218	133	4	61	215	50	18	2	
Fatality Rate	6.3	6.4	6.0	25.0	...	4.2	2.0	38.9	200.0	
1940	6	4	2	...	...	4	1	...	1
Cases	58	40	18	...	21	27	8	2	...	
Fatality Rate	10.3	10.0	11.1	...	...	14.8	12.5	...	...
1939	28	18	10	1	2	14	8	1	2	
Cases	230	147	83	3	50	128	31	7	2	
Fatality Rate	12.2	12.2	12.0	33.3	3.4	10.9	25.8	14.3	100.0	

Year	Total	Sex		Age Groups					
		M	F	<1	1-4	5-14	15-24	25-44	45+
1938	10	6	4	...	5	3	1	...	1
Cases	140	26	14	...	9	21	3	6	...
Fatality Rate	25.0	23.1	25.6	...	53.6	14.3	33.3	...	...
1937	23	12	11	1	2	11	3	2	4
Cases	190	87	73	3	53	84	16	4	...
Fatality Rate	14.4	13.8	15.1	33.3	3.8	13.1	18.8	50.0	...
1936	9	6	3	...	2	1	1	4	1
Cases	28	20	8	...	7	14	4	2	1
Fatality Rate	32.1	30.0	37.5	...	28.6	7.1	25.0	200.0	100.0
1935	825	26	9	1	11	16	3	3	...
Cases	1512	297	215	14	196	280	33	18	...
Fatality Rate	6.8	8.8	4.2	7.1	6.6	5.7	9.1	16.7	...
1934	13	7	6	...	3	4	3	2	1
Cases	82	22	30	3	17	30	7	5	...
Fatality Rate	21.0	21.9	20.0	...	17.6	13.3	42.9	40.0	...
1933	24	15	9	1	4	8	6	4	1
Cases	234	148	86	4	72	123	28	6	1
Fatality Rate	10.3	16.1	10.5	25.0	5.6	6.5	21.4	66.7	100.0
1932	46	22	24	1	12	23	10	...	...
Cases	1361	203	158	4	118	192	37	8	1
Fatality Rate	12.7	10.8	15.2	25.0	10.2	12.0	27.0	...	...
1931	145	92	53	6	40	70	15	9	5
Cases	1975	555	420	31	413	410	89	25	6
Fatality Rate	14.9	16.6	12.6	19.4	9.7	17.1	16.9	36.0	83.3
1930	16	8	8	2	4	7	1	1	1
Cases	50	33	26	4	23	24	7	1	...
Fatality Rate	27.1	24.2	30.8	50.0	17.4	29.2	14.3	100.0	...
1929	15	8	7	...	6	6	1	...	2
Cases	59	23	26	5	30	20	4	...	...
Fatality Rate	25.4	24.2	20.9	...	20.0	30.0	25.0	...	...
1928	27	17	19	2	9	8	2	1	5
Cases	182	48	34	6	23	28	6	3	...
Fatality Rate	32.9	35.4	29.4	33.3	32.1	21.1	33.3	33.3	...
1927	45	28	17	...	16	18	5	3	3
Cases	1322	206	132	10	149	138	27	6	1
Fatality Rate	13.6	14.0	12.9	...	10.7	13.0	18.5	50.0	300.0
1926	19	10	9	1	7	4	1	4	2
Cases	58	30	28	3	25	21	4	5	...
Fatality Rate	32.8	23.3	32.1	33.3	28.0	19.0	25.0	80.0	...
1925	34	16	18	3	9	17	3	1	1
Cases	192	88	78	12	80	68	7	2	2
Fatality Rate	20.5	18.2	23.1	25.0	11.3	27.0	42.0	50.0	50.0

* Case fatality rate expressed in per cent.

† Includes one case of unknown sex.

‡ Includes one case of unknown age.

§ Includes one death of unknown age.

TABLE 11a. AGE SPECIFIC CASE FATALITY RATES FOR POLIO PEAK YEARS AND WARMING-UP YEARS: 1925-1949

Years	Total	<1	1-4	5-14	15-24	25-44	*45+
Warming-up Years 1944 and 1948	7.2	5.0	4.0	6.7	9.2	15.0	50.0
Peak Years With Warming-up 1945 and 1949	9.0	6.0	4.7	8.7	11.8	18.7	44.4
Peak Years Without Warming-up 1927, 1931, 1935	12.4	12.7	9.2	12.6	15.4	20.6	†

* Cases and deaths too few to give reliable data.

† More deaths than cases.

TABLE 11b. PER CENT OF TOTAL CASES AND DEATHS BY AGE FOR POLIO PEAK YEARS AND WARMING-UP YEARS: 1925-1949

Years	Total	<1	1-4	5-14	15-24	25-44	*45+
Warming-up Years 1944 and 1948	†						
	C 1361	1.5	24.1	50.6	15.2	8.3	0.3
	D 98	1.0	13.3	46.0	19.4	17.3	2.0
Peak Years With Warming-up 1945 and 1949	C 2465	2.0	25.2	49.0	13.8	9.1	0.4
	D 223	1.3	13.0	47.1	17.9	18.8	1.8
Peak Years Without Warming-up 1927, 1931, 1935	C 1819	3.0	40.9	45.5	8.2	2.7	0.4
	D 223	3.1	29.8	46.2	10.2	6.7	3.1

* Cases and deaths too few to give reliable data.

† C—Cases.

D—Deaths.

The three tables in this discussion can be used to indicate trends. Table 11 gives the basic data. Table 11a. and 11b. are subsidiary tables drawn up to emphasize peak experiences.

Cases plotted by years seem to show the following:

1. A pattern in the earlier years of abrupt peaks in 1927, 1931 and 1935 with a four-year interval and the 1931 incidence unusually high, being exceeded in later years only by the recent 1949 epidemic.
2. Following a rather prolonged period of relative inactivity through the years 1936-1943, the State experienced two peaks, one in 1945 and the second in 1949, again with a four-year interval. But this later experience differs from the earlier in that both the 1945 and 1949 peaks were preceded by the warming-up years of 1944 and 1948. In other words, the 1945 and 1949 peaks did not come abruptly, since both 1944 and 1948 seemed to be preparing for these peaks.
3. If we believe the recent experience may continue, 1951 should be a relatively easy year, comparable to 1950. But 1952 could be an increasing warming-up year for another peak in 1953. But if the earlier pattern holds, then 1952 might prove to be a year of low incidence comparable to the experiences of 1950 and 1951, to be followed then by the abrupt peak year of 1953.

Attention is called to the fact that cases reported in the early years were usually paralytic cases; in the recent years the cases include both paralytic and non-paralytic. If the non-paralytic cases could be removed from the 1945 and 1949 peak totals, the chances are that the 1931 epidemic would have exceeded 1945 and 1949. The 1931 epidemic was truly a serious year when one realizes that practically all, if not all of the cases reported in 1931, were paralytic cases.

When analyzing specific case fatality rates in Table 11, consideration should be given to the smallness of the sample in many of the years portrayed. Definitely the experiences reported for the age group 45 and over should have little value, because there are years in which the number of deaths exceed the number of cases reported for this age group.

Crude analyses seem to show that:

1. Case fatality rates are decreasing, but that may be the result of the reporting of both paralytic and non-paralytic cases in these later years which show lower case fatality rates than do the earlier years.
2. There seems to be no sex difference in case fatality rates. In some years, the case fatality rate for males exceeds that for females; but in other years, the reverse is evident.
3. Case fatality rates have dropped for each age group. In Table 11a, the last line gives the pooled case fatality rates for the early epidemic years: 1927, 1931 and 1935. It is interesting to note that the age specific case fatality rates for the later peak years: 1945 and 1949 as well as the corresponding rates for the so-called warming-up years: 1944 and 1948 are less than the similar rates for the earlier peak years: 1927, 1931 and 1935. But the rates for the epidemic years: 1945 and 1949 are consistently higher than the corresponding rates for the warming-up years: 1944 and 1948.
4. Table 11b. gives the percentages of total cases and deaths for each age group for the three periods considered in Table 11a. There is a marked decrease in percentages of total cases and deaths, for the age groups are five years from the early epidemic years: 1927, 1931 and 1935 to the recent epidemic years: 1945 and 1949. In like manner, there is a definite increase in percentages of total cases and deaths for the age groups: 15-24 and 25-44 years from the early to the later epidemic years. Little or no change is apparent between the two epidemic periods in the percentages of total cases and deaths for the age group 5-14 years.

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960

SITE, SEX AND COLOR	List No.	AGE GROUPS													Total	15 and over	Unknown	
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64				65 to 69	70 to 74	75 and over
All Malignant	140-246	8470	10	47	49	40	21	67	100	189	318	629	735	1100	1316	1331	1161	1092
Total		4137	1	22	22	11	25	44	67	106	192	346	528	649	675	585	471	437
White Male		3865	1	20	24	13	7	31	40	100	181	274	348	497	485	510	331	281
White Female		229	1	6	2	2	6	2	2	4	6	16	25	40	41	27	21	28
Non-white Male		242	1	1	1	3	4	14	14	15	25	20	28	35	27	19	25	22
Non-white Female																		
Lip	140	14											1	2	1	2	2	6
Total		14											1	2	1	2	2	6
White Male		14											1	2	1	2	2	6
White Female																		
Non-white Male																		
Non-white Female																		
Tongue	141	67								1	2		9	10	8	10	14	19
Total		64								1	1		9	10	8	10	14	19
White Male		6								1	1		1	1	1	1	2	1
White Female		6																
Non-white Male		1																
Non-white Female		1																
Salivary Gland	142	19											4	1	2	5	2	3
Total		12											4	1	2	5	2	3
White Male		12											4	1	2	5	2	3
White Female		1																
Non-white Male		1																
Non-white Female		1																

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS													Total	15 and over	Unknown	
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64				65 to 69	70 to 74	75 and over
Floor of Mouth	143	11											3	1	1	1	3	1
Total		10											3	1	1	1	3	1
White Male		10											3	1	1	1	3	1
White Female		1																
Non-white Male		1																
Non-white Female																		
Other Parts of Mouth and Mouth Unspecified	144	22								1			1	2	3	5	1	7
Total		18								1			1	2	3	5	1	7
White Male		4								1			1	2	3	5	1	7
White Female		4																
Non-white Male		2																
Non-white Female		2																
Oral Mesopharynx	145	24											4	2	4	6	4	4
Total		18											4	2	4	6	4	4
White Male		18											4	2	4	6	4	4
White Female		4											1	1	1	1	1	1
Non-white Male		1																
Non-white Female		1											1	1	1	1	1	1
Nasopharynx	146	14											4	2	4	1	3	4
Total		14											4	2	4	1	3	4
White Male		14											4	2	4	1	3	4
White Female		8											1	1	1	1	1	1
Non-white Male		6											1	1	1	1	1	1
Non-white Female		6											1	1	1	1	1	1

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																		
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown	
Unspecified Female Genital Organs	176	33		1							1	2	5	4	1	4	5	7		
White Male																				
White Female		33		1								1	2	5	4	1	4	5	7	
Non-white Male																				
Non-white Female	2										1	1	2	2	1	4	5	7		
Prostate	177	876									4	13	17	39	65	70	153			
Total		876									4	13	17	39	65	70	153			
White Male		847									4	11	14	36	62	74	148			
Non-white Male		29										2	2	3	3	3	5	5		
Non-white Female																				
Testis	178	21					2	4			1	1	2	2	1	1	1			
Total		21					2	4			1	1	2	2	1	1	1			
White Male		19					2	4			1	1	2	2	1	1	1			
Non-white Male		2																		
Non-white Female																				
Other and Unspecified Male Genital Organs	179	17																		
Total		17																		
White Male		15																		
Non-white Male		2																		
White Female																				
Non-white Female	4																			

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Kidney	180	144		0	3	2					3	6	10	26	22	24	14	18	
Total		144		0	3	2					3	6	10	26	22	24	14	18	
White Male		85		0	3	2					3	6	10	16	18	13	6	10	
Non-white Male		59		0															
White Female	22		1																
Non-white Female	2		1																
Bladder and Other Urinary Organs	181	543																	
Total		543																	
White Male		240																	
Non-white Male		303																	
White Female	1																		
Non-white Female	3																		
Melanoma of Skin	190	39																	
Total		39																	
White Male		24																	
Non-white Male		15																	
White Female																			
Non-white Female																			
Other Neoplasm of Skin	191	70			1														
Total		70			1														
White Male		27			1														
Non-white Male		43																	
White Female	1																		
Non-white Female	3																		

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960-Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																				
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown			
Eye	102	Total	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
White Male		3																				
White Female		5																				
Non-white Male		1																				
Non-white Female		2																				
Brain and Other Parts of Nervous System	103	Total	102	2	10	11	4	2	4	0	14	13	16	19	26	29	9	3	3	3		
White Male		39	4	6	6	1	1	1	3	9	9	12	16	14	16	14	5	3	1	1	1	
White Female		35	2	3	4	2	1	2	1	4	5	4	3	6	9	15	4	2	2	1	2	2
Non-white Male		16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Female		4																				
Thyroid Gland	104	Total	40								2	2	4	5	7	7	6	0	0	0		
White Male		15									1	1	3	3	3	3	3	1	1	1		
White Female		24									1	1	1	2	4	4	3	0	0	0		
Non-white Male		1									2	2	2	1	1	1	1	1	1	1		
Non-white Female		1									1	1	1	1	1	1	1	1	1	1		
Other Endocrine Glands	105	Total	20	2	2	1		1	1	1	2	2	2	2	2	3	2	1	1	1		
White Male		13	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1		
White Female		5	1	1					2	1	1	1	1	1	1	1	1	1	1	1		
Non-white Male		2																				
Non-white Female		1																				

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1960-Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																		
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown	
Bone, Including Jaw Bone	106	Total	84	2	8	1	0	1	3	1	1	1	1	1	1	1	1	1	1	1
White Male		47	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
White Female		23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Male		8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Female		4																		
Connective Tissue	107	Total	14	1	1	1	1	1	1	1	2	1	1	2	1	1	1	3	1	1
White Male		7									1	1	1	2	1	1	1	1	1	1
White Female		5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Male		1																		
Non-white Female		1																		
Lymph Nodes, Secondary and Unspecified Sites	108	Total	19			1	1	1	1	1	1	1	2	2	3	2	2	2	1	1
White Male		10			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
White Female		3																		
Non-white Male		1																		
Non-white Female		1																		
Other and Unspecified Sites	109	Total	162	1	1	1	1	2	2	2	6	4	4	21	20	31	24	21	38	
White Male		89	1	1	1	1	1	1	2	1	2	4	2	2	9	22	14	21	28	
White Female		70	1	1	1	1	1	1	2	1	2	2	1	1	10	17	6	12	18	
Non-white Male		6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Non-white Female		9	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS; 1950--Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS													Total				
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64		65 to 69	70 to 74	75 and over	Unknown
Lymphosarcoma and Reticulosarcoma	200	Total	2	4	2	3	4	1	2	3	8	10	11	23	16	13	13	11	
White Male		1	2	1	2	3	1	2	3	5	3	6	7	13	12	9	6	5	
White Female		1	2	1	1	1	1	1	1	3	3	3	4	8	4	4	6	7	
Non-white Male																			
Non-white Female																			
Hodgkin's Disease	201	Total			1	3	3	9	9	3	8	9	10	7	6	10	10	8	
White Male					1	3	3	9	9	3	8	9	10	7	6	10	10	8	
White Female					1	1	2	4	4	1	2	1	3	1	1	4	5	5	
Non-white Male																			
Non-white Female																			
Other Forms of Lymphoma (Reticulomas)	202	Total		3	1						1	2	1	2	4				
White Male				3	1						1	2	1	2	4				
White Female																			
Non-white Male																			
Non-white Female																			
Multiple Myeloma (Plasmocytoma)	203	Total						1	1				3	11	6	2	7	2	
White Male													3	11	6	2	7	2	
White Female														3	4	4	2	1	
Non-white Male																			
Non-white Female																			

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS; 1950--Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS													Total				
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64		65 to 69	70 to 74	75 and over	Unknown
Leukemia and Atoukemia	204	Total	5	23	63	6	5	15	11	12	10	13	26	27	24	21	20	33	
White Male			1	11	26	2	2	5	4	5	6	10	14	14	14	11	20	26	33
White Female			1	10	11	2	3	6	7	8	5	3	12	13	14	10	16	19	19
Non-white Male			1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Female			2	9	25	1	1	1	1	1	1	1	2	1	1	1	1	1	1
Mycosis Fungoides	205	Total						2					1	1	1	1	1		
White Male														1	1	1	1	1	
White Female																			
Non-white Male																			
Non-white Female																			
All Benign Neoplasms	210-220	Total	4	1	3	1	4	7	6	2	14	13	10	12	12	2	3	8	
White Male			1	1	1	1	1	2	1	2	4	3	3	4	6	2	3	8	
White Female			1	1	1	1	2	1	1	1	2	1	2	2	2	1	1	1	
Non-white Male			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Non-white Female			1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	
All Neoplasms of Unspecified Nature	270-270	Total	2	2			1	5	1	6	6	5	10	12	5	17	4	10	
White Male			1	1			1	1	1	4	4	3	7	8	3	16	1	4	
White Female			1	1			1	1	1	1	2	2	3	3	2	10	1	4	
Non-white Male			1	1			1	1	1	1	1	1	2	2	1	6	3	5	
Non-white Female			1	1			1	1	1	1	1	1	2	2	1	6	3	5	

The tables on neoplasms have been prepared to supply both basic data and indications of the risks experienced by New Jersey's residents according to the factors of sex, color and age. Specificity of attack by site has also been indicated.

The percentage distribution shown on Table 12a-2 emphasizes the preponderance of male deaths from malignant neoplasms of the buccal cavity, pharynx and respiratory system. To a lesser extent, the same sex distribution exists in deaths from cancer of the digestive system, peritoneum, and the lymph and blood tissues.

From the 1950 preliminary census data on characteristics of the population, the non-white population was 5.7 per cent of the total population. If that percentage is compared with the percentages shown by site by color, it is possible to approximate roughly those sites apparently related to race. For example, since cancer deaths of non-whites amounted only to 5.5 per cent of the total cancer deaths instead of the 5.7 per cent, one could expect that non-whites are less subject to cancer or else that the age distribution of non-whites is different from that of whites.

The horizontal percentage analysis by color in the lower part of the table is perhaps a little more indicative of the pattern. From this it appears that the non-whites who die of cancer are less apt to have cancer of the digestive system, peritoneum, respiratory system, and the lymph and blood tissues but more likely to succumb to cancers of the buccal cavity, pharynx, breast and genito-urinary system. A further study of similar data over a span of years should confirm or reject this experience of only one year's deaths.

The percentage age distribution by site has some interesting connotations. Although one would assume that most of the childhood deaths from cancer would be linked with the lymph and blood tissues, the pattern holds through the age of 24 years. Of those persons in the 25-44 year group the greatest percentage of the cancer deaths was associated with the breast and genito-urinary system. Approximately 43 per cent of all female cancer deaths were charged to those sites. Since 70 per cent of all these deaths were female, the affinity for that particular age group is quite understandable. In persons over 44 years of age dying from cancer, the site is most likely to be the digestive system or peritoneum.

The specific death rates shown in Table 12a-3 are worth careful study. From the time of birth till one completes twenty-four years of life, the risk of dying from cancer appears to be similar at any age. The risk in the next age group (25-44 years) is approximately four times greater. For those in the age group 45-64 years, the chances of dying from cancer are eight times greater than for the 25-44 group and 30 times greater than for the 0-24 group. Once one reaches the age of 65 years he is subject to a risk of dying from

cancer which is about 100 times greater than the risk in the 0-24 group and three times greater than the risk in the 45-64 group. Since cancer causes about 15 per cent of all deaths in persons 65 years and over, the risk is easily understood, even though it cannot as easily be faced.

The cancer death rate for all females is statistically significantly lower than that for all males. There appears to be no difference in the risks for whites and non-whites. It must be remembered that all of these interpretations above are based on limited experience. A more detailed study of cancer deaths by site by sex by color by age group for a period of years might reveal individual group fluctuations from the general rates.

TABLE 12a-1. DEATHS FROM NEOPLASMS BY SEX, COLOR AND AGE GROUPS FOR EACH SITE GROUP: 1950

AGE GROUP	Group Total	Malignant							
		Total	Buccal Cavity and Pharynx	Digestive and Peritoneum	Respiratory	Breast and Genito-urinary	Other and Unspecified	Lymph and Blood	Benign or Unspecified
All Ages	8,653	8,470	212	3,487	1,029	2,526	641	575	183
<1 year	16	10	...	...	...	...	5	5	6
1-4	50	47	...	...	...	...	12	28	3
5-14	52	49	...	...	...	...	15	29	3
15-24	66	61	1	4	3	8	19	26	5
25-44	708	665	9	164	56	256	85	95	43
45-64	3,632	3,553	99	1,372	565	1,024	270	223	79
65+	4,129	4,085	103	1,946	405	1,227	235	169	44
Male	4,437	4,363	175	1,876	852	757	366	337	74
Female	4,216	4,107	37	1,611	177	1,769	275	238	109
White	8,164	8,002	198	3,304	981	2,375	597	547	162
Non-white	489	468	14	183	48	151	44	28	21

TABLE 12a-2. DEATHS FROM MALIGNANT NEOPLASMS; PERCENTAGE DISTRIBUTION BY AGE, SITE, SEX AND COLOR: 1950

AGE GROUP	Total	Site Distribution by Age, Sex and Color						
		Buccal Cavity and Pharynx	Digestive and Peritoneum	Respiratory	Breast and Genito-urinary	Other and Unspecified	Lymph and Blood	
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<1 year	0.1	...	...	...	...	...	0.8	0.9
1-4	0.6	...	...	...	...	...	1.9	4.9
5-14	0.6	0.1	...	...	...	...	0.2	2.3
15-24	0.7	0.5	0.1	...	...	...	0.3	5.0
25-44	7.9	4.2	4.7	5.4	10.1	13.3	3.0	4.5
45-64	41.9	46.7	39.3	54.9	40.5	42.1	38.8	16.5
65+	48.2	48.6	55.8	39.4	48.6	36.6	42.1	29.4
Male	51.5	82.5	53.8	82.8	30.0	57.1	58.6	41.4
Female	48.5	17.5	46.2	17.2	70.0	42.9	41.4	41.4
White	94.5	93.4	94.8	95.3	94.0	93.1	95.1	95.1
Non-white	5.5	6.6	5.2	4.7	6.0	6.9	4.9	4.9
Age, Sex and Color Distribution by Site								
All ages	100.0	2.5	41.2	12.1	29.8	7.6	6.8	
<1 year	100.0	...	...	...	...	50.0	6.8	
1-4	100.0	...	...	...	...	25.5	59.6	
5-14	100.0	...	...	...	...	30.6	59.2	
15-24	100.0	1.6	6.6	4.9	13.7	31.2	42.6	
25-44	100.0	1.3	24.7	8.4	38.5	12.8	14.3	
45-64	100.0	2.8	38.6	15.9	28.8	7.6	6.3	
65+	100.0	2.5	47.6	9.9	30.0	5.8	4.2	
Male	100.0	4.0	43.0	19.5	17.4	8.4	7.7	
Female	100.0	0.9	39.2	4.3	43.1	6.7	5.8	
White	100.0	2.5	41.3	12.2	29.7	7.5	6.8	
Non-white	100.0	3.0	39.1	10.2	32.3	9.4	6.0	

TABLE 12a-3. CANCER DEATH RATES BY AGE, SEX AND COLOR PER 100,000 SPECIFIC POPULATION: 1950

Age Group	Population(a)	Deaths		S. E.(b)
		Number	Rate	
All ages	4,835,000	8,470	175.2	± 1.9
<5 years	481,000	57	11.9	± 1.6
5-14	669,000	49	7.3	± 1.0
15-24	659,000	61	9.3	± 1.2
25-44	1,553,000	665	42.9	± 1.7
45-64	1,067,000	3,553	333.0	± 5.6
65+	407,000	4,085	1,003.7	± 15.7
Male	2,319,000	4,363	188.1	± 2.9
Female	2,516,000	4,107	163.2	± 2.5
White	4,557,000	8,002	175.6	± 2.0
Non-white	278,000	468	168.3	± 7.8

(a) Preliminary population from census count and sampling.
 (b) Standard error of rate must be considered if comparisons are to be made.

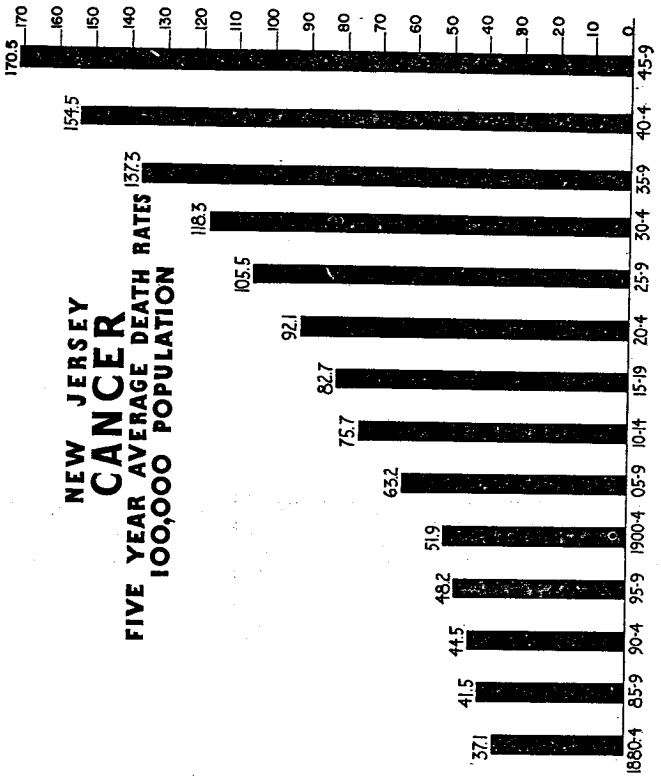


CHART 2

TABLE 13a-1. DEATHS IN NEW JERSEY FROM TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH, 1950
International List (6th Revision) Numbers 800-866, 960

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		January	February	March	April	May	June	July	August	September	October	November	December	
Total	800-806, 960	800	69	32	46	46	62	64	71	78	80	80	71	83
Railway accidents	800-802	33	2	1	3	3	3	1	3	5	2	2	3	2
Motor vehicle accidents	810-805, 960	719	46	49	38	42	52	56	66	66	69	74	67	83
Other road vehicle accidents	800-808	3	1	1	1	1	1	1	1	1	1	1	1	1
Water transport accidents	830-835	3	1	2	1	1	1	1	1	1	1	1	1	1
Aircraft accidents	860-866	11	1	1	1	1	1	1	1	1	1	1	1	1

TABLE 13a-2. DEATHS IN NEW JERSEY FROM NON-TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH, 1950
International List (6th Revision) Numbers 870-956, 961-962

PRIMARY CAUSE	List No.	MONTH OF DEATH											
		January	February	March	April	May	June	July	August	September	October	November	December
Total	870-920, 961-962	1229	104	97	174	186	117	114	93	97	100	122	101
Poisoning by solid liquid substances	870-888	31	4	5	23	23	2	4	2	7	3	6	3
Poisoning by gases and vapors	890-886	111	4	15	9	19	6	4	2	7	3	7	17
Falls	900-886	170	52	41	31	59	45	54	60	40	53	62	41
Fire and explosion of combustible material	910	315	27	32	12	24	2	6	3	5	4	9	13
Accidental suffocation in bed or cradle	924	148	7	1	6	13	10	32	27	26	9	15	3
Drowning	929	7	1	6	13	10	32	27	26	9	15	3	1
Other causes	917-925, 925-928, 931-936, 940-946, 961-962	208	10	15	15	7	19	15	16	18	0	10	40

TABLE 13c. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND TYPE OF ACCIDENT: 1960
International List (6th Revision) Numbers 800-963

TYPE OF ACCIDENT	IMMEDIATE CAUSE									
	Poisonous Gases and Smokes	Burns	Mechanical Suffocation	Drown- ing	Cutting or Piercing	Falls	Crushing, Fractures and Lamellae	Electric Current	Foreign Bodies	Other Accidents
Total	127	131	40	103	4	304	795	16	12	117
Home	119	100	38	12	4	439	33	...	11	75
Other occupational	4	19	2	11	...	3	49	...	...	12
Public place non-occupational motor vehicle...	...	1	...	7	...	8	636	...	...	...
Public place non-occupational and non-motor vehicle	4	7	...	153	...	87	38	7	1	21
Not specified or unknown	...	...	...	...	...	8	4	...	...	9

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 13d. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND COUNTY OF ACCIDENT: 1960
International List (6th Revision) Numbers 800-963

COUNTY	IMMEDIATE CAUSE									
	Poisonous Gases and Smokes	Burns	Mechanical Suffocation	Drown- ing	Cutting or Piercing	Falls	Crushing, Fractures and Lamellae	Electric Current	Foreign Bodies	Other Accidents
Atlantic County	8	7	1	10	...	14	55	1	1	1
Bergen County	12	8	2	8	...	24	77	...	1	6
Burlington County	1	3	1	13	1	13	27	...	1	3
Camden County	...	6	...	12	...	35	59	...	...	4
Camden County	2	...	...	13	...	11	7	1	...	4
Essex County	27	29	11	19	...	149	23	3	2	4
Gloucester County	15	21	2	6	...	71	71	3	...	21
Hudson County	1	2	9	27	...	42	19	...	1	1
Mercer County	3	6	4	6	...	5	19	...	1	8
Middlesex County	12	9	2	9	...	31	46	...	2	3
Monmouth County	1	12	1	13	...	21	59	1	3	8
Morris County	4	4	2	8	...	25	36	3	1	11
Passaic County	7	3	1	19	...	37	38	2	...	3
Somerset County	1	1	1	6	...	8	21	1	...	3
Sussex County	...	4	1	3	...	7	8	1	...	5
Warren County	19	6	6	4	...	34	52	...	...	12
State Institutions	1	1	1	...	...	6	11	...	...	...
Military Posts	...	1	...	3	...	1	4	...	...	2
Other States	...	1	...	3	...	2	4	...	...	3
Unknown	...	...	...	...	...	1	...	...	...	3
Total	127	131	40	103	4	564	795	16	12	117

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 136. NON-TRANSPORT ACCIDENTAL DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH AND PLACE OF ACCIDENT: 1960
International List (6th Revision) Numbers 870-968

PRIMARY CAUSE	Place and Premises							Place Specified			
	Total	Home	Farm	Mine and Quarry	Industrial Premises	Place for Recreation and Sport	Street and Highway		Public Buildings	Resident Institution	Other Place Specified	Place Not Specified
Total	1222	705	6	3	90	14	69	34	58	101	21
Poisoning by solid and liquid substances	31	24	1	1	6	1	1	1	1	1	1
Poisoning by gases and vapors	111	105	2	2	1	1	1	2	1	1	1
Fire and explosion of combustible material	576	405	1	1	33	2	41	25	48	8	12
Mechanical asphyxiation	33	35	1	1	6	2	2	3	1	1	1
Mechanical asphyxiation in bed or cradle	38	35	1	1	1	7	1	1	1	1	1
Drowning	148	11	4	2	82	6	13	4	7	137	1
Other causes	202	82	4	2	1	1	1	1	1	23	8

TABLE 137. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH BY AGE GROUPS: 1960
International List (6th Revision) Numbers 800-963

IMMEDIATE CAUSE	All Ages	AGE GROUPS							Unknown
		<1 year	1-4	5-14	15-24	25-44	45-64	65+	
Total	2029	80	95	101	211	373	500	663	...
Poisonous gas and smoke	127	3	3	2	2	15	49	53	...
Burns	131	3	19	15	7	32	24	31	...
Mechanical asphyxiation	40	34	2	2	1	..	1	..	
Choking	162	1	16	30	35	37	9	14	...
Cutting or piercing	128	..	11	4	..	..	2	..	
Falls	594	6	11	4	9	45	130	360	...
Crushing, fractures, lacerations	705	4	27	38	141	214	214	157	...
Electric shock	16	..	6	3	3	8	2	1	...
Other accidents	117	24	14	10	15	20	18	16	...

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 138. MOTOR VEHICLE DEATHS IN NEW JERSEY BY TYPE OF VEHICLE BY AGE GROUPS: 1960
International List (6th Revision) Numbers 810-885, 890

ACCIDENT INVOLVING	All Ages	Male	Female	AGE GROUPS							
				<1 year							
				1-4	5-14	15-24	25-44	45-64	65+		
Goods transport vehicle(s), but no other motor vehicle	73	61	12	6	7	7	23	24	15	8	..
Goods transport vehicle and no other motor vehicle	62	46	16	..	2	10	24	24	15	6	..
Goods transport vehicle and unspecified motor vehicle	2	2	..	2	1	..	..	..	..	..	..
Passenger motor vehicle(s), but no other motor vehicle	488	370	108	1	17	21	58	105	122	108	..
Passenger motor vehicle and motor bus	8	6	2	..	..	..	..	..	..	..	..
Motor bus(es), but no other motor vehicle	42	26	16	5	1	11	12	13	6	9	..
Motor bus had unspecified motor vehicle	18	14	4	..	2	..	..	..	..	..	..
Unspecified motor vehicles	..	24	6	..	..	4	4	13	6	6	..

TABLE 14. CAUSES OF DEATH AS PERCENTAGE OF TOTAL 46,837 DEATHS; WITH PERCENTAGE BY SEX FOR EACH CAUSE: 1950

Table with 5 columns: Abridged List No., Detail List No., CAUSE GROUPS, Per Cent of Total, Per Cent Male, Per Cent Female. Lists causes of death such as Infective and parasitic diseases, Tuberculosis of respiratory system, etc.

TABLE 15. DEATH RATES (a): TOTAL, WHITE AND NON-WHITE BY CAUSE: 1950

Table with 5 columns: Abridged List No., Detail List No., CAUSE GROUPS, RATE PER 100,000 ESTIMATED POPULATION (Total, White, Non-white). Lists causes of death such as Infective and parasitic diseases, Tuberculosis of respiratory system, etc.

Notes: (a) Data from which rates were calculated appear in Table 17. (b) Death rates for complications of pregnancy, childbirth and the puerperium (640-689) are excluded from this table as they are computed per 1,000 live births.

TABLE 18. INFANT DEATHS BY CAUSE AND AGE GROUPS: 1950
(Separated into These Causes With and Without Public Health Significance)

Cause of Death Showing International List (8th Revision) Numbers	Total Infant Deaths	Under 1 Day	1 Day < 1 Wk.	1 Week 1 Wk. < 2 Mo.	1 Month 1 Mo. < 2 Mo.	2 Months 2 Mo. < 3 Mo.	3 Months and Over
ALL CAUSES (001-927, 900-909)	3,412	847	692	239	110	85	339
Total causes with public health significance	1,886	547	452	153	64	53	211
Without public health significance	1,526	300	240	86	46	32	128
Immaturity unqualified (774-776)	559	323	174	30	1	..	2
Fetal anoxia and atelectasis (762)	439	258	158	20	1	..	1
Without immaturity	199	88	62	8	1	..	1
With immaturity	240	170	106	12	..	..	..
Birth injuries (700-701)	290	145	109	17	1	1	4
Without immaturity	151	80	65	7	1	1	1
With immaturity	140	65	44	3	..	..	3
Diseases of the respiratory system (470-527, 703)	237	110	28	35	28	20	105
Without immaturity	108	50	15	10	10	7	46
With immaturity	129	60	13	25	18	13	59
Other diseases of the respiratory system (470-527)	170	2	6	6	6	7	22
Diseases of the digestive system (530-587, 704)	62	2	..	..	4	..	7
Without immaturity	11	..	..	..	..	..	..
With immaturity	51	..	..	..	..	..	..
Other diseases of the digestive system (530-587)	47	2	6	6	4	7	22
Diseases of the circulatory system (600-657, 705)	80	28	44	4	1	1	2
Without immaturity	4	..	..	..	..	..	..
With immaturity	76	28	44	4	1	1	2
Other diseases of the circulatory system (600-657)	4	..	..	..	..	..	..
Without immaturity	2	..	..	..	..	..	..
With immaturity	2	..	..	..	..	..	..
External causes other than mechanical suffocation * (800-923, 926-969)	61	5	2	6	9	3	36
Hemorrhagic disease of the newborn (771)	23	7	12	4	..	..	..
Without immaturity	15	5	7	3	..	..	..
With immaturity	8	2	5	3	..	..	..

Infective and parasitic diseases (001-138)

Other causes of public health significance	28	..	..	5	9	2	14
Accidental mechanical suffocation-in bed or cradle (024)	161	52	41	16	17	9	26
Avitaminosis	34	..	..	1	8	9	16
Asthma and other metabolic diseases (280-289)	2	..	..	..	..	..	..
Ill-defined diseases of early infancy (772-773)	104	43	63	13	7	1	1
Without immaturity	39	11	8	8	7	1	8
With immaturity	65	32	25	5	3	..	8
Without early infancy (705-769)	10	9	8	2	1	..	..
With immaturity	10	6	5	1	1	..	..
Total causes without public health significance	569	107	127	63	52	32	158
Congenital anomalies and congenital diseases of the nervous system (925, 750-769)	473	104	122	71	43	21	92
Diseases of the nervous system without public health significance	108	1	5	12	9	11	66
Toxic diffuse encephalitis (252-261)	22	..	..	3	3	5	10
Diseases of the nervous system and sense organs (330-338)	1	..	..	..	..	..	..
Diseases of the bone and organs of movement (720-740)	37	1	1	2	1	1	28
Diseases of the skin and subcutaneous tissue (600-608)	18	..	..	..	..	..	..
Diseases of the genit-urinary system (520-576)	4	..	..	..	..	..	..
Diseases of the adrenal glands (274)	2	..	..	..	..	..	..
Diseases of the blood and blood-forming organs (200-239)	4	..	..	..	..	..	..
Symptoms and ill-defined conditions (750-759, 795)	9	1	2	1	1	1	4
Without immaturity	0	..	..	..	..	..	..
With immaturity	9	1	2	1	1	1	4

* On the basis of studies made, it has been found that diagnoses in this category are subject to great error unless substantiated by careful autopsy.

Note: Diseases in which immaturity was either the only cause or a contributory cause represented a grand total of 1,639 infants. The age distribution was as follows: under 1 day, 617; 1 day but under 1 week, 251; 1 week but under 1 month, 62; 1 month but under 2 months, 4; 2 months and over, 2.

In 1950, New Jersey acquired 97,734 live-born babies. During the same year, the State lost by death 2,445 infants. This loss occurred at the rate of 25 infant deaths for each 1,000 live births.

In the accompanying table which has been prepared, the total 2,445 infant deaths are considered in terms of causes with and without public health significance. Almost four-fifths or 1,886 of the deaths were charged to causes which should be of concern to public health workers. Of these, over one-fourth was classified as prematurity unqualified, really no cause at all. However, an additional 500 deaths designated with immaturity had assigned causes. This is a distinct advance in cause assignment made possible through the use of the 6th Revision of the International List.

More than one-tenth of the deaths assigned to causes which are thought to have public health significance was charged to birth injuries. This is a medical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. New Jersey's medical profession can take justifiable pride in the State's low maternal death rate. In 1950, only 70 mothers died, a rate of seven maternal deaths for each 10,000 live births.

On the other hand, public health workers should be concerned with the 170 deaths which constituted two-thirds of the deaths classified as diseases of the respiratory system. Deaths due to diseases of the respiratory system accounted for 12 per cent of the deaths considered to have public health significance.

Of the 559 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for better than four-fifths of this group.

In 1950, New Jersey lost 34 infants by accidental mechanical suffocation in bed or cradle and an additional 22 with causes classified as diseases of the thymus gland. Studies have shown that diagnoses in those categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider these deaths from the autopsy record in the hospitals.

If New Jersey's live-born babies die, they experience death early in their brief existence. (Table 18a.)

TABLE 18a. INFANT DEATHS BY AGE AND IMMATURETY: 1950

Time alive	Total		Immature on death certificate		Not designated immature	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	2,445	100.0	2,039	100.0	1,406	100.0
1 day	947	38.7	617	59.4	330	23.5
1 week	1,639	67.0	971	93.5	668	47.5
1 month	1,875	76.7	1,033	99.4	842	59.9

Nearly two-fifths of those babies who died in 1950 failed to live beyond the first day of life. Before one week elapsed, two thirds of the 2,445 babies had died. Before the end of the first month of life—the usually designated neo-natal period—three-fourths of the 2,445 babies had completed their short lives.

The immature babies so designated on their death certificates contributed 1,039 or 42 per cent of the total infant deaths in 1950. Of these 1,039, three-fifths died within the first day of life. The immature babies dying within their first day of life accounted for two-thirds of all infant deaths occurring within the first day of life. Before attaining one week of age, over 93 per cent of these 1,039 immature babies had failed to survive. Over 99 per cent of the immature babies who died had died before attaining one month of age. This contrasts sharply with the nearly 60 per cent of the mature babies who died during their neo-natal period.

The tables with this brief analysis have been submitted for consideration by medical and public health workers who want to reduce New Jersey's infant mortality.

PRINCIPAL CAUSES OF DEATH BY AGE GROUPS: 1950

In the following selection of principal causes of death, certain groupings were made when the causes were functionally or etiologically related. If such relation did not exist, then individual causes were chosen. Although one might expect that the list for each age group would include the same number of causes, such an arbitrary method would in some instances result in placing undue importance upon the causes at the end of the list. For some age groups, the small numerical totals of causes further down such a list would be so nearly alike that one could not truly be ranked above another. Where the numbers were meaningful an attempt was made to include for each age group the same ten principal causes of death which affected the total population regardless of age.

The causes of death have not yet been ranked by sex within age groups. This could produce a marked change in rank, as for example, the "Complications of pregnancy, etc.," given as the eighth cause for the age group 15 through 24. Since this cause is restricted to females, any ranking of causes by that sex in this age group would undoubtedly advance this cause to a higher rank. For the age group 25 through 44 years, this same cause was responsible for 50 deaths.

Poliomyelitis, although not one of the principal causes of death in the age group 25 through 44, had 25 deaths assigned to it. No longer may one consider this as a disease mostly affecting children. In persons 15 years of age and over, poliomyelitis caused 37 deaths. This was 52.9 per cent of all deaths from that cause.

For all ages, the same ten principal causes of death were on the list for both 1949 and 1950. The first four causes were the same for both years. The rearrangement in rank for the other causes may not be due to an actual increase of importance, but to improved reporting by physicians. This is particularly true of "Immaturity unqualified and diseases with immaturity." Prematurity reflected by the weight of the baby as given on the birth certificate has undoubtedly been listed more often as a contributory cause on the death certificate of the same infant. Although motor vehicle accidents in 1949 caused the same percentage of all deaths as in 1950, it gained in rank through a slight percentage decrease in deaths from falls. Deaths from diseases of the circulatory system, although the leading cause of death for both years, gained in importance in 1950, being responsible for 46.5 per cent of all deaths as compared to 44.9 per cent in 1949.

Just as in 1949, these lists for 1950 point out the alarming fact that tuberculosis in New Jersey should be regarded as "Public Enemy Number One." That it is the second leading cause of death for the age group 15 through 24 years and the third cause for the age group 25 through 44 years clearly indicates that New Jersey has failed to attack the disease with the weapons of early finding of new cases and contacts, adequate follow-up and hospitalization where necessary. The total of 429 deaths from tuberculosis in persons under 45 years of age was 36.7 per cent of all tuberculosis deaths and 5.9 per cent of deaths from all causes for those ages.

Deaths from cancer contributed one of the first three principal causes of death for every age group above one year. Although it is possible that some of the deaths in young adults were due to leukemia, the numbers were sufficiently large to warrant stressing the need for early diagnosis and treatment.

Almost 5 per cent of all deaths of persons 15 through 44 years were due to suicide. Perhaps these deaths and the additional 413 suicides among persons over 44 years might have to some extent been reduced in number had the parties involved had an opportunity to be reached through the facilities of mental health clinics.

Although the percentage and number of persons 65 years and over who died as a result of falls have shown a slight decrease from 1949, adequate safety measures in homes and public buildings could undoubtedly have saved some of the 396 who died as a result of falls in 1950.

Fire and explosion of combustible material caused 38 deaths of children under 15 years of age and drowning caused 34 deaths in this same group. Certainly these figures should alert educators to the need for more safety instruction for children and perhaps to a greater degree for the parents themselves.

Careful study of the causes in each age group, with particular reference to those which may be of a preventable nature, may reveal problems hitherto

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;
NUMBERS AND PERCENTAGES: 1950

ALL AGES			
Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (460-468)	22,697	46.5
2	Malignant neoplasms (140-205)	8,470	17.4
3	Vascular lesions (330-334)	4,563	9.3
4	Tuberculosis (001-019)	1,170	2.4
5	Influenza, pneumonia and bronchitis (480-502)	1,091	2.2
6	Diabetes (260)	1,042	2.1
7	Immaturity unqualified and diseases with immaturity (774-776, 780-778 with 0.5 or more)	1,039	2.1
8	Nephritis and nephrosis (590-594)	713	1.5
9	Motor vehicle accidents (810-835)	640	1.3
10	Falls (900-904)	586	1.2
	All other	6,826	14.0
	Total deaths	48,837	100.0

UNDER 1 YEAR

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Immaturity unqualified (774-776)	539	22.0
2	Congenital malformations and mental deficiencies (325, 730-739)	453	18.5
3	Postnatal asphyxia and atelectasis (762)	189	7.6
4	Birth injuries (700-761)	261	10.7
5	Pneumonia and pneumonia of the newborn (490-493, 763)	206	8.4
6	Hemolytic disease of the newborn (770)	80	3.3
7	Gastro-enteritis and colitis; diarrhea of the newborn (570-571, 764)	46	1.9
	All other	421	17.2
	Total deaths	2,445	100.0

1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Congenital malformations and mental deficiencies (325, 730-739)	56	14.3
2	Malignant neoplasms (140-205)	47	12.0
3	Influenza, pneumonia and bronchitis (480-502)	38	9.7
4	Motor vehicle accidents (810-835)	26	6.6
5	Tuberculosis (001-019)	21	5.3
6	Fire and explosion of combustible material (916)	17	4.3
7	Drowning (929)	12	3.1
8	Encephalitis (343)	10	2.6
9	Poliomyelitis (080-081)	8	2.0
	All other (see text)	157	40.1
	Total deaths	392	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;
NUMBERS AND PERCENTAGES: 1950—Continued

5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Malignant neoplasms (140-205)	49	15.1
2	Motor vehicle accidents (810-835)	30	9.3
3	Polymyelitis (080-081)	24	7.4
4	Drowning (929)	21	6.5
5	Diseases of the circulatory system (400-468)	18	5.5
6	Influenza, pneumonia and bronchitis (480-502)	18	5.5
7	Congenital malformations and mental deficiencies (325, 750-759)	16	4.9
8	Fire and explosion of combustible material (916)	16	4.9
9	Tuberculosis (001-019)	13	4.0
10	Nephritis and nephrosis (590-594)	13	4.0
	All other	107	32.9
	Total deaths	325	100.0

15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Motor vehicle accidents (810-835)	100	17.0
2	Tuberculosis (001-019)	63	10.7
3	Malignant neoplasms (140-205)	61	10.3
4	Diseases of the circulatory system (400-468)	50	8.5
5	Suicide (970-979)	27	4.6
6	Drowning (929)	26	4.4
7	Nephritis and nephrosis (590-594)	20	3.4
8	Complications of pregnancy, childbirth and the puerperium (640-689)	19	3.2
9	Polymyelitis (080-081)	12	2.0
	All other (see text)	212	35.9
	Total deaths	590	100.0

25-44 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	928	26.6
2	Malignant neoplasms (140-205)	665	18.9
3	Tuberculosis (001-019)	327	9.3
4	Motor vehicle accidents (810-835)	172	4.9
5	Suicide (970-979)	164	4.7
6	Vascular lesions (330-334)	145	4.1
7	Nephritis and nephrosis (590-594)	116	3.3
8	Cirrhosis of liver (581)	98	2.8
9	Influenza, pneumonia and bronchitis (480-502)	68	1.9
	All other	826	23.5
	Total deaths	3,517	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;
NUMBERS AND PERCENTAGES: 1950—Continued

45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	6,920	45.1
2	Malignant neoplasms (140-205)	3,553	23.1
3	Vascular lesions (330-334)	1,282	8.0
4	Tuberculosis (001-019)	402	3.2
5	Diabetes (260)	393	2.6
6	Cirrhosis of the liver (581)	337	2.2
7	Suicide (970-979)	268	1.7
8	Influenza, pneumonia and bronchitis (480-502)	255	1.7
9	Nephritis and nephrosis (590-594)	218	1.4
10	Motor vehicle accidents (810-835)	178	1.2
	All other	1,514	9.8
	Total deaths	15,358	100.0

65 YEARS AND OVER

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	14,764	56.3
2	Malignant neoplasms (140-205)	4,085	15.6
3	Vascular lesions (330-334)	3,172	12.1
4	Diabetes (260)	396	2.3
5	Influenza, pneumonia and bronchitis (480-502)	548	2.1
6	Falls (900-904)	396	1.5
7	Nephritis and nephrosis (590-594)	335	1.3
8	Tuberculosis (001-019)	249	1.0
9	Cirrhosis of liver (581)	192	0.7
10	Suicide (970-979)	145	0.5
	All other	1,733	6.6
	Total deaths	26,210	100.0

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1960—Continued

CAUSE OF DEATH	White		Non-white		Age Groups									
	Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown	
														Male	Female
687. Other diseases of female genital organs														
690. Erythema and prethrombophilitis of pregnancy														
691. Other infections of genito-urinary tract during pregnancy														
692. Placenta previa	14	9	5	6			1	4	9					
693. Other hemorrhage of pregnancy	0	4	2	2				1	5					
694. Abortion of pregnancy	0	0	0	0										
695. Abortion with sepsis	0	0	0	0										
696. Other complications arising from pregnancy	0	2	1	1				2	1					
697. Abortion without mention of sepsis or toxemia	1	1	1	1				2	2					
698. Abortion with sepsis	4	1	1	3				2	2					
699. Delivery without complication	1	1	1	1				1	1					
700. Delivery complicated by placenta previa or ante-partum hemorrhage	6	4	2	2				1	5					
701. Delivery complicated by retained placenta	1	1	1	1				1	1					
702. Delivery complicated by other ante-partum hemorrhage	1	1	1	1				1	1					
703. Delivery complicated by abnormal position of fetus	8	3	2	2				2	3					
704. Delivery complicated by prolonged labour or malposition of fetus	1	1	1	1				1	1					
705. Delivery with laceration of perineum, without mention of other	2	2	2	2				1	2					
706. Delivery with other trauma	0	0	0	0				0	0					
707. Delivery with other complications of childbirth	0	0	0	0				0	0					
708. Puerperal urinary infection without other sepsis	1	1	1	1				1	1					
709. Sepsis of childbirth and the puerperium	1	1	1	1				1	1					
710. General puerperal and thrombotic	1	1	1	1				1	1					
711. Puerperal pyelitis during the puerperium	7	6	6	6				2	5					
712. Puerperal pulmonary embolism	1	1	1	1				1	1					
713. Other forms of puerperal toxemia	1	1	1	1				1	1					
714. Other general infections in the puerperium	1	1	1	1				1	1					
715. Mastitis and other disorders of lactation	1	1	1	1				1	1					
716. Boil and carbuncle	1	1	1	1				1	1					
717. Cellulitis of finger and toe	8	7	7	7				1	1					
718. Other cellulitis and abscesses with lymphangitis	1	1	1	1				1	1					
719. Acute lymphadenitis	1	1	1	1				1	1					
720. Impetigo	1	1	1	1				1	1					
721. Other unspecified	1	1	1	1				1	1					
722. Malabsorption	2	2	2	2				1	1					
723. Other local infections of skin and subcutaneous tissue	1	1	1	1				1	1					
724. Scabious	1	1	1	1				1	1					
725. Occupational dermatitis	1	1	1	1				1	1					
726. Other unspecified	1	1	1	1				1	1					
727. Other unspecified	1	1	1	1				1	1					
728. Other unspecified	1	1	1	1				1	1					
729. Other unspecified	1	1	1	1				1	1					
730. Other unspecified	1	1	1	1				1	1					
731. Other unspecified	1	1	1	1				1	1					
732. Other unspecified	1	1	1	1				1	1					
733. Other unspecified	1	1	1	1				1	1					
734. Internal derangement of knee joint	1	1	1	1				1	1					
735. Displacement of intervertebral disc	1	1	1	1				1	1					
736. Affection of sacro-iliac joint	1	1	1	1				1	1					
737. Other affections of joint	1	1	1	1				1	1					
738. Other affections of joint	1	1	1	1				1	1					
739. Other affections of joint	1	1	1	1				1	1					
740. Other affections of joint	1	1	1	1				1	1					
741. Synovitis, bursitis, and tenosynovitis without mention of occupa-														
742. Strain of ligament and tenosynovitis of occupational origin														
743. Infective myositis														
744. Other diseases of muscle, tendon, and fascia	17	6	10	1				6	1					
745. Paronychia	1	1	1	1				1	1					
746. Onychomycosis	1	1	1	1				1	1					
747. Hallux valgus and varus	1	1	1	1				1	1					
748. Clubfoot	1	1	1	1				1	1					
749. Other deformities	1	1	1	1				1	1					
750. Other unspecified	1	1	1	1				1	1					
751. Spina bilida and myelomeningocele	81	11	19	1				31	1					
752. Congenital hydrocephalus	65	32	28	3				47	5					
753. Other congenital malformations of nervous system and sense organs	223	119	104	2				114	6					
754. Congenital malformations of circulatory system	233	112	96	11				180	20					
755. Congenital malformations of digestive system	3	1	1	1				1	1					
756. Congenital malformations of genito-urinary system	3	2	2	0				3	1					
757. Congenital malformations of bone and joint	59	32	26	1				68	3					
758. Other and unspecified congenital malformations, not elsewhere	8	3	4	1				10	1					
759. Unspecified and spinal injury at birth	82	18	13	1				29	2					
760. Unspecified and spinal injury at birth	137	78	48	13				137	3					
761. Other birth injury	124	68	38	11				124	7					

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1960—Continued

CAUSE OF DEATH	Total		White		Non-white		Age Groups							
	Male	Female	Male	Female	Male	Female	<	1-4	5-14	15-24	25-44	45-64	65+	Unknown
702. Postnatal asphyxia and atelectasis	224	146	45	25	489	1								
703. Pneumonia of newborn	27	27	2	0	07									
704. Meningitis of newborn	4	6	2	1	13									
705. Ophthalmia neonatorum														
706. Pemphigus neonatorum														
707. Umbilical sepsis														
708. Necrosis of eyelids	1	1	1	1	2									
709. Meningitis referable from maternal toxemia	1	1	1	1	3									
710. Hemolytic disease of newborn (erythroblastosis)	45	29	5	2	80	1								
711. Hemorrhagic disease of newborn	9	10	3	1	23									
712. Nutritional maladjustment	3	3	1	1	10									
713. Infection of newborn (specify infection)	30	21	6	6	59									
714. Infection of newborn (specify infection)	30	21	6	6	59									
715. Immaturity with asphyxia of any other subsidiary condition	34	2	3	1	49									
716. Immaturity unqualified	240	105	74	44	536									
717. Certain symptoms referable to nervous system and special senses	1	1			1									
718. Other symptoms referable to nervous system and special senses	1	1			1									
719. Symptoms referable to cardiovascular and lymphatic system	12	3	0		1									
780. Symptoms referable to respiratory system	2	1	1	1	2									
781. Symptoms referable to upper gastro-intestinal tract	3	1	1	1	3									
782. Symptoms referable to abdomen and lower gastro-intestinal system	3	1	2		1									
783. Symptoms referable to genitourinary system	1				1									
784. Symptoms referable to limbs and back														
785. Other general symptoms														
786. Abnormal urinary constituents of unspecified cause														
787. Abnormal urinary constituents of unspecified cause														
788. Abnormal urinary constituents of unspecified cause														
789. Nervousness and debility														
790. Nervousness and debility														
791. Tremor unqualified	6	2	4		11									
792. Observation, without need for further medical care														
793. Seizure without mention of psychosis	49	25	39	3	84									
794. Ill-defined and unknown causes of morbidity and mortality	467	321	25	6	8									
795. Ill-defined and unknown causes of morbidity and mortality	6	4	1	1	11									
8901. Railway accident involving passenger	6	4	1	1	11									
8902. Railway accident involving other and unspecified person	21	18	11	2	39									
8910. Motor vehicle traffic accident involving collision with railway train	11	9	2		20									
8911. Motor vehicle traffic accident involving collision with street car	1				1									
8912. Motor vehicle traffic accident to pedestrian	25	10	2		35									
8913. Motor vehicle traffic accident to pedal cyclist	12	6	2		18									
8914. Motor vehicle traffic accident to rider or passenger of motorcycle	12	12	2		24									
8915. Motor vehicle traffic accident to rider or passenger of motorcycle	4	4			8									
8916. Motor vehicle traffic accident involving two or more motor vehicles	4	4			8									
8917. Motor vehicle traffic accident to occupant of motor vehicle in collision with pedestrian or pedal cyclist	137	101	38	10	2	4	1	35	54	51	10			

CAUSE OF DEATH	Total	Male	Female	Age Groups										
				<	1-4	5-14	15-24	25-44	45-64	65+	Unknown			
	8918. Motor vehicle traffic accident involving collision with animal or animal-drawn vehicle	44	38	7	3									
8919. Motor vehicle traffic accident involving collision with fixed or suspended object	2	2												
8920. Motor vehicle traffic accident involving collision with falling or falling object	7	7												
8921. Motor vehicle traffic accident to rider of motorcycle not involving collision	2													
8922. Motor vehicle traffic accident involving overturning in roadway	14	11	2											
8923. Other nonmotor road vehicle accidents	88	61	14	0	2									
8924. Other nonmotor road vehicle accidents	9	6	4											
8925. Motor vehicle traffic accident of unspecified nature	10	10	0											
8930. Motor vehicle nontraffic accident to pedestrian	19	16	3											
8931. Motor vehicle nontraffic accident to pedal cyclist	9	6	3											
8932. Motor vehicle nontraffic accident to rider or passenger of motorcycle	1	1												
8933. Other motor vehicle nontraffic accident involving two or more motor vehicles	1	1												
8934. Motor vehicle nontraffic accident while boarding and alighting	3	3												
8940. Motor vehicle nontraffic accident of other and unspecified nature	8	7	1											
8941. Other street car accident involving collision with motor vehicle														
8942. Accident to pedestrian caused by pedal cyclist														
8943. Accident to rider of pedal cycle not involving collision with a motor vehicle														
8944. Accident to pedestrian caused by other nonmotor road vehicle														
8945. Other nonmotor road vehicle accidents														
8950. Submersion of occupant of small boat	6	3												
8951. Other water transport injury by submersion	9	5												
8952. Other water transport injury by submersion	10	13	1											
8953. Other water transport injury by submersion														
8954. Falls on same level in water transport														
8955. Unspecified falls in water transport	1	1												
8956. Machinery accident in water transport	6	5	1											
8960. Water specified accidents in water transport	1	1												
8961. Accident to nonmaneuvering in water transport	9	9												
8962. Injury to occupant by accident to commercial "transport" aircraft	2													
8963. Other injury in commercial "transport" aircraft	1													
8964. Aircraft accident elsewhere to person not in aircraft	1	1												
8965. Aircraft accident elsewhere to person not in aircraft	1	1												
8966. Other and unspecified aircraft accidents	4	4												
8970. Accidental poisoning by morphine and other opium derivatives	1	1												
8971. Accidental poisoning by other and unspecified drugs	10	4	0											
8972. Accidental poisoning by bromides, salicylates	1	1												
8973. Accidental poisoning by other analgesic and soporific drugs	1	1												
8974. Accidental poisoning by salicylates	1	1												
8975. Accidental poisoning by other analgesic and soporific drugs	1	1												
8976. Accidental poisoning by belladonna, hyoscine, and atropine	1	1												
8977. Accidental poisoning by other and unspecified drugs	1	1												
8978. Accidental poisoning by noxious foodstuffs	1	1												
8979. Accidental poisoning by noxious foodstuffs	1	1												
8981. Accidental poisoning by petroleum products	1	1												
8982. Accidental poisoning by industrial solvents	1	1												
8983. Accidental poisoning by corrosive ammonium, acids, and caustic alkalis	1	1												
8984. Accidental poisoning by mercury and its compounds	4	3	1											

* Includes one female, race unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BERGEN COUNTY FOR 1950
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years							
			Total		Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
			Male	Female	Male	Female								
B1	001-138	Infective and parasitic diseases	68	38	5	7	2	8	10	0	30	27	22	.....
B1	001-008	Tuberculosis of respiratory system	1	1	3	2	.....	.....	.....	.....	.....	.....	.....	.....
B2	010-019	Tuberculosis, other forms	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B4	040-039	Typhoid and its sequelae	5	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B5	043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B6	045-048	Dysentery, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B7	050-061	Scarlet fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B7	050-061	Diphtheria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B8	055	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B9	056	Meningococcal infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	057	Septic poliomyelitis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B11	058	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	059	Scarlet fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B13	060	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B14	065	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B15	100-108	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B16	110-117	Malaria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B17		Leishmaniasis (930-939, 041, 042, 044, 049, 052-054)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B18	140-239	Neoplasms	11	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B18	140-205	Malignant neoplasms	338	412	6	7	.....	.....	.....	.....	.....	.....	.....	.....
B19	210-235	Benign and unspecified neoplasms	338	406	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B20	240-289	Allergic, endocrine system, metabolic and nutritional	15	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B20	200	Diabetes mellitus	119	38	68	3	.....	.....	.....	.....	.....	.....	.....	.....
B21	290-298	Chronic diseases of the circulatory system	87	30	54	2	.....	.....	.....	.....	.....	.....	.....	.....
B21	290-293	Anemias	11	5	14	.....	.....	.....	.....	.....	.....	.....	.....	.....
B22	300-329	Mental, psychomotoric and personality disorders	8	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B22	300-308	Diseases of the nervous system and senses	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B23	330-334	Vascular lesions affecting central nervous system	9	6	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
B23	340	Nonmeningeal meningitis	198	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B24	400-068	Diseases of the structures of the eye	39	17	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
B24	400-102	Rheumatic fever	2153	1187	913	15	.....	.....	.....	.....	.....	.....	.....	.....
B25	410-418	Chronic rheumatic heart disease	70	32	38	.....	.....	.....	.....	.....	.....	.....	.....	.....
B25	410-418	Chronic rheumatic heart disease	70	32	38	.....	.....	.....	.....	.....	.....	.....	.....	.....
B26	430-434	Chronic degenerative heart disease	1590	644	625	13	.....	.....	.....	.....	.....	.....	.....	.....
B26	440-443	Hypertension with heart disease	29	13	15	.....	.....	.....	.....	.....	.....	.....	.....	.....
B26	444-447	Hypertension without mention of heart	28	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B30	470-597	Residual (460-466, 400-468)	179	87	60	46	.....	.....	.....	.....	.....	.....	.....	.....
B30	480-483	Diseases of the respiratory system	118	60	60	3	.....	.....	.....	.....	.....	.....	.....	.....
B30	480-483	Lobar pneumonia	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B37	581	Croup of larynx	11	7	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
B37	581	Croup of larynx	11	7	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
B38	590-604	Diseases of the genito-urinary system	58-587	60-603	54	.....	.....	.....	.....	.....	.....	.....	.....	.....
B38	590-604	Nephritis and nephrosis	117	70	42	.....	.....	.....	.....	.....	.....	.....	.....	.....
B39	610	Hyperplasia of prostate	82	45	34	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	610-680	Disorders of the female genital tract	17	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	610-680	Disorders of the female genital tract	17	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	700-718	Diseases of the skin and cellular tissue	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	720-759	Congenital malformations	3	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
B42	760-765	Birth injuries	28	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B43	763-768	Birth injuries, neonatal asphyxia and atelectasis	161	163	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	769-776	Other diseases peculiar to early infancy and immaturity	10	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	769-776	Other diseases peculiar to early infancy and immaturity	10	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B45	799-798	Acute and chronic influenza	98	54	37	6	.....	.....	.....	.....	.....	.....	.....	.....
B45	800-809	Acute and chronic influenza	98	54	37	6	.....	.....	.....	.....	.....	.....	.....	.....
B47	830-805	Acute and chronic influenza	251	102	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
B48A	850-805	Motor vehicle accidents	53	43	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
B48B	850-805	Other accidents except falls	63	43	16	.....	.....	.....	.....	.....	.....	.....	.....	.....
B49	870-879	Falls	60	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B49	870-879	Falls	60	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B50A	890-963	Stab wounds	63	41	23	.....	.....	.....	.....	.....	.....	.....	.....	.....
B50B	894-909	Police intervention, execution and operations of war	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B50B	894-909	Police intervention, execution and operations of war	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
001-009		ALL CAUSES	2461	2107	53	48	247	40	38	69	800	1372	2065	.....
001-009		ALL CAUSES	2461	2107	53	48	247	40	38	69	800	1372	2065	.....

July 1, 1950, Estimated Population, 538,000.

Total Resident Deaths, 4,670.

Rate per 1,000 Population, 8.7.

* Total includes 1 female—race unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAMDEN COUNTY FOR 1930 Classified by International Abridged List of Causes (4th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Total	Male	Female	Male	Female	<1	1-4	5-14				65+	
										15-24	25-44	45-64	Unknown		
B1	001-138	Infective and parasitic diseases	87	52	20	12	3	4	4	2	3	10	34	25	..
B12	001-003	Tuberculosis, of respiratory system	60	39	11	8	2	2	2	2	2	10	23	13	..
B13	001-004	Tuberculosis, of other forms	6	3	3	1	1	1	1	1	1	1	1	1	..
B14	040	Syphilis and its sequelae	6	5	1	2	1	1	1	1	1	1	1	1	..
B15	043	Cholera	1	1	1	1	1	1	1	1	1	1	1	1	..
B16	043-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	..
B17	060, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	..
B18	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	..
B19	067	Whooping cough	2	2	2	2	2	2	2	2	2	2	2	2	..
B20	068	Measles	1	1	1	1	1	1	1	1	1	1	1	1	..
B21	080	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	..
B22	080	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	..
B23	085	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	..
B24	100-108	Typhus and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1	1	..
B25	140-220	Residual (630-633, 641, 642, 644, 646, 652-654, 659-674, 681-683, 686-696, 120-133)	12	3	7	7	2	3	1	3	1	6	3	4	..
B26	230-240	Neoplasms, neoplasia	521	242	242	22	22	15	15	2	6	34	300	308	..
B27	210-230	Malignant neoplasms	509	238	235	22	22	14	14	2	6	31	283	288	..
B28	240-280	Benign and inappreciated neoplasms	12	4	7	4	4	1	1	2	6	3	17	20	..
B29	290	Alergic, endocrine system, metabolic and nutritional diseases	74	30	36	1	7	7	2	2	6	35	31	4	..
B30	290-290	Residual (290-291, 292-294, 295-297, 298-299)	57	21	29	1	7	7	2	2	9	42	27	4	..
B31	290-293	Diseases of the blood and blood-forming organs	17	10	7	1	1	1	1	1	1	2	4	6	..
B32	300-320	Anemias	8	3	2	1	1	1	1	1	1	1	2	4	..
B33	330-338	Diseases of psychomotoric and personality disorders	6	3	2	2	2	2	2	2	2	2	2	2	..
B34	330-334	Diseases of the mind and sense organs	318	166	188	14	10	9	1	1	12	82	210	1	..
B35	340	Vascular lesions affecting central nervous system	254	141	125	12	9	11	1	1	4	86	500	3	..
B36	400-405	Nonmeningeal meningitis	25	12	12	2	2	2	2	2	2	4	82	500	..
B37	400-402	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1517	763	616	73	45	45	1	1	6	10	432	106	..
B38	410-410	Rheumatic rheumatoid heart disease	2	1	1	1	1	1	1	1	1	1	1	1	..
B39	420-422	Chronic rheumatic and degenerative heart disease	1041	671	92	21	1	1	1	1	1	9	17	12	..
B40	420-422	Residual (420-421, 422-423)	46	21	20	3	2	2	2	2	2	28	320	687	..
B41	430-440	Other diseases of heart	269	162	180	25	12	12	1	1	1	28	92	74	..
B42	440-443	Diseases of the heart with heart disease	4	3	1	1	1	1	1	1	1	1	1	1	..
B43	444-447	Hyperemia with heart disease	38	18	18	3	4	4	4	4	4	4	4	4	..
B44	470-527	Residual (470-475, 510-527)	100	64	32	5	6	6	6	6	6	6	6	6	..
B45	430-435	Infectious mononucleosis	22	10	7	1	1	1	1	1	1	1	1	1	..
B46	435-440	Gastritis, duodenitis, enteritis and colitis, except infectious of newborn	8	2	5	2	2	2	2	2	2	2	2	2	..
B47	581	Residual (430-439, 542, 544, 545, 573-575, 580, 582-587)	35	26	7	2	2	2	2	2	2	2	2	2	..
B48	590-637	Diseases of the genito-urinary system	10	0	6	2	2	2	2	2	2	2	2	2	..
B49	630-634	Nephritis and nephrosis	73	39	26	5	4	4	4	4	4	4	4	4	..
B50	630	Residual (630-631, 632, 633, 634, 635, 636, 637)	9	8	1	1	1	1	1	1	1	1	1	1	..
B51	640-689	Pregnancy, childbirth and the puerperium	7	3	4	3	4	4	4	4	4	4	4	4	..
B52	690-710	Diseases of the skin and cellular tissue	5	1	3	3	3	3	3	3	3	3	3	3	..
B53	720-730	Diseases of the bones and organs of movement	2	2	2	2	2	2	2	2	2	2	2	2	..
B54	700-778	Certain diseases of the nervous system	34	14	16	8	5	5	5	5	5	5	5	5	..
B55	780-792	Birth injuries, postnatal asphyxia and atelectasis	102	52	36	9	5	5	5	5	5	5	5	5	..
B56	783-798	Infections of the newborn	4	1	3	1	1	1	1	1	1	1	1	1	..
B57	799-776	Other diseases peculiar to early infancy and immaturity	7	1	6	6	6	6	6	6	6	6	6	6	..
B58	800-809	Symptoms, semilibit and ill-defined conditions	41	19	16	4	4	4	4	4	4	4	4	4	..
B59	810-835	Accidents, poisonings and violence	13	7	6	6	6	6	6	6	6	6	6	6	..
B60	836-840	Motor vehicle accidents	16	9	11	4	4	4	4	4	4	4	4	4	..
B61	850-855	All other accidents except falls	47	25	11	4	4	4	4	4	4	4	4	4	..
B62	860-904	Falls	38	26	4	6	6	6	6	6	6	6	6	6	..
B63	910-915	Suicide	5	3	2	2	2	2	2	2	2	2	2	2	..
B64	920-970	Homicide	15	18	2	2	2	2	2	2	2	2	2	2	..
B65	980-985	Police intervention, execution and operations of war	3	2	1	1	1	1	1	1	1	1	1	1	..
B66	990-995	Police intervention, execution and operations of war	11	9	5	3	3	3	3	3	3	3	3	3	..
B67	995-999	ALL CAUSES	1573	1283	173	105	195	27	26	32	100	604	1733	8	..

July 1, 1930, Estimated Population, 300,000. Total Resident Deaths, 3,144. Rate per 1,000 Population, 10.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAMDEN CITY FOR 1930 Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years										
			Total	Male	Female	Male	Female	<	1-4	5-14	15-24	25-44	45-64	65+ Unknown			
R1	001-138	Infective and parasitic diseases	58	33	12	11	2			2	11	28	11	17			
R2	001-068	Tuberculosis of respiratory system	39	24	7	7	1			2	10	16	10	17			
R3	010-019	Tuberculosis, other forms	1	1													
R4	060-009	Syphilis and its sequelae	7	4							6	1	1				
R5	043	Cholera															
R6	045-048	Dysentery, all forms															
R7	060-051	Scarlet fever and streptococcal sore throat															
R8	050	Diphtheria															
R9	057	Whooping cough															
R10	058	Measles															
R11	058	Scarlet fever and streptococcal infections															
R12	060	Meningeal meningitis															
R13	060	Acute polyomyelitis															
R14	085	Encephalitis															
R15	100-108	Typhus and other rickettsial diseases															
R16	110-117	Malaria															
R17	090-093	Residual (690-093, 041, 012, 044, 040, 052-054, 056, 058, 061-066, 080-090, 120-138)	10	3	5	2			1		3	2					
R18	140-220	Neoplasms	216	102	88	6				2	17	93	108				
R19	210-230	Breast and unspecified neoplasms	216	102	88	6				2	17	93	108				
R20	240-280	Benign and unspecified neoplasms	5	1	3	1					2	2	1				
R21	290	Diabetes mellitus	41	18	19	1			3		4	21	14				
R22	290-290	Diabetes mellitus	14	7	6	1			2		3	13	11				
R23	300-320	Diseases of the blood and blood-forming organs	6	3	1				1		2	2	3				
R24	300-320	Anemias (290-320)	5	3	1				1		2	2	3				
R25	330-308	Mental, psychopathic and personality diseases	139	62	47	12			1		8	27	83				
R26	350-354	Diseases of the nervous system and sense organs	115	57	42	10			1		8	34	79				
R27	340	Visceral leishmaniasis and central nervous system	12	5	7	2			1		1	1	4				
R28	400-068	Nonneurological meningitis	70	33	29	5			1		1	3	4				
R29	410-416	Diseases of the heart	24	9	12	3			1		1	3	4				
R30	420-422	Arteriosclerotic and degenerative heart disease	47	23	17	31			2		1	10	6				
R31	430-433	Myocarditis and pericarditis	3	2	1												
R32	440-443	Heart failure	18	4	6	3			1			4	10				
R33	444-447	Hypertension without mention of heart	115	46	26	1			2		4	40	51				
R34	470-487	Hypertension with mention of heart	33	15	16	1			1		1	2	2				
R35	490-493	Residual (410-456, 460-493)	62	24	16	10			3		2	10	20				
R36	490-493	Influenza	3			2											
R37	581	Pneumonia	44	22	13	9			1		2	15	17				
R38	590-597	Residual (470-473, 510-527)	1	1	1	2			1								
R39	540-541	Ulcer of stomach and duodenum	8	20	10	4			2		1	6	22				
R40	550-553	Appendicitis	3	8	4												
R41	560-561, 570	Intestinal obstruction and hernia	12	5	6	8			4		1	1	6				
R42	571, 572	Gastritis, duodenitis, enteritis and colitis, except chronic	8														
R43	581	Cirrhosis of liver	16	10	1				1		1	2	3				
R44	582-587	Residual (530-533, 542, 544, 545, 573-575, 580, 582-587)	6	3	1	2											
R45	600-607	Diseases of the genito-urinary system	32	14	12	3			1		2	3	8				
R46	610	Gonorrhoea	23	9	10	8					1	5	8				
R47	600-603	Hypertrophy of prostate	3	1	2												
R48	640-688	Pregnancy, childbirth and the puerperium	3	1	2												
R49	690-718	Diseases of the skin and cellular tissue	2	1	1												
R50	700-709	Congenital malformations of organs of movement	19	1	2												
R51	700-708	Congenital malformations of organs of movement	19	1	2												
R52	700-702	Certain diseases of early infancy	46	23	12	7			16		1	1	2				
R53	703-708	Birth injuries, postnatal asphyxia and atelectasis	20	15	4	4			4		20	6	6				
R54	708-710	Infections of the newborn	3		3												
R55	780-795	Accidents, injuries to early infancy and juvenile normalities	17	9	4	8			17		1	2	3				
R56	790-800	Symptoms, sequelae and ill-defined conditions	4	2	2												
R57	800-809	Accidents, poisonings and violence	75	40	21	15			2		6	12	17				
R58	810-815	Motor vehicle accidents	25	13	10	2			3		5	6	6				
R59	820-827	All other accidents except falls	24	14	2	2			1		3	7	0				
R60	830-836	Falls	5	4	3	2											
R61	840-847	Poisoning	17	9	5												
R62	850-853	Heart failure	7	1	1												
R63	860-863	Police intervention, execution and operations of war															
R64	869-900	ALL CAUSES	1451	704	535	135			77		82	12	19	30	106	485	790

July 1, 1930, Estimated Population, 124,864. Total Resident Deaths, 1,451. Rate per 1,000 Population, 11.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAPE MAY COUNTY FOR 1950
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years										
			Total		Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown			
			Male	Female	Male	Female											
B1	001-183	Infective and parasitic diseases	10	7	6	3	1	1	1	1	1	1	1	1	1	1	1
B1	001-008	Tuberculosis of respiratory system	12	7	6	3	1	1	1	1	1	1	1	1	1	1	1
B2	002-019	Conditions of other forms	10	6	6	3	1	1	1	1	1	1	1	1	1	1	1
B3	003-029	Syphilis and its sequelae	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B4	040	Typhoid fever	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B5	045	Cholera	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	045-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	049, 051	Dysentery, fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	050, 051	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B9	056	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B10	087	Meningeococcal infections	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	088	Plague	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	089	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	084	Scarlet fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	085	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B15	100-108	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	023-074, 081-083, 086-096, 120-128	Neoplasms	97	45	47	2	8	1	5	34	54	1	1	1	1	1	1
B18	140-205	Malignant neoplasms	94	43	46	2	8	1	5	31	54	1	1	1	1	1	1
B19	210-239	Benign and unspecified neoplasms	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B20	240-289	Diseases of the endocrine system, metabolic and nutritional diseases	16	5	10	1	1	1	1	1	1	1	1	1	1	1	1
B21	300-329	Diabetes mellitus	14	3	10	1	1	1	1	1	1	1	1	1	1	1	1
B22	330-339	Diseases of the nervous system and sense organs	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B23	340-354	Vascular lesions affecting central nervous system	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1
B24	400-488	Diseases of the circulatory system	277	135	141	10	11	1	1	11	63	203	1	1	1	1	1
B25	410-416	Chronic rheumatic heart disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B26	420-429	Chronic degenerative heart disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B27	430-434	Other diseases of heart	132	112	101	9	6	1	1	5	47	130	1	1	1	1	1
B28	440-443	Hyper tension with heart disease	38	18	17	1	1	1	1	1	1	1	1	1	1	1	1
B29	444-447	Hypertension without mention of heart	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B30	470-487	Ischemic (430-436, 460-468) diseases of the respiratory system	23	10	8	2	3	2	2	2	2	2	2	2	2	2	2
B30	480-483	Influenza	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B31	490-493	Pneumonia	8	4	3	1	1	1	1	1	1	1	1	1	1	1	1
B32	500-502	Bronchitis	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B33	530-537	Diseases of the digestive system	30	16	10	1	1	1	1	1	1	1	1	1	1	1	1
B34	540, 541	Ulcer of stomach and duodenum	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B35	550-563	Appendicitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B36	570-571, 579	Intestinal obstruction and hernia	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B37	583, 571, 672	Diarrhea of newborn	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B37	681	Cirrhosis of liver	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B38	590-593	Residual (530-539, 542, 544, 545, 573-575, 580, 683-587) of the genitourinary system	9	2	7	2	2	2	2	2	2	2	2	2	2	2	2
B39	610	Nephritis and nephrosis	11	5	5	1	1	1	1	1	1	1	1	1	1	1	1
B40	610-630	Hyperplasia of prostate	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B41	630-740	Pregnancy, childbirth and the puerperium	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B42	750-770	Diseases of the bones and organs of movement	7	3	3	1	1	1	1	1	1	1	1	1	1	1	1
B43	780-770	Congenital malformations	13	11	2	1	1	1	1	1	1	1	1	1	1	1	1
B44	780-770	Certain diseases of early infancy	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
B45	780-785	Birth injuries, postnatal asphyxia and atelectasis	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
B46	790-795	Other diseases of the newborn	9	5	2	1	1	1	1	1	1	1	1	1	1	1	1
B47	800-809	Other diseases of early infancy and immaturity	23	15	7	1	1	1	1	1	1	1	1	1	1	1	1
B48	810-815	Symptoms, senility and ill-defined conditions	8	6	2	1	1	1	1	1	1	1	1	1	1	1	1
B49	820-829	Accidents, poisonings and violence	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B50	830-839	Motor vehicle accidents	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B51	840-849	All other accidents except falls	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B52	850-859	Falls	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
B53	860-869	Stroke	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B54	870-879	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B55	901-999	ALL CAUSES	565	294	230	21	20	24	7	1	7	31	185	337	1	1	1

July 1, 1950, Estimated Population, 87,000. Total Resident Deaths, 685. Rate per 1,000 Population, 18.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF IRVINGTON FOR 1930
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<	1-4	5-14	15-24	25-44	45-64	65+ Unknown	
B1	001-138	Infective and parasitic diseases	8	5	8	5										
B2	001-008	Tuberculosis of respiratory system	2	2	2	2										
B3	009-030	Tuberculosis of other forms	2	3	2	3										
B4	030-039	Syphilis and its sequelae	1	1	1	1										
B5	040	Typhoid fever	1	1	1	1										
B6	048	Cholera														
B7	048-048	Dysentery, ill forms														
B8	050-061	Typhoid fever and streptococcal sore throat														
B9	060	Whooping cough														
B10	067	Measles														
B11	087	Scarlet fever														
B12	088	Stomach polyantheliasis														
B13	084	Scarlet fever														
B14	085	Measles														
B15	100-108	Typhus and other rickettsial diseases														
B16	109	Malaria														
B17	110-117	Malaria (003-059, 041, 042, 044, 046, 062-064, 069-074, 081-083, 088-096, 120-138)	1	1	1	1										
B18	140-229	Neoplasms	17	20	17	20										
B19	340-396	Malignant neoplasms	13	16	13	16										
B20	400	Benign and unclassified neoplasms	4	4	4	4										
B21	200-203	Diseases of the blood and blood-forming organs	2	2	2	2										
B22	300-326	Diabetes mellitus	13	6	13	6										
B23	330-334	Anemia	58	30	58	30										
B24	400-468	Residual (334-359)	20	24	20	24										
B25	410-416	Mental, psychoneurotic and personality disorders	5	6	5	6										
B26	420-422	Diseases of the nervous system and sense organs	58	30	58	30										
B27	430-434	Diseases of the central nervous system	50	26	50	26										
B28	440-443	Nonmeningeal meningitis	8	6	8	6										
B29	444-447	Residual (341-345, 350-357, 360-360, 370-389, 390-398)	8	6	8	6										
B30	470-527	Diseases of the circulatory system	251	150	251	150										
		Arteriosclerotic and degenerative heart disease	10	3	10	3										
		Other diseases of heart	188	117	188	117										
		Hypertension with heart disease	25	12	25	12										
		Hypertension without mention of heart disease	14	8	14	8										
		Diseases of the respiratory system	13	6	13	6										
		Influenza	14	11	14	11										
B31	600-603	Pneumonia	9	9	9	9										
B32	600-602	Residual (470-475, 510-527)	2	2	2	2										
B33	690-697	Diseases of the digestive system	22	11	22	11										
B34	690-694	Diseases of the mouth and pharynx	3	3	3	3										
B35	690, 691, 670	Apertosis of stomach and duodenum	3	3	3	3										
B36	543, 571, 572	Intestinal obstruction and hernia	6	8	6	8										
B37	581	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	2	2	2										
B38	690-697	Diseases of the genito-urinary system	6	3	6	3										
B39	610	Nephritis and nephrosis	6	2	6	2										
B40	640-680	Residual (600-609, 611-617, 620-626, 630-637)	1	1	1	1										
B41	720-740	Pregnancy, childbirth and the puerperium	1	1	1	1										
B42	700-762	Diseases of the skin and cellular tissue	3	2	3	2										
B43	763-768	Diseases of the bones and organs of movement	2	2	2	2										
B44	700-776	Residual (690-693, 700-719, 720-726, 730-737, 740-749, 750-759, 760-762)	17	4	17	4										
B45	890-909	Certain diseases of infancy	4	9	4	9										
B46	910-916	Birth injuries, postnatal asphyxia and atelectasis	1	1	1	1										
B47	917-922	Infections of the newborn	4	2	4	2										
B48	923-928	Other diseases peculiar to early infancy and infancy	1	2	1	2										
B49	930-939	Symptoms, sequelae and ill-defined conditions	27	15	27	15										
B50	940-949	Accidents, poisonings and violence	6	2	6	2										
B51	950-959	Motor vehicle accidents	5	2	5	2										
B52	960-969	All other accidents except falls	1	0	1	0										
B53	970-979	Falls	5	1	5	1										
B54	980-989	Other diseases	6	3	6	3										
B55	990-999	Suicide	6	3	6	3										
B56	990-999	Homicide	2	2	2	2										
B57	990-999	Force intervention, execution and operations of war	2	2	2	2										
B58	990-999	ALL CAUSES	543	298	543	298										

Rate per 1,000 Population, 9.2

Total Resident Deaths, 543.

July 1, 1930, Estimated Population, 69,142.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF GLOUCESTER COUNTY FOR 1930
Classified by International Abridged List of Causes (9th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPE	White		Non-white		Age Groups by Years									
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown		
B1	001-138	Infective and parasitic diseases	19	9	4	4	1	1	1	1	1	1	1	1	1	1
B2	001-008	Tuberculosis of respiratory system	13	6	4	4	1	1	1	1	1	1	1	1	1	1
B3	010-010	Tuberculosis, other forms	2	1	1	1										
B4	020-020	Syphilis and its sequelae	3	3	1	2										
B5	040	Cholera	1	1												
B6	043-048	Dysentery, all forms	1	1												
B7	060, 061	Scarlet fever and streptococcal sore throat	1	1												
B8	065	Diphtheria	1	1												
B9	067	Membranous infections	1	1												
B10	088	Acute polyomyelitis	1	1												
B11	088	Acute poliomyelitis	1	1												
B12	080	Smallpox	1	1												
B13	084	Measles	1	1												
B14	100-108	Typhus and other rickettsial diseases	1	1												
B15	110-117	Malaria	1	1												
B16	140-230	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-082, 086-090, 120-138)	164	85	71	22	6	1	11	68	11	11	59	82	2	2
B17	140-230	Malignant neoplasms	109	84	68	2	6	1	11	68	11	11	59	82	2	2
B18	140-230	Benign and unclassified neoplasms	2	1	3	1										
B19	210-230	Allergic, endocrine system, metabolic and nutritional diseases	28	10	10	8	8	5	2	8	10	2	8	10	2	2
B20	290	Residual (240-245, 250-254, 270-277, 280-289)	18	6	4	2	2	3	2	6	2	2	2	2	2	2
B21	290-290	Anemias	1	1												
B22	300-320	Diseases of the nervous and personality disorders	5	4	1	1										
B23	330-338	Diseases of the blood and blood-forming organs	87	45	3	8	8	2	1	1	1	2	20	82	1	18
B24	340	Nonmalignant meningitis	2	2	2	2										
B25	400-008	Rheumatic fever	421	220	180	24	18	1	1	3	18	121	278	2	2	8
B26	410-410	Rheumatic heart disease	16	7	6	1										
B27	420-422	Arteriosclerotic and degenerative heart disease	288	100	111	12	1	1	2	1	10	9	167	6	6	18
B28	430-434	Other diseases of heart	10	8	1	1										
B29	440-444	Myocardial infarction	74	88	26	9	6	6	1	1	6	18	60	1	1	8
B30	444-447	Hyperextension without fracture of heart	28	6	15	4	4	1	1	1	1	1	8	20	2	20
B31	450-458	Residual (450-458, 460-468)	24	15	15	3	2	1	1	2	2	2	6	15	1	15
B32	460-467	Influenza	4	3	3											
B33	469-468	Pneumonia	17	10	2	4	1	1	1	1	1	1	1	1	1	1
B34	500-502	Residual (470-475, 510-527)	2	1	1											
B35	530-537	Diseases of the digestive system	29	15	16	1										
B36	540, 541	Ulcer of stomach and duodenum	4	1	3											
B37	500, 501, 570	Appendicitis	1	1	1											
B38	543, 571, 572	Gastritis, gastroenteritis and enteritis (except diarrhea of newborn)	2	2	1	1										
B39	581	Chronicity of liver	13	10	3											
B40	590-597	Diseases of the genito-urinary system	28	11	16	1	1	1	1	1	1	1	1	1	1	1
B41	610	Nephritis and nephrosis	20	7	10	1	1	1	1	1	1	1	1	1	1	1
B42	640-680	Hyperemia of prostate	4	3	1											
B43	720-740	Pregnancy, childbirth and the puerperium	1	1	1											
B44	750-759	Diseases of the skin and cellular tissue	1	1	1											
B45	760-762	Diseases of the bones and organs of movement	1	1	1											
B46	770-789	Congenital malformations	3	2	1	1										
B47	790-792	Birth injuries, postnatal asphyxia and asfexia	30	16	6	4	6	80	4	6	0	1	1	1	1	1
B48	793-798	Infections of the newborn	16	9	4	2	1	16	4	2	1	1	1	1	1	1
B49	799-776	Other diseases peculiar to early infancy and immaturity unqualified	14	6	2	2	2	14	2	2	2	2	2	2	2	2
B50	800-800	Syphilitic, venereal and ill-defined conditions	0	4	3	1	1	1	1	1	1	1	1	1	1	1
B51	820-825	Accidents and violence	66	41	0	9	1	1	1	1	1	1	1	1	1	1
B52	830-835	Motor vehicle accidents	16	12	1	1	2	4	5	6	14	11	14	3	1	1
B53	840-846	All other accidents except falls	17	12	1	4	1	1	2	5	8	3	3	1	1	1
B54	850-855	Falls	6	6	2	1										
B55	860-865	Self-destruction	3	3	2	1										
B56	870-875	Suicide	5	5	2	1										
B57	880-885	Homicide	3	3	2	1										
B58	890-900	Police intervention, execution and operations of war	1	1	1	1										
B59	901-909	All causes	905	470	338	83	44	48	8	9	13	63	264	609	2	2

July 1, 1930, Estimated Population, 92,000.

Total Resident Deaths, 905.

Rate per 1,000 Population, 9.8.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HUDSON COUNTY FOR 1960
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years							
			Total		Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
			Male	Female	Male	Female								
B1	001-138	Infective and parasitic diseases	247	40	18	12	4	0	1	12	63	113	45	
B2	001-008	Tuberculosis of respiratory system	168	32	12	12	1	4	5	6	8	114	568	
B3	010-019	Neoplasms, other forms	122	5	5	5	1	1	1	1	1	1	1	
B4	010	Syphilis	21	14	4	3	1	4	2	2	1	1	1	
B5	043	Typhoid fever	2	2	2	2	1	1	1	1	1	1	1	
B6	043-018	Cholera	2	2	2	2	1	1	1	1	1	1	1	
B7	060, 061	Dysentery, all forms	3	2	2	2	1	1	1	1	1	1	1	
B8	060	Scarlet fever and streptococcal sore throat	3	2	2	2	1	1	1	1	1	1	1	
B9	066	Whooping cough	3	2	2	2	1	1	1	1	1	1	1	
B10	067	Meningococcal infections	3	2	2	2	1	1	1	1	1	1	1	
B11	053	Plague	7	3	3	3	1	1	1	1	1	1	1	
B12	080	Scarlet fever	2	2	2	2	1	1	1	1	1	1	1	
B13	085	Steno polymyositis	2	2	2	2	1	1	1	1	1	1	1	
B14	085	Measles	2	2	2	2	1	1	1	1	1	1	1	
B15	100-108	Typhus and other rickettsial diseases	2	2	2	2	1	1	1	1	1	1	1	
B16	110-117	Malaria	2	2	2	2	1	1	1	1	1	1	1	
B17		Leishmaniasis (930-023, 041, 042, 044, 049, 052-054, 051-058, 058-060, 120-125)	137	4	4	4	1	1	1	1	1	1	1	
B18	130-230	Neoplasms (851-068, 068-060, 120-125)	137	4	4	4	1	1	1	1	1	1	1	
B19	210-230	Malignant neoplasms	129	682	54	22	3	6	7	8	114	588		
B20	240-280	Benign and unspecified neoplasms	129	672	54	22	3	6	7	8	114	588		
B21	290-293	Diabetes mellitus	27	10	10	10	2	2	2	2	2	2	2	
B22	300-320	Diseases of the blood and blood-forming organs	176	53	14	1	3	1	2	10	67	68		
B23	330-338	Iron deficiency anemia (591-599)	30	14	13	1	4	3	1	2	4	50		
B24	400-408	Mental, psychoneurotic and personality disorders	176	53	14	1	3	1	2	10	67	68		
B25	410-416	Diseases of the nervous system and sense organs	176	53	14	1	3	1	2	10	67	68		
B26	420-422	Vascular lesions affecting central nervous system	624	203	944	6	11	2	3	10	171	1122		
B27	420-432	Nonmeningeal meningitis	570	240	313	6	11	2	3	10	171	1122		
B28	440-443	Diseases of the circulatory system (300-308, 370-389, 390-398)	48	20	28	3	8	1	2	3	10	10		
B29	444-447	Rheumatic fever	329	179	20	2	2	1	2	3	10	10		
B30	450-453	Chronic rheumatic heart disease	122	46	72	3	1	1	1	1	1	1		
B31	500-502	Arteriosclerotic and degenerative heart disease	267	1408	1006	30	22	2	4	1	0	11		
B32	500-501, 570	Hypertension with heart disease	333	184	10	10	4	2	2	1	0	882		
B33	543, 571, 572	Hypertension without mention of heart	85	21	72	6	11	2	3	10	10	20		
B34	470-527	Diseases of the respiratory system	203	122	67	3	4	2	4	1	1	1		
B35	480-483	Influenza	203	122	67	3	4	2	4	1	1	1		
B36	530-587	Pneumonia	151	51	8	3	22	4	1	1	1	1		
B37	581	Bronchitis	36	6	6	1	1	1	1	1	1	1		
B38	590-594	Residual (470-475, 510-527)	39	25	18	12	1	1	1	1	1	1		
B39	610	Diseases of the digestive system	334	194	150	4	6	4	2	4	1	1		
B40	640-680	Ulcers of stomach and duodenum	33	42	9	2	1	1	1	1	1	1		
B41	690-716	Intestinal obstruction and hernia	22	14	8	1	1	1	1	1	1	1		
B42	720-740	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	54	24	28	1	1	1	1	1	1	1		
B43	750-759	Diarrhoea of newborn	15	6	9	9	1	1	1	1	1	1		
B44	760-762	Cirrhosis of liver	117	81	34	2	2	1	1	1	1	1		
B45	763-768	Nephritis and nephrosis	73	97	42	7	1	1	1	1	1	1		
B46	769-772	Diseases of the genito-urinary system	111	77	50	7	7	1	1	1	1	1		
B47	770-779	Hydronephrosis of prostate	90	40	33	5	3	1	1	1	1	1		
B48	780-789	Pregnancy, childbirth and the puerperium	33	11	17	1	1	1	1	1	1	1		
B49	790-792	Diseases of the skin and cellular tissue	6	2	5	1	1	1	1	1	1	1		
B50	800-804	Diseases of the bones and organs of movement	78	39	33	3	3	1	1	1	1	1		
B51	810-814	Congenital malformations	229	113	61	27	10	20	8	1	1	1		
B52	820-829	Birth injuries, postnatal asphyxia and atelectasis	6	6	6	6	1	1	1	1	1	1		
B53	830-839	Infectious diseases of the newborn	135	9	0	0	0	0	0	0	0	0		
B54	840-849	Other diseases peculiar to early infancy and infancy unmodified and ill-defined conditions	56	30	16	8	8	0	0	0	0	0		
B55	850-859	Accidents, poisonings and violence	310	102	2	2	13	8	9	10	10	57		
B56	860-869	Motor vehicle accidents	67	41	23	8	3	0	4	11	14	20		
B57	870-879	All other accidents except falls	98	55	22	11	10	6	5	9	8	21		
B58	880-889	Falls	80	45	28	14	2	1	1	1	1	7		
B59	890-899	Subjete	61	40	14	1	1	1	1	1	1	27		
B60	900-909	Homeicide	13	5	3	4	1	1	1	1	1	5		
B61	910-919	Police intervention, execution and operations of war	6800	2924	173	138	319	44	38	67	541	2475		
B62	920-929	ALL CAUSES	6800	3060	2024	173	138	319	44	38	67	541		

July 1, 1959, Estimated Population, 647,000. Total Resident Deaths, 6,800. Rate per 1,000 Population, 10.6.

TABLE 28. TABULATION OF DEATHS OF RESIDENTS OF HOBOKEN FOR 1950
 Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years									
			Total	Male	Female	Male	Female	<1	1-4	5-14				15-24	25-44	45-64	65+	Unknown
										5	10	15	20					
B1	001-138	Infective and parasitic diseases	35	28	7					1	1	1		4	17	11		
B2	001-008	Tuberculosis of respiratory system	20	20	4									4	14	7		
B3	010-019	Syphilis and other forms	4	4														
B4	020-029	Septic fever	4	3	1										1	1	8	
B5	048	Cholera																
B6	045-048	Dysentery, all forms																
B7	045-048	Scarlet fever and streptococcal sore throat																
B8	065	Diphtheria	1	1														
B9	065	Typhoid fever																
B10	067	Measles																
B11	063	Acute poliomyelitis																
B12	080	Smallpox	1	1														
B13	084	Synphax																
B14	100-108	Malaria																
B15	110-117	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 088-096, 120-135)	111	1														
B16	140-200	Neoplasms	108	66	45													
B17	210-239	Fracture, dislocation, sprain, strain, laceration, burn, scald, and unspecified neoplasms	3	3	2													
B20	200	Allegic, endocrine system, metabolic and nutritional diseases	14	2	12													
B21	290-290	Diseases (carditis, 350-351, 370-377, 390-399)	12	2	10													
B22	290-290	Diseases of the blood and blood-forming organs	2		2													
B23	300-303	Anemias																
B24	300-303	Residual (291-296)																
B25	300-303	Mental, psychoneurotic and personality disorders	2															
B26	300-308	Endocrine system and sense organs	41	21	20													
B27	330-334	Neuroses	29	29														
B28	340	Vascular lesions affecting the nervous system	3															
B29	400-402	Nonhemorrhagic meningitis	2															
B30	400-402	Residual (341-345, 350-357, 300-309, 370-380, 300-308)	315	183	127													
B31	400-402	Rheumatic febrile circulatory system	3															
B32	410-418	Rheumatic rheumatic heart disease																
B33	420-422	Chronic rheumatic and degenerative heart disease	230	153	77													
B34	420-422	Other diseases of heart	29	11	18													
B35	440-443	Other diseases of heart	3		3													
B36	444-447	Hypertension without disease of heart	15	9	6													
B37	470-527	Residual (450-456, 460-468)	15	7	8													
B38	490-493	Diseases of the respiratory system																
B39	490-493	Influenza																
B40	640-689	Pneumonia	15	7	8													
B41	690-716	Bronchitis																
B42	700-702	Residual (470-478, 510-527)																
B43	700-702	Diseases of the digestive system	20	22	7													
B44	700-709	Stomach and duodenum	6	6														
B45	700-709	Appendicitis	5	4	1													
B46	700-709	Intralobular obstruction and hernia	3	2	1													
B47	700-709	Gastritis, duodenitis, enteritis and colitis, except childbirth of newborn	1	0	1													
B48	700-709	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)																
B49	700-709	Diseases of the genito-urinary system	8	1	7													
B50	700-716	Nephritis and nephrosis	7	5	2													
B51	700-716	Pregnancy, childbirth and the puerperium	2	2														
B52	700-716	Residual (600-609, 611-617, 620-630, 630-637)																
B53	700-716	Diseases of the skin and cellular tissue																
B54	700-716	Diseases of the bones and organs of movement	6	5	1													
B55	700-702	Certain diseases of early infancy	25	10	13													
B56	700-702	Birth injuries, postnatal asphyxia and asolecrosis	10	1	9													
B57	700-702	Infections of the newborn	10	7	3													
B58	700-702	Other diseases peculiar to early infancy and immaturity	9	3	6													
B59	700-702	Symptoms, senility and ill-defined conditions	38	27	11													
B60	700-702	Accidents, poisonings and violence	6	6														
B61	700-702	Motor vehicle accidents																
B62	700-702	All other accidents except falls	12	12														
B63	700-702	Falls	1	1														
B64	700-702	Suicide	6	4	2													
B65	700-702	Police intervention, execution and operations of war	1	1														
B66	700-702	ALL CAUSES	627	388	239	6	3	30	1	4	6	51	221	300				

July 1, 1950, Estimated Population, 81,000.

Total Resident Deaths, 627.

Rate per 1,000 Population, 12.5.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF UNION CITY FOR 1930
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-132	Infective and parasitic diseases	17	12	12	5	5	1	1	1	1	1	1	10	4
B2	011-008	Tuberculosis, of every system	17	12	12	5	5	1	1	1	1	1	1	10	4
B3	010-019	Tuberculosis, other forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B4	033-020	Syphilis and its sequelae	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B5	040-040	Typhoid fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B6	045-048	Dysentery, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B7	050-051	Dysentery, fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B8	055-055	Diphtheria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B9	055-055	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	063-063	Plague, bubonic infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B11	063-063	Plague, septicemic infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	080-080	Acute poliomyelitis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B13	084-084	Scarlet fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B14	105-108	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B15	105-108	Mumps	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B16	110-117	Malaria and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B17	140-230	Residual (630-039, 041, 045, 044, 019, 052-054, 059-074, 081-083, 089-096, 120-138)	116	69	69	47	47	1	1	1	1	1	1	51	53
B18	140-230	Scarlet fever	114	68	68	40	40	1	1	1	1	1	1	51	53
B19	210-250	Measles	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B20	240-260	Alberic, enderburg system, metabolic and nutritional diseases	15	4	4	11	11	.....	.....	.....	.....	.....	.....	.....	.....
B21	290-200	Diphtheria mellitus	12	3	3	9	9	.....	.....	.....	.....	.....	.....	.....	.....
B22	290-200	Diphtheria, of the nose, throat and blood-forming organs	12	3	3	9	9	.....	.....	.....	.....	.....	.....	.....	.....
B23	300-325	Anemia	4	1	1	3	3	.....	.....	.....	.....	.....	.....	.....	.....
B24	300-325	Residual (294-299)	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B25	330-335	Mental, psychoneurotic and personality disorders	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B26	330-335	Diseases of the nervous system and sense organs	57	22	22	35	35	.....	.....	.....	.....	.....	.....	.....	.....
B27	340-434	Diseases of the vascular and central nervous system	52	20	20	32	32	.....	.....	.....	.....	.....	.....	.....	.....
B28	440-445	Nonmeningeal meningitis	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B29	440-445	Residual (841-343, 350-357, 360-369, 370-389, 390-398)	313	178	178	135	135	.....	.....	.....	.....	.....	.....	.....	.....
B30	460-468	Diseases of the circulatory system	18	13	13	5	5	.....	.....	.....	.....	.....	.....	.....	.....
B31	470-527	Diseases of the heart	15	6	6	9	9	.....	.....	.....	.....	.....	.....	.....	.....
B32	480-483	Arteriosclerosis of the heart disease	23	10	10	13	13	.....	.....	.....	.....	.....	.....	.....	.....
B33	480-483	Residual (470-475, 510-527)	23	10	10	13	13	.....	.....	.....	.....	.....	.....	.....	.....
B34	500-591, 570	Other diseases of the generative heart disease	27	0	0	27	27	.....	.....	.....	.....	.....	.....	.....	.....
B35	533, 571, 572	Hypertension with heart disease	27	0	0	27	27	.....	.....	.....	.....	.....	.....	.....	.....
B36	533, 571, 572	Hypertension without mention of heart disease	9	5	5	4	4	.....	.....	.....	.....	.....	.....	.....	.....
B37	581	Residual (460-468, 490-493)	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B38	590-597	Diseases of the respiratory system	18	13	13	5	5	.....	.....	.....	.....	.....	.....	.....	.....
B39	610	Influenza	14	12	12	2	2	.....	.....	.....	.....	.....	.....	.....	.....
B40	610-689	Pneumonia	14	12	12	2	2	.....	.....	.....	.....	.....	.....	.....	.....
B41	690-716	Bronchitis	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B42	700-776	Residual (470-475, 510-527)	22	16	16	6	6	.....	.....	.....	.....	.....	.....	.....	.....
B43	700-776	Diseases of the genito-urinary system	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	700-776	Residual (600-609, 611-617, 620-629, 630-637)	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B45	700-776	Diseases of the skin and cellular tissue	4	3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B46	700-776	Diseases of the mouth and organs of movement	4	3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B47	700-776	Congenital malformations	10	5	5	5	5	.....	.....	.....	.....	.....	.....	.....	.....
B48	700-776	Birth injuries, postnatal asphyxia and atelectasis	4	1	1	3	3	.....	.....	.....	.....	.....	.....	.....	.....
B49	700-776	Infections of the newborn	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B50	780-795	Other diseases peculiar to early infancy and lunacy	4	3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B51	800-900	Syphilis, venereal and ill-defined conditions	4	3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B52	800-900	Syphilis, venereal and ill-defined conditions	4	3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....
B53	800-900	Accidents, poisonings and violence	28	16	16	12	12	.....	.....	.....	.....	.....	.....	.....	.....
B54	800-900	Motor vehicle accidents	4	2	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....
B55	800-900	All other accidents except falls	5	3	3	2	2	.....	.....	.....	.....	.....	.....	.....	.....
B56	800-900	Falls	11	6	6	4	4	.....	.....	.....	.....	.....	.....	.....	.....
B57	800-900	Suicide	8	4	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....
B58	800-900	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B59	800-999	ALL CAUSES	621	354	354	267	267	.....	.....	.....	.....	.....	.....	.....	.....

July 1, 1930, Estimated Population, 35,000.

Total Resident Deaths, 621.

Rate per 1,000 Population, 11.3.

TABLE 22. TABULATION OF DEATHS OF HUNTERDON COUNTY FOR 1950
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years									
			Total	Male	Female	Male	Female	<1	1-4	5-14			15-24	25-44	45-64	65+	Unknown	
										5-14	15-24	25-44						
B1	001-338	Infective and parasitic diseases	11	6	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B2	000-008	Diseases of respiratory system	9	6	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B3	010-019	Tuberculosis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B4	020-029	Syphilis and its sequelae	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B5	030-039	Typhoid fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B6	040-049	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B7	050-059	Scabies, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B8	060-069	Syphilis and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B9	068	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	067	Diphtheria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B11	066	Meningococcal infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	086	Scarlet fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B13	084	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B14	085	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B15	100-109	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B16	110-119	Residual (000-009, 011-019, 041-049, 052-054, 059-074, 081-083, 085-086, 120-138)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B18	140-239	Neoplasms	83	38	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B19	200-209	Malignant neoplasms	82	38	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B20	210-219	Benign neoplasms	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B21	240-263	Allergic and unspecified neoplasms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B22	260	Diabetes mellitus	10	6	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B23	290-299	Diseases of the blood and blood-forming organs	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B24	300-309	Anemias	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B25	310-319	Leukemias	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B26	320-329	Residual (311-314, 330-337, 360-363, 370-383, 380-389)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B27	400-408	Ischemic heart disease	243	132	111	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B28	410-419	Coronary heart disease	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B29	420-422	Arteriosclerotic heart disease	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B30	430-434	Other diseases of heart	171	100	71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B31	440-443	Hypertension with heart disease	83	44	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B32	444-447	Hypertension without mention of heart	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B33	450-459	Diseases of the circulatory system	18	6	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B34	460-468	Residual (451-459, 461-468)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B35	470-527	Diseases of the respiratory system	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B36	480-483	Residual (471-483)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Rate per 1,000 Population, 11.7.

Total Resident Deaths, 506.

July 1, 1950, Estimated Population, 43,000.

Total Resident Deaths, 506.

B37	530-537	Pneumonia	15	10	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B38	540-541	Diseases of the digestive system	12	11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B39	550-553	Ulcer of stomach and duodenum	15	14	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	560-563	Appendicitis	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	570-571, 572	Intestinal obstruction and hernia	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B42	574, 575, 576	Acute and chronic enteritis and colitis, except diarrhoea of newborn	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B43	581	Cirrhosis of liver	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	582-587	Residual (530-539, 542, 544, 545, 575-578, 580, 582-587)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B45	590-597	Diseases of the genitourinary system	8	1	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B46	600-604	Nephritis and nephrosis	10	7	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B47	610	Hydronephrosis	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B48	620-629	Residual (600-609, 611-617, 620-629, 630-637)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B49	640-649	Pregnancy, childbirth and the puerperium	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B50	720-749	Diseases of the bones and cartilage of bones	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B51	750-759	Congenital malformations	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B52	760-770	Certain diseases of early infancy	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B53	780-782	Birth injuries, postnatal asphyxia and atelectasis	14	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B54	790-792	Other diseases of infancy and childhood	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B55	793-796	Other diseases peculiar to early infancy and childhood	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B56	797-799	Symptoms, senility and ill-defined conditions	10	4	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B57	800-809	Accidents, poisonings and violence	35	24	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B58	810-812	Motor vehicle accidents	15	12	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B59	820-829	All other accidents except falls	8	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B60	830-839	Falls	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B61	840-849	Suicide	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B62	850-859	War	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B63	860-869	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B64	870-879	Residual (861-869)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B65	880-889	All other causes	501	274	226	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Rate per 1,000 Population, 11.7.

Total Resident Deaths, 506.

July 1, 1950, Estimated Population, 43,000.

Total Resident Deaths, 506.

TABLE 22. TABULATION OF DEATHS OF MENCKE COUNTY FOR 1960
Classified by International Abridged List of Causes (5th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
B1	001-138	Infective and parasitic diseases	118	87	25	10	23	10	2	6	1	5	31	41	22	..
B12	001-008	Tuberculosis of respiratory system	89	50	15	7	17	8	1	1	2	4	8	9	17	..
B13	010-010	Tuberculosis, other forms	7	8	2	3	3	3	..	..	..	..	..	..	..	..
B14	020-029	Spillula and its sequelae	8	..	..	..	..	..	..	..	..	..	..	..	..	..
B15	043	Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B16	045-048	Dysentery, all forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B17	050, 061	Scarlet fever and streptococcal sore throat	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B18	065	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B19	067	Whooping cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B10	087	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B11	088	Acute poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B12	089	Scarlet fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B13	088	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B14	088	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B15	100-108	Typhus and other rickettsial diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B16	110-117	Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B17	..	Residual (600-030, 041, 042, 044, 049, 052-054, 056-058, 061-063, 086-090, 120-128)	4	1	1	1	1	1	1	1	1	1	1	1	1	1
B18	140-230	Neoplasms	372	189	189	10	12	12	1	1	1	1	1	1	1	1
B19	240-250	Malignant neoplasms	362	179	189	10	12	12	1	1	1	1	1	1	1	1
B20	260-269	Benign and unspecified neoplasms	362	112	108	10	12	12	1	1	1	1	1	1	1	1
B21	280-289	Alcohol, endocrine system, metabolic and nutritional diseases	64	22	34	1	7	7	1	1	1	1	1	1	1	1
B22	300-320	Diabetes mellitus	4	2	2	..	..	..	..	..	..	..	..	..	..	..
B23	330-338	Diseases of the nervous system and sense organs	260	121	128	10	10	10	3	3	3	3	3	3	3	3
B24	400-402	Alzheimer's disease	18	13	5	..	..	..	..	..	..	..	..	..	..	..
B25	410-416	Chronic rheumatic heart disease	26	12	8	3	2	2	1	1	1	1	1	1	1	1
B26	420-429	Other rheumatic and degenerative heart disease	654	392	240	23	9	9	2	2	2	2	2	2	2	2
B27	430-432	Other diseases of the circulatory system	142	64	77	6	2	2	1	1	1	1	1	1	1	1
B28	440-443	Hypertension with heart disease	13	7	7	..	..	..	..	..	..	..	..	..	..	..
B29	444-447	Hypertension without mention of heart	50	28	22	1	1	1	1	1	1	1	1	1	1	1
B30	470-527	Residual (400-405, 400-408)	74	42	16	6	10	10	3	3	3	3	3	3	3	3
B31	580-603	Encephalitis	52	29	13	5	8	8	1	1	1	1	1	1	1	1
B32	590-602	Residual (470-475, 510-627)	10	5	4	1	2	2	1	1	1	1	1	1	1	1
B33	530-587	Diseases of the digestive system	78	45	28	2	5	5	1	1	1	1	1	1	1	1
B34	540, 541	Dyspepsia	16	10	1	..	..	..	..	..	..	..	..	..	..	..
B35	560, 561, 570	Disease of stomach and duodenum	4	2	1	..	..	..	..	..	..	..	..	..	..	..
B36	543, 571, 572	Intestinal obstruction and hernia	8	3	5	..	..	..	..	..	..	..	..	..	..	..
B37	581	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	7	3	3	1	1	1	1	1	1	1	1	1	1	1
B38	582-587	Cirrhosis of liver	33	19	14	..	..	..	..	..	..	..	..	..	..	..
B39	590-637	Diseases of the genito-urinary system	10	5	4	1	2	2	1	1	1	1	1	1	1	1
B40	640-680	Nephritis and nephrosis	40	25	15	3	4	4	1	1	1	1	1	1	1	1
B41	690-716	Hyperplasia of prostate	6	5	6	1	1	1	1	1	1	1	1	1	1	1
B42	720-749	Diseases of the skin and cellular tissue	2	..	..	..	..	..	..	..	..	..	..	..	..	..
B43	750-759	Congenital malformations	34	13	17	4	4	4	1	1	1	1	1	1	1	1
B44	760-768	Birth injuries, neonatal asphyxia and tetanosis	70	28	27	10	7	7	2	2	2	2	2	2	2	2
B45	769-776	Infections of the newborn	21	15	8	3	2	2	1	1	1	1	1	1	1	1
B46	780-788	Other diseases peculiar to early infancy and immaturely acquired	4	..	..	..	..	..	..	..	..	..	..	..	..	..
B47	790-793	Scarlet fever	41	13	17	7	4	4	1	1	1	1	1	1	1	1
B48	800-809	Staphylococcal infections	4	3	1	..	..	..	..	..	..	..	..	..	..	..
B49	810-835	Acute and chronic abscess	183	20	33	20	5	5	7	7	7	7	7	7	7	7
B50	840-849	Motor vehicle accidents	38	17	8	6	4	4	7	7	7	7	7	7	7	7
B51	850-859	All other accidents except falls	85	18	7	..	..	..	..	..	..	..	..	..	..	..
B52	860-869	Falls	25	11	7	..	..	..	..	..	..	..	..	..	..	..
B53	870-879	Struck by or against object	5	1	1	..	..	..	..	..	..	..	..	..	..	..
B54	880-885	Residual	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B55	890-895	Police intervention, execution and operations of war	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B56	900-909	ALL CAUSES	2224	1144	862	125	201	201	125	27	16	20	188	679	1106	..

July 1, 1950, Estimated Population, 228,000.

Total Resident Deaths, 2,224.

Rate per 1,000 Population, 0.8.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MIDDLESEX COUNTY FOR 1930
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years										
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown			
B1	001-138	Infective and parasitic diseases	88	59	17	10	4	4	1	4	4	8	12	39	26	...			
B1	001-008	Tuberculosis of respiratory system	62	47	7	4	4	4	1	4	2	1	4	10	20	...			
B2	010-019	Subcutaneous, other forms	11	6	2	2	2	2	1	1	1	1	1	0	1	...			
B4	040-049	Typhoid fever	2	1	1	1	1	1	1	1	1	1	1	1	1	...			
B5	043	Cholera	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B6	045-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B7	060-061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B8	065	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B10	067	Meningococcal infections	4	4	4	4	4	4	4	4	4	4	4	4	4	...			
B11	068	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B12	069	Cerebrospinal meningitis	3	2	2	1	1	1	1	1	1	1	1	1	1	...			
B14	085	Measles	2	1	1	1	1	1	1	1	1	1	1	1	1	...			
B15	100-108	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B16	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B17	010-029, 030-032, 034, 049, 052-054, 057-059, 062-065, 068-069, 120-128	Neoplasms	4	222	170	4	5	1	1	1	1	4	45	370	175	3			
B18	140-205	Malignant neoplasms	396	219	171	3	3	1	1	1	4	44	170	175	3	...			
B19	210-239	Benign and unspecified neoplasms	6	8	5	1	1	1	1	1	1	1	1	1	1	...			
B20-280		Allegic, endocrine system, metabolic and nutritional	70	18	51	1	1	1	1	1	1	1	8	35	39	...			
B20	200	Diabetes mellitus	59	14	45	1	1	1	1	1	1	1	2	5	20	...			
B21	290-330	Diseases of the blood and blood-forming organs	11	4	6	3	3	3	3	3	3	3	2	3	3	...			
B22	330-354	Residual (340-245, 250-254, 270-277, 280-289)	10	6	3	3	3	3	3	3	3	3	2	3	3	...			
B23	340	Residual (331-345, 350-357, 360-369, 370-389, 390-399)	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B24	400-408	Mental, psychomotoric and personality disorders	11	11	11	11	11	11	11	11	11	11	11	11	11	...			
B25	409-425	Diseases of the nervous system and sense organs	227	99	117	7	7	7	7	7	7	7	11	73	132	...			
B26	426-433	Vascular lesions affecting central nervous system	136	82	107	6	6	6	6	6	6	6	11	3	64	136			
B27	434-447	Residual (431-435, 440-443, 446-449, 450-459)	9	8	8	2	2	2	2	2	2	2	2	2	2	...			
B28	440-443	Diseases of the circulatory system	1088	614	440	20	14	14	14	14	14	14	7	48	401	831			
B29	444-447	Rheumatic fever	6	6	6	6	6	6	6	6	6	6	6	6	6	...			
B30	448-463	Chronic rheumatic heart disease	40	14	24	1	1	1	1	1	1	1	1	1	1	...			
B31	464-473	Diseases of the heart and generative heart disease	84	42	32	12	8	8	8	8	8	8	2	8	16	15			
B32	474-483	Other diseases of heart	82	41	31	12	8	8	8	8	8	8	2	8	16	15			
B33	484-493	Hypertension with heart disease	123	51	67	1	1	1	1	1	1	1	2	20	31	414			
B34	494-503	Hypertension without mention of heart	17	13	3	1	1	1	1	1	1	1	1	1	1	...			
B35	504-512	Residual (490-496, 499-499)	55	28	24	3	3	3	3	3	3	3	2	4	5	48			
B36	513-522	Diseases of the respiratory system	15	2	2	6	6	6	6	6	6	6	2	1	1	11	52		
B37	523	Influenza	1	2	2	2	2	2	2	2	2	2	2	2	2	...			
B38	524	Pneumonia	60	24	18	6	1	1	1	1	1	1	1	4	4	24			
B39	525	Bronchitis	3	2	2	1	1	1	1	1	1	1	1	1	1	4			
B40	526-535	Diseases of the digestive system	15	13	7	1	1	1	1	1	1	1	1	1	1	...			
B41	536-545	Diseases of the stomach and duodenum	9	9	20	1	1	1	1	1	1	1	1	1	1	...			
B42	546-555	Appendicitis	5	2	3	3	3	3	3	3	3	3	3	3	3	...			
B43	556-565	Intestinal obstruction and hernia	6	2	4	4	4	4	4	4	4	4	4	4	4	...			
B44	566-575	Gastroenteritis, enteritis and colitis, except chronic	6	5	4	1	1	1	1	1	1	1	1	1	1	...			
B45	576-585	Cirrhosis of liver	31	22	6	1	1	1	1	1	1	1	1	1	1	...			
B46	586-595	Diseases of the genitourinary system	9	5	4	4	4	4	4	4	4	4	4	4	4	...			
B47	596-605	Neuritis and other diseases of peripheral nerves	40	30	8	1	1	1	1	1	1	1	1	1	1	...			
B48	606-615	Hypertrophia of prostate	25	19	6	1	1	1	1	1	1	1	1	1	1	...			
B49	616-625	Residual (600-605, 611-617, 620-625, 630-637)	9	7	2	2	2	2	2	2	2	2	2	2	2	...			
B50	626-635	Pregnancy, childbirth and the puerperium	1	1	3	3	3	3	3	3	3	3	3	3	3	...			
B51	636-645	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	...			
B52	646-655	Diseases of the eye	41	16	20	2	2	2	2	2	2	2	2	2	2	...			
B53	656-665	Conceit malformations organs of movement	90	60	20	12	12	12	12	12	12	12	12	12	12	...			
B54	666-675	Cerebral diseases of early infancy	38	24	11	3	3	3	3	3	3	3	3	3	3	...			
B55	676-685	Birth injuries, postnatal asphyxia and atelectasis	9	6	2	1	1	1	1	1	1	1	1	1	1	...			
B56	686-695	Birth injuries of the newborn	9	6	2	1	1	1	1	1	1	1	1	1	1	...			
B57	696-705	Birth injuries similar to early infancy and immature unanesthetized	43	29	7	8	8	8	8	8	8	8	8	8	8	...			
B58	706-715	Symptoms, senility and ill-defined conditions	6	3	1	1	1	1	1	1	1	1	1	1	1	...			
B59	716-725	Accidents, poisonings and violence	151	105	36	5	5	5	5	5	5	5	5	5	5	...			
B60	726-735	Motor vehicle accidents	41	29	8	1	1	1	1	1	1	1	1	1	1	...			
B61	736-745	All other accidents except falls	42	28	10	3	3	3	3	3	3	3	3	3	3	...			
B62	746-755	Falls	16	10	10	1	1	1	1	1	1	1	1	1	1	...			
B63	756-765	Struck by or against objects	27	28	8	1	1	1	1	1	1	1	1	1	1	...			
B64	766-775	Slip, trip and fall	5	4	4	4	4	4	4	4	4	4	4	4	4	...			
B65	776-785	Police intervention, execution and operations of war	0	0	0	0	0	0	0	0	0	0	0	0	0	...			
B66	786-795	ALL CAUSES	2371	1327	998	69	39	39	39	39	39	39	169	17	16	82	187	838	1123

July 1, 1930, Estimated Population, 235,000.

Total Resident Deaths, 2,371.

Rate per 1,000 Population, 8.9.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MONMOUTH COUNTY FOR 1930 Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown	
B1	001-138	Infective and parasitic diseases	56	23	15	8	10	6	4	8	16	17	1	1	1	1
B1	001-008	Tuberculosis of respiratory system	89	16	9	6	9	6	4	8	16	17	1	1	1	1
B2	001-009	Tuberculosis of other organs	1	2	2	1	1	1	1	1	1	1	1	1	1	1
B3	020-020	Syphilis and its sequelae	5	1	1	1	1	1	1	1	1	1	1	1	1	1
B4	040	Epidioid fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B5	045	Cholera	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	045-045	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	060-061	Dysentery, bacillary and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B9	066	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B10	067	Meningococcal infections	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	068	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	069	Scarlet fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	084	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	085	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B15	100-108	Pythias and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	059-059, 011, 012, 044, 046, 052-054, 059-074, 081-083, 085-096, 120-133, 134	Neoplasms	428	201	108	17	14	17	14	1	1	1	1	1	1	1
B18	140-239	Malignant neoplasms	422	198	104	17	13	17	14	1	1	1	1	1	1	1
B19	240-250	Benign and unspecified neoplasms	6	3	2	2	2	2	2	2	2	2	2	2	2	2
B20	260	Diseases of the endocrine system, metabolic and nutritional	62	14	8	8	4	4	4	4	4	4	4	4	4	4
B21	290-295	Diabetes mellitus	47	13	27	4	4	4	4	4	4	4	4	4	4	4
B22	300-320	Diseases of the nervous system and sense organs	31	14	15	2	2	2	2	2	2	2	2	2	2	2
B23	330-335	Cerebral (246-245, 270-274, 276-277, 280-289)	243	98	127	8	10	8	10	2	11	53	109	11	9	81
B24	400-468	Diseases of the blood and blood-forming organs	223	87	118	8	10	8	10	3	1	9	81	100	1	1
B25	470-527	Diseases of the circulatory system	1101	877	493	35	63	35	63	1	1	1	1	1	1	1
B26	530-535	Chronic rheumatic heart disease	31	14	15	2	2	2	2	2	2	2	2	2	2	2
B27	540-545	Coronary atherosclerosis, degenerative heart disease	816	429	358	20	33	20	33	7	17	7	17	7	17	7
B28	550-555	Other diseases of heart	173	56	68	12	12	12	12	1	1	1	1	1	1	1
B29	444-445	Hypertension without mention of heart	22	13	8	1	1	1	1	2	2	2	2	2	2	2
B30	470-527	Residual (450-456, 460-468)	101	54	42	5	2	5	2	1	1	1	1	1	1	1
B31	480-483	Influenza	4	3	2	2	2	2	2	2	2	2	2	2	2	2
B32	490-493	Pneumonia	32	19	19	4	4	4	4	1	1	1	1	1	1	1
B33	500-502	Bronchitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B34	510-511	Diseases of the digestive system	9	6	3	3	3	3	3	3	3	3	3	3	3	3
B35	520-525	Ulcer of stomach and duodenum	33	12	9	2	2	2	2	2	2	2	2	2	2	2
B36	530-535	Appendicitis	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B37	540-545	Alimental obstruction and hernia	7	1	4	2	2	2	2	2	2	2	2	2	2	2
B38	550-555	Diarrhoea, enteritis and colitis, except diarrhoea of newborn	5	4	1	1	1	1	1	1	1	1	1	1	1	1
B39	560-565	Diarrhoea of newborn	19	0	10	1	1	1	1	1	1	1	1	1	1	1
B40	570-575	Residual (530-539, 542, 544, 545, 573-578, 580)	19	7	11	1	1	1	1	1	1	1	1	1	1	1
B41	580-587	Diseases of the genitourinary system	19	13	14	3	3	3	3	3	3	3	3	3	3	3
B42	590-591	Nephritis and nephrosis	33	13	14	5	5	5	5	5	5	5	5	5	5	5
B43	600	Hyperplasia of prostate	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B44	610	Residual (600-606, 611-617, 620-626, 650-637)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B45	640-650	Diseases of the skin and cellular tissue	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B46	660-718	In cases of the bones and organs of movement	3	1	1	1	1	1	1	1	1	1	1	1	1	1
B47	720-739	Congenital malformations	29	16	10	8	8	8	8	22	3	2	1	1	1	1
B48	740-769	Maternal diseases of early infancy	69	39	20	7	6	6	6	6	6	6	6	6	6	6
B49	770-783	Maternal diseases of late infancy	22	8	8	2	2	2	2	2	2	2	2	2	2	2
B50	790-795	Infections of the newborn	52	2	2	2	2	2	2	2	2	2	2	2	2	2
B51	800-815	Other diseases peculiar to early infancy and immaturely unqualified	35	12	12	5	5	5	5	5	5	5	5	5	5	5
B52	820-835	Scalds, scabies, and ill-defined conditions	20	10	10	6	6	6	6	6	6	6	6	6	6	6
B53	840-845	Accidents and violence	129	80	53	1	1	1	1	1	1	1	1	1	1	1
B54	850-855	Motor vehicle accidents	62	21	8	3	3	3	3	4	4	4	4	4	4	4
B55	860-865	All other accidents except falls	48	28	9	6	6	6	6	10	10	10	10	10	10	10
B56	870-875	Falls	15	6	6	1	1	1	1	1	1	1	1	1	1	1
B57	880-885	Skull fracture	21	2	2	1	1	1	1	1	1	1	1	1	1	1
B58	890-895	Stomach contents	4	2	2	1	1	1	1	1	1	1	1	1	1	1
B59	900-905	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B60	910-915	Residual	2369	1141	1068	106	114	106	114	117	24	17	21	144	665	1381

July 1, 1930, Estimated Population, 225,000.

Total Resident Deaths, 2,990.

Rate per 1,000 Population, 10.5.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MORRIS COUNTY FOR 1930
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-135	Infective and parasitic diseases	35	21	11	2	1	1	1	2	10	14	7	.....
B1	001-005	Tuberculosis of respiratory system	23	16	6	1	1	1	1	1	6	13	4	.....
B3	005-010	Diphtheria	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B4	020-029	Syphilis and its sequelae	5	2	1	1	1	.....	.....	.....	.....	.....	.....	.....
B5	043	Typhoid fever	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B6	043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B7	043-048	Dysentery, all forms	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B8	050-051	Scarlet fever and streptococcal sore throat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B9	056	Diphtheria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	057	Whooping cough	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B11	058	Meningococcal infections	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	059	Plague	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B13	084	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B14	085	Measles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B15	100-108	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B16	110-117	Malaria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B17	.....	Residual (600-609, 611, 612, 644, 649, 652-654, 659-674, 681-683, 686-696, 720-733)	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B18	140-239	Neoplasms	201	121	182	6	2	1	2	8	28	117	111	.....
B19	140-205	Malignant neoplasms	237	120	130	5	2	2	2	3	28	115	109	.....
B20	240-259	Diseases of the endocrine system, metabolic and nutritional	4	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....
B21	260	Diabetes mellitus	42	14	27	.....	.....	.....	.....	.....	.....	.....	.....	.....
B22	260-299	Diseases of the blood and blood-forming organs	33	11	21	.....	.....	.....	.....	.....	.....	.....	.....	.....
B23	300-325	Diseases of the nervous system and sense organs	165	89	86	4	3	1	1	1	1	1	5	.....
B24	330-398	Vascular lesions affecting central nervous system	149	59	86	4	3	.....	.....	.....	.....	.....	.....	.....
B25	340	Non-infective encephalitis (604-700, 804-700, 806-808)	15	12	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
B26	400-408	Diseases of the circulatory system	785	425	384	8	17	2	2	2	2	40	117	.....
B27	410-416	Chronic rheumatic heart disease	3	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
B28	410-416	Chronic rheumatic heart disease	31	16	13	1	1	1	1	1	1	1	6	.....
B29	430-432	Other diseases of heart	57	33	24	.....	.....	.....	.....	.....	.....	.....	.....	.....
B30	430-448	Other diseases of heart	90	40	49	.....	.....	.....	.....	.....	.....	.....	.....	.....
B31	440-444	Hypertension without mention of heart	12	4	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
B32	440-444	Hypertension without mention of heart	12	4	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
B33	470-527	Residual (400-500, 500-488)	57	27	31	.....	.....	.....	.....	.....	.....	.....	.....	.....
B34	480-483	Influenza	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B35	.....	Residual (530-539)	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B36	530-537	Diseases of the digestive system	16	9	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B37	540-541	Ulcer of stomach and duodenum	11	8	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
B38	550-563	Appendicitis	4	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B39	560-561, 570	Intestinal obstruction and hernia	13	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	567, 571, 612	Chronic enteritis and colitis, except diarrhoea of newborn	6	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	581	Cirrhosis of liver	16	9	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B42	582-587	Diseases of the biliary system	30	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
B43	590-594	Nephritis and nephrosis	16	14	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	610	Hyperplasia of prostate	17	7	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
B45	610-689	Residual (600-609, 611-617, 620-629, 630-637)	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B46	690-749	Pregnancy, childbirth and the puerperium	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B47	750-759	Diseases of the bones and organs of movement	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B48	760-776	Congenital malformations	15	7	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
B49	780-776	Certain diseases of early infancy	49	27	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
B50	780-776	Certain diseases of early infancy	24	13	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
B51	780-776	Birth injuries, postnatal asphyxia and atelectasis	5	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
B52	780-776	Other diseases peculiar to early infancy and infancy unqualified	16	10	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
B53	780-795	Symptoms, senility and ill-defined conditions	4	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B54	800-809	Accidents, poisonings and violence	62	63	25	.....	.....	.....	.....	.....	.....	.....	.....	.....
B55	810-812	Motor vehicle accidents	23	17	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
B56	820-802	All other accidents except falls	20	20	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
B57	830-805	Falls	21	11	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
B58	840-804	Home accidents	21	14	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B59	850-803	Home accidents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B60	860-806	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B61	870-800	All other accidents except falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B62	880-808	Residual (800-809, 810-812, 820-829, 830-837)	1984	822	700	26	20	66	15	11	17	114	407	004

July 1, 1930, Estimated Population, 166,000. Total Resident Deaths, 1,584. Rate per 1,000 Population, 9.6.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF OCEAN COUNTY FOR 1950
 Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years												
				Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown					
B1	001-138	Infective and parasitic diseases	14	6	4	2	2													
B2	001-008	Tuberculosis of	7	2	4	0	0													
B3	001-019	Residual	1	1																
B4	020-029	Tuberculosis, other forms	1	1																
B5	043-048	Syphilis and its sequelae	1	1																
B6	045-046	Cholera	1	1																
B7	060-061	Dysentery, all forms																		
B8	065	Scarlet fever and streptococcal sore throat																		
B9	067	Diphtheria																		
B10	067	Whooping cough																		
B11	083	Meningococcal infections																		
B12	080	Acute poliomyelitis																		
B13	084	Flu																		
B14	100-108	Smallpox	2	1	1															
B15	110-117	Measles	1	1																
B16	110-117	Malaria and other rickettsial diseases	1	1																
B17		Residual (030-039, 041, 042, 044, 045, 052-054, 050-074, 081-083, 080-096, 120-138)	9	1	4	1	1													
B18	140-200	Neoplasms	112	70	43															
B19	200-200	Benign neoplasms	113	60	45															
B20	240-280	Allergic, endocrine system, metabolic and nutritional diseases	23	6	16	1	1													
B21	290-290	Diabetes mellitus	4	6	15	1	1													
B22	290-293	Anemia (240-245, 250-251, 270-277, 280-289)	1	1																
B23	300-308	Residual (291-296)	1	1																
B24	400-408	Mental, psychoneurotic and personality disorders	85	20	55															
B25	300-308	Injuries of the nervous system and sense organs	64	28	36															
B26	330-334	Vascular disease affecting central nervous system	20	20																
B27	340	Nonhemorrhagic	1	1																
B28	400-408	Residual (311-315, 350-357, 360-368, 370-389, 390-395)	322	160	142	8	0													
B29	400-408	Diseases of the circulatory system	8	2	6															
B30	410-416	Chromic fever	217	143	85	4	5													
B31	420-422	Arteriosclerosis	8	2	6															
B32	430-443	Other diseases of heart disease	41	11	27	2	1													
B33	444-447	Hypertension with heart disease	23	7	16															
B34	470-527	Hypertension without mention of heart disease	13	7	6															
B35	480-483	Residual (430-456, 490-468)	22	7	15															
B36		Influenza	13	13	0															
B37		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	1	1																
B38	590-607	Diseases of the respiratory system	6	1	4															
B39	610	Nephritis and nephrosis	10	9	1															
B40	610-680	Hyperplasia of prostate	2	2																
B41	720-749	Residual (600-609, 611-617, 620-626, 630-637)	2	2																
B42	750-770	Pregnancy, childbirth and the puerperium	1	1																
B43	780-782	Diseases of the bones and organs of frame	2	2																
B44	780-770	Congenital malformations	1	1																
B45	790-795	Certain diseases of early infancy	3	2	1															
B46	800-805	Birth injuries, postnatal asphyxia and atelectasis	24	13	9															
B47	810-825	Other diseases peculiar to early infancy and childhood	10	4	4															
B48	830-883	Other diseases peculiar to early infancy and childhood unqualified	1	1																
B49	890-905	Symptoms, senility and ill-defined conditions	13	0	4															
B50	910-905	Suicide	22	1	1															
B51	920-925	Suicide with mention of violence	44	25	16															
B52	930-935	Motor vehicle accidents	6	3	3															
B53	940-945	All other accidents except falls	16	10	4															
B54	950-955	Falls	12	4	8															
B55	960-965	Suicide	10	6	4															
B56	970-975	Homicide	1	1																
B57	980-985	Police intervention, execution and operations of war	1	1																
B58	990-995	All causes	654	389	268	16	11	33	1	6	8	30	108	800						

July 1, 1950, Estimated Population, 56,000.

Total Resident Deaths, 654.

Rate per 1,000 Population, 11.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CLIFTON CITY FOR 1930
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<1	1-4	5-4	15-24	25-44	45-64	65+ Unknown	
B1	001-138	Infective and parasitic diseases	173	111	2	2					3	1	1	0	8	
B2	003-008	Tuberculosis of respiratory system	9	7												
B3	010-019	Tuberculosis, other forms	2	2												
B4	020-029	Syphilis and its sequelae														
B5	040	Cholera														
B6	045-048	Dysentery, all forms														
B7	050-051	Scarlet fever and streptococcal sore throat														
B8	055	Whooping cough														
B9	057	Meningococcal infections														
B10	058	Plague														
B11	063	Septic polyomyelitis														
B12	064	Scarlet fever														
B13	081	Styphilitis														
B14	085	Typhus and other rickettsial diseases														
B15	100-108	Malaria														
B16	110-117	Neoplasms (300-359)														
B17	140-239	Neoplasms (600-859)														
B18	140-239	Malignant neoplasms	92	68	54											
B19	240-259	Benign and unspecified neoplasms	91	67	34											
B20	260	Alergic, endocrine system, metabolic and nutritional	1	1												
B21	260-269	Diabetes mellitus	10	7	9											
B22	300-309	Residual (240-245, 250-254, 270-277, 280-289)	2	1	1											
B23	310-319	Diseases of the blood and blood-forming organs														
B24	320-329	Residual (300-359)	4	2	2											
B25	330-339	Mental, psychoneurotic and personality disorders														
B26	330-399	Diseases of the nervous system and special senses	4		4											
B27	330-341	Vascular lesions affecting central nervous system	41	28	23											
B28	340	Residual (330-341)	4	26	21											
B29	400-408	Diseases of the circulatory system (390-399, 370-389, 390-399)	4	2	2											
B30	400-408	Rheumatic fever														
B31	400-402	Chronic rheumatic heart disease	133	89												
B32	400-402	Chronic rheumatic heart disease	133	89												
B33	430-432	Coronary atherosclerosis	156	86	60											
B34	430-434	Other rheumatic and degenerative heart disease	1	1												
B35	440-443	Hypertension with heart disease	3	1	2											
B36	444-447	Hypertension without mention of heart	21	10	11											
B37	470-472	Residual (400-456, 400-468)	18	46	3											
B38	480-483	Diseases of the respiratory system	10	6	4											
B39	480-483	Influenza	1	1												
B31	490-493	Pneumonia	8	9												
B32	500-502	Residual (470-475, 510-527)	1	1												
B33	590-597	Diseases of the digestive system	21	16	5											
B34	540-541	Gastritis	1	1												
B35	550-553	Appendicitis	1	1												
B36	560, 561, 570	Intestinal obstruction and hernia	3	2	1											
B37	571, 572	Gastroenteritis, duodenitis, enteritis and colitis, except infectious														
B38	581	Diseases of liver	0	2												
B39	590-597	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	4	3	1											
B40	600-610	Diseases of the genito-urinary system	10	10	6											
B41	620-629	Diseases of the female genital system	3	3	3											
B42	630-637	Residual (600-609, 611-617, 620-629, 630-637)	3	2	1											
B43	640-680	Diseases of the skin and cellular tissue	1	1												
B44	700-770	Congenital malformations of organs of movement	5	4												
B45	780-795	Certain diseases of early infancy	17	9	7											
B46	800-809	Birth injuries, postnatal asphyxia and atelectasis	0	3	0											
B47	810-819	Infections of the newborn	1	1												
B48	820-829	Other diseases peculiar to early infancy and infants	5	6	1											
B49	830-835	Symptoms, sensibility and ill-defined conditions	7	4	1											
B50	840-849	Accidents, poisonings and violence	23	19	5											
B51	850-859	Motor vehicle accidents	3	3												
B52	860-869	All other accidents except falls	7	6												
B53	870-879	Falls	4	3	1											
B54	880-889	Self-inflicted injuries	1	7	4											
B55	890-899	Suicide	1	7	4											
B56	900-909	Police intervention, execution and operations of war														
B57	910-919	ALL CAUSES	498	305	191	2				21	4	0	3	41	177	241

July 1, 1930, Estimated Population, 65,000.

Total Resident Deaths, 498.

Rate per 1,000 Population, 7.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PASADENA CITY FOR 1930
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Total		Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-138	Infective and parasitic diseases	20	0	6	2	2	1	1	1	2	3	10	4	
B2	001-008	Tuberculosis of respiratory system	12	5	4	2	1	1	1	2	3	3	4		
B3	010-010	Tuberculosis, other forms	5	0	1	1	1	1	1	2	3	3	4		
B4	020-020	Syphilis and its sequelae	6	5	1	1	1	1	1	1	1	1	6		
B5	048	Cholera	1	1	1	1	1	1	1	1	1	1	1		
B6	045-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1		
B7	060, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1		
B8	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1		
B9	067	Whooping cough	1	1	1	1	1	1	1	1	1	1	1		
B10	057	Whooping-cough infections	1	1	1	1	1	1	1	1	1	1	1		
B11	058	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1		
B12	080	Smallpox	1	1	1	1	1	1	1	1	1	1	1		
B13	084	Tetanus	1	1	1	1	1	1	1	1	1	1	1		
B14	100-108	Malaria and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1		
B15	110-117	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 085-096, 120-138)	121	57	55	6	1	1	1	1	7	04	1		
B16	140-209	Neuritis	116	50	62	6	2	1	1	1	7	08	40		
B17	140-208	Neuralgia	1	1	1	1	1	1	1	1	1	1	4		
B18	210-239	Benzoin and unspecified neoplasms	5	1	3	1	1	1	1	1	1	1	1		
B19	240-289	Allergic, endocrine system, metabolic and nutritional diseases	23	8	13	2	2	1	1	1	1	1	1		
B20	290	Diabetes mellitus	22	8	12	2	2	1	1	1	1	1	1		
B21	290-290	Diseases of the blood and blood-forming organs	22	8	12	2	2	1	1	1	1	1	1		
B22	290-293	Anemias	4	1	2	1	1	1	1	1	1	1	1		
B23	300-326	Mental, psychoneurotic and personality disorders	70	34	24	1	2	1	1	1	1	1	1		
B24	330-340	Residual (284-296)	59	22	23	1	1	1	1	1	1	1	1		
B25	350-501, 570	Residual (341-345, 350-357, 360-368, 370-389, 390-398)	205	132	120	1	5	1	1	1	12	78	174		
B26	420-422	Arteriosclerotic and degenerative heart disease	14	8	6	1	2	1	1	1	1	1	1		
B27	430-434	Other diseases of heart	13	8	5	1	2	1	1	1	1	1	1		
B28	440-443	Operative with heart disease	33	11	21	1	1	1	1	1	1	1	1		
B29	444-447	Operative with other mention of heart	18	8	10	1	5	1	1	1	1	1	1		
B30	470-527	Diseases of the respiratory system	11	6	5	1	1	1	1	1	1	1	1		
B31	480-483	Influenza	6	4	2	1	1	1	1	1	1	1	1		
B32	500-502	Pneumonia	34	1	3	1	1	1	1	1	1	1	1		
B33	500-587	Residual (470-475, 510-527)	21	9	12	1	1	1	1	1	1	1	1		
B34	550-553	Diseases of the digestive system	6	0	6	1	1	1	1	1	1	1	1		
B35	560-561, 570	Diseases of the mouth and pharynx	4	2	2	1	1	1	1	1	1	1	1		
B36	543, 571, 572	Alimental obstruction and hernia	2	2	2	1	1	1	1	1	1	1	1		
B37	581	Gastric, duodenal, enteritis and colitis, except diarrhea of newborn	10	12	5	1	1	1	1	1	1	1	1		
B38	600-637	Diseases of the genito-urinary system	7	3	4	1	1	1	1	1	1	1	1		
B39	640	Diphtheria and epiglottitis	10	12	6	1	1	1	1	1	1	1	1		
B40	640-680	Residual (600-640, 611-617, 620-626, 630-637)	7	5	2	1	1	1	1	1	1	1	1		
B41	690-710	Pregnancy, childbirth and the puerperium	2	1	1	1	1	1	1	1	1	1	1		
B42	720-726	Diseases of the skin and cellular tissue	5	1	4	1	1	1	1	1	1	1	1		
B43	730-770	Congenital malformations of organs of movement	21	13	8	1	2	1	1	1	1	1	1		
B44	780-782	Certain diseases of early infancy	10	5	4	1	1	1	1	1	1	1	1		
B45	790-792	Birth injuries, postnatal asphyxia and atelectasis	1	1	1	1	1	1	1	1	1	1	1		
B46	793-798	Infections of the newborn	1	1	1	1	1	1	1	1	1	1	1		
B47	780-795	Operative similar to early infancy and immature unoperated	10	7	1	1	1	1	1	1	1	1	1		
B48	800-809	Symptoms, senility and ill-defined conditions	2	1	1	1	1	1	1	1	1	1	1		
B49	810-833	Accidents, poisonings and violence	35	27	5	1	2	1	1	1	1	1	1		
B50	834-869	Motor vehicle accidents	6	4	2	1	1	1	1	1	1	1	1		
B51	870-905	All other accidents except falls	4	4	4	1	1	1	1	1	1	1	1		
B52	900-904	Falls	9	7	2	1	1	1	1	1	1	1	1		
B53	905-910	Self-inflicted	13	12	1	1	1	1	1	1	1	1	1		
B54	910-916	Suicide	3	3	3	1	1	1	1	1	1	1	1		
B55	917-939	Homicide	3	3	3	1	1	1	1	1	1	1	1		
B56	940-969	Violence, execution and operations of war	3	3	3	1	1	1	1	1	1	1	1		
B57	970-999	ALL CAUSES	628	328	297	13	18	27	2	3	10	42	236	306	

July 1, 1930, Estimated Population, 58,000.

Total Resident Deaths, 628.

Rate per 1,000 Population, 10.8.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PATERSON CITY FOR 1930 Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							Unknown
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	58	12	10	3	1	1	3	2	10	18	13	85+		
B2	001-008	Tuberculosis of respiratory system	12	7	5	2	1	1	2	1	10	18	10	1		
B3	001-009	Tuberculosis, other forms	18	7	5	2	1	1	2	1	6	12	13	1		
B4	020-020	Scabies	1	1	1	0	0	0	0	0	0	0	0	0		
B5	040	Epidemic typhus	6	1	2	0	0	0	0	0	1	1	5	3		
B6	043-048	Cholera	6	2	2	0	0	0	0	0	0	0	0	0		
B7	000-001	Dysentery, all forms	1	1	1	0	0	0	0	0	0	0	0	0		
B8	050-050	Bacterial fever and streptococcal sore throat	1	1	1	0	0	0	0	0	0	0	0	0		
B9	056	Whooping cough	1	1	1	0	0	0	0	0	0	0	0	0		
B10	067	Meningococcal infections	1	1	1	0	0	0	0	0	0	0	0	0		
B11	088	Scarlet fever	1	1	1	0	0	0	0	0	0	0	0	0		
B12	089	Scarlet polymyositis	1	1	1	0	0	0	0	0	0	0	0	0		
B13	085	Mumps	1	1	1	0	0	0	0	0	0	0	0	0		
B14	085	Measles	1	1	1	0	0	0	0	0	0	0	0	0		
B15	100-108	Typhus and other rickettsial diseases	1	1	1	0	0	0	0	0	0	0	0	0		
B16	110-117	Malaria	1	1	1	0	0	0	0	0	0	0	0	0		
B17	110-117	Residual (030-039, 041, 042, 044, 049, 052-054, 051-053, 056-060, 120-125)	4	3	3	0	0	0	0	0	0	0	0	0		
B18	140-239	Neoplasms	287	133	144	8	1	3	1	2	1	2	1	1		
B19	210-239	Malignant neoplasms	277	122	124	8	1	2	1	2	1	2	1			
B20	200	Benign and unspecified neoplasms	10	11	20	0	0	0	0	0	0	0	0			
B21	290-299	Diseases of the blood and blood-forming organs	60	31	4	4	1	1	1	1	1	1	1			
B22	300-326	Diabetes mellitus	25	31	4	4	1	1	1	1	1	1	1			
B23	330-388	Mental, psychoneurotic and personality diseases	16	6	4	4	1	1	1	1	1	1	1			
B24	400-402	Diseases of the nervous system and sense organs	3	3	3	0	0	0	0	0	0	0	0			
B25	400-402	Chronic rheumatic heart disease	2	2	2	0	0	0	0	0	0	0	0			
B26	420-422	Chronic rheumatic heart disease	170	82	8	8	1	2	2	2	2	2	2			
B27	430-434	Other diseases of the heart	151	75	3	3	1	1	1	1	1	1	1			
B28	440-443	Hypertension with heart disease	15	15	15	0	0	0	0	0	0	0	0			
B29	444-447	Hypertension without mention of heart	15	9	4	4	1	1	1	1	1	1	1			
B30	470-527	Residual (450-455, 460-468)	61	28	13	3	0	1	1	1	1	1	1			
B31	480-483	Influenza	39	19	11	3	0	1	1	1	1	1	1			
B32	500-483	Diphtheria	2	1	1	0	0	0	0	0	0	0	0			
B33	530-587	Pneumonia	24	10	10	2	1	1	1	1	1	1	1			
B34	540-541	Residual (470-475, 510-527)	4	2	1	1	1	1	1	1	1	1	1			
B35	550-553	Diseases of the digestive system	6	4	1	1	1	1	1	1	1	1	1			
B36	500-501, 570	Ulcer of stomach and duodenum	61	34	26	1	1	1	1	1	1	1	1			
B37	543, 571, 572	Appendicitis	12	6	6	0	0	0	0	0	0	0	0			
B38	580-587	Intestinal obstruction and hernia	12	6	3	3	1	1	1	1	1	1	1			
B39	581	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	4	2	2	0	0	0	0	0	0	0	0			
B40	610-680	Residual (530-539, 542, 544, 545, 573-575, 580, 582-587)	21	11	10	2	1	1	1	1	1	1	1			
B41	600-710	Diseases of the genito-urinary system	9	5	3	1	1	1	1	1	1	1	1			
B42	700-770	Nephritis and nephrosis	39	19	6	4	1	1	1	1	1	1	1			
B43	720-740	Residual (600-609, 611-617, 626-628, 630-637)	19	10	5	3	1	1	1	1	1	1	1			
B44	760-705	Pregnancy, childbirth and the puerperium	3	2	1	1	1	1	1	1	1	1	1			
B45	800-809	Diseases of the skin and cellular tissue	1	1	1	0	0	0	0	0	0	0	0			
B46	810-812	Diseases of the bones and organs of movement	1	1	1	0	0	0	0	0	0	0	0			
B47	820-822	Certain diseases of early infancy	4	1	1	1	1	1	1	1	1	1	1			
B48	830-832	Birth injuries, postnatal asphyxia and alectasia	48	18	11	4	3	1	1	1	1	1	1			
B49	840-842	Infections of the newborn	18	10	1	4	3	1	1	1	1	1	1			
B50	850-852	Other diseases peculiar to early infancy and immaturity	4	2	2	0	0	0	0	0	0	0	0			
B51	860-862	Symptoms, senility and ill-defined conditions	22	8	10	2	2	2	2	2	2	2	2			
B52	870-872	Accidents, poisoning and violence	3	1	2	0	0	0	0	0	0	0	0			
B53	880-882	Motor vehicle accidents	76	50	10	5	2	3	3	4	4	4	4			
B54	890-892	All other accidents except falls	18	14	2	2	1	1	1	1	1	1	1			
B55	900-904	Falls	10	14	1	1	1	1	1	1	1	1	1			
B56	910-912	Suicide	38	5	11	2	3	3	3	3	3	3	3			
B57	920-922	Homicide	38	14	4	4	1	1	1	1	1	1	1			
B58	930-932	Police intervention, execution and operations of war	5	2	2	0	0	0	0	0	0	0	0			
B59	940-942	All causes	1613	828	692	51	44	69	8	7	12	98	472	947		

July 1, 1930, Estimated Population, 140,000. Total Resident Deaths, 1,613.

Rate per 1,000 Population, 11.5.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF SOMERSET COUNTY FOR 1900
Classified by International Abridged List of Causes (4th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65- Unknown	
B1	601-635	Infective and parasitic diseases	20	14	6	1	1	1	1	1	1	1	1	3	0	4
B2	601-648	Tuberculosis, other	11	7	4	1	1	1	1	1	1	1	1	1	0	4
B3	610-619	Syphilis and its sequelae	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B4	620-629	Epidemic typhus	4	2	1	1	1	1	1	1	1	1	1	1	1	1
B5	640	Dysentery	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	645-648	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	650, 651	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	655	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B9	658	Hemorrhagic infections	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B10	660	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	680	Smallpox	4	4	4	4	4	4	4	4	4	4	4	4	4	4
B12	680	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	685	Erysipelas and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	100-206	Neoplasms	149	78	70	1	2	2	2	2	2	2	2	2	2	2
B15	207-208	Malignant neoplasms	149	78	70	1	2	2	2	2	2	2	2	2	2	2
B16	210-239	Benign and unspecified neoplasms	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	240-289	Allergic, toxic, and unspecified neoplasms, metabolic and nutritional diseases	4	3	3	1	1	1	1	1	1	1	1	1	1	1
B20	200	Diabetes mellitus	21	5	15	1	1	1	1	1	1	1	1	1	1	1
B21	200-200	Residual (240-245, 250-254, 270-277, 280-289)	17	2	14	1	1	1	1	1	1	1	1	1	1	1
B21	200-203	Diseases of the blood and blood-forming organs	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B22	300-328	Mental, psychoneurotic and personality diseases	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B23	330-340	Residual (341-345, 350-357, 360-369, 370-389, 390-399)	109	45	61	2	2	2	2	2	2	2	2	2	2	2
B24	400-468	Diseases of the circulatory system	103	49	51	1	1	1	1	1	1	1	1	1	1	1
B25	410-415	Ischemic heart disease	6	6	102	0	4	4	4	4	4	4	4	4	4	4
B26	420-422	Arteriosclerosis	15	8	6	6	6	6	6	6	6	6	6	6	6	6
B27	430-434	Other diseases of heart disease	255	144	105	9	9	9	9	9	9	9	9	9	9	9
B28	440-443	Hypertension with heart disease	22	16	6	2	2	2	2	2	2	2	2	2	2	2
B29	444-447	Hypertension without mention of heart disease	5	2	3	0	2	2	2	2	2	2	2	2	2	2
B30	470-527	Diseases of the respiratory system	23	8	15	2	2	2	2	2	2	2	2	2	2	2
B30	480-483	Influenza	39	16	15	3	3	3	3	3	3	3	3	3	3	3
B31	530-563	Pneumonia	21	7	12	2	2	2	2	2	2	2	2	2	2	2
B32	560-562	Bronchitis	9	6	3	1	1	1	1	1	1	1	1	1	1	1
B33	530-587	Diseases of the respiratory system	22	13	9	3	3	3	3	3	3	3	3	3	3	3
B34	540, 541	Ulcer of stomach and duodenum	4	2	2	1	1	1	1	1	1	1	1	1	1	1
B35	550-553	Appendicitis	4	2	2	1	1	1	1	1	1	1	1	1	1	1
B36	560, 561, 570	Intestinal obstruction and hernia	4	3	1	1	1	1	1	1	1	1	1	1	1	1
B37	581	Gastritis, duodenitis, enteritis and colitis, except chronic of newborn	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B38	580-587	Diseases of the genito-urinary system	3	3	3	3	3	3	3	3	3	3	3	3	3	3
B39	600-604	Hypertrichosis and alopecia	11	4	7	1	1	1	1	1	1	1	1	1	1	1
B40	610	Residual (600-600, 611-617, 620-624, 630-637)	6	6	6	6	6	6	6	6	6	6	6	6	6	6
B40	640-689	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B41	690-710	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B42	700-762	Congenital diseases of early infancy	12	9	3	3	3	3	3	3	3	3	3	3	3	3
B43	750-759	Certain injuries, postnatal asphyxia and atelectasis	14	13	21	3	3	3	3	3	3	3	3	3	3	3
B44	755-768	Infections of the newborn	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B45	760-770	Other diseases peculiar to early infancy and immaturity	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B46	780-795	Symptoms, senility and ill-defined conditions	21	7	12	2	2	2	2	2	2	2	2	2	2	2
B47	800-809	Accidents, poisonings and ill-defined conditions	43	24	19	4	4	4	4	4	4	4	4	4	4	4
B48	810-835	Motor vehicle accidents	15	11	4	4	4	4	4	4	4	4	4	4	4	4
B49	830-839	All other accidents except falls	12	5	4	3	3	3	3	3	3	3	3	3	3	3
B50A	840-845	Falls	6	4	2	2	2	2	2	2	2	2	2	2	2	2
B50B	846-849	Struck by or against objects	4	4	4	4	4	4	4	4	4	4	4	4	4	4
B50C	850-859	Self-inflicted	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B50D	860-869	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B50E	870-879	ATI CAUSES	849	430	381	17	12	12	12	12	12	12	12	12	12	12
001-999			430	381	17	12	12	12	12	12	12	12	12	12	12	12

July 1, 1900, Estimated Population, 90,000. Total Resident Deaths, 849. Rate per 1,000 Population, 8.6.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF UNION COUNTY FOR 1930
Classified by International Abridged List of Causes (9th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years								
			Male	Female	Male	Female	Male	Female	<	1-4	5-14	15-24	25-44	45-64	65+	Unknown	
																	Rate
B1	001-135	Infective and parasitic diseases	85	47	13	9	11	9	2	2	6	6	20	27	13	..	..
B2	010-008	Tuberculosis of respiratory system	60	32	12	7	7	4	4	1	1	5	20	19	14	..	..
B3	010-019	Tuberculosis, other forms	3	2	1	1	1	1	1	1	1	1	2	3	1	..	..
B4	020-029	Scyllitis and its sequelae	6	1	1	1	2	2	1	1	1	1	2	3	1	..	..
B5	040	Gonorrhea	6	1	1	1	1	1	1	1	1	1	2	3	1	..	..
B6	043-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B7	050, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B8	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B9	068	Scarlet fever and streptococcal infections	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B10	057	Membranous infections	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B11	068	Plague	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B12	080	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B13	084	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B14	084	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	..	..
B15	100-108	Typhus and other rickettsial diseases	2	2	2	2	2	2	2	2	2	2	2	2	2	..	..
B16	110-117	Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B17	..	Residual (630-033, 041, 042, 044, 046, 032-054, 050-074, 081-083, 086-096, 120-138)	8	3	4	4	4	4	1	1	1	1	1	1	1	..	..
B18	140-205	Malignant neoplasms	620	321	317	18	18	18	18	2	2	6	68	314	277	3	3
B19	210-238	Benign and unspecified neoplasms	317	316	316	18	18	18	2	2	5	6	68	314	277	3	3
B20	240-289	Allergic, endocrine system, metabolic and nutritional diseases	83	52	45	5	5	5	1	1	1	1	5	30	47	..	..
B21	290-299	Diseases of the blood and blood-forming organs	172	24	41	2	2	2	1	1	1	1	4	21	43	..	..
B22	300-329	Diseases of the nervous and personality disorders	306	143	102	10	10	10	1	1	1	1	1	1	1	..	..
B23	330-334	Vascular lesions affecting central nervous system	335	133	118	8	8	8	1	1	1	1	1	1	1	..	..
B24	400-485	Residual (341-345, 350-357, 360-366, 370-389, 390-308)	21	7	11	2	2	2	1	1	1	1	1	1	1	..	..
B25	490-102	Rheumatic fever circulatory system	1000	820	688	42	42	42	1	1	1	1	2	65	407	1035	..
B26	410-410	Chronic rheumatic heart disease	600	22	22	1	1	1	1	1	1	1	1	1	1	..	..
B27	420-422	Arterio-sclerotic and degenerative heart disease	1133	621	447	34	34	34	1	1	1	1	1	1	1	..	..
B28	430-434	Other diseases of heart	44	27	17	1	1	1	1	1	1	1	1	1	1	..	..
B29	440-444	Diseases of the heart	210	80	111	4	4	4	1	1	1	1	1	1	1	..	..
B30	444-447	Hypertension without mention of heart	112	50	42	2	2	2	1	1	1	1	1	1	1	..	..
B31	470-527	Residual (450-455, 400-468)	94	48	36	2	2	2	1	1	1	1	1	1	1	..	..
B32	430-455	Influenza	6	3	3	1	1	1	1	1	1	1	1	1	1	..	..

July 1, 1930, Estimated Population, 850,000. Total Resident Deaths, 3,518. Rate per 1,000 Population, 8.8.

B33	480-485	Pneumonia	62	34	23	6	6	6	1	1	1	1	2	18	32	..	..
B34	500-602	Bronchitis	8	2	6	1	1	1	1	1	1	1	1	1	1	..	..
B35	530-537	Residual (470-475, 510-527)	18	9	7	1	1	1	1	1	1	1	1	1	1	..	..
B36	540, 541	Ulcer of stomach and duodenum	120	75	49	4	4	4	1	1	1	1	1	1	1	..	..
B37	550-555	Appendicitis	8	16	11	1	1	1	1	1	1	1	1	1	1	..	..
B38	560, 561, 570	Intestinal obstruction and hernia	21	13	5	3	3	3	2	2	2	2	2	2	2	..	..
B39	570, 571, 572	Gastritis, duodenitis, enteritis and colitis, except chronic	3	1	2	1	1	1	1	1	1	1	1	1	1	..	..
B40	581	Cirrhosis of liver	31	30	20	1	1	1	1	1	1	1	1	1	1	..	..
B41	590-597	Diseases of the genito-urinary system	28	12	10	3	3	3	1	1	1	1	1	1	1	..	..
B42	600-604	Nephritis	70	33	28	4	4	4	1	1	1	1	1	1	1	..	..
B43	610	Hypertrophy of prostate	47	10	22	1	1	1	1	1	1	1	1	1	1	..	..
B44	640-680	Residual (600-606, 611-617, 620-626, 630-637)	14	8	3	3	3	3	1	1	1	1	1	1	1	..	..
B45	690-700	Pregnancy, childbirth and the puerperium	3	1	2	2	2	2	1	1	1	1	1	1	1	..	..
B46	710-716	Diseases of the skin and cellular tissue	10	3	4	1	1	1	1	1	1	1	1	1	1	..	..
B47	720-729	Congenital malformations organs of movement	16	9	4	4	4	4	1	1	1	1	1	1	1	..	..
B48	730-776	Certain diseases of early infancy	122	58	48	3	3	3	1	1	1	1	1	1	1	..	..
B49	780-782	Birth injuries, neonatal asphyxia and atelectasis	54	23	23	5	5	5	1	1	1	1	1	1	1	..	..
B50	783-785	Infections of the newborn	8	2	2	1	1	1	1	1	1	1	1	1	1	..	..
B51	786-776	Birth injuries similar to early infancy and immaturely unanterior	65	32	25	5	5	5	1	1	1	1	1	1	1	..	..
B52	790-795	Symptoms, senility and ill-defined conditions	202	117	72	8	8	8	1	1	1	1	1	1	1	..	..
B53	800-809	Accidents, poisonings and violence	48	36	11	8	8	8	1	1	1	1	1	1	1	..	..
B54	810-815	Motor vehicle accidents	11	11	11	1	1	1	1	1	1	1	1	1	1	..	..
B55	820-827	All other accidents except falls	51	23	19	6	6	6	1	1	1	1	1	1	1	..	..
B56	830-835	Falls	46	22	24	1	1	1	1	1	1	1	1	1	1	..	..
B57	840-844	Stroke	53	33	17	1	1	1	1	1	1	1	1	1	1	..	..
B58	850-855	Coma	4	4	4	1	1	1	1	1	1	1	1	1	1	..	..
B59	860-865	Coma	4	4	4	1	1	1	1	1	1	1	1	1	1	..	..
B60	870-879	Force intervention, execution and operations of war	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B61	880-889	All causes	3518	1742	1537	111	111	111	180	22	24	30	268	1148	1837	..	..

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ELIZABETH FOR 1950
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-158	Infective and parasitic diseases	38	19	11	6	3	2	1	1	6	12	11	7	0
B2	001-008	Tuberculosis of respiratory system	29	17	8	3	1	2	1	1	5	10	7	7	1
B3	010-019	Tuberculosis, other forms	2	1	1	1	1	1	1	1	1	1	1	1	1
B4	020-029	Syphilis and the sequelae	4	1	2	1	1	1	1	1	1	1	2	1	1
B5	043	Cholera	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	045-046	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	060, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
B9	067	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1
B10	083	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	088	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	080	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	085	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	085	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
B15	100-108	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1	1
B18	140-239	Neoplasms (500-559, 611, 612, 694, 695, 652-654, 655-657, 681-683, 685-686, 720-737)	230	106	112	6	6	1	1	1	2	14	110	101	1
B19	210-230	Malignant neoplasms	201	96	95	5	5	1	1	1	1	12	99	89	1
B20	240-259	Benign and unspecified neoplasms	29	4	1	1	1	1	1	1	1	2	2	2	1
B21	260-280	Alberca, endocrine system, metabolic and nutritional	22	4	16	1	1	1	1	1	1	1	12	0	1
B22	300-326	Diseases of the blood and blood-forming organs	4	3	1	1	1	1	1	1	1	1	1	1	1
B23	330-334	Anemia (291-299)	4	2	2	2	2	2	2	2	2	2	2	2	2
B24	400-468	Mental, psychoneurotic and personality disorders	106	42	66	4	4	4	4	4	4	4	4	4	4
B25	410-416	Diseases of the nervous system and sense organs	100	41	59	3	3	3	3	3	3	3	3	3	3
B26	420-442	Vascular lesions affecting central nervous system	8	1	7	1	1	1	1	1	1	1	1	1	1
B27	440-443	Diseases of the circulatory system (300-399, 400-468)	530	288	231	8	9	8	9	8	9	108	310	1	1
B28	400-402	Rheumatic fever	27	12	15	1	1	1	1	1	1	1	1	1	1
B29	410-416	Chronic rheumatic heart disease	51	21	30	1	1	1	1	1	1	1	1	1	1
B30	420-442	Myocardial and degenerative heart disease	113	8	105	6	6	6	6	6	6	6	6	6	6
B31	430-442	Other myocardial and degenerative heart disease	62	31	30	1	1	1	1	1	1	1	1	1	1
B32	440-443	Hypertension with heart disease	42	17	25	2	2	2	2	2	2	2	2	2	2
B33	441-447	Hypertension without mention of heart	42	18	24	2	2	2	2	2	2	2	2	2	2
B34	470-527	Diseases of the respiratory system	2	20	9	1	1	1	1	1	1	1	1	1	1
B35	480-483	Influenza	2	2	2	2	2	2	2	2	2	2	2	2	2

Rate per 1,000 Population, 10.4.

Total Resident Deaths, 1174.

July 1, 1950, Estimated Population, 119,000.

Total Resident Deaths, 1174.

B31	490-493	Pneumonia	20	15	3	2	2	2	2	2	2	2	2	2	2
B32	500-502	Residual (470-475, 510-527)	6	1	1	1	1	1	1	1	1	1	1	1	1
B33	500-507	Diseases of the digestive system	37	32	25	3	3	3	3	3	3	3	3	3	3
B34	540, 541	Ulcer of stomach and duodenum	3	1	2	1	1	1	1	1	1	1	1	1	1
B35	560-565	Appendicitis, infection and hernia	7	5	2	2	2	2	2	2	2	2	2	2	2
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1	1	1	1	1	1	1	1	1	1	1	1
B37	581	Cirrhosis of liver	25	10	9	1	1	1	1	1	1	1	1	1	1
B38	590-637	Diseases of the genito-urinary system	21	13	6	6	6	6	6	6	6	6	6	6	6
B39	590-594	Nephritis and nephrosis	12	7	5	1	1	1	1	1	1	1	1	1	1
B40	600-610	Gonorrhea (590-594, 600-603, 604-607, 608-609)	2	2	2	2	2	2	2	2	2	2	2	2	2
B41	600-718	Diseases of the skin and cellular tissue	2	1	1	1	1	1	1	1	1	1	1	1	1
B42	700-709	Congenital malformations	9	4	4	1	1	1	1	1	1	1	1	1	1
B43	700-703	Birth injuries, perinatal asphyxia and asolectasia	42	15	26	2	2	2	2	2	2	2	2	2	2
B44	703-708	Infections of the newborn	1	1	1	1	1	1	1	1	1	1	1	1	1
B45	709-778	Other diseases peculiar to early infancy and infancy	19	7	9	2	2	2	2	2	2	2	2	2	2
B46	780-785	Styptic unqualified, ill-defined conditions	87	55	26	1	1	1	1	1	1	1	1	1	1
B47	830-835	Accidents, poisonings and violence	21	13	8	1	1	1	1	1	1	1	1	1	1
B48A	890-892	Motor vehicle accidents	25	15	8	1	1	1	1	1	1	1	1	1	1
B48B	890-895	Falls	10	10	0	0	0	0	0	0	0	0	0	0	0
B49	8970-8979	Skulds	20	15	3	2	2	2	2	2	2	2	2	2	2
B50A	8980-8983	Police intervention, execution and operations of war	2	2	2	2	2	2	2	2	2	2	2	2	2
B50B	8984-8986	ALL CAUSES	1174	601	510	32	31	32	31	32	31	32	31	32	31

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF WARREN COUNTY FOR 1930
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years						
			Total		Total		<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
			Male	Female	Male	Female							
R1	001-138	Infective and parasitic diseases	11	8	3	3	1	1	2	2	2	2	3
R11	001-008	Tuberculosis of respiratory system	3	8	1	1	1	1	1	1	1	1	3
R12	010-010	Tuberculosis, other forms	1	1	1	1	1	1	1	1	1	1	1
R13	020-020	Syphilis and its sequelae	1	1	1	1	1	1	1	1	1	1	1
R14	040-040	Cholera and fever	1	1	1	1	1	1	1	1	1	1	1
R15	043	Cholera	1	1	1	1	1	1	1	1	1	1	1
R16	045-046	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1
R17	060-061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1
R18	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1
R19	066	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R20	068	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R21	069	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R22	070	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R23	071	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R24	072	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R25	073	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R26	074	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R27	075	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R28	076	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R29	077	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R30	078	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R31	079	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R32	080	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R33	081	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R34	082	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R35	083	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R36	084	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R37	085	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R38	086	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R39	087	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R40	088	Whooping cough	1	1	1	1	1	1	1	1	1	1	1
R41	140-239	Malaria and other febrile diseases	2	2	2	2	2	2	2	2	2	2	2
R42	141-240	Malaria	1	1	1	1	1	1	1	1	1	1	1
R43	240-280	Malaria and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1
R44	241-281	Malaria	1	1	1	1	1	1	1	1	1	1	1
R45	242-282	Malaria and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1
R46	243-283	Malaria	1	1	1	1	1	1	1	1	1	1	1
R47	244-284	Malaria and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1
R48	245-285	Malaria	1	1	1	1	1	1	1	1	1	1	1
R49	246-286	Malaria and other febrile diseases	1	1	1	1	1	1	1	1	1	1	1
R50	247-287	Malaria	1	1	1	1	1	1	1	1	1	1	1
R51	290-290	Diabetes mellitus	15	4	11	11	2	2	2	2	2	2	10
R52	291-291	Diabetes mellitus	13	3	10	10	2	2	2	2	2	2	10
R53	292-292	Diabetes mellitus	12	2	10	10	2	2	2	2	2	2	10
R54	293-293	Diabetes mellitus	11	1	10	10	2	2	2	2	2	2	10
R55	294-294	Diabetes mellitus	10	1	9	9	2	2	2	2	2	2	10
R56	295-295	Diabetes mellitus	9	1	8	8	2	2	2	2	2	2	10
R57	296-296	Diabetes mellitus	8	1	7	7	2	2	2	2	2	2	10
R58	297-297	Diabetes mellitus	7	1	6	6	2	2	2	2	2	2	10
R59	298-298	Diabetes mellitus	6	1	5	5	2	2	2	2	2	2	10
R60	299-299	Diabetes mellitus	5	1	4	4	2	2	2	2	2	2	10
R61	300-326	Arteriosclerotic and degenerative heart disease	342	178	164	164	9	9	9	9	9	9	87
R62	301-327	Arteriosclerotic and degenerative heart disease	341	177	164	164	9	9	9	9	9	9	87
R63	302-328	Arteriosclerotic and degenerative heart disease	340	176	163	163	9	9	9	9	9	9	87
R64	303-329	Arteriosclerotic and degenerative heart disease	339	175	162	162	9	9	9	9	9	9	87
R65	304-330	Arteriosclerotic and degenerative heart disease	338	174	161	161	9	9	9	9	9	9	87
R66	305-331	Arteriosclerotic and degenerative heart disease	337	173	160	160	9	9	9	9	9	9	87
R67	306-332	Arteriosclerotic and degenerative heart disease	336	172	159	159	9	9	9	9	9	9	87
R68	307-333	Arteriosclerotic and degenerative heart disease	335	171	158	158	9	9	9	9	9	9	87
R69	308-334	Arteriosclerotic and degenerative heart disease	334	170	157	157	9	9	9	9	9	9	87
R70	309-335	Arteriosclerotic and degenerative heart disease	333	169	156	156	9	9	9	9	9	9	87
R71	310-336	Arteriosclerotic and degenerative heart disease	332	168	155	155	9	9	9	9	9	9	87
R72	311-337	Arteriosclerotic and degenerative heart disease	331	167	154	154	9	9	9	9	9	9	87
R73	312-338	Arteriosclerotic and degenerative heart disease	330	166	153	153	9	9	9	9	9	9	87
R74	313-339	Arteriosclerotic and degenerative heart disease	329	165	152	152	9	9	9	9	9	9	87
R75	314-340	Arteriosclerotic and degenerative heart disease	328	164	151	151	9	9	9	9	9	9	87
R76	315-341	Arteriosclerotic and degenerative heart disease	327	163	150	150	9	9	9	9	9	9	87
R77	316-342	Arteriosclerotic and degenerative heart disease	326	162	149	149	9	9	9	9	9	9	87
R78	317-343	Arteriosclerotic and degenerative heart disease	325	161	148	148	9	9	9	9	9	9	87
R79	318-344	Arteriosclerotic and degenerative heart disease	324	160	147	147	9	9	9	9	9	9	87
R80	319-345	Arteriosclerotic and degenerative heart disease	323	159	146	146	9	9	9	9	9	9	87
R81	320-346	Arteriosclerotic and degenerative heart disease	322	158	145	145	9	9	9	9	9	9	87
R82	321-347	Arteriosclerotic and degenerative heart disease	321	157	144	144	9	9	9	9	9	9	87
R83	322-348	Arteriosclerotic and degenerative heart disease	320	156	143	143	9	9	9	9	9	9	87
R84	323-349	Arteriosclerotic and degenerative heart disease	319	155	142	142	9	9	9	9	9	9	87
R85	324-350	Arteriosclerotic and degenerative heart disease	318	154	141	141	9	9	9	9	9	9	87
R86	325-351	Arteriosclerotic and degenerative heart disease	317	153	140	140	9	9	9	9	9	9	87
R87	326-352	Arteriosclerotic and degenerative heart disease	316	152	139	139	9	9	9	9	9	9	87
R88	327-353	Arteriosclerotic and degenerative heart disease	315	151	138	138	9	9	9	9	9	9	87
R89	328-354	Arteriosclerotic and degenerative heart disease	314	150	137	137	9	9	9	9	9	9	87
R90	329-355	Arteriosclerotic and degenerative heart disease	313	149	136	136	9	9	9	9	9	9	87
R91	330-356	Arteriosclerotic and degenerative heart disease	312	148	135	135	9	9	9	9	9	9	87
R92	331-357	Arteriosclerotic and degenerative heart disease	311	147	134	134	9	9	9	9	9	9	87
R93	332-358	Arteriosclerotic and degenerative heart disease	310	146	133	133	9	9	9	9	9	9	87
R94	333-359	Arteriosclerotic and degenerative heart disease	309	145	132	132	9	9	9	9	9	9	87
R95	334-360	Arteriosclerotic and degenerative heart disease	308	144	131	131	9	9	9	9	9	9	87
R96	335-361	Arteriosclerotic and degenerative heart disease	307	143	130	130	9	9	9	9	9	9	87
R97	336-362	Arteriosclerotic and degenerative heart disease	306	142	129	129	9	9	9	9	9	9	87
R98	337-363	Arteriosclerotic and degenerative heart disease	305	141	128	128	9	9	9	9	9	9	87
R99	338-364	Arteriosclerotic and degenerative heart disease	304	140	127	127	9	9	9	9	9	9	87
R100	339-365	Arteriosclerotic and degenerative heart disease	303	139	126	126	9	9	9	9	9	9	87
R101	340-366	Arteriosclerotic and degenerative heart disease	302	138	125	125	9	9	9	9	9	9	87
R102	341-367	Arteriosclerotic and degenerative heart disease	301	137	124	124	9	9	9	9	9	9	87
R103	342-368	Arteriosclerotic and degenerative heart disease	300	136	123	123	9	9	9	9	9	9	87
R104	343-369	Arteriosclerotic and degenerative heart disease	299	135	122	122	9	9	9	9	9	9	87
R105	344-370	Arteriosclerotic and degenerative heart disease	298	134	121	121	9	9	9	9	9	9	87
R106	345-371	Arteriosclerotic and degenerative heart disease	297	133	120	120	9	9	9	9	9	9	87
R107	346-372	Arterioscler											

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF STATE INSTITUTIONS FOR 1930
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUDES	Total		White		Non-white		Age Groups by Years								
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown	
B1	001-138	Infective and parasitic diseases	6	2	2	1	1	1									
B2	001-139	Tuberculous respiratory system	5	1	1	1	1	1									
B3	010-019	Tuberculosis, other	5	1	1	1	1	1									
B4	020-029	Syphilis and its sequelae	1														
B5	040-040	Typhoid fever	1														
B6	045-048	Dysentery	1														
B7	050-051	Scarlet fever and streptococcal sore throat	1														
B8	065	Diphtheria	1														
B9	066	Diphtheria, other	1														
B10	080	Whooping cough	1														
B11	083	Measles	1														
B12	080	Measles, other	1														
B13	084	Scarlet fever, other	1														
B14	085	Scarlet fever, other	1														
B15	100-106	Smallpox	1														
B16	110-117	Measles and other rickettsial diseases	1														
B17		Measles, other	1														
B18	140-239	Neoplasms	3	3	3	3	3	3									
B19	200-205	Malignant neoplasms	3	3	3	3	3	3									
B20	240-269	Benign neoplasms	1														
B21	290	Allegic, endocrine system, metabolic and nutritional diseases															
B22	300-329	Diabetes mellitus															
B23	330-334	Diabetes, other															
B24	400-463	Diseases of the circulatory system	20	15	15	5	5	5									
B25	400-402	Ischemic heart disease	16	12	12	4	4	4									
B26	410-410	Arteriosclerotic and degenerative heart disease	16	12	12	4	4	4									
B27	420-422	Other diseases of heart	2	1	1	1	1	1									
B28	430-434	Hypertension with heart disease	2	1	1	1	1	1									
B29	440-444	Other diseases of heart	2	1	1	1	1	1									
B30	470-527	Diseases of the respiratory system	2	1	1	1	1	1									
B31	490-493	Influenza	1	1	1	1	1	1									
B32	500-502	Pneumonia	1	1	1	1	1	1									
B33	530-537	Residual (470-475, 510-527)	1	1	1	1	1	1									
B34	550-553	Diseases of the digestive system	2	2	2	2	2	2									
B35	600, 591, 570	Diseases of the mouth and pharynx	1	1	1	1	1	1									
B36	545, 571, 572	Intestinal obstruction and hernia	1	1	1	1	1	1									
B37	551	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	1	1	1	1	1	1									
B38	580-587	Diseases of the genito-urinary system	1	1	1	1	1	1									
B39	590-593	Diseases of the prostate	1	1	1	1	1	1									
B40	640-680	Diseases of the skin and cellular tissue	1	1	1	1	1	1									
B41	720-749	Diseases of the bones and organs of movement	1	1	1	1	1	1									
B42	750-759	Congenital malformations	1	1	1	1	1	1									
B43	760-762	Birth injuries, postnatal asphyxia and asphyxia	1	1	1	1	1	1									
B44	765-768	Infections of the newborn	1	1	1	1	1	1									
B45	769-770	Other diseases peculiar to early infancy and immature unqualified	1	1	1	1	1	1									
B46	780-785	Accidents, violence and ill-defined conditions	1	1	1	1	1	1									
B47	E800-809	Accidents, violence and ill-defined conditions	1	1	1	1	1	1									
B48A	E800-802	Motor vehicle accidents	1	1	1	1	1	1									
B48B	E800-805	Other accidents	1	1	1	1	1	1									
B49	E800-804	Falls	1	1	1	1	1	1									
B50A	E800-803	Suicide	1	1	1	1	1	1									
B50B	E800-803	Homicide	1	1	1	1	1	1									
B50C	E800-809	Police intervention, execution and operations of war	1	1	1	1	1	1									
		ALL CAUSES	37	26	26	9	9	9	1	1	1	1	1	1	4	11	20

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MILITARY POSTS FOR 1950
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years								
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown	
B1	001-138	Infective and parasitic diseases															
B2	001-139	Respiratory system															
B3	010-010	Tuberculosis other															
B4	020-020	Syphilis and its sequelae															
B5	040	Erythoid fever															
B6	045-06	Cholera															
B7	050-061	Scarlet fever and streptococcal sore throat															
B8	065	Diphtheria															
B9	066	Whooping cough															
B10	067	Measles															
B11	068	Measlelike infections															
B12	080	Acute poliomyelitis															
B13	084	Smallpox															
B14	085	Measles															
B15	100-06	Typhus and other rickettsial diseases															
B16	110-117	Residual (020-039, 041, 042, 044, 049, 052-051, 053-074, 081-083, 086-096, 120-183)															
B17		Neoplasms															
B18	140-239	Malignant neoplasms															
B19	210-236	Benign neoplasms															
B20	240-239	Allergic conditions, metabolic and nutritional diseases															
B21	260	Diabetes mellitus															
B22	290-299	Residual (240-243, 250-254, 270-277, 290-290)															
B23	300-326	Mental, psychoneurotic and personality disorders															
B24	330-336	Diseases of the nervous system and sense organs															
B25	340	Sexual lesions affecting central nervous system															
B26	350-326	Residual (341-345, 350-357, 360-360, 370-380, 390-398)															
B27	400-468	Diseases of the circulatory system															
B28	400-402	Ischemic heart disease															
B29	420-426	Other diseases of heart															
B30	430-434	Hypertension with heart disease															
B31	440-443	Hypertension without mention of heart disease (ICD-9 403)															
B32	441-447	Diseases of the respiratory system															
B33	470-527	Influenza															
B34	480-483																

B31	490-493	Pneumonia															
B32	500-502	Bronchitis															
B33	530-537	Residual (470-473, 510-527)															
B34	540-541	Ulcer of stomach and duodenum															
B35	550-553	Appendicitis															
B36	560-561, 570	Intestinal obstruction and hernia															
B37	581	Gastritis, duodenitis, enteritis and colitis, except chronic of newborn															
B38	590-597	Residual (530-539, 542, 544, 545, 575-578, 580, 582-585)															
B39	600-604	Diseases of the genito-urinary system															
B40	610	Hyperbasia of prostate															
B41	620-629	Residual (600-604, 611-617, 620-620, 630-637)															
B42	630-639	Pregnancy, childbirth and the puerperium															
B43	720-749	Diseases of the bones and skeletal tissue															
B44	750-759	Congenital malformations															
B45	760-778	Certain diseases of early infancy															
B46	780-782	Birth injuries, postnatal asphyxia and atelectasis															
B47	790-792	Other diseases peculiar to early infancy and infancy unqualified															
B48	793-795	Symptoms, entities and ill-defined conditions															
B49	800-809	Accidents, poisonings and violence															
B50	810-812	Motor vehicle accidents															
B51	820-822	All other accidents except falls															
B52	830-835	Pathologic conditions															
B53	840-845	Pathologic conditions															
B54	850-855	Pathologic conditions															
B55	860-865	Pathologic conditions															
B56	870-875	Pathologic conditions															
B57	880-885	Pathologic conditions															
B58	890-895	Pathologic conditions															
B59	900-905	Pathologic conditions															
B60	910-915	Pathologic conditions															
B61	920-925	Pathologic conditions															
B62	930-935	Pathologic conditions															
B63	940-945	Pathologic conditions															
B64	950-955	Pathologic conditions															
B65	960-965	Pathologic conditions															
B66	970-975	Pathologic conditions															
B67	980-985	Pathologic conditions															
B68	990-995	Pathologic conditions															
B69	001-009	ALL CAUSES	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11

State Registrar of Vital Statistics

The State Registrar has the custody of more than twelve million records of births, marriages, and deaths which date back to 1848. The records for the period 1848 to 1887 were collected by the Secretary of State and turned over to the Bureau of Vital Statistics 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 Bureau of Vital Statistics. Prior to that year annual statistical reports, which have been published since 1879, were prepared from records not in the custody of the Bureau.

As required by law the State Registrar supervised the issuance of marriage licenses and the registration of births, marriages and deaths throughout the State and supplied to local registrars and others the forms necessary to obtain registration.

Certified copies of birth, marriage and death records were issued to individuals and interested organizations and agencies. During the fiscal year 1950-1951, 46,571 searches of the records were made and copies of certificates issued for which \$28,115.39 was received in fees. A total of 18,456 of the searches and certified copies was for purposes exempt from charge by law. Receipts were \$5,335.63 more than the amount collected during the preceding year. There was a decrease of 4,767 or 20 per cent in the number of certificates issued without charge, which records were requested mainly for use as proof when applying for dependency allotments and in furthering other claims against the Federal Government due to service with the armed forces. During the previous year there was an increase of 4,089 certificates or 21 per cent over the number for the preceding year.

During the year approximately 197,000 birth, stillbirth, marriage, and death certificates were received, examined, coded, and permanently filed, a small part of which were certificates for unreported births which occurred during previous years. The annual growth of the records requires approximately 200 cubic feet of storage space.

More than 92,000 premarital certificate forms were received and examined, a duty placed upon the office at the adoption of the law requiring an examination for syphilis prior to the issuance of a marriage license.

One thousand seven hundred and five original birth records were sealed and new certificates containing the names obtained by adoption made, as prescribed by Section 26:8-40.1 of the Revised Statutes.

The Field Representative made 22 calls upon local registrars, two calls on army chaplains and one call upon a county clerk. It was necessary to restrict field work in order to keep coding of certificates and other office routine current. Additional personnel should be provided in order that the Field Representative will be available for intensive field work.

As required by Chapter 202, Laws of 1945, a monthly report of the names of deceased veterans with the dates and places of burial, cremation or removal of such deceased veterans, and the wars in which they served, was forwarded to the county supervisors of veterans' interment. Two thousand seven hundred and sixty-five veterans were reported as buried in New Jersey cemeteries during the fiscal year.

The section has photostatic equipment, which is used for supplying certified copies of marriage and death certificates and of birth certificates when complete copies of certificates are desired. A considerable number of photostats was made for other sections of the Department and some work was done for other branches of the State Government.

Four bills for the improvement of vital statistics laws and procedures were introduced into the Legislature. All of the bills were approved and became law.

One of the new laws pertains to birth and death certificates. It provides that the certificates shall contain such items as shall be required by rule or regulation of the State Department of Health. Heretofore it has been necessary to amend the law whenever the form of either certificate was changed.

The second new act clarifies the law controlling the reporting of fetal deaths. A certificate and a burial or removal permit are required for every fetal death, provided twenty or more weeks of gestation elapsed before the delivery.

The third law made possible the issuance of a simplified permit for the shipment of dead human bodies by common carrier.

The fourth bill was intended to clarify the law controlling payment for long period searches of the birth, marriage, and death records, and to authorize the Department to furnish the United States Public Health Service, without expense to the State, microfilm images of birth, stillbirth, and death certificates. Unfortunately, during committee consideration, the part of the bill which pertained to fees for searches was deleted.

DEPARTMENT OF HEALTH

GENERAL SUMMARY

Certificates received, examined, coded, and permanently filed:

	Calendar Years			
	1947	1948	1949	1950
Births	106,086	97,278	97,414	97,734
Stillbirths	2,265	1,964	1,972	1,845
Marriages	55,802	51,913	44,469	46,291
Deaths	48,276	48,107	47,706	48,837
Remarriages .....	.....	.....	1,095	1,025
Total	212,429	199,262	192,656	195,732

	Fiscal Years			
	1947	1948	1949	1950
Searches made and/or certified copies issued for which fees were received	23,075	22,020	22,779	28,115
Certified copies issued and searches made in pension and other cases for which no fees were received	14,539	19,134	23,223	18,456
Fees received for searches and certified copies	\$23,075.15	\$22,020.01	\$22,779.76	\$28,115.39

INDEX

	PAGE
A	
Accidental deaths	284-291
Activities:	
Departmental	7
Activities of Divisions, Bureaus, Programs and Sections	
Divisions:	
Constructive Health	29
Environmental Sanitation	109
Laboratories	139
Local Health Services	161
Preventable Diseases	175
Vital Statistics and Administration	219
Bureaus:	
Administrative Services	222
Adult and Industrial Health	33
Acute Communicable Diseases	177
Bacteriology	142
Cancer Control	190
Chemistry	152
Crippled Children	39
Dental Health	80
Examination and Licensing	225
Food and Drugs	113
Grants-in-Aid	165
Maternal and Child Health	89
Pathology	156
Personnel and Accounts	225
Public Health Engineering	126
Public Health Nursing	166
Public Health Statistics	228
Registrar of Vital Statistics	394
Serology	158
Tuberculosis Control	198
Venereal Disease Control	205
Programs and Sections:	
Alcoholism Program	179
Heart Diseases Section	193
Nutrition Program	100
Rabies Control Program	134

	PAGE
Acute Anterior Poliomyelitis:	
Reported cases by counties and months	183
Reported cases and deaths by age groups and sex	183
Reported cases and deaths by counties	187
Reported cases and deaths with rates	184
Administrative Services, Section on	222
Biological Drug and Vaccine Distribution	224
Health Education Services	223
Warehouse	224
Adult and Industrial Health, Bureau of	33
Atmospheric Pollution	35
Special Projects	34
Statistical Summary of Activities	37
Alcoholism	14, 179
Allocations, Departmental	227
Animal Experimentation	19
Anthrax:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Atmospheric Pollution	11
B	
Baby Keep-Well Stations	95
Bacteriology, Bureau of	142
Blood tests made in	148
Specimens examined in	143-152
Bills introduced in Legislature	21
Biologicals, distribution of	224
Births	229
By counties and municipalities	237
By months	237
Certified copies	394
Illegitimate	90, 252
Infants	91
Number and Rates	235
Place of occurrence vs. residence	249
Rates, five year average	236
Stillbirths	237
Blood Tests	148
Pre-Natal	150
Pre-Marital	150
Syphilis	150
Board of Examiners of Health Officers and Inspectors	181
Boarding homes for children	96
Botulism:	
Reported cases and deaths	185

	PAGE
Brucellosis:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
C	
Cancer:	
Death rate	282
Death rates—five-year average	283
Education and Research	16
Occupational	34
Cancer Control, Bureau of	190
Charts and Tables, vital statistics	233
Chemistry, Bureau of	152
Food and Drug samples examined in	153
Sewage and Water samples examined in	155
Chest X-ray Surveys	201
Chickenpox:	
Reported cases and deaths, case and death rates	184
Reported cases and deaths by counties	186, 188
Chronic Diseases, Division of	177
Civil Defense	113
Cold Storage:	
Annual Report	123
Extension of time for articles in	122
Report	123
Warehouse Act	115
Warehouses	122
Commissioner of Health, Report of	7
Communicable Diseases:	
Reported cases and deaths	181
Reported cases by counties	186
Conference of State and Local Health Officials	19
Constructive Health, Division of	29
Council, Public Health	21
Community Health Education	164
Crippled Children, Bureau of	41
Acute Poliomyelitis	41
Administrative Report	39
Cerebral Palsy	54
Medical Social Service	52
Nursing Division, Report of	40
Poliomyelitis Statistical Report	76
Psychology	64
Rheumatic Fever Program	59
Cross-connections	132

	PAGE
D	
Deaths	231-393
Accidental	284-291
Age groups	251
By months	237
Causes:	
Age groups, sex and color	304-319
Age groups, number and percentages	301-303
By counties, cities, State institutions and military posts	320-393
With percentages by sex	292
Certified copies	394
Counties and municipalities	237-248
Five-year average	236
Infants	91, 92, 253, 296, 298
Malignant Neoplasms	264-281
Maternal	89
Population	235
Rates, white and non-white	293
Tabulation	294
Dental Health, Bureau of	80
Diarrhea, Infectious of newborn:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Diphtheria:	
Reported cases and deaths by age groups and sex	182
Reported cases and deaths by counties	186, 188
Reported cases and deaths with rates	184
Specimens examined for	146
Disability Insurance Service	181
District State Health Offices	168
Dogs and Cats	135
Drugs:	
Control Program	118
Samples examined	125
Dysentery:	
Reported cases and deaths by counties	186, 188
Reported cases and deaths	185
E	
Encephalitis, Infectious:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Engineering, Bureau of Public Health	126
Enteric pathogens, examinations	148

	PAGE
Environmental Sanitation, Division of	111
Activities	18
Examination and Licensing, Bureau of	225
Expenditures, Departmental	227
F	
Factories within potable watershed	133
Feces and urine specimens examined	148
Financial statement	226
Fluoridation of Public Water Supplies	84
Food and Drugs:	
Cold storage	122, 123
Cold Storage Warehouse Act	115
Control Program	118
Fees—licenses and permits	126
Inspections of establishments	124
Narcotic Drugs	118
Penalties for violations of law	126
Samples examined	125
Food Poisoning:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Food and Drugs, Bureau of	113
Funds:	
Statement of Expenditures	227
G	
Garbage and Refuse disposal	113
German Measles:	
Reported cases and deaths with rates	184
Reported cases and deaths by counties	186, 188
Grants-in-Aid, Bureau of	165
Gonorrhoea:	
Cases and rates	206, 209
Specimens examined	145
Guinea pig inoculations	147

	PAGE
H	
Health and Medical Care Preparedness Plan	7
Health Education Services	223
Health Officers, Board of Examiners	181
Heart Disease	16
Heart Diseases, Section of	193
Hospitals, advisory service to	99
I	
Ice Cream Program	120
Industrial Hygiene Activities	36
Industrial Wastes	127
Infant Mortality	91, 232, 237, 253, 296, 298
Influenza:	
Reported cases and deaths, with rates	184
Reported cases and deaths, by counties	186, 188
Insect and Rodent Control	113
In-Service Training Course	17
K	
Kolmer tests	158
L	
Laboratory Services expanded	16
Laboratories, Division of	139
Lake sanitation	112
Legal Actions	130
Legislation:	
Refrigerated Warehouses	114
Narcotic Drugs	118
Leprosy:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Licenses and permits:	
Food and Drugs	126
Maternity homes	96
Revenue from	226
Local Health District Act	8
Local Health Services, Division of	161

	PAGE
M	
Man-hours:	
Sewage, industrial wastes, stream pollution	129
Mailing cases	152
Malaria:	
Reported cases and deaths	185
Reported cases and deaths by counties	186, 188
Marriages	231
By age groups	258
By counties and municipalities	237
By months	237
Certified copies	394
Number and rates	235
Previous marital status	259
Maternal and Child Health, Bureau of	89
Maternal deaths	90, 237, 253, 257
Maternal Mortality	89
Maternity homes	96
Mazzini tests	158
Measles:	
Reported cases and deaths, with rates	184
Reported cases and deaths by counties	186, 188
Measles, German:	
Reported cases and deaths, with rates	184
Reported cases and deaths by counties	186, 188
Media supplies	152
Meningitis, Meningococcal:	
Reported cases and deaths by age groups and sex	183
Reported cases and deaths with rates	184
Reported cases by counties	187, 189
Midwifery	90
Migrant Health	180
Milk:	
Fees for licenses and permits	126
Program	120
Samples collected for analyses	125
Morbidity tables	181-189
Mortality:	
Infant	91, 232
Maternal	232
Tables	233, 234
Motor Vehicle fatalities	287, 291

	PAGE
Mumps:	
Reported cases and deaths with rates	184
Reported cases and deaths by counties	181, 189
N	
Narcotic establishments	19
Non-white, death rates of	293
Notices, engineering	130
Nurses:	
Education	95
Salary assumed by communities	97
Statistical summary of work	98
Nursing service	95, 166
Nutrition Program	100-107
O	
Ophthalmia Neonatorum:	
Reported cases and deaths	185
Reported cases and deaths by counties	187, 189
Orders of Necessity	130
P	
Paratyphoid Fever:	
Reported cases and deaths	185
Reported cases and deaths by counties	187, 189
Pathology, Section of	156
Penalties	126
Personnel and Accounts, Bureau of	225
Pneumonia:	
Reported cases and deaths by counties	187, 189
Reported cases and deaths, with rates	184
Poliomyelitis, Acute:	
Cases, reporting of	42
Fatality rates	260
Reported cases by county and month	183
Reported cases and deaths by age groups and sex	183
Reported cases and deaths by counties	187
Reported cases and deaths with rates	184
Pollen Control	112
Population	229
Pre-Marital Blood Tests	150
Pre-Natal Blood Tests	150
Preventable Diseases, Bureau of	175
Prevention of Illness and Premature Death	14

	PAGE
Private Sewage Disposal Systems	19
Public Health Council	21
Public Health Courses	17
Public Health Engineering, Bureau of	126
Public Health Nursing, Bureau of	166
Public Health Nursing Programs	31
Public Health Statistics, Bureau of	228
Public Water Supplies, fluoridation of	13
R	
Rabies:	
Animals examined	144
Cases	134
Control Program	18, 134
Education	135
Mice inoculations for	144
Reported cases and deaths in humans	185
Tags fees	134
Vaccination, dogs and cats	135
Wild Life control	136
Rabies Control Program	134
Refrigerated warehouse industry	19
Report of State Commissioner of Health	7
Reportable Diseases:	
Reported cases and deaths by county	184
Reported cases and deaths with rates	184
Rocky Mountain Spotted Fever:	
Reported cases and deaths by counties	187, 189
Reported cases and deaths with rates	184
S	
Samples examined:	
Milk, Cream, Food and Drugs	153
Water and Sewage	155
Scarlet Fever:	
Reported cases and deaths by age groups and sex	182
Reported cases and deaths by counties	187, 189
Reported cases and deaths with rates	184
Sewage treatment plants	127
Serology, Section of	158
Sewage disposal, private	112
Sewage, industrial wastes, stream pollution, man hours	128
Sewage and water samples analyzed	155
Sewerage and water projects examined and approved	128
Shellfish Control Program	121

Smallpox:	PAGE
Reported cases and deaths	185
Specimens examined in laboratory	143
Stream Pollution control program	19
State and Local Health Officials, Annual Conference	19
State Health Districts	168
Statistical Tables and Charts	233
Statistics, Public Health	228
Stillbirths	232, 237, 253
Streptococic sore throat:	
Reported cases and deaths	185
Reported cases and deaths by age groups and sex	182
Reported cases and deaths by counties	187
Suicide	286
Syphilis:	
Blood tests	150
Case rates	206
Epidemiologic activity	212
Migrant workers	211
Morbidity trends	205
Reported cases	206, 209
Specimens examined	159
Tables:	T
Communicable diseases	181
Vital statistics	233
Tests at State Fair	178
Tetanus:	
Reported cases and deaths	185
Reported cases and deaths by counties	187, 189
Trachoma, reported cases and deaths	185
Trichinosis:	
Reported cases and deaths	185
Reported cases and deaths by counties	187, 189
Tuberculosis Control, Bureau of	198
Tuberculosis:	
Activities	198
Chest Clinics	202
Deaths	233
Reported cases by sex, color and age groups	203
Specimens examined	146
X-ray surveys	201

Tularemia:	PAGE
Reported cases and deaths	185
Reported cases and deaths by counties	187, 189
Typhoid fever:	
Reported cases and deaths by age groups and sex	181
Reported cases and deaths by counties	187
Reported cases and deaths with rates	184
Typhus fever:	
Reported cases and deaths	185
	V
Vaccine distribution	224
Veneral Disease Control, Bureau of	205
Case rates	206
Drugs	216
Educational	213
Migrant Program	211
Morbidity trends	205
Reported cases	208
Veterinary Public Health	111
Vital Statistics	394
Certified copies	394
General Summary	396
Revenue from certified certificates	396
Vital Statistics and Administration, Division of	221
Vital Statistics, State Registrar of	394
Vital Statistics—Charts and Tables	233
	W
Water and sewerage projects	128
Water and sewage samples analyzed	155
Whooping Cough:	
Reported cases and deaths by age groups and sex	182
Reported cases and deaths by counties	187
Reported cases and deaths with rates	184
	X
X-ray Surveys:	
Chest examinations	201