

SEVENTY-SIXTH ANNUAL REPORT

OF THE

Department of Health

OF THE

STATE OF NEW JERSEY

1953



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1954

Department of Health of the State of New Jersey
Public Health Council

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* Deceased February 5, 1953

† Succeeded to Chairmanship February 9, 1953

‡ Elected Vice-Chairman February 9, 1953

STATE OF NEW JERSEY,
DEPARTMENT OF HEALTH,
TRENTON, N. J., July 1, 1953.

*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, 1953.

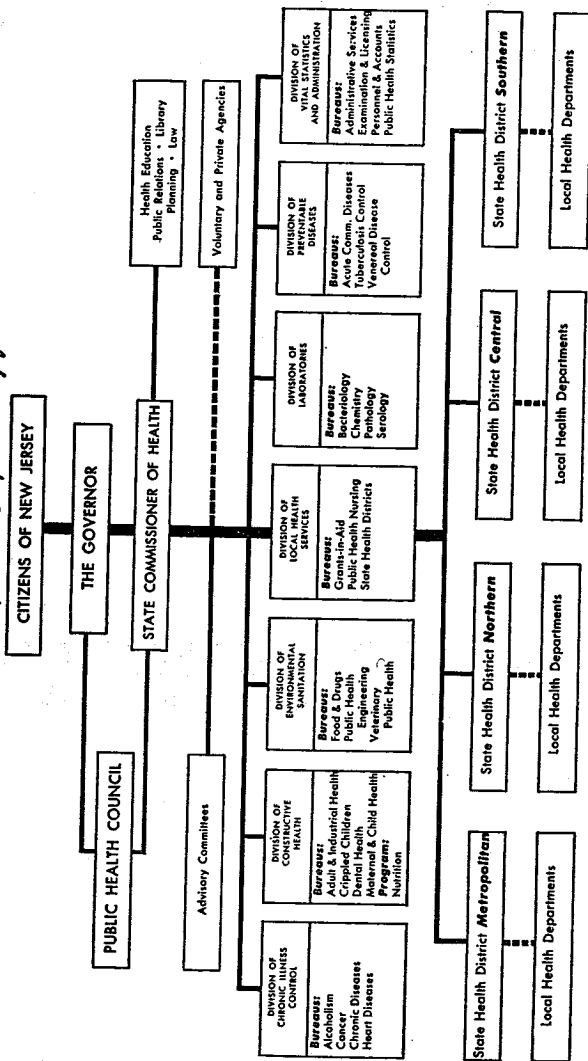
Respectfully submitted,

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

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Report of the State Commissioner of Health

July 1, 1952—June 30, 1953

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

Reorganization of our state public health services, begun in 1948, was planned as a gradual and continuing process. During the last year our progress has been marked by further development of this plan in three fields: the decentralization and strengthening of personnel and services in four State Health Districts, the expansion of chronic disease control measures and the completion of the ground work for the detailed and extensive task of recording the various working programs of the State Department of Health.

All four of the State Health District Offices planned as part of the reorganization of the Department are now in operation with virtually complete staffs. These offices serve as the means through which the technical and professional services of the Department are made available to local health agencies. The reorganization plan has been placed in operation as the district offices have been able to assume these service responsibilities. This gradual and orderly decentralization of state health services to the State Health District Offices had its greatest growth during the past year as we realized the gains made possible by the reorganization plans and activities of the preceding years.

There has also been a growth in the acceptance and provision of direct local health services to the people by the responsible local boards of health with the result that the Department can further reduce the direct health services which it has been providing and increase its work in guiding and advising local health departments.

The staff of each State Health District Office constitutes a survey team available to local communities upon request. They help guide them and consult with them in the determination of local health needs and plans for solution. This continuing service is an outgrowth of the three-year evaluation study initiated in 1950 with the financial participation of the Commonwealth Fund.

Ten Grant-in-Aid contracts were in force during the year, six with local boards of health to provide funds for employment of a public health nurse,

and four with local hospitals to provide funds for special public-health related personnel. One of the contracts with a local board of health expired during the year and the local board assumed the salary of the nurse. This practice of providing funds instead of personnel is a continuing step in strengthening local responsibility for local health services.

The economy of the generalized rather than the specialized use of personnel in public health nursing and in sanitation which was started in 1948 was further proven during the last year. Our State Health District staffs working on a generalized basis have been able to provide greater services than in previous years. We have now established beyond reasonable doubt, that better state health services can be provided at less cost through a decentralized staff of personnel doing a generalized program in four State Health District Offices than teams of specialists operating from a central headquarters staff in Trenton.

LOCAL ACTION NEEDED FOR LOCAL HEALTH SERVICES

The State Department of Health provides technical and professional guidance and assistance to local boards of health, it provides help in making surveys, provides a few grants-in-aid and some personnel and it still performs a few direct health services; but the ultimate responsibility for the kind of local health services which our people have rests with the local boards of health. A few of our boards of health are doing an outstanding job, others are providing from adequate to minimal services and a still larger number is providing what few services they can within the limits of the funds available to them.

The extent and quality of local public health services provided for the residents of each of our 571 separate municipalities are determined by the people in those municipalities. Local public health services vary greatly in New Jersey and we find that the greatest area of need is in the small towns and townships, particularly in rural sections. This arises because these jurisdictions do not have the population needed to support adequate full time public health services. This is not a new problem, and health officials have been concerned with it for many years. There is no doubt, however, that these services will not be provided except as the people in the individual municipalities recognize their own needs and take action of their own choice to meet these needs. The development of health councils and similar groups on a local and county basis during the past year has been encouraging evidence that the people are becoming more concerned about their local public health needs. The evaluation survey has been used in some places as an informational and study tool to determine local public health needs and resources.

The Local Health District Act of 1951, a permissive Act, provides a way for municipalities to join together in the voluntary establishment of consol-

idated local health districts or county local health districts. Hunterdon County was the first county to have a referendum vote for a county local health district under the Local Health District Act of 1951. The defeat of this proposal in every municipality in the county is a measure of the work which must be done before the people are convinced of their need for better local health services.

ADVANCES IN CHRONIC ILLNESS CONTROL

In New Jersey we have an aging population and an increasing incidence of chronic disease in a complex industrial and social environment. Because of this increasing incidence, and because medical and public health research have made it possible for us to plan and provide certain definite preventive and rehabilitative services for the reduction of premature deaths and loss of productive years, public health measures for the control of chronic illnesses have inevitably become a part of the public health program.

The New Jersey problem was studied by the Temporary Committee on the Chronic Sick appointed by Governor Driscoll in 1949 in accordance with a joint resolution of the Legislature of that year. This Committee, drawing on the resources and knowledge of our state, submitted a carefully prepared report with a detailed legislative recommendation in December, 1951.

Setting forth its recommendation, the Committee stated that the fundamental purpose of the proposed legislation was "to provide recognition for that portion of the responsibility which must be borne by the State, to create an Advisory Council on Chronic Sick, to consult with the Department of Health on the manner of preventing, detecting and controlling chronic sickness and rehabilitating the chronic sick and to establish within the Department of Health a Division of Chronic Illness Control to administer the program."

The Prevention of Illness Act was introduced in the 1952 Legislature upon recommendation of the Committee, was passed without amendment, and was signed by Governor Driscoll on April 28, 1952. This Act provides for the appointment by the Governor of an Advisory Council on the Chronic Sick, the appointment of a technical advisory committee to this Council and the establishment of a Division of Chronic Illness Control in the State Department of Health. It stands as the most important act of legislation for health in 1952, ranking with the Local Health District Act of 1951 in potential returns.

The Division of Chronic Illness Control was established in accordance with the Act on July 1, 1952. The existing bureaus and programs already operating in the field of chronic illness were brought together in the new division which became the seventh of the divisions of the Department. The Bureau of Cancer Control, the Bureau of Chronic Diseases (including the

Section of Heart Diseases and the Program of Alcoholism Control) were transferred to the new Division of Chronic Illness Control and the last two were designated as bureaus. Dr. Marian R. Stanford who had served as Chief of the newly designated Bureau of Heart Diseases was appointed to serve as Director of the Division on October 1, 1952.

The Advisory Council on the Chronic Sick was appointed by Governor Driscoll and the technical advisory committee to this Council was named by the State Commissioner of Health in accordance with the Act. The Council and members of the technical advisory committee have rendered much valuable assistance and advice. The Council approved a series of recommendations of the Commissioner concerned primarily with the organization and work of the Division of Chronic Illness Control. These recommendations and the projects approved by the Council have helped to provide a sound professional and technical basis for the development of this program.

A further example of the utilization of professional and technical advice and guidance from highly qualified persons who give their aid and time without pay is the Consultant Committee on Community Homemaker Service appointed to help in the stimulation and development of community homemaker services. A State-wide institute on the organization of such services has been held and regional institutes are now being planned.

The Governor's Conference on the Prevention of Chronic Illness was held at Trenton on December 17, 1952, sponsored by the State Department of Health and The Medical Society of New Jersey. It was called to secure quickly and inexpensively the data concerning present knowledge and experience through the expert judgment and recommendation of the persons invited as speakers to the Conference. This data was to be used in designing an adequate chronic illness control program. This was the third Governor's Conference to be held in the field of public health. The first, in 1949, was on Heart Disease and the second was the Governor's Conference on Atmospheric Pollution held in February, 1952.

From the Conference on the Prevention of Chronic Illness we secured additional data, opinions and recommendations needed to complete our planning. The activities required to implement this program were set forth in my special report of December 1, 1952 submitted to Governor Driscoll in accordance with the Prevention of Chronic Illness Act. The methods recommended to achieve the scope and type of activities and the appropriation necessary to do this job were a part of that report.

The text of this December 1, 1952 "Report to the Governor on the Prevention of Chronic Illness" appears as an addendum to this report as a matter of permanent record.

An appropriation of \$250,000 has been made for the Division of Chronic Illness Control by the Legislature for the fiscal year beginning July 1, 1953. Our planning of the past year has made it possible to be ready to start at once with decisions already made on problems to receive first attention. Thus we have gained a full year in our work for the control of chronic illnesses.

Our existing resources have also made definite progress possible during the year just closed. Improved diagnostic and rehabilitative facilities have been provided as auxiliary services for the general practitioner through five general hospitals in selected areas of New Jersey. Multiphasic screening services are in operation at these hospitals and they also serve as teaching centers for physicians in the area. A second out-patient clinic for alcoholics was opened in Newark with the cooperation of St. Michael's Hospital and a third at West Jersey Hospital, Camden, is planned. The first was previously established at McKinley Hospital, Trenton.

Only through prevention, early detection and control of chronic illnesses can society protect itself against the rapidly rising rates of chronic invalidism. The enormously increased costs of care to society for invalids in our population, associated with the rapid increase in the older age groups, will exceed, or severely tax, society's ability to pay unless the burden is materially lessened. This is no small problem or undertaking. Strenuous, persistent, whole-hearted and devoted effort is necessary to succeed. Prevention of chronic illness and attendant invalidism will result in considerable savings of time and money for our citizenry. If they are to realize these benefits in the immediate future, time is of the essence.

PREPARATION OF WRITTEN PROGRAMS

With the structural reorganization of the Department brought to virtual completion and with the trained staff now available, it has been possible to start a detailed process of recording in standard form all of the programs of the State Department of Health. By this means we will be able to determine how well specific programs are being handled by specific definition of the problem and its objectives.

It will also provide an evaluation of the degree of importance of activities within each program and eventually result in preparation of a manual of procedure for use by all those participating in interrelated programs of the Department. It is also believed that when the program schedules are written and reviewed, some administrative operations can be brought together to increase efficiency and produce maximum results.

A second objective is to assist local health departments to parallel this activity in writing similarly recorded programs which they may wish to adopt. This will be a continuing process which will carry within it provision for evaluation of results and methods.

It is another means of furthering the job which we set out to do in 1948—providing New Jersey with a reorganized and revitalized State Department of Health which can provide effective state-wide leadership in public health for the protection and promotion of the health of the people of our State.

The beginnings already made in the writing of programs are reflected in this report since, in some divisions, the preparation of individual programs has progressed to the point where the reporting of activities of the Department can now be made on an individual program basis. This report itself shows the transition period of the past year as we change from the rigid compartmentalization of personnel and activities within administrative bureaus to a functional grouping of activities and services in specific programs which cut across bureau and division lines.

EXPANDED ACTIVITY NEEDS WERE MET

Expansion of State Health Department programs and addition of new ones has meant a corresponding increase in the work load of our own Departmental service units. Principal among these is the Division of Vital Statistics and Administration, the primary function of which is to provide a group of necessary services to the rest of the Department.

The personnel and fiscal requirements of new programs and of the steps in the reorganization of the Department which were accomplished this year have necessitated extra fiscal and personnel services. Chief among our improvements in personnel relationships was the inauguration of informal orientation courses for both new and old employees.

Requests for production and use of health education materials have taxed the facilities and staff of these centralized services and it is anticipated that these needs will grow as new programs now developing reach their working stage. Similarly, the requests for public health statistical services have increased while at the same time the practice of providing the District State Health Offices with statistical resource material pertaining to the specific districts has been expanded. During the year the work of receiving and processing reports of communicable diseases was transferred to the Division of Vital Statistics and Administration so that all of the statistical services are now within a single division, one of the goals of the reorganization plan.

The various professional examining and licensing boards which operate within the Department have provided increasing services. The Board of Examiners for Sewage and Water Plant Operators improved their examination procedures by instituting the use of examinations prepared by the American Public Health Association.

Expanding programs, new activities and new public health problems require an in-service training of the personnel of the State Department of Health as well as local health department employees. In addition to utiliza-

tion of regular courses at near-by schools of public health and other colleges and universities, there has been an increasing number of three to five day institutes conducted for special groups in which the public health aspects of certain problems were presented. Among these have been such subjects as special training for laboratory personnel, training of local health personnel in methods of inspecting and testing fluoroscopic shoe-fitting machines, training of persons for homemaker services, institutes in cardiovascular disease for nurses and others of a specialized nature.

LABORATORY SERVICES ENHANCED

The improvement of our state public health services as a result of the reorganization of the State Department of Health is well illustrated by the work of the Division of Laboratories which was formed by bringing together the various laboratory units of the Department previously operated as independent units. Having these functionally related units in one division has permitted a number of measures which have saved money and, at the same time, have increased services.

We have improved our physical plant and provided more satisfactory working conditions by a reassignment of laboratory space within the Division of Laboratories. This has also made possible the more efficient use of laboratory personnel. Improved fiscal management including the pooling of funds, supplies and equipment and the stock inventory control system, all on a division-wide basis have now been placed in operation.

At the same time efforts have been made to have local laboratories assume a larger part of the routine tests for syphilis so that the Department laboratory might better serve as a laboratory of reference and develop practical research projects in this field. A planned educational program to reach as many laboratory workers as possible with refresher training in practical courses of immediate use was started with nearly 200 laboratory workers in attendance. Plans for expansion of this training during the coming year have been made.

Among new laboratory developments was the performance of viral complement fixation tests on a pilot basis. Laboratory personnel have been trained, a stock of available virus and rickettsial antigens has been accumulated, and it is anticipated that this service can be provided to practicing physicians during the coming year. There has been a 30 per cent increase in the number of specimens submitted for our Tumor Registry, the activity for the identification of the tuberculosis bacillus by laboratory culture has been intensified and there has been a significant increase in the number of water, milk and food specimens received, reflecting the increase in the work of environmental sanitation programs.

MEDICAL AND HEALTH SERVICES IN CIVIL DEFENSE

Civil defense services are a regular part of our public health protection, for we must be prepared to save lives in the event of a disaster. During the year the activities in Medical and Health Civil Defense Services were centered on three goals: the stimulation and training of local health personnel so that they would be able to meet the demands of a disaster; the development of a central core of medical and health personnel with definite assignment of duties; and providing medical advice and guidance in the procurement of the necessary supplies, the full co-ordination of facilities and the assurance of an extensive supply of whole blood and derivatives.

THE CHANGING PICTURE OF ENVIRONMENTAL SANITATION

Environmental sanitation activities are embodied in twelve departmental programs. In all of these there have been two administrative trends: the decentralization of many service activities from the Division of Environmental Sanitation offices in Trenton to the four State Health District offices and a gradual increase in environmental sanitation services provided by local boards of health for their own communities.

The sanitary control of bathing places is a good example of this development. By the end of the 1952 season, certificates indicating voluntary compliance with sanitary standards formulated by an advisory committee under the sponsorship of the Department had been issued by two State Health District offices with the active participation of local health authorities and private laboratories. Sampling of surf bathing waters and inspection of sewage treatment plants discharging into surf waters became the responsibility of the State Health Districts while increased participation by local authorities was encouraged.

In the field of housing, the interest of local health officials and residents in rehabilitation of sub-standard housing has been stimulated. Construction of small sewage treatment plants to serve entire housing developments rather than installation of individual sewage disposal systems will reduce the present work load now performed in this phase of housing sanitation. Plans for nine sewage disposal plants of this type have been approved.

Our communities are turning more and more to joint effort in solving their sewage disposal problems with trunk sewers and central treatment works. Outstanding examples of the success of this type of inter-municipal planning are the Middlesex County Sewerage Authority, the Somerset-Raritan Valley Sewerage Authority and the Bergen County Sewer Authority. At the close of the fiscal year, 80 per cent of the eligible participants in the area to be served by the Middlesex County Sewerage Authority had either

signed a contract to join in the trunk sewer project or had indicated their intention to do so.

In furtherance of the work of many years in reducing stream pollution, new standards for the various streams based primarily upon present and expected uses were completed and ready for approval at the end of the year. Quality standards for industrial waste and sewage treatment plant effluents for discharge to surface waters and suggested methods of sanitary sewage treatment were also prepared.

Use of sanitary landfills for disposal of garbage and refuse is on the increase with seven such operations serving ten municipalities having a permanent population of a quarter of a million and a summer population of one-half million people. Nine additional sites have been approved for sanitary landfills.

This year saw the completion of several phases of the ragweed and poison ivy control program started in previous years. The Weed Control Code of New Jersey (1953) was established for adoption by reference by local boards of health. The Interdepartmental Committee of the Departments of Agriculture, Conservation and Economic Development, Health, Highways and the Agricultural Experiment Station at Rutgers University presented and published its report. The two-day Institute on Weed Control focused attention on this public health problem and served to stimulate action by municipalities for control of ragweed and poison ivy. It is anticipated that there will be a large increase in the number of pollen collecting stations during the next year so that more information on the extent and distribution of ragweed pollens will be available for planning control measures.

The system of rating milk plants and supplies begun last year with one especially trained sanitarian has been expanded. Four sanitarians have been approved by the Public Health Service for such inspection work and these men are now training other field personnel so that further expansion of this work will follow. Reciprocal acceptance of inspection reports of milk plants and dairy farms by local health departments having comparable standards of inspection is on the increase and plans for a joint system of inspections and checking in which local health departments will participate with the State Department of Health are in the discussion stage.

Environmental sanitation methods must stay abreast of industry changes and advances. During the year local and state inspectors were trained in the testing and inspection of high temperature short time pasteurizing units; new rating forms for milk plants and dairy farms were developed with a manual; proposed requirements for bulk tank farm pickup were prepared; cleaning-in-place of pipelines in milk plants and on dairy farms was studied under experimental field conditions; the revised State Sanitary Code was established with a requirement that by April 1, 1958 all milk consumed in New Jersey must

come from animals free from brucellosis; and a fluid milk shortage was met. These examples from the single field of milk sanitation indicate the changing aspects of public health.

Vigorous enforcement of laws governing foods and drugs is a continual necessity for the protection of the consumer against fraud, adulteration, filth and hazardous, and in some cases poisonous, foods and drugs. Constant patrolling of condemned bodies of water is necessary to prevent removal and sale of polluted shellfish. During the year joint enforcement action by this Department, the New Jersey State Police, the Division of Shellfisheries and the New York State Conservation Department has broken up the growing practice of harvesting clams in condemned portions of the Raritan and Sandy Hook Bays.

New Jersey's fine record of rabies control was continued with one case in a dog during 1952. This has resulted from the combined efforts of local and state officials in a three-point dog control program of licensing, vaccination and stray dog control. Research and study together with control measures were required to maintain our control of other animal diseases transmissible to man. One keypoint of this work is the present concerted effort to eliminate raw garbage feeding of hogs as a trichinosis control measure.

STATE SANITARY CODE REVISED

Revision of the State Sanitary Code by the Public Health Council, begun in December, 1951 was completed during the year.

The revised Code which is the result of study and research over a period of two years by medical and other advisory committees and groups of health officials, was adopted on June 22, 1953, following public hearings. Originally authorized by the Legislature in 1915, the authority for the enactment of the Code was placed with the Public Health Council in the State Health Department Reorganization Law of 1947. Revision of the Code marks another step in the reorganization of New Jersey's state health administration.

The revision of the Code reflects advances in knowledge that can be applied in the prevention of many diseases. An entire new chapter is devoted to control of X-ray machines and other sources of radiation. Regulations have already been promulgated under this chapter by the State Health Department.

The regulation requiring the shielding of X-ray machines and other sources of radiation will prevent owners and users from being exposed to excessive dosage of radiation. A control program for making dairy herds free from brucellosis is embodied in the regulation requiring that milk sold in the State come from dairy animals free from brucellosis after April 1, 1958.

New regulations governing certain laboratories doing public health laboratory tests are also included in the revised Code. Revision of the list of diseases which local boards of health are required to report to the State Department of Health eliminated chicken pox, German measles and mumps from the list in the Code. Reporting of these diseases to local reporting officials may be required by local ordinances.

CODES FOR LOCAL ADOPTION

The "Public Health and Sanitation Codes Adoption by Reference Act" adopted in 1950 provides that local boards of health may enact, amend or supplement ordinances establishing, amending or supplementing a code or any parts thereof by reference to such code without including the text of the code in the ordinance if the code and any related documents are printed in book form and if three copies of the printed code are filed in the office of the secretary, clerk or similar officer of the local board of health.

Following the adoption of this law, a number of advisory committees of health officials and other technical and professional persons were appointed to study and draft recommendations for a series of uniform codes to be submitted to the State Department of Health for approval. These codes, as completed and approved, are to be made available to boards of health in book form for adoption by reference.

The "Retail Food Handling Establishment Code (1952)" approved February 7, 1952, which was the first such code to be made available, was adopted by 22 local boards of health during 1952. The "Smoke Control Code of New Jersey (1953)" was approved February 9, 1953 and the "Weed Control Code of New Jersey (1953)" on June 1, 1953. A similar code concerning public health nuisances was being completed by the Advisory Committee at the close of the fiscal year and other codes were in preparation by the various advisory committees.

A large measure of the success of the past year in raising the level of our public health services has been due to the continued active support and help of many individuals and organizations who have been working to make their time, energy and technical and professional skill available for the solution of special public health problems. Not only have we had the support of the professional technical groups in the health and allied field, but we have also had the advice and assistance of a large number of Advisory Committees, which have afforded us expert help and advice in a number of ways. Most encouraging has been the continued and growing support and joint participation in public health measures of our volunteer health, civic and welfare organizations. We are in fact demonstrating that good public health services can be achieved when all of the members of the public health team work to the common end.

THE PREVENTABLE DISEASES

Dramatic and striking advances in the control of communicable diseases have developed rapidly in the last few years. The announcement of the successful use of gamma globulin as a protective against the paralytic manifestations of poliomyelitis came during the last year. Maximum effective use of our limited supply of gamma globulin, which is fractionated from blood or plasma, required specific and detailed regulations for distribution to ensure that all of our supply would not be dissipated with the first few reported cases. To this end, regulations were adopted in accordance with recommendations of the National Office of Defense Mobilization restricting use of gamma globulin to household contacts of poliomyelitis (household contacts 30 years of age or under or pregnant persons), infectious hepatitis and measles.

Tuberculosis remains a major communicable disease problem in New Jersey. The decline in the death rate and the increase in the case rate per death are both signs of progress, but they indicate also that more could be accomplished with increased case-finding, follow-up and prompt therapy. Our practice of concentrating mass chest X-ray surveys in high prevalence areas has resulted in a higher proportion of persons referred for follow-up.

During the year a complete changeover from state-owned and operated X-ray equipment to commercial service was made. In accordance with the plan for use of the State District Health Offices, these offices are now responsible for making arrangements for mass chest X-ray surveys through local agencies in the four districts.

Early diagnosis and treatment is the primary need for further reduction of syphilis. While the reported incidence rate continued to decrease, over 94 per cent of the infections had progressed into latent or late stages before being diagnosed. Over 81 per cent of reported congenital syphilis was diagnosed after the first year of life and 75 per cent during the tenth year or later.

Increased case-finding efforts and better reporting of venereal disease cases diagnosed at military installations within the state have resulted in a rise in the incidence rate for gonorrhea as well as more accurate reporting of cases of syphilis.

BUILDING OPTIMUM HEALTH

A healthy and productive life within our own physical, mental and emotional limitations is the goal of many of us. The health programs grouped in the Division of Constructive Health are designed to permit the development of the optimum degree of total health possible within these limitations by the individual and the group.

This has been our goal for persons without special handicaps for several years, but more recently we have come to view the development of good health in handicapped persons from this same positive viewpoint of developing the optimum degree of health possible within individual differences. The wider acceptance of this approach in persons with cerebral palsy has resulted in the provision of increasing services provided by voluntary and other local agencies. As a result, the practical need for the continuation of state supported demonstration treatment facilities is drawing to a close.

The Rheumatic Fever Demonstration Unit and Clinic at St. Michael's Hospital in Newark, based on this same principle of constructive health is serving as a model for rheumatic fever units in other parts of the state. At the same time, plans are being formulated for limited participation by the Crippled Children Program toward the payment of hospitalization and convalescent care for children with rheumatic fever and congenital heart disease on a state-wide basis. The Cleft Palate and Cleft Lip Rehabilitation Center with all of the special services and skills necessary for diagnosis and treatment of children and adults has been in full operation during the year.

In all of these services, the goal is to help the individual to become a productive member of the community.

Accidents take a high toll of lives and injuries, particularly among preschool age children. To reduce this needless loss of life and living a child safety project for education of parents in home accident prevention among infants and young children is now being planned. This project will have the co-operation of the New Jersey Safety Council, New Jersey Academy of Pediatrics, Medical Society of New Jersey and the New Jersey Congress of Parents and Teachers.

As a part of the endeavor to secure further reduction of our infant mortality rate, a program of training in the care of premature infants for nurses throughout the state has been in operation.

The dental health program has continued in its objective of providing a dental treatment program for children with topical application of sodium fluoride solution as a routine part, professional education, school and public health education and the promotion of the fluoridation of public water supplies. While New Jersey is lagging behind other states in making use of this preventive measure, the City of Rahway and 21 communities in Monmouth County initiated fluoridation during the last year. A number of other communities is seriously considering fluoridation. The Fluoridation Institute held on June 17, 1953 served to provide pertinent information to water works operators, health officers and other interested groups. The survey of the fluoride content of New Jersey's public water supplies begun in April, 1952 has been completed.

Adult and industrial health is concerned with the health of people at work and is both preventive in guarding against known health hazards and constructive in promoting the health of people at work through optimum working conditions. Provision of such public health services requires that a health department have a number of professional skills, and training available for a constructive industrial health program is the result of the combined effort of many groups working together.

As our industries grow in size and number as well as in concentration within our small State, our problem of air pollution increases. Our research program has been strengthened and on the basis of what we have learned, we are now providing a four point air sanitation program of: information on air sanitation, technical assistance to municipalities and other groups in the investigation of complaints, assistance in establishment of local control and continuance of air sanitation research.

In all field investigations conferences with local governmental personnel and representatives of industrial plants are held to secure local action for better air sanitation where findings indicate the need. Research has been improved with the addition of a second mobile laboratory equipped with meteorological equipment and an automatic directional air sampling device. Progress has also been made in developing rapid analytical methods for the determination of multiple trace elements collected from the outdoor atmosphere; a spectroscopist is being trained and equipment to complete the spectrographic laboratory is being purchased. In the field of local control the Smoke Control Code of New Jersey (1953) approved by the Department for adoption by reference by local boards of health is a further tool for local control.

There have been two main areas of development in radiological health, a comparative newcomer to public health. One of these has been the stepping up of the activities to bring fluoroscopic shoe-fitting devices under safe control and the other is the increasing use by New Jersey industries of radioisotopes. The regulations adopted by the Department for the control of fluoroscopic shoe-fitting devices under Chapter VI of the State Sanitary Code have been applied with the assistance of local health officials. A training course was given for local health department personnel, but since instruments are necessary in making such tests most of the work must be done by State Department of Health personnel except in larger cities.

The increasing use of radioisotopes, particularly of Cobalt 60 which with its half-life of five years, constitutes a long-lived source of great potential hazard, presents a new and complex problem of public health protection. Our staff has been working closely with the Atomic Energy Commission, making visits to isotope users with field representatives of that control agency. This will be a program of continuing study and research so that our technical and

medical staff will be prepared to provide the skill and the knowledge needed in this new atomic era.

ANNUAL HEALTH OFFICIALS CONFERENCE

The 42nd Annual Conference of State and Local Health Officials of New Jersey, an expanded two-day meeting with simultaneous sessions for different professional groups was held in the War Memorial Building, Trenton on Thursday and Friday, April 30 and May 1, 1953. Attendance for the program which follows, was the largest ever registered for this Annual Conference.

THURSDAY, APRIL 30, 1953

BALLROOM

10:15 A. M. *Registration in lobby*

10:30 A. M. *Sanitation*

Presiding—Dr. William P. Doherty, Health Officer, Bridgeton
Food Establishment Sanitation After Fire and Other Disasters—Milton Ruth, Chief, Bureau of Food and Drug
Food and Drink Vending Machine Sanitation—David Morgan, Chief, Food and Drug Division, Newark City Health Department
Food Handler Training Courses—Joseph B. Kane, Chief Sanitarian, Passaic City Department of Health

12:00 Noon *Adjournment for lunch*

2:00 P. M. *Curbstone Consultation Conferences*

Incineration and Sanitary Landfills—I. Russell Riker, Borough Engineer, Princeton; John Zemlansky, Principal Sanitarian, State Department of Health; Joseph Shafto, Neptune Township Commissioner
Private Sewage Disposal—Thomas R. Glenn, Jr., Assistant Professor of Civil Engineering, Rutgers University; Leigh W. Morrill, District Chief—Public Health Engineer and Ernest Segesser, Public Health Engineer, State Department of Health
Food Sanitation—Milton Ruth, Chief, Bureau of Food and Drug; Dennis J. Sullivan, Health Officer, Jersey City; Joseph B. Kane, Chief Sanitarian, Passaic City Department of Health; William F. Kearney, Chief Inspector, Paterson City Health Department
Reporting of Reportable Diseases—Dr. Carl E. Weigele, Director, Division of Preventable Diseases; William J. Page, Jr., Health Program Representative, U. S. Public Health Service; F. Merton Saybolt, Principal Statistician, Division of Vital Statistics and Administration; W. J. Bowles, Statistician, Division of Vital Statistics and Administration
Local Registration Procedure—Susan D. Vail, Registrar, Plainfield; John S. Young, Field Representative, Division of Vital Statistics and Administration
Marriage Licensing and Registration—Walter R. Scott, State Registrar.

4:00 P. M. *Adjournment*

VETERANS' ROOM

- 10:30 A. M. *Registration and Reporting*
 Presiding—John J. Hanson, Health Officer, New Brunswick
 Improving Morbidity Reporting—Dr. Marguerite F. Hall, Director, Division of Vital Statistics and Administration
 The Statistics of Vital Statistics—Dr. F. Herbert Colwell, Chief, Bureau of Public Health Statistics
 Methods and Techniques for Reporting—Walter R. Scott, State Registrar

12:00 Noon *Adjournment for lunch*

- 2:00 P. M. *Public Health Administration*
 Presiding—Frank M. Doughty, Health Officer, Plainfield
 The State Department of Health Attacks Chronic Illness—Dr. Marian R. Stanford, Director, Division of Chronic Illness Control
 Chronic Illness Control in Essex County—William H. Hahn, M. D., Newark, President Essex Co. Service for the Chronically Ill.
 Fluoridation—A Positive Protection—Dr. Frank E. Law, Regional Dental Consultant, U. S. Public Health Service

4:00 P. M. *Adjournment*

Health Film Showings

Films will be shown simultaneously with this program from 10:00 A. M. to 12:00 Noon and 1:00 P. M. to 4:00 P. M. A detailed schedule will be available at the registration desk.

FRIDAY, MAY 1, 1953

BALLROOM

- 10:15 A. M. *Registration in lobby*
- 10:30 A. M. *Public Health Administration*
 Presiding—Dr. Daniel Bergsma, State Commissioner of Health
 Civil Defense and Public Health—Dr. Geoffrey W. Esty, Director, Division of Constructive Health; Mr. Alfred H. Fletcher, Director, Division of Environmental Sanitation.
 Public Health Aspects of Radiation—Dr. Miriam Sachs, Chief, Bureau of Adult and Industrial Health, and Staff
 Evaluation of Physical Examination of Food Handlers—Dr. Aaron H. Haskin, Health Officer, City of Newark
- 12:00 Noon *Adjournment for lunch*

2:00 P. M. *Curbstone Consultation Conferences*

Public Health Legislation—Mr. Charles Kientz, Health Officer, North Arlington; E. Powers Mincher, Assistant to the State Commissioner of Health

In-Service Training for Health Personnel—Harry R. H. Nicholas, District Health Officer; Ralph T. Fisher, State Consultant, Community Health Organization.

Qualifications for Local Health Personnel—Dr. Carl E. Weigle, Director, Division of Preventable Diseases; Wallace T. Eakins, Chief, Bureau of Grants-in-Aids; Clyde R. Newell, District Health Officer.

Vital Statistics—Dr. Marguerite F. Hall, Director, Division of Vital Statistics and Administration; Walter R. Scott, State Registrar; F. Merton Saybolt, Principal Statistician, Division of Vital Statistics and Administration

Preparing Nurses to Meet Today's Changing Needs—Grace Unzicker, R. N., District Chief Public Health Nurse, Southern State Health District; Catherine E. Denning, R. N., Chairman, Department of Public Health Nursing, Seton Hall University; Miss Ella Stonsby, Director, Division of Nursing Education, Rutgers University

Need for Public Health Nursing Supervision—Mrs. Mary Nevin, Chief Public Health Nurse, Northern State Health District

4:00 P. M. *Adjournment*

VETERANS' ROOM

- 10:30 A. M. *Public Health Nursing*
 Presiding—Miss Grace Unzicker, District Chief Public Health Nurse, Southern State Health District
 The Public Health Nurse in Local Health Services—Panel Discussion
 Members of the Panel:
 Miriam A. Dailey, R. N., Executive Director, Montclair Public Health Nursing Service
 Carl T. Pomeroy, M. P. H., Health Officer, Town of Montclair
 Johanna E. Kennedy, R. N., District Chief Public Health Nurse, Metropolitan State Health District
 Gladys L. Kimble, Director, Public Health Services, Englewood Hospital Association
- 11:15 A. M. *Demonstration of a Generalized Home Visit*
 Helen E. Kinback, R. N., Educational Supervisor, Montclair Public Health Nursing Service
 Alice W. Price, R. N., Staff Nurse, Montclair Public Health Nursing Service

12:00 Noon *Adjournment for lunch*

2:00 P. M. *Public Health Administration*
 Presiding—Dr. G. F. Moench, Director, Division of Local Health Services
 The Job of the Local Board of Health Member—Dr. Hugh D. Palmer,
 District State Health Officer, Southern State Health District; Frank J.
 Osborne, Health Officer, City of East Orange

3:15 P. M. *The Job of the Local Public Health Laboratory*
 Evelyn L. Brown, Assistant Director of Laboratory, Health Department,
 Paterson
 Frank M. Doughty, Health Officer, City of Plainfield

4:00 P. M. *Adjournment*

Health Film Showings

Films will be shown simultaneously with this program from 10:00 A. M. to 12:00 Noon and 1:00 P. M. to 4:00 P. M. A detailed schedule will be available at the registration desk.

The annual meeting of the Public Health Council was held on July 14, 1952. The following officers were elected for the fiscal year 1952-53: Dr. Walter G. Alexander, Chairman; Dr. Marcus W. Newcomb, Vice-Chairman; Mrs. Erma T. Dilkes, Secretary.

On February 5, 1953, Dr. Alexander died. Dr. Newcomb thus automatically became Chairman of the Public Health Council and served as such, beginning with the meeting of February 9, 1953. Mr. Harry N. Lendall was elected Vice-Chairman at the February 9 meeting to fill the vacancy caused by the elevation of Dr. Newcomb to Chairman.

Dr. Richard E. Shope resigned his membership on the Council to take effect at the end of this fiscal year.

The membership of the Public Health Council during 1952-53 was as follows:

<i>Name</i>	<i>Address</i>	<i>Expiration of Term</i>
Erma T. Dilkes	Sewell	June 30, 1953
Harry N. Lendall	New Brunswick	June 30, 1954
Richard E. Shope	Kingston	March 13, 1957
Frederick P. Lee	Paterson	June 30, 1957
Nelson S. Butera	Morristown	May 4, 1958
Walter G. Alexander*	Orange	June 30, 1958
Marcus W. Newcomb	Browns Mills	June 30, 1959

* Deceased February 5, 1953.

The following were issued permits, under the provisions of R. S. 4:22-16, 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:

<i>Name</i>	<i>Location</i>	<i>Date of Permit</i>
St. Michael's Hospital	Newark	August 18, 1952
Monmouth Memorial Hospital	Long Branch	September 26, 1952

HEALTH LEGISLATION OF 1953

The following legislation of interest to health officials was enacted by the 1953 Legislature:

S-2, Chap. 5 (Clapp). Technical amendment to Revised Statutes, Title 4, Agriculture and Domestic Animals.

S-5, Chap. 8 (Clapp). Technical amendment to Revised Statutes, Title 8, Cemeteries.

S-21, Chap. 24 (Clapp). Technical amendment to Revised Statutes, Title 24, Food and Drugs.

S-23, Chap. 26 (Clapp). Technical amendment to Revised Statutes, Title 26, Health, Chap. 177, P. L. 1947.

S-31, Chap. 34 (Clapp). Technical amendment to Revised Statutes, Title 37, Marriage and Married Persons.

S-39, Chap. 43 (Clapp). Technical amendment to Revised Statutes, Title 45, Professions (Beauty Culture).

S-43, Chap. 47 (Clapp). Technical amendment to Revised Statutes, Title 50, Shellfish.

S-50, Chap. 54 (Clapp). Technical amendment to Revised Statutes, Title 54, Water and Water Supply.

S-173, Chap. 382 (Hannold). Gives civil service status without examination to municipal health board plumbing inspectors with 12 years continuous service as such from date of original appointment.

S-201, Chap. 359 (Caferio). Permits citizen, over 21, who has Doctor of Veterinary Medicine degree from a veterinary or professional college in the United States, and similar degree from a college or university accredited by the U. S. Bureau of Animal Industry or Civil Service Commission, and who has been licensed by a veterinary board of another state, to take veterinary medicine examination and to practice in this State.

S-223, Chap. 434 (McCay). Prescribes procedures for approval and adoption by municipalities of "Official maps" for municipal planning purposes, and for authorized variations; delineates distinction between "master plan" and "official map"; effective January 1, 1954.

S-224, Chap. 433 (McCay). Proposes general revision of law governing creation, powers, duties and functions of municipal planning bodies, to be known as "Municipal Planning Act (1953)"; repeals R. S. 40:55-21, both inclusive; effective January 1, 1954.

S-228, Chap. 283 (Stout). Provides that claims by eligible persons for benefits from medical service corporations and medical service plans, based on eligible services rendered by licensed chiropractors within scope of practice, be granted.

S-231, Chap. 358 (Mathis). Revises law governing subdivision of lands, filing of maps and plats, installation of monuments, designation of boundaries and streets, and redefines pertinent terms in R. S. 46:23-1; effective January 1, 1954.

S-251, Chap. 143 (Stout and Mathis). Provides for regulation by Department of Agriculture, of brands, labels, marks and advertisement of eggs; prohibits use of name of State of New Jersey, or of any political subdivision thereof, in terms of such marks or advertising, without prior written approval from Secretary of Agriculture; appropriates \$15,000 to purposes of act.

S-254, Chap. 244 (Bodine). Authorizes formation of water companies to supply water to municipalities under 20,000 population, or any part thereof, heretofore limited to municipality with maximum of 15,000 population; effective July 1, 1953.

S-298, Chap. 260 (Cafero). Delineates, by co-ordinates and bearings, the "clam line" of lands under water in Delaware Bay which the Shell Fisheries Council may lease out for oyster and clam cultivation, and over which operation of power driven clamming and oyster boats is prohibited.

S-302, Chap. 261 (Cafero). Prohibits taking oysters by means other than hand tongs, from Delaware Bay beds in West Creek and at mouth of West Creek.

S-310, Chap. 262 (Cafero). Provides penalties ranging from \$100 to \$300 for first offense, and \$300 to \$500 for subsequent offenses, for violations of the law regulating oyster and clam catching upon specified State lands, if not under lease.

S-311, Chap. 263 (Cafero). Requires that licensed oyster planters agree to deliver 40% of the shells, from oysters taken in Delaware Bay, Maurice River cove and Delaware River lands under tidal water, to the Shell Fisheries Council.

S-390, Chap. 349 (Clapp). Extends application of provisions regulating the organization and personnel of municipal health boards to include townships not otherwise specified therein.

S-397, Chap. 346 (Hand). Validates marriages heretofore solemnized by city police justice not authorized to solemnize marriages, provided marriage is otherwise valid.

SJR-3, Chap. JR 3 (Summerill). Designates week of March 1-7 as "Save Your Vision Week."

SJR-5, Chap. JR 4 (Hannold). Designates April as "Cancer Control Month."

A-6, Chap. 165 (Thomas). Requires Public Health Council publish specified notice of public hearing on proposed changes to State Sanitary Code in a newspaper in each county not less than 15 days prior thereto, and make copies of such changes available to public on request through municipal health boards.

A-116, Chap. 388 (Saiber). Enlarges authority, powers and duties of Passaic Valley Sewerage Commissioners relative to acquisition, ownership, construction, repair and operation of sewerage facilities and projects, and permits financing by bond issues up to \$10 million, after hearing and notice to contracting municipalities.

A-120, Chap. 363 (Saiber). Permits person over age 21 and a resident of State 5 years prior to December 31, 1952, to take examination to practice medicine and surgery, who has completed approved academic education or preparatory school or received medical student's qualifying certificate, and completed 2 years premedical education and 4 years study in medical college in the United States and received medical degree, and served as interne in hospital for at least 1 year and served as resident physician in State or local hospital; or has served in medical corps of United States for at least 2 years after December 7, 1941; or who has a New Jersey pharmacy license.

A-123, Chap. 370 (Saiber). Increases annual salary of Passaic Valley Sewerage Commissioners from \$4,000 to \$6,500.

A-129, Chap. 364 (Junda and Saiber). Permits applicants with diploma from professional school or college in good standing in certain foreign countries, presently limited to Canada, to take physician's examination; operative until December 1, 1957.

A-137, Chap. 190 (Tompkins, Kurtz, Newton and Dwyer). Requires physician attending person suffering from narcotic drugs, other than that duly prescribed and authorized, report same to State police within 24 hours after first such treatment; makes failure to report disorderly conduct.

A-164, Chap. 415 (C. W. Haines). Requires operators of disposal plants for carcasses of livestock, or meat packing house refuse, obtain annual license from Department of Agriculture, upon 30-day application and payment of \$10 fee; prescribes sanitary standards for such plants and the handling, transportation and disposition of carcasses so as to prevent the spread of highly infectious or contagious animal diseases; requires annual inspection of premises, permits for vehicles used, and fixes penalties for violations.

A-247, Chap. 325 (Marggraff). Permits municipal communicable disease reporting officer to certify the number of cases reported to State Health Department as a basis for payment by municipality of 10 cents per case fee.

A-265, Chap. 416 (Marggraff). Requires marriage license applicants file doctor's signed certificate of submission to "approved serological test for syphilis" or doctor's signed statement that applicant is "near termination of pregnancy" or "death is imminent."

A-287, Chap. 418 (Deamer). Provides for the admission, not to exceed 7 days, excluding Saturdays, Sundays and holidays, of persons suffering from mental or nervous illness or psychosis caused by drugs or alcohol, to appropriate treating institutions for observation, upon certificate of examining physician.

A-300, Chap. 326 (Mills). Provides that 4 members of a 7-member sewer district authority board shall constitute a quorum, and that 4 affirmative votes thereof shall be required for action.

A-361, Chap. 122 (Beadleston). Creates New Jersey Neuropsychiatric Institute within Department of Institutions and Agencies to include existing facilities of Village for Epileptics at Skillman, for care and treatment of persons suffering from diseases and disfunctions of the brain and nervous system, and for research into prevention and cure of such disorders; specifies procedures for admission thereto.

A-380, Chap. 420 (Saiber). Requires persons directing bioanalytical laboratory obtain license from State Board of Medical Examiners, after examination and payment of \$25 fee, and annual renewal fee not to exceed \$10; requires annual registration of such laboratories upon payment of \$15 fee; prescribes qualifications, and regulations; fixes penalties for violations; provides for 4-member advisory committee to be appointed by Governor.

A-391, Chap. 278 (Lazio). Permits continued operation of licensed beauty shop by remaining partners, without payment of additional fee, where one partner withdraws or dies.

A-419, Chap. 117 (A. M. Smith). Grants civil defense forces of any other state which is party to Interstate Civil Defense and Disaster Compact (P. L. 1951, c. 8) same powers, duties, rights, privileges and immunities while on duty in New Jersey as they would have in their own state.

A-442, Chap. 148 (Maebert). Authorizes freeholders in first-class counties over 800,000 population to use all or part of communicable diseases hospital for any other public purpose; permits such hospital buildings, other than those housing patients, to be located within 250 feet of highway or other inhabited building.

A-456, Chap. 233 (Marggraff, Dwyer, Pilger and Hoff). Prescribes standards for practice of chiropractic; stipulates qualifications required, methods of examination, admission and regulation; provides for appointment of two additional chiropractors, in advisory capacity, to Board of Medical Examiners.

A-580, Chap. 389 (Mills). Prohibits the discharge of sewerage or other polluting matter into any river or stream included within the jurisdiction of any sewerage district authority, other than the Passaic Valley Sewerage Authority.

A-605, Chap. 315 (C. W. Haines). Requires cattle imported into New Jersey be certified by officer of State of origin as to freedom from tuberculosis and other communicable diseases, and that they otherwise meet requirements prescribed in this State.

A-610, Chap. 184 (Evans). Increases salaries of beauty culture control board members from \$2,000 to \$2,500 annually; permits issuance without examination of manager-operator license to 19-year old persons having 3 years experience as teacher, and to 19-year old persons having 2 years teacher experience after examination; increases fees and penalties; effective July 1, 1953.

A-612, Chap. 316 (Duffy). Requires undertakers, instead of person in charge of burial grounds, interring dead bodies transported into New Jersey for burial, make inquiry as to military service of deceased.

A-613, Chap. 185 (Evans). Increases barber examination fee from \$10 to \$15, license certificate from \$3 to \$5, license restorations from \$6 to \$10, and initial apprentice licenses from \$1.50 to \$3; increases salary of State Board of Barbers Examiners from \$3,800 to \$5,000, and of board secretary-treasurer from \$4,000 to \$5,500; effective July 1, 1953.

A-615, Chap. 422 (Barnes). Requires containers used for sale of "non-fat milk" and "non-fat fortified milk" be appropriately labeled as such; defines such terms.

A-619, Chap. 186 (Evans). Requires \$10 fee for annual renewal of barber's license when application is made later than July of each year; effective July 1, 1953.

A-629, Chap. 177 (Silver). Authorizes county and municipal sewerage authorities to acquire, maintain and operate "compensation reservoirs" for the collection, transportation and release of water to replenish in time of draught or other emergency, waters diverted for sewerage disposal purposes.

A-634, Chap. 318 (Tompkins). Exempts, from the law governing the dispensing of narcotic drugs, the sale or administering of ethylmorphine hydrochloride, in ¼-grain quantity, or paregoric, in one fluid drachm quantity, provided same is sold in medicinal form.

ACR-23, filed with Secretary of State (C. W. Haines). Creates 10-member legislative commission, 3 Senate, 3 Assembly, 4 public, to study problems relative to clearing obstructions from streams and draining overflowed lands, and to propose legislation authorizing abutting owners and local governing bodies to accomplish same; requires report to 1954 Legislature.

AJR-9, Chap JR 9 (Hillery). Creates 10-member Commission Educational Television to be composed of present members of similar commission appointed by Commissioner of Education at Governor's request, to study the potentialities of educational television.

AJR-14, Chap. JR 8 (Shannon). Reconstitutes and continues commission heretofore created to study problems and needs of mentally-deficient persons, to report to Legislature after February 1, 1954.

HEALTH BILLS WHICH WERE NOT ENACTED

The following bills of interest to health officials were introduced in the 1953 Legislature, but did not become law:

S-86 (Vogel). Authorizes creation of a State debt, by bond issuance, in the sum of \$25,000,000, for the construction and maintenance of a State medical, dental and veterinary college; creates such college, governed by 5-man trustee board appointed by Governor with advice and consent of the Senate; provides for 3-cent tax, per share, on transfer of stock of all domestic corporations; requires referendum upon debt creation be submitted to people at general election of November, 1953.

S-126 (Shershin). Implements, enlarges and strengthens duties and powers of Commissioner of Labor and Industry with respect to industrial safety, including right to supervise, investigate and regulate building structure, fire prevention measures, handling of explosives, working conditions, and other allied matters; requires continuous review and analysis of industrial accident causes, by a qualified and experienced "chief"; appropriates \$65,800, when included in annual or supplemental appropriation act.

S-161 (Farley). Increases membership on Public Health Council, Department of Health, from 7 to 8, and requires that one be a licensed dentist, with term to commence July 1, 1953. (Vetoed.)

S-168 (Shershin). Provides that State and counties reimburse each other for care of tubercular patients in same manner as now done with respect to insane patients in State and county hospitals.

S-172 (Wallace). Permits restoration of license to practice beauty culture, without examination, provided application is made within 4 years after expiration of prior license, and applicant pay current renewal fee and \$20 restoration fee.

S-175 (Hannold). Restricts municipal authority to regulate vehicles used for the transportation of passengers and goods so as to exclude vehicles already licensed by health department for delivery of milk and cream. (Vetoed.)

S-202 (Young). Creates 5-member Board of Chiropractic Examiners, in the Division of Professional Boards, Department of Law and Public Safety, to regulate the practice of chiropractic, license practitioners, and enforce penalties; defines chiropractic and specifies qualifications, fees and subjects to be included in examination for license.

S-218 (Shershin). Creates Division of Cemeteries within Department of Law and Public Safety, consisting of Attorney General, Secretary of State, Commissioner of Health and a division director appointed by Governor with Senate advice and consent; establishes 7-member cemetery council within said division, appointed by Governor, at least 3 to be officers of active cemetery organizations; authorizes division to supervise and regulate establishment, maintenance and preservation of burial grounds and operation of cemetery organizations; provides numerous specific regulations; makes rules adopted by such division operative October 1, 1953.

S-275 (Van Alstyne). Provides special benefit payments, under Workmen's Compensation Law, to totally and permanently disabled persons receiving award payments under old lower rates than would presently apply.

S-279 (Wallace). Permits taking of breath specimen and chemical analysis thereof, from defendant accused of operating motor vehicle while under influence of intoxicating liquor, without his consent.

S-347 (Littell). Requires State pay indemnity to owner of livestock slaughtered or ordered withheld from sale because of contagious disease, computed on basis of market value of animals immediately prior to time they became so diseased or were ordered slaughtered. (Vetoed.)

S-348 (Littell). Requires State pay indemnity to owner of milk which is condemned or quarantined because of outbreak of contagious disease, equal to value of such milk as appraised by 3-member committee appointed by agency establishing such quarantine. (Vetoed.)

S-349 (Young). Authorizes township committee, upon petition of not less than 50 voters, to create Special Service Districts with power to eliminate mosquito breeding areas therein and develop, maintain and operate lake-front or bathing beaches; specifies method of electing commissioners and approving annual appropriations.

S-363 (Stout). Permits counties and municipalities to conduct mental health programs by contract with approved mental hygiene clinics.

S-415 (Littell). Directs North Jersey District Water Supply Commission to construct and maintain Round Valley Reservoir Water Supply System, Hunterdon County, and South Jersey District Water Supply Commission to construct and maintain Wharton Reservoir Water Supply System in Atlantic and Burlington Counties, to increase water supply in respective parts of State; authorizes issuance of bonds to finance same.

S-420 (Bodine). Requires members of county sewerage authority be residents of a municipality which has an interest in a contract with such authority.

A-113 (Beadleston). Requires all meat, meat products and poultry be sold by avoirdupois net weight only; excepts squabs, rabbits, baby chicks, ducklings, live poultry sold for laying or breeding or by lot to raisers and live animals other than poultry; prescribes penalties.

A-118 (Saiber, Salsburg, Knoblauch). Permits cemetery associations to acquire land in excess of 125-acre limit (R. S. 8:3-4.2), provided same are used for "roads and walks and not for burial purposes"; permits purchase of tax sale certificates.

A-133 (Tompkins, Kurtz, Newton and Dwyer). Authorizes and directs Board of Control of Institutions and Agencies to establish "New Jersey Facility for Treatment of Drug Addicts" for confinement and treatment of persons using narcotics or convicted of narcotics violations.

A-134 (Tompkins, Kurtz, Newton and Dwyer). Appropriates up to \$275,000 for establishment and operation until June 30, 1954, of facilities for treatment of persons using narcotics and narcotic violators.

A-140 (Tompkins). Requires nonresidents convicted of any crime as well as of any offense relating to narcotics since July 1, 1942, register with police within 24 hours after entry into State for purpose of remaining in any municipality for more than 24 hours.

A-174 (Duffy). Requires all ice cream, ices and related frozen products be sold or offered for sale by avoidupois net weight only; requires marking of weight on containers; prescribes penalties, method of enforcement; not applicable to ice cream cones, sodas, sundaes, and similar form sold in hotels, restaurants, ice cream parlors, fountains, or other retail establishments, nor to molded or fancy forms sold by numerical count.

A-203 (C. W. Haines). Authorizes Board of Agriculture to establish quarantines and regulations for control and eradication of vesicular exanthema in swine; provides payment of specified indemnities when destruction of all hogs on an infected farm is necessary; fixes penalties for violations; appropriates \$250,000.

A-205 (C. W. Haines). Requires operators of garbage-feeding hog farm obtain annual license from Department of Agriculture upon 30-day application and payment of \$5 fee; prescribes health and safety standards relative to "cooking and treating" of garbage so as to control and eradicate contagious and infectious diseases of swine and other types of livestock which may be spread through the feeding of garbage to swine; requires annual inspections, and fixes penalties for violations.

A-217 (Musto). Forbids physicians, dentists and nurses to disclose in court, or to any public officer, confidential information acquired in professional capacity except where patient is victim of a crime or for identification purposes; provides for waiver by patient in open court.

A-223 (Musto). Authorizes municipalities to regulate use and operation of rented furnished dwelling units.

A-249 (Field). Provides for recovery of fines for cruelty to animals, by means of a civil action brought by N. S. P. C. A., or similar incorporated humane societies.

A-251 (Marggraff). Prohibits manufacture, distribution or sale of non-alcoholic drinks containing specified artificial colors certified by United States Department of Agriculture; excepts drinks containing water treated with fluorides.

A-252 (Marggraff). Requires treating physician to report cases of venereal disease to State Health Department within 12 hours of diagnosis; substitutes reference to "communicable diseases" instead of specific list, and reference to "ill or infected" instead of "sick."

A-267 (Jones). Creates 7-member "Air Pollution Commission" in Department of Law and Public Safety to investigate, study, prevent and control air pollution.

A-301 (Mills). Requires municipalities located within a sewerage district obtain written consent of such sewerage authority before contracting for the construction, operation or extension of any sewerage facilities for "its own use."

A-340 (Lazio). Permits the continuing operation of a beauty shop by licensed cosmetologist for benefit of widow or estate of deceased partner, without payment of additional fee.

A-368 (Duffy). Requires local health boards elect a president and appoint a secretary both of whom shall sign all ordinances enacted by board, and certify all documents on behalf of board.

A-373 (Silver). Extends requirement that food sold in package form have net weight or numerical count marked on outside of package, to include any "goods, wares, merchandise or commodity of any kind"; requires such marking be in combination with identification of manufacturer, packer or distributor on package, filed with Division of Weights and Measures.

A-379 (Lazio and A. M. Smith). Increases maximum pension to widow of health board employees in second-class cities from \$2,000 to \$3,600. (Vetoed.)

A-396 (Knoblauch). Creates "New Jersey State College of Medicine and Dentistry" to grant academic degrees in medicine, dentistry and allied fields; empowers 12 trustees provide and operate facilities, purchase supplies, hire faculty, fix tuition fees and prescribe scholastic standards; provides for annual appropriation.

A-408. (Maebert). Establishes State Medical, Surgical and Hospital Insurance fund for payment up to specified maximums of medical and hospital expenses of employees and their dependents for injuries or illness not covered by Workmen's Compensation benefits, and to be financed by employer and employee contributions based on 2½% of wages.

A-413 (Newton). Authorizes municipal health boards to license and regulate barber shops and beauty parlors, in addition to any State licenses.

A-414 (Shannon). Effects revision of provisions relative to education of physically-handicapped children in public schools; requires parents of handicapped children between 7 and 16 not attending school or any State institution for 6-month period during year, file request for specified exemption for such child. (Vetoed.)

A-426 (N. C. Smith). Allows claimants under care of chiropractor to receive temporary disability benefits, if otherwise eligible.

A-462 (Vervaeet). Requires new construction of buildings requiring water and sewerage facilities meet minimum uniform sanitary standards to be prescribed by State Health Department and local ordinances; provides for enforcement through local health boards and prescribes remedies and penalties for violations.

A-463 (Snediker). Authorizes incinerator authorities to use proceeds from bonds to defray specified costs of garbage disposal system; specifies basis for determining sums to be paid by contracting municipalities served.

A-522 (Snediker). Requires application for dog license include veterinarian's certificate that dog has been inoculated against rabies within one year prior to such application.

A-539 (Newton). Requires sewerage authority employees be appointed or employed subject to Civil Service provisions.

A-546 (Silver, Cahill, Evans and Knight). Effects revision of Pascoe State School Aid Act (P. L. 1946, c. 63) in accordance with State School Aid Commission recommendations to 1952 Legislature, to be known as "State Aid or Schools Law (1953)"; increases basis of aid from \$94 to \$200 per pupil, and minimum aid to any district from \$3 to \$110 per pupil.

A-550 (Silver, Cahill, Evans and Knight). Eliminates provisions for reimbursement by State to school district for education of physically-handicapped pupils, of one-half of excess over cost of educating pupils of normal needs.

A-555 (Hauser). Provides for recovery of fines for cruelty to animals by civil action brought in name of New Jersey S. P. C. A. or any similar humane or welfare society.

A-563 (C. W. Haines and Thomas). Prohibits the importation into New Jersey of garbage for any purpose; prescribes penalties of \$100 for first offense, \$200 for subsequent offenses, and 10 to 30 days imprisonment, to be enforced in summary proceeding by Department of Agriculture, State Police and local health officers.

A-623 (Maebert). Requires professional or practical nurse practicing in State after September 1, 1955, have current license, instead of present provision permitting nurses to practice after suspension or expiration of license.

A-631 (Lassans). Creates 7-member advisory committee to study, and recommend regulations governing air pollution and sanitation; membership to be Secretary of Agriculture, Commissioners of Health, Labor and Industry, or their designated representatives, and three persons appointed by various professional, civic, labor and industrial organizations; regulatory power to be exercised by affected local or county governments, or by State departments; act entitled the "Air Sanitation Control Act (1953)."

A-652 (Dwyer). Requires that city engineer, appointed in second-class cities, be a duly licensed professional engineer, instead of civil engineer and land surveyor, as heretofore.

A-664 (C. W. Haines). Permits (resident, citizen) veterans over age thirty with high school education, 4-year course and degree from premedical college in any State, degree from medical college in any State, with over 2 years service as interne or resident physician in hospital in any State, who passes medical board examination in specified subjects in any State and who has license to practice medicine in such State, to receive license to practice medicine in New Jersey.

ADDENDUM

Report of the State Commissioner of Health to the Governor on the Prevention of Chronic Illness

INTRODUCTION

The 176th Legislature passed, without amendment, a bill cited as the Prevention of Chronic Illness Act which was introduced by the office of the Governor upon recommendation of the Governor's Temporary Committee on the Chronic Sick. This legislation is now Chapter 102, P. L. 1952.

Specific funds have not been appropriated by the State to date to carry out the requirements of this law. Accordingly, accomplishments have of necessity been minimal.

In connection with the study of activities listed below it should be pointed out that prevention of chronic illness may for practical purposes be divided into two types—primary and secondary. Primary prevention may be illustrated by effective immunization of an individual against diphtheria so as to prevent him from acquiring that disease. Secondary prevention, in contrast, would consist of rapid detection of the presence of the disease in a child and rapidly applying effective therapy so as to prevent the possible serious consequences of death or heart damage. In this report the use of the word "prevention" by itself means both primary and secondary prevention. Primary prevention is meant whenever the word is used in conjunction with the words "detection" and "control".

REQUIRED ACTIVITIES

The scope and type of activities required to implement the program authorized by this act during the ensuing fiscal year include:

1. Establishing and administering a Division of Chronic Illness Control for the prevention, early detection and control of chronic illness. This has been accomplished in so far as is possible without a paid staff having this major effort as its prime responsibility.

2. Establishing and assisting the operation of the Advisory Council on the Chronic Sick as required by law. The Council appointed by the Governor this year has had one meeting and made certain recommendations to the Commissioner in accordance with their statutory duties.

3. Establishing and assisting the operation of a committee of technical advisers as required by law. The Advisory Council has recommended four members of the technical committee to date and these have been appointed by the Commissioner.

4. Arranging for (a) joint discussions of the general problem with interested official and voluntary agencies for the purpose of formulating an adequate program for dealing with the problem of the chronic sick, and (b) determining a formula for the ultimate division of the governmental share of the cost thereof between municipalities, counties and the State. This, of necessity, is a developmental process and requires a suitable staff. An effort to obtain quickly and inexpensively valuable data concerning present knowledge, experience, expert judgment and recommendations related to prevention of chronic illness has been started in the form of a Governor's Conference on the Prevention of Chronic Illness. This effort approved by the Advisory Council and the Governor is designed primarily to obtain outside, expert opinion in the form of fifteen minute prepared summaries concerning potential preventive measures which will be helpful in designing an adequate chronic illness control program starting July 1, 1953, provided necessary funds are made available.

5. Planning for adequate nursing and housekeeping aid services for the chronic sick in their homes. This is a difficult problem requiring considerable time to accumulate accurate data upon which studies and conclusions may be made.

6. Collecting and preparing available information designed to acquaint the professions and the public with the best and most modern methods of preventing chronic sickness and its early detection and control. This need will be met in small part as a secondary benefit of the Governor's Conference on the Prevention of Chronic Illness. Funds will be needed to distribute the data assembled to those in need thereof.

7. Collecting and distributing pertinent statistical data about the significance, character and magnitude of the problem of prevention of chronic illness. Presently our Bureau of Public Health Statistics is cooperating with others in this effort and performing an extensive statistical study of the incidence and varieties of chronic illness in Hunterdon County, New Jersey.

8. Performing and encouraging research activities as to the best and most modern methods of prevention, discovery, treatment and cure of chronic diseases. Research of four types is indicated, namely, (a) statistical, such as is being done in Hunterdon County, (b) laboratory, such as adopting procedures

for their safe and efficient use as devices for screening or detecting chronic illnesses in large groups of persons, (c) methodology, such as testing efficiency or adequacy of providing necessary services, and (d) testing applicability of newer knowledge on a pilot study clinical basis. It is recommended that research be conducted only to determine the practicability of a procedure, idea or method.

RECOMMENDED METHODS

The methods recommended to achieve the scope and type of activities cited above and to encourage greater participation in the program by counties, municipalities, private and public agencies include:

1. Assembling, as soon as funds and personnel can be obtained, an effective staff to administer the Division of Chronic Illness Control and cooperatively to administer carefully designed programs to prevent, detect and control chronic illnesses.

2. Assembling all available pertinent facts continuously for designing and redesigning effective current programs readily applicable by individuals or agencies.

3. Conducting necessary conferences to exchange data, establishing standards and procedures and to achieve maximum coordination and integration of effort.

4. Purchasing or printing and distributing literature useful to persons involved or to agencies rendering services.

5. Utilizing the press, radio and other means of communication, when appropriate, to disseminate information useful to the public.

BUDGET

1. Very careful study of needs for funds for salaries and wages, properly to staff the Division of Chronic Illness Control, indicates the sum of	\$50,280.00
2. Office furniture and related administrative expenses, including two motor vehicles, require an estimated	9,690.00
3. The Advisory Council on the Chronic Sick, in accord with their statutory duty, considered the problem and recommended the sum of \$190,000.00. This was tentatively divided as follows:	190,000.00
\$30,000.00 for detection of chronic sickness	
\$30,000.00 for control of chronic sickness	
\$70,000.00 for nursing services	
\$25,000.00 for rehabilitation	
\$25,000.00 for research	
\$10,000.00 for educational supplies and printing	

Total requested \$249,970.00

Only through prevention, early detection and control of chronic illnesses can society protect itself against the rapidly rising rates of chronic invalidism. The enormously increased costs of care to society for invalids in our population, associated with the rapid increase in the older age groups, will exceed, or severely tax, society's ability to pay unless the burden is materially lessened. This is no small problem or undertaking. Strenuous, persistent, wholehearted and devoted effort is necessary to succeed. Prevention of chronic illness and attendant invalidism will result in considerable savings of time and money for our citizenry. If they are to realize these benefits in the immediate future, time is of the essence.

Report of the Division of Chronic Illness Control

July 1, 1952—June 30, 1953

MARIAN R. STANFORD, M. D., *Director*

Bureau of Alcoholism Control	WILLIAM J. HARRIS, JR. <i>Program Coordinator</i> Chief (Appointed March 16, 1953)
Bureau of Cancer Control	EDWIN D. MERRILL, M. D., M. P. H. <i>Program Coordinator</i> Chief (Resigned May 31, 1953)
Bureau of Chronic Diseases	
Bureau of Heart Diseases	KATHERINE D. HAIN, M. D. <i>Program Coordinator</i> Acting Chief (Appointed March 16, 1953)

Division of Chronic Illness Control

Recognizing its responsibility for the protection of its citizens against the rapidly increasing rate of chronic invalidism, the State of New Jersey by act of Legislature passed the Prevention of Chronic Illness Act, April 28, 1952. This Act provided for the establishment of a Division of Chronic Illness Control in the State Department of Health, an Advisory Council, and a Committee of Technical Advisers to work together to more effectively prevent, detect, and control chronic sickness and rehabilitate those afflicted.

The Act also charged the State Department of Health, through its Division of Chronic Illness Control, with the responsibility of arranging for joint discussions of the general problem of the chronic sick with representatives of all State health agencies, welfare and education departments, hospitals, voluntary agencies, institutions and the medical, dental, nursing, social service and allied professions for the purpose of formulating an adequate program to deal with the problem of the chronic sick.

The new Division was faced with the challenge of an aging population and an increasing incidence of chronic disease in a highly complex industrial and social environment. However, research developments offer many new resources to meet the challenge, and it is an objective of the Division to make these resources quickly available to large groups of the population. An unparalleled opportunity exists in chronic illness control to serve the broad concept that a public health program is concerned with the fitness of the individual including his mental, emotional and social adjustment as a means to a happy and productive life.

Accomplishments of the first year of the program are discussed under the headings of hospital diagnostic and rehabilitation centers, other multiphasic screening programs, clinics for alcoholics, the team approach, and education.

HOSPITAL DIAGNOSIS AND REHABILITATION CENTERS

Working with five general hospitals in selected areas of the State, improved diagnostic and rehabilitative facilities have been provided as auxiliary services for the general practitioner. This has been accomplished through the loan of X-ray and other newly developed scientific equipment to promote earlier diagnosis. Grants-in-aid have been given to these hospitals to assist in the provision of specially trained personnel so essential in the use of the finer diagnostic techniques. These five centers also serve as teaching centers for the physicians of the surrounding communities. At St. Michael's Hos-

pital in Newark, courses in general and advanced cardiology have been repeated for three years. All physicians of the State are eligible to attend.

At these hospital diagnostic centers the trend is to consider not only one disease manifestation in an individual but to employ multiphasic screening tests to detect pre-clinical evidence of possible disease. Mass chest X-rays are being studied not only for tuberculosis but also for early evidence of other disease such as cancer and heart. New tests are now being devised and known tests evaluated for reliability, cost and methodology. The referral of disease suspects to their physicians, following multiphasic screening, is serving to motivate both patients and physicians to accept the present trend of periodic physical examinations and continuous health supervision.

CLINICS FOR ALCOHOLICS

From the experience in this State in the operation of an out-patient clinic in a general hospital (McKinley Hospital, Trenton) and from the reports of other States, increased support has developed for this approach to the problem of rehabilitation of the alcoholic. Accordingly, a second clinic was undertaken this year with the co-operation of St. Michael's Hospital, Newark, to serve the metropolitan area. Plans have been completed for a third clinic at West Jersey Hospital, Camden.

Group therapy also has proved its value to the patients of the pilot clinic and has been undertaken at two tuberculosis hospitals (Roosevelt Hospital, Metuchen and Bonnie Burn Sanatorium at Scotch Plains), and is being planned for other institutional groups.

MULTIPHASIC SCREENING

In addition to the development of multiphasic screening in the five diagnostic and rehabilitation centers, the Division has encouraged and assisted selected community hospitals in developing multiphasic screening services for in-patient, out-patient, hospital staff, and medical staff patient referrals. Screening procedures such as chest X-ray with 70mm. equipment, serology, and hemoglobin tests are being used routinely. At one of the centers, St. Michael's Hospital in Newark, a pilot study in diabetes screening has started.

TEAM APPROACH

With the increasing awareness of the need for many skills to bring about the goal of optimum health and usefulness of an individual, the Division of Chronic Illness Control is providing consultant services in medical social rehabilitation to assist in the development of facilities in the community, hos-

pital, diagnostic and rehabilitation centers and in the State Health Districts. With the aid of these facilities, especially in the hospital diagnostic and rehabilitation centers, the trend is to consider the whole individual and his relation to his complex socio-economic environment. A pilot study in work classification is being attempted at St. Michael's Hospital, Newark. By means of the follow-up provided by various services such as the medical social worker, the public health nurse, the nutritionist, the psychiatrist, and the vocational counselor, the patient is being rehabilitated at the time of diagnosis so that he may be able to live as normal a life as possible.

Another activity of the Division directed toward the "team approach" in the rehabilitation of the individual has been the stimulation and development on a State-wide basis of a community homemaker service. A Consultant Committee on Community Homemaker Service was appointed and an Institute to inform the public of ways and means to provide these services has been held. Additional programs to promote this service are being formulated on a regional basis.

This team approach is indicative of the present-day trend to combine the co-ordinated services of many disciplines in order to effect the rehabilitation of the sufferer from chronic illness. The goal of optimum health for our citizens will be attained only through the integration of programs in many agencies, official and voluntary. In this way, community support and action will be stimulated for the provision of the essential facilities.

EDUCATION

A progressive plan of professional education has continued to be an important function of the chronic illness control program in order to acquaint the medical and allied professions with the most recent research developments and new concepts in the prevention of disease and the promotion of health.

A special effort has been made to inform physicians of the possibility of treatment and rehabilitation of the alcoholic through a quarterly digest which has been sent to all practicing physicians and through special programs arranged for the county medical societies upon request.

A Governor's Conference on the Prevention of Chronic Illness was held on December 17, 1952 and was attended by more than 500 persons, many of them leaders in civic and social organizations. This Conference provided the opportunity to present the newer knowledge of the prevention and control of chronic illness to representatives of many communities and agencies.

DEPARTMENT OF HEALTH

PLANNING FOR NEXT YEAR

During the first year of its existence, much effort of the Division has gone into planning for expansion of the program in the coming year on recommendation or approval of the Advisory Council. An appropriation of \$250,000 was requested by the Commissioner and voted by the Legislature for the year beginning July 1, 1953. Decisions have been reached on some of the problems to receive first attention next year.

Report of the Division of Constructive Health

July 1, 1952—June 30, 1953

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

Bureau of Adult and Industrial Health	MIRIAM SACHS, 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 G. LUDLAM, D. D. S., M. P. H. <i>Chief</i>
Bureau of Maternal and Child Health	RENEE ZINDWER, M. D., M. P. H. <i>Chief</i>
Nutrition Program	MARGARET P. ZEALAND <i>Nutritionist</i>

Division of Constructive Health

INTRODUCTION

The several programs operating in the Division of Constructive Health have as their central emphasis the concept of positive health, whereby the capacity of the individual or group to cultivate an optimum degree of total health is recognized. This broad concept of constructive health is not satisfied with the absence of a specific or recognized disease or infirmity, but seeks to find ways by which the individual may live, within the limits imposed by bodily and mental equipment, with others, healthfully and productively. The Maternal and Child Health Program activities, of course, have operated with this point of view for many years as evidenced by its now well-known "anticipatory guidance" emphasis. More recently there has been a trend to consider all handicapped individuals from the positive point of view. Industrial health also is increasingly aware of the importance of positive health. Integrated through many of the public health programs of the Department is the important constructive role played by nutrition. There is an increased realization that the more effective constructive public health becomes, the greater the effectiveness of chronic illness prevention also. There is no clear boundary between these two areas of public health.

Much of the Division Director's effort has been directed toward the facilitation of program administration and operation in the field through the State Health Districts, by the building up of effective relationships with District staffs. Because public health cannot operate apart from the public it serves, the Director has continued his many public relations activities during the year as representing Department and Division interests on numerous State Councils, conferences and committees both lay and professional.

Because of the absence of a full-time public health physician to head the Program of Crippled Children, the Division Director has spent extra effort and a very large percentage of his time in administrative and procedural reorganization of the Crippled Children Program. As its Program Coordinator, he has drawn up a comprehensive written program and a procedure manual in accordance with Department priorities.

Bureau of Adult and Industrial Health

INTRODUCTION

Adult and industrial health, according to modern concept, is concerned with all factors which influence the health of people at work. It is preventive medicine and public health practice as applied to the working people; not only persons employed in factories, but also farmers, miners, storekeepers, clerks, professional persons, and all others who are gainfully employed in any type of occupation. The methodology used to study the factors influencing occupational health has been extended to include those who may be affected by some product or process associated with the above-enumerated occupations, namely, residents of a community affected by industrial effluent, neighbors sprayed by insecticide blown off a crop-dusted field, children exposed to ionizing radiation by a storekeeper who uses a fluoroscopic shoe-fitting machine.

The most important single activity is the field survey of an industry. Industrial surveys are performed as part of routine investigations or upon request from industrial management, labor, local health personnel, physicians and industrial nurses. In these surveys, the environmental and working conditions are examined. Where hazardous substances exist or are suspected in the working environment, samples are collected and analyzed in the laboratories which form an essential part of every industrial hygiene unit. If dangerous substances are found to be present in harmful concentrations, control measures are recommended.

These activities require the participation of staff persons trained in many different disciplines; engineering, chemistry, medicine, nursing, toxicology, physics and others. A constructive industrial health program is not the work of any one group but the combined effort of many groups working together.

This elementary and basic theme has become more complicated during the past few years. Technological developments, atomic energy research and growing awareness on the part of the public that the unlimited and unregulated use of the air as a medium of waste disposal may affect health or cause serious discomfort have accelerated the tempo of activities and created increased demand for special services.

During the past twelve months, Bureau activities have been channeled into three major programs—Adult and Industrial Health, Air Sanitation, and Radiological Health.

During the change-over period, when activity assignments and procedure were being formalized field trips were somewhat reduced in number. Difficulties have been encountered in trying to spread personnel and equipment over several program activities. The final results, however, have so clearly defined

the needs for additional personnel, supplies and supporting services that it is expected that the rather uncomfortable diagnostic period will be shown to have been very worthwhile.

ADULT AND INDUSTRIAL HEALTH PROGRAM

The Adult and Industrial Health Program, it must be repeated, is the fundamental activity of this Bureau. The participating personnel of this program have received training in the activities of Air Sanitation and Radiological Health so that they now spend part of their time on these two programs as well as the basic Adult and Industrial Health activities.

The activities of the Adult and Industrial Health Program may be divided into two very broad phases.

I. *The Preventive Phase*—To determine if the working environment or other conditions of work are harmful to the health of the workers and to prevent these harmful effects.

II. *The Constructive Phase*—To promote the maximum health and well-being of people at work.

Included in the preventive phase of activities are the plant surveys concerned with occupational disease due to all types of harmful chemical substances, such as lead, benzol or silica. Certain other preventive activities also fall into this field. These include participation in health programs which are concerned with the prevention of industrial infections such as anthrax, and with diseases of suspected industrial origin such as environmental cancer.

In the constructive phase of the program activities, stress is placed upon optimum working conditions relating to ventilation, illumination, temperature and other basic "comfort conditions." Preplacement examinations, medical services and nursing services are promoted to attempt to achieve at least minimal standards of health protection.

Sixty routine industrial plant surveys were conducted and samples of toxic substances collected and evaluated as to the existence of a health hazard.

Fifty-six introductory visits were completed to explain the function of this Program and to offer consultative services in constructive health activities.

Seventy-five technical studies of possible health hazards were completed.

The Bureau participated in three occupational cancer symposia held, respectively, at Atlantic City, Monmouth Memorial Hospital in Long Branch, and the Academy of Medicine in Newark. As a result of the papers presented on environmental and occupational carcinogens, requests have been received from private physicians and hospital pathologists for assistance and information on industrial processes and substances. Radiation was stressed as one of the environmental and occupational carcinogenic agents and some of the resultant interest has been diverted to the activities of the Radiological Health Program.

During the past year, employee health services has become a subject of great interest for employees of the State. A detailed analysis of working conditions and possible hazards was conducted for the New Jersey State Highway Department. A manual was prepared outlining space and equipment needed, standards of medical and nursing service and suggested forms and procedures. This manual, with very little change, may be applied to other requests for medical consultation for employee health services.

The Department of Law and Public Safety, Division of Motor Vehicle Inspection, has already submitted a request for similar consultation services. A preliminary phase of this request has been an environmental and clinical study of working conditions existing in four typical motor vehicle inspection stations. Medical histories of employees were obtained and limited physical examinations were performed which included blood samples, analyzed for carbon monoxide and lead effects, and urine samples for total lead. Continuous carbon monoxide testing was performed with equipment designed and operated by our Air Sanitation Program. At the completion of the study it is hoped that the clinical and laboratory findings can be correlated with the environmental sampling. Any hazards which are revealed can be guarded against in periodic examinations in an employee health program and in engineering recommendations for either new construction or alterations of the inspection stations.

Air Sanitation Program

The study and control of atmospheric pollution falls most properly within the framework of an industrial health program because a large part of the foreign substances which contaminate the outdoor atmosphere are waste products from industrial operations and because their control is the responsibility of industry. The basic plant investigation visit with the methods used in environmental sampling of the workroom atmosphere is the take-off point for the expanded activities and methods of the Air Sanitation Program.

During the fiscal year 1953 the air pollution activities of the Bureau of Adult and Industrial Health were organized in a formal program under the broad title "Air Sanitation."

For the accomplishment of the Air Sanitation Program all forms of contamination of the outdoor atmospheric environment, both actual and potential, are to be considered. Such forms of contamination are:

1. Chemical pollutants from industrial processes.
2. Smoke from industrial, commercial or domestic heating facilities.
3. Smoke from industrial or municipal incinerators or dumps.
4. Exhaust gases from motor vehicles.
5. Objectional pollens.
6. Miscellaneous forms of man-made or natural contaminants.

The Air Sanitation Program has four basic objectives:

1. To provide information on air sanitation.
2. To provide technical assistance to municipalities and other groups in the investigation of complaints.
3. To assist in the establishment of local control.
4. To conduct air sanitation research.

A considerable amount of time during the 1953 year was spent in the development of the program as now in operation.

Providing technical assistance to municipalities and other groups comprised the major field activity. In all, sixty-eight (68) complaints of air pollution were investigated. A firm policy of requiring local government officials to give assurance of local action, when our studies indicate the need for such action, was placed in effect this year. Several informal meetings with air sanitation offenders, municipal officials and program personnel were held. The results of this approach appear favorable.

A six week general air sanitation study was conducted in Cliffside Park. The study indicated one plant to be a potentially hazardous offender and action for abatement has been started through a conference called and held in the Metropolitan State Health District Office. Legal action will be instituted in event abatement action is not taken by plant management.

The lack of standard air testing and sampling procedures requires continuous research in methods and procedures for field studies. Various devices have been constructed or modified by program personnel for field use. The one mobile laboratory previously developed for air sampling and testing has been supplemented with a second mobile laboratory equipped with meteorological equipment and an automatic directional air sampling device. The directional sampler was designed and constructed by program personnel.

In view of the fact that the evaluation and control of atmospheric contamination is a relatively new field in public health, program personnel have attended several conferences and conventions on the subject of air pollution.

This source of data has been found to be most helpful for keeping abreast of current developments in engineering and legal control.

A limited number of permanent air sampling stations have been constructed and located in various parts of the State. These stations include 24 pollen samplers and eight dust fall collectors. The results of the 1953 ragweed pollen season study will be used as an indication of pollen concentrations, need for planned ragweed control programs and for future use to evaluate effectiveness of control measures. The eight dust fall collecting stations will be gradually expanded to about 40 localities with the objective of obtaining some relative indication of "air dirtiness" throughout the State.

An increasing number of requests for technical assistance received from industrial representatives including attorneys, engineers, and plant operators attests to an increased recognition of the Department of Health activity in air sanitation. In several instances the opinion of program personnel has been requested by municipal officials in matters involving local industrial construction and process alteration permits.

With the Division of Laboratories, great progress has been made in rapid analytical methods for the determination of multiple trace elements collected from the outdoor atmosphere. A spectroscopist is being trained to perform tests for the Air Sanitation Program. The field station of the Public Health Service in Cincinnati has loaned the Department of Health a Hilger medium spectrograph. A densitometer and a power source have been purchased to complete the spectrographic laboratory.

It is expected that these refinements in analytical techniques combined with field use of the directional sampler will yield information that has been hitherto unavailable.

By numerical count, despite augmented personnel and equipment, at first glance it may appear that fewer field investigations are being conducted. However, the conference method, which includes local governmental personnel and representatives of industrial plants, moves more slowly but accomplishes firmer results than our previous procedures.

Radiological Health Program

The fiscal year 1953 saw the inception of the formal Radiological Health Program, developed as a series of activities apart from the routine operation of the other Programs in the Bureau of Adult and Industrial Health. These activities, in many ways, however, parallel or are carried out in conjunction with activities of the other programs.

Radiological Health Program development and operation was encouraged by the assignment in October of two Public Health Service officers, Doctor Gordon B. Wheeler, surgeon (Doctor Wheeler has since resigned from the

United States Public Health Service and is no longer available to the Program), and Mr. Henry J. L. Rechen, sanitary engineer. Except for the months of March and April, when Doctor Wheeler and Mr. Rechen attended the early phases of the bomb tests at the Nevada Proving Grounds, their time has been devoted to developing a workable program.

The tempo of field work has been increased, due to the availability of more versatile survey instruments and to the passage by the Public Health Council, on December 15, 1952, of a Sanitary Code Chapter on "Radiation," and the acceptance of Departmental Regulations concerning *Fluoroscopic Shoe-Fitting Machines*. A general break-down of field activities is given in Table I, and demonstrates the increased attention being given to users of radioactive materials authorized by the United States Atomic Energy Commission and to owners of fluoroscopic shoe-fitting machines:

TABLE I
RADIOLOGICAL HEALTH FIELD ACTIVITIES

Type of Radiation Source	Known No. of Users	Total No. Visited	No. Visited in Fiscal 1953
AEC Isotopes	89	33	25
Radioactive Static Eliminators	71	16	1
X-ray, Industrial	34	9	1
Polonium	2	1	1
Radium	14	4	4
Fluoroscopic Shoe-Fitting Machines	385	75	74

ATOMIC ENERGY COMMISSION ISOTOPES

It is considered desirable to visit every authorized user of AEC radioisotopes. The use of reactor-produced radioisotopes is increasing rapidly in New Jersey. The largest quantities are short-lived, and include Iodine-131 and Phosphorous-32, used medically for diagnosis and therapy. There is also a growing employment of Cobalt-60, for gamma radiography and medical therapy. Cobalt 60, with a half-life of five years, constitutes a long-lived source of great potential hazard. Each must be investigated individually. Beta-ray gauges are also popular, but in general cannot be considered hazardous as presently installed. One future development calling for a high degree of technical competency in radiological health is the proposed installation of one and possibly two kilo-Curie Cobalt-60 industrial sources. The varied natures of the spectrum of radioactive elements now available prevents to some degree the development of standardized investigational procedures.

RADIOACTIVE STATIC ELIMINATORS

The use of radioactive static eliminators is so informal that it is not desirable to attempt to examine every installation. Based on the numbers of installations, rather than users, it has been found that a few visits may include a very large proportion of the active installations. For example, one large company warehouse and service plant has had on hand, at one time, as many as 200 radium static eliminators. A policy of furnishing advice, rather than field services, has proved to be the most efficient method for this type of source.

X-RAY, INDUSTRIAL

Industrial X-ray installations potentially may constitute one of the most hazardous sources of exposure to plant employees.

However, field investigations have revealed that only a small group is subject to exposure, and that little is known concerning such exposures in the past. Until mass survey devices, such as film badges, are available for an organized study of the exposures, it is considered best to defer study of this problem. Film badge service, on a limited investigational basis, is planned during the coming fiscal year.

POLONIUM, RADIUM, AND OTHER NATURALLY RADIOACTIVE MATERIALS

Except for radium, the use of these materials is limited by their availability, half-life, and price. Few important users have been discovered, and as yet, no generalized problem has become evident. Radium is found in hospitals and in several large corporations. Its use for industrial radiography and medical therapy has been largely supplanted by the radioisotopes available from the AEC. Visits to dial-painting shops have been made to assist in establishing modern radiological health control methods.

FLUOROSCOPIC SHOE-FITTING MACHINES

The establishment of the Departmental Regulations concerning the 385 machines known to be in use in the State of New Jersey has caused the development of a routine method of inspection and reporting. In general, it may be stated that without adequate instruments one would be unable to determine the degree of compliance with the regulations. For this reason the bulk of the inspections have been made by program personnel; it is hoped that necessary competence may be developed by more local health agencies, to bring about a more rapid completion of this activity. Training was directed for this purpose to representatives of local health departments in a series of three one-day courses, given at Trenton in May 1953.

MEDICAL, DENTAL, VETERINARY AND OTHER X-RAY

The X-ray sources employed in the healing arts have not been investigated individually, except in isolated instances. It is intended to develop mass survey procedures that will measure individual exposures, by film badge surveys, but will not obligate examination of each of the estimated 8,000-10,000 machines installed in the State of New Jersey.

EDUCATION IN RADIOLOGICAL HEALTH

An Industrial Health Bulletin, Vol. 4, No. 10, on *Radiation Hazards* has been published and distributed. Health agencies, insurance companies, and interested workers in radiological health have requested copies of this bulletin.

The lecture material for the Basic Radiological Health course has also had wide distribution, especially through the New York Regional Office of the Public Health Service.

REGIONAL COORDINATING CONFERENCE ON RADIOLOGICAL HEALTH

For some time workers in the field of public health have been faced with the problem of administering and controlling sources of ionizing radiation. The comprehensive field includes radium and radium salts, radioisotopes, X-ray machines and fluoroscopic machines. The uses to which these various sources are put reach into industrial operations, hospitals, offices of professional people such as doctors, dentists, veterinarians, etc., and retail merchandizing as exemplified by fluoroscopic shoe-fitting machines. Factors which must be considered in radiological health, in addition to use, are transportation, storage and disposal with the possibility of radioactive dust contamination in air and radioactive liquid waste going into a general sewer system.

Many authorities have jurisdiction over one or all facets of a problem, namely,

1. United States Atomic Energy Commission
2. Public Health Service
3. State Departments of Health
4. State Departments of Labor
5. City Health Departments

Rules, regulations, and recommendations have been promulgated by the

1. Atomic Energy Commission
2. American Standards Association
3. National Bureau of Standards
4. Public Health Service
 - a. Division of Occupational Health
 - b. Radiological Health Branch
5. Civil Defense Organizations
6. State and Municipal Official Agencies

There has been a very definite need for some coordinating group to reconcile the different points of view which have been set forth because of the many agencies' interest in radiological health activities. Under the leadership of the Public Health Service, Regional Office II, persons administering phases of radiological health programs were invited to attend a series of monthly meetings to discuss the need, purposes and modus operandi of a semi-official, informal association to resolve the difficulties of the "day-to-day" worker and administrators faced with the difficulties inherent in radiological health programs. It was decided that such a group would be called Regional Coordinating Conference on Radiological Health. The primary purpose of the Conference is:

"To exchange views on subjects of interest in the field of radiological health as they pertain to the operation and administration of our respective programs."

It was agreed to limit participation in the Regional Coordinating Conference to members of official agencies since it was anticipated that on many occasions, confidential or privileged material might be discussed. In the future, if it seemed desirable, there might be an occasional open meeting to which representatives of insurance companies or interested industries could be invited.

Six meetings have been held with representatives present from

Public Health Service—Region II
 New Jersey State Department of Health
 New York City Department of Health
 New York State Department of Health
 New York State Department of Labor
 Philadelphia Department of Public Health
 Connecticut State Department of Health
 Atomic Energy Commission—New York Operations Office
 United States Coast Guard—New York Port Offices
 United States Army—Governors Island, New York

The major topics of discussion have been the costs and needs for an official film badge service, and the administrative aspects of a program for the control of fluoroscopic shoe-fitting machines.

The New Jersey State Department of Health provided copies of fluoroscopic shoe-fitting machine inspection forms, survey methods, compliance letters, and informational bulletins to New York State Department of Health and Philadelphia Department of Health personnel who are initiating fluoroscopic shoe-fitting machine regulations.

It is the sincere hope of all persons participating in these meetings that by sharing each other's problems and reaching some agreement on uniform procedures, many of the paradoxes connected with radiation services and departmental regulations can be eliminated.

Bureau of Crippled Children

INTRODUCTION

The Crippled Children Program differs from other public health programs in the Division of Constructive Health in that it deals with services to individual children under the age of twenty-one, who have handicapping conditions as defined by the State Crippled Children Commission as follows:

"Any child between the age of birth and 21 years of age suffering from rheumatic heart disease or with a deformity which, because of loss, defect or deformity of bones, muscles or other soft tissue, reduces, or due to a progressive condition, may reduce normal capacity for education or self-support."

ADMINISTRATION

The administrative and program responsibilities of the Crippled Children Commission are vested in the Bureau of Crippled Children. While the State Health Districts are essentially responsible for program operation, the Bureau office is responsible for individual case financial processing. This includes arrangements and approval for hospital bed day purchases, convalescent care, the purchase of appliances and special prosthetic devices and special medicines. This individual case financing further demands arrangements for contributions by private agencies and matching contributions from official agencies such as the several Boards of Chosen Freeholders.

The approval of case services under the definition, except for rheumatic fever, acute polio and cerebral palsy, is the responsibility of the Orthopedic Medical Consultant. Individual case processing procedures, the preparation of budgets and budget reports, the maintenance of case registry and the carry-

ing out of administrative policies and procedures of the Program Coordinator is the responsibility of the Executive Director of the Bureau.

The Program Coordinator has been intensely occupied during the past year in arranging for further decentralization of program operation responsibility to the State Health Districts, revising, simplifying where possible, and realigning case processing procedures to conform to Department practices. A start has been made in the transfer of bookkeeping and accounting activities to the Bureau of Personnel and Accounts in accord with general Department practices. Revisions and simplification of activity reporting needs by the Children's Bureau has resulted in considerable additional savings in clerical man-hours. A program has been written in accord with Department format prescribed therefor and a comprehensive procedure manual has been prepared.

STATE REGISTER OF CRIPPLED CHILDREN

Case registry activities have been in part transferred to the Division of Vital Statistics and Administration, which is now furnishing necessary lists by IBM machine methods. The registry is in the process of complete review and correction and is expected to become an increasingly valuable tool for program evaluation and need. Table 1 gives the total number of cases on the State Registry:

TABLE 1

CRIPPLED CHILDREN ON STATE REGISTER

On Register as of January 1, 1952	17,207
Placed on Register during calendar year	2,229
Total entered on Register	19,436
Removed from Register for specified reasons	2,624
Crippling condition cured	550
Reached age of 21	1,646
Residence established in another state	147
Death of registrant	144
Registration found to be in error	137
On Register at end of year	16,812
Reported for registration but eligibility not determined at end of year ..	344

PHYSICIAN SERVICES, HOSPITALIZATION AND APPLIANCES

The Crippled Children Program does not operate medical clinics for handicapped children except for the cerebral palsied and for rheumatic fever in Essex County. A panel of qualified orthopedists, neurosurgeons and plastic surgeons approved by the Crippled Children Commission examine and follow up cases eligible for State assistance without charge at approved hospitals and special clinics, and recommend necessary appliances, special medicines, or hospitalization and convalescent care, which are paid for in part or in total by matched funds after any voluntary contributions have been deducted.

Table 2 indicates that 348 such children received hospitalization for a total of 14,176 bed days and that 109 children received convalescent-home care for a total of 18,961 bed days. Total Federal and State matching expenditure for hospitalization and convalescent-home care was \$163,050.93. In addition, \$30,259.29 was generously spent by voluntary organizations, such as the local Polio Foundation Chapters or by individuals or parents, as the result of requests from the Bureau of Crippled Children, which as a matter of policy seeks to obtain a maximum degree of local participation and responsibility. These contributions are deducted from the total purchase rate, which is \$8.00 per day for the first fourteen days and \$6.00 per day thereafter for hospitals, and \$5.00 per day for convalescent homes. Balances are paid for by matched Federal and State funds, such State funds being contributed largely from the County Boards of Freeholders on a 60%-40% ratio. While it is realized that the bed day purchase rate is less than half the average reimbursable cost of a given hospital, it has not been possible to increase payment rates at the present time (due to lessening of appropriations and the limitation of matching funds), without drastically cutting down the number of children receiving hospitalization and convalescent services.

There were 439 artificial limbs, braces and appliances paid for by the Crippled Children Program for a matched total of \$28,989.32. Here again, voluntary private agencies, particularly the local Polio Foundation Chapters, several local Elks Lodges, and parents contributed in part or in total toward the payment of these appliances, balances being paid for by Federal and State matching funds, mostly derived from County Boards of Chosen Freeholders. Payments from these sources totaled \$6,581.74. Voluntary contributions play an important part in the Crippled Children Program. The success in obtaining such contributions has been due to the excellent continuing relationships with private agencies and service groups built up by the Crippled Children Commission.

TABLE 2

CASE NUMBER AND PAYMENT OF HOSPITAL, CONVALESCENT HOME AND APPLIANCE SERVICES SUPPLIED CHILDREN FOR YEAR 1952

HOSPITAL CONVALESCENT CARE	
<i>Total Number of Children</i>	457
<i>Total Bed Days</i>	33,137
<i>In-Patient</i>	
Number of children who received specialized services	348
Number of bed days	14,176
<i>Convalescent Home</i>	
Number of children who received specialized services	109
Number of bed days	18,961
<i>Payment of Bed Days (Hospital and Convalescent Home) Total</i>	\$193,310.17
<hr/>	
State and Federal funds	\$87,206.11
County Boards of Chosen Freeholders	75,844.82
<i>Total payments from tax sources</i>	\$163,050.93
<i>Private Contributions</i>	
Local Chapters of Polio Foundations	\$20,460.42
Parents	8,764.49
Hospitalization Insurance	931.46
Elks Lodges	55.00
Municipality of child's residence	47.87
<i>Total contributions</i>	\$30,259.24
<hr/>	
APPLIANCES	
<i>Total Number Purchased</i>	439
<i>Total Payments</i>	\$35,571.06
<hr/>	
State and Federal funds	\$13,750.27
County Boards of Chosen Freeholders	15,239.05
<i>Total payments from tax sources</i>	\$28,989.32
<i>Private Contributions</i>	
Parents	\$2,777.35
Local Chapters of Polio Foundations	2,394.34
Elks Lodges	1,010.05
Newspaper	200.00
Church	150.00
Community Club	50.00
<i>Total payments from private sources</i>	\$6,581.74

In addition to the hospital, convalescent home and appliance services rendered, 824 children have received State clinic services in the several State diagnostic cerebral palsy clinics and the rheumatic fever clinic at St. Michael's Hospital, for a total of 1,523 clinic visits. The total unduplicated count of children receiving hospital, convalescent home and clinic services for the calendar year 1952 was 1,215. An analysis of these children relative to County distribution, race, age, new and old cases, and diagnosis by sex and age are given in Tables 3, 4 and 5.

CEREBRAL PALSY

The Crippled Children Program has continued to operate medical diagnostic and follow-up clinics, State-wide, for the cerebral palsied. Pursuant to Federal regulation, any child presumed to have cerebral palsy may attend one of these clinics regardless of financial status. As far as possible, permission is sought from the private physician or clinic before attendance is arranged at one of these clinics. Physician's permission is requested before child is followed up at a cerebral palsy clinic, and cases are accepted at these follow-up sessions only if the child receives recommended qualified physical therapy treatments in the interim. Clinic sessions were held in Newark, Jersey City, Hoboken, Newton, Elizabeth, Somerville, Long Branch, Trenton and Camden under the operational supervision of the respective District State Health Officers and staffs. As before, these clinics are in charge of physicians who have received special training in cerebral palsy by Dr. Winthrop Phelps at the Children's Rehabilitation Institute at Cockeysville, Maryland. Due to resignations, arrangements have been completed for the training of three additional physicians during the fiscal year starting July 1, 1953. In this way adequate clinic services are maintained.

It should be noted that as a result of many years of State demonstration of the need to provide specialized medical clinics for the diagnosis and treatment of cerebral palsy, increasing number of voluntary private organizations have been establishing private cerebral palsy centers which furnish not only treatment services, but diagnostic and follow-up medical services as well. During the past year the treatment unit at Hoboken began to provide such private services, and a new treatment center has been established in Union County at Elizabeth. Both of these units utilize the services of physicians who are also active in the State program. The steadily increasing awareness of the public of the needs for specialized services for cerebral palsy is resulting in widespread action programs. At the same time, there is appreciation that the cerebral palsied child must be considered as a whole in a framework of his capacity for total health. There is also a trend away from considering cerebral palsy as being the province of any one specialty. Rather, there is current interest toward the "team" or multidiscipline approach.

Because Dr. Phelps, with his many obligations in other states, is unable to come to New Jersey as frequently as before, special consultation clinics have been organized and held regularly in each District. First priority of attendance at these clinics are for those cases for which consultation services of Dr. Phelps are requested by one of the cerebral palsy trained physicians from State and private cerebral palsy medical clinics. In this way the expert services and opinions of Dr. Phelps are given State-wide distribution.

The Crippled Children Program continues to operate three treatment centers for cerebral palsy through the payment of the salaries of their physical therapists. These units are the direct supervisory responsibility of the District State Health Officers and their staffs. However, planning is under way whereby eventual operation and supervision of these units may be transferred to private cerebral palsy organizations. The many years of demonstration of facilities for the treatment of the cerebral palsied has resulted in the establishment of numerous private treatment centers throughout the State, capable and qualified in carrying on their work. The practical need for the continuation of treatment services by the State is coming to a close. However, consultation services in public health nursing, medical social work, psychological evaluations and assistance toward the payment of appliances will be continued.

The initial phase of a tentative cerebral palsy eye research project was started during the year. This project contemplated the selection of properly screened cases of cerebral palsy indicating a lack of eye muscle coordination, who would then receive orthoptic exercises in an attempt to discover whether the eye muscle coordination could be improved by such treatment in the same manner as arm or leg muscle coordination is benefited by physical therapy. Although this project has been prepared and has received the approval of the Children's Bureau, final approval by the Department has not been given, and further consideration and planning is indicated.

RHEUMATIC FEVER DEMONSTRATION PROJECT

Federal support for the Rheumatic Fever Demonstration Unit and Clinic at St. Michael's Hospital was reduced one-third for the fiscal year 1952-53 in preparation for complete cessation of support of this project by June 30, 1955. In the meantime, however, the activity of this unit continued to increase during the year, while intensive reorganizational steps were taken to assist the hospital eventually to take over the responsibility to operate the unit. This reorganizational planning and procedure was undertaken by Dr. Katherine Hain, Coordinator of the Cardiac Program in the Division of Chronic Illness Control. As of July 1, 1953 the Unit will operate as an integral part of St. Michael's Hospital under the terms of a grant-in-aid contract for allocation of funds. The Newark City Health Department is furnishing secretarial services, a public health nurse and is in turn receiving grant-in-aid assistance

toward the payment of nursing services supplied by the Newark Visiting Nurse Association for rheumatic fever cases served by the Unit. Furthermore, the Hospital is arranging, as far as possible, for convalescent home services of their cases through private and voluntary agencies. Medical social work for the Unit will be temporarily provided, in part, by the newly-appointed District Medical Social Rehabilitation Consultant until the Hospital can arrange for such services. The Unit will also have the services of a trained cardiologist in the Hospital as well as the continuation of supervision and examinations by the Pediatrician.

As the project completes its reorganization, it is anticipated that it will serve as a model for rheumatic fever units in other parts of the State under Department participation and assistance. Plans are being formulated for limited participation by the Crippled Children Program toward the payment of hospitalization and convalescent care for children with rheumatic fever and congenital heart disease on a State-wide basis.

During the year the project continued to operate as previously, with weekly out-patient clinics for children of Essex County suffering from rheumatic fever, rheumatic heart disease, acquired heart disease and congenital heart disease. Staff conferences were held weekly. Ten to fifteen beds were available in the hospital on the Pediatric Ward. Cases received hospitalization, convalescent care, public health supervision, psychological evaluations, medical social work services, dental services, occupational therapy, vocational counseling through the New Jersey Rehabilitation Commission, bedside teaching and camp experience at regular and special cardiac camps. Congenital heart cases seen at the clinic received special diagnostic evaluations from the cardiac staff of the Hospital before surgical treatment. The clinic also served as a teaching center for public health nurses and had many visitors from allied professional fields. Nursing follow-up services were supplied by the several V. N. A. agencies in Essex County holding contracts with the Department.

During the year the project continued to be under the operational and administrative supervision of the Metropolitan State Health District, with the technical and program supervision of the Crippled Children Program. The coordinator of the project was the Public Health Nurse Supervisor for crippled children in the District.

The statistical report of the activities of the project will be found in Table 6.

CLEFT PALATE EVALUATION PROJECT

With the active cooperation and joint planning of the Program Coordinator, the Cleft Palate and Cleft Lip Rehabilitation Center was organized in 1951 and has been in full operation during the past year at St. Barnabas Hospital in Newark. The Center is under the direction of Dr. Lyndon Peer and is composed of seven major departments as follows: Plastic Surgery, Speech

Therapy, Psychology, Orthodontia, Dental Rehabilitation, Cephalometrics, Otolaryngology and Pediatrics. Accessory services include Neuro-Surgery, Endocrinology, Psychiatry and Orthopedics. The Center contains all of the special departments and skills necessary for the diagnosis and treatment of deformed children and adults. The needs of the total individual are considered in addition to the particular deformity in order to help handicapped individuals become productive members of their community.

Arrangements have been completed whereby all cases that have received assistance through the Crippled Children Program for cleft lip and palate surgery may be referred to the Center for post-operative evaluation. Although the Center has been giving this service without remuneration to these cases since the beginning of the year, approval has recently been obtained whereby payment for the complete evaluation service is made to St. Barnabas Hospital at the rate of \$65.00 per case for 100 cases per year.

Plastic Surgeons in the State are cooperating with the Center, which in turn holds frequent seminars for the specialty, as well as regular conferences and educational meetings for physicians, nurses, social workers and parents.

Already new and pertinent knowledge and improvements of techniques are resulting from these exhaustive case studies, not only in post-operative care and treatment, but in improved surgical procedures. National and international attention has been drawn to the Center as their initial findings are made known.

NURSING ACTIVITIES

The Public Health Nurse Consultant to the Crippled Children Program has been giving consultant services to the State Health Districts, not only in the operation of the Program in the field, but also to those voluntary organizations particularly which conduct their own programs for the cerebral palsied. Her training, not only as a public health nurse but as a physical therapist, has been an advantage in rendering this service. In addition she has aided the Program Coordinator in the reorganization of policies and administrative procedures, assisted him in the writing of the program and has carried out certain professional administrative functions under his direction.

Public Health Nursing Program operations for Crippled Children in the Districts are the immediate responsibility of the Public Health Nurse Supervisors for Crippled Children. Although some of these Supervisors still give limited direct nursing services to crippled children, an effort is being made to arrange that all direct nursing services shall be given by community agencies.

In order to stimulate this development of community responsibility, the contracts for grant-in-aid assistance and Manual for Nursing Agencies were completely revised after intensive study by the Crippled Children and Public Health Nursing Programs. Depending upon the qualifications of the several

contract nursing agencies, two types of services will be rendered by the Districts for these agencies effective July 1, 1953: Supervisory and Consultative. Both of these will continue to be the responsibility of the Public Health Nurse Supervisors for Crippled Children. In addition, those agencies receiving consultation services from the District will be given a quota of case allotments for the rendering of instructional home visits to crippled children, instead of individual authorizations as before.

During the fiscal year 1952 contract nursing agencies made a total of 9,909 nursing visits to crippled children receiving the services of the program for a total payment of \$19,818.00 at the rate of \$2.00 per visit. Beginning July 1, 1953 payment will be at the rate of \$2.50 per case visit.

PSYCHOLOGICAL SERVICES

There were five major aspects to the psychological services rendered the Crippled Children Program by the Psychologist. The *first* was the examination and evaluation of the handicapped child, involving a study of the record, the examination itself and interpretations to parents, staff members, both local and District, and physicians. Fifty-five percent of examinations were for the purpose of determining the child's developmental level. In 42% of cases, problems of education and training were involved. Adjustment and emotional problems were frequent. Two percent of the children examined were under consideration for institutional placement, although just 50 percent of all children examined were eligible for an institution for the mentally deficient. In one percent of the cases vocational planning constituted the major problem. This group was small because of the responsibilities assumed by the Vocational Rehabilitation Commission.

The *second* major aspect of psychological service pertained to case conferences with both professional and lay workers, Public Health Nurse Supervisors and Program staff.

The *third* aspect was the attendance of the Psychologist at cerebral palsy diagnostic and follow-up clinics, where there was an interchange of ideas and case discussion.

The *fourth* significant activity of the Psychologist dealt with parent group counseling. Comments by parents, demands for extension of this type of work within the State and inquiries from without as the result of publications attested the significance of this development.

Research, lectures and writing comprised the *fifth* area of importance to the Psychologist. The research has consisted of three types of activity. One was the recording and integration of work done in the past. The second involved the intensive study of certain perceptual problems of children with cerebral palsy. This is carried on in conjunction with the University of

Syracuse, which has been financing the project. The third current area has grown out of parent counseling. An inventory of attitudes has been developed on the basis of statements by parents of children with cerebral palsy.

This brief review of the extensive direct services of the Psychologist indicates the need for the private cerebral palsy centers to provide psychological services for themselves through local psychologist resources. These should be trained by the Program Psychologist, who can then devote increasing time for consultation services and less to the giving of direct services. In addition, there is a real need for establishing another Psychologist position in the Program to assist in the extensive program for psychological services.

MEDICAL SOCIAL SERVICES

The Medical Social Consultant to the Crippled Children Program devoted the largest percentage of her time to necessary and important direct social service work of the Rheumatic Fever Project at St. Michael's Hospital, as a member of the Unit team. The remainder of available time of the Medical Social Consultant was spent in consultation services to the Program staff, to contract V. N. A. agencies, welfare agencies having contact with the Program, professional staffs of hospitals, convalescent homes and specialized schools for handicapped children. Occasional direct services were also given on request for the evaluation of specific problem cases. As far as possible the Medical Social Consultant also attended the cerebral palsy diagnostic clinics and co-operated with the staff of the Cleft Palate Rehabilitation Center.

TABLE 3

DISTRIBUTION OF CHILDREN RECEIVING CLINIC, HOSPITAL AND APPLIANCE SERVICES, BY COUNTIES

CALENDAR YEAR 1952			
County	Number of Children	County	Number of Children
Atlantic	18	Middlesex	15
Bergen	57	Monmouth	106
Burlington	28	Morris	26
Camden	63	Ocean	20
Cape May	10	Passaic	25
Cumberland	21	Salem	11
Essex	490	Somerset	31
Gloucester	13	Sussex	14
Hudson	108	Union	57
Hunterdon	19	Warren	8
Mercer	75		
		Total	1,215

TABLE 4

DISTRIBUTION OF CHILDREN RECEIVING CLINIC, HOSPITAL AND APPLIANCE SERVICES, BY RACE AND AGE AND BY NEW AND OLD CASES

Race New and old cases	Total (according to Children Under 1	Age, in years to birthday in report year)			
		1-4	5-14	15-20	
TOTAL	1,216	25	246	734	210
White	997	21	189	616	171
Other	204	3	52	112	37
Unknown	14	1	5	6	2
Number of these children who received services for the first time	440	25	145	225	45
Number of these children who had received services in previous years	775	—	101	509	165

TABLE 5

DISTRIBUTION OF CHILDREN RECEIVING CLINIC, HOSPITAL AND APPLIANCE SERVICES, BY DIAGNOSIS, SEX AND AGE

Report Group Code	Title	TOTAL	Sex		Number of children in each diagnostic group Age, in years (By birthday in report year)			
			Male	Female	Under 1	1-4	5-14	15-20
—	TOTAL	1,215	663	552	25	246	734	210
0120	Tuberculosis of bones and joints, active or unspecified	2	1	1	....	1	1	....
0130	Late effects of tuberculosis of bones and joints	9	6	3	....	1	6	2
0199	Other tuberculosis, except respiratory	....	....	....	....	....	....	....
0809	Poliomyelitis, acute	18	8	10	....	7	9	2
0818	Late effects of acute poliomyelitis	81	39	42	....	18	50	13
2830	Ricketts, active	....	....	....	....	....	....	....
2840	Late effect of ricketts..	1	1	....	....	....	....	1
3510	Cerebral palsy	500	293	207	1	117	324	58

Report Group Code Number	Title	Number of children in each diagnostic group						
		TOTAL	Sex		Age, in years (By birthday in report year)			
			Male	Female	Under 1	1-4	5-14	15-20
3590	Other diseases of the nervous system and sense organs, except eye, ear and mental disorders	2	2	....	....	....	1	1
3899	Other diseases of the eye, except congenital or diabetic cataract .	2	....	2	....	....	2	....
4090	Rheumatic fever, acute	106	59	47	....	3	81	22
4100	Chronic rheumatic heart disease	76	39	37	....	....	46	30
4300	Other diseases of the heart, except congenital malformations	95	44	51	1	6	70	18
7200	Arthritis and rheumatism, except rheumatic fever	4	3	1	1	....	2	1
7309	Osteomyelitis and periostitis, except tuberculosis	4	3	1	....	....	4	....
7459	Curvature of spine, except congenital or late effect of poliomyelitis or tuberculosis	8	1	7	....	1	2	5
7469	Flatfoot, acquired or unspecified	4	3	1	....	....	2	2
7499	Other diseases of the bones and organs of movement, except congenital malformations	34	23	11	....	1	25	8
7510	Spina bifida and meningocele	19	11	8	3	6	8	2
7530	Congenital malformations of the circulatory system	42	19	23	6	7	17	12
7540	Cleft palate and hare-lip	74	37	37	13	38	20	3
7571	Congenital dislocation of hip	12	3	9	....	6	4	2

Report Group Code Number	Title	Number of children in each diagnostic group							
		TOTAL	Sex		Age, in years (By birthday in report year)				
			Male	Female	Under 1	1-4	5-14	15-20	
7584	Clubfoot, congenital or unspecified	18	11	7	....	8	8	2
7599	Other congenital malformations	40	21	19	....	22	15	3
7619	Other injuries at birth, except cerebral palsy and epilepsy	8	4	4	....	1	6	1
9400	Burns	15	7	8	....	1	9	5
9980	Other morbid conditions due to accidents, poisonings and violence	30	19	11	....	2	14	14
9991	Other diagnosed diseases, injuries, or handicapping conditions, except provisional or deferred diagnoses	11	6	5	....	....	8	3

Bureau of Dental Health

INTRODUCTION

The Dental Health Program is offering services to eighteen (18) counties, and emphasizes the following basic principles:

1. Public health is primarily interested in the *prevention* of disease, and the development of optimum health.
2. Dental diseases are to a large extent preventable.
3. The prevention of dental diseases depends largely upon individual and community initiative and knowledge.
4. Individual initiative and knowledge must be gained through education.
5. Dental health education can effectively be promoted by helping classroom teachers in the elementary grades incorporate such education in their daily curricula.

The prime objective in Public Health Dentistry in this State has been to combat and prevent the widespread dental and oral diseases prevalent in our school population. Four fundamental activities have been employed in attempting to attack this problem:

EDUCATIONAL ACTIVITIES

The educational activities of the Dental Health Program may be divided into two categories—(a) professional education, (b) lay or public education.

(a) *Professional education* in cooperation with the New Jersey State Dental Society and the New Jersey Society of Dentistry for Children; through sponsorship in courses for oral cancer; through accredited courses and dental health education for nurses, teachers and oral hygienists; through scientific information provided to dentists, physicians, nurses, oral hygienists, etc., on request, and lectures at four (4) different dental schools.

Educational concepts today emphasize the importance of utilizing community resources for broadening and enriching the school program. Many agencies, organizations and individuals have valuable contributions to make to education. Each has a responsibility for doing what it can for the improvement of the community and its educational program.

Dental societies, dental health committees and individual dentists have a responsibility for contributing to the health and welfare of children and adults both through making dental care available in their private offices and by giving leadership and consultation to the community health program.

Children who have a sound foundation in the principles of dental health can assume more responsibility for their own dental health. They will develop good oral hygiene habits and seek regular dental care. Dental health throughout life is determined, in part, by the effectiveness of dental health lessons learned during childhood.

Each school and community functions differently, and no pattern can be established that will fit all. Suggestions here expressed are intended as guides which may be found helpful in initiating or expanding dental health education programs in schools.

Fourteen (14) oral cancer courses were given between January 1950 and January 1953 for 277 dentists at New York University, the University of Pennsylvania, Temple, Columbia University, and affiliated hospitals. The total Department expenditure of Federal funds for this purpose was \$41,550.00. The dental profession is very grateful for this opportunity, as they know of no other State which has had such an active or extensive oral cancer control program. In this three-year period records indicate that approximately 155 oral malignancies have been detected by dentists who have had the advantage of this training.

The value and importance of these oral cancer courses are considered to be outstanding. The Chief of the Dental Program plans this coming year to write, in pamphlet form, a detailed description of all phases of this professional educational activity.

(b) *Lay or public education* through cooperation with local officials and voluntary agencies and the four State Health Districts in the dissemination of authoritative dental information; and through community interest in local treatment programs. In the field of public health education, county and local dental health committees have made marked contributions. By means of posters, leaflets and movies provided by the Dental Program, these committees were able to disseminate authentic information. The dentists participating in the treatment program frequently took opportunities to present to school administrators, teachers, pupils and parents, information concerning preventive measures. The four dental health supervisors coordinated the promotion of dental health education programs in their areas. Methods of providing information for teachers and nurses to carry on dental health education programs in the classrooms are presently being investigated.

The educational program has not been confined to educating the individual to the things he himself can do to have good teeth. It has also made efforts to educate the individual and the public concerning fluoridation as a public health preventive measure. During the year 1952-53, fluoridation has been the major activity in the field of dental public health. Following the endorsement of fluoridation by the American Dental Association, the American Medical Association, and many other leading health organizations of the nation, the Dental Program has been increasingly active in promoting this project. Fluoridation is looked upon as a measure which restores to the water the naturally essential element, which in the proper proportions markedly reduces the incidence of dental caries. The Chief of the Dental Program has met with state and local dental societies; city councils; P. T. A.'s; civic clubs and other interested groups in many communities throughout the State of New Jersey. Literature secured from the U. S. Public Health Service, the American Dental Association, and the N. J. State Dental Society, has been very widely distributed. A great reduction in the occurrence of tooth decay in New Jersey is expected in a few years after fluoridation has been more widely adopted by municipalities. In the meantime, the dental health conditions of our children constitute a major health problem and all personnel of the Dental Program are active in combating this problem by means of an excellent dental treatment program.

RESEARCH AND EVALUATIVE ACTIVITIES

(a) These basic activities deal principally with improving methods of administering public health dental programs; of analyzing methods of dental research, particularly on a public health level; and appraising methods of prevention of dental disease. The Chief of the Dental Program has continued a study to compare dental conditions found among children in naturally fluoridated water communities with children residing in areas with non-fluoridated waters. Also, studies have been conducted in communities now adding fluorine to the water, and surveys have been run prior to fluoridation in cities which anticipate fluoridation of their water supply within a very short period of time. Increasing evidence indicates that a communal water supply containing 1 ppm to 1.5 ppm will result in a 65% reduction of the dental caries rate.

The following are the criteria recommended for measuring the trends of caries susceptibility rates by dentists using mouth mirrors and sharp explorers:

1. DMF rates and age groups.
2. Percentage of children requiring dental treatment.
3. Average number of defective teeth per child.
4. Number of lost permanent teeth per 100 children in the 12-14 age group. (Table 1).

The following criteria are recommended for the evaluation of the dental treatment program:

- (a) Individual records and periodic reports as recommended by the State Department of Health and the State Department of Education.
- (b) Increase in the percentage of completed cases (all necessary extractions, fillings and topical sodium fluoride applications) from year to year. (Table 3.)
- (c) Consistent decrease in the extraction of permanent teeth. (Table 1.)
- (d) Professional supervision of the operations of participating dentists.
- (e) Emphasis on prevention treatment for young children (4-10 yrs.) and incremental care thereafter.
- (f) The community approach with collaboration of State and local dental societies.
- (g) Information as to the number of children obtaining treatment in private dental offices.

PREVENTION

(a) Fluorine—Table 3 shows the number of 2% sodium fluoride applications provided by dental operators this past year on children receiving care under the Dental Program. The use of this procedure in private offices has been encouraged.

The Program Coordinator has assisted local communities in planning all phases of fluoridation of public water supplies. Since the last Annual Report, the City of Rahway and 21 communities in Monmouth County have initiated fluoridation. Atlantic City, and about 12 other communities are at present seriously considering fluoridation of their community water supplies. New Jersey is lagging in the development of these projects. But it is felt that considerable progress will be shown this coming year.

(b) Nutrition—Through cooperation with the State Nutritionist, the State Nutrition Council and other allied organizations much effort is directed toward the reduction of the consumption of carbonated beverages and refined carbohydrates.

At the present time the Dental and Nutrition Programs are planning for a Dental Health Educational Program in the Southern State Health District of New Jersey.

DENTAL CARE ACTIVITIES FOR CHILDREN

This consists essentially of initiating, sponsoring, and supervising local dental treatment programs for children who are financially unable to receive private dental care. Financial eligibility is determined by formula on a county-wide basis, and is approved by the County Dental Health Committee and the local dental society.

In the fiscal year 1951-52, 7,890 children received dental care through programs sponsored, in part, by the Department. During the fiscal year, 1952-53, a total of 6,874 children received treatment (Table 1). In 1951-52, 15,653 dentist hours were consumed. Due to increase in hourly rate of dentist fees for 1952-53, 11,617 dentist hours were used. Emphasis is placed upon providing all necessary fillings and extractions, prophylaxes and sodium fluoride applications in children of younger age. These children then receive incremental dental care at least once a year, if possible. Since most of the children are reached through the public or parochial school, the youngest age is usually six years, although pre-school children are being included wherever possible. The children receiving such treatment in 1952-53, came from school districts in eighteen counties (no programs in Salem, Mercer and Hudson Counties).

Treatments were provided by 98 dentists in three basic types of installations: mobile units, clinics and private offices. These dentists are compensated on an hourly basis (\$6.00 in mobile units and clinics, and \$8.00 in private offices). The total number of hours they are to work in the State Program is determined at the beginning of each fiscal year. All the dentists are approved by the local dental societies and their work is supervised by four dental health supervisors. One full-time field worker, under civil service,

assists in administering the local dental programs. The demand for these dental services is very great, far exceeding the existing facilities. It is only the limitation of funds which prevents the expansion of many of the existing activities and initiation of new programs.

There are many local programs which are not State sponsored. Some receive "advice," supervision, assistance and educational materials from the Dental Bureau. Information concerning these can be obtained from the Chief of the Dental Program.

Emphasis this past year has been for more local community and county responsibility and financial support toward their dental programs. The responsibility of local Dental Programs essentially belong to the community. The Department Dental Program acts in an "assisting" role only. Results obtained from the requests for local financial assistance in almost all of the 18 counties has been very gratifying.

Table 2 shows clearly the trend here indicated. Federal and State moneys are gradually being reduced and local funds are and must be increased.

Costs of the Dental Treatment Program have been repeatedly studied. The latest figures are for the year 1951 and 1952. The following table shows the comparative cost analysis of 3 different type programs:

	Children Treated	Dentist Hours	Operations	Completed Treatments	Direct and Hidden Cost*	Cost per Child	Cost per Operation	Percentage of Cases Completed
Private Office	2269	4776	16,204	1256	\$41,813.10	\$18.43	\$2.58	55.4%
Urban & Suburban Clinics	2388	4758	15,756	1909	\$46,705.10	\$19.56	\$2.96	79.9%
Trailers & Mobile Clinics	2976	5852	20,090	2241	\$61,124.20	\$20.54	\$3.04	75.3%

It can be seen that there is not too much difference in cost of operation in the 3 types of dental programs. Dentists' salaries in 1951-52 were \$6.00 per hour in private office and \$4.00 per hour in other installations. As of July 1, 1952 these salaries were increased to \$8.00 and \$6.00 respectively. Hence, future reports will undoubtedly show higher "Cost per Child" and "Cost per Operation" rates than shown above. Also, future reports will show a more detailed cost analysis than herein presented.

* These costs include dentists' salaries, supplies, assistant's salary and Central Office expenses.

The personnel carrying on the activities of the Dental Program are as follows:

- 1—Chief of Bureau of Dental Health
Sr. Public Health Physician
- 1—Assistant Chief (part-time basis)
Public Health Physician
Position unfilled from Feb. 1, 1953 to June 30, 1953, due to resignation on Feb. 1, 1953.
- 4—Dental Supervisors (Public Health Physicians)
- 1—Dental Aide
- 1—Mobile Dental Clinic Operator
- 1—Senior Clerk
- 1—Clerk-Stenographer
- 1—Clerk-Typist
- 98—Participating Dentists
(6—Full-Time Dentists)
(92—Part-Time Dentists)

Bureau of Maternal and Child Health

STAFF

In the beginning of the fiscal year 1951-52 the Program's central staff consisted of the Program Coordinator and two clerks, the Public Health Nurse Consultant in Maternal and Child Health, and a Public Health Nurse who visited hospital maternity units and maternity homes throughout the State.

Illness of the Public Health Nurse Consultant, however, left the Maternal and Child Health Program without consultant services for approximately four months. There was also a shortage of clerical service for several months because of illness. Further curtailment of staff was caused by the illness and eventual resignation of the public health nurse who visited the hospital units, thus leaving the program without personnel for this important activity.

Replacement and addition of clerical help has been provided beginning with the fiscal year 1953-54, at which time the clerical staff will consist of a senior clerk-stenographer, a clerk-stenographer and a clerk typist.

HOSPITAL ADVISORY ACTIVITY

The licensing of hospital and maternity homes in New Jersey is the function of a special Licensing Board under the Department of Institutions and Agencies, which Department is also responsible for approval of structural changes and construction of new hospitals and for the administration of funds allocated to the State under the Hill-Burton (Hospital Construction) Act.

The Maternal and Child Health Program, however, cooperates by making available to hospitals special advisory and consultation services in regard to maternity and newborn care and by exchanging pertinent information with representatives of the Department of Institutions and Agencies and the New Jersey State Board of Nursing. In this way duplication of efforts is avoided. In selected instances joint field visits were made to hospitals and maternity homes by program staff and representatives of the Division of Inspection and Licensing and the Division of Hospital Construction, both of the Department of Institutions and Agencies.

Joint meetings were also occasionally held informally for the purpose of discussing areas of mutual interest and problems and for reaching agreements upon certain standards and recommendations. It is planned to hold such meetings more regularly for the purpose of further coordination and integration of efforts.

An integral part of the Hospital Advisory Program are the routine and requested visits made to the individual hospitals and maternity homes, afford-

ing personnel observation in hospital practices and procedures relative to maternity and newborn care. At such visits existing practices and procedures are evaluated, discussed with hospital personnel, and appropriate recommendations made as indicated. Visits are followed up by letter, and if possible by another visit. These visits were made by a public health nurse with special experience and, in selected instances, by the Program Coordinator. However, this important activity had to be curtailed when the public health nurse assigned to it became ill and subsequently resigned. It is anticipated that a public health nurse consultant, especially qualified in maternity and newborn care, will be appointed in the near future, so that this valuable part of the program can be reactivated. Past experiences indicated that an average of four and one half hours (exclusive of travel time) is spent by the nurse per hospital visit. In 1952 there were 92 hospitals with maternity units. There were eight approved or provisionally approved maternity homes. In order to increase the effectiveness of the program, additional nursing personnel is needed for more frequent routine visits and particularly for follow-up visits. It is hoped to have a physician on the staff to implement and complement the nurses' visits.

HOSPITAL REPORTS

Hospitals are required to make an annual statistical report to the Department of Institutions and Agencies which includes statistical information on maternity and newborn services. These reports are made available to the Maternal and Child Health Program. Discrepancies for given items were noted between the data supplied by the individual hospitals and those obtained from the Division of Vital Statistics and Administration, particularly as related to premature deliveries. To assist hospitals to realize the need for improvement of their records and statistics and to focus their attention on the problem, a table of comparative selected hospital statistics (1951 data) was prepared with the assistance of the Division of Vital Statistics and Administration, listing the individual hospitals by code number only. The table was distributed to all hospital administrators together with an accompanying letter identifying the code number of their respective hospital and asking the administrator to discuss it with his staff. The table was also made available to the Department of Institutions and Agencies, the New Jersey Hospital Association, the Maternal Welfare Committee and the Child Health Committee of the Medical Society of New Jersey. The interest was considerable and gratifying. A similar table for 1952 data is currently in preparation by the Division of Vital Statistics and Administration and will be distributed as before.

MATERNITY HOMES

All maternity homes are subject to licensing by the Department of Institutions and Agencies.

There were eight maternity homes licensed in 1952, two of these on a provisional basis only, as compared with fifteen maternity homes licensed in 1951. The decrease in the number of approved maternity homes is the result of the adoption of minimum standards by the Licensing Board of the Department of Institutions and Agencies. These standards have to be met prior to issuance of license. The Maternal and Child Health Program assisted in the preparation of these standards. Not all of the proposed standards were adopted by the Licensing Boards as mandatory but they are referred to and recommended in the list of adopted minimum standards.

TRAINING PROJECT IN PREMATURE INFANT CARE

The training program in the care of premature infants for nurses employed in New Jersey Hospitals went into action at Mountainside Hospital, Montclair, according to plans worked out in the preceding year cooperatively with representatives of the hospital, the New Jersey Hospital Association, the New Jersey State Board of Nursing, the Medical Society of New Jersey, the Department of Institutions and Agencies, the New Jersey League of Nursing and the United States Children's Bureau. The project was financed through special funds made available by the United States Children's Bureau. A nurse instructor was employed full time by Mountainside Hospital through grants-in-aid. She was responsible for coordinating the teaching program, for the major part of the teaching load and for follow-up, by visiting the hospitals of nurses who took the course. Course content and evaluation consisted of lectures, demonstrations, practical experience in the premature nursery and field visits to premature nurseries of Presbyterian Hospital, New York, and St. Michael's Hospital, Newark, and follow-up home visits with public health nurses of the Montclair Visiting Nurse Association.

Members of the pediatric and obstetrical staff, nursing staff, nutrition and social service staff of Mountainside Hospital actively and generously participated in the teaching as well as the director of the Montclair Visiting Nurse Association and her assistant. Six courses were originally scheduled for the fiscal year, each of six weeks duration. The first course started in September 1952. Because of current shortage of nurses throughout the State and the problems involved in releasing them for a prolonged training period, it was necessary to limit the number of courses given to four, since the number of nurses who were able and interested to participate was too small to justify giving two additional courses.

MATERNAL AND CHILD HEALTH INSTITUTE FOR PUBLIC HEALTH NURSES

A maternal and child health institute was held in East Orange for public health nurses of official and non-official agencies of East Orange, West Orange, South Orange, Orange, Maplewood, Millburn and Bloomfield to which hospital nurses were also invited. The institute was sponsored and planned locally by a representative committee. Members of the State Department of Health (Metropolitan State Health District, Bureau of Maternal and Child Health, Bureau of Public Health Nursing) assisted actively in the planning and execution of the project.

The institute consisted of seven monthly sessions, each of two and one half hours duration with an average attendance of approximately forty nurses. The over-all theme was "Maternal Health," each session taking up specific aspects of the maternal health problem of particular interest to the public health nurse. Each time the subject was introduced by a speaker, group discussion followed. Conclusions arrived at by each individual group were presented by the recorder to the total attendance. Resource people gave additional comments.

A continuation of the institute is planned for 1953-54. The main theme will be "Child Health."

The purpose of in-service training in maternal and child health is to improve the competency of public health nurses in this field by keeping them abreast with new concepts and new technical and administrative developments in maternal and child health.

Institutes for public health nurses throughout the State are currently being planned for 1953-54.

HEALTH EDUCATION

Printed health education materials on maternal and child health were made available for distribution to and by public health nurses under State supervision. This method of distribution has been adopted because, due to financial limitations, materials cannot be purchased in sufficient quantity to allow unrestricted distribution to citizens upon request. Furthermore, health education materials prove much more valuable, if implemented by a visit of the public health nurse. Because of limited funds the list of materials purchased and distributed was also curtailed. It is planned to develop some leaflets of our own to replace more expensive purchased materials and to meet specific health education needs in New Jersey.

Carefully selected films, dealing mostly with emotional growth and development of children and with parent child relationship have been made available to the districts on a rotating schedule to be used for in-service training of nurses and for parent education in the field. A meeting was held with the District Consultants in Community Health Organization for the purpose

of film evaluations and to orient them to some of the specific mental health aspects and issues brought out in the films. It is anticipated that further such meetings will be held.

Detailed descriptions of all films with specific recommendations for their use are currently being prepared for use in the Districts.

MIDWIVES

The trend of steady decrease of licensed and active midwives in the State continues. The number of midwives licensed in 1952-53 was 113 as compared to 122 in 1951 and 133 in 1950.

In 1952 there were 42 active midwives delivering 222 babies. In 1951 there were 49 active midwives delivering 252 babies. In 1950 there were 67 active midwives delivering 328 babies.

The babies delivered by midwives in 1952 represented 0.2% of the New Jersey resident births.

In 1919, when the State Department of Health assumed supervision of midwives, they numbered 900 and delivered 49% of the State's births. The maximum number of babies delivered by any one midwife was 36. Only 5 midwives delivered more than 10 babies during the year and there were 11 midwives who delivered only one (1) baby in 1952. Three of the midwives listed as delivering one baby each were not licensed.

The distribution of active midwives by counties was as follows:

County	Number of Active Midwives
Atlantic	1 (unlicensed)
Bergen	4
Burlington	1 (unlicensed)
Camden	4 (1 unlicensed)
Essex	10
Hudson	4
Middlesex	9
Morris	1
Passaic	2
Somerset	2
Sussex	1
Union	3

MISCELLANEOUS ACTIVITIES OF PROGRAM COORDINATOR

Lectures: The Maternal and Child Health Program Coordinator participated in the actual teaching at the Premature Training Center by giving the lecture on the health aspects of prematurity. A lecture on prematurity was also presented at the Maternal and Child Health Institute for public health nurses in the Oranges and Maplewood area. A paper, "Teachers

Health, Findings and Recommendations," was presented at the Cleveland meeting of the American Public Health Association in October 1952.

Program Writing: A considerable portion of the program coordinator's time was devoted to writing and revising a program plan and implementing procedures as part of the Departmental Project for the combined U. S. Public Health Service and U. S. Children's Bureau plan for the 1954-56 period.

Medical Society Committees: The program coordinator as an active member of the Maternal Welfare Committee, the Child Health Committee and the newly established Neonatal Mortality Subcommittee of the Medical Society of New Jersey, represented the Department on these committees.

New Jersey Council for Improvement of School Health Services: The program coordinator represented the Department on the Council and its Executive Committee. The Council's purpose is to improve School Health Services throughout the State.

Child Safety: A project has been initiated in home accident prevention among infants and young children. This project will be under the auspices of the New Jersey Congress of Parents and Teachers. It will consist of the distribution of a self-administered questionnaire to the entire parent teachers association membership. Collection and analysis of results in anticipated. The project will have the cooperation of the New Jersey Safety Council, the New Jersey Academy of Pediatrics and the Child Health Committee of the Medical Society of New Jersey.

FIELD ACTIVITIES ON LOCAL LEVEL

The administration of maternal and child health activities on the local level, where State supervised, is the responsibility of the State Health Districts. It is of interest to consider some of these activities on a state wide basis.

There were 255 local public health nurses under District supervision. These nurses attended 12,982 prenatal cases and made 36,147 visits to these prospective mothers, averaging approximately 3 visits per case. They reported as having attended 23,381 postpartum cases in 48,236 visits, averaging approximately 2 visits per case. These figures indicate that the nurses attended about twice as many postpartum as prenatal cases and that comparatively few contacts are made with the prenatals carried on the case load. There were 446 fewer prenatal cases and 953 more postpartum cases reported on the nurses' case load than in the preceding year.

If we consider public health nursing services as an important factor in good prenatal care and if we further consider that good prenatal care is probably one of the most significant approaches toward the reduction of pre-

maturity, stillbirths and perhaps even neonatal mortality, more emphasis will need to be placed on locating and working with prenatal cases. Since the work load of the individual nurse is great, emphasis on case selection on basis of priorities is essential. An increase of group activities may, to some extent, alleviate the problem.

The nurses rendered services to 27,624 infants in 170,528 visits, averaging approximately 7 visits per infant. They had 21,790 preschool children under their care, making 156,132 visits to them, an average of approximately 7 visits per child. They had 184 more infants but 3,118 less preschool children under their care than in 1951.

Altogether they made 326,660 visits to infants and preschool children in 1952 as compared to 359,420 such visits reported for 1951, amounting to a decrease of approximately 10%.

The generalization of public health nursing services resulting in increased activities in other areas than in maternal and child health work is probably to a large extent responsible for this change. It is very important to offer nurses in the field adequate supervision and in-service training so that case load and visits may be carefully selected on basis of priorities and needs.

The State Health District Offices reported that 4,943 infants and 4,170 preschool children were in attendance at 112 Baby Keep-Well Stations under their supervision. These infants averaged 3.5 visits and the preschool children averaged 3 visits to the stations.

The nurses who participated in school health services, supervised 127,533 school children. They made 39,958 home visits to these children; assisted school physicians at 82,821 examinations; did inspections themselves, and participated in the teaching of 26 Child Hygiene League classes.

ANALYSIS OF VITAL STATISTICS

In the following portion of this report all statistical tables and data presented were assembled and prepared by the Division of Vital Statistics and Administration. For additional statistical information refer to the report of the Division of Vital Statistics and Administration.

BIRTHS

The 110,215 resident live births reported in 1952 represented a crude birth rate of 23.9 per 1,000 estimated population (see table 1). Of the total number of births 10,454 were births to non-white mothers—approximately 9.5 per cent of the total. This is of interest since the 1950 census indicated that the non-white cases represented only 5.7 of the total population.

The births occurring in New Jersey numbered 106,047 (see table 2). Of these 7,511 or 7.1 per cent were premature babies (2,500 grams or less). For 914 births the weight was not stated on the birth certificate.

TABLE 1
LIVE BIRTHS; INFANT AND MATERNAL DEATHS (NO. AND RATE)

	BY COUNTY OF RESIDENCE					
	NEW JERSEY, 1952					
	<i>Live Births</i>	<i>Infant Deaths No.</i>	<i>Rate a</i>	<i>Maternal Deaths No.</i>	<i>Rate a</i>	
New Jersey	110,215	2,633	23.9	70	0.6	
Atlantic County	2,783	64	23.0	6	2.2	
Bergen County	13,570	280	20.6	7	0.5	
Burlington County	3,060	81	26.5	2	0.7	
Camden County	7,177	183	25.5	3	0.4	
Cape May County	700	18	25.7	1	1.4	
Cumberland County	2,117	63	29.8	2	0.9	
Essex County	18,523	499	26.9	21	1.1	
Gloucester County	2,290	59	25.8	..	..
Hudson County	13,353	307	23.0	8	0.6	
Hunterdon County	936	27	28.8	2	2.1	
Mercer County	5,130	129	25.1	4	0.8	
Middlesex County	7,179	176	24.5	3	0.4	
Monmouth County	5,512	134	24.3	1	0.2	
Morris County	3,909	85	21.7	1	0.3	
Ocean County	1,345	27	20.1	1	0.7	
Passaic County	7,223	137	19.0	4	0.6	
Salem County	1,205	44	36.5	..	..
Somerset County	2,567	49	19.1	1	0.4	
Sussex County	821	25	30.5	..	..
Union County	9,153	188	20.5	3	0.3	
Warren County	1,211	38	31.4	..	..
State Institutions	6	..	..	..	..
Military Establishments	445	20	b	..	..
State Health Districts:						
Metropolitan	61,822	1,411	22.8	43	0.7	
Northern	9,444	224	23.7	4	0.4	
Central	22,226	547	24.6	11	0.5	
Southern	16,272	431	26.5	12	0.7	

a Expressed per 1,000 live births. When based upon small numbers, rates are unreliable for comparative purposes unless standard errors of rates are computed and considered.

b Due to small numbers, rates are not computed.

TABLE 2
 BIRTHS IN NEW JERSEY BY WEIGHT GROUPS, BY SPECIAL AGE GROUPS OF MOTHER: 1952

AGE GROUPS	Total	WEIGHT GROUPS						Weight not Stated
		5 lbs. 9 ozs. and over	4 lbs. 7 ozs. to 5 lbs. 8 ozs.	3 lbs. 5 ozs. to 4 lbs. 6 ozs.	2 lbs. 3 ozs. to 3 lbs. 4 ozs.	1001-1500 Grams	less than 2 lbs. 3 ozs. under 1000 Grams	
All Ages	106,047	97,622	5,085	1,406	580	440	914	
10-14	56	49	4	1	...	1	78	
15-19	6,156	5,505	371	116	49	37	287	
20-24	29,493	27,137	1,460	363	132	114	245	
25-29	35,491	33,011	1,512	415	172	136	197	
30-34	22,971	21,137	1,088	319	135	95	78	
35-39	9,773	8,879	541	159	71	45	24	
40-44	2,014	1,827	100	32	20	11	3	
45-49	91	76	1	...	1	...	1	
Unknown	2	...	...	...	...	...	...

RESIDENT INFANT DEATHS

In 1952, New Jersey acquired 110,215 live-born babies. During the same year, the State lost by death 2,633 infants. This loss occurred at the rate of 24 infants for each 1,000 live births.

In table 3, the 2,633 infant deaths are considered in terms of causes with public health significance and causes without public health significance. Of these deaths, 96 per cent or 2,533 were charged to causes which should be of concern to public health workers. Of these, 566 (22 per cent) were classified as prematurity unqualified. If clinical and pathological examinations had been emphasized more, perhaps specific causes could have been discovered. An additional 555 deaths, designated with immaturity, had causes assigned. This advance in cause assignment is made possible through the use of the 6th Revision of the International List.

For the first time, congenital malformations are included in the causes with public health significance. As a result of congenital malformations, 432 infants died. That represents 17 per cent of all infant deaths of special interest to public health workers. The cause and prevention of congenital malformations require a research approach.

Public health workers should also be concerned with the 321 infant deaths classified as diseases of the respiratory system. This figure includes 100 deaths from pneumonia of the newborn.

More than 11 per cent of the deaths assigned to causes which are thought to have public health significance were charged to birth injuries. This is an obstetrical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. In 1952, only 70 women died of causes allocated, according to the rules of the International List, to pregnancy, delivery and the puerperium. This is a rate of 6 maternal deaths for each 10,000 live births.

In 1952, New Jersey lost 33 infants by accidental mechanical suffocation in bed or cradle and an additional 23 from causes classified as diseases of other endocrine glands. Studies have shown that diagnoses in these categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider such deaths from the autopsy records in the hospitals.

If New Jersey's live-born babies die, they experience death early in their brief existence.

TABLE 3
RESIDENT INFANT DEATHS BY CAUSE AND AGE GROUPS
(Separated Into Those With and Those Without Public Health Significance)
NEW JERSEY, 1952

Showing International List (6th Revision) Numbers	Cause of Death	Total Infant Deaths	Less Than 1 Day	1 Day But <1 Week	1 Week But <28 Days	28 Days and Over
ALL CAUSES (901-999)		2,633	914	773	226	670
Total causes with public health significance		2,533	956	765	217	595
Prematurity, unqualified (774-776)		566	342	184	29	11
Postnatal asphyxia and aelectasis (762)		510	258	224	20	8
Without immaturity		190	92	83	11	4
With immaturity		320	166	141	9	4
Congenital malformations and congenital diseases of the nervous system (325, 750-759)		432	101	113	72	146
Diseases of the respiratory system (470-527, 763)		321	8	49	41	223
Pneumonia of the newborn (763)		100	7	39	24	5
Without immaturity		73	7	9	15	3
With immaturity		27	1	9	2	2
Other diseases of the respiratory system (470-527)		221	152	111	2	218
Birth injuries (760-761)		281	81	70	8	6
Without immaturity		163	71	41	4	4
With immaturity		118	5	4	11	2
Diseases of the digestive system (530-587, 764)		97	12	9	9	77
Diarrhea of the newborn (764)		12	.....	.....	.....	3
Without immaturity		9	.....	.....	.....	3
With immaturity		3	.....	.....	.....	.....
Other diseases of the digestive system (530-587)		85	5	4	2	74
Hemolytic disease of the newborn (770)		68	26	30	6	6
Without immaturity		60	23	26	5	6
With immaturity		8	3	4	1	.....
External causes other than mechanical suffocation (800-923, 925-999)		53	6	1	3	43
Infective and parasitic diseases (901-138)		28	3	1	.....	24
Hemorrhagic disease of the newborn (771)		26	5	18	3	.....
Without immaturity		14	5	7	2	.....
With immaturity		12	.....	11	1	.....
Other causes with public health significance		151	50	30	20	51
Accidental mechanical suffocation in bed or cradle (924)*		33	.....	.....	2	28
Avitaminoses and other metabolic diseases (280-289)		4	.....	.....	2	2
Ill-defined diseases of early infancy (772-773)		90	42	23	7	18
Without immaturity		36	11	7	1	17
With immaturity		54	31	16	6	1
Other diseases of early infancy (765-769)		24	8	7	6	3
Without immaturity		11	3	3	2	3
With immaturity		13	5	4	4	.....
Total causes without public health significance		100	8	8	3	75
Diseases of the nervous system and sense organs (330-398)		36	2	5	0	26
Diseases of other endocrine glands (270-277)*		23	1	1	2	19
Neoplasms (140-239)		9	1	1	1	6
Diseases of the circulatory system (400-468)		8	.....	.....	.....	8
Diseases of the blood and blood-forming organs (290-299)		8	.....	.....	.....	8
Diseases of the genito-urinary system (590-637)		4	.....	.....	.....	4
Diseases of the skin and cellular tissue (690-716)		3	.....	.....	.....	3
Other diseases of thyroid gland (254)		2	.....	.....	.....	2
Asthma (241)		1	.....	.....	.....	1
Symptoms and ill-defined conditions (780-789, 795)		6	.....	.....	.....	4

* On the basis of studies made, it has been found that diagnoses in this category are subject to 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 1,121 infant deaths. The age distribution was as follows: under 1 day, 619; 1 day but under 1 week, 410; 1 week but under 28 days, 72; 28 days and over, 20.

TABLE 4
INFANT DEATHS BY AGES AND IMMATURETY
NEW JERSEY, 1952

Age	Total		Immature on death certificate		Not designated immature	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
< 1 day	964	36.6	619	55.2	345	22.8
< 1 week	1,737	66.0	1,029	91.8	708	46.8
< 28 days	1,963	74.6	1,101	98.2	862	57.0
< 1 year	2,633	100.0	1,121	100.0	1,512	100.0

Of the babies who died in 1952, 37 per cent failed to live beyond the first day of life. Before one week elapsed, 66 per cent of the 2,633 babies had died. Before the end of the neonatal period (28 days), 75 per cent of the 2,633 babies had died.

The immature babies so designated on their death certificates contributed 1,121 or 43 per cent of the total infant deaths in 1952. Of these 1,121 babies, 55 per cent died within the first day of life. The immature babies dying within their first day of life accounted for 64 per cent of all infant deaths occurring within the first day of life. Before attaining one week of age, 92 per cent of these 1,121 immature babies had failed to survive. Over 98 per cent of the immature babies who died did so before attaining 28 days of age. This contrasts sharply with the 57 per cent of the mature babies who died during their neonatal period.

STILLBIRTHS

Two thousand and two resident stillbirths were reported for New Jersey (see tables 5, 5a, 5b). These included 1,699 white and 295 non-white stillbirths and 8 stillbirths of unknown color. Of these 30% were mature babies, 43% were premature babies (2,500 grams or less). On 27% of the stillbirth certificates no weight was stated, which indicates that we need better completion of stillbirth certificates. As anticipated, the higher incidence of stillbirths in all weight categories occurred in the mothers of the 25-29 years age group, which is the peak of the child-bearing period.

TABLE 5
TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952
NEW JERSEY

Weight	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 ozs. and over	600	...	29	113	178	145	100	31	3	1
2500 grams										
4 lbs. 7 ozs. to										
5 lbs. 8 ozs. incl.	189	...	15	36	44	57	29	7	1	...
2001-2500 grams incl.										
3 lbs. 5 ozs. to										
4 lbs. 6 ozs. incl.	140	...	8	24	46	32	24	6	...	...
1501-2000 grams incl.										
2 lbs. 3 ozs. to										
3 lbs. 4 ozs. incl.	197	...	15	49	56	43	25	6	1	2
1001-1500 grams incl.										
less than 2 lbs. 3 ozs.	330	1	30	79	93	67	41	18	...	1
less than 1000 grams										
Unknown	^a 546	...	21	103	157	132	81	28	2	^a 22
Total	^a 2002	1	118	404	574	476	300	96	7	^a 26

^a Includes eight stillbirths of unknown color.

TABLE 5a.
WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952
NEW JERSEY

Weight	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 ozs. and over										
over										
2500 grams	532	...	20	103	156	130	88	31	3	1
4 lbs. 7 ozs. to										
5 lbs. 8 ozs. incl.	157	...	7	28	40	50	26	5	1	...
2001-2500										
grams incl.										
3 lbs. 5 ozs. to										
4 lbs. 6 ozs. incl.	120	...	5	17	43	28	21	6	...	...
1501-2000										
grams incl.										
2 lbs. 3 ozs. to										
3 lbs. 4 ozs. incl.	156	...	3	35	47	37	25	6	1	2
1001-1500										
grams incl.										
less than										
2 lbs. 3 ozs.										
less than	273	...	15	61	82	62	36	16	...	1
1000 grams										
Unknown	461	...	10	88	133	115	76	25	1	13
Total	1699	...	60	332	501	422	272	89	6	17

TABLE 5b.
NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952
NEW JERSEY

Weight	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 ozs. and over										
over										
2500 grams	68	...	9	10	22	15	12	...	...	...
4 lbs. 7 ozs. to										
5 lbs. 8 ozs. incl.	32	...	8	8	4	7	3	2	...	...
2001-2500										
grams incl.										
3 lbs. 5 ozs. to										
4 lbs. 6 ozs. incl.	20	...	3	7	3	4	3	...	...	...
1501-2000										
grams incl.										
2 lbs. 3 ozs. to										
3 lbs. 4 ozs. incl.	41	...	12	14	9	6	...	...	...	...
1001-1500										
grams incl.										
less than										
2 lbs. 3 ozs.										
less than	57	1	15	18	11	5	5	2	...	...
1000 grams										
Unknown	77	...	11	15	24	17	5	3	1	1
Total	295	1	58	72	73	54	28	7	1	1

ILLEGITIMATE BIRTHS

There were 2,493 illegitimate births reported among New Jersey residents. This represents 2.3 per cent of the total number of births for the State, the same as in the preceding year.

TABLE 6.

ILLEGITIMATE BIRTHS BY AGE OF MOTHER

	35						
	All Ages	10-14	15-19	20-24	25-29	30-34	& Over
Number of Illegitimate Births	2,493	46	922	843	389	169	118
Per cent of Illegitimate Births	100	1.8	37.0	34.0	15.6	6.8	4.7

The percentage figure for total illegitimate births has not changed appreciably over the past decade, but the actual number of such births was 861 or almost 53% higher than the 1942 figure.

Efforts to help these mothers must accordingly receive greater consideration. There is still much to be done to provide adequate social service and medical care for unmarried mothers. Coordinated planning of medical, public health and social service groups on State and local level is essential for developing the needed facilities and services for the necessary prenatal care and postpartum follow-up of these mothers and their babies.

Of the 99,761 births in 1952 to white mothers, 1,085 or 1.1 per cent were reported as illegitimate. Of the 10,454 births to non-white mothers 1,408 or 13.5 per cent were listed as illegitimate.

MATERNAL MORTALITY

Of the 80 women who died during pregnancy, delivery or the postnatal period in 1952, only 70 women died of causes allocated to pregnancy, delivery and the puerperium according to the rules of the International List (see tables 7 and 8). This is a rate of 6 maternal deaths for each 10,000 live births, the lowest rate ever attained in the State.

But the maternal death rate in New Jersey has as yet not reached the irreducible minimum as can be seen from field physicians' reports. The approach to this problem is to:

1. Educate our women to realize the importance of seeking early and adequate prenatal care.
2. Provide the best possible maternal care.
3. Have necessary facilities, equipment, supplies and blood available for any emergency.

TABLE 7.

MATERNAL DEATHS BY SPECIFIC CAUSE

NEW JERSEY, 1952

Other infections of genito-urinary tract during pregnancy (641)	1
Toxemias of pregnancy (642)	20
Other hemorrhage of pregnancy (644)	1
Ectopic pregnancy (645)	3
Total complications of pregnancy (640-649)	25
Abortion without mention of sepsis or toxemia (650)	4
Abortion with sepsis (651)	2
Abortion with toxemia, without mention of sepsis (652)	2
Total abortions (650-652)	8
Delivery complicated by placenta praevia or antepartum hemorrhage (670)	4
Delivery complicated by retained placenta (671)	1
Delivery complicated by other postpartum hemorrhage (672)	4
Delivery complicated by disproportion or malposition of fetus (674)	4
Delivery complicated by prolonged labor of other origin (675)	3
Delivery with other trauma (677)	1
Delivery with other complications of childbirth (678)	2
Total delivery with specified complications (670-678)	19
Sepsis of childbirth and the puerperium (681)	1
Puerperal phlebitis and thrombosis (682)	3
Puerperal pulmonary embolism (684)	4
Puerperal eclampsia (685)	6
Cerebral hemorrhage in the puerperium (687)	2
Other and unspecified complications of the puerperium (688)	2
Total complications of the puerperium (680-689)	18
Total Maternal Deaths	70

TABLE 8.

MATERNAL DEATHS BY CAUSE, COLOR, AND AGE GROUPS

NEW JERSEY, 1952

Cause* and Color	All Ages	Age Groups	
		15-24	25-44
Complications of Pregnancy (640-649)	25	10	15
White	14	4	10
Non-white	11	6	5
Abortion (650-652)	8	3	5
White	5	3	2
Non-white	3		3
Delivery with Specified Complications (670-678)	19	2	17
White	17	1	16
Non-white	2	1	1
Complications of the Puerperium (680-689)	18	3	15
White	16	2	14
Non-white	2	1	1
All Causes (640-689)	70	18	52
White	52	10	42
Non-white	18	8	10

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

Nutrition Program

The Nutrition Program Coordinator continued to familiarize public health personnel with the dynamic developments in the field of public health nutrition. In addition, efforts were continued in integrating nutrition in the several Department programs. Much time and effort was devoted to the preparation of an official Department Nutrition Program and Procedure Manual.

While the Program Coordinator was doing graduate study at Columbia University School of Public Health from September through May, the District Nutritionist of the Southern State Health District attended the essential State conferences, staff meetings and special institutes, ordinarily covered by the Program Coordinator.

A State-wide "Better Breakfast Week" was celebrated in October under the sponsorship of the Medical Society of New Jersey. The State Nutritionist participated in the pre-planning conferences, and assisted the project by giving talks and furnishing nutrition education materials and films, which were subsequently used throughout the State by lay and professional groups. Public Health nurses, especially those who also held school positions, were urged by the Nutritionist to stimulate interest in this project with worthwhile results.

In December the Nutritionist represented the Department at the National Food and Nutrition Institute in Washington, D. C.

At the Cardiovascular Institutes sponsored by the Department and held in Trenton and Paterson, the District Nutritionist participated in the absence of the State Nutritionist.

In association with the Red Cross, County Home Agent, Public Service Home Economist and others, the Nutritionist assisted in the planning of a Mass Feeding Institute, which was held for the River (Civil Defense) Area.

At the request of Dr. Winthrop Phelps, Consultant for the Crippled Children Program, the diets of several cerebral palsied children attending the State Diagnostic Cerebral Palsy Clinics were evaluated by the Nutritionist of the Southern State Health District and plans made to consult regularly with the Crippled Children Public Health Nurse Supervisor, the local contract nurse agencies and parents.

During the summer, a team consisting of a sanitarian and nutritionist visited all camps listed in the Southern State Health District, and found conditions to be very unsatisfactory relative to nutrition arrangements and food preparation. Recommendations for improvements were submitted by the Nutrition Program Coordinator for inclusion in the Procedure Manual of the Department Camp Program.

In-service training of public health nurses was continued by means of home visits, consultations, and conferences. All new films and pamphlets from outside sources were carefully reviewed and evaluated before being made available for use by Department personnel. Mounded sample copies of educational materials available through the Nutrition Program have been placed in each State Health District Office.

A number of nutrition exhibits were prepared jointly with the Bureau of Administrative Services for use at professional meetings and for in-service training programs of professional and lay organizations.

Report of the Division of Environmental Sanitation

July 1, 1952—June 30, 1953

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

Bureau of Food and DrugsMILTON RUTH
Chief

Bureau of Public Health EngineeringROBERT S. SHAW, B. S. E., M. P. H.
Chief

Bureau of Veterinary Public HealthOSCAR SUSSMAN, D. V. M., M. P. H.
Chief

Division of Environmental Sanitation

The broad objective of the Division of Environmental Sanitation is to influence the planning, designing, construction, maintenance and operation of the physical elements upon which individuals and communities depend for healthful living and to protect them from animal diseases that are transmissible to man. Such elements include water supplies, sewage disposal systems, garbage and refuse disposal, food establishments, housing, and those activities which disturb the soil and change the topography of the land when such activities adversely affect public health and control of the zoonoses including the control of insects and rodents. Before describing in more detail the specific programs, some of the over-all activities of the Division are outlined briefly including the work of advisory committees, the organizations of institutes, the issuance of information bulletins and the participation of representatives of the Department on national committees.

ADVISORY COMMITTEES

Four of ten advisory code committees which have been active in drafting codes for adoption by reference have completed their work and three of these codes have been published in Public Health News with the recommendation that they be adopted by local communities. The completed codes are: Retail Food Handling, Fluoroscopic Shoefitting (established as a Chapter of the State Sanitary Code), Smoke Control, and Weed Control. A fifth committee on nuisances has completed its work, except for final review, before being recommended for adoption by the Department. Two other code committees, one on individual sewage disposal systems and the other on plumbing, have completed codes covering in considerable detail these two fields of environmental sanitation. These are undergoing final legal review and should be ready for recommendation by the Department soon. The seventh committee, on industrial and commercial water supplies, is approaching completion and should be ready for review by the legal department soon. Two committees covering tourists and trailer camps, and swimming pools have been delayed in their work due to the pressure of other important work. It is expected that these committees will become active within the next few months. A committee to establish standards on garbage and refuse disposal was appointed December 29, 1952. The main committee at its first meeting was organized into three subcommittees and they have been active during the past six months. All subcommittees have completed written reports. A report of the main committee is now in preparation.

A group of consultants representing realty interests, municipalities, the Society of Professional Engineers and the Planning Division of the State Department of Conservation and Economic Development were appointed by the Department to work together in the development of a proposed State law governing sanitary facilities at realty subdivisions. A bill known as A-462 was introduced by the realty interests and had the support of the Department. It did not pass at this session of the Legislature. An interim program was agreed to by a combined group called together by the Department and representing those who originally drafted A-462, the Advisory Code Committee which drafted the Individual Sewage Disposal Code, and the State Department of Health. In addition this group went on record as favoring the re-introduction of this legislation at the next session of the State Legislature by the realty interests.

An advisory committee was established on June 29, 1953 to revise Title 24. This Title includes the food and drug laws under which this program of the Department is carried out. The main advisory committee has been organized into the following four subcommittees: milk and ice cream, meat, food, and drugs. These committees are endeavoring to complete their assignments in time to submit recommended changes to Title 24 to the next session of the State Legislature.

The Advisory Committee on Animal Diseases Transmissible to Man has met on five occasions to consider problems concerning rabies, brucellosis, trichinosis and vesicular exanthema. The specific recommendations made by this committee have been indispensable to the Department in the development and improvement of the programs to control these diseases.

INSTITUTES

Three institutes were conducted during the year for the Department by the Division of Environmental Sanitation. A two-day Institute on Weed Control conducted in cooperation with the Agricultural Research Experiment Station at Rutgers was attended by 125 people. A one-day Fluoridation Institute presented in Trenton attracted 100 people. Approximately 70 people participated in a four-day Rodent and Insect Institute given in cooperation with the United States Public Health Service and held in Newark, New Jersey.

INFORMATION BULLETINS

Information bulletins are issued from time to time on problems of current interest in order to advise as to the attitude of the State Department of Health on particular problems. These are usually brought to our attention by local health officials. Information Bulletin No. 4 was issued this year covering the policy of the State Department of Health with reference to the approval of

food equipment for use in New Jersey. In brief, it accepts food equipment which is approved by the National Sanitation Foundation, the United States Public Health Service and the Three A Committee of the International Association of Milk and Food Sanitarians. An effort is made to make such standards available to district and local health officials as they are approved.

PARTICIPATION ON NATIONAL COMMITTEES

Members of this Division have been active on national committees in the field of environmental sanitation. A representative of the Division is a member of the Council of Consultants of the National Sanitation Foundation and has been active in the preparation of national food equipment standards.

Representatives of this Department were very active several years ago together with representatives of national public health organizations in bringing about some basic changes in the philosophy and program of the United States Department of Agriculture in poultry inspection. One of these changes was the appointment of a joint committee of industry and health officials to advise the Department of Agriculture relative to any proposed changes in regulations in order to assure them that such changes would be in general accord with sound public health procedures.

A representative of this Division is a member of a Joint Committee on Housing of the American Public Health Association and the National Association of Housing Officials. This committee is endeavoring to bring about joint effort between two National Associations in the field of housing.

This Division was also represented on a Subcommittee on State and Local Health Administration of the Committee on Administrative Practice of the American Public Health Association and on a Sanitation Study Group of that Committee.

Another representative of this Division is active on a Rabies Control Committee of the American Veterinary Association. Still another member is active on a Public Health Committee of the United States Livestock Sanitary Board. These are examples of some of the activities of members of this Division contributing toward the development of national standards and programs. Not only does the State make a contribution toward the development of sound national programs but benefits accrue to the State as these representatives are exposed to the thinking and experience of other sections of the country on these problems.

The activities of the Division of Environmental Sanitation during the year can be grouped into the following twelve programs:

<i>Engineering</i>	<i>Food and Drugs</i>	<i>Veterinary Public Health</i>
Bathing	Mill and Milk Products	Animal Diseases
Housing	Shellfish	Insects and Rodents
Potable Water	Foods	
Solid Waste Disposal	Drugs	
Stream Pollution Control		
Ragweed and Poison Ivy Control		

Bureau of Food and Drugs

State laws and departmental rules and regulations designed to prevent the adulteration and misbranding of foods, drugs, devices and cosmetics and laws and regulations intended to prevent the improper handling, preparation, storage and transportation of such products are enforced by the several programs in this field of sanitation. Licenses, permits or certificates are issued to those who meet the standards set by the department.

The following table shows licenses, permits and certificates issued and revenue derived by this department:

<i>Establishment</i>	<i>Licenses</i>	<i>Permits</i>	<i>Certificates</i>	<i>Revenue</i>
Milk Plant		565		\$14,125.00
Goat Milk Plant		22		189.18
Refrigerated Warehouse and/or Locker Plant	98			4,550.00
Ice Cream Factory	941			8,990.00
Narcotic Drug Plant	58			695.00
Creamery and/or Cheese Factory ..	65			No fee
Egg-Breaking Plant	14			No fee
Non-Alcoholic Beverage Bottling Plant	206			No fee
Slaughterhouse	141			No fee
Shellfish Interstate Shipping Plant ..			253	No fee
Shellfish Intrastate Shipping Plant ..			82	No fee
	1,523	587	335	\$28,549.18

During the year, \$1,550.00 was collected in penalties for violations of the Food and Drug laws.

The following table shows types and numbers of establishments engaged in the manufacture, processing, handling, storage and sale of foods and drugs inspected by representatives of this department during the past year.

<i>Type of Establishment</i>	<i>Total</i>
Bakeries	59
Candy Factories	45
Canneries	65
Creameries	184
Dairy Farms:	
(a) Delivering to Pasteurizing Plants—in state	849
out of state	2,060
(b) Producer-Distributor (Raw Milk)	68
(c) Goat Dairy	57
Drug Manufacturing Establishments	28
Eating Establishments	135
Egg Breaking Plants	33
Flour Mills	2
Food Markets (Retail)	54
Food Warehouses	34
Frozen Food Processing Plants	15
Goat Milk Plants	4
H. T. S. T.	27
Ice Cream Plants	1,060
Meat Processing Plants	34
Milk Plants—in state	560
out of state	94
Miscellaneous Food Establishments	49
Non-Alcoholic Beverage Bottling Plants	205
Pickling Plants	23
Poultry Slaughtering Plants	2
Refrigerated Warehouses and Locker Plants	178
Shellfish Establishments (Wholesale or Shucking)	664
Slaughterhouses	260
	6,793

LEGISLATION

Assembly Bill A-615, defining and setting standards for non-fat milk and non-fat fortified milk, was reviewed and no objections were raised. These definitions and standards will supplement the existing definition for skimmed milk and permit the fortification of non-fat milk with minimum quantities of vitamins A and D.

All of the sections of Title 24 dealing with penalty and court proceedings were revised by Chapter 24, Public Laws of 1953, to bring them into conformity with the State judicial system and procedures.

The State Sanitary Code was revised by the Public Health Council to bring the requirements for the production and handling of certified milk up to date and to require that milk for use or sale in New Jersey must be obtained from dairy animals free of brucellosis by April 1, 1958.

Acting under authority contained in Chapter 177, Laws of 1947, the department issued amended rules and regulations for the administration of R. S. 24:2-1 and 24:14-2 relating to the taking of shellfish from condemned waters. The new rules were promulgated to consolidate existing rules and regulations issued over a period of years. In addition, one new area—a portion of the Navesink River, Monmouth County—was condemned on a year-round basis instead of seasonally.

MILK AND MILK PRODUCTS

Through the training received at the Field Training Centers and by working with Public Health Service personnel, four sanitarians are now approved by the Public Health Service for rating milk plants and supplies for interstate shipments. In turn, these sanitarians have been training other field personnel in rating techniques so that the number of sanitarians qualified for work in evaluating official health agency milk programs will be greatly increased during the next year. The ability of the approved raters to determine and eliminate weak spots in official health agency milk programs will strengthen those programs and make it easier to develop broader cooperation with other health agencies.

Representatives of the Paterson and Jersey City Health Departments have joined with the Newark Health Department and the State Health Department in discussing plans for establishing reciprocal agreements between the agencies named.

A training course was held for sanitarians of the above departments in the testing and inspection of high temperature short time pasteurizing units, followed by field work on units in plants under supervision.

New rating forms for milk plants and dairy farms were developed along with a manual of interpretation of requirements. These materials, after considerable field trials, are ready for final revision and printing.

This department has already accepted 173 reports of out-of-state plant inspections and 100 reports of inspection of plants located in New Jersey from 3 local health agencies known to have comparable standards of inspections. This type of reciprocal inspection acceptance will continue and increase if present plans for a joint system of inspections and checking are consummated.

Proposed requirements for "Bulk Tank Farm Pickup" systems have been prepared for adoption.

"Cleaning-In-Place" of sanitary pipes in milk plants and on dairy farms is being studied by a joint committee of the New Jersey Health Officers Association and the State Health Department for the purpose of setting up requirements if the method proves acceptable. Three plants and several farms have been permitted to use this cleaning method on an experimental basis with sufficient variations in each system to insure complete data for study during and at the completion of the experiment.

A shortage of fluid milk developed in August and it was necessary to reclassify some permits to fluid milk classification during the emergency period in order to assure an adequate supply of milk to New Jersey consumers.

Reports of anthrax occurring in two dairy herds were received during the year. Personnel of the State Department of Health and the State Department of Agriculture cooperated in applying control measures to reduce the possibility of spread of the disease. Included in the control were the application of embargoes and quarantines on the animals and animal products, the destruction of diseased carcasses and suspected milk, and the disinfection of premises, equipment and utensils.

SHELLFISH

The harvesting, handling and sale of shellfish (clams, mussels and oysters) in New Jersey is regulated by the department under authority contained in Chapter 14 of Title 24 of the Revised Statutes and regulations adopted pursuant thereto.

Regulatory procedure requires patrolling of condemned bodies of water to prevent removal and sale of polluted shellfish, collection of samples of water from approved and condemned areas for bacteriological analyses, collection of shucked shell stock samples for bacteriological analyses and sanitary inspection of all types of establishments handling shellfish wholesale.

During the year, the department, assisted by personnel of the New Jersey State Police, Division of Shellfisheries, and New York State Conservation Department, succeeded in breaking up the growing practice of harvesting clams in condemned portions of the Raritan and Sandy Hook Bays. Although numerous boat operators were alleged to be violating various statutes, the apprehension of six persons aboard two boats on one night, followed by their immediate arrest and seizure of the vessels, caused illegal shellfishing to cease. The boats were seized for violation of conservation laws and all persons arrested were charged with violating laws prohibiting the removal of shellfish from condemned areas, the harvesting of shellfish between sunset and sunrise, the use of power equipment in harvesting shellfish and resisting arrest and two individuals were charged with clamming without a license. Although trial of the violators had not been completed at the end of the fiscal

year, the department has been commended by the legitimate shellfishers for its part in the vigorous and effective control of illegal shellfishing.

The above activity was supplemented by frequent patrolling of other condemned bodies of water in the state which resulted in the apprehension of numerous other individuals in the act of harvesting contaminated shellfish. In each case departmental personnel supervised the return of shellfish to the water from which removed, and the individuals were ordered in writing to discontinue the violation of shellfish laws enforced by this department. Twenty-two registered letters of warning issued from the department in the above matter. Recommendations were made to the Attorney General's office for institution of legal proceedings for collection of penalties in the case of three chronic violators and two penalties of \$100 each were collected by the Attorney General without court action. Action against the third individual is pending.

A portion of the Navesink River in Monmouth County formerly approved for the taking of shellfish from November 16 to March 31 was condemned for the removal of shellfish for twelve months of the year because of the increase in pollution of these waters. The order prohibiting the removal of shellfish was filed with the Secretary of State on November 14, 1952 and became effective on November 17, 1952. Subsequently all of the rules and regulations relating to the taking of oysters, clams and mussels were consolidated into one list, filed with the Secretary of State on April 2, 1953 and became effective on April 6, 1953. Notice of the new rules and regulations were forwarded to newspapers, local boards of health, industry groups and other interested agencies.

An extensive bacteriological survey of the quality of the waters of Raritan and Sandy Hook Bays was begun in cooperation with the United States Bureau of Marine Fisheries of the New York State Department of Conservation. It is planned to secure a representative number of samples at various stages of the tide during the four seasons of the year in order to secure year round statistics. The project will not be completed until early in 1954.

During the year the following samples of shellfish waters, potable waters and shellfish products were collected for analyses:

Shellfish waters	3,050
Potable waters	202
Shell oysters	373
Shucked oysters	388
Hard clams	917
Soft clams	172
Mussels	1
	5,103

FOOD OTHER THAN MILK AND SHELLFISH

Inspection of food establishments to determine compliance with sanitary requirements and labeling and adulteration provisions of laws and regulations enforced by the department was continued. Collection of samples of food was also continued on a monthly project basis. The samples were analyzed for chemical and bacteriological adulteration, contamination by filthy or foreign substances and compliance with established standards of identity. Labeling was also reviewed to determine compliance with statutory requirements.

Special emphasis was placed on detection of substitution of horseflesh for beef in violation of R. S. 24:5-21. Activity of the department in this field resulted in apprehension of two restaurant operators, two individuals and a partnership involved in one ring. Based on analyses of samples collected, recommendation was made to the Attorney General's office for institution of legal proceedings to collect first offense penalties of \$500.00 each. Two penalties were paid without court action and action by the Attorney General against the remaining three parties is pending.

On a number of occasions personnel of the department cooperated with Federal and local agencies in embargoing or supervising destruction of large lots of foods due to adulteration. Included were approximately 40,000 pounds of frozen blueberries containing excessive maggots, approximately 35,000 pounds of frozen chopped spinach contaminated by filth and smaller lots of worm infested frozen fish. The blueberries were voluntarily destroyed by the owners without the need for court action and under supervision of representatives of this department and the other articles were turned over to the United States Marshal for seizure for violation of federal statutes. Program personnel also cooperated with local, State and Federal agencies on other matters pertaining to food. These activities included transmittal of information regarding sanitary conditions, making special investigations of new processes and products, investigating complaints, assisting with difficult local problems and similar work.

DRUGS

During the year inspections were made of drug manufacturing plants holding or applying for narcotic licenses. The department, cooperating with the Federal Bureau of Narcotics, has required all licenses to comply with the necessary requirements for safeguarding the narcotics while being processed and stored. Nine new licenses were issued and one application denied because of failure to meet these requirements.

Certain drugs were collected and examined for the purpose of ascertaining whether or not these articles were adulterated or misbranded. Of the 248

samples collected, 40 were found to be adulterated and 36 misbranded. Warning letters were sent to the persons and firms preparing or distributing these articles before resampling. Resampling showed nearly 100% compliance with the laws and regulations enforced by this department.

The department has continued to cooperate with the drug industry by issuing certificates of inspection to certain plants exporting to foreign countries whose governments require proof that the plants and products comply with the laws and regulations of the exporting country. Before issuing certificates of approval, an inspection is made of the premises, records are examined and certificates are issued after evidence is found the drugs do comply with the laws and regulations enforced by this department.

The department has cooperated with several local boards of health in investigations concerning drugs as well as the State Police, State Board of Pharmacy, New Jersey Pharmaceutical Association and the United States Food and Drug Administration.

During the year this department was notified of the voluntary recall by the manufacturers of four different drugs. Local boards of health were notified and the department checked the manufacturer's recall program for coverage and efficiency.

Bureau of Public Health Engineering

The time of engineers of this Division was divided among their 6 programs approximately as follows:

Bathing Program	3%
Housing Program	18%
Potable Water Program	20%
Solid Waste Disposal Program	7%
Stream Pollution Control Program	50%
Ragweed and Poison Ivy Control Program	2%

BATHING

The transition from previously established procedures in the promotion of sanitation and safety at bathing lakes, surf bathing places and swimming pools continued with the preparation of a formal Bathing Program and the execution of certain activities of the Program by the State Health Districts and particularly local health authorities. The scope of Division activities within the program framework related primarily to planning, coordination and consultation.

By the end of the 1952 bathing season, Certificates of Compliance were issued to seventeen North Jersey lake bathing places upon their voluntarily meeting sanitation, safety and bathing water quality criteria as formulated by working committees under the sponsorship of the Division. The issuance of certificates was undertaken by two State Health Districts with active participation by local health authorities and private laboratories.

The formal Bathing Program of the Division, including recommended tentative standards for sanitation, safety and bathing water quality for lake bathing beaches awaited Department approval at the close of the fiscal year. Anticipated developments as indicated by the formal program will effect statewide execution of most activities within a year or two.

Sampling of surf bathing waters and inspection of sewage treatment plants discharging into surf waters became the responsibility of State Health Districts as reorganization progressed. In addition, increased participation by local authorities was encouraged. The Division became responsible for the preparation of procedural methods and consultation or assistance where required. A paper on bathing beach standards was read before the New York State Society of Professional Engineers in April, 1953 and published in the August, 1953 issue of Public Health News.

The Division continued its policy of encouraging local health authorities to submit plans of proposed swimming pools for review. In addition, planning of those activities necessary to attain the primary objective of the Program continued.

The preparation of a swimming pool code for adoption by local boards of health to aid in the control of swimming pool design and operation continued to be of immediate interest to the Division. Pending completion of such a recommended code, interested parties were referred to the publication entitled "Recommended Practice for Design, Equipment and Operation of Swimming Pools and Other Public Bathing Places" as prepared by the American Public Health Association.

HOUSING

Those activities of public health engineering closely allied with the home and its environment have been grouped under this program. While the field work in some of the activities has been gradually accepted by the State Health District offices, coordination and most of the administrative work remains the function of the Division at the close of the fiscal year.

Activities under this program included the continuation of the review of plans and approval of sanitation facilities at realty subdivisions, the evaluation of the water and sewage facilities at nursing homes for the State Department of Institutions and Agencies, the evaluation of the potable water facilities

for bakeries licensed by the State Department of Labor and Industry, the encouragement of local health personnel in slum arresting and clearance activities, the participation in the preparation of Assembly Bill 462 relating to realty improvement (failed to pass), and a sanitary survey of state institutions for the State Department of Institutions and Agencies.

Two trends appeared to be developing in this field which should be considered in future program administration. The first relates to slum clearance and urban redevelopment. The 83rd Congress passed legislation (Public Law 187-83rd Congress, Chapter 302-1st Session H. R. 4663) to the effect that the Administrator of the Program shall give consideration to the efforts of the locality to enforce local codes and regulations relating to adequate standards of health, sanitation and safety for dwellings and to the feasibility of achieving slum clearance objectives through rehabilitation of existing dwellings and areas before additional capital grants authorized by Title I of the Housing Act of 1949 as amended (42 U. S. C. 1453, 1456) be authorized. The activities of this phase of the housing program to date have been to create interest among the various health officials and lay personnel in a rehabilitation program. A more aggressive approach is indicated to stay abreast of this trend.

The second trend relates to the method of providing sewage disposal facilities for realty subdivisions. During this year there has been a movement away from individual sewage disposal systems toward the construction of the so-called small package sewage treatment plant to serve entire housing projects or areas. Such a trend if continued will decrease the work load now carried in the administration of this phase of the Housing Program.

POTABLE WATER

The Rules and Regulations on Fluoridation of public potable water supplies were revised to encourage this highly beneficial program. A further step in this program was the Fluoridation Institute held in Trenton on June 17, 1953, to provide pertinent information to waterworks operators, health officers and other interested parties. To further encourage this program, letters were sent to local health departments and local health officers suggesting that they go on record as approving the policy of fluoridation of public water supplies. An outstanding accomplishment in this field was the initiation of fluoridation by the Monmouth Consolidated Water Company in March, 1953. In June of 1953 that section of Asbury Park which is supplied by the Municipal Water Department (the other section being supplied by the Monmouth Consolidated Water Company) followed by instituting fluoridation. The adoption by Monmouth Consolidated Water Company is especially significant both because of the number of communities (21) served by this utility

and also because it marks the first private water purveyor in this State to adopt fluoridation. At the close of the fiscal year twenty-six municipalities (population approximately 151,000) were receiving fluoridated water.

Plans for 20 projects for alterations, improvements and additions to water works amounting to \$1,642,460.00 were approved. Eleven new systems and supplies valued at \$232,375.00 were also approved.

Original cross-connection permits issued pursuant to Chapter 308, P. L. 1942 numbered eight.

One Order of Necessity to facilitate financing a water project was granted during the current year.

A program of compilation of data on chemical analyses of all public water supplies in the State was established to provide more complete information on the various characteristics of potable water.

Greater emphasis was given to the concept that adequate quantities of water as well as satisfactory bacteriological quality are of major health significance.

SOLID WASTE DISPOSAL

This program has not been completed but it has been very active especially in relation to the treatment and disposal of garbage and refuse.

An Advisory Committee on Garbage and Refuse Disposal has submitted preliminary reports on the preparation, storage, collection and disposal of such wastes. These reports will be assembled and coordinated into a general report. Conclusions and recommendations will be included as bases for consideration in drafting standards, codes, recommended ordinances or State legislation.

Sanitary landfills have been established in seven areas of this State and these areas are properly disposing of garbage and refuse from ten municipalities and two military establishments. One of these sanitary landfills is operated on a tidal marsh on an experimental basis. Nine additional sites for sanitary landfill operations have been approved by the Division. The municipalities concerned will place these sanitary landfills in operation as soon as budgets have been approved and financial arrangements are made for the purchase of heavy equipment for their operation. Many requests for conferences and approval of sites for sanitary landfill operations are being received at this Division from municipal officials and planning boards who desire to eliminate open dump nuisances in their municipalities.

More than a quarter of a million people are now being served by the sanitary landfill method of disposal of garbage and refuse and it is estimated this population is increased to one-half million during the summer season at the seashore resort communities.

According to the figures established at one of the first sanitary landfill operations in this State the cost of disposal per ton of garbage and refuse by this method is one dollar. This charge includes the amortization of the equipment on a five-year basis and all the labor and other operational charges.

STREAM POLLUTION CONTROL

Municipal Sewage

Plans, specifications and other related data were examined and approved and permits issued for the construction and operation of one hundred sixty-seven (167) sanitary sewage projects amounting to an estimated cost of more than \$68,000,000.00. The projects consist of new sewage treatment works, additions and alterations to existing works and sewer extensions.

Standards were prepared for the various streams in the State based primarily upon their present and expected uses. Quality standards for industrial waste and sewage treatment plant effluents for discharge to the surface waters and suggested methods of sanitary sewage treatment were also prepared. These standards were completed at the end of the fiscal year and awaited formal approval.

Applications were examined and permits were issued to twenty-nine (29) industries to locate upon potable watersheds which comprise approximately sixty (60) per cent of the land area of New Jersey.

Orders of Necessity were issued to fourteen (14) municipalities, after proper hearings, pursuant to R. S. 40:1-16(g) to exceed their bonded indebtedness to construct sewerage projects.

The trend toward trunk sewers with central treatment works has continued. Important progress was made by the Middlesex County Sewerage Authority, the Somerset County Citizens Committee on Water Supply and Pollution and the Bergen County Sewer Authority. An indication of the value of trunk sewer systems is afforded by recent data available on the lower Raritan River valley where the population equivalent of the effluents discharged by municipal sewage treatment plants and industry is nearly 800,000. Orders to abate pollution were issued against eleven municipalities and seven industries in the lower Raritan valley.

At the end of the fiscal year eighty per cent of the eligible participants in the area to be served by the Middlesex County Sewerage Authority had either signed a contract or indicated their intention of signing a contract to join in the trunk sewer project.

There was a decided trend toward the so-called "package" sewage treatment plants for the smaller installations, particularly housing subdivisions. There were plans for nine such plants approved.

Data were assembled for detailed sewage and industrial waste questionnaires submitted by the United States Public Health Service and engineering journals. An inventory or census of sewerage work is prepared annually for the United States Public Health Service.

Cooperation continued with other State and Interstate agencies interested in stream pollution, conservation and development.

The State Department of Law and Public Safety was requested to institute necessary court action against three municipalities to enforce compliance with the terms of notices previously issued. In each instance satisfactory stipulations were later promulgated. Similar stipulations were obtained from two industries. Concerted action by the Division has been taken during this fiscal year to clean up insanitary conditions in the lower Hackensack valley. Conferences were held with public officials as well as private persons to make plans for the elimination of stream pollution and other insanitary conditions caused by piggeries and open dumps. These matters were referred to the office of the Attorney General for legal action which was imminent at the close of the fiscal year.

Industrial Wastes

Plans, reports and other related data were examined and approved and permits issued for the construction and operation of eight (8) new industrial waste treatment plants and additions and alterations to three existing industrial waste treatment plants. The estimated cost of these projects amounts to more than \$886,000.00.

Many conferences were held with industrial management relating to proposed sites for new industry including quality standards for waste disposal, discussion of waste treatment methods, progress in pilot plant studies, having certain tests made by Department laboratory that industry is usually not equipped to make, especially the biochemical oxygen demand test, and general policies and practices of the Department.

New methods of industrial waste treatment were investigated.

Conferences of the industrial waste committee of the New Jersey Sewage and Industrial Waste Association were attended.

RAGWEED AND POISON IVY CONTROL

The Weed Control Code of New Jersey (1953) was adopted by the Department and is recommended for adoption by local boards of health by reference. This code will provide a greater uniformity in weed control activities among municipalities in New Jersey. The Weed Control Code of New Jersey (1953) was adopted by the Department and is recommended for adop-

tion by local boards of health by reference. This code will provide a greater uniformity in weed control activities among municipalities in New Jersey.

An Interdepartmental Committee representing five (5) Departments of State Government (Agriculture, Highways, Conservation and Economic Development, Agricultural Experiment Station, and Health) presented and published its report emphasizing four basic reasons for weed control. These are: (1) to promote more efficient crop production; (2) to benefit health; (3) to promote safety; (4) to beautify public places.

A survey was initiated early this summer by the State Department of Agriculture of a few selected weeds of special importance to public health and crops. A graduate student with considerable experience in plant ecology spent the summer mapping the location and extent of growth of these selected weeds. This project was recommended by the Interdepartmental Committee as one of the first steps that should be taken in developing a State-wide coordinated weed control program.

Another recommendation of the Weed Control Committee was to hold a two-day Institute on Weed Control. Such a conference was conducted at the State University in cooperation with the Agricultural Station. Approximately 125 persons representing agriculture, health, highways, medical and other organizations attended. Weeds detrimental to public health were discussed in detail at this conference and included the following:

1. Those which give off air-borne pollen causing pollenosis to large numbers of susceptible individuals as in the case of ragweed plants.
2. Those which are injurious on contact, as poison ivy.
3. Those which are toxic when consumed.
4. Those which affect health by providing hiding places for larvae of harmful insects and other pests by impeding drainage, and by injuring or depreciating the potable qualities of drinking water.

Other phases of weed control were discussed at this conference to benefit agriculture, safety and beautification.

Plans have been promulgated for a program which will develop for the next fiscal year more information on the extent and distribution of pollen on a State-wide basis. During this fiscal year such distribution was studied by the operation of four pollen collection stations at designated points in New Jersey. This will be expanded six times for a more complete analysis of air pollution by ragweed plant pollens.

A rather complete exhibit on weed control was developed by the State Museum in cooperation with the State Department of Health. This exhibit was shown at the Museum during the month of July. July had been desig-

nated as Weed Control Month by the Governor. Following the showing of the exhibit it was reconstructed by this Department as a collapsible easily mobile exhibit which has since been used at various meetings and conferences throughout the State.

Bureau of Veterinary Public Health

Rabies

One of the major activities in preventing the transmission of animal diseases to man is the control of rabies. Rabies in New Jersey is presently under control due to the combined efforts of the local officials and this Department in initiating and maintaining a three-point program of (1) licensing, (2) vaccination and (3) stray dog control.

The Department assists in an educational campaign directed towards children, adults and the dog-owning public, providing them with information as to the salient points of the transmission of this disease.

Vaccination clinics are arranged by the District personnel.

One case of rabies in a dog was reported in Warren County in September 1952. This was an isolated case and intensive epizootiological studies made indicate there have been no recurrences since that time. Preventive efforts were intensified in Warren County as a precautionary measure.

The wildlife reduction program instituted in 1950-51 was not continued during this year. Close surveillance, however, has been maintained at both the Pennsylvania and the New York borders in order to determine if and when such reduction program should be resumed in order to prevent the spread of wildlife rabies within the State. This has been a cooperative effort on the part of the Division of Fish and Game and this Department.

Continuing efforts have been productive in the establishment of new local dog control programs, including the establishment of pounds and the appointment of well trained wardens to continue such efforts. Among those who have recently established new pounds that are operating effectively are Neptune Township, Bridgewater Township and Clementon, New Jersey.

There were 331,859 dogs licensed in the State of New Jersey during the calendar year 1952. For this period, the State Department collected \$82,964.75 which was placed in the Rabies Control Trust Fund. The total expenditures for the rabies control work in the State was \$45,976.21 for the fiscal year 1952-53. The purchase of vaccine distributed free in order to foster vaccination programs in local municipalities resulted in the expenditure of \$11,133.84.

A total of 14,640 animal bites were reported by local officials and 335 persons received antirabic treatment due to suspicion of rabies in the biting animal. Inability to quarantine and observe the animals, or in some cases

the severity of and anatomical location of the bite, necessitated preventive vaccination of the person by the attending physician.

Cooperative efforts of the Division of Laboratories and other approved laboratories result in notification to program personnel as to the possibilities of rabies in an area. Investigations are made of all dog and animal heads submitted in order to determine possible contact spread.

Chapter 37, P. L. 1952 revised the Rabies Control Act and facilitates the preparation and submission to the State Department of Health of monthly reports of licenses and registration of dogs. Reporting the name of owners of licensed dogs is not now required but the reporting of all unlicensed dogs listed in the census made annually by the Chief of Police or his agent is required. This law became effective during the fiscal year 1952-53.

Psittacosis

Re-evaluation of the State Sanitary Code with respect to restrictions on the sale, handling and importation of psittacine birds was made in this period. This re-evaluation resulted in a change in the State Sanitary Code which was consistent with present scientific thinking relative to the spread of this disease from birds to man and in view of the newer knowledge of antibiotic therapy with respect to this particular illness. The newer restrictions permit the movement of birds from one State to another but will give the health department more information relative to the movement of such birds that may be infected with psittacosis and a greater possibility of the establishment of quarantines when necessary in order to prevent the spread. Rutgers University, Poultry Pathology Division, cooperates with this Department in the detection and isolation of the virus on samples that are submitted for analysis.

Trichinosis

The Advisory Committee on Animal Diseases Transmissible to Man recommended that the State Department of Health continue in its efforts to eliminate raw garbage feeding as a hazardous procedure involving the health of the consuming public. In cooperating with the United States Department of Agriculture and the New Jersey State Department of Agriculture an effort is now underway to provide information and consultative advice to garbage feeders who desire to learn how to cook garbage and produce hogs that are relatively free of trichinosis. Program personnel are cooperating with the New Jersey State Department of Agriculture, Division of Animal Industry, and the United States Public Health Service in their efforts to control vesicular exanthema by means of the cooking of garbage and also supervision of the processing of hogs certified to be infected. Pork from these hogs have to be heated to a temperature of 156° F. prior to release for food consumption or other usage. The supervisory work entailed was effected through the aid

of the District Public Health Veterinarians. An effort has been made to educate farmers and the public to the hazards of consuming pork that has been derived from raw garbage-fed hogs unless properly processed. An informative bulletin on trichinosis was made available and efforts have been made to eliminate raw garbage feeding in order to limit the spread of trichinosis. Members of this staff attended conferences on trichinosis and a paper was delivered at the First National Conference on Trichinosis in Chicago, December 15, 1952. This material is available in the form of conference notes and was submitted to those concerned.

Leptospirosis

Survey samplings are continuing to determine the incidence of this disease in the State. One District Public Health Veterinarian was sent to a scientific symposium on this subject and is prepared to act as a consultant on the subject.

Brucellosis

Revisions in the State Sanitary Code were made following the advice and consultation of the Advisory Committee on Animal Diseases Transmissible to Man. The revision in effect requires that on or after April 1, 1958 all milk consumed in New Jersey must come from animals free of brucellosis. This is the logical follow-up to the raw milk regulation instituted in 1949 and is a progressive movement in the elimination or control of this particular disease of animals and man. This requirement strengthens the hand of the State Departments of Agriculture in their programs of Brucellosis control which are designed to benefit farmers, livestock handlers and industrial workers in slaughterhouse, hide and dairy industries and protect the consumers of milk.

Eastern Equine Encephalomyelitis

A cooperative study was commenced under the administrative supervision of this program, to determine some of the basic fundamental facts of the transmission of Eastern Equine Encephalomyelitis. New Jersey is an endemic area for this virus in pheasants and other birds. Occasional outbreaks have occurred in animals and some cases in humans indicate a possible close connection between the endemicity of the disease in animals and birds. This study includes activities of the United States Public Health Service, who have assigned a veterinary virologist to do the field research and have also aided in the entomological aspects of this project; Rutgers University, which is aiding in pathological and entomological phases; the Division of Fish and Game, which is supplying the bird management information; and, includes research as to the vector possibilities of worms, insects and other agents in the transmission of this disease to animals and humans.

INSECT AND RODENT CONTROL

Two municipalities in this State—Camden and Kearny—were surveyed for rodents. Sanitarians from these local boards of health and from the Southern State Health District were trained in the habits and characteristics of insects and rodents. An intensive area-wide economic poison rodent control program was initiated in Camden with the cooperation of the local board of health and the City Commissioners. The program emphasized the importance of basic sanitation including proper storage, collection, and disposal of garbage and refuse, removal of rodent harborage, and proper warehousing procedures in controlling rodent populations.

Cooperation continued with the New Jersey Agricultural Experiment Station in the rodent ectoparasite study by trapping rats in business establishments and buildings. From preliminary reports of this study, the oriental rat flea (*X. cheopis*) taken from rats trapped in these buildings showed an index of 2.08 per rat. This index is nearly ten times greater than the flea index for collections of rats taken from dumps.

Another cooperative study was initiated this year with the First Army Area Medical Laboratory, the New Jersey State Department of Agriculture and the New Jersey Agricultural Experiment Station. This study included the examination of trapped rodents for trichina larvae. Rodent eye muscles were examined microscopically as well as digested by enzymes. The sedimented materials were examined microscopically. All examinations for trichina larvae were negative.

A four-day insect and rodent control institute was held in cooperation with the Metropolitan State Health District, Public Health Service and the New Jersey Agricultural Experiment Station for training sanitarians of the boards of health, pest control operators and the sanitarians in the Metropolitan State Health District.

Report of the Division of Laboratories

July 1, 1952—June 30, 1953

ELMER L. SHAFFER, Ph. D., Director

Bureau of Bacteriology—**JOHN H. SPOONER, Jr., Chief**Bureau of Chemistry—**JOHN J. NELSON, Chief**Bureau of Pathology—**EDWIN O. GILBERT, Principal Histologist**Bureau of Serology—**CLARENCE H. BUNTING, Principal Serologist**

Division of Laboratories

This is the first full year of operation of the Division of Laboratories under the present directorship. Some important changes took place which are worthy of note. A reassignment of rooms on the third floor of the State House made possible the removal of the Serological Laboratories from the fourth floor. No actual increase in floor space was attained for serology, but a more compact operating unit made for more efficient management. However, the bacteriological laboratories obtained increased floor space adjacent to their previously occupied rooms. This permitted a needed expansion for developing of new activities. While these changes accomplished an over-all improvement in physical requirements, they do not completely satisfy the growing needs for a modern laboratory building. Under present housing conditions it is almost impossible to obtain the increase in volume of utilities (gas, electricity, water) needed in a modern laboratory.

June 30, 1953 completed the first full year of our stock inventory control system. Our experience indicates the many advantages that this operation can yield. Not only are adequate supplies constantly maintained, but savings have been effected in larger purchases of supply items to be used by the entire Division on a pooled basis. In addition some items were deleted from the supply list for one reason or another, and some items were replaced by less costly substitutes which were equally suitable. The entire inventory activity represents an efficient business management which is reflected in fiscal savings and maintenance of adequate supplies and equipment. It is hoped that, as a result of our satisfactory experience in creating supply and equipment pools, it may be desirable wherever possible fiscally to pool our budgets to form a divisional budget. This will enable the use of funds where the needs are greatest on a priority basis and will discourage expenditures not wholly justifiable when the use of such funds could be more advantageously applied.

The Office of the Division has continued to utilize the advantages of the window envelope where these were possible. In addition new report forms were developed to be used with window envelopes wherever possible. Form type of letters were also developed to replace the need for individually typed letters. Despite these savings in personnel time, the office force is under constant pressure to complete the day's work. This is due in part to increase in office activities and in part to reduction in the number of workers. It is hoped that when all the programs are reviewed and adopted a more realistic and stream-lined system of reporting laboratory results will effectually diminish the load of office operations.

The program coordinators in the Division spent a great deal of time in preparing the written programs under the direction of the Commissioner of Health. We feel that this activity greatly benefited those who wrote the programs as well as those who will utilize them when finally adopted. The "blue printing" of the activities in each of the programs outlines the "who, when, where, what and why" for all who make use of these services.

As usual, a number of Division personnel were sent to various educational institutions for advanced and refresher training.

J. N. Welsh, Principal Bacteriologist, was granted leave from September 1952 to June, 1953 and obtained his Master of Science degree at New York University.

J. Olex, Bacteriologist, attended a 2 week course in Mycotic Diseases at the C. D. C. Laboratories, Chamblee, Georgia.

W. Y. Newcomb, Bacteriologist, attended a 2 week course on bacteriological examination of water and milk at the Environmental Health Center at Cincinnati, Ohio.

Catherine Jedynak, Assistant Bacteriologist, attended a 2 week course on Systemic Mycology at Chamblee, Georgia.

E. Applegate (deceased), Senior Chemist, attended a 2 week course at the Environmental Health Center, Cincinnati, Ohio, on "Advanced Training in Water Pollution Investigation."

E. Gardner, Chemist (Spectroscopist), received a short informal training course at the Environmental Health Center in spectrographic analysis.

Eleanor Thomas, Senior Serologist, attended a refresher course at C. D. C., Chamblee, Georgia, on the "Preparation of Cardiolipin Antigens."

Clarence Bunting, Principal Serologist, and Eleanor Thomas, spent several weeks at the Virus Diagnostic Laboratory, Children's Hospital in Philadelphia, Pa.

Wherever desirable courses were offered and funds were available we have encouraged selected personnel to take advantage of the opportunities. In each case, we feel the Division has benefited greatly by the acquisition of new knowledge and experience.

To the degree possible, a pooling of personnel was carried out. This enabled us to shift workers to activities where the needs were momentarily greatest. A further development of this idea, where possible, will result in an economy of man hours.

The Division of Laboratories has found difficulty, as all other laboratories, in obtaining well-trained and experienced workers. There are many factors entering into the reasons for this dearth of laboratory personnel, but we have come to recognize some responsibilities in this connection and to aid in improving the situation. We, therefore, planned an educational program that would reach as many laboratory workers as possible and offer refresher

training in practical courses of immediate use to participants. We found the idea well received in all laboratories throughout the State. Accordingly in October, 1952, a course was organized in Prothrombin Technique. The instruction was given by one of the experts of P. H. S. in this field. A total of 32 laboratory technical and scientific personnel from all parts of this State attended at the St. Michael's Hospital, Newark, N. J. The course was received with much enthusiasm and subsequent questionnaires indicated the universal acceptance of this course and of the general idea of refresher course training. In March, 1953, a refresher course in Problems in Syphilis Serology was given in cooperation with personnel from the Venereal Disease Research Laboratory. Because of the large registration (150), the course was held at Trenton (Div. of Labs.) and Newark (St. Barnabas Hospital). Again, on the conclusion of this course, the enthusiastic response of the participants has encouraged us that we can and must play a role in professional education in laboratory subjects. Plans for an expanding educational program for the coming year are now being laid. In addition to the formal courses described above, we have received a number of laboratory scientists for informal training and experience in our laboratories at varying times throughout the year.

Recognizing the need in the Civil Defense program for the development of adequate numbers of personnel trained in blood bank techniques, every technical and scientific worker in the Division volunteered to take a course in blood typing and grouping given by serology personnel. Now that all have been so trained, opportunities for refresher work in this field will be maintained so that workers may continue to retain their knowledge and facility in this field by regular experience. It is anticipated that such trained personnel may act as a reservoir of instructors when called upon in a broadened program under Civil Defense.

In May, 1953, at the annual meeting of the N. J. State Medical Society at Atlantic City, the Division received an "Award of Merit" for its exhibits in bacteriology, serology and cancer detection techniques. In addition to displaying the subjects of the various exhibits, our personnel in attendance had the opportunity of meeting a great many New Jersey physicians and answering many questions. It was an opportunity for creating good public relations with men and women with whom we deal constantly.

Bureau of Bacteriology

M. tuberculosis identification: During the fiscal year, the "walk-in" incubator was installed to make available needed space for culture work in M. tuberculosis identification. All this work is now being carried on in a single room, an obvious improvement for technical and sanitary reasons. Our

previous experience and that of others indicated much more satisfactory results from culture work over the simple examination of stained spreads of sputa and other materials. In addition to the routine examination of stained spreads for acid-fast organisms, all specimens submitted by physicians with complete data filled out on the information slips are subjected to cultural identification. Cultural studies not only yield a much higher percentage of positives over the simple spread examinations, but it is also possible to determine (a) virulence, (b) non-pathogenic acid-fast organisms.

Stained spreads of sputum and other secretions or excretions were examined for *M. tuberculosis* as follows:

Total	Positive	Negative	Unsatisfactory
17,632	1,565	15,533	534

Cultures in the same specimen categories:

4,588	549	3,933	106
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In addition to spreads and cultural examinations for *M. tuberculosis*, animal inoculations are made on special request of physicians or where the specimen is a urine or other body fluid.

Guinea pig inoculations and results are:

Total	Positive	Negative	Unsatisfactory
371	31	337	3

In addition to the above, guinea pig inoculations were made for virulence studies as follows:

Total	Positive	Negative	Unsatisfactory
176	143	7	26

There is an increasing emphasis for the laboratory identification of *M. tuberculosis* beyond the usual spread examination. This may stem from the awareness of physicians that this disease constitutes an increasing problem in diagnosis as indicated by statistics showing increase in case and death rates in some areas. The use of antibiotics and chemotherapy in the treatment of tuberculosis has created the need for use of cultural methods in determining sensitivity of organisms to such therapy. It is anticipated that our laboratories will be called upon to make these determinations in increasing numbers.

ENTERIC DISEASE (FECES & URINE) AND STOOLS FOR OVA & PARASITES

The following feces and urine specimens were examined with stated results:

	Total	Positive	Negative	Unsatisfactory
<i>S. typhosa</i>	3,474	15	3,374	85
Other Salmonellae	3,474	13	3,376	85
Shigellae	3,474	14	3,375	85
No examination	68	..	..	68
	<hr/> 10,490	<hr/> 42	<hr/> 10,125	<hr/> 323

This work includes the more complete identification of the Salmonellae into their respective groups as follows:

<i>S. typhosa</i>	11
<i>S. typhimurium</i>	9
<i>S. newport</i>	2
<i>S. saint paul</i>	1
<i>S. tennessee</i>	1
<i>Shigella flexner</i> 6	1

Stool examinations for ova and parasites were as follows:

Total	Positive	Negative	Unsatisfactory
1,092	35	1,046	11

BLOOD AGGLUTINATIONS

Blood agglutination tests are performed for typhoid O and H antigens, paratyphoid A and B, undulant fever, tularemia and Weil-Felix reaction for typhus and Rocky Mountain Spotted fever. The laboratory prepared its own antigens for these tests.

Results and number of specimens for the year were as follows:

	Total	Positive	Negative	Unsatisfactory
Typhoid fever	2,014	71	1,859	84
Paratyphoid fever	1,403	40	1,318	45
Undulant fever	1,792	34	1,733	25
Rocky Mt. spotted and typhus fever	168	8	127	33
Tularemia	46	..	46	..
	<hr/> 4,423	<hr/> 153	<hr/> 5,083	<hr/> 187

GONORRHEA SPREADS

The new type combined information and report blank introduced last year and given an opportunity for a full year's use has proved satisfactory with no complaints from practicing physicians.

Specimens examined for *Neisseria gonorrhoea* (pus) spreads were as follows:

Total	Positive	Negative	Unsatisfactory
5,528	625	4,809	94

DIPHTHERIA CULTURES AND THROAT AND NOSE SPECIMENS FOR OTHER ORGANISMS

This work continued to play an important part in the program. A plan to submit media to the physicians for the immediate planting of the throat cultures is being developed.

Specimens examined for *Corynebacterium diphtheriae* were as follows:

Total	Positive	Negative	Unsatisfactory
5,287	72	4,826	389

Specimens examined for hemolytic streptococci were:

Total	Positive	Negative	Unsatisfactory
1,250	209	1,041	..

Spreads for Vincent's angina were examined as follows:

Total	Positive	Negative	Unsatisfactory
171	23	140	8

RABIES

Animal brains for rabies examination continue to play an important role in the program. The State Sanitary Code recently adopted requires, under Chapter IV, Reg. 6 (e) that: Animal brains examined for rabies and found to be Negri-negative shall have a suitable portion thereof inoculated into mice in those circumstances where there is a record of a bite or intimate human or animal contact. This has been done as part of the Bacteriology Program for years and should now become a necessity for all laboratories approved for rabies examinations.

Animal brains from many species of animals, including dogs 84, cats 23, squirrels 13, foxes 13, rats 2, rabbits 2, skunk 2, and chipmunk, coon, opossum, were examined as follows:

Total	Positive	Negative	Unsatisfactory
163	1	155	7

The one positive shown above was found by animal inoculation. Swiss mice are inoculated intradurally for this purpose and kept under observation for 3 or 4 weeks. There were approximately 600 inoculations made during the year.

MISCELLANEOUS EXAMINATIONS

Other examinations are grouped as follows:

	Total	Positive	Negative	Unsatisfactory
Anthrax	23	..	23	..
Bacterial infections (body fluids, blood, pus, feces, sputum, urine, etc.)	492	394	85	13
Horseflesh determinations	20	13	7	..
Malaria	29	5	23	1
Other examinations such as identification of cultures, occult blood, pneumonia, trichinosis, etc.	114	54	52	8
	678	466	190	22

BACTERIOLOGICAL EXAMINATION OF WATERS, TRADE WASTES AND MILK

This work was greatly increased by the four State Health Districts being established and submitting water and milk specimens. To equalize the load, especially in milk, a collection and submission schedule was prepared.

WATER, FOOD, MILK AND MILK PRODUCTS, SEWAGE, ETC.

The total number of bacteriological examinations made in the main laboratory together with the milk, water and shellfish examinations made at the branch laboratories at Leonardo, Tuckerton and Bivalve are as follows:

Waters	10,381
Milks	2,498
Shellfish	1,902

LABORATORY INSPECTIONS

Certain statutes in the New Jersey laws and regulations of the State Sanitary Code require that laboratories to perform certain examinations shall be laboratories approved by the State Department of Health. See R. S. 37:1-23, R. S. 26:4-49.2 and Chapter IV, State Sanitary Code.

There are, as of June 30, 1953, 112 such approved laboratories in New Jersey consisting of one State laboratory, one United States laboratory, 19 municipal or county laboratories, 51 hospital laboratories and 40 private laboratories. Such laboratories are visited at periodic intervals by a representative of the Division of Laboratories. See Serology program for this activity for blood specimens in evaluating serological tests for syphilis. Check bacteriological specimens are submitted for examination at time of the visit and results and suggestions made to the individual laboratory. The approved laboratories of the State, other than the State laboratory, examined a total of 532,882 blood specimens for S. T. S. during the last fiscal year and a total of 136,317 bacteriological specimens for various communicable diseases.

NON-TECHNICAL SERVICES

This activity includes the opening, decontaminating, cleaning, sterilizing, packing and shipping of specimen containers for all the programs in the Division of Laboratories. This activity also includes preparation of culture media and the care of laboratory animals. The discontinuance of distribution of Sheppard tubes for serological specimens will save \$4,000 to \$5,000 per year. The tubes now being supplied are considered equally adequate and satisfactory. Industries using these tubes previously supplied by us have for the most part agreed to purchase their own supplies, thus making a substantial saving in funds and services to the Division. A more careful scrutiny of request for all types of containers will result in savings without curtailing the use of our services where justifiable. In view of restricted budgets such savings in funds will be useful in maintaining other needed services.

Bureau of Chemistry

A summary of statistical data shows a total of 24,239 determinations made on 5,821 specimens received. These include specimens of milk and dairy products, other foods, drugs, water and sewage, specimens submitted under the Industrial Health Program and miscellaneous types of determinations. The survey of the fluoride content of all public waters begun in the last fiscal year was completed. A complete chemical survey of all public water supplies was initiated and it is anticipated will be completed in the next fiscal year. This activity is repeated every two years so that chemical analyses on all public water supplies will be available on a relatively current basis. There was a

four-fold increase over the last fiscal year in the number of milk and dairy products examined. The increase was the result of increased collection activity in the State Health Districts. The number of sewage specimens decreased to almost half the number of such specimens received in the last fiscal year. However, since more separate determinations were made on each specimen than heretofore, the totals were only 10% less than the previous year. A recent acquisition of a fluorophotometer will enable us to conduct vitamin assays in connection with the Flour and Bread Enrichment Act of 1946. Methodologies and preparation of standard curves are now being developed.

In the Industrial Health Laboratory, preparations were made to service the developing program in Industrial Hygiene particularly in the field of air pollution. While actual determinations in relation to this program have not yet begun, considerable preparatory activity required the acquisition of spectrographic analysis equipment. A Hilger spectroscope was loaned to us by P. H. S. and other equipment is on order. The use of this equipment requires specially trained personnel and we have sent several of our workers to take special courses in different institutions. This equipment can also be utilized in general chemical analyses, replacing more time consuming methods yet giving accurate results. Proper application of this equipment will bring a saving in man-hours.

In addition to the above activities 280 separate analyses involving 41 different chemical substances were carried out on samples submitted in the Industrial Health Program as well as some samples collected by laboratory personnel.

<i>Type of Sample</i>	<i>Number</i>	<i>Determinations</i>
Milk and Dairy Products	2,667	6,241
Other Foods	247	579
Drugs	260	408
Water and Sewage	2,248	16,033
Industrial Health	216	280
Miscellaneous*	183	698
Total	5,821	24,239

* (Urinalyses, blood counts, experimentals etc.)

Bureau of Pathology

This program has continued in expanded form in the avenues of activity laid down in prior years. This fiscal year showed an increase of about 30% in the number of tumor specimens submitted for registry and in the number of consultation specimens received from Pathologists of this State.

Tumor specimens registered 525
 Consultations received 125

About 14,000 tissue slides were prepared. About 2,000 photographs, gross and micro were made.

Regular field trips of personnel were continued throughout the year enabling us to bring our services where required. We have been called on numerous occasions for consultation on problems in histological techniques and in aiding in the development of photographic services in institutional laboratories. Photographic projection slides are one of the best means for disseminating our knowledge of cancer and allied diseases. These visual methods of education enable large audiences to obtain knowledge leading to earlier and better diagnostic ability in this field. Microphotographs made in our laboratories of specimens submitted by Pathologists have been sent to the contributors. This facility has attracted increased contributions of tumors to our registry. This type of tumor registry in which an actual tumor specimen, or portion thereof, can be the most accurate of all registries. Diagnoses are thus based on actual specimens and not on clinical judgment or the records of death certificates. If our type of tumor registry can continue to expand to eventually receive representative portions of all tumors removed in the institutions throughout the State, we will have attained a unique position to possess true statistics for analyses and evaluation in the study of cancer.

Our relationships with the Pathologists of the State through their State organization have continued to be close and cooperative. Our interest in furthering professional education in cancer has led us to continue the seminar plan of discussions. Three such slide seminars were held during the year, highlighted by one held on December 9, 1952 at the Newark Presbyterian Hospital. The moderators for that occasion were Drs. F. Stewart and F. Foote of the Memorial Center for Cancer of New York. Over 85 Pathologists attended, this being the largest group thus far. The Pathology laboratory made all necessary arrangements, including preparation and distribution of sets of micro slides of tissues to be discussed, as well as editing the case histories involved.

We have continued practical research projects in evaluating new technical methods for the study of cancer. Several technical bulletins were published and sent to all Pathological laboratories in the State.

On several occasions our program in Pathology has received national recognition and we have received numerous requests from out of state Pathologists for our study material.

The relationship with physicians in the operation of this program have continued to build excellent support. The cooperation has been genuine and generous and it is a situation which can be fruitfully pursued.

Bureau of Serology

The activity in this program covering the serological tests for syphilis continues to represent the largest scale single activity in the Division of Laboratories. The large number of specimens received continued to tax our facilities to the limits of capacity. Despite the development of local laboratory facilities which are competent and reliable to service local needs, we find our laboratory as the repository for the greater bulk of routine tests for syphilis. Efforts have been made to shift the responsibility for processing such routine tests to local laboratories wherever possible. If some relief from the burden of routine testing could be obtained, we could more profitably engage in serving as a laboratory of reference for local laboratories, and in developing practical research projects in this field. A number of industries who had been large scale users of our laboratories for routine employment blood tests, are now obtaining those services from local laboratories. While this has unquestionably aided in reducing our volumetric load of work, nevertheless it appears that increases in tests received from other sources have continued to impose pressure on our daily capacity.

We have continued to use the Mazzini slide test (lipoidal antigen) as a screening test for all blood specimens submitted. All reactors to this test are subsequently subjected to the V. D. R. L. slide test and the Kolmer complement fixation test, both of which employ cardiolipin-lecithin antigens. Quantitative tests are performed on all serology positive reactors. The Kolmer test is performed on all spinal fluids, as is also a protein determination and colloidal gold test when requested. While a well performed serological test for syphilis continues to be the most constant single symptom of this disease, it is becoming more apparent that some reactors, "biological false positives," present serious problems to both laboratory interpretation and clinical evaluation. It is hoped that the Treponema immobilization test or some similar specific reaction can be developed to yield reliable differential results. At the same time such tests must be simplified technically to be available in the average reference laboratory without prohibitive cost.

All premarital and prenatal blood specimens received were subjected to blood grouping and Rh typing. This activity is sponsored jointly by the Division of Civil Defense in the Department of Defense and the Department of Health. In addition to physicians submitting these specimens, patients receive copies of their blood group-type for reference as required.

For a number of years, we have distributed, on request, to approved laboratories Mazzini lipoidal antigen (329 sets this year). We continue to be of the opinion that this distribution has greatly enhanced uniformity and reproducibility of results in these laboratories thereby reducing the incidence of inconsistency in reporting.

In order that a high standard of performance may be maintained in all approved laboratories, an intensified evaluation-assistance program was inaugurated in January, 1953. The object was to determine the sensitivity and specificity of various syphilis serology tests as used by each laboratory on the basis of results obtained from selected reference laboratories. At bi-monthly periods, each laboratory received 15 unknown sera (90 per year) to test and report. On the basis of the reports received, we determine the sensitivity and specificity of each laboratory. Those which fall below the accepted standard are offered every assistance in raising their performance rating.

This intensified program (which has increased by five-fold the test specimens previously used annually) has had a salutary effect on the various laboratories. They have welcomed the opportunity of being checked by independent authorities and we have already noted a general improvement in conformity with the results of the reference laboratories.

Viral complement fixation tests were engaged in at first on a "pilot" basis. Personnel received special training at the Children's Hospital Virus Laboratory, in Philadelphia, under competent instruction. A stock of available virus and rickettsial antigens have been accumulated. It is now anticipated that we shall be ready to service physicians with these tests. However, some educational effort will be required to inform physicians as to the limitations of these services and the conditions under which they are offered.

Additional laboratory diagnostic services were offered physicians as follows: tests for heterophile antibodies with absorption tests on all positives; determination of antistreptolysin titers, cold agglutinins in atypical pneumonia and complement fixation tests for viral, rickettsial and parasitic diseases.

The total number of tests as reported by the program in serology was 592,595 distributed as follows:

Serologic Tests for Syphilis	352,477
Rh factor determinations (premarital and prenatal specimens)	97,876
Blood group determinations (premarital and prenatal specimens)	97,876
Group "O" bloods titered	42,840
Total Protein determinations on Spinals	1,109
Colloidal Gold Curves	256
Heterophile antibody reactions	916
Rh antibody determinations	64
Cold agglutininations	22
Special serologic tests for viral, rickettsial, parasitic diseases ..	60
Antistreptolysin titers	15
Total	592,595

SPECIMENS OF BLOOD AND SPINAL FLUID EXAMINED FOR SYPHILIS DURING YEAR
ENDING JUNE 30, 1953

Total	Reactors		Negatives		Unsatisfactory	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
308,908	21,496	6.9	283,234	91.8	4,178	1.3

NUMBER OF SEROLOGIC TESTS FOR SYPHILIS ON 308,908 SPECIMENS OF BLOOD AND
SPINAL FLUID

Mazzini Qualitative	301,615
Mazzini Quantitative	11,190
V. D. R. L.	27,648
Kolmer Qualitative	9,861
Kolmer Quantitative	2,163
Total	352,477

SUMMARY

A general summary of 1952-1953 developments in the Division of Laboratories may be in order: (1) improved physical plant and more satisfactory working conditions, (2) improved fiscal management, including pooling of funds, supplies and equipment where possible, (3) full operation of stock inventory control system, (4) more efficient utilization of personnel, (5) development of an educational program in laboratory subjects open to laboratory personnel throughout the State, (6) training of all divisional technical and scientific personnel in blood grouping-typing technique for use in Civil Defense programs, (7) initial activity in developing complement fixation tests in virus and allied diseases, (8) procurement and preparation of apparatus and methodologies for servicing investigations in air pollution program, (9) continued expansion of the Tumor Registry under voluntary submission by Pathologists of actual specimens and records, (10) intensification of activity in M. tuberculosis identification, (11) significant increases in water, milk and food specimens received from field operations in State Health Districts.

We cannot review the activity of a year in the four programs of this Division without reflecting on the personnel involved. We feel that the "atmosphere" in which the programs operated was progressive and stimulating to all, that the morale of all workers was high and that they exhibited a fine loyalty to the Division and the Department. Each has been made to feel that each is an important part of the activity in which each is engaged, that dependability and responsibility for the proper performance of their tasks is reflected in the general success of the program. This is a spirit which we hope to nurture into a scientific fellowship for the successful fulfillment of our assignments.

Report of the Division of Local Health Services

July 1, 1952—June 30, 1953

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 JAMES E. PETERMAN, M. D., M. P. H.
District State Health Officer

Northern

Southern HUGH D. PALMER, M. D., M. P. H.
District State Health Officer

Division of Local Health Services

The year ending June 30, 1953 has been marked by constant appraisal of programs, planning and re-adjustment of administrative procedure within the Division of Local Health Services. It was necessary to keep abreast of the total complex picture of health administration which is continuously expanding and shifting with new developments and new techniques.

ORGANIZATION

The Division of Local Health Services is composed of the Bureau of Grants-in-Aid, the Bureau of Public Health Nursing, and the four State Health Districts, Northern, Metropolitan, Central and Southern. Counties included in each District are as follows:

<i>Northern</i>	<i>Metropolitan</i>	<i>Central</i>	<i>Southern</i>
Hunterdon	Bergen	Burlington	Atlantic
Morris	Essex	Mercer	Camden
Somerset	Hudson	Middlesex	Cape May
Sussex	Passaic	Monmouth	Cumberland
Warren	Union	Ocean	Gloucester Salem

FUNCTIONS

The major functions and responsibilities of the Division are the rendition of consultant, advisory and certain direct services to local boards of health through correlation of the other Division programs. The Division of Local Health Services correlates and integrates these services and programs with those of official, voluntary and private agencies and local boards of health according to State laws, community needs and requests. It interprets and carries out State Health Department policies.

Specifically, the functions are:

1. To promote a coordinated program of optimum local health services.
2. To guide and advise local health departments in all phases of organization and program.
3. To maintain a competent staff of professionally trained workers to whom local communities can direct requests for guidance and consultation.
4. To implement the programs of the State Department of Health by consultative and advisory service.

5. To expedite available resource assistance of the State Health Department to local boards of health as needed in local programs.
6. To channel information on pertinent public health problems, and to gather facts and data needed in program planning.
7. To participate in specific pilot projects in certain phases or areas of local health programs for demonstration or research.
8. To cooperate in community and State health programs with all agencies interested in welfare, education, safety and public health.
9. To assist in conducting evaluations of the local and State health programs.

STATE HEALTH DISTRICTS

The four State Health Districts are rendering service close to the core of local public health activity. The Districts are staffed by a District State Health Officer, Public Health Veterinarian, District Chief Public Health Nurse, District Chief Public Health Engineer, District Consultant Community Health Organization, Sanitarians, Clerks and other personnel. The fourth Public Health Veterinarian was added to the Metropolitan State Health District and a Rabies Control Warden was transferred to each of the four Districts from the Rabies Control Program. From Civil Service lists three District Chief Public Health Engineers were assigned to Districts. The Northern State Health District was formally activated during the fiscal year. This completed the re-organization plan for the Districts.

PROGRAM PLANNING

The plan for preparation of State Health Department programs which began in 1951-52 was continued with a high priority during the year. Of the approximately forty-five programs assigned for writing by the Commissioner, five were delegated as the responsibility of the Division of Local Health Services. In accordance with the assignment, work was started on the following programs:

- Public Health Nursing
- Grants-in-Aid
- Migrant Health
- Evaluation Surveys
- Camp Program

The preparation of State Health Department programs is a vital factor in obtaining the objective of decentralization of direct service to local communities and is essential for guidance in the implementation of the Department programs in the Districts.

LOCAL BOARDS OF HEALTH

The total number of local boards of health in New Jersey is 571. This includes the board in each municipality and also the board in each of two Camp Meeting Associations created under special laws and the board authorized by statute in the New Jersey section of the Palisades Interstate Park.

The total amount reported by the local boards of health as available for their use specifically for health purposes during the calendar year 1952 was \$6,240,530.61. This is equivalent to \$1.26 per capita based upon an estimated population of 4,949,000—approximately one-half of the per capita expenditure recommended by health authorities.

LOCAL PERSONNEL

As of December 31, 1952, there were employed by the local health boards in the State 57 licensed health officers serving on a full-time basis. These officials served 93 municipalities having a total population of about 2,416,870 based upon the census of 1950. In 85 other municipalities, the local board of health employed a licensed health officer on a part-time basis. There were other local health boards which employed licensed inspectors either on a full-time or part-time basis. Obviously, there are many communities not served by licensed health officers. Actually, 68.9% of the municipalities are not so served, and their total population amounts to 28.1% of the total State population.

EVALUATION TEAM

There is need for the continuing study of local health needs and of the practical means of meeting them. A program for the continuous evaluation of a community's progress in its proposed and adopted plan of action is provided through the State Health Districts as a result of the three-year Evaluation Study Project initiated in 1950 with the financial participation of the Commonwealth Fund which was terminated July 1, 1953. The qualified staff of each District Office constitutes an evaluation team, available to local communities upon request, to help guide and consult in the determination of local health needs and plans for solution. Great effort was expended in the development of community health education and promotion of community participation.

COUNCIL FOR LOCAL PUBLIC HEALTH SERVICES

Personnel of the Division of Local Health Services cooperated with the Council for Local Public Health Services and participated in both program and planning of their annual, spring and regional conferences in order to

stimulate the interest and support of citizen groups for more adequate local health service.

A regional conference of the Council for Local Public Health Services was held at Allentown in October, 1952, with attendance of over 200 representatives of official and voluntary agencies as well as professional and lay organizations. Planning meetings for regional conferences were held in the Northern and Metropolitan State Health Districts. Plans have been completed for the Metropolitan Regional Conference in the Fall of 1953.

HEALTH COUNCILS

County health councils were organized during the year in Mercer, Cumberland and Salem Counties, and the activities of existing councils have been expanded. The Atlantic County Welfare Council was reorganized as the Atlantic County Council for Health, Welfare and Recreation. The Warren County Welfare Council has organized a Health Committee made up of representatives from the medical, dental, health and allied professions as well as the social agencies. The Health Committee of the Somerset County Council of Social Agencies has continued with their evaluation survey, summarizing and evaluating accomplishment to date. Advisory assistance and provision of resource material has been given by all District staffs in the organization and activity development.

REGIONAL COMMISSION

Effort has been expended by the District staffs in the special health activities of civic groups or voluntary agencies whenever the opportunity was available in order to establish and maintain wholesome public relations and to coordinate and interpret departmental program and stimulate local activity and participation.

In the Spring of 1953, the Northern State Health District was requested by a local health official to assist in assembling facts and to aid in the planning of a regional commission to encompass five municipalities comprising a population of approximately 32,000. Because of personnel and financial limitations, tentative efforts were made by the official agency to secure grant-in-aid support for the initial budget of such a regional commission. The Department did not have funds available for this purpose. Intensive efforts to obtain community support and participation will be made in the Fall of 1953.

While striving for an ideal of comprehensive health services, we must note that some health problems are of such magnitude or of such a unique nature that they require special efforts for their solution. Special effort was expended by the Division, while logically developing programs and plans, in stimulating increased local financial support and in giving advisory assistance to local health departments.

GRANT-IN-AID PROGRAM

The Grant-in-Aid program of providing funds to municipalities for the employment of personnel rather than providing Department personnel to provide the direct service was continued. This enables the municipality to have and to retain control and supervision of the work performed.

During the fiscal year ending June 30, 1953, there were in effect ten Grant-in-Aid contracts. Five of these were with the local boards of health of New Milford Borough, Pequannock Township, Clayton Borough, Kearny Town and Union City, allotting to each funds for the employment of a public health nurse. In each instance, the contract was a renewal of a previous contract and each local board increased its share of the nurse's salary, thereby reducing the amount of the Department's grant. The increased payments by the five local boards amounted to a total of \$3,340.00. A contract with the board of health of Raritan Township, Middlesex County, expired on July 31, 1952 and the local board assumed the salary of the nurse who had been paid by the grant funds.

The four other contracts entered into during the year were with hospitals. Two were with St. Michael's Hospital in Newark to supply funds for the employment of a medical secretary and a medical technologist to implement the Hospital's cardiovascular disease program, tumor clinic and multiphasic screening program. One was with the West Jersey Hospital in Camden for the services of a medical social worker to organize a professional department of social service at the Hospital. The social worker resigned after two months' service and no replacement was found. The fourth contract was a renewal of a previous contract with the Mountainside Hospital at Montclair to support the services of a nurse to instruct hospital nurses in the care of premature infants.

The five contracts with local boards of health involved the expenditure by the Department of \$8,433.71, and the four with hospitals the sum of \$7,511.62 for salaries, a total of \$15,945.33 during the fiscal year. In addition, \$430.25 was spent for payment of travel expenses of the nurse instructor at the Mountainside Hospital.

PUBLIC HEALTH NURSING PROGRAM

This departure from the plan followed in previous years, under which the New Jersey State Department of Health placed in a given area a public health nurse whose salary would eventually be absorbed and paid from local sources, did not anticipate that the State-paid nurses would be immediately withdrawn. Because of severe budget cuts and further anticipated cuts, the transfer of State-paid public health staff nurses to local boards of health must necessarily be expedited. This is in line with the established policy of the

Department since the re-organization of 1948 of placing the responsibility of providing direct service in the hands of the local boards of health who are legally responsible. Under the direction of the District State Health Officers, time of the District nursing staff was allocated to interpreting to local boards of health and education the policy of the Department regarding direct nursing service.

At the close of the fiscal year, June 30, 1953, there were 47 nurses wholly or partly paid by the State Department of Health and assigned to local service in single or groups of municipalities. Six of these nurses received their entire salary from the State, the other 41 were partly State-paid and received the remainder of their salaries from local boards of health, local boards of education and local governing bodies.

The distribution of the 47 nurses by State Health Districts is shown in the following table:

<i>District</i>	<i>No. Wholly State-Paid</i>	<i>No. Partly State-Paid</i>	<i>Totals</i>
Metropolitan	1	6	7
Northern	0	18	18
Central	4	0	4
Southern	1	17	18
	—	—	—
	6	41	47

Twenty-one of the nurses were assigned to service in single municipalities and the other twenty-six each served a group of municipalities. The number of municipalities in a group ranged from two to five.

Expenditures by the State Department of Health for the support of this nursing program at the close of the fiscal year were at the rate of \$88,266.32 per year for salaries and \$5,914.04 for travel expenses. Fifty-eight local boards of health were sharing the payment of salaries to the extent of \$28,-092.31 with \$1,604.25 allotted for expenses. Seventy-three local boards of education contributed at the rate of \$36,069.97 per year for salaries plus \$4,319.71 for expenses. Seventeen local governing bodies added funds for salaries at the rate of \$7,132.00 and \$705.00 for expenses. The combined expenditures of the State and local boards for salaries were at the rate of \$159,560.60 per year plus \$12,543.00 for expenses, a grand total of \$172,-102.60. Table I, attached, shows by State Health Districts the annual rate of contribution by the State Department of Health and by local boards as of June 30, 1953 for the salaries and expenses of the 47 public health nurses, wholly or partly State-paid, and assigned to local service.

During the fiscal year ending June 30, 1953, the local boards which pay part of the salaries of the nurses increased their share by the sum of \$6,898.56.

GENERALIZATION OF NURSING SERVICE

While the stimulation of communities to assume more responsibility for local public health nursing services played a major role in the nursing program this year, in recognition of the excessive number of nursing visits requested by officials in local areas, priority and quality were stressed rather than quantity of visits. Emphasis was placed on generalization of service and provisions for in-service educational programs. The planning and executing of these educational activities for public health nurses was carried on primarily for the further integration of the programs in Venereal Disease, Maternal and Child Health, Crippled Children and Heart Diseases. Many of the activities were sponsored and attended by personnel from local and other State agencies, indicating sustained interest in the improvement and expansion of public health nursing service.

Local official nurses supervised by the State Department of Health are becoming increasingly aware of the responsibilities of the need for a generalized nursing program and accept these responsibilities within the limitations imposed by several factors including personnel shortages and heavy caseloads. This increased awareness should enhance an early re-distribution and re-allocation of nursing services in areas where needed.

NURSE ACTIVITY RECORD

In cooperation with local health officials in five municipalities of the Central State Health District, a pilot study was made on the use of the nurse daily activity record which was developed by the Department. This resulted in a better understanding of the need for reporting by nurses to the local officials on a daily basis.

In continued efforts toward the establishment and maintenance of standards, recommendations were prepared for revision of State Civil Service job specifications for all level public health nursing positions, including qualifications, examples of work and specific knowledges and abilities.

The annual public health nurse census conducted by the nursing program showed a 6.4% increase in the percentage of public health nurses in New Jersey who have completed one or more years of preparation in public health nursing on the college level. The number of public health nurses participating in graduate nurse education as well as the increase in number of public health nurses employed by local public health nursing agencies indicates a trend toward the attainment of nationally recommended standards.

HEART DISEASE CONTROL

The Northern and Metropolitan State Health Districts actively participated in planning and conducting an Institute in the Control of Cardiovascular Diseases for nurses. This marked the last of a series of four regional programs which brought to key nurses throughout the State the interpretation of developments in the rapidly expanding program of heart disease control.

MENTAL HEALTH

Supervisors, official and non-official public health nurses and school nurses in Hunterdon County attended a series of eighteen in-service seminars conducted by members of the Hunterdon County Medical Center staff. The purpose of the seminars was to orient nurses of the County to family problems related to mental health and mental retardation.

EPILEPSY

Northern State Health District staff participated in an Epileptic Institute at which time an Epileptic Contact Center was established at the State Health District Office for persons seeking aid in problems related to epilepsy. Broadening of the program on a local level will include the establishment of a speakers' bureau and assistance with the promotion of consultation clinics.

MATERNAL AND CHILD HEALTH

A series of Maternal and Child Health conferences was held in the Metropolitan State Health District at a local health department for all nursing groups and allied professional workers serving the surrounding municipalities, under joint sponsorship of the local health departments and the State Department of Health. Evaluation of Baby Keep-Well Station services, in terms of community needs, has effected the closing of several stations and increasing the number of sessions in other communities. Increased attention was given to the need for establishing closer working relationships with physicians, prenatal clinic personnel and with the professional personnel of all health and welfare agencies servicing the various communities.

CRIPPLED CHILDREN

Most of the activities of the Crippled Children Program were transferred from the Bureau to the respective Districts during the year. In addition, changes in policies and procedures were put into operation in the Districts. The integration of these services as well as their coordination with the nursing services of the official and non-official agencies was thereby facilitated. A

tentative revision of the contract for nursing services to crippled children was completed. The aim of the revised contract and contract manual is to place the responsibility for the nursing care of the crippled child in the local community.

VENEREAL DISEASE

Within the Venereal Disease Program in the Districts, case interviewing, contact investigation and control of congenital syphilis has been stressed. In the rural areas of the State, Public Health Nurse Supervisors and locally-paid public health nurses who have incorporated venereal disease service in their programs are carrying out these functions. In the areas of high incidence, Venereal Disease Investigators have been assigned. In all cases, working relationships regarding reporting, referral and follow-up of contacts, suspects and diagnosed cases have been established with physicians, local health officers and hospitals as well as clinics. In the Metropolitan State Health District, venereal disease conferences were planned on a county-wide basis for the purpose of informing local health officials of the over-all State program, local responsibilities and latest techniques used in case finding. Conferences were held in two counties and were well attended.

MIGRANT HEALTH

Results of clinic examinations of migrant workers held in the Districts re-emphasized the fact that venereal disease is the single greatest disease problem among the migrant population group of the State. Of the total examined in 1952, 17.2% had venereal disease; 7.7% had bronchial disease; 6.2% had serious caries of the teeth; 2.6% had cardiovascular disease; and .05% had pulmonary tuberculosis. In the Central State Health District particularly, the high percentage of migrant workers with positive serology returned to the clinic for treatment was attributed to the work of the Venereal Disease Investigators of the Department. Other conditions found among the migrant group were referred to cooperating agencies for follow-up and treatment where necessary.

TUBERCULOSIS CONTROL

The State Health District Offices cooperated with local health departments and county tuberculosis associations in organizing their community X-ray programs and in assisting with their follow-up and referral of cases. A tuberculosis registry was set up in Mercer County under the auspices of the County Board of Freeholders and with the assistance of the Central State Health District staff.

ACUTE COMMUNICABLE DISEASES

Investigation of acute communicable disease, promotion of more adequate reporting, submission of adequate laboratory specimens where indicated, and studies of possible sources of infection were routinely carried on under staff guidance in the Districts. Particularly in the Metropolitan State Health District, local health officers were encouraged to de-emphasize some outmoded but current practices in communicable disease control in the interest of better family health education and prevention.

NUTRITION

In-service training in nutrition was continued for public health nurses during the past year. In the Southern State Health District, where a nutritionist is assigned to the staff, group discussions relating to diet and meal planning were held in one county with pre- and post-natal groups. Also, the associated activities of menu planning and food handling were carried into the Camp Program.

GENERALIZATION OF SANITATION ACTIVITIES

The orientation of all District sanitarian staffs toward participation in the over-all program continued with emphasis on the broadening of the individual scope of activities as well as adequate coverage and more even distribution of the workload. Wherever local health department personnel were available, all District Offices requested and received their cooperation and assistance in routine programs of direct service, with the long-term objective of consultative and advisory service being promoted.

BATHING SANITATION

Bathing sanitation programs were continued. The Monmouth County Bathing Beach Sanitation Committee, organized in 1951, continued to carry their program of bathing beach sanitation, with necessary inspections, sampling and public relations activities. The area surveyed by them included the entire North Jersey shore from Perth Amboy to Seaside Park. The Northern State Health District assisted and promoted the Bathing Lake Program pilot project carried on in that area.

FOOD HANDLING

District staffs assisted local health officials in planning and carrying on their food handler courses. In one District, there were joint previewing of films and materials, preparation of course outlines, and preparation and par-

ticipation in a radio broadcast on food sanitation with the Northern District Health and Sanitary Association. As a result of the Inter-Departmental Committee of the Department of Health and the Department of Institutions and Agencies, the latter has initiated a Food Handler's Training Program. The first course was instituted at the Bordentown Reformatory and was given on a demonstration basis to supervisory personnel by the Central State Health District staff. Similar courses are being planned on the request of superintendents of several other State Institutions in the Districts. The Retail Food Handling Establishment Code has been adopted in twenty-two municipalities in 1952.

Local health officers of two communities within the Central State Health District have accepted the responsibility of inspecting ice cream manufacturing plants in their respective jurisdictions and recommending licenses by the State Department of Health when warranted. The plants in these two communities represent a significant percentage of the total number of ice cream plants in the District. Other local health officers were encouraged to accept the responsibility and may be expected to do so in the next period. Similar arrangements are being developed for the inspection of soft drink bottling plants in this District.

REALTY SUBDIVISIONS

The control of individual sewage treatment plants for new realty subdivisions presented a large problem during the year. Subdivisions were investigated by District staffs and recommendations made as to suitability of disposal systems. The Districts assumed responsibility early in 1953 for the handling of sewage disposal problems in those realty subdivisions in which the Federal Housing Authority or the Veterans Administration is involved financially.

RODENT CONTROL

Initial steps have been taken by the Districts in the field of rodent control and the elimination of open dumps. The City of Camden undertook a comprehensive rodent survey under the direction of a specialist lent to the Department by the Public Health Service, and has established a sanitary landfill to meet part of its garbage disposal problem. An Institute on the control of rats and flies was held in Newark for all health officials and others interested in the problem.

RABIES CONTROL

Rabies Control Wardens were transferred to the District staffs during the year. Within each District an active program for the prevention of rabies was carried on, including routine inspections of pounds and kennels, patrolling and picking up of stray animals, round-up and destruction of wild animal packs, anti-rabic vaccination clinics, health education as well as consultative advice upon request. In the Central State Health District, regional rabies control activities were established involving the joint sponsorship of a number of municipalities.

VETERINARY PROGRAM

There has been noticeable improvement in the sanitary conditions and slaughtering operations of abattoirs within the last year. Staff encouraged the participation of local health officers in routine inspection activities, co-operated with the Department of Institutions and Agencies, the Department of Agriculture and the U. S. Public Health Service in epidemiological investigations, and maintained the vesicular exanthema quarantine.

TRENDS

Throughout the Districts, legal responsibilities are being assumed by the local official agencies in some measure. The cross-integration of the programs of all agencies related to health and safety is being witnessed, even though discrepancies exist in the coordination of the specializations of the public health field which naturally are reflected in the decentralization and generalization of the Departmental programs. It has also become more evident that active interest in health is not confined to the professions concerned with the delivery of health services. The potential envisaged through the united efforts of all segments of the population having a stake in the health field and its services points up the leadership that official agencies must provide and maintain in studying and assessing existing needs and resources available in both normal and emergency situations. It also confirms the need for more definitive and detailed programs and standards provided by the State to the local official agency in the face of the lack or shortage of qualified personnel at the local level.

TABLE I
ANNUAL RATE OF SALARIES AND EXPENSES OF PUBLIC HEALTH NURSES, WHOLLY OR PARTLY STATE-PAID,
AND ASSIGNED TO LOCAL SERVICE AS OF JUNE 30, 1933

A. Serving More Than One Municipality		BOARD OF HEALTH		GOVERNING BODY		BOARD OF EDUCATION		TOTALS	
District	No. of Nurses	Salary	Expenses	Salary	Expenses	Salary	Expenses	Salary	Expenses
Metropolitan	1	\$1,112.00	\$25.00	\$388.00	\$25.00	\$1,524.00	\$126.00	\$3,024.00	\$150.00
Northern	15	22,143.32	4,313.04	7,671.36	711.00	16,977.72	2,831.36	50,769.60	5,088.00
Central	10	13,552.69	913.00	5,851.75	398.75	11,925.25	1,107.75	33,948.00	3,648.00
Southern	20	\$36,808.32	\$2,228.54	\$13,911.31	\$1,134.75	\$30,229.97	\$3,814.71	\$87,431.60	\$7,883.00
TOTALS									
B. Serving Single Municipalities									
Metropolitan	6	\$12,702.00	\$697.50	\$5,818.00	\$182.69	\$1,240.00	\$110.00	\$29,760.00	\$900.00
Northern	4	14,100.00	1,140.00	6,000.00	500.00	2,340.00	170.00	34,100.00	1,740.00
Central	4	14,100.00	1,140.00	5,145.00	100.00	2,100.00	225.00	27,240.00	1,300.00
Southern	8	10,194.00	975.00			\$750.00		27,240.00	1,300.00
TOTALS	21	\$51,196.00	\$3,855.50	\$14,181.00	\$469.50	\$750.00	\$505.00	\$72,120.00	\$4,960.00
GRAND TOTALS	47	\$83,293.32	\$5,914.04	\$28,092.31	\$1,694.25	\$7,132.00	\$703.00	\$159,660.00	\$12,543.00

Above does not include two relief nurses or a Hospital and Maternity Home Visitor.

Report of the Division of Preventable Diseases

July 1, 1952—June 30, 1953

CARL E. WEIGELE, M. D., M. P. H., *Director*

Bureau of Acute Communicable Diseases

Bureau of Tuberculosis Control

Bureau of Venereal Disease Control ADELE C. SHEPARD, M. D., M. P. H.
Chief

Division of Preventable Diseases

Another step in the amazing progress of the past few years against the communicable diseases occurred this year when the announcement was made of the successful use of gamma globulin as a protective against the paralytic manifestations of poliomyelitis. Prompt steps were taken to make the best use of the limited supply of this material by entrusting to the Office of Defense Mobilization the distribution of all available supplies to the various States. This agency allocated a supply to each State Department of Health based on the number of reported cases in the past five years.

THE USE OF GAMMA GLOBULIN

As soon as the national allocation was announced with recommendations for use of the material, a plan of distribution was developed for New Jersey, using the regular distribution stations for other biologicals. The value of gamma globulin in preventing or modifying measles and infectious hepatitis had been demonstrated previously and these diseases were included in the New Jersey plan. In all three diseases the use of gamma globulin was restricted to household contacts, as follows:

Poliomyelitis—Household contacts 30 years of age or under
Pregnant women of any age
Dosage: 0.14 c.c. or less per lb. of body weight

Infectious Hepatitis—Household contacts
Dosage for modification: 0.01 c.c. per lb. of body weight

Measles—Children of the household
Dosage for modification: 0.02 c.c. per lb. of body weight
Dosage for prevention in infants and debilitated children; 0.10 c.c. per lb. of body weight

A folder describing the plan of distribution was mailed to all physicians and health officers in May, 1953, and distribution was begun. Only a few cases of polio were reported prior to the end of the fiscal year, but already requests were received for supplies of gamma globulin to protect playmates of infected children and groups such as camps. As these proposed uses were contrary to the national plan and the plan adopted by the State Department of Health, they were denied. Some difficulty is anticipated in limiting distribution as the number of cases of poliomyelitis increases.

PREPARATION FOR INFLUENZA EPIDEMIC

An instance of prompt organization against a threatened epidemic occurred this year. Because of influenza-like outbreaks of disease from various parts of the country, particularly in military camps, the Public Health Service in January, 1953, alerted State Health Officers to the possibility of a widespread epidemic. Accordingly, letters were sent to practicing physicians, health officers, hospital administrators, and clinical pathologists requesting their cooperation in prompt reporting and offering to make available the difficult laboratory studies for the identification of the influenza virus in well-defined outbreaks. In one of the institutions of the State, diagnosis of a small group of cases was confirmed as influenza A prime, but a wide-scale epidemic did not materialize.

REVISION OF THE STATE SANITARY CODE

With the adoption of the revised State Sanitary Code on June 22, 1953, changes in reporting practices became effective. Chickenpox, German measles, and mumps have been removed from the list of reportable diseases because observance of isolation and quarantine are not effective in controlling these diseases and because the natural spread of these diseases in early childhood is the only way in which immunity can be acquired.

Several diseases were added to the list, notably infectious hepatitis and salmonellosis which are being recognized more frequently as a cause of serious illness.

All outbreaks of any disease or unusual manifestation of disease are now to be reported by physicians and investigated by local health officers. This should stimulate epidemiologic and laboratory studies and the application of control measures.

Isolation and quarantine regulations for patients and contacts have been reduced for some of the communicable diseases because modern therapy has modified their duration and severity.

CHANGES IN ORGANIZATION

Changes in the organization of the Department were effected July 1, 1952, which reduced the scope of activities of the Division of Preventable Diseases to the Acute Communicable Diseases, Tuberculosis, and the Venereal Diseases. The following bureaus, formerly a part of the Division, were transferred appropriately to the newly created Division of Chronic Illness Control: the Bureau of Cancer Control, the Bureau of Chronic Diseases including the Section on Heart Disease and the Program on Alcoholism Control. The processing of tuberculosis and venereal disease morbidity reports was trans-

ferred to the Division of Vital Statistics and Administration. The Migrant Health Program was transferred to the Division of Local Health Services.

With this transfer of functions and personnel, smaller office space was required and, accordingly, the Division of Preventable Diseases was moved on September 15, 1952, from the third floor of the First-Mechanics Bank Building to smaller quarters on the fourth floor of the same building. As the year ended, curtailment of federal funds for tuberculosis and venereal disease control was announced. To meet this curtailment arrangements have been made to transfer personnel of the Venereal Disease Bureau to other divisions, retaining only the medical chief, two clerks, and the five investigators who are employed for a special case-finding project for which federal funds were continued. As tuberculosis is a long-term illness, this program will be transferred to the Division of Chronic Illness Control on July 1, 1953.

CASES AND DEATHS OF THE REPORTABLE DISEASES

During the calendar year 1952, there were reported 149,519 cases of the 39 reportable diseases (exclusive of tuberculosis and venereal diseases), as compared with 99,641 for the preceding year. (See Table No. I.) Measles was chiefly responsible for this increase with 77,972 cases in 1952 as against 22,346 in 1951.

The all-time record low for diphtheria in 1951 (34 cases) was further reduced in 1952 to 32 cases. Two deaths were recorded.

There has been no report of a case of smallpox since 1947.

An upswing in poliomyelitis occurred in 1952 with 754 cases reported and 47 deaths, as compared with 448 cases and 41 deaths in 1951. However, 1952 did not reach the 1950 figure of 866 cases and 70 deaths. In 1949, there were 1,513 cases and 121 deaths.

Streptococcal sore throat (including scarlet fever) increased from 2,989 reported cases in 1951 to 3,630 cases in 1952.

An increase in reported cases of amoebic dysentery from 87 in 1951 to 451 in 1952 may be due in part to a higher index of suspicion and greater use of laboratory tests to confirm the diagnosis.

As the revised State Sanitary Code omits Chickenpox, German measles, and mumps from the list of reportable diseases, 1952 is the last year that figures will be available. It is interesting to note that these three diseases totaled 62,743 cases in 1952, or 42% of the total number of cases of reportable diseases. Clerical workers who have handled these report cards will be released for more productive activity.

BOARD OF EXAMINERS OF HEALTH OFFICERS, INSPECTORS, AND PUBLIC HEALTH LABORATORY TECHNICIANS

The Director of the Division continued to serve as Chairman of the Board of Examiners of Health Officers, Inspectors, and Public Health Laboratory Technicians. The usually scheduled examinations were conducted.

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 administrative 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.

PROGRAMS

Considerable time was given by the Director and his staff to the preparation of programs within the Division and also to the review of programs of other divisions of the Department.

TABLE I
REPORTED CASES OF NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE
(Exclusive of Tuberculosis and Venereal Diseases)
New Jersey, 1962

COUNTIES	Anthrax	Chickentox	Diarthera of Newborn	Diphtheria	Dysentery, Amoebic	Dysentery, Bacillary	Encephalitis, Infectious	Epilepsy	Food Poisonings & Food Infections	Influenza	Malaria	Measles	Measles, German	Meningococcal Meningitis	Mumps
Atlantic	0	138	0	1	0	2	6	0	0	0	0	760	40	4	177
Bergen	0	6,187	0	2	0	0	8	0	0	4	0	13,678	1,908	4	2,235
Burlington	0	269	2	0	0	0	4	0	0	10	1	699	45	8	140
Camden	1	1,466	0	0	1	0	4	0	0	0	0	2,211	269	12	467
Cape May	0	75	0	0	0	0	0	0	0	0	0	558	12	1	67
Cumberland	0	74	0	3	0	0	0	0	0	0	0	345	30	3	58
Essex	0	7,603	0	0	0	1	19	2	2	53	3	24,568	4,544	18	4,378
Gloucester	0	334	0	6	0	0	0	0	0	0	1	891	100	5	500
Hudson	0	1,033	2	3	2	7	5	0	0	0	1	5,172	1,271	10	823
Hunterdon	0	23	0	0	0	0	0	0	0	0	0	169	5	0	25
Mercer	0	773	5	2	1	1	4	1	1	0	1	1,698	688	2	326
Middlesex	0	1,212	0	3	0	1	0	0	0	0	0	1,853	187	4	948
Monmouth	0	1,289	0	0	2	2	2	3	0	0	3	4,025	390	8	921
Morris	0	1,579	0	1	0	0	2	0	0	1	0	4,710	291	6	1,353
Morris	0	141	0	0	0	0	0	0	0	0	0	692	17	1	24
Ocean	0	1,707	0	2	0	0	1	0	0	45	0	5,205	319	1	415
Passaic	0	247	0	0	0	0	0	0	0	0	0	1,856	70	3	59
Salem	2	489	0	0	0	0	1	0	0	0	0	1,029	214	1	271
Somerset	0	76	0	0	0	0	0	0	0	0	0	1,156	126	3	154
Sussex	0	5,492	0	1	0	0	2	1	0	2	2	9,423	1,456	6	3,488
Union	0	87	0	6	0	0	0	0	0	0	1	230	135	0	30
Warren	0	53	0	0	442	0	0	0	0	0	0	84	35	0	65
State Institutions	0	90	0	0	3	0	0	0	0	0	1	380	589	10	143
Military posts	0	0	0	0	0	0	0	13	28	0	178	0	0	0	0
State total	3	30,377	9	32	451	13	59	20	31	115	191	79,972	12,741	110	17,077

TABLE I—Continued
 REPORTED CASES OF NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE
 (Exclusive of Tuberculosis and Venereal Diseases)

New Jersey, 1962

COUNTIES	Ophthalmia Neonatorum	Paratyphoid Fever	Pneumonia	Polymyelitis	Pittiasis	Rocky Mountain Spotted Fever	Scarlet Fever	Streptococcal Sore Throat	Tetanus	Trachoma	Trichinosis	Typhoid Fever	Undulant Fever	Whooping Cough
Athantic	0	0	5	12	0	0	34	0	0	0	0	2	0	19
Bergen	0	0	33	109	0	0	506	8	0	0	4	1	0	231
Burlington	0	1	10	14	0	1	34	1	1	0	1	1	0	60
Camden	0	1	114	35	0	3	203	0	0	0	0	1	0	76
Cape May	0	1	0	5	0	0	16	0	0	0	0	1	0	8
Cumberland	1	2	21	32	0	0	133	0	1	0	0	4	1	14
Essex	1	0	1,067	89	0	0	515	10	2	0	4	10	0	480
Gloucester	0	1	47	78	1	1	42	0	1	0	0	2	0	172
Hudson	0	1	7	0	0	0	14	0	0	0	0	1	1	41
Hunterdon	0	1	116	24	0	0	113	0	0	0	2	0	0	51
Mercer	0	0	59	57	0	0	196	0	1	0	1	0	0	53
Middlesex	0	2	35	43	0	3	143	0	1	0	0	1	0	128
Monmouth	0	0	37	54	0	0	99	0	2	0	0	1	0	94
Morris	0	0	37	54	0	1	15	0	0	0	0	0	0	13
Ocean	0	0	17	52	0	0	503	0	1	1	4	0	0	44
Passaic	0	0	0	21	0	0	158	0	0	0	0	1	0	9
Salem	0	1	5	24	0	1	74	1	0	0	0	1	0	22
Somerset	0	0	29	13	0	0	323	4	0	0	1	0	4	2
Sussex	0	0	92	67	0	0	46	0	0	0	0	3	0	289
Union	0	0	8	8	0	0	99	0	0	0	0	0	0	13
Warren	0	0	10	1	0	0	3	0	0	0	0	0	0	0
State institutions	0	0	376	5	0	0	21	12	0	0	0	0	0	2
Military posts	0	0	2,136	754	1	10	3,492	138	11	1	20	37	16	1,093
State total	1	11	2,136	754	1	10	3,492	138	11	1	20	37	16	1,093

1 No reported cases of Botulism, Cholera, Filariasis, Glanders, Leprosy, Mental Deficiency, Plague, Rabies (human), Smallpox, Tularemia, Typhus Fever and Yellow Fever.

TABLE II
 RECORDED DEATHS FROM REPORTABLE DISEASES BY COUNTIES
 (Exclusive of Epilepsy, Mental Deficiency, Tuberculosis and Venereal Diseases)

NEW JERSEY, 1962

COUNTIES	Chickenpox (087)	Diphtheria (055)	Dysentery, Amoebic (046)	Dysentery Unspecified (048)	Encephalitis (082, 083)	Influenza (480-483)	Meningococcal Meningitis (087-0)	Mumps (085)	State total
Atlantic	0	1	0	0	2	0	0	0	13
Bergen	0	0	0	1	1	2	1	0	44
Burlington	0	0	0	0	1	2	0	0	6
Camden	2	0	0	0	0	6	0	1	0
Cape May	0	0	0	0	0	0	0	0	0
Cumberland	0	1	0	0	1	2	0	0	2
Essex	0	0	3	1	2	4	1	1	11
Gloucester	0	0	2	0	3	1	0	0	1
Hudson	0	0	0	0	0	1	0	0	1
Hunterdon	0	0	0	0	0	1	0	0	1
Mercer	0	0	0	0	1	2	0	0	1
Middlesex	1	1	0	0	3	1	0	0	0
Monmouth	0	0	0	0	0	1	0	0	1
Morris	0	0	0	0	0	1	0	0	1
Ocean	0	0	0	0	0	1	0	0	1
Passaic	1	0	1	0	5	3	0	0	0
Salem	0	0	0	0	0	1	0	0	1
Somerset	0	0	0	0	0	0	0	0	0
Sussex	0	0	0	0	0	0	0	0	0
Union	0	0	0	0	0	2	0	0	0
Warren	0	0	0	0	0	2	0	0	0
State institutions	0	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0
State total	4	2	6	4	20	40	14	14	13

Disease and International List (6th Rev.) Numbers

TABLE II—Continued
RECORDED DEATHS FROM REPORTABLE DISEASES BY COUNTIES
(Exclusive of Epilepsy, Mental Deficiency, Tuberculosis and Venereal Diseases)
NEW JERSEY, 1952

COUNTIES	Disease and International List (8th Rev.) Numbers						
	Pneumonia (490-493)	Pneumonia of the Newborn (783)	Polioviruses (080-081)	Rocky Mountain Spotted Fever (104)	Streptococcal Sore Throat (Including Scarlet Fever) (050-051)	Tetanus (061)	Whooping Cough (056)
Atlantic	0	39	1	0	0	0	0
Bergen	112	14	7	0	0	0	0
Burlington	0	11	0	0	0	0	0
Camden	4	10	0	0	0	1	0
Cape May	0	10	0	0	0	0	0
Cumberland	0	1	2	0	0	0	1
Essex	10	19	0	0	1	1	0
Gloucester	26	17	0	0	1	1	0
Hudson	0	173	2	0	0	0	0
Hunterdon	0	24	2	0	0	0	0
Mercer	56	4	3	0	0	0	0
Middlesex	82	8	6	0	0	0	0
Monmouth	0	0	0	0	0	0	0
Morris	0	0	0	0	0	0	0
Ocean	0	47	4	0	0	0	0
Passaic	0	18	0	0	0	0	0
Pasaden	0	106	3	0	0	0	0
Salem	0	20	1	0	1	1	0
Somerset	0	22	1	0	0	0	0
Union	0	14	2	0	0	1	0
Warren	0	17	1	0	0	0	1
State institutions	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0
State total	3	1,195	47	1	4	8	3

Note: No recorded deaths from Anthrax, Asiatic Cholera, Brucellosis, Dysentery (bacillary), Filariasis, Food Poisonings and Food Infections, German Measles, Hemorrhagic Septicemia, Infectious Mononucleosis, Listeriosis, Malaria, Meningitis, Other Protozoal Infections, Paratyphoid Fever, Plague, Psittacosis, Rabies in Humans, Smallpox, Trachoma, Trichinosis, Typhoid Fever, Typhus Fever or Yellow Fever.

TABLE III
CASES AND DEATHS FROM TYPHOID FEVER: 1952
BY SEX AND AGE GROUPS

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	3	0	2	0	1	0
5 to 14 years	7	0	6	0	1	0
15 to 24 years	5	0	3	0	2	0
25 to 44 years	16	0	10	0	6	0
45 to 64 years	6	0	3	0	3	0
65 years and over	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
All ages	37	0	24	0	13	0

TABLE IV
CASES AND DEATHS FROM STREPTOCOCCAL SORE THROAT (Including Scarlet Fever): 1952
BY SEX AND AGE GROUPS

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	11	0	5	0	6	0
1 to 4 years	962	1	459	0	463	1
5 to 14 years	2,436*	1	1,283	1	1,230	0
15 to 24 years	184	0	72	0	112	0
25 to 44 years	66	1	22	0	44	1
45 to 64 years	7	0	0	0	7	0
65 years and over	1	1	1	1	0	0
Age unknown	3	0	2	0	1	0
All ages	3,630*	4	1,826	2	1,803	2

* Total cases include: One sex unknown.

TABLE V
CASES AND DEATHS FROM DIPHTHERIA: 1952
BY SEX AND AGE GROUPS

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	11	0	4	0	7	0
5 to 14 years	9	0	2	0	7	0
15 to 24 years	5	2	1	1	4	1
25 to 44 years	5	0	2	0	3	0
45 to 64 years	2	0	0	0	2	0
65 years and over	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
All ages	32	2	9	1	23	1

TABLE VI

CASES AND DEATHS FROM WHOOPING COUGH: 1952

BY SEX AND AGE GROUPS

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	128	3	56	1	72	2
1 to 4 years	467	0	238	0	229	0
5 to 14 years	1,657	0	495	0	362	0
15 to 24 years	18	0	10	0	8	0
25 to 44 years	15	0	5	0	10	0
45 to 64 years	8	0	1	0	5	0
65 years and over	1	0	0	0	1	0
Age unknown	1	0	0	0	—	—
All ages	1,693	3	805	1	888	2

TABLE VII

CASES AND DEATHS FROM MENINGOCOCCAL MENINGITIS: 1952

BY SEX AND AGE GROUPS

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	22	3	17	3	5	0
1 to 4 years	29	3	15	1	14	2
5 to 14 years	24	2	10	1	14	1
15 to 24 years	20	1	13	0	7	1
25 to 44 years	8	2	8	2	0	0
45 to 64 years	6	2	5	1	1	1
65 years and over	1	0	1	0	0	0
Age unknown	0	0	0	0	—	—
All ages	110	13	69	8	41	5

TABLE VIII

CASES AND DEATHS FROM POLIOMYELITIS*: 1952

BY SEX AND AGE GROUPS

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	10	1	8	0	2	1
1 to 4 years	136	4	92	2	66	2
5 to 14 years	367	18	225	11	192	7
15 to 24 years	102	5	53	2	49	3
25 to 44 years	113	18	54	11	59	7
45 to 64 years	3	1	1	0	2	1
65 years and over	0	0	0	0	0	0
Age unknown	1	0	0	0	1	0
All ages	754	47	443	26	311	21

* Cases are acute poliomyelitis; deaths include also late effects of poliomyelitis.

TABLE IX

CASES OF ACUTE POLIOMYELITIS BY MONTH BY COUNTY: 1952

COUNTY	Total	NUMBER OF CASES											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Atlantic	12	0	0	0	0	0	0	0	8	3	1	0	0
Bergen	109	0	0	1	1	0	2	13	37	32	19	3	1
Burlington	14	0	0	0	0	0	0	0	1	8	3	0	0
Camden	33	0	0	0	0	0	2	1	9	13	7	2	1
Cape May	5	0	0	0	0	0	0	1	3	1	0	0	0
Cumberland	32	0	0	0	0	0	0	6	10	12	2	2	0
Essex	89	0	0	0	0	0	0	8	31	32	12	3	1
Gloucester	9	0	0	0	0	0	0	1	2	4	0	0	0
Hudson	78	0	0	0	0	0	0	5	33	22	12	3	3
Hunterdon	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer	24	0	1	0	0	0	0	6	2	6	7	2	0
Middlesex	57	0	0	0	0	0	1	5	14	20	11	6	0
Monmouth	43	0	0	1	0	0	0	6	18	7	5	4	2
Morris	50	0	0	0	0	0	0	3	14	16	14	3	0
Ocean	4	0	0	0	0	0	0	0	3	1	0	0	0
Passaic	52	0	0	0	0	0	1	2	14	19	11	3	2
Salem	21	0	0	0	0	0	0	7	11	2	1	0	0
Somerset	24	0	0	0	0	0	0	4	5	10	4	1	0
Sussex	15	0	0	0	0	0	1	4	9	1	0	0	0
Union	67	0	0	0	0	0	0	10	26	22	7	2	0
Warren	8	0	0	0	0	0	0	0	4	1	1	1	1
*State institutions	1	0	0	0	0	1	0	0	0	0	0	0	0
*Military establishments	5	0	1	0	0	0	0	0	1	1	1	1	0
State Total	734	0	2	2	1	1	7	77	249	240	125	39	11

* Not included in totals of counties where located.

TABLE X

MALARIA—1943-1952

Year	Total No. Reported Cases	No. Cases in Military Personnel	No. Cases in Civilians	Probable Place of Infection of Civilian Cases		
				Out of State	New Jersey	Doubtful
1943	20	16	4	3	0	1
1944	826	788	38	32	5	1
1945	1,412	1,287	125	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	18	8	5	3	0
1950	11	5	6	3	3	2
1951	371	365	6	6	0	0
1952	191	178	13‡	12	0	1
Totals	3,323	3,154	169	128	25	6

* One of these cases infected through blood transfusion.

† Two of these cases infected through blood transfusion.

‡ Twelve of these were previously in military service.

TABLE XI
CASES AND DEATHS, WITH RATES AND PER CENT FATALITY: 1952
FOR SELECTED REPORTABLE DISEASES

DISEASES	CASES		DEATHS		Per Cent Fatality
	No.	Rate*	No.	Rate*	
Chickenpox	30,877	618.8	4	0.1	<0.1
Diphtheria	32	0.6	0	<0.1	6.3
German measles	12,741	257.4	0	..	..
Influenza	115	2.3	40	0.8	34.8
Measles	79,972	1,615.9	14	0.3	<0.1
Meningococcal meningitis	110	2.2	13	0.3	11.8
Mumps	17,077	345.1	3	0.1	<0.1
Pneumonia	2,136	43.2	1,196	24.1	55.9
Poliovirus	754	15.2	47†	0.9	6.2
Rocky Mountain Spotted fever	10	0.2	1	<0.1	10.0
Streptococcal Sore Throat (Inclades Scarlet fever)	3,630	73.3	4	0.1	0.1
Typhoid fever	37	0.7	0	..	..
Whooping cough	1,633	34.2	3	0.1	0.2

* Expressed per 100,000 estimated population.

† Includes 2 deaths from late effects.

Note: <0.1 means less than 0.1.

Bureau of Tuberculosis Control

Tuberculosis remained a major communicable disease problem in New Jersey, with 3,769 cases and 831 deaths reported in 1952. From the "description" of the statistical data presented in Table XII, it appears that intensification of effort is indicated particularly in Atlantic, Essex, Hudson and Mercer Counties. (See Tables XII, XIII, XIV and XV.)

The death rate from tuberculosis continued to decline, with an increase in case rates per death, both signs of progress (See Table XVI) but also an indication of what could be accomplished with more adequate case-finding, follow-up, and prompt therapy. The State death rate of 16.8 per 100,000 population is slightly higher than the estimated figure for the United States for 1952, which is 16.1.

CHEST X-RAY SURVEYS

Mass chest X-ray surveys have continued as a major activity (Tables XVII and XVIII), with the State District Health Officers assuming the responsibility of arrangements through local agencies. A complete change over from State-owned equipment to commercial X-ray service was effected on November 1, 1952.

The effort to concentrate surveys in high prevalence areas has shown results by a higher proportion of referrals to number of persons X-rayed than formerly. (See Table XIX.)

HOSPITAL AND CLINIC FACILITIES

As hospital populations have proved to be a high-prevalence group for tuberculosis case-finding, equipment was purchased to equip another general hospital for routine screening of admissions and employees.

All screening, both through community and hospital surveys, was effected in cooperation with the heart and cancer programs and is being developed as part of the multiphasic screening program of the Division of Chronic Illness. (See Table XX.)

TABLE XII

DISCUSSION ON ATTACHED TABLE OF TUBERCULOSIS DATA: 1952

The attached release of tuberculosis morbidity and mortality numbers and rates may be useful, in some measure, in deciding where emphasis on case finding and control should be placed.

In determining whether the case or death rate of one county or municipality is significantly different from another, it is suggested that twice the standard error of each rate be used. If overlapping of rates does not occur by use of this device, one may say that in 95 times out of 100, the rates of the places are significantly different. In seeking explanation for such a difference, many factors must be considered. The emphasis on case finding, race and age distribution of the populations and completeness of reporting may enter into the problem.

Interpretative illustrations follow:

A. Although Mercer County had the highest observed death rate, yet if one considers the use of twice the standard error, the county rate could have been as low as 18.9 per 100,000 estimated population. Using twice the standard error to adjust the other county rates to the highest value possible by chance alone, the counties of Atlantic (28.7), Burlington (18.9), Camden (19.7), Essex (27.7), Gloucester (20.2), Hudson (27.6), Hunterdon (25.4), Monmouth (21.2), Salem (34.6), Sussex (27.1) and Warren (19.9) either equal or exceed Mercer County's rate.

Cape May County had the lowest observed rate but the use of the same technique indicates that its rate could have been as high as 13.0 per 100,000 estimated population. Counties which could have been as low or lower by chance alone were Bergen (4.6), Burlington (6.9), Camden (10.9), Cumberland (4.0), Gloucester (5.4), Hunterdon (2.6), Middlesex (8.4), Monmouth (10.8), Morris (7.4), Ocean (1.9), Passaic (8.0), Salem (8.6), Somerset (3.5), Sussex (1.5), Union (9.6), and Warren (1.9).

In view of this paradox of some counties appearing in both lists, one could only conclude that if those on the high list did not appear on the low list, then their rates could be called relatively high. Conversely, if those on the low list do not appear on the high list, one could assume that their rates are relatively low. Using this premise, the following lists were made:

Counties With Relatively High Rates

Atlantic
Essex
Hudson
Mercer

Counties With Relatively Low Rates

Bergen Ocean
Cape May Passaic
Cumberland Somerset
Middlesex Union
Morris

Similar comparisons may be made for the death rates of the cities and for the case rates of both the counties and cities. In basing conclusions on the comparison of case rates, additional caution must be used. These cases are those reported for the first time in 1952 and, for those areas where case finding is done properly, may include many cases of inactive tuberculosis.

The case-death ratio is to some extent a measure of the effectiveness of case finding. The State averaged $4\frac{1}{2}$ cases per death. Cape May County led with almost 16 cases per death. Burlington had the lowest ratio, 1.9 cases per death, and was closely followed by Sussex County with a ratio of 2.0. Usually a high case-death ratio like that of Cape May County will be accompanied by a relatively low death rate.

Using a reverse technique and examining the case-death ratios for those counties which appeared in the list of counties with relatively low rates, it may readily be seen that Bergen County (9.9), Cumberland County (14.0), and Passaic County (14.8) were the only ones to have a ratio at least twice that of the State. It would appear that these counties may have the most effective tuberculosis control programs in the State.

TABLE XII. TUBERCULOSIS DATA BY RESIDENCE FOR COUNTIES AND MAJOR MUNICIPALITIES—NEW JERSEY, 1952

COUNTY AND MUNICIPALITY	Deaths			Cases*			Cases per Death (Case-Death) Ratio
	Number	Rate†	S.E.‡	Number	Rate†	S.E.‡	
New Jersey	831	18.8	0.6	3,769	76.2	1.2	4.5
Atlantic County	28	20.9	3.9	124	92.5	8.3	4.4
Atlantic City	22	35.5	7.6	97	156.5	15.9	4.4
Bergen County	38	6.8	1.1	375	67.6	8.5	9.9
Burlington County	18	12.9	3.0	35	25.0	4.2	1.9
Camden County	47	15.3	2.2	174	56.7	4.3	3.7
Camden City	21	16.5	3.6	88	69.3	7.4	4.2
Cape May County	2	5.4	3.8	31	83.8	15.0	15.5
Cumberland County	10	11.0	3.5	140	153.8	13.0	14.0
Essex County	226	24.5	1.6	631	64.3	2.7	2.8
East Orange	9	11.1	3.7	38	46.9	7.6	4.2
Irington	5	8.2	3.7	17	27.9	6.8	3.4
Newark	174	38.8	2.9	466	104.0	4.8	2.7
Gloucester County	12	12.8	3.7	60	63.8	8.2	5.0
Hudson County	157	23.8	1.9	526	79.6	3.5	3.4
Bayonne	13	16.5	4.6	48	60.3	8.8	3.7
Hoboken	11	21.6	6.5	64	125.5	15.7	5.8
Jersey City	99	32.4	3.3	287	93.8	5.5	2.9
Union City	11	19.6	5.9	25	44.6	8.9	2.3
Hunterdon County	6	14.0	5.7	22	51.2	10.9	3.7
Mercer County	60	25.5	3.3	249	106.0	6.7	4.2
Trenton	38	29.2	4.7	163	125.4	9.8	4.3
Middlesex County	35	12.8	2.2	134	49.1	4.2	3.8
Monmouth County	37	16.0	2.6	102	44.2	4.4	2.8
Morris County	22	13.0	2.8	64	37.9	4.7	2.9
Ocean County	6	10.3	4.2	36	62.1	10.3	6.0
Passaic County	40	11.6	1.8	592	172.1	7.1	14.8
Clifton	7	10.4	3.9	109	140.3	14.9	14.3
Passaic City	9	15.5	5.2	123	212.1	19.1	13.7
Paterson	18	12.7	3.0	223	157.0	10.5	12.4
Salem County	11	21.6	6.5	39	76.3	12.2	3.5
Somerset County	10	9.7	3.1	60	58.3	7.5	6.0
Sussex County	5	14.3	6.4	10	28.6	9.0	2.0
Union County	54	13.2	1.8	185	45.2	3.3	3.4
Elizabeth City	17	14.8	3.6	62	53.9	6.8	3.6
Warren County	6	10.9	4.5	38	69.1	11.2	6.3
State Institutions	1	**	..	112	**	...	...
Military Establishments .....	...	...	..	30	**	...	...

* Cases, regardless of activity, reported for first time in 1952.

† Rate per 100,000 estimated population.

‡ Standard error of rate. Must be considered for comparison of rates.

** Residence allocation too unreliable. Rates not computed.

TABLE XIII. TUBERCULOSIS MORBIDITY BY AGE GROUPS FOR COUNTIES AND MAJOR CITIES—NEW JERSEY, 1952

PLACE	Age Group								
	All Ages	Under 1 Year	1-4	5-14	15-24	25-44	45-64	65+	Unknown
Atlantic County	124	1	1	0	40	48	25	....	....
Atlantic City	97	1	1	7	30	30	19	....	....
Bergen County	373	9	1	23	143	143	31	1	....
Burlington County	33	....	....	4	13	11	7	....	....
Camden County	174	2	2	4	17	62	69	16	2
Camden City	88	2	1	3	16	30	36	5	1
Cape May County	31	....	1	5	6	8	10	5	1
Cumberland County	140	2	12	32	14	30	38	12	....
Essex County	631	5	18	20	83	236	202	66	1
East Orange	38	....	....	1	4	19	11	3	....
Irvington	17	....	....	....	1	7	6	3	....
Newark	468	4	17	12	63	173	152	45	....
Gloucester County	60	....	1	7	8	16	21	7	....
Hudson County	526	3	8	13	46	175	217	64	....
Bayonne	48	....	....	1	15	15	26	5	....
Hoboken	64	....	....	7	10	18	24	5	....
Jersey City	287	2	5	3	30	100	108	39	....
Union City	25	1	....	1	....	12	9	2	....
Hunterdon County	22	....	....	2	7	6	6	1	....
Mercer County	240	2	4	4	21	82	91	45	....
Trenton	163	2	4	4	15	51	60	27	....
Middlesex County	134	....	3	2	18	51	39	20	1
Monmouth County	102	1	....	6	14	38	33	8	2
Morris County	64	....	....	2	4	28	22	8	....
Ocean County	36	....	3	....	4	14	14	....	1
Passaic County	592	....	2	9	29	164	263	119	6
Clifton	190	....	....	1	4	34	45	18	....
Passaic	123	....	1	3	4	40	54	21	....
Paterson	223	....	1	2	15	57	101	45	2
Salem County	39	....	....	2	2	12	15	8	....
Somerset County	60	....	....	....	7	30	14	9	....
Sussex County	10	....	....	....	1	6	1	2	....
Union County	185	1	4	4	21	70	61	24	....
Elizabeth	62	....	2	....	6	18	26	10	....
Warren County	38	....	....	2	5	10	17	4	....
Institutions	112	....	....	2	14	34	38	24	....
Military Posts	30	....	....	....	16	12	2	....	....
Total	3769	16	68	118	373	1277	1377	525	15

TABLE XIV. TUBERCULOSIS MORBIDITY BY SEX AND BY COLOR FOR COUNTIES AND MAJOR CITIES—NEW JERSEY, 1952

PLACE	Sex				Color			
	Total	Male	Female	Unknown	Total	White	Non-white	Unknown
Atlantic County	124	74	50	....	124	76	47	1
Atlantic City	97	58	39	....	97	57	40	....
Bergen County	373	221	154	....	373	351	22	1
Burlington County	33	26	9	....	33	28	7	....
Camden County	174	110	64	....	174	134	39	1
Camden City	88	58	30	....	88	56	31	1
Cape May County	31	21	10	....	31	27	3	1
Cumberland County	140	70	70	....	140	111	27	2
Essex County	631	464	227	....	631	363	268	....
East Orange	38	19	19	....	38	27	11	....
Irvington	17	10	7	....	17	16	1	....
Newark	468	313	153	....	468	226	240	....
Gloucester County	60	33	27	....	60	43	16	1
Hudson County	526	341	185	....	526	464	62	....
Bayonne	48	29	19	....	48	46	2	....
Hoboken	64	37	27	....	64	61	3	....
Jersey City	287	188	99	....	287	231	56	....
Union City	25	17	8	....	25	25	....	....
Hunterdon County	22	14	8	....	22	21	1	....
Mercer County	240	149	100	....	249	202	47	....
Trenton	163	92	71	....	163	131	32	....
Middlesex County	134	78	56	....	134	112	21	1
Monmouth County	102	58	44	....	102	68	34	....
Morris County	64	40	24	....	64	58	6	....
Ocean County	36	18	18	....	36	30	6	....
Passaic County	592	395	197	....	592	557	33	2
Clifton	100	58	42	....	100	99	1	....
Passaic	123	95	28	....	123	112	11	....
Paterson	223	146	77	....	223	200	21	2
Salem County	39	24	15	....	39	36	3	....
Somerset County	60	32	28	....	60	58	2	....
Sussex County	10	3	7	....	10	9	1	....
Union County	185	122	63	....	185	138	47	....
Elizabeth	62	43	19	....	62	46	16	....
Warren County	38	19	19	....	38	38	....	....
Institutions	112	60	43	....	112	101	11	....
Military Posts	30	27	3	....	30	23	6	1
Total	3769	2348	1421	....	3769	3048	710	11

TABLE XV. TUBERCULOSIS MORBIDITY BY CLINICAL STATUS FOR COUNTIES AND MAJOR CITIES—NEW JERSEY, 1952

PLACE	Clinical Status				
	Total	Active	Not Active	Undetermined	Not Stated
Atlantic County	124	65	45	3	11
Atlantic City	97	54	34	3	6
Bergen County	375	114	193	63	5
Burlington County	33	26	2	3	4
Camden County	174	143	18	5	8
Camden City	88	74	8	2	4
Cape May County	31	15	10	5	1
Cumberland County	146	24	166	3	4
Essex County	631	563	40	17	11
East Orange	38	31	6	...	1
Irvine County	17	13	3	...	1
Newark	496	439	16	8	3
Gloucester County	60	28	24	8	..
Hudson County	528	336	119	60	11
Bayonne	48	22	19	6	1
Hoboken	64	33	20	9	2
Jersey City	287	200	54	30	3
Union City	25	16	6	3	..
Hunterdon County	22	20	1	1	..
Mercer County	249	179	66	1	3
Trenton	163	119	42	1	1
Middlesex County	134	100	19	11	4
Monmouth County	102	67	26	8	1
Morris County	64	48	7	3	6
Ocean County	36	24	8	2	2
Passaic County	592	163	392	30	7
Clifton	109	21	78	5	1
Passaic	123	33	77	9	4
Paterson	223	71	140	12	..
Salem County	39	15	19	5	..
Somerset County	66	30	29	1	..
Sussex County	10	7	2	1	..
Union County	185	173	6	4	2
Elizabeth	62	57	3	1	1
Warren County	38	17	17	3	1
Institutions	112	59	26	18	9
Military Posts	30	18	2	7	3
Total	3769	2234	1180	262	93

TABLE XVI

FIVE YEAR TREND IN TUBERCULOSIS DEATH RATES

Year	Deaths		Cases	Cases per Death (Case-Death Ratio)
	Number	Rate		
1948	1,388	29.4	3,141	2.3
1949	1,298	27.1	3,629	2.8
1950	1,170	24.2	3,548	3.0
1951	1,022	20.9	3,246	3.2
1952	831	16.8	3,769	4.5

TABLE XVII

ANNUAL REPORT OF CHEST X-RAY SURVEYS* BY TYPE OF SURVEY; WITH NUMBER AND PER CENT OF REFERRALS†

PERIOD OF JANUARY 1 THROUGH DECEMBER 31, 1952

Survey Type	Readable X-rays	Referrals	
		Number	Per Cent
Industrial (Demonstration)	2,870	131	4.6
Community	97,287	4,070	4.2
All Other Groups	5,339	165	3.1
Total	105,496	4,366	4.1

* Includes only those conducted by the New Jersey State Department of Health.

† Excludes cardiovascular referrals.

TABLE XVIII. ANNUAL REPORT OF INDUSTRIAL AND COMMUNITY CHEST X-RAY SURVEYS(a) BY COUNTY AND MAJOR MUNICIPALITIES: WITH NUMBER AND PER CENT OF REFERRALS(b)

(Period of January 1 through December 31, 1952)

PLACE(c)	Industrial			Community		
	Readable X-rays	Referrals No.	Per Cent	Readable X-rays	Referrals No.	Per Cent
Atlantic County	574	51	8.9	10843	526	4.9
Atlantic City	574	51	8.9	6376	244	3.8
Bergen County .....	..	..	..	..	..	..
Burlington County .....	..	..	..	4888	173	3.5
Camden County	689	37	5.4	4110	180	4.4
Camden City .....	..	..	..	2280	93	4.1
Cape May County .....	..	..	..	1339	54	4.0
Cumberland County	305	12	3.9	6144	295	4.8
Essex County	400	7	1.8	2009	110	5.5
East Orange .....	..	..	..	..	..	..
Irvington .....	..	..	..	..	..	..
Newark .....	..	..	..	..	..	..
Gloucester County .....	..	..	..	2932	102	3.5
Hudson County	244	7	2.9	20711	896	4.3
Bayonne	33	2	6.1	5069	186	3.7
Hoboken .....	..	..	..	..	..	..
Jersey City	211	5	2.4	11942	508	4.3
Union City .....	..	..	..	..	..	..
Hunterdon County .....	..	..	..	974	35	3.6
Mercer County .....	..	..	..	7404	290	3.9
Trenton .....	..	..	..	2860	104	3.6
Middlesex County .....	..	..	..	6939	289	4.2
Monmouth County	589	16	2.7	5401	207	3.8
Morris County .....	..	..	..	6532	284	4.3
Ocean County .....	..	..	..	1603	50	3.1
Passaic County .....	..	..	..	..	..	..
Clifton .....	..	..	..	..	..	..
Passaic .....	..	..	..	..	..	..
Paterson .....	..	..	..	..	..	..
Salem County .....	..	..	..	2451	102	4.1
Somerset County .....	..	..	..	5108	160	3.1
Sussex County .....	..	..	..	1280	56	4.4
Union County .....	..	..	..	4165	165	4.0
Elizabeth .....	..	..	..	2687	104	3.9
Warren County	69	1	1.4	2294	96	4.2
State Total	2870	131	4.6	97287	4070	4.2

a. Includes only those conducted by the New Jersey State Department of Health.

b. Excludes cardiovascular referrals.

c. County figures include all municipalities.

TABLE XIX

RATIO OF TUBERCULOSIS REFERRALS TO TOTAL READABLE X-RAYS—FIVE YEARS

	Total Readable X-rays (Community and Industrial surveys only)	Tuberculosis Referrals	Per Cent Referred Against Readable X-rays
1948	143,669	2,604	1.74
1949	130,594	3,547	2.70
1950	138,176	4,158	3.09
1951	89,104	2,929	3.28
1952	100,311	3,349	3.33
Total	601,854	16,587	2.75

TABLE XX

Below is a list of clinics and hospitals provided with service, equipment and supplies during 1952:

Clinics	Services	X-ray Equipment or Supplies
Atlantic County		
Atlantic City	x	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	
Long Branch	x	
Middletown	x	

<i>Clinics</i>	<i>Services</i>	<i>X-ray Equipment or Supplies</i>
Ocean County		
Toms River	x	x
Passaic County		
Paterson		x
Salem County		
Elmer	x	x
Salem	x	x
Sussex County		
Newton		x
Warren County		
Phillipsburg	x	x
<i>Hospitals</i>		
Atlantic County		
Atlantic Co. Mental—Northfield		x
Camden County		
Lady of Lourdes—Camden		x
Essex County		
St. Michaels—Newark		x
Hudson County		
Jersey City Med. Center—Jersey City		x
Mercer County		
St. Francis—Trenton		x
Passaic County		
Paterson General—Paterson		x

Bureau of Venereal Disease Control

MORBIDITY, MORTALITY, AND TRENDS

Any observations or conclusions based on venereal disease morbidity figures must be predicated on the assumption that the percentage and accuracy of reporting are the same for all areas of the State. It should also be borne in mind that reported figures, at best, represent minimum incidence and that venereal disease cases undoubtedly are underreported.

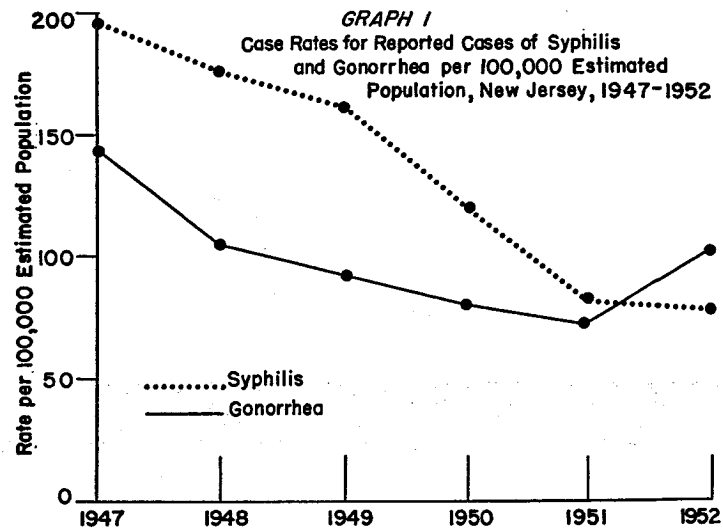
All rates are given per 100,000 population.

From a high of 11.2 in 1940, the death rate for all syphilis dropped gradually to 2.7 in 1951, a trend which was broken with a rate of 2.9 for 1952. In this year there were 143 deaths reported as due to syphilis.

The reported syphilis incidence rates by year from 1947 through 1952, per 100,000 population, were respectively: 197.0, 176.6, 162.9, 120.8, 82.0, 79.1. (See Graph I.)

A study of Table Ia indicates that in 1952 over 94% of infections had progressed into latent or late stages before being diagnosed and reported. Infections were not effectively treated at the time of their greatest communicability. Furthermore, over 81% of reported congenital syphilis was diagnosed after the first year of life and over 75% during the tenth year or later.

In 1952 there were 5,062 reported cases of gonorrhoea. The reported incidence rates by year from 1947 through 1952 per 100,000 population, were respectively: 145.4, 107.2, 93.0, 81.4, 72.7, 102.3. (See Graph I.)



Since 1949 the yearly reported incidence rate for gonorrhoea had been decreasing more slowly than that for syphilis. And in 1952, with the marked rise in gonorrhoea incidence, there was a complete reversal in trend. The influence on these rates of an aggressive case-finding effort cannot be overlooked. Active case-finding can affect the reported incidence of disease as much as a real rise in incidence. Another explanation for the increase is that an all-out effort was made, beginning January 1, 1952, to obtain reports of all venereal diseases diagnosed at military installations within the State. Military installations, however, did report to some extent in each of the previous years. The fact remains that if the 1,466 cases of gonorrhoea in military personnel are completely disregarded, the remainder of 3,596 cases

represents an increase over last year's figure of 3,559 cases, which includes military reports.

With 9,089 cases reported in calendar year 1952, victims of venereal disease in New Jersey outnumbered those of any other communicable disease except measles, chickenpox, and mumps.

Cases of Specified Communicable Diseases, New Jersey 1952 (calendar)

Measles	79,972
Chickenpox	30,377
Mumps	17,077
Venereal Disease	9,089
Tuberculosis	3,769
Streptococcal sore throat	3,630
Pertussis	1,693
Poliomyelitis	754

Much of the responsibility for the control and reporting of venereal diseases rests upon physicians in private practice. From Table Ia, it is noted that these physicians reported 50.5% of the total syphilis reported during 1952, but only 15.5% of the cases of gonorrhoea. The ease with which gonorrhoea can be managed is probably a factor contributing to underreporting.

Civilian clinics and military posts, respectively, gave ratios of 37.0 and 47.3 cases of gonorrhoea reported to each case of lesion syphilis, while the same ratio taken from private physicians' reports is only 7.5 to 1. Reporting and epidemiologic study of patients treated by private physicians stand out as important problems yet to be solved in the control effort.

TABLE Ia. REPORTED CASES OF ALL VENEREAL DISEASES* BY STAGE AND REPORTING AGENCY, NEW JERSEY, 1949-1952

Diseases	1952		Military	Total	1951		Total	1950		Total	1949		Total
	Private Doctor	Clinics and Others§			Private Doctor	Clinics and Others§		Private Doctor	Clinics and Others§		Private Doctor	Clinics and Others§	
Syphilis	1,978	1,868	70	3,916	2,146	1,870	4,016	2,956	2,882	5,838	3,969	3,826	7,795
Primary and Secondary	104	76	31	211	109	119	228	187	173	360	379	392	771
Early Latent	498	531	26	1,055	564	561	1,125	804	964	1,768	1,145	1,366	2,511
Late and Late Latent	1,296	1,164	11	2,471	1,388	1,081	2,469	1,898	1,615	3,483	2,809	1,852	4,611
Congenital	71	56	2	149	78	83	161	97	130	227	108	138	246
Not Stated	9	21	0	30	7	26	33	1,029	2,907	3,933	28	98	126
Gonorrhoea	783	2,811	1,463	5,062	878	2,701	3,559	1,029	2,907	3,933	1,220	3,229	4,449
Chancroid	1	20	73	94	3	11	14	4	19	23	.....	.....	.....
Granuloma Inguinale	7	4	3	16	2	6	8	.....	14	14	.....	.....	.....
Lymphogranuloma .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Venereum	0	1	0	1	2	7	9	1	20	21	.....	.....	.....

* Includes all cases reported in New Jersey, plus New Jersey residents reported in other states and referred to the Division of Vital Statistics and Administration.
 § Hospitals, jails, reformatories, other institutions.

TABLE Ib. REPORTED CASES OF ALL VENEREAL DISEASES BY STAGE, MILITARY INSTALLATIONS, NEW JERSEY, 1952

INSTALLATION	Syphilis			Gonorrhea	Chancroid	Lympho-Granuloma Venereum	Granuloma Inguinale
	Primary and Secondary	Early Latent	Other Syphilis				
Camp Kilmer	18	5	3	1000	21	2	..
Fort Monmouth	5	6	3	51	2	..	..
Fort Hancock	1	6	3	63	2	1	..
Earle Naval Depot	1	..	..	..	..	..	..
Fort Dix	4	9	4	329	46	2	..
Lakehurst Naval Air Station .....	..	..	..	13	..	..	..
McGuire Air Force Base .....	..	..	..	..	..	..	..
Atlantic City Naval Air Station .....	..	..	..	7	..	..	..
Cape May Coast Guard Receiving Station .....	..	..	..	..	..	..	..
Bayonne Naval Depot .....	..	..	..	..	..	..	..
Veterans Hospital .....	..	..	..	1	..	..	..
Camp Wood .....	..	..	..	2	..	..	..
Total	31	26	13	1466	73	5	..

New Jersey has the largest concentration of military personnel on the eastern seaboard. Table Ib indicates the cases of venereal disease reported by military installations in the State. Camp Kilmer, a processing center for overseas personnel, ranked second only to Newark in cases reported by clinics.

Tables IIa and IIb are presented to assist district and local health officers in directing control efforts to the areas of need. The Northern District apparently has no appreciable venereal disease problem in its counties or cities. In the Metropolitan District, the story is quite different. More cases of venereal disease were reported from the City of Newark alone than from the entire Central and Northern Districts combined. A concentrated effort is being made in the City of Newark, by local and State personnel alike, to find and bring to treatment all known or suspected cases of venereal disease by epidemiological methods.

East Orange, Jersey City, Elizabeth, and Passaic also have reported rates of syphilis which exceed that for the State as a whole. Paterson, though its reported rate for syphilis is lower than the average for the State, has a significant gonorrhea problem.

In the Central District, significant venereal disease rates are reported for Mercer, Middlesex, and Monmouth Counties. These three counties experienced increases in syphilis rates, the increments being 31.8 per 100,000 population in Mercer, 11.1 in Middlesex, and 13.1 in Monmouth. These increases, though inverse to State and national trends, are easily explained by the additional case-finding efforts carried out last year in these counties. The high

rates for the City of Trenton, 202.3 and 207.7 for syphilis and gonorrhea, respectively, should be noted particularly.

There are three counties in the Southern District (Atlantic, Cumberland, and Salem) for which the reported rates of syphilis exceed the rate for the State as a whole.

TABLE IIa. SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND COUNTY OF RESIDENCE, NEW JERSEY, 1952

AREA	Syphilis		Gonorrhea	
	Number	Rate	Number	Rate
New Jersey	3,827	77.3	5,015	101.3
Northern District	107	26.4	40	9.9
Hunterdon County	14	32.6	3	7.0
Morris County	41	24.3	20	11.8
Somerset County	22	21.4	12	11.7
Sussex County	9	23.7	2	5.7
Warren County	21	38.2	3	5.5
Metropolitan District	1,763	60.9	2,337	80.8
Bergen County	175	31.5	39	7.0
Essex County	803	86.9	1,821	197.1
Hudson County	384	58.1	184	27.8
Passaic County	185	53.8	190	55.2
Union County	216	52.8	108	25.2
Central District	1,157	123.5	748	79.8
Burlington County	39	27.9	30	21.4
Mercer County	333	141.7	298	126.8
Middlesex County	282	103.3	215	78.8
Monmouth County	469	203.0	193	83.5
Ocean County	34	58.6	12	20.7
Southern District	674	94.4	407	57.0
Atlantic County	248	195.1	161	120.1
Camden County	141	45.9	137	44.6
Cape May County	25	67.6	33	89.2
Cumberland County	113	124.2	47	51.6
Gloucester County	64	68.1	13	13.8
Salem County	83	162.7	16	31.4

* Rates expressed per 100,000 estimated population.

TABLE IIb. SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND SELECTED CITY OF RESIDENCE, NEW JERSEY, 1952

AREA	Syphilis		Gonorrhea	
	Number	Rate	Number	Rate
New Jersey	3,827	77.3	5,015	101.3
Northern District	107	26.4	40	9.9
Metropolitan District	1,763	60.9	2,337	80.8
Bayonne	31	39.2	4	5.1
Clifton	23	34.3	..	..
East Orange	77	95.1	46	56.8
Elizabeth	90	78.3	28	24.3
Hoboken	19	37.3	4	7.8
Irrington	6	9.8	3	4.9
Jersey City	278	90.8	172	56.2
Newark	600	133.9	1,701	379.7
Passaic	54	93.1	13	22.4
Paterson	96	67.6	172	121.1
Union City	10	17.9	1	1.8
Central District	1,157	123.5	748	79.8
Trenton	263	202.3	270	207.7
Southern District	674	94.4	407	57.0
Atlantic City	185	298.4	149	240.3
Camden	111	87.4	120	94.5

* Rates expressed per 100,000 estimated population.

EPIDEMIOLOGIC ACTIVITIES

Epidemiologic activity received more emphasis than any other aspect of venereal disease control during 1952. The results of this effort are reflected in greatly increased quantity and quality of case-finding throughout the State. Patients in clinics, private physicians' patients and patients in military installations constituted clinical material for contact interviewing. Duplicates of positive reports received from State and other laboratories accounted for the majority of other suspects. Total referrals numbered 7,857 in 1952, compared with 4,245 in 1951 and 2,772 in 1950. A summary of the returns from the 6,823 epidemiologic reports forwarded to or originated by local health departments is presented in Table III. The importance of the interstate aspects of the venereal disease control program is reflected by the 1,034 referrals of information on suspects who resided in other States.

The purpose of investigating persons who are suspected of having venereal disease is to bring those persons to medical attention which will establish the presence of or freedom from infection. The percentage of all suspects brought to examination during 1952 was 71.4. For purposes of evaluation, suspects are divided into two general categories, sexual contacts and other suspects. As might be expected, proportionately fewer sexual contacts were brought to examination, the percentage being 61.0 for contacts of civilians, 47.8 for contacts of military personnel, or 56.6 for all reported contacts. Only 48% of contacts were brought to examination during 1951. The improvement during 1952 may be credited largely to the case-finding project (see page 185) which consistently succeeded in bringing a higher proportion (68.3%) of assigned contacts to examination.

A total of 3,349 infections were identified in New Jersey by epidemiologic activity during 1952, compared with 1,468 in 1951. An additional 263 persons were given treatment on epidemiologic evidence, i.e., known exposure to an infected individual. Regardless of whether this volume of work can be maintained in the future, the Bureau of Venereal Disease Control will continue to stress the importance of obtaining usable information on as many venereal disease suspects as possible and speedily placing these individuals under medical observation.

TABLE III
Results of Investigation of All Venereal Disease Suspects
Referred to District State Offices, New Jersey, 1952

Type of Suspect	Infections Identified										Not Infected—Not Examined							Dispr. not						
	Brought to Treatment					Returned to Rx					Unable to Locate		Out of Jurisdiction		Insufficient Information				Other					
	Total Referrals	W	M	F	C	W	M	F	C	Other	Syph.	GC	Invest.	Under Rx of Ade.	Prov. Rx	H. Pl. Rx	Not Inf.	Unco-operative		Unable to Locate	Out of Jurisdiction	Insufficient Information	Other	
Contacts of Civilians:																								
Primary and Secondary	104	2	4	2	4	1	3	1	3	3	3	3	3	3	3	3	37	5	21	6	11	1	5	
Early Latent	345	2	12	1	11	4	3	1	3	3	3	3	3	3	3	3	167	5	69	27	11	1	11	
Other Syphilis	184	1	11	1	11	4	4	1	4	4	4	4	4	4	4	4	90	3	29	3	2	4	8	
Gonorrhea	1,436	2	6	1	220	2	1	4	4	4	4	4	4	4	4	4	367	29	497	33	32	1	32	
Other V. D.	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	1	6	2	1	1	1	
Contacts of Military Personnel:																								
Primary and Secondary	44	1	2	1	3	1	3	1	3	3	3	3	3	3	3	3	29	1	5	1	5	1	1	
Early Latent	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	1	5	1	2	1	1	
Other Syphilis	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Gonorrhea	780	2	2	2	81	2	2	2	2	2	2	2	2	2	2	2	157	9	231	4	109	2	21	
Other V. D.	30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	1	10	1	3	1	1	
Total Contacts	2,943	9	29	22	312	5	13	6	6	6	6	6	6	65	246	900	47	803	76	168	8	8	78	
Positive Tests:																								
Preemployment	1,112	4	16	67	1	225	225	225	225	225	225	225	225	263	1	98	27	120	20	20	13	13	62	
Prenatal	342	14	38	1	1	54	54	54	54	54	54	54	54	94	1	20	8	33	6	6	3	3	24	
Private Physicians	245	1	16	17	1	40	40	40	40	40	40	40	40	66	1	31	2	5	8	8	16	16	24	
Report—Physicians	664	1	20	41	27	153	153	153	153	153	153	153	153	204	1	33	8	29	6	6	16	16	24	
Report—Gonorrhea	234	1	20	10	2	13	13	13	13	13	13	13	13	40	1	21	2	16	6	6	1	1	4	
Selectee	156	1	2	1	2	4	4	4	4	4	4	4	4	15	1	87	3	20	10	10	1	1	8	
Separate	78	1	2	1	2	4	4	4	4	4	4	4	4	116	1	57	6	3	2	2	1	1	4	
Survey	442	3	79	61	4	49	49	49	49	49	49	49	49	89	1	86	9	61	23	23	13	13	37	
Miscellaneous	607	7	42	89	44	59	59	59	59	59	59	59	59	89	17	400	63	300	76	76	53	53	176	
Tot. Pos. Tests & Misc.	3,880	18	249	324	79	602	3	537	986	17	400	110	1,203	1,051	263	1,300	63	300	152	168	2	53	176	
Totals—All Suspects	6,823	27	278	346	391	6	615	9	626	263	1,300	110	1,203	1,051	263	1,300	110	1,203	152	168	2	53	176	

The indices which measure the quality of contact interviewing and investigation have been calculated for the last two years and they too, reflect considerable improvement.

Year	Contact Index (1)	Epi. Index (2)	Brt. to Rx Index (3)	Lesion to Lesion Index (4)
1952	1.92	.27	.16	.67
1951 .....	.71	.10	.05	.03

- (1) Ratio of contacts obtained from previously untreated cases of primary and secondary syphilis in clinics to the number of such cases.
- (2) The number of infections found in named contacts per case of lesion syphilis.
- (3) The number of new cases of syphilis brought to treatment per reported clinic case of primary and secondary syphilis.
- (4) Number of primary and secondary syphilis infections found per reported case through contact investigation.

This quality of performance does not apply to each case of early syphilis reported. It is estimated that only about one-half of such cases were interviewed at all, so that it follows that the quality of this activity, State-wide, can be greatly raised by interviewing all available patients.

Various screening procedures produced a total of 3,880 suspects during the calendar year 1952 (see Table III). More important is the fact that 1,276 of these suspects required epidemiologic effort to bring or return them to treatment, 626 were under treatment as a result of having had tests, and 1,051 were adequately treated when investigated. Concerning those treated prior to investigation, there is no breakdown showing whether they were treated subsequent to these particular tests or whether they were treated as a result of previous tests. On the basis of the figures in Table III, it is premature to discontinue such programs as premarital, prenatal, and pre-employment testing since 192 infections were identified as the result of prenatal tests alone. The priority which is accorded to the investigation of the prenatal suspect is indicated by the fact that field personnel failed to locate only 5 of 245 suspects reported.

Contact and suspect investigation were directly responsible for bringing to treatment more than 25% of all primary and secondary syphilis reported during the year.

THE CASE-FINDING PROJECT

Based on the results of the program initiated on July 1, 1951, it was decided to continue the cooperative venereal disease case-finding project, with personnel provided by the Public Health Service. Two additional investigators, making a total of seven, were employed on July 1, 1952. In January, 1953, one of these men was promoted and transferred to the Metropolitan District office in the capacity of a consultant. Records and statistics for this

project are kept on a fiscal year basis. From July 1, 1952, to June 30, 1953, practically all of the interviewing of infected military personnel stationed in New Jersey was done by these men. They interviewed 1,422 military personnel and 920 civilians for sexual contacts, obtaining identifying information on a total of 4,206 individuals. The vast majority of epidemiologic reports on military contacts were forwarded to other States and were not handled through the Bureau of Venereal Disease Control. Contact indices were higher than national averages, ranging up to an average of 3.64 contacts elicited per civilian patient with primary or secondary syphilis.

Venereal disease investigators were assigned 3,385 contacts and suspects during fiscal 1953 and 2,649 or 78.2% of these individuals were brought to examination. 68.3% of the assigned sexual contacts, 63.3% of military and 68.9% civilian, were placed under medical observation.

There is little question that increased epidemiologic activity caused the apparent upward trend in civilian venereal disease incidence during a period when a decline would ordinarily have been expected. The case-finding project, handling a majority of the interviewing and investigation which was done, accounted for much of the improvement in the case-finding program during 1952.

VENEREAL DISEASE AMONG MIGRANT WORKERS

Migrant farm laborers represent a classic example of the conditions under which venereal diseases flourish. The rate of illiteracy is high. Housing is extremely poor. Sanitation and personal hygiene habits are also poor. Promiscuity and common law marriages are socially acceptable to the group. It is not surprising, then, to relate that, of 1,910 persons examined during the 1952 season, 201 had positive tests for syphilis, 122 cases of gonorrhea were found and five cases of other venereal disease were treated. Briefly, 9.2% of the total examined required treatment for syphilis and 6.4% required treatment for gonorrhea.

Other aspects of the migrant labor problem have some bearing on the State's total venereal disease problem. Farmers have recognized this group as a source of year-around labor and one or two families have remained on many of the farms as permanent residents. Many of the migrants have found permanent employment in industry within the State and have become residents for that reason. There is a growing tendency among farmers, particularly among those with smaller farms, to obtain Puerto Rican laborers, which reduces the number of farm laborers to be examined by the State Department of Health. Puerto Ricans, with few exceptions, are examined by their government before they are permitted to migrate as laborers.

Migrant workers were also tested at three race tracks during 1952. Of 851 tested, 109, or 12.8%, gave positive or doubtful reactions.

Venereal disease investigators assigned to the Case-finding Project were used in the migrant program for advance work, blood-letting, follow-up of positive tests, and contact interviewing and investigation.

VENEREAL DISEASE EDUCATION AND INFORMATION

The Bureau of Venereal Disease Control sponsored or participated in a variety of educational activities during the year. A total of 24,322 pieces of literature were distributed to individuals, health departments, and interested organizations. Seven venereal disease films were shown to 83 groups totaling 4,197 individuals.

Two lectures were given to correction officers at Rahway State Prison by the Chief of the Bureau and other lectures to inmates of New Jersey Reformatory for Women. The Massachusetts Department of Health requested assistance in their in-service training program in October, 1952. The Bureau supplied a representative for lectures on contact interviewing techniques and contact investigation.

Physicians throughout the State were contacted by a form letter to which venereal disease morbidity cards were attached. The letter urged the prompt reporting of venereal diseases. The Chief of the Bureau was the guest speaker at the Warren County Medical Society meeting in October, 1952.

One of the highlights of the year was the Venereal Disease Control Conference held in Atlantic City in April, 1953. This meeting, of two days duration, was cosponsored by the Department and the Public Health Service. Health officials from the New England and Middle Atlantic States attended.

A reprint of an address by the Chief of the Bureau, delivered at a similar conference in Boston, appeared in the November, 1953, issue of *Public Health News*.

IN-PATIENT CARE

The fiscal year 1953 brought to an end an era of hospitalization for treatment of venereal disease. The effectiveness of penicillin and its simplicity of administration on an out-patient basis made the continuation of this program unnecessary.

Payments totaling \$1,232 were made to hospitals during fiscal 1953. All clinics, health departments, physicians, and hospitals were advised that the program was to be discontinued after June 30, 1953.

DRUG DISTRIBUTION

Penicillin, other antibiotics and drugs for the treatment of venereal disease were distributed without charge to hospitals, clinics, and private physicians. Procaine penicillin in oil with 2% aluminum monostearate is considered to be the drug of choice for the treatment of syphilis and gonorrhoea. The Bureau will continue to distribute recommended dosages of this preparation.

PERSONNEL

At the end of the fiscal year the Bureau was comprised of the following staff members:

Administrative

Chief

Health Program Representative (on loan from Public Health Service)

Clerical

Senior Clerk

Clerk-Stenographer

Field

Health Program Representative (on loan from Public Health Service, assigned to Metropolitan State Health District Office)

Public Health Adviser (on loan from Public Health Service, assigned to Camp Kilmer)

Venereal Disease Investigators (4)

One clerk and one clerk-typist were transferred to the Division of Vital Statistics and Administration during the year. Morbidity files were also transferred to that division.

A major reduction in personnel was effected June 30, 1953, when the public health nurse consultant, a clerk, a clerk-typist, and a senior clerk stenographer were transferred to other divisions of the Department.

Report of the Division of Vital Statistics and Administration

July 1, 1952—June 30, 1953

MARGUERITE F. HALL, PH.D., *Director*

Bureau of Administrative ServicesJOHN B. VAN ELLIS,
Chief

Bureau of Examination and LicensingKENNETH J. CARHART,
Chief

Bureau of Personnel and AccountsWILLIAM R. PEEBLES,
Chief

Bureau of Public Health StatisticsF. HERBERT COLWELL, Dr. P. H.
Chief

State Registrar of Vital StatisticsWALTER R. SCOTT,
State Registrar

Division of Vital Statistics and Administration

The Division of Vital Statistics and Administration operates principally as a service unit to the Department. Four program coordinators with the Director are responsible as participating personnel in those departmental programs assigning activities to the Division as well as for those programs emanating from the Division itself.

By the close of the fiscal year the Division had almost completed the required schedules for the following programs:

- Distribution of Biologics
- Examination and Licensing
- Barber Examiners
- Beauty Culture Control
- Registration

The Fiscal and Personnel Programs were well on their way to completion. Basic schedules had been written for the Public Health Statistics Program.

The Director has given major attention to program design, review, operation and integration with the services offered by this Division as well as by the Department.

With the transfer to the Division of the remaining collecting activities considerable attention has been given to improving morbidity reporting. The major purpose for improving morbidity reporting is to have accurate, adequate facts for carrying out effective control programs targeting prevention and follow-up. This problem is reflected as an important activity in the respective programs requiring morbidity reporting.

The Director realizes that the greatest resources of the Division and the Department are its personnel. Every effort is made to train and encourage personnel in the best performance of their duties. Especially commendable are the orientation courses and the in-service training program for stenographers reflected as activities within the Personnel Program.

Especially noteworthy is the integration of responsibilities in the Examination and Licensing Program with other departmental programs requiring examination and licensing services. The Distribution of Biologics Program increased its services through the Gamma Globulin distribution essentially for poliomyelitis contacts and expects to carry additional responsibilities in connection with the continued prevention and control of this disease. Through record linkage made possible by being assigned departmental statistical responsibilities, the Public Health Statistics Program alerts program coordi-

nators of changing trends and possible impending problems as well as anticipate departmental statistical needs.

The significant administrative problems challenging the Director working with Division personnel stem from the nature of the Division services such as:

1. Helping interpret to departmental personnel those services centralized in the Division;
2. Trying to meet shortages of qualified and adequately trained personnel;
3. Improving, whenever and wherever possible, inadequate housing by constant vigilance over equipment, materials and supplies as well as by review of work methods.

Bureau of Administrative Services

The Bureau of Administrative Services is staffed and equipped to render a wide variety of services to the Department. Among them are the following: design and production of health education materials including pamphlets, posters, exhibits and other visual aids; maintenance and display of exhibits; maintenance of audio-visual aids such as films, projectors, etc.; warehousing and distribution of printed materials, office and field supplies; production of printed forms, reports, etc.; mimeographing, addressographing and mailing services and the preparation of specifications for commercial printing and other graphic needs. The distribution of biologicals, drugs and vaccines is administered as a separate project.

Personnel at the end of the fiscal year totaled 11.

HEALTH EDUCATION SERVICES

Requests for services involving many of the functions of this Bureau continued to increase. During the year several large and small exhibits were maintained.

Requests for visual and audio-visual aid services increased considerably and in several instances could not be satisfactorily rendered due to the limited staff. Efforts are now being made to augment the staff by establishing a new position which will deal exclusively with exhibit work and thus permit a considerable increase in these services to the Department.

Production in the print shop decreased considerably due to the resignation of two employees; however, the majority of the assignments were completed through commercial sources and in several instances through the cooperation of the printing unit of the Department of the Treasury.

The lay film library of the Department was augmented by the purchase of a few additional films. However, films on many subjects are still lacking. Purchase of films is dependent upon funds allocated by the program concerned.

Lay film bookings are made for the Department by the New Jersey State Museum. Attendance reports received from the Museum indicate a total attendance for the year of at least 191,616, an increase of over 30,000.

Many film showings were provided for the Department and other agencies by this Bureau.

Mailing lists on addressograph plates are maintained, from which many regular and special mailings are made for various bureaus of the Department.

WAREHOUSE

Printed materials, office supplies and nurses' field supplies were stored and distributed on a department-wide basis. A perpetual inventory was maintained for all items.

Considerable time was devoted to other projects such as large mailings requiring special packaging, mimeographing and many special truck deliveries for Civil Defense and other needs.

Plans were made to accept additional responsibilities regarding the purchase of all office supplies for departmental use. This will mean a considerable increase in general office work as all detailed applications and departmental orders will initiate from the warehouse. This change in procedure will be put into effect in order to reduce duplication of paper work throughout the Department as well as to effect additional economies in office supply purchases.

BIOLOGICS

During the fiscal year the Department made available the following biologicals for distribution: Diphtheria Toxoid, alum precipitated; Smallpox Vaccine; Diphtheria-Tetanus-Pertussis (fluid); Diphtheria-Tetanus-Pertussis (alum refined); Typhoid Vaccine; Rocky Mountain Spotted Fever Vaccine and Rabies Vaccine (human).

These materials were distributed at about the same volume as in the preceding fiscal year with the exception of Rabies Vaccine (human), which showed a 20% decline and Rocky Mountain Spotted Fever Vaccine, which showed a 25% decline. They were placed in the 66 distributing stations located at strategic spots in the 21 counties of the State and were available to all physicians and local boards of health for clinical purposes without charge.

Gamma Globulin distribution in the latter part of the fiscal year became a major problem. The Department formerly received this material from the American Red Cross to be used by physicians for the modification and prevention of measles. During the year the Office of Defense Mobilization became responsible for the national distribution of Gamma Globulin and appointed this Department as its distributor for New Jersey.

The Office of Defense Mobilization specified that Gamma Globulin was to be used for poliomyelitis, measles, and infectious hepatitis, and because of its scarcity established stringent regulations covering its availability and use. This necessitated a considerable amount of additional field and office work, and also required new reporting forms and literature.

Penicillin, Aureomycin and other drugs were distributed for the Venereal Disease Program as was Canine Rabies Vaccine for the Rabies Control Program.

Constant supervision of all distributing stations was maintained by special and periodic visits at which time local problems concerning biologic and Gamma Globulin distribution were corrected, inventories and supplies checked, and expired biologic collected. The fine work that these distributing stations are doing for the Department without remuneration, and the co-operation of their personnel is highly commendable.

Bureau of Examination and Licensing

The fiscal year 1952-53 on June 30th offered opportunity for further accomplishments in the over-all programs of this Bureau.

Examination techniques of the Board of Examiners for Sewage and Water Plant Operators were adjusted to the use of American Public Health Association examinations. The Board of Examiners for Health Officers, Sanitary Inspectors, Food and Drug, Milk, Meat, Plumbing Inspectors, and Public Health Laboratory Technicians continued to function and to show progress.

New legislation enacted provides increased fees for both barber and beauty culture licenses and increased compensation for members of the boards. Recent legislation also enacted provides greater restoration license privileges to barbers and beauticians and will no doubt prove very valuable to the trade at large.

The initial drafting of a written program pertaining to this Bureau's responsibility was prepared and it is anticipated that such material will be of value to the Department's field personnel.

During the course of the year a total of 57 examinations was conducted by the four boards.

Examination and license fees collected during the fiscal year equaled \$148,505.70.

Bureau of Personnel and Accounts

The continuing and progressing reorganization of the State Department of Health created many problems during the fiscal year 1952-1953 in the administration of the personnel and fiscal programs of the Department. The Bureau of Personnel and Accounts was assigned the task of considering the

reclassification and fiscal adjustments made necessary by the continuing reorganization.

During the fiscal year the personnel unit of the Bureau was again concerned with the reclassification of many positions, the creation of new positions and the upward adjustment of salary ranges of many position titles. New specifications were written and presented to the Civil Service Commission for each new position established.

The major organizational problem of the Department during the fiscal year concerned was that of the establishment of the Division of Chronic Illness Control. It was necessary that new positions be created and that position transfers be made in order properly to staff the new division.

For the first time in the Department a series of informal orientation courses were offered in an effort to have each of the employees, both old and new, given the opportunity to learn more about their Department, its relationship to other departments of the State and to learn more about their job, its responsibilities and their rights and privileges as a departmental employee. An in-service training program for clerk-typists interested in learning stenography and for other employees who desired a refresher course in stenography was conducted. This course was designed for two reasons: (1) to alleviate the problem encountered by the shortage of clerk-stenographers available from the open market, and (2) to increase the efficiency and skills of employed stenographers.

At the close of the year a study was made which indicated that the number of budgeted positions in the Health Department had been reduced from 735 during the fiscal year 1949 to 577 as of June 30, 1953. This reduction in positions was made during the period in which the Department of Health became responsible for the administration of many new programs such as Alcoholism Control, Air Pollution, Board of Barber Examiners, Board of Beauty Culture Control, Crippled Children Commission, Statistical Research, Veterinary Public Health and others.

The accounting unit of the Bureau was again concerned primarily with the proper accounting of all funds received and expended by the various units of the Department and with the adjustment of procedures necessary to meet the demands of the continuing reorganization. New procedures such as the establishment of an expenditure control and the elimination of certain sub-accounts, designed to achieve greater centralization, as well as further budgetary consolidation, were achieved. The accounts of the Crippled Children Commission were consolidated and the administration of these accounts centralized within the Bureau of Personnel and Accounts during this fiscal year.

Early in the year a study was undertaken with a view to further consolidation of organizational units of the Department with fewer locations

outside of the State House and with the view to achieving further economies, both fiscally and operationally. As a result of this study certain removals were made which resulted in much greater consolidation of organizational units and in the saving of several thousand dollars per year to the Department.

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, 1953.

STATE DEPARTMENT OF HEALTH—FINANCIAL STATEMENT
FISCAL YEAR—1952-1953.

RECEIPTS

Received for Transfer to State Treasury:

License and permit fees	\$256,742.83
Penalties	7,601.70
Certified certificates	35,666.65
Examination fees	2,125.00
Miscellaneous (including analysis)	6,265.22

Net total \$308,401.40

Received for Disbursement:

State appropriation and transfers	\$1,566,205.56
U. S. Department of Health, Education and Welfare—Public Health Service	639,739.74
U. S. Department of Health, Education and Welfare—Children's Bureau	459,692.26
Commonwealth Fund	14,680.27
Hunterdon County Health Inventory Fund	11,500.00

Net total \$2,691,817.83

DEPARTMENTAL ALLOCATIONS

	Salaries		Other Classes		Total State	Total Federal	Total All Funds
	State	Federal	State	Federal			
Office of the Commissioner	\$71,199.62	\$17,453.20	\$13,073.70	\$4,976.40	\$84,273.32	\$22,459.60	\$106,732.92
Vital statistics and administration	245,221.32	126,594.72	70,910.62	9,249.09	316,131.94	136,753.81	451,885.75
Environmental sanitation	156,208.60	41,868.62	50,722.50	7,930.53	206,931.10	49,799.15	256,730.25
Preventable diseases	31,020.00	41,630.04	632.70	71,552.68	31,652.70	113,182.72	144,835.42
Chronic illness	40,897.90	20,780.79	29,018.46	60,818.90	69,816.36	81,579.69	151,496.05
Laboratories	175,548.08	50,702.89	50,707.21	13,605.95	226,345.29	104,308.84	330,654.13
Constructive health	133,360.35	144,580.11	88,577.48	148,359.66	221,937.83	292,949.77	514,887.60
Local health services	395,282.53	225,375.35	39,914.76	74,023.07	435,197.29	299,308.42	734,505.71
Totals	\$1,248,738.40	\$708,915.72	\$343,647.43	\$390,516.28	\$1,592,385.83	\$1,099,432.00	\$2,691,817.83

DEPARTMENTAL EXPENDITURES

Office of the Commissioner	\$71,199.62	\$17,453.20	\$11,797.75	\$4,988.13	\$82,947.37	\$22,471.83	\$105,419.20
Vital statistics and administration	238,503.12	126,594.72	68,095.89	8,986.77	306,596.11	136,551.49	443,147.60
Environmental sanitation	165,041.01	41,868.62	47,995.03	6,886.55	206,931.10	49,799.15	256,730.25
Preventable diseases	31,020.00	41,487.78	525.26	64,233.93	31,652.70	105,721.71	137,374.41
Chronic illness	36,750.00	20,780.79	17,743.95	54,134.82	69,816.36	74,595.61	144,412.00
Laboratories	175,548.08	80,543.26	50,300.79	12,944.13	226,345.29	109,487.39	335,832.68
Constructive health	127,383.03	130,812.09	83,875.76	100,700.26	221,937.83	291,512.35	513,450.18
Local health services	395,255.78	221,286.40	39,004.65	64,763.65	434,260.43	286,003.03	720,263.46
Totals	\$1,230,700.64	\$690,789.86	\$319,339.18	\$317,638.24	\$1,550,039.82	\$1,096,428.10	\$2,646,467.92
Balances, June 30, 1953	\$18,087.76	\$18,125.86	\$24,308.23	\$72,878.04	\$42,346.01	\$91,008.90	\$133,354.91

Bureau of Public Health Statistics

CALENDAR YEAR 1952

The Bureau of Public Health Statistics is composed of two closely integrated sections. The Registration Section operates under certain laws and departmental policies in carrying out all functions related to the registration of vital events. It is also responsible for the collection of all records of illnesses reportable by law or regulation. The processing of the records of vital events and illnesses for transfer to punch cards is an additional duty of the Registration Section. The section report appears elsewhere.

The Research and Statistics Section of the Bureau is composed of two units: Machine-processing Unit, and Analysis and Research Unit. The Machine-processing Unit utilizes International Business Machines (IBM) and processes data by means of cards, key-punches, verifiers, interpreters, sorters, tabulators, reproducers and collators. The Analysis and Research Unit helps to prepare data for machine processing, analyzes tabulations, and presents the finished analyses in the most practicable form and manner.

The Bureau of Public Health Statistics primarily gives service to the various health programs. The Bureau functions by giving assistance in program planning, controlling operations of programs, and in evaluating results of programs.

The Bureau of Public Health Statistics continued to improve its services and accepted additional duties during the calendar year 1952. The extent of additional responsibilities was limited by the availability of IBM machine time and the number of man-hours of work allowed by the budget.

In general terms, approximately 50% of the man-hours of work available in the Machine-processing Unit was utilized on records of births, marriages, deaths and stillbirths. This processing included key-punching of the basic data, and preparation of monthly and annual detailed tabulations, in addition to monthly and annual indexes for use in the Registration Section of the Bureau.

Twelve per cent of the man-hours of work available in the Machine-processing Unit of the Bureau was devoted to the preparation of weekly, monthly and annual tabulations of morbidity reports, exclusive of reports concerning tuberculosis and venereal disease. These morbidity reports were used primarily by the Division of Preventable Diseases and the Division of Local Health Services.

The remainder of the man-hours available in the Machine-processing Unit was utilized in the processing of records concerning tuberculosis, venereal disease, personnel and accounts and other services. During the year, the new registration records of the Bureau of Crippled Children were transferred to punch cards and cumulative alphabetic lists were prepared for use at a State

and district level. Plans were also made to do these same tasks on over 15,000 old registration records of crippled children. In addition to machine time, much personnel time was given to the Hunterdon County Health Survey.

In view of the policy of the State Department of Health to provide the District State Health Offices with resource material pertinent to the health programs of the Department, the Bureau of Public Health Statistics provided copies of monthly and annual tabulations of deaths, plus monthly copies of special lists of tuberculosis deaths and case reports to the respective district offices.

The high quality of service that the Bureau of Public Health Statistics consistently endeavors to give is dependent upon trained personnel functioning in an environment that is conducive to efficiency. The element of the environment that is not conducive to good work and actually reduces output is excessive crowding. In the Machine-processing Unit and in the vaults of the Registration Section, this condition becomes worse each year. The situation is now acute.

Population: With the release of the final April 1 census figures for 1950, more accurate population data became available. The population estimate for New Jersey as of July 1, 1952, was 4,949,000. This figure and the estimates for the counties and major cities as shown at the end of Table 22 were obtained by adding the excess of births over deaths for the period April 1, 1950, through June 30, 1952, to the 1950 census count and rounding each estimate to the nearest thousand.

According to the data on characteristics of the New Jersey population as of April 1, 1950, the nonwhite races represented 6.7 per cent of the total population. Application of that percentage to the July 1, 1952, estimate of total population gave a figure of 332,000 as the estimated number of nonwhite persons. The estimate of the white population was 4,617,000 as of July 1, 1952.

Births: The 110,215 resident live births reported in 1952 represented a crude birth rate of 22.3 per 1,000 estimated population. This all-time high of live births reported in 1952 was almost double the number of births registered in each of the years 1933 through 1939. The year 1952 was the seventh consecutive year in which the annual number of births exceeded 95,000 and the birth rate was greater than 20.0. Boards of education have become increasingly concerned with the school problems which steady increases present.

Of the 99,761 births in 1952 to white mothers, 1,085 or 1.1 per cent were reported as illegitimate. Of the 10,454 births to nonwhite mothers, 1,408 or 13.5 per cent were listed as illegitimate. Although the percentage figure for total illegitimate births has not changed appreciably over the past decade, such births in 1952 were 861 or almost 53 per cent greater than the 1942

figure. Plans of social agencies and nurses to help these mothers and babies must accordingly receive greater emphasis.

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 106,047 births occurring in New Jersey during 1952, there were 914 records having no entry for weight at birth. Therefore only 105,133 births were used as the denominator in computing the following percentages by weight:

Weight Group	Number	Per Cent
Over 2,500 grams	97,622	92.9
2,001-2,500 grams, incl.	5,085	4.8
1,501-2,000 grams, incl.	1,406	1.3
1,001-1,500 grams, incl.	580	0.6
1,000 grams or less	440	0.4
Total with weight given	105,133	100.0

Of the 106,040 birth records on which the attendant was clearly identified, 104,392 births or 98 per cent occurred in hospitals; 1,321 or 1 per cent were attended by physicians outside of hospitals; and 224 or 0.2 per cent had midwives in attendance. The midwife data presented here may differ from figures accumulated by the Bureau of Maternal and Child Health after it checks back on information given on these original birth records. The rest of the births were attended by other persons of a specific or unknown category.

There were 1,157 sets of twins born, but in 68 of these only one was born alive. Mothers in New Jersey gave birth to 8 sets of triplets. In 7 instances all three were born alive; in 1 case, only 1 was born alive.

Marriages: The crude marriage rate for 1952 was 8.3 per 1,000 estimated population. The total of 41,125 marriages reported was 3,439 or 7.7 per cent less than in 1951. The trend in marriage rates has been downward since 1946. In that year, the number of marriages reached an all-time high of 61,020 representing a rate of 14.2 per 1,000 population.

Tables 7 and 7a of this report give information on marriages by age and previous marital status of the individuals. The text associated with the tables may be of interest to many agencies.

All marriage tabulations are by place of occurrence.

Deaths: A total of 51,430 resident deaths from all causes was recorded for New Jersey in 1952. The crude death rate of 10.4 per 1,000 estimated population was slightly higher than the 1951 rate. The 1949 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 totals for certain causes or groups of causes not strictly comparable to prior years.

Table 19 and its text on principal 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 has been possible since 1950 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.

Summarization of monthly tabulations of deaths in New Jersey revealed the following items of interest.

Of the 50,540 deaths, 3,269 or about 6 per cent were veterans. Of these deaths, 1,952 were World War I veterans; 862 were World War II veterans; and 44 were veterans of both wars. Spanish-American War veterans accounted for 186 deaths and an additional 11 persons who died were veterans of both the Spanish-American and First World Wars. United Nations Force accounted for 52 deaths and an additional 17 decedents were veterans of other wars. On the balance of 145 death certificates military service was indicated but war service was unspecified.

Approximately 53 per cent of all deaths in New Jersey occurred in hospitals or institutions. Of these 26,875 deaths, 20,873 or 78 per cent took place in general hospitals. There were 672 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 1952, there were 2,633 infant deaths for New Jersey. The resulting mortality rate of 23.9 per 1,000 live births, the same as in 1951, was the lowest ever experienced in New Jersey since rates were first computed. The white infant mortality rate in 1952 was 21.6 and for non-white infants, the rate was 45.5. When New Jersey in 1921, by virtue of 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 influenced tremendously 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. 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 1952, there were 70 maternal deaths, representing a rate of 0.6 per 1,000 live births. This is the lowest rate since 1906 when such rates were first computed. The nonwhite maternal mortality rate was 1.7. 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 2,002 stillbirths reported for 1952 accounted for a rate of 18.2 per 1,000 live births. In 1951 the rate was 18.9. The nonwhite rate for 1952 was 28.2. On 8 reports, race or color was not stated.

Cancer: The number of deaths from malignant neoplasms in 1952 was 9,033 and the rate was 182.5 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 1952 was 831 of which 773 were charged to tuberculosis of the respiratory system. The rates per 100,000 estimated population were 16.8 and 15.6, respectively.

There were 624 deaths of white persons from all forms of tuberculosis and 207 deaths of non-white persons. Per 100,000 estimated population, the white rate was 13.5 and the non-white rate was 62.3. Reference to Chart 3 and 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 Bureau of Acute Communicable Diseases and the Bureau of Venereal Disease Control.

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Table 18a. Infant deaths by age and immaturity: 1952.

Table 19. Principal causes of death by age groups; numbers and percentages: 1952.

Table 20. Deaths from each cause, detailed international list, by sex, color and age groups: 1952.

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: 1952.

TABLE 1
POPULATION: NUMBERS AND RATES FOR BIRTHS, MARRIAGES
AND DEATHS: 1921-1952

(Births and deaths adjusted for residence)

YEAR	Estimated Population	BIRTHS		MARRIAGES		DEATHS	
		Number of Births Reported	Birth Rate per 1,000 Population	Number of Marriages Reported	Marriage Rate per 1,000 Population	Number of Deaths Reported	Death Rate per 1,000 Population
1921	3,285,475	78,172	23.7	27,815	8.4	37,362	11.3
1922	3,371,359	74,470	22.0	27,114	8.0	40,086	11.8
1923	3,453,243	74,611	21.5	28,730	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	74,193	20.4	27,672	7.6	41,749	11.4
1926	3,717,395	72,336	19.4	28,424	7.6	44,333	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	4,044,300	68,232	16.8	28,489	7.0	48,190	10.7
1931	4,056,290	64,078	15.8	28,438	6.9	44,133	10.9
1932	4,068,100	61,215	15.0	22,840	5.6	42,826	10.5
1933	4,080,000	59,072	13.7	24,453	6.0	43,380	10.6
1934	4,091,800	54,841	13.4	28,991	7.1	43,547	10.6
1935	4,103,700	55,059	13.4	29,724	7.2	43,267	10.5
1936	4,115,600	54,145	13.2	32,771	8.0	44,859	10.9
1937	4,127,500	53,197	13.4	36,190	8.8	45,312	11.0
1938	4,139,400	56,602	13.7	31,006	7.5	44,045	10.6
1939	4,151,300	56,859	13.7	31,895	7.7	43,837	10.6
1940	4,163,100	59,328	14.3	41,059	9.9	45,208	10.9
1941	4,199,900	67,104	16.0	46,538	11.1	45,971	10.9
1942	4,228,423	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	4,167,940	73,632	18.2	36,054	8.7	47,340	11.4
1945	4,200,841	76,895	18.3	39,711	9.5	47,433	11.3
1946	4,304,261	95,044	22.1	61,020	14.2	46,261	10.7
1947	4,435,000	106,056	23.9	55,502	12.6	48,276	10.9
1948	4,729,000	97,278	20.6	51,913	11.0	48,167	10.2
1949	4,786,000	97,414	20.4	44,469	9.3	47,703	10.0
1950	4,832,000	97,734	20.2	46,291	9.6	48,837	10.1
1951	4,896,000	105,218	21.5	44,564	9.1	50,098	10.2
1952	4,949,000	110,215	22.3	41,125	8.3	51,430	10.4

Note: For similar data for period 1870-1920, see Table 1 in any annual report, prior to 1950.

BIRTH AND DEATH RATES

per 1,000 population
(Based on Five-Year Averages of Events and Population)

1880 - 1949

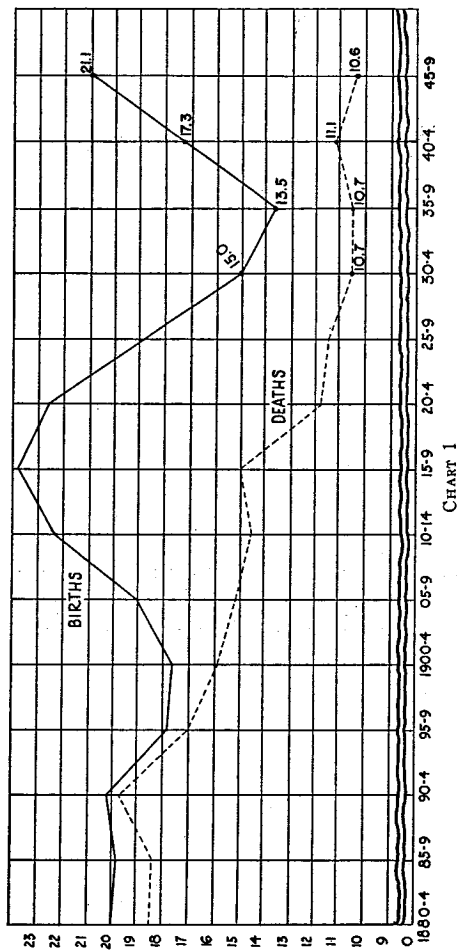


CHART 1

TABLE 1a. BIRTHS, MARRIAGES AND DEATHS: 1952

Month	Births	Marriages	Deaths
January	8,660	2,396	4,663
February	8,255	3,039	4,298
March	8,947	2,188	4,504
April	8,410	3,331	4,184
May	8,550	3,747	4,070
June	8,659	5,221	4,412
July	9,461	3,121	4,158
August	9,230	3,600	3,656
September	9,264	4,203	3,707
October	9,253	3,652	4,226
November	8,603	3,939	4,199
December	8,755	2,688	4,463
Total	106,047	41,125	50,540

The birth and death data have not been adjusted for residence but, like the marriage figures, represent events occurring in New Jersey. Since environmental conditions are responsible for the seasonal influence on the number of events occurring, it would be illogical to include in New Jersey's seasonal trend those events occurring to New Jersey residents in other states and subject to the natural conditions imposed by the modes of living in those states.

TABLE 1b. BIRTHS, MARRIAGES, DEATHS, STILLBIRTHS, MATERNAL DEATHS, INFANT DEATHS AND NEONATAL DEATHS BY COUNTIES AND MUNICIPALITIES: 1952

(Births, deaths and stillbirths adjusted for residence.)

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal births Deaths	Infant Deaths by Age at Death		
					Total	Under 28 Days	
Absecon City	59	11	32	...	...	...
Atlantic City	1103	717	957	26	4	39	28
Brigantine City	72	7	14	2	...	...	...
Buena Borough	49	38	18	...	...	...	...
Buena Vista Township	43	13	23	1	...	1	1
Corbin City	1	...	5	...	...	...	...
Egg Harbor City	129	73	41	...	...	2	2
Egg Harbor Township	49	21	36	3	...	...	...
Estelle Manor City	6	3	8	...	...	...	...
Folsom Borough	1	5	1	1	...	...	...
Galloway Township	62	13	38	1	...	2	1
Hamilton Township	98	20	39	2	...	...	...
Hammonton Town	194	72	72	1	1	3	1
Linwood City	57	16	23	...	...	1	1
Longport Borough	14	2	13	...	...	1	1
Margate City	131	22	58	2	...	2	1
Mellica Township	17	15	27	...	...	...	...
Northfield City	98	8	39	...	...	1	1
Pleasantville City	360	127	184	8	1	10	3
Port Republic City	7	2	12	1	...	...	...
Somers Point City	64	37	45	...	...	1	...
Ventnor City	126	91	116	2	...	1	...
Weymouth Township	13	...	19	...	...	1	1
Total	2788	1813	1797	54	6	64	41

BERGEN COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Allendale Borough	63	10	39	...	...	1	...
Alpine Borough	13	4	9	...	...	1	...
Bergenfield Borough	514	128	147	2	...	14	14
Bogota Borough	128	98	84	2	...	4	2
Carlstadt Borough	103	15	36	2	...	...	...
Cliffside Park Borough	233	112	137	4	...	6	6
Closter Borough	109	16	36	2	...	2	2
Cresskill Borough	129	27	34	...	...	1	1
Demarest Borough	51	7	16	...	...	7	...
Edmont Borough	313	98	118	6	...	5	5
East Paterson Borough	393	81	87	3	...	13	...
East Rutherford Borough	124	83	71	4	...	2	1
Edgewater Borough	53	99	59	...	1	1	...
Emerson Borough	56	13	16	...	...	1	...
Englewood City	407	294	234	10	1	12	...
Englewood Cliffs Borough	12	4	7	...	...	...	...
Fair Lawn Borough	739	143	159	14	...	10	...
Fairview Borough	206	117	85	1	1	4	3
Fort Lee Borough	405	141	180	9	...	7	6
Franklin Lakes Borough	57	6	12	1	...	6	...
Garfield City	548	186	206	12	...	7	3
Glen Rock Borough	221	25	83	4	...	6	4
Hackensack City	662	324	296	14	...	5	5
Harrington Park Borough	82	13	15	...	...	...	...
Harrison Heights Borough	130	106	89	1	...	2	2
Haworth Borough	33	8	11	...	...	2	...
Hillsdale Borough	109	26	50	4	...	3	3
Hoboken Borough	61	37	19	2	...	1	1
Leonia Borough	162	52	78	4	1	8	7
Little Ferry Borough	100	48	57	3	...	1	1
Lodi Borough	500	97	125	8	...	13	10
Lyndhurst Township	439	133	182	6	...	6	5
Mahwah Township	89	25	39	1	...	3	1
Maywood Borough	256	55	74	6	...	4	1
Midland Park Borough	170	28	32	3	...	2	...
Montvale Borough	38	7	27	...	...	1	...
Moonachie Borough	67	9	16	1	...	...	...
New Milford Borough	568	44	77	10	1	19	15
North Arlington Borough	464	108	112	7	...	4	4
Northvale Borough	42	16	9	...	...	...	...
Norwood Borough	37	12	12	...	...	1	1
Oakland Borough	80	13	17	...	...	4	3
Old Tappan Borough	19	2	10	...	...	2	2
Oradell Borough	62	18	45	2	...	...	...
Palisade Interstate Park Borough	1	...	...	...	...	...	...
Palisade Park Borough	213	70	86	4	...	2	1
Paramus Borough	434	29	80	4	...	11	8
Park Ridge Borough	63	35	37	1	...	...	...
Ramsey Borough	119	40	36	2	...	...	...
Ridgefield Borough	202	54	68	6	...	4	4
Ridgefield Park Township	211	80	121	6	...	3	3
Ridgewood Village	376	183	225	5	...	4	3
River Edge Borough	287	34	73	3	...	5	2
River Vale Township	74	3	17	...	...	2	2
Rochelle Park Township	144	28	38	5	...	...	...
Rockleigh Borough	1	...	...	...	...	...	...
Rutherford Borough	394	129	214	7	1	11	10
Saddle River Borough	20	14	5	...	...	1	1
Saddle River Township	212	49	36	2	...	2	1
South Hackensack Township	35	3	8	1	...	...	...
Teaneck Township	390	184	269	10	...	24	20
Tenafly Borough	166	77	90	7	...	1	1
Teterboro Borough	1	...	...	...	...	...	...
Upper Saddle River Borough	18	6	9	...	...	...	...
Waldwick Borough	193	11	55	2	...	8	7
Washington Borough	139	50	73	5	1	2	2
Washington Township	56	3	10	1	...	...	...
Westwood Borough	171	81	74	2	...	4	3
Woodcliff Lake Borough	34	...	...	...	...	...	...
Wood Ridge Borough	120	34	58	1	...	3	2
Wyckoff Township	139	24	47	...	...	1	1
Total	13570	4041	5021	223	7	280	221

BURLINGTON COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Bass River Township	9	10	9	...	...	1	1
Beverly City	89	22	49	2	...	3	3
Bordentown City	151	72	68	3	...	6	3
Bordentown Township	62	2	21	1	...	2	2
Burlington City	317	114	146	9	1	7	6
Burlington Township	49	10	22	2	...	1	1
Chesterfield Township	22	17	12	1	...	1	...
Cinnaminson Township	24	9	19	...	...	...	...
Delanco Township	63	14	39	3	...	1	...
Delran Township	42	7	17	2	...	...	...
Eastampton Township	15	...	8	...	...	...	...
Edgewater Park Township	68	8	24	1	...	1	1
Evesham Township	13	5	8	...	...	...	...
Fieldsboro Borough	160	50	78	2	...	3	3
Florence Township	45	18	13	...	...	1	1
Hainesport Township	36	5	9	1	1	1	1
Lumberton Township	29	4	20	2	...	1	1
Mansfield Township	205	91	63	1	...	3	2
Maple Shade Township	67	17	28	1	...	2	1
Medford Township	25	14	15	...	...	7	7
Medford Lakes Borough	272	111	78	1	...	7	7
Moorestown Township	258	71	93	3	...	12	7
Mount Holly Township	57	6	24	2	...	4	3
Mount Laurel Township	28	1	2	...	...	...	...
New Hanover Township	19	9	14	...	...	1	...
North Hanover Township	159	37	64	3	...	4	3
Pemberton Borough	55	15	21	...	...	1	1
Pemberton Township	180	88	49	...	...	4	2
Riverside Township	174	86	83	3	...	4	3
Riverton Borough	72	30	28	...	...	1	1
Shamong Township	15	1	6	...	...	...	...
Southampton Township	50	28	28	2	...	2	...
Springfield Township	47	10	8	...	...	...	...
Tabernacle Township	35	5	10	...	...	2	1
Washington Township	10	1	14	...	...	2	2
Westampton Township	24	1	8	1	...	...	...
Willingboro Township	5	6	3	...	...	...	...
Woodland Township	13	1	2	...	...	...	...
Wrightstown Borough	71	35	4	...	...	2	2
Total	3060	966	1244	49	2	81	57

CAMDEN COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Auburn Borough	183	52	112	4	...	2	1
Audubon Park Borough	17	...	...	...	...	...	...
Berlin Borough	123	8	26	1	...	4	3
Bellmawr Borough	216	12	30	2	...	...	...
Berlin Borough	65	58	31	2	...	1	1
Berlin Township	75	4	17	3	...	1	...
Brooklawn Borough	...	...	...	...	...	...	...
Camden City	2760	1365	1393	44	2	81	53
Cheslhurst Borough	3	2	7	...	...	...	...
Clementon Borough	89	10	33	...	...	...	...
Delaware Township	454	121	219	...	...	...	6
Collingswood Borough	121	19	39	3	...	2	1
Delaware Township	18	7	10	...	...	2	2
Gloucester City	327	103	150	9	...	14	10
Gloucester Township	178	36	97	1	1	3	3
Haddonfield Borough	406	92	148	6	...	12	12
Haddon Heights Borough	182	81	88	2	...	4	3
Haddon Township	163	57	85	2	...	5	4
Hi Nella Borough	5	...	...	...	...	...	...
Laurel Springs Borough	71	7	16	...	...	2	2
Lawnside Borough	42	9	23	1	...	3	3
Lindenwold Borough	75	42	33	4	...	1	...

CAMDEN COUNTY—Continued

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by	
				births	Deaths	Total	Under 28 Days
Magnolia Borough	71	18	17	1	...	3	...
Merchantville Borough	275	108	62	4	...	2	2
Mount Ephraim Borough	112	31	25	...	...	1	...
Oaklyn Borough	132	22	63	1	...	2	2
Pennsauken Township	371	96	182	2	...	14	11
Pine Hill Borough	42	6	18	1	...	2	1
Pine Valley Borough	1	...	...	...	...	...	...
Runnemede Borough	145	60	47	1	...	...	...
Somerdale Borough	39	11	19	...	...	5	4
Stratford Borough	36	10	9	...	...	2	2
Tavistock Borough	15	7	9	...	...	...	...
Yorbees Township	62	30	43	1	...	4	4
Waterford Township	89	31	58	2	...	1	1
Winslow Township	69	22	20	2	...	1	...
Wood Lynne Borough	...	...	...	...	...	...	...
Total	7177	2847	3167	103	3	183	132

CAPE MAY COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by	
				births	Deaths	Total	Under 28 Days
Avalon Borough	6	2	8	...	...	...	...
Cape May City	89	25	52	1	...	1	...
Cape May Point Borough	1	...	...	...	...	...	...
Dennis Township	24	17	31	3	...	...	...
Lower Township	47	21	40	...	...	...	...
Middle Township	99	39	69	...	...	6	4
North Wildwood City	49	10	51	1	...	1	3
Ocean City	139	67	97	2	1	1	1
Sea Isle City	20	12	11	1	...	...	...
Stone Harbor Borough	16	8	12	...	...	1	1
Upper Township	38	7	28	...	...	2	2
West Cape May Borough	21	2	11	...	...	...	...
West Wildwood Borough	1	1	5	...	...	...	...
Wildwood City	93	103	100	...	...	3	2
Wildwood Crest Borough	39	7	27	...	...	1	1
Woodbine Borough	45	7	15	1	...	1	...
Total	700	328	558	11	1	18	14

CUMBERLAND COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by	
				births	Deaths	Total	Under 28 Days
Bridgeton City	488	209	217	9	...	20	13
Commercial Township	86	19	60	1	...	5	2
Deerfield Township	60	4	19	1	...	2	1
Downe Township	34	12	33	...	...	3	1
Fairfield Township	80	24	38	...	...	1	1
Greenwich Township	39	7	12	1	...	2	1
Hopewell Township	47	6	26	3	...	2	2
*Lands Township	201	57	62	4	...	1	1
Lawrence Township	66	18	27	1	...	1	1
Maurice River Township	42	25	26	...	...	...	...
Millville City	374	138	209	4	1	6	2
Shiloh Borough	9	4	5	...	...	1	...
Stow Creek Township	27	1	5	...	...	...	...
Upper Deerfield Township	137	28	36	5	...	3	4
*Vineland Borough	106	34	62	1	...	7	6
*Vineland City	321	82	153	4	1	7	6
Total	2117	668	890	37	2	63	41

* As of July 1, 1932, Lands Township and Vineland Borough incorporated and became Vineland City.

ESSEX COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by	
				births	Deaths	Total	Under 28 Days
Belleville Town	694	229	283	12	2	11	10
Bloomfield Township	1682	313	511	17	2	18	15
Caldwell Borough	115	94	75	1	...	3	3
Caldwell Township	42	12	10	...	...	...	...
Cedar Grove Township	249	10	37	...	...	10	10
East Orange City	1563	377	998	31	...	37	30
Esser Falls Borough	13	12	16	1	...	...	...
Glen Ridge Borough	108	43	90	1	...	2	1
Irington Town	1178	459	643	20	1	19	15
Livingston Township	332	48	68	4	...	2	2
Maplewood Township	323	180	256	6	...	5	4
Millburn Township	194	123	110	4	...	3	2
Montclair Town	823	414	514	21	2	23	13
Newark City	9188	4828	5205	185	13	324	243
North Caldwell Borough	40	4	17	...	...	...	...
Orange City	562	218	244	9	...	15	12
Orange Township	845	412	443	10	1	15	14
Roseland Borough	40	8	13	...	...	1	1
South Orange Village	266	163	173	2	...	2	2
Verona Borough	187	93	94	8	...	6	5
West Caldwell Borough	108	6	45	...	...	3	2
West Orange Town	632	191	308	9	...	8	8
Total	18523	8419	10163	354	21	490	392

GLOUCESTER COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by	
				births	Deaths	Total	Under 28 Days
Clayton Borough	70	21	33	...	...	4	1
Deptford Township	115	38	74	...	...	4	2
East Greenwich Township	42	7	26	1	...	1	1
Elk Township	25	5	13	...	...	5	4
Franklin Township	172	46	79	4	...	7	6
Glassboro Borough	97	16	57	1	...	...	...
Greenwich Township	51	28	19	2	...	1	...
Harrison Township	43	17	24	2	...	1	1
Logan Township	19	8	16	...	...	...	...
Mantua Township	151	24	45	1	...	5	3
Monroe Township	137	28	68	3	...	1	1
National Park Borough	56	25	28	1	...	...	...
Newfield Borough	41	16	7	...	...	1	1
Paulsboro Borough	245	71	70	3	...	3	3
Pitman Borough	157	63	87	1	...	2	1
South Harrison Township	6	1	5	...	...	3	2
Swedesboro Borough	112	41	41	2	...	3	2
Washington Township	40	11	28	2	...	1	...
Wenonah Borough	85	4	24	2	...	1	1
West Deptford Township	100	20	44	2	...	4	...
Westville Borough	120	55	53	...	...	1	...
Woodbury City	424	118	150	9	...	13	9
Woodbury Heights Borough	24	6	13	...	...	...	...
Woodville Township	8	...	11	...	...	...	...
Total	2290	677	1015	36	...	59	36

HUDSON COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Baronne City	1625	613	794	27	2	35	31
East Newark Borough	29	26	20	2	...	...	...
Guttenberg Town	88	37	64	2	...	2	2
Harrison Town	263	132	141	9	...	7	5
Hoboken City	1066	724	610	25	1	41	26
Jersey City	6749	3649	2488	116	3	153	107
Keany Town	757	297	393	24	...	16	1
North Bergen Township	868	182	437	20	2	21	19
Secaucus Borough	147	60	91	4	...	...	...
Union City	1042	628	656	20	...	30	21
Weehawken Township	240	91	139	2	...	7	6
West New York Town	726	596	354	10	...	15	13
Total	13353	6397	7235	261	8	307	241

HUNTERDON COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Alexandria Township	17	6	8	...	...	...	...
Bechtel Township	7	...	7	...	...	...	...
Bloomsbury Borough	15	6	6	...	...	...	...
Calton Borough	26	8	21	...	...	...	...
Clinton Town	42	15	20	...	...	...	...
Clinton Township	18	6	23	1	...	...	...
Delaware Township	321	7	27	...	...	...	...
East Amwell Township	42	5	27	...	...	1	...
Flemington Borough	98	43	39	...	...	4	2
Franklin Township	39	6	19	1	...	3	...
Frenchtown Borough	41	11	18	...	...	...	...
Glen Gardner Borough	23	3	9	...	...	1	...
Hampton Borough	26	6	11	...	...	...	...
High Bridge Borough	38	21	29	1	1	...	...
Holland Township	6	5	11	...	...	...	...
Kingwood Township	22	8	16	...	...	...	...
Lambertville City	118	37	70	2	1	5	4
Lebanon Borough	30	6	14	...	...	...	...
Lebanon Township	31	3	12	...	...	...	...
Milford Borough	36	16	16	...	...	1	1
Raritan Township	65	4	23	...	...	4	1
Readington Township	87	29	49	3	...	4	4
Stockton Borough	21	2	7	1	...	...	...
Tewksbury Township	29	5	11	...	...	...	...
Union Township	22	4	4	1	...	2	1
West Amwell Township	17	1	13	...	...	...	...
Total	936	263	326	11	2	27	14

MERCER COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
East Windsor Township	31	5	14	3	...	1	...
Ewing Township	432	79	121	7	...	12	8
Hamilton Township	1032	253	417	18	1	23	15
Hightstown Borough	119	50	75	1	...	3	2
Hopewell Borough	39	24	21	1	...	...	...
Hopewell Township	104	23	39	1	...	2	1
Lawrence Township	291	62	85	4	...	2	2
Pennington Borough	37	23	28	...	...	1	1
Princeton Borough	152	157	101	2	...	2	2
Princeton Township	156	6	30	...	...	3	3
Trenton City	2399	1201	1423	57	3	73	54
Washington Township	71	7	28	...	...	2	2
West Windsor Township	56	21	28	...	...	...	...
Total	5130	1911	2403	94	4	129	92

MIDDLESEX COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Carteret Borough	236	113	110	5	...	3	3
Cranbury Township	12	25	3	...	...	...	...
Dunellen Borough	207	83	67	5	...	9	...
East Brunswick Township	245	28	51	1	...	8	8
Helmetta Borough	9	7	10	...	...	2	2
Highland Park Borough	330	90	113	3	...	4	4
Jamesburg Borough	113	24	37	...	...	5	3
Madison Township	156	38	60	2	...	6	...
Metuchen Borough	419	74	97	3	...	10	8
Middlesex Borough	132	32	36	3	...	2	1
Millsboro Borough	108	40	33	1	...	...	...
Monroe Township	33	6	13	...	...	...	...
New Brunswick City	963	530	435	20	1	21	17
North Brunswick Township	127	16	38	2	...	3	3
Perth Amboy City	780	396	416	12	...	20	16
Piscataway Township	263	38	87	...	...	7	3
Plainsboro Township	24	1	9	...	...	1	...
Raritan Township	673	103	138	5	...	14	11
Saverville Borough	236	51	89	3	...	10	7
South Amboy City	223	72	93	1	1	7	5
South Brunswick Township	83	18	42	...	...	5	4
South Plainfield Borough	343	43	68	3	...	6	4
South River Borough	270	97	102	3	...	5	5
Spotswood Township	114	15	13	...	...	...	...
Woodbridge Township	1073	213	359	20	1	27	21
Total	7179	2136	2563	112	3	176	138

MONMOUTH COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Allenhurst Borough	15	7	17	...	...	...	...
Allentown Borough	45	21	14	...	...	...	...
Asbury Park City	386	290	249	1	...	7	4
Atlantic Township	29	6	12	...	...	2	2
Atlantic Highlands Borough	127	65	44	...	1	2	2
Avon Borough	29	20	27	...	...	...	...
Belmar Borough	100	53	77	2	...	...	...
Bradley Beach Borough	61	45	56	2	...	...	...
Belleville Borough	21	3	20	1	...	1	...
Deal Borough	25	24	14	1	...	...	...
Eatontown Borough	157	29	47	2	...	6	7
Englishtown Borough	49	21	16	2	...	9	...
Fair Haven Borough	110	10	43	4	...	1	1
Farmingdale Borough	35	18	22	...	...	...	...
Freehold Borough	164	87	100	2	...	3	6
Freehold Township	89	4	46	1	...	3	...
Highlands Borough	93	15	41	1	...	3	1
Holmdel Township	17	5	15	...	...	...	...
Howell Township	156	26	57	...	...	...	...
Interlaken Borough	21	3	10	...	...	...	...
Keansboro Borough	150	60	81	3	...	8	5
Keypoint Borough	138	105	76	...	...	...	...
Little Silver Borough	35	18	23	...	...	1	1
Long Branch City	724	189	282	10	...	10	14
Manalapan Township	78	8	25	...	...	2	2
Manasquan Borough	96	43	49	2	...	1	1
Marlboro Township	42	17	34	...	...	5	5
Matawan Borough	137	32	47	1	...	2	1
Matawan Township	90	16	30	...	...	1	1
Middletown Township	360	80	177	5	...	12	11
Milstone Township	49	6	26	2	...	2	1
Monmouth Beach Borough	4	4	14	...	...	...	...
Neptune Township	328	64	196	5	...	8	8
Neptune City Borough	78	18	38	...	...	...	...
Ocean Grove	1	...	2	...	...	...	...
Ocean Township	145	18	78	3	...	2	1
New Shrewsbury Borough	23	13	11	...	...	1	...

MONMOUTH COUNTY—Continued

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Gceanport Borough	52	9	22	3	...	1	1
Larira Township	85	8	32	1	...	1	1
Red Bank Borough	559	154	186	9	...	13	10
Roosevelt Borough	9	1	5	...	...	...	...
Rumson Borough	100	31	48	2	...	1	1
Sea Bright Borough	30	16	10	...	...	1	1
Sea Girt Borough	32	11	20	...	...	...	...
Shrewsbury Borough	60	5	16	3	...	1	1
Shrewsbury Township	27	1	6	...	...	...	...
South Belmar Borough	21	3	17	...	...	...	...
Spring Lake Borough	46	35	38	...	...	...	...
Spring Lake Heights Borough	70	11	17	...	...	1	1
Union Beach Borough	57	26	39	...	...	...	...
Upper Freehold Township	50	4	37	...	...	4	1
Wall Township	154	28	89	4	...	3	2
West Long Branch Borough	53	17	26	...	...	...	...
Total	5512	1841	2706	79	1	134	94

MORRIS COUNTY - 1952

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Poconon Town	158	80	82	1	...	4	3
Poconon Township	29	3	15	...	...	1	1
Butler Borough	115	51	57	2	...	4	3
Chatham Borough	167	48	75	4	...	1	1
Chatham Township	50	2	24	...	...	1	1
Chester Borough	19	7	17	...	...	...	...
Chester Township	30	...	6	...	...	...	...
Denville Township	187	49	65	3	...	4	3
Dover Town	245	126	141	7	...	5	5
East Hanover Township	37	22	13	...	...	1	1
Florham Park Borough	82	9	32	1	...	...	...
Hanover Township	140	29	38	6	...	3	2
Harding Township	39	5	11	...	...	...	...
Jefferson Township	89	19	22	3	...	3	2
Kimpton Borough	39	3	7	...	...	...	...
Lincoln Park Borough	88	18	29	3	...	1	...
Madison Borough	285	82	101	3	...	3	2
Mendham Borough	35	23	12	...	...	...	...
Mendham Township	28	2	18	...	...	...	...
Mill Hill Township	51	14	15	...	...	1	1
Montville Township	86	27	39	1	...	2	2
Morris Plains Borough	91	35	28	1	...	3	2
Morristown Town	497	132	225	16	...	10	6
Morris Township	121	40	63	3	...	6	5
Mount Arlington Borough	16	5	8	...	...	...	...
Mountain Lakes Borough	52	18	30	...	...	...	...
Mount Olive Township	74	13	28	1	...	...	...
Mount Tabor	2	...	1	...	...	...	...
Netcong Borough	54	44	19	...	...	1	1
Parsippany-Troy Hills Township	200	36	81	4	...	9	5
Passaic Township	76	20	32	1	...	2	2
Pegannock Township	188	26	55	4	...	2	2
Randolph Township	74	16	46	3	...	1	1
Riverdale Borough	50	5	16	2	...	2	2
Rockaway Borough	75	51	37	1	...	2	...
Rockaway Township	110	11	45	1	...	4	3
Roxbury Township	144	39	36	...	...	2	2
Victory Gardens	26	1	5	...	...	3	3
Washington Township	39	6	23	...	...	...	...
Wharton Borough	69	32	37	2	...	4	2
Total	3909	1169	1660	75	1	85	63

OCEAN COUNTY - 1952

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Burnegat City Borough	2	2	2	...	...	...	...
Bay Head Borough	19	4	12	1	...	...	...
Beach Haven Borough	26	10	25	...	...	2	2
Beachwood Borough	43	5	12	...	...	1	1
Berkeley Township	43	22	20	...	...	2	2
Brick Township	109	18	56	1	...	3	2
Dover Township	232	67	107	6	...	4	2
Englewood Township	6	7	12	...	...	1	1
Harvey Cedars Borough	...	...	...	...	...	...	...
Island Beach Borough	...	...	...	...	...	...	...
Island Heights Borough	11	4	11	...	...	...	...
Jackson Township	67	17	31	1	...	...	...
Lacey Township	21	1	18	...	...	...	...
Lakehurst Borough	70	7	12	2	...	2	2
Lakewood Township	251	169	165	6	1	6	3
Lavallette Borough	18	6	7	...	...	...	...
Little Egg Harbor Township	8	1	2	...	...	...	...
Long Beach Township	17	4	7	...	...	...	...
Manchester Township	6	19	6	...	...	...	...
Mantoloking Borough	1	...	...	...	...	...	...
Ocean Gate Borough	13	5	7	...	...	2	1
Ocean Township	7	...	5	...	...	...	...
Pine Beach Borough	14	1	6	2	...	1	1
Plumstead Township	68	11	25	3	...	2	1
Point Pleasant Beach Borough	44	47	38	3	...	1	1
Point Pleasant Borough	115	26	50	2	...	...	...
Seaside Heights Borough	21	10	13	...	...	...	...
Seaside Park Borough	18	12	12	1	...	...	...
Ship Bottom Beach Arlington Borough	7	2	8	...	...	...	...
South Toms River Borough	5	2	2	...	...	...	...
Stafford Township	32	14	15	1	...	...	...
Surf City Borough	3	...	4	...	...	...	...
Tuckerton Borough	29	12	25	...	...	...	...
Union Township	15	12	14	...	...	...	...
Total	1345	508	729	29	1	27	20

PASSAIC COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 28 Days
Bloomington Borough	69	17	33	2	...	3	2
Clifton City	1619	286	560	24	...	23	19
Haledon Borough	37	47	67	...	...	2	2
Hartthorne Borough	263	87	135	6	1	3	3
Little Falls Township	160	64	48	3	...	2	1
North Haledon Borough	70	12	33	1	...	3	3
Passaic City	683	696	598	16	...	19	11
Paterson City	2776	1253	1743	85	3	57	40
Pompton Lakes Borough	191	86	38	4	...	...	...
Prospect Park Borough	107	57	44	3	...	1	...
Ringwood Borough	41	6	19	1	...	3	1
Tokova Borough	158	25	45	...	...	4	3
Wanaque Borough	207	21	43	3	...	7	4
Wayne Township	341	71	117	10	...	7	7
West Milford Township	91	26	40	1	...	2	1
West Paterson Borough	90	21	30	...	...	1	1
Total	7223	2775	3593	161	4	137	98

SALEM COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 28 Days
Alloway Township	39	12	21	1	...	2	1
Elmer Borough	47	11	29	...	...	...	...
Elslaboro Township	12	1	5	1	...	3	2
Lower Alloway Creek Township	24	6	24	1	...	5	5
Mannington Township	160	32	53	1	...	1	1
Mannington Township	46	3	32	1	...	5	4
Oldmans Township	46	11	26	1	...	13	10
Penns Grove Borough	172	72	82	1	...	3	2
Pilesgrove Township	63	3	16	...	...	2	2
Pilesgrove Township	72	10	56	2	...	2	2
Quinton Township	26	8	22	1	...	3	...
Salem City	257	67	98	4	...	4	4
Upper Penns Neck Township	139	23	46	3	...	1	1
Upper Pilesgrove Township	51	14	21	1	...	2	1
Woodstown Borough	91	32	29	1	...	44	33
Total	1205	304	530	19	...	...	...

SOMERSET COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 28 Days
Bedminster Township	17	12	15	...	...	1	1
Bernards Township	102	24	41	...	...	1	1
Bernardsville Borough	94	33	49	1	...	2	2
Bound Brook Borough	305	89	92	5	...	1	...
Branchburg Township	42	7	26	...	...	4	4
Bridgewater Township	200	21	45	2	...	6	5
Far Hills Borough	26	5	8	...	...	2	2
Franklin Township	268	44	62	5	...	3	3
Green Brook Township	40	1	9	...	...	5	4
Hillsborough Township	156	19	31	1	...	1	1
Hillsborough Township	240	68	53	5	...	3	3
Millstone Borough	5	2	2	...	...	3	2
Montgomery Township	76	1	24	3	...	1	1
North Plainfield Borough	300	115	124	6	1	3	3
Pennack Gladstone Borough	26	11	16	...	...	4	3
Raritan Town	124	59	52	3	...	9	5
Rocky Hill Borough	19	4	7	...	...	5	3
Somerville Borough	333	103	133	9	...	2	2
South Bound Brook Borough	87	26	22	2	...	3	2
Warren Township	78	16	29	2	...	1	1
Watchung Borough	25	16	15	...	...	49	37
Total	2567	678	855	44	1	...	...

SUSSEX COUNTY 1952

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 28 Days
Andover Borough	9	2	5	...	...	...	...
Andover Township	34	3	9	1	...	...	...
Branchville Borough	26	8	10	2	...	1	...
Byram Township	10	3	9	3	...	...	...
Frankford Township	36	6	18	...	...	1	1
Franklin Borough	68	31	50	...	...	...	...
Fredon Township	10	10	3	1	...	2	2
Green Township	20	6	4	...	...	1	1
Hamburg Borough	35	17	14	1	...	1	1
Hampton Township	9	3	9	...	...	1	1
Hardyston Township	29	1	17	1	...	3	3
Hopatcong Borough	36	11	7	1	...	1	1
Lafayette Township	19	7	8	...	...	1	1
Montague Township	8	3	10	1	...	1	1
Newton Town	156	66	74	1	...	3	2
Ogdensburg Borough	28	9	10	3	...	2	1
Sandryton Township	20	1	8	...	...	1	1
Sparta Township	82	29	25	1	...	1	1
Scanhope Borough	30	11	13	1	...	1	1
Stillwater Township	18	4	11	...	...	4	4
Sussex Borough	51	42	35	1	...	2	2
Vernon Township	34	8	17	...	...	1	1
Walpack Township	7	3	...	...	...	10	10
Wantage Township	66	10	10	...	...	17	18
Total	821	291	379	17	...	25	25

UNION COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 28 Days
Clark Township	196	41	20	3	...	2	1
Cranford Township	443	132	158	7	...	4	3
Elizabeth City	2359	1069	1138	62	2	54	42
Fanwood Borough	91	8	33	1	...	1	...
Garwood Borough	117	41	41	5	...	6	4
Hillside Township	544	115	174	4	...	10	9
Kenilworth Borough	148	36	26	...	...	5	3
Linden City	718	172	210	17	...	16	12
Mountainside Borough	66	10	9	3	...	1	1
New Providence Borough	169	11	39	1	...	6	2
Berkeley Heights Township	62	12	31	...	...	2	2
Plainfield City	1013	374	423	32	...	13	7
Rahway City	574	158	200	14	...	9	6
Roselle Borough	516	126	150	10	...	9	7
Roselle Park Borough	221	50	106	1	1	7	3
Scotch Plains Township	255	74	72	2	...	4	2
Springfield Township	193	59	83	5	...	3	2
Summit City	363	170	183	11	...	12	10
Union Township	712	178	277	11	...	16	12
Westfield Town	500	144	195	13	...	8	8
Windfield Township	63	...	10	1
Total	9153	2980	3591	207	3	188	136

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WARREN COUNTY

CIVIL DIVISION	Births	Mar-riages	Deaths	Infant Deaths by Age at Death		
				Still-births	Maternal Deaths	Under 28 Days
Allamuchy Township	16	1	4	1	...	1
Alpha Borough	42	22	17	...	...	1
Belvidere Town	64	30	31	2	...	1
Blairstown Township	45	8	23	...	...	1
Franklin Township	55	10	20	...	...	1
Frelighuysen Township	11	1	11	1	...	1
Greenwich Township	18	21	10	...	...	1
Hackettstown Town	89	20	47	3	...	2
Hardwick Township	6	...	1	...	...	1
Harmony Township	28	13	17	...	...	1
Hope Township	9	6	1	...	...	1
Independence Township	23	11	16	...	...	1
Knowlton Township	21	3	16	...	...	1
Liberty Township	8	...	4	...	...	1
Lopatcong Township	10	1	12	...	...	1
Mansfield Township	33	9	10	...	...	1
Oxford Township	62	21	18	...	...	1
Palaquarry Township	7	...	2	...	...	1
Phillipsburg Town	488	138	271	9	...	13
Polatcong Township	29	3	20	...	...	1
Washington Borough	115	41	59	...	...	3
Washington Township	33	6	28	...	...	1
White Township	15	3	13	...	...	2
Total	1211	399	638	16	...	27
INSTITUTIONS	6	1	26	1	...	...
MILITARY POSTS	445	513	39	7	...	18

TABLE 2. DEATHS BY AGE GROUPS; NUMBER AND PERCENTAGE FOR PAST DECADE: 1943-1952

YEAR	Total Deaths	AGE GROUPS													
		Under 1 Year	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and over	Unknown	No.	%				
1943	49,781	2,782	5.6	479	1.0	493	1.0	1,022	2.1	4,007	8.4	21,148	42.5	21,148	42.5
1944	47,340	2,507	5.4	433	1.0	400	1.0	941	2.0	4,304	9.2	22,927	48.5	22,927	48.5
1945	47,033	2,470	5.2	473	1.0	499	1.0	840	1.8	4,127	8.7	23,574	49.3	23,574	49.3
1946	46,276	2,389	5.1	428	0.9	437	0.9	738	1.6	3,868	8.3	22,880	49.5	22,880	49.5
1947	48,276	2,059	4.3	428	0.9	427	0.9	738	1.5	3,868	8.0	24,811	51.4	24,811	51.4
1948	48,107	2,859	5.9	419	0.9	377	0.8	682	1.4	3,710	7.7	23,481	48.8	23,481	48.8
1949	47,706	2,521	5.3	414	0.9	355	0.7	686	1.4	3,585	7.5	24,848	52.1	24,848	52.1
1950	48,887	2,445	5.0	392	0.8	328	0.7	500	1.0	3,517	7.2	26,210	53.7	26,210	53.7
1951	48,887	2,445	5.0	392	0.8	328	0.7	500	1.0	3,517	7.2	26,210	53.7	26,210	53.7
1952	51,490	2,653	5.1	425	0.8	321	0.6	591	1.1	3,653	7.1	27,088	52.6	27,088	52.6

TABLE 3. ILLEGITIMATE BIRTHS BY COLOR AND AGE OF MOTHER: 1952

Age of Mother	Total		Color			
			White		Non-White	
			No.	%	No.	%
All Ages	2,493	100.0	1,085	100.0	1,408	100.0
10-14	46	1.8	5	0.5	41	2.9
15-19	922	37.0	320	29.5	602	42.8
20-24	848	34.0	417	38.4	431	30.6
25-29	389	15.6	179	16.5	210	14.9
30-34	169	6.8	91	8.4	78	5.5
35-39	88	3.5	60	5.5	28	2.0
40-44	29	1.2	12	1.1	17	1.2
45-49	1	<0.1			1	0.1
Unknown	1	<0.1	1	0.1		

Although it is recognized that not all births to unmarried mothers are correctly reported as such, the discrepancy between actual and reported figures probably does not vary significantly between age groups. Bearing that qualification in mind and assuming that there is no race difference in the reluctance of females to give correct information, the data in the table may be studied to advantage.

The percentage of non-white females who became mothers out of wedlock prior to reaching twenty years of age was relatively higher than that of females of the white race. This was also true for 1950 and 1951.

After that age, there is a reversal of trend. Fifteen per cent of the illegitimate births to white mothers occurs after the age of 29 years. The percentage for non-white mothers was 8.8.

Although constituting no more than 6 per cent of New Jersey's population, the non-white races accounted for 56 per cent of the total illegitimate births. One out of every hundred births to white mothers occurs out of wedlock; the ratio for non-white mothers is 13 out of every hundred. These ratios were approximately the same in 1950 and 1951.

TABLE 4. NUMBER OF BIRTHS, DEATHS UNDER ONE YEAR, DEATHS UNDER ONE MONTH,* STILLBIRTHS AND MATERNAL DEATHS WITH RATES PER 1,000 LIVE BIRTHS: 1921-1952

Year	Births Reported	Deaths Under 1 Year		Deaths Under 1 Month*		Stillbirths		Maternal Deaths	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate
1921	78,472	5,773	7.38	2,830	36.2	8,242	11.5	451	6.9
1922	74,470	5,864	7.87	2,773	37.2	8,033	10.7	466	6.2
1923	70,530	5,358	7.59	2,651	37.6	7,833	11.1	424	6.0
1924	70,530	5,358	7.59	2,651	37.6	7,833	11.1	424	6.0
1925	74,193	5,109	6.89	2,497	33.7	8,177	11.0	406	5.5
1926	72,880	5,000	7.03	2,537	34.8	8,018	10.9	401	5.5
1927	72,799	4,464	6.13	2,462	33.8	8,074	11.1	430	6.0
1928	78,207	4,116	5.27	2,488	31.8	8,074	10.4	400	5.1
1929	68,292	3,870	5.66	2,417	35.5	7,844	11.3	367	5.3
1930	64,078	3,649	5.69	2,104	32.9	7,707	11.9	367	5.7
1931	61,216	3,089	5.04	1,862	30.4	7,578	12.4	390	6.4
1932	61,216	3,089	5.04	1,862	30.4	7,578	12.4	390	6.4
1933	54,844	2,936	5.35	1,590	29.0	7,348	13.4	353	6.4
1934	54,844	2,936	5.35	1,590	29.0	7,348	13.4	353	6.4
1935	55,050	2,858	5.19	1,500	27.3	7,273	13.2	285	5.2
1936	54,435	2,363	4.34	1,349	24.8	7,073	12.9	294	5.4
1937	55,107	2,170	3.94	1,303	23.6	7,073	12.8	249	4.5
1938	56,859	2,160	3.80	1,327	23.4	7,181	12.6	182	3.2
1939	56,859	2,160	3.80	1,327	23.4	7,181	12.6	182	3.2
1940	59,828	2,094	3.50	1,432	23.9	7,044	11.8	191	3.2
1941	67,104	2,392	3.56	1,651	24.6	7,009	10.4	172	2.6
1942	82,512	2,585	3.14	1,651	20.0	7,172	8.7	152	1.8
1943	82,512	2,585	3.14	1,651	20.0	7,172	8.7	152	1.8
1944	75,052	2,507	3.34	1,680	22.4	7,066	9.3	151	2.0
1945	76,995	2,470	3.21	1,680	21.8	7,066	9.2	151	1.9
1946	95,044	2,705	2.85	2,020	21.3	7,066	7.3	119	1.2
1947	97,970	2,365	2.41	2,020	20.6	7,066	7.2	118	1.2
1948	97,970	2,365	2.41	2,020	20.6	7,066	7.2	118	1.2
1949	97,414	2,521	2.59	1,904	19.5	7,066	7.2	70	0.7
1950	97,414	2,445	2.50	1,876	19.2	7,066	7.2	69	0.7
1951	105,218	2,445	2.32	1,917	18.2	7,066	6.7	69	0.7
1952	110,216	2,063	1.87	1,963	17.8	2,902	2.6	70	0.6

* Beginning with 1951, number and rate are based on neonatal deaths under 28 days of age.

TABLE 5. TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952

Weight	AGE GROUP										Unknown
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown	
1 5 lbs. 9 ozs. and over	600	...	29	113	178	145	100	31	3	1	
2 2500 grams 4 lbs. 7 ozs. to 5 lbs. 8 ozs. inc. 2001-2500	189	...	15	36	44	57	29	7	1	...	
3 grams inc. 3 lbs. 5 ozs. to 4 lbs. 6 ozs. inc. 1501-2000	140	...	8	24	46	32	24	6	...	...
4 grams inc. 2 lbs. 3 ozs. to 3 lbs. 4 ozs. inc. 1001-1500	197	...	15	49	56	43	25	6	1	2	
5 less than 2 lbs. 3 ozs. less than 1000 grams	330	1	30	79	93	67	41	18	...	1	
R Unknown	a546	...	21	103	157	132	81	28	2	a22	
Total	a2002	1	118	404	574	476	300	96	7	a26	

a Includes eight stillbirths of unknown color.

TABLE 5a. WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952

Weight	AGE GROUP										Unknown
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown	
5 lbs. 9 ozs. and over	532	...	20	103	156	130	88	31	3	1	
2500 grams 4 lbs. 7 ozs. to 5 lbs. 8 ozs. inc. 2001-2500	157	...	7	28	40	50	26	5	1	...	
grams inc. 3 lbs. 5 ozs. to 4 lbs. 6 ozs. inc. 1501-2000	120	...	5	17	43	28	21	6	...	...
grams inc. 2 lbs. 3 ozs. to 3 lbs. 4 ozs. inc. 1001-1500	156	...	3	35	47	37	25	6	1	2	
less than 2 lbs. 3 ozs. less than 1000 grams	273	...	15	61	82	62	36	16	...	1	
Unknown	461	...	10	88	133	115	76	25	1	13	
Total	1699	...	60	332	501	422	272	89	6	17	

DEPARTMENT OF HEALTH

TABLE 5b. NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1952

Weight	AGE GROUP										
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown	
5 lbs. 9 ozs. and over	68	...	9	10	22	15	12	...	...	...
2500 grams	32	...	8	8	4	7	3	2	...	...
4 lbs. 7 ozs. to 5 lbs. 8 ozs. inc.	20	...	3	7	3	4	3	...	...	...
2001-2500 grams inc.	41	...	12	14	9	6	...	...	...	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. inc.	57	1	15	18	11	5	5	2	1	1	
1501-2000 grams inc.	77	...	11	15	24	17	5	3	1	1	
2 lbs. 3 ozs. to 3 lbs. 4 ozs. inc.	295	1	58	72	73	54	28	7	1	1	
grams inc. less than 1000 grams											
Unknown											
Total											

TABLE 6. MATERNAL DEATHS BY SPECIFIC CAUSE: 1952

Other infections of genito-urinary tract during pregnancy (641)	1
Toxemias of pregnancy (642)	20
Other hemorrhage of pregnancy (644)	1
Ectopic pregnancy (645)	3
Total complications of pregnancy (640-649)	25
Abortion without mention of sepsis or toxemia (650)	4
Abortion with sepsis (651)	2
Abortion with toxemia, without mention of sepsis (652)	2
Total abortions (650-652)	8
Delivery complicated by placenta praevia or antepartum hemorrhage (670)	4
Delivery complicated by retained placenta (671)	1
Delivery complicated by other postpartum hemorrhage (672)	4
Delivery complicated by disproportion or malposition of fetus (674)	4
Delivery complicated by prolonged labor of other origin (675)	3
Delivery with other trauma (677)	1
Delivery with other complications of childbirth (678)	2
Total delivery with specified complications (670-678)	19
Sepsis of childbirth and the puerperium (681)	1
Puerperal phlebitis and thrombosis (682)	3
Puerperal pulmonary embolism (684)	4
Puerperal eclampsia (685)	6
Cerebral hemorrhage in the puerperium (687)	2
Other and unspecified complications of the puerperium (688)	2
Total complications of the puerperium (680-689)	18
Total Maternal Deaths	70

TABLE 6a. MATERNAL DEATHS BY CAUSE, COLOR AND AGE GROUPS: 1952

Cause* and Color	Age Group		
	All Ages	15-24	25-44
Complications of Pregnancy (640-649)	25	10	15
White	14	4	10
Non-White	11	6	5
Abortion (650-652)	8	3	5
White	5	3	2
Non-white	3		3
Delivery with Specified Complications (670-678)	19	2	17
White	17	1	16
Non-white	2	1	1
Complications of the Puerperium (680-689)	18	3	15
White	16	2	14
Non-White	2	1	1
All Causes (640-689)	70	18	52
White	52	10	42
Non-White	18	8	10

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

DISCUSSION OF TABLES 7 AND 7a

The age groups below 21 years in Table 7 differ for males and females in order to reflect the legal age requirements for marriage in New Jersey.

Of 41,125 married males, 3,984 or 9.7 per cent were less than 21 years of age and had to furnish parental consent. There were 1,868 or 4.5 per cent of the 41,125 females who, being under 18 years of age, had to receive parental consent.

Of the 3,984 males who were required to furnish parental consent, 160 or 4.0 per cent being less than 18 years old, had to receive judicial approval of the parental consent. Of the 1,868 females under 18 years of age, 173 or 9.3 per cent were less than 16 years old and had to receive judicial approval of parental consent.

Table 7 indicates that there is not a great disparity between the ages of the average male and female who marry in New Jersey. However, after males reach 25 years of age, they seem to prefer to marry females in the next lower age group. More than half the men in the 25-29 age group married women in the 20-24 age group. The only departure from this pattern occurred for males in the age group 50-59 years who tend 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 evident in the analysis of data for the preceding three years.

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.

Table 7a reveals that in 30,140 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 4,930 divorced males, 51 per cent married single women, 36 per cent married divorcees and 13 per cent married widows. Of the 4,680 divorced females, 50 per cent married single men, 38 per cent married divorced males and 12 per cent married widowers. Of the 2,508 widowers, 31 per cent married single women, 23 per cent married divorcees and 46 per cent married widows. Of the 2,595 widows, 30 per cent married single men, 25 per cent married divorced males and 45 per cent married widowers.

TABLE 7. MARRIAGES BY AGE GROUPS: 1952

WIFE'S AGE GROUP	HUSBAND'S AGE GROUP										Total														
	10-17		18-19		20		21-24		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	Judicial Consent	Parents' Consent
10-15	34	74	21	32	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	173
16-19	33	835	276	628	145	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1005
19-20	32	296	272	822	152	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6445
20-24	1	14	21	832	2808	1694	708	240	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16514
25-29	0	1	1	115	661	1146	785	430	170	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6979
30-34	0	0	0	21	137	390	680	642	302	198	24	0	0	0	0	0	0	0	0	0	0	0	0	0	2292
35-39	0	0	0	5	32	85	284	978	361	340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1761
40-44	0	0	0	1	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1094
45-49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1204
50-59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1228
60-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1228
70 plus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
TOTAL	160	1778	2048	13038	16250	4620	2714	1887	1817	1800	914	381	381	41125											

TABLE 7a. MARRIAGES BY PREVIOUS MARITAL STATUS: 1952

Wife's Status	Husband's Status				
	Total	Single	Widowed	Divorced	Unknown
Single	33,643	30,140	771	2,506	226
Widowed	2,626	776	1,165	654	31
Divorced	4,718	2,338	572	1,770	38
Unknown	138	48	22	28	40
Total	41,125	33,302	2,530	4,958	335

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1952—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		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	
		Total	1	1	1	4	10	15	10	15	16	20	23	32	37	30	30	30	34	50
Liver, Secondary and Unspecified	159																		
Total	110	1	1	1	4	10	15	10	15	16	20	23	32	37	30	30	34	50	50
White Male	116	1	1	1	4	10	15	10	15	16	20	23	32	37	30	30	34	50	50
White Female	116	1	1	1	4	10	15	10	15	16	20	23	32	37	30	30	34	50	50
Non-white Male	9																		
Non-white Female	9																		
Pancreas	157																		
Total	186																		
White Male	186																		
White Female	186																		
Non-white Male	13																		
Non-white Female	9																		
Peritoneum	153																		
Total	27	1	1	2	1	3	3	4	1	10	1	1	1	1	1	1	1	1	1
White Male	14																		
White Female	14																		
Non-white Male	2																		
Non-white Female	2																		
Unspecified Digestive Organs	150																		
Total	52	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
White Male	27																		
White Female	27																		
Non-white Male	2																		
Non-white Female	2																		

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1952—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		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	
		Total	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nose, Nasal Cavities, Middle Ear and Accessory Sinuses	160																		
Total	7																		
White Male	7																		
White Female	6																		
Non-white Male	1																		
Non-white Female	1																		
Larynx	161																		
Total	84																		
White Male	84																		
White Female	4																		
Non-white Male	4																		
Non-white Female	3																		
Trachea, Bronchus and Lung, Specified as Primary	163																		
Total	373																		
White Male	368																		
White Female	368																		
Non-white Male	23																		
Non-white Female	3																		
Lung and Bronchus, Unspecified as to Primary or Secondary	163																		
Total	670																		
White Male	670																		
White Female	670																		
Non-white Male	160																		
Non-white Female	7																		

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS; 1952—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	8	1	2	1															
Total		8	1	2	1															
White Male		5	1	1																
White Female		3																		
Non-white Male																				
Non-white Female																				
Brain and Other Parts of Nervous System	103	152	1	9	10	3	6	2	9	16	14	18	21	22	20	26	7	1		
Total		151	1	10	11	1	3	1	8	8	10	12	15	16	14	14	4	1		
White Male		111	1	4	10	1	1		3	3	3	3	4	4	3	4	1			
White Female		68	1	4	5	2	2	1	6	5	4	6	7	12	6	5	1			
Non-white Male		1																		
Non-white Female		3		1					1											
Thyroid Gland	104	28							1	2		1	1	3	12	7	2			
Total		28							1	2		1	1	3	12	7	2			
White Male		12							1	1		1	2	5	9	2				
White Female		23							1	1		1	1	2	4	2				
Non-white Male		1													1					
Non-white Female		1												1						
Other Endocrine Glands	105	13				1	1			2		1	2	1	1	1	1	2		
Total		13				1	1			2		1	2	1	1	1	1	2		
White Male		6				1	1			1		1	2	1	1	1	1	2		
White Female		6								1			1							
Non-white Male																				
Non-white Female		1																		

TABLE 13. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS; 1952—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	70			1	2	2	4	1	2	1	1	1	1	1	1	1	1	1	1
Total		70			1	2	2	4	1	2	1	1	1	1	1	1	1	1	1	1
White Male		47			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
White Female		23			1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
Non-white Male		1																		
Non-white Female																				
Connective Tissue	107	27			1	1	1	1	1	2	2	2	2	2	2	1	1	2	1	6
Total		27			1	1	1	1	1	2	2	2	2	2	2	1	1	2	1	6
White Male		13								1	1	1	1	1	1	1	1	1	1	3
White Female		14								1	1	1	1	1	1	1	1	1	1	3
Non-white Male		1																		
Non-white Female		1																		
Lymph Nodes, Secondary and Unspecified	108	8								4		4								
Total		8								4		4								
White Male		4								2		2								
White Female		3								2		2								
Non-white Male																				
Non-white Female		1																		
Other and Unspecified Sites	109	221			1	2	2	1	10	10	13	10	13	26	33	28	31	62		
Total		221			1	2	2	1	10	10	13	10	13	26	33	28	31	62		
White Male		104			1	1	1	1	3	4	6	6	6	15	16	15	14	20		
White Female		111			1	1	1	1	7	5	5	5	5	11	17	13	13	33		
Non-white Male		2																		
Non-white Female		4							1											

TABLE 12a-1. DEATHS FROM NEOPLASMS BY SEX, COLOR AND AGE GROUPS FOR EACH SITE GROUP: 1952

AGE GROUP	Group Total	Malignant							Breast and Genito-urinary (176-181)	Other and Unspecified (196-199)	Lymph and Blood (200-205)	Hemion or Unspecified (216-239)
		Total (140-205)	Buccal Cavity and Pharynx (140-148)	Digestive Peritoneum (150-159)	Respiratory (160-165)	Respiratory (160-165)	Digestive Peritoneum (150-159)	Buccal Cavity and Pharynx (140-148)				
All Ages	9,219	9,033	214	3,676	1,171	2,644	678	650	186			
Under 1	0	7	..	..	..	..	..	..	..
1-4	46	43	..	1	..	3	1	6	2			
5-14	50	46	..	..	1	1	14	24	3	
15-24	68	61	..	6	1	1	18	26	4			
25-44	736	691	12	164	60	6	19	29	7			
45-64	3,738	3,669	92	1,338	610	251	95	109	45			
65 plus	4,552	4,516	110	2,167	498	1,087	275	267	89			
Male	4,783	4,711	177	2,032	987	760	374	381	72			
Female	4,436	4,322	37	1,644	184	1,884	304	269	114			
White	8,734	8,571	202	3,505	1,117	2,461	659	627	163			
Non-white	485	462	12	171	54	183	19	23	23			

TABLE 12a-2. DEATHS FROM MALIGNANT NEOPLASMS; PERCENTAGE DISTRIBUTION BY AGE, SITE, SEX AND COLOR: 1952

AGE GROUP	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
Under 1	0.1	..	<.01	..	..	0.1	0.9
1-4	0.5	..	..	0.1	0.1	2.1	3.7
5-14	0.5	..	..	0.1	0.1	2.7	4.0
15-24	0.7	..	0.2	0.1	0.2	2.8	4.4
25-44	7.6	5.6	4.5	5.1	9.5	14.0	16.8
45-64	40.6	43.0	36.4	52.1	41.1	40.6	41.1
65 plus	50.0	51.4	58.9	42.5	49.0	37.7	29.1
Male	52.2	82.7	55.3	84.3	28.7	55.2	58.6
Female	47.8	17.3	44.7	15.7	71.3	44.8	41.4
White	94.9	94.4	95.3	95.4	93.1	97.2	96.5
Non-white	5.1	5.6	4.7	4.6	6.9	2.8	3.5
Age, Sex and Color Distribution by Site							
All Ages	100.0	2.4	40.7	12.9	29.3	7.5	7.2
Under 1	100.0	..	..	..	..	14.3	85.7
1-4	100.0	..	2.3	2.3	7.0	32.6	55.8
5-14	100.0	..	..	2.2	39.1	56.5	..
15-24	100.0	..	9.8	1.6	9.8	31.2	47.6
25-44	100.0	1.7	23.7	8.7	36.3	13.8	15.8
45-64	100.0	2.5	36.5	16.6	29.6	7.3	7.3
65 plus	100.0	2.4	48.0	11.0	28.7	5.7	4.2
Male	100.0	3.8	43.1	21.0	16.1	7.9	8.1
Female	100.0	0.9	38.0	4.3	43.6	7.9	6.2
White	100.0	2.4	40.9	13.0	28.7	7.7	7.3
Non-white	100.0	2.6	37.0	11.7	39.6	4.1	5.0

TABLE 12a-3. CANCER DEATHS AND RATES SPECIFIC FOR AGE, SEX AND COLOR
(PER 100,000 ESTIMATED POPULATION): 1952

Age Group	Estimated Population(a)	Deaths		
		Number	Rate	S.E.(b)
Total	4,949,000	9,033	182.5	1.9
Under 5 years	470,000	50	10.6	1.5
5-14	678,000	46	6.8	1.0
15-24	661,000	61	9.2	1.2
25-44	1,608,000	691	43.0	1.6
45-64	1,129,000	3,669	325.0	0.5
65 plus	403,000	4,516	1,120.6	16.7
Male	2,439,000	4,711	193.2	2.8
Female	2,510,000	4,322	172.2	2.6
White	4,617,000	8,571	185.6	2.0
Non-White	332,000	462	139.2	6.5

(a) Excess of births over deaths from date of 1950 Census to July 1, 1952 added to 1950 Census Count and results rounded to the nearest thousand.

(b) Standard error of rate must be considered if comparisons are to be made.

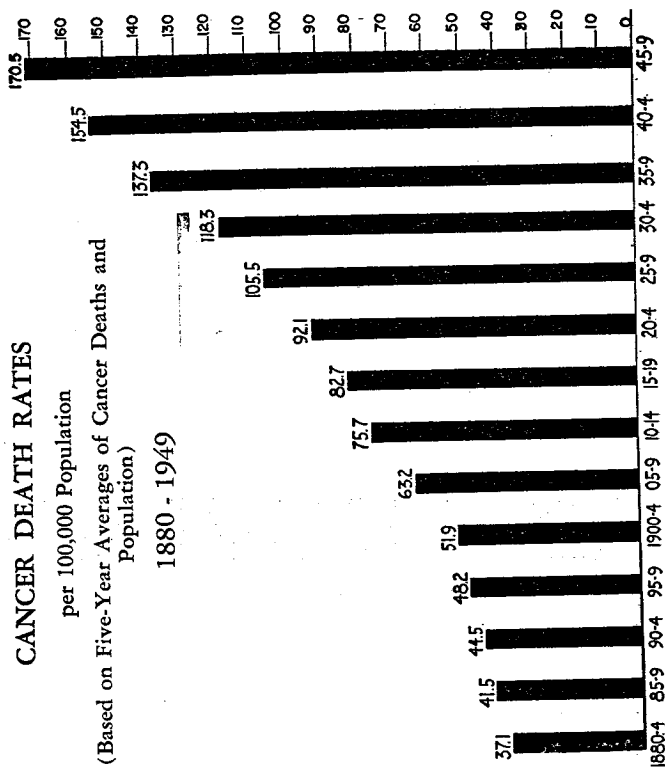


TABLE 13a-1. DEATHS IN NEW JERSEY FROM TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH: 1952
International List (6th Revision) Numbers 800-806, 900

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		Total	January	February	March	April	May	June	July	August	September	October	November	December
Total		1107	110	110	110	110	110	110	110	110	110	110	110	110
Health accidents	800-806, 900	188	4	4	4	4	4	4	4	4	4	4	4	4
Motor vehicle accidents	800-802	893	78	72	49	71	69	84	84	70	73	74	87	83
Other road vehicle accidents	810-802, 900	11	1	1	1	1	1	1	1	1	1	1	1	1
Water transport accidents	840-802	31	2	2	2	2	2	2	2	2	2	2	2	2
Aircraft accidents	850-803	18	1	1	1	1	1	1	1	1	1	1	1	1
	800-808	28	1	1	2	1	1	1	1	1	1	1	2	6

TABLE 13a-2. DEATHS IN NEW JERSEY FROM NON-TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH: 1952
International List (6th Revision) Numbers 870-869, 901-922

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		Total	January	February	March	April	May	June	July	August	September	October	November	December
Total		1438	112	112	113	102	101	173	141	103	101	100	95	127
Poisoning by solid substances	870-839	64	0	0	0	0	0	0	0	0	0	0	0	0
Poisoning by gases and vapors	861-822	64	0	0	0	0	0	0	0	0	0	0	0	0
Falls	800-808	650	57	53	59	54	54	43	60	50	63	64	42	52
Fire and explosion of combustible material	900-904	188	22	21	21	8	22	7	10	8	10	13	13	13
Mechanical suffocation in bed or cradle	916	35	4	4	2	2	1	2	1	3	2	5	0	2
Drowning	894	101	1	2	0	13	10	2	47	21	12	5	5	2
Other causes	910-915, 917-922, 925-928, 931-936, 941-944, 901-922	285	11	10	14	17	13	96	30	12	18	9	21	28

TABLE 13c. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND TYPE OF ACCIDENT: 1962
International List (6th Revision) Numbers 800-902

TYPE OF ACCIDENT	IMMEDIATE CAUSE											
	Total	Poisonous Gas and Smoke		Mechanical Suffocation	Drowning	Cutting or Piercing	Falls	Crushing Fractures Lacerations		Electric Current	Foreign Bodies	Other Accidents
		Burns	Other					Landslides	Other			
Total	2455	100	222	42	187	3	673	982	21	11	213	
Home	989	80	168	30	0	1	43	57	4	7	109	
Occupational motor vehicle	68	7	4	1	0	1	5	7	1	1	10	
Public occupational	103	7	23	2	5	1	76	64	13	1	8	
Public occupational motor vehicle	792	7	11	1	5	1	3	770	1	1	1	
Public place non-occupational and non-motor vehicle	402	7	20	1	107	1	101	65	3	3	30	
Not specified or unknown	11	0	0	0	1	0	2	3	0	0	5	

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: 1962
International List (6th Revision) Numbers 800-902

Total	Poisonous Gas and Smoke										Crushing Fractures Lacerations										Other Accidents
	Burns		Mechanical Suffocation	Drowning	Cutting or Piercing	Falls	Landslides		Electric Current	Foreign Bodies	Other	Landslides		Electric Current	Foreign Bodies	Other					
	Burns	Other					Landslides	Other				Landslides	Other								
Atlantic County	3	1	2	7	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
Bergen County	1	10	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Burlington County	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Camden County	2	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Cape May County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Essex County	1	2	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Gloucester County	2	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hamilton County	8	21	2	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hudson County	10	21	2	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hunterdon County	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Morris County	1	23	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Monmouth County	3	11	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Morris County	5	5	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Ocean County	1	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Passaic County	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Somerset County	3	9	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Somerset County	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sussex County	2	2	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Union County	6	40	2	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Warren County	10	4	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Wayne County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Other States	20	3	1	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	2455	100	222	42	187	3	673	982	21	11	213										

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 13c. NON-TRANSPORT ACCIDENTAL DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH AND PLACE OF ACCIDENT: 1982
International List (8th Revision) Numbers 870-989, 991-992

PRIMARY CAUSE	Lit No.	Place Specified										
		Total	Home	Farm	Mine and Quarry	Industrial Premises	Place for Recreation and Sport	Street and Highway	Public Building	Resident Institution	Other Place Specified	Place Not Specified
Total	870-989	1488	908	16	5	130	9	85	28	00	177	11
Poisoning by solid and liquid substances	891-993	84	29	0	0	1	0	1	0	1	1	1
Poisoning by gases and vapors	870-888	08	08	0	0	0	0	0	0	0	0	0
Falling	890-904	039	453	6	2	48	2	71	19	02	9	0
Fire and explosion of combustible material	910	188	105	1	0	13	0	11	5	1	2	4
Mechanical asphyxiation in bed or cradle	924	35	34	0	0	0	0	0	0	0	0	0
Drowning	929	161	9	1	0	1	5	1	0	0	144	1
Other causes	910-923 924-928 929-933 931-938 944-951 951-992	285	101	6	3	64	2	8	4	12	19	6

TABLE 13c. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH BY AGE GROUPS: 1982
International List (8th Revision) Numbers 800-908

IMMEDIATE CAUSE	All Ages	AGE GROUPS									
		<1 year	1-4	5-14	15-24	25-44	45-64	65+	Unknown		
Total	2435	81	100	116	222	531	659	703	000	000	
Poisonous gas and smoke	100	7	11	1	6	16	29	30	0	0	
Burns	222	3	30	14	13	66	62	41	0	0	
Mechanical asphyxiation	132	32	18	40	34	44	34	16	0	0	
Cutting or piercing	138	0	0	0	0	1	1	0	0	0	
Falls	674	3	4	6	8	83	152	443	0	0	
Crushing, fractures, lacerations	982	4	4	45	148	289	287	181	0	0	
Electric current	41	1	1	2	1	3	2	1	0	0	
Other accidents	213	32	8	7	10	38	74	44	0	0	

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 13c. MOTOR VEHICLE DEATHS IN NEW JERSEY BY TYPE OF VEHICLE BY AGE GROUPS: 1982
International List (8th Revision) Numbers 810-885, 900

ACCIDENT INVOLVING	All Ages	AGE GROUPS									
		<1 year	1-4	5-14	15-24	25-44	45-64	65+	Unknown		
Goods transport vehicle(s), but no other motor vehicle	81	0	0	0	0	0	0	0	0	0	
Goods transport vehicle and passenger motor vehicle	79	0	0	0	0	0	0	0	0	0	
Goods transport vehicle and motor bus	2	0	0	0	0	0	0	0	0	0	
Goods transport vehicle and unspecified motor vehicle	2	0	0	0	0	0	0	0	0	0	
Passenger motor vehicle(s), but no other motor vehicle	672	0	0	18	30	101	100	100	0	0	
Passenger motor vehicle and unspecified motor vehicle	6	0	0	0	0	0	0	0	0	0	
Motor bus(es), but no other motor vehicle	11	0	0	0	0	0	0	0	0	0	
Motor bus and unspecified motor vehicle	2	0	0	0	0	0	0	0	0	0	
Unspecified motor vehicles	4	0	0	0	0	0	0	0	0	0	
Total	863	0	4	24	45	144	242	212	102	0	

TABLE 18. INFANT DEATHS BY CAUSE AND AGE GROUPS: 1932
 (Separated into Those With and Those Without Public Health Significance)

Cause of Death Showing International List (6th Revision) Numbers	Total Infant Deaths	Less than 1 Day	1 Day but		1 Week but		28 Days and Over
			< 1 Week	< 28 Days	< 1 Week	< 28 Days	
ALL CAUSES (901-987, 990-999)	2633	364	773	245	705	870	
Total causes with public health significance	2533	356	755	217	686	856	
Without public health significance	100	8	18	28	19	14	
Tetanus, diphtheria and scarlet fever (703)	516	258	224	30	20	4	
Without immaturity	160	42	88	11	4	4	
With immaturity	320	166	141	9	9	4	
Congenital malformations and congenital diseases of the nervous system (470-527)	432	101	112	72	72	140	
Diseases of the respiratory system (470-527, 703)	321	8	40	41	223	233	
Encephalitis of the newborn (703)	160	8	48	39	39	5	
Without immaturity	72	7	39	21	21	3	
With immaturity	221	1	9	12	18	2	
Other diseases of the respiratory system (470-527)	281	152	111	12	12	212	
Birth injuries (703-704)	163	81	70	8	4	6	
Without immaturity	118	71	41	4	2	2	
Diseases of the newborn (704)	12	3	4	10	7	3	
Without immaturity	9	...	...	6	3	3
With immaturity	3	...	...	3	...	...
Other diseases of the digestive system (530-587)	85	5	4	2	74	4	
Diseases of the newborn (703)	60	23	20	5	6	6	
Without immaturity	60	23	20	5	6	6	
With immaturity	8	3	4	1	1	...	
External causes other than mechanical suffocation (900-923, 925-969)	53	0	1	3	...	43	

Infective and parasitic diseases (904-933)	48	3	1	...	24
Hemorrhagic disease of the newborn (771)	26	1	1	...	...
Without immaturity	14	3	...	...	...
With immaturity	12	...	...	...	...
Other diseases of the skin and subcutaneous tissue (934)	161	50	30	20	51
Accidental mechanical suffocation (934)*	4	...	...	...	...
Arterianoses and other metabolic diseases (230-239)	4	...	...	...	...
Ill-defined diseases of early infancy (772-773)	90	42	23	7	18
Without immaturity	36	11	7	1	17
With immaturity	54	31	16	6	1
Other diseases of early infancy (772-773)	11	3	2	2	3
Without immaturity	11	3	3	2	3
With immaturity	...	...	...	...	...
Diseases of the eye without public health significance	33	5	3	4	3
Diseases of other external organs (330-398)	100	8	8	9	75
Diphtheria (370-371)	30	2	5	3	26
Diseases of the ear, nose and throat (370-371)	49	1	1	2	46
Neoplasms (400-499)	8	...	...	...	...
Diseases of the circulatory system (400-499)	8	...	...	...	...
Diseases of the genitourinary and blood-forming organs (250-299)	8	...	...	...	...
Diseases of the skin and cellular tissue (600-716)	4	...	...	...	...
Other diseases of the thyroid gland (254)	3	1	...	...	...
Asthma (244)	1	...	...	...	...
Symptoms and ill-defined conditions (780-789, 795)	6	2	...	...	4

* On the basis of studies made, it has been found that diagnoses in this category are subject to error unless substantiated by careful autopsy. Note: Diseases in which prematurity was either the only cause or a contributory cause represented in amount total of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The age distribution was as follows: under 1 day, 619; 1 day but under 1 week, 410; 1 week but under 28 days, 72; 28 days and over, 20.

DISCUSSION OF TABLES 18 AND 18A

In 1952, New Jersey acquired 110,215 live-born babies. During the same year, the State lost by death 2,633 infants. This loss occurred at the rate of 24 infants for each 1,000 live births.

In the attached table, the 2,633 infant deaths are considered in terms of causes with public health significance and causes without public health significance. Of these deaths, 96 per cent or 2,533 were charged to causes which should be of concern to public health workers. Of these, 566 (22 per cent) were classified as prematurity unqualified. If clinical and pathological examinations had been emphasized more, perhaps specific causes could have been discovered. An additional 555 deaths, designated with immaturity, had causes assigned. This advance in cause assignment is made possible through the use of the *Sixth* Revision of the International List.

For the first time, congenital malformations are included in the causes with public health significance. As a result of congenital malformations, 432 infants died. That represents 17 per cent of all infant deaths of special interest to public health workers. The causes of congenital malformations and the resultant deaths near births lend themselves to attack in the research field.

Public health workers should also be concerned with the 321 infant deaths classified as diseases of the respiratory system. This figure includes 100 deaths from pneumonia of the newborn.

TABLE 18a
INFANT DEATHS BY AGE AND IMMATUREITY: 1952

Age	Total		Immature on death certificate		Not designated as immature	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
< 1 day	964	36.6	619	55.2	345	22.8
< 1 week	1,737	66.0	1,029	91.8	708	46.8
< 28 days	1,963	74.6	1,101	98.2	862	57.0
< 1 year	2,633	100.0	1,121	100.0	1,512	100.0

More than 11 per cent of the deaths assigned to causes which are thought to have public health significance was charged to birth injuries. This is an obstetrical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. In 1952, only 70 women died of causes allocated, according to the rules of the International List, to pregnancy, delivery and the puerperium. This is a rate of 6 maternal deaths for each 10,000 live births.

In 1952, New Jersey lost 33 infants by accidental mechanical suffocation in bed or cradle and an additional 23 from causes classified as diseases of other endocrine glands. Studies have shown that diagnoses in these categories are

subject to great error unless substantiated by careful autopsy. A medical committee could consider such deaths from the autopsy records in the hospitals.

If New Jersey's live-born babies die, they experience death early in their brief existence.

Of babies who died in 1952, 37 per cent failed to live beyond the first day of life. Before one week elapsed, 66 per cent of the 2,633 babies had died. Before the end of the neonatal period (28 days), 75 per cent of the 2,633 babies had completed their short lives.

The immature babies so designated on their death certificates contributed 1,121 or 43 per cent of the total infant deaths in 1952. Of these 1,121 babies, 55 per cent died within the first day of life. The immature babies dying within their first day of life accounted for 64 per cent of all infant deaths occurring within the first day of life. Before attaining one week of age, 92 per cent of these 1,121 immature babies had failed to survive. Over 98 per cent of the immature babies who died did so before attaining 28 days of age. This contrasts sharply with the 57 per cent of the mature babies who died during their neonatal period.

PRINCIPAL CAUSES OF DEATH BY AGE GROUPS: 1952

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 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 most of the principal causes of death which affected the total population regardless of age.

In 1952 eleven principal causes of death are listed for all ages. Ten were listed in 1951. Cirrhosis of the liver was added this year. The first four causes have the same rank for both years. The rearrangement in rank for other causes may or may not be significant.

Deaths from diseases of the circulatory system, still the leading cause of death, showed a slight percentage decrease in 1952, being responsible for 45.4 per cent of all deaths as compared to 46.0 per cent in 1951. This decrease, being based upon differences in proportionate mortality, may have resulted from an increase in the number of deaths from one or more other causes.

Deaths in 1952 from cancer appeared as one of the first two principal causes of death for every age group above one year. The number of cancer deaths reported for each age group up to and including those 25-44 years of age was approximately the same as last year. In 1952 there was a decrease of approximately one per cent in the number of cancer deaths which occurred in the 45-64 age group. In the 65 and over age group, there was an increase of 7 per cent in 1952 as compared with 1951.

Influenza, pneumonia and bronchitis ranked fourth for all ages, and first for the age group 1-4 years again this year. More than 25 per cent of the deaths reported for these respiratory diseases occurred to persons 25-64 years of age.

Tuberculosis, eighth in rank for all ages, caused 831 deaths. Thirty-four were in the age group 15-24 and 215 in the group 25-44 years. In both of these age groups tuberculosis ranked fourth as the cause of death, and both accounted for 30 per cent of the total number of tuberculosis fatalities recorded in 1952. In the age group 45-64, tuberculosis was sixth in rank and accounted for 355 deaths or approximately 43 per cent of the tuberculosis total for all ages. Despite the fact that the modern therapeutic methods are credited with prolonging the life of those afflicted with tuberculosis, the disease must continue to be attacked through early detection, early diagnosis, and early care.

Cirrhosis of the liver, ninth in rank as a cause of death, accounted for 774 deaths. Although this is the first year cirrhosis of the liver has appeared as a principal cause of death for all ages, there has been a steady increase in the number each year especially in the age group 45-64. For instance in 1949 there were 302 deaths in that age group and in 1952 there were 433, an increase of 43.4 per cent.

Poliomyelitis, although not one of the principal causes of death in the age group 25-44, had 18 deaths assigned to it. No longer may one consider this as a disease mostly affecting children. In persons 15 years and over, poliomyelitis caused 24 deaths.

One hundred and sixty-four deaths, or approximately 4 per cent of all persons dying in the age group 15-44 were due to suicide. Perhaps these deaths and the additional 300 suicides among persons over 44 years of age might, to some extent, have been reduced in number, had the parties involved had an opportunity to be reached through the facilities of mental health clinics.

Fire and explosion of combustible material caused 56 deaths of children under 15 years of age. In 1951 there were only 22 deaths in this category. Accidental drowning caused 49 deaths in this same age 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.

The percentage and number of persons sixty-five years and over who died in 1952 as a result of falls have shown a small decrease as compared with 1951. Adequate safety measures in homes and public buildings could undoubtedly have saved some of the 456 who died as a result of falls in 1952.

Motor vehicle accidents with an increase of 123 deaths gained in rank again this year to become the seventh leading cause of death.

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 unsuspected. These may require all our resources to combat. Health, to a great degree among all age groups can be purchased by the proper expenditure of adequate funds.

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS; NUMBERS AND PERCENTAGES: 1952

ALL AGES			
Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	23,329	45.4
2	Malignant neoplasms (140-205)	9,033	17.6
3	Vascular lesions (330-334)	5,108	9.9
4	Influenza, pneumonia and bronchitis (480-502)	1,928	3.6
5	Immaturity unqualified and diseases with immaturity (774-776, 760-773) (with 0.5 or more)	1,121	2.2
6	Diabetes (260)	1,095	2.1
7	Motor vehicle accidents (810-835)	837	1.6
8	Tuberculosis (001-019)	831	1.6
9	Cirrhosis of liver (581)	774	1.5
10	Falls (900-904)	672	1.3
11	Nephritis and nephrosis (500-594)	669	1.3
	All other	6,633	12.9
	Total deaths	51,430	100.0

UNDER 1 YEAR			
Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Immaturity unqualified (774-776)	568	21.5
2	Postnatal asphyxia and atelectasis (762)	510	19.4
3	Congenital malformations and congenital diseases of the nervous system (825, 730-739)	432	16.4
4	Birth injuries (700-761)	281	10.7
5	Pneumonia and pneumonia of the newborn (490-493, 763)	271	10.3
6	Gastro-enteritis and colitis; diarrhea of the newborn (570, 571, 764)	74	2.8
7	Hemolytic disease of the newborn (770)	68	2.6
	All other	431	16.3
	Total deaths	2,633	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;
NUMBERS AND PERCENTAGES: 1952—Continued

1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Influenza, pneumonia and bronchitis (480-502)	69	16.1
2	Malignant neoplasms (140-205)	43	10.0
3	Congenital malformations (750-759)	33	8.5
4	Fire and explosion of combustible material (916)	23	5.1
5	Motor vehicle accidents (810-835)	23	5.4
6	Drowning (929)	18	4.2
7	Nephritis and nephrosis (590-594)	9	2.1
8	Tuberculosis (001-019)	8	1.9
9	Meningococcal infections (037)	8	1.9
10	Nonmeningococcal meningitis (340)	6	1.4
	All other	172	40.1
	Total deaths	429	100.0

5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Malignant neoplasms (140-205)	46	13.0
2	Motor vehicle accidents (810-835)	43	13.0
3	Drowning (929)	30	9.1
4	Influenza, pneumonia and bronchitis (480-502)	23	7.0
5	Congenital malformations (750-759)	19	5.7
6	Pollomyelitis (080-081)	18	5.4
7	Diseases of the circulatory system (400-468)	15	4.5
8	Nephritis and nephrosis (590-594)	10	3.0
	All other	127	38.4
	Total deaths	331	100.0

15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Motor vehicle accidents (810-835)	153	27.0
2	Malignant neoplasms (140-205)	61	10.8
3	Diseases of the circulatory system (400-468)	53	9.3
4	Tuberculosis (001-019)	34	6.0
5	Drowning (929)	23	4.1
6	Nephritis and nephrosis (590-594)	22	3.9
7	Suicide (970-979)	21	3.7
8	Influenza, pneumonia and bronchitis (480-502)	18	3.2
9	Homicide (880-883)	11	1.9
	All other	171	30.1
	Total deaths	567	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;
NUMBERS AND PERCENTAGES: 1952—Continued

25-44 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	971	26.7
2	Malignant neoplasms (140-205)	691	19.0
3	Motor vehicle accidents (810-835)	219	6.0
4	Tuberculosis (001-019)	213	5.9
5	Vascular lesions (330-334)	136	3.9
6	Suicide (970-979)	143	3.9
7	Cirrhosis of liver (581)	119	3.3
8	Influenza, pneumonia and bronchitis (480-502)	100	2.8
9	Nephritis and nephrosis (590-594)	91	2.5
10	Homicide (880-883)	65	1.8
11	Falls (900-904)	51	1.4
	All other	514	22.4
	Total deaths	3,633	100.0

45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	7,093	44.4
2	Malignant neoplasms (140-205)	3,660	23.0
3	Vascular lesions (330-334)	1,323	8.4
4	Cirrhosis of the liver (581)	453	2.7
5	Diabetes (260)	366	2.2
6	Tuberculosis (001-019)	355	2.2
7	Influenza, pneumonia and bronchitis (480-502)	281	1.8
8	Nephritis and nephrosis (590-594)	230	1.4
9	Motor vehicle accidents (810-835)	228	1.4
10	Suicide (970-979)	201	1.3
	All other	1,778	11.1
	Total deaths	15,967	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)	15,184	54.5
2	Malignant neoplasms (140-205)	4,516	16.2
3	Vascular lesions (330-334)	3,303	12.0
4	Diabetes (260)	675	2.4
5	Influenza, pneumonia and bronchitis (480-502)	639	2.3
6	Falls (900-904)	456	1.6
7	Nephritis and nephrosis (590-594)	305	1.1
8	Cirrhosis of liver (581)	213	0.8
9	Tuberculosis (001-019)	203	0.8
10	Motor vehicle accidents (810-835)	167	0.6
	All other	1,897	6.8
	Total deaths	27,868	100.0

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1969—Continued

CAUSE OF DEATH	Total		White		Non-white		Age Groups								
	Total	Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
637. Other diseases of female genital organs															
640. Pyelitis and pyelonephritis of pregnancy	1														
641. Other infections of genito-urinary tract during pregnancy															
642. Toxemia of pregnancy	20		12			8									
643. Obstructive disease of pregnancy	1									1					
645. Ectopic pregnancy	3		2			1									
646. Anemia of pregnancy															
651. Frequency with malposition of fetus in uterus															
654. Other complications arising from pregnancy															
659. Other complications arising from pregnancy															
660. Abortion without mention of sepsis or toxemia	1														
652. Abortion with toxemia, without mention of sepsis	2		1			1									
653. Abortion with toxemia, with mention of sepsis	4														
670. Delivery complicated by abnormal position, or sepsis, or asphyxia, or hemorrhage	1														
671. Delivery complicated by retained placenta	1														
672. Delivery complicated by other postpartum hemorrhage	1														
673. Delivery complicated by abnormality of bony pelvis	4														
674. Delivery complicated by abnormality of cervix	1														
675. Delivery complicated by prolonged labour, of other origin	3		3												
676. Delivery with laceration of perineum, without mention of other laceration															
677. Delivery with other trauma															
678. Other diseases of childbed	1														
680. Puerperal urinary infection without other sepsis	1														
681. Sepsis of childbed and the puerperium	1														
682. Puerperal phlebitis and thrombosis	3		3												
683. Sepsis of unknown origin during the puerperium	1														
684. Puerperal eclampsia	6		6												
686. Other forms of puerperal toxemia	2		2												
687. Cerebral hemorrhage in the puerperium	2		2												
688. Other diseases of unknown origin during the puerperium	2		2												
690. Roli and carbuncle	1														
691. Other cellulitis and abscess without mention of lymphangitis	1														
692. Other cellulitis and abscess with lymphangitis	7	3	4												
693. Erysipelas	2	1	1												
694. Acute lymphadenitis															
695. Impetigo															
698. Infectious warts															
699. Other infections of skin and subcutaneous tissue	2		2												
700. Scabrous dermatitis															
701. Favus															
702. Occupational dermatitis															

703. Other dermatitis															
704. Erythematous conditions	12	5	7												
705. Erythrodermia and similar disorders	9	3	6												
706. Psoriasis and similar disorders															
707. Lichen planus															
708. Pruritis and related conditions															
709. Onychomycosis	1														
710. Other dermatoses and atrophic conditions of skin	6	1	5												
711. Diseases of nail															
712. Diseases of hair and hair follicles	6	2	4												
713. Diseases of sweat and sebaceous glands	1		1												
715. Other diseases of skin	6														
716. Acute arthritis due to syzygotic organisms	1		1												
720. Acute nongonococcal arthritis															
721. Chronic gonococcal arthritis	22	7	15												
723. Other specified forms of arthritis	0	2	1												
724. Other specified forms of arthritis															
725. Arthritis, unspecified	10	6	4												
726. Muscular rheumatism	1		1												
730. Osteomyelitis, unspecified	1		1												
731. Osteitis deformans, periositis	6	3	3												
732. Osteochondritis	1		1												
733. Other diseases of bone	3		3												
734. Displacement of knee joint															
735. Displacement of hip joint	1		1												
736. Affection of sacro-iliac joint	1		1												
737. Ankylosis of joint															
738. Other diseases of joint															
741. Synovitis, bursitis, and tenosynovitis without mention of occupational origin	2	1	1												
742. Synovitis, bursitis, and tenosynovitis of occupational origin	2														
743. Incretive myositis and other inflammatory diseases of tendon and muscle															
744. Curvature of spine, muscle, tendon and fascia	14	6	8												
745. Flat foot	1		1												
747. Hallux valgus and varus															
748. Other deformities															
750. Menstruosity	2	1	1												
751. Spina bifida and meningocele	38	19	21			2	38								
752. Congenital hydrocephalus	10	4	6				31								
753. Congenital malformations of nervous system and sense organs	48	29	24			1	4			1					
754. Congenital malformations of circulatory system	181	110	27			6	11			3					
755. Chest palate and harelip	10	84	6			6	165			14					
756. Congenital malformations of digestive system	5	3	2				15								
757. Congenital malformations of genito-urinary system	8	10	2			7	57								
758. Congenital malformations of bone and joints	37	18	22			2	5			3					
759. Other unspecified congenital malformations, not elsewhere classified	7	9	2			3	4			1					
760. Intra-cranial and spinal injury at birth	50	38	28			4	45			2					
761. Other birth injury	27	19	14			6	151			1					
	331	211	160			41	330			1					

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ATLANTIC COUNTY FOR 1952
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	<	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-133	Infective and parasitic diseases	42	17	4	14	1	2	1	1	10	20	8	
B12	010-010	Tuberculosis of respiratory system	24	11	4	11	1	1	1	1	8	15	3	
B2	020-229	Tuberculosis, other forms	10	4	3	3					2	4	4	
B4	040-040	Scarlet fever	1	1										
B5	048	Diphtheria	1	1										
B6	048-048	Dysentery, all forms	1	1										
B7	050-051	Scarlet fever and streptococcal sore throat	1	1										
B8	058	Diphtheria	1	1										
B9	062	Meningococcal infections	1	1										
B10	067	Typhoid fever	1	1										
B11	068	Acute poliomyelitis	1	1										
B12	080	Shingles	1	1										
B13	081	Scarlet fever	1	1										
B14	084	Typhus and other rickettsial diseases	1	1										
B15	100-108	Diabetes mellitus	3	1	2	2								
B16	110-117	Residual (830-835, 841, 842, 844, 846, 862-854, 868-874, 881-883, 886-890, 120-138)	3	1	2	2								
B18	140-230	Neoplasms	315	127	143	22	22	22	22	22	10	100	174	
B19	210-239	Malignant neoplasms	308	124	141	22	22	22	22	22	10	100	174	
B20	240-259	Benign and unspecified neoplasms	6	6	0	0	0	0	0	0	0	0	0	
B21	260	Allegic, endocrine system, metabolic and nutritional diseases	50	21	22	5	5	2	1	2	2	20	27	
B22	280-290	Residual (240-243, 205-254, 270-277, 280-289)	58	13	18	5	2	2	1	1	1	10	27	
B23	300-320	Diseases of the blood and blood-forming organs	12	4	4	1	1	1	1	1	1	1	1	
B24	330-338	Alcoholism	1	1										
B25	340	Mental, psychoneurotic and personality disorders	7	3	3	1	1	1	1	1	1	1	1	
B26	350-374	Diseases of the nervous system and sense organs	188	74	72	20	14	14	14	6	4	48	131	
B27	380	Vascular lesions affecting central nervous system	1	1										
B28	380-389	Nonmeningeal meningitis	8	3	3	3	3	3	3	3	3	3	3	
B29	400-468	Diseases of the circulation, 390-399, 390-399S	808	406	328	72	62	62	2	2	27	254	853	
B30	470-527	Chronic rheumatic heart disease	20	12	15	1	1	1	1	1	1	1	1	
B31	410-410	Other chronic and degenerative heart disease	633	322	225	48	35	35	1	1	10	13	6	
B32	430-432	Other chronic and degenerative heart disease	110	3	5	2	2	2	1	1	1	1	1	
B33	430-432	Other chronic and degenerative heart disease	110	3	5	2	2	2	1	1	1	1	1	
B34	430-443	Hypertension with heart disease	23	10	16	1	1	1	1	1	1	1	1	
B35	441-447	Residual (430-440, 440-488)	60	25	28	4	4	4	2	2	2	14	43	
B36	480-483	Influenza	59	20	16	10	5	1	1	1	6	12	23	

July 1, 1952, Estimated Population, 234,000. Total Resident Deaths, 1,737. Rate per 1,000 Population, 13.4.

B37	490-503	Pneumonia	20	12	10	5	1	1	1	1	1	1	1	20
B38	500-502	Residual (470-475, 510-527)	3	1	1	6	1	1	1	1	1	1	1	7
B39	500-527	Diseases of the digestive system	17	7	5	6	1	1	1	1	1	1	1	17
B40	530-531	Diseases of the mouth and pharynx	91	40	37	8	6	6	4	1	1	1	1	98
B41	530-533	Appendicitis	9	5	2	1	1	1	1	1	1	1	1	9
B42	500, 501, 570	Intestinal obstruction and hernia	13	4	0	2	2	2	1	1	1	1	1	13
B43	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	2	6	1	1	1	1	1	1	1	1	8
B44	581	Residual (530-539, 542, 544, 545, 573-573, 580, 582-587)	33	15	16	1	1	1	1	1	1	1	1	33
B45	590-637	Diseases of the genito-urinary system	23	14	5	3	4	4	1	1	1	1	1	23
B46	640-659	Nephritis and nephrosis	28	13	9	3	3	3	1	1	1	1	1	28
B47	610	Residual (600-609, 617, 624-626, 630-637)	6	3	3	1	1	1	1	1	1	1	1	6
B48	640-659	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1	1
B49	720-749	Diseases of the skin and cellular tissue	4	1	1	1	1	1	1	1	1	1	1	4
B50	750-779	Diseases of the bones and organs of movement	17	7	3	3	3	3	1	1	1	1	1	17
B51	780-782	Certain diseases of early infancy	11	7	3	3	3	3	1	1	1	1	1	11
B52	783-788	Birth injuries, postnatal asphyxia and atelectasis	14	7	3	3	3	3	1	1	1	1	1	14
B53	789-798	Infections of the newborn	4	2	1	1	1	1	1	1	1	1	1	4
B54	799-776	Other diseases peculiar to early infancy and infancy	16	7	1	5	3	3	10	10	1	1	1	16
B55	800-899	Strokes, aneurysms and ill-defined conditions	86	44	40	32	2	2	2	2	2	2	2	86
B56	900-929	Accidents, poisonings and violence	24	17	31	2	2	2	1	1	1	1	1	24
B57	930-939	Motor vehicle accidents	15	6	3	4	4	4	2	2	2	2	2	15
B58	940-949	All other accidents except falls	9	1	1	1	1	1	1	1	1	1	1	9
B59	950-959	Falls	22	10	10	3	3	3	3	3	3	3	3	22
B60	960-969	Self-inflicted injuries	14	10	3	1	1	1	1	1	1	1	1	14
B61	970-979	Homicide	4	1	3	1	1	1	1	1	1	1	1	4
B62	980-983	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1
B63	984-989	Residual (980-983, 984-989)	1	1	1	1	1	1	1	1	1	1	1	1
B64	990-999	ALL CAUSES	1737	802	698	188	139	139	64	6	7	13	118	522, 1054

TABLE 2. TABULATION OF DEATHS OF RESIDENTS OF ATLANTIC CITY FOR 1932
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSED GROUPS	Total		White		Non-white		Age Groups by Years						
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-44		45-64	65+ Unknown	
											25-44	45-64			
B1	001-158	Infective and parasitic diseases	29	8	21	7	12	6	1	1	1	1	1	4	1
B12	001-408	Tuberculosis of respiratory system	21	1	20	2	18	2	1	1	1	1	1	3	2
B13	010-010	Tuberculosis, other forms	1		1										
B14	003-029	Syphilis and its sequelae	1		1										
B15	040	Cholera													
B16	045-048	Dysentery, all forms													
B17	060, 061	Scarlet fever and streptococcal sore throat													
B18	055	Diphtheria													
B19	050	Diphtheria, except scarlet fever													
B20	053	Acute epiglottitis													
B21	080	Acute poliomyelitis													
B22	084	Shingles													
B23	081	Acute tonsillitis													
B24	100-108	Typhus and other rickettsial diseases													
B25	110-117	Malaria	1		1										
B26		Residual (630-039, 041, 042, 044, 046, 052-054, 056-074, 081-088, 086-096, 120-138)	150	58	92	18	10	10	14	65	100	14	55	30	1
B27	140-205	Malignant neoplasms	183	53	130	31	38	18	12	63	89	22	62	2	2
B28	210-239	Benign and unspecified neoplasms	6	3	3	1	1	1	2	2	2	2	2	2	2
B29	240-289	Allergic, endocrine system, metabolic and nutritional diseases	90	15	75	10	3	3	2	1	1	1	1	1	1
B30		Residual (240-245, 250-254, 270-277, 280-289)	22	9	13	8	2	2	1	1	1	1	1	1	1
B31	290-299	Diseases of the blood and blood-forming organs	1		1										
B32	300-308	Heart diseases (294-296)	4	1	3	1	1	1	1	1	1	1	1	1	1
B33	309-309	Diseases of the nervous system and personality disorders	110	47	63	18	12	15	6	31	74	6	31	74	1
B34	310-324	Alcoholism and drug addiction	105	48	57	33	18	11	11	3	30	72	3	30	72
B35	325-334	Vascular lesions affecting central nervous system													
B36	340, 341, 370	Nonmeningeal meningitis	4	4											
B37	381	Cirrhosis of liver	429	181	248	145	61	42	1	12	182	285	1	1	1
B38	400-408	Rheumatic fever	16	4	12	6	6	6	1	4	4	4	4	4	4
B39	410-410	Chronic rheumatic heart disease	318	161	157	100	40	27	1	7	94	242	1	7	94
B40	420-422	Arteriosclerotic and degenerative heart disease	60	12	48	12	15	12	10	2	10	31	10	21	6
B41	430-434	Other diseases of heart	17	4	13	2	2	2	2	1	1	1	1	1	1
B42	440-442	Myocardial infarction	28	9	19	13	4	2	4	2	1	1	1	1	1
B43	444-447	Hypertension without mention of heart	31	10	21	5	10	6	6	2	3	8	12	12	12
B44	470-527	Diseases of the respiratory system													
B45	480-483	Influenza													

B37	531	Pneumonia	20	6	14	4	7	4	3	1	1	1	1	1	1
B38	532	Pneumonia	2	0	2	1	1	1	1	1	1	1	1	1	1
B39	530-537	Residual (530-535, 540-537)	58	23	35	15	8	1	1	1	1	1	1	1	1
B40	540, 541	Ulcer of stomach and duodenum	3	2	1	1	1	1	1	1	1	1	1	1	1
B41	550-559	Appendicitis	6	2	4	2	2	2	2	1	1	1	1	1	1
B42	560, 571, 576	Intestinal obstruction and hernia	3	2	1	2	2	2	2	1	1	1	1	1	1
B43	580, 571, 572	Cholelithiasis, cholecystitis and colitis, except cholelithiasis of newborn	3	2	1	2	2	2	2	1	1	1	1	1	1
B44	581	Cirrhosis of liver	24	11	13	10	1	1	1	1	1	1	1	1	1
B45	590-597	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	17	5	12	8	3	3	3	1	4	12	4	12	4
B46	598-598	Disease of the alimentary system	12	6	6	4	2	1	1	1	1	1	1	1	1
B47	599-599	Nephritis and nephroses	1	1											
B48	610	Hypertrophies of prostate	1	1											
B49	610-610	Residual (600-600, 611-617, 620-626, 630-637)	4	1	3	3	1	1	1	1	1	1	1	1	1
B50	610-740	Pregnancy, childbirth and the puerperium	3	3											
B51	750-750	Diseases of the female genitalia and accessory organs	3	3											
B52	760-760	Diseases of the female genitalia	8	4	4	2	2	2	2	1	1	1	1	1	1
B53	770-770	Complicated malformations	20	9	11	7	4	4	4	2	2	2	2	2	2
B54	780-780	Genital diseases of early infancy	4	4											
B55	790-798	Infectious diseases of the newborn	2	1	1	2	2	2	2	1	1	1	1	1	1
B56	790-797	Other diseases peculiar to early infancy and immaturity unqualified	12	4	8	4	1	1	4	3	12	3	10	3	3
B57	798-798	Scorpion, snake and ill-defined conditions	4	1	3	2	2	2	2	2	2	2	2	2	2
B58	800-800	Motor vehicle accidents	12	7	5	5	1	1	1	1	1	1	1	1	1
B59	800-802	Motor vehicle accidents	10	3	7	2	4	1	1	1	1	1	1	1	1
B60	800-808	All other accidents except falls	16	7	9	4	2	2	2	2	2	2	2	2	2
B61	810-810	Poisoning	10	4	6	4	2	2	2	2	2	2	2	2	2
B62	820-820	Self-inflicted injuries	1	1											
B63	830-830	Suicide	1	1											
B64	840-840	Police intervention, execution and operations of war	1	1											
B65	850-859	Police intervention, execution and operations of war	1	1											
B66	860-869	Police intervention, execution and operations of war	1	1											
B67	001-999	ALL CAUSES	937	383	554	311	157	104	89	8	7	62	308	368	68

July 1, 1932, Estimated Population, 42,000.

Total Resident Deaths, 937.

Rate per 1,000 Population, 15.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BERGEN COUNTY FOR 1932
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		Total		<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
			Male	Female	Male	Female							
B1	001-138	Infective and parasitic diseases	60	43	23	1	1	4	8	3	5	22	22
B2	001-008	Tuberculosis of respiratory system	38	27	9	1	1	1	1	1	6	15	11
B3	010-019	Tuberculosis, other forms	3	5	3	1					2	4	3
B4	020-029	Syphilis and its sequelae	5	6	3	1							
B5	030	Cholera	1	1	1								
B6	040	Cholera	1	1	1								
B7	050-058	Dysentery, all forms	1	1	1								
B8	060-061	Scarlet fever and streptococcal sore throat	1	1	1								
B9	065	Diphtheria	1	1	1								
B10	065	Diphtheria, group	1	1	1								
B11	067	Measles	1	1	1								
B12	083	Acute poliomyelitis	1	1	1								
B13	084	Scarlet fever	1	1	1								
B14	084	Scarlet fever	1	1	1								
B15	100-108	Meningeal infections	3	3	3								
B16	110-117	Malaria	1	1	1								
B17	110-117	Malaria	1	1	1								
B18	140-200	Residual (600-608, 611, 612, 644, 645, 622-654, 659-674, 681-683, 685-686, 120-139)	10	0	0	4	2	1	1	1	1	4	2
B19	140-200	Neoplasms	941	472	463	4	12	6	7	7	82	379	400
B20	210-235	Malignant neoplasms	925	407	443	3	12	6	7	7	71	374	400
B21	240-289	Benign and unspecified neoplasms	16	10	10	1	1	1	1	1	1	4	2
B22	290	Allergic, endocrine system, metabolic and nutritional diseases	129	41	84	2	2	2	2	2	4	70	69
B23	300-326	Residual (240-245, 250-254, 270-277, 280-289)	163	29	71	2	1	2	2	2	3	39	61
B24	330-340	Diseases of the blood and blood-forming organs	10	0	0	1	1	1	1	1	1	1	1
B25	350-355	Anemias	10	3	4	3	7	4	2	1	13	121	85
B26	355-356	Residual (291-299)	537	227	309	3	7	3	4	2	1	13	121
B27	356-358	Diseases of the nervous system and sense organs	490	208	274	3	7	1	2	2	2	89	691
B28	359-364	Vascular lesions affecting central nervous system	291	152	103	23	18	3	1	2	89	691	
B29	360-369	Nonmeningeal meningitis	18	15	25	1	2	2	2	2	3	17	17
B30	370-380	Residual (341-346, 347, 350-359, 370-380)	291	152	103	23	18	3	1	2	89	691	
B31	400-468	Rheumatic fever	2	2	1	1	1	1	1	1	1	1	1
B32	470-482	Chronic rheumatic heart disease	1819	1024	733	20	33	1	1	1	1	1	1
B33	420-422	Arteriosclerotic and degenerative heart disease	290	82	114	1	3	1	1	1	1	1	1
B34	430-434	Other diseases with heart disease	29	20	19	1	3	1	1	1	1	1	1
B35	444-447	Hypertension without mention of heart disease	1536	776	733	2	5	25	11	3	20	132	126
B36	470-527	Diseases of the respiratory system	8	4	4	1	1	1	1	1	1	1	1
B37	480-483	Influenza	1	1	1	1	1	1	1	1	1	1	1

B38	530-537	Pneumonia	119	51	68	1	2	2	1	1	1	1	1
B39	540-562	Bronchitis	13	9	7	1	1	1	1	1	1	1	1
B40	570-577	Diseases of the respiratory system	215	126	87	2	5	3	2	2	2	2	2
B41	580-587	Ulcero of stomach and duodenum	29	20	9	1	1	1	1	1	1	1	1
B42	590-593	Appendicitis	1	1	1	1	1	1	1	1	1	1	1
B43	600-601, 670	Intestinal obstruction and hernia and colitis, except stricture of newborn	32	17	15	1	1	1	1	1	1	1	1
B44	610-617, 672	Stricture of newborn	21	14	6	1	1	1	1	1	1	1	1
B45	620-628, 630-636	Cirrhosis of liver	83	35	27	1	1	1	1	1	1	1	1
B46	640-649	Residual (530-539, 542, 544, 545, 573-575, 580, 582-587) the alimentary system	39	13	26	1	1	1	1	1	1	1	1
B47	650-657	Xanthoma and nephritis	97	58	34	5	5	5	5	5	5	5	5
B48	660	Hypertrophy of prostate	21	21	21	3	3	3	3	3	3	3	3
B49	670-676	Pregnancy, childbirth and the puerperium	62	30	24	1	1	1	1	1	1	1	1
B50	680-689	Diseases of the bones and organs of movement	1	1	1	1	1	1	1	1	1	1	1
B51	690-700	Congenital malformations	1	1	1	1	1	1	1	1	1	1	1
B52	700-702	Certain diseases of early infancy	1	1	1	1	1	1	1	1	1	1	1
B53	703-708	Birth injuries, postnatal asphyxia and tetanus	1	1	1	1	1	1	1	1	1	1	1
B54	709-716	Other diseases peculiar to early infancy and infancy	1	1	1	1	1	1	1	1	1	1	1
B55	720-726	Symptoms, senility and ill-defined conditions	75	40	31	2	2	2	2	2	2	2	2
B56	730-738	Accidents, poisonings and violence	20	11	11	1	1	1	1	1	1	1	1
B57	740-749	Motor vehicle accidents	76	56	38	1	1	1	1	1	1	1	1
B58	750-759	All other accidents except falls	82	48	29	5	5	5	5	5	5	5	5
B59	760-769	Falls	48	26	23	2	2	2	2	2	2	2	2
B60	770-779	Home accidents	54	34	20	1	1	1	1	1	1	1	1
B61	780-789	Police intervention, execution and operations of war	3	2	2	1	1	1	1	1	1	1	1
B62	790-799	All other accidents	1	1	1	1	1	1	1	1	1	1	1
B63	800-809	All causes	5921	3003	2300	54	260	52	39	41	316	1518	2776

July 1, 1932, Estimated Population, 535,000. Total Resident Deaths, 5,021. Rate per 1,000 Population, 9.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF GARDEN CITY FOR 1932
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	1-4	5-14	15-24	25-44	45-64	65+ Unknown	
B1	001-133	Infective and parasitic diseases	41	10	15	8	7	3	1	1	0	17	10		
B2	001-008	Tuberculosis of respiratory system	21	10	3	3	4	1	1	1	2	12	4		
B3	010-019	Tuberculosis, other forms	2	1	1	1	1	1	1	1	1	1	1		
B4	020-029	Scarlet fever	8	4	4	4	4	1	1	1	1	3	4		
B5	030-039	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1		
B6	041-048	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1		
B7	060-061	Whooping cough	1	1	1	1	1	1	1	1	1	1	1		
B8	065	Meningoencephalitis	1	1	1	1	1	1	1	1	1	1	1		
B9	010-019	Meningoencephalitis	2	1	1	1	1	1	1	1	1	1	1		
B10	065	Plague	2	1	1	1	1	1	1	1	1	1	1		
B11	063	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1		
B12	080	Measles	2	1	1	1	1	1	1	1	1	1	1		
B13	081	Scarlet fever	1	1	1	1	1	1	1	1	1	1	1		
B14	100-106	Malaria	1	1	1	1	1	1	1	1	1	1	1		
B15	110-117	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1		
B16	044	Residual (004-039, 041, 042, 043, 044, 049, 052-054)	7	1	4	4	2	1	1	1	1	1	1		
B17	051-058	Residual (051-058, 058, 059, 120-183)	237	110	94	10	94	21	1	5	20	116	94		
B18	140-230	Neoplasms	221	109	92	10	20	1	1	5	10	114	92		
B19	210-230	Malignant neoplasms	6	1	2	2	1	1	1	1	2	2	1		
B20	240-280	Benign and unspecified neoplasms	45	20	17	3	5	0	1	1	1	10	24		
B21	290	Allergic, endocrine system, metabolic and nutritional diseases of the blood and blood-forming organs	11	1	1	1	1	1	1	1	1	1	1		
B22	290	Diabetes mellitus	2	1	1	1	1	1	1	1	1	1	1		
B23	300-320	Diseases of the nervous system and sense organs	12	1	1	1	1	1	1	1	1	1	1		
B24	320-329	Residual (241-260)	12	6	6	6	4	0	2	1	4	0	2		
B25	400-405	Residual (301-320)	12	6	6	6	4	0	2	1	4	0	2		
B26	410-416	Cardiac disease	141	63	72	8	8	8	2	2	0	38	80		
B27	417-424	Other diseases of heart	133	48	69	8	8	8	2	1	2	1	2		
B28	430-434	Hypertension with heart disease	62	37	32	1	1	1	1	1	25	100	404		
B29	444-447	Hypertension without mention of heart disease	26	1	1	1	1	1	1	1	1	1	1		
B30	430-434	Residual (440-443)	65	33	18	17	12	8	11	1	7	10	20		
B31	430-434	Influenza	6	1	1	4	1	1	1	1	1	1	1		

B32	400-405	Pneumonia	50	25	9	9	7	9	6	1	1	5	10	19	
B33	500-502	Bronchitis	7	5	1	1	1	1	1	1	1	1	1	1	
B34	500-507	Residual (470-475, 510-527)	49	27	15	4	8	6	6	6	3	9	20		
B35	540-541	Diseases of the digestive system	6	4	1	1	1	1	1	1	1	1	1		
B36	550-553	Ulcer of stomach and duodenum	2	1	1	1	1	1	1	1	1	1	1		
B37	560-561, 570	Intestinal obstruction and hernia	10	0	3	3	1	1	1	1	1	1	1		
B38	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	2	2	1	2	2	1	2	5	6	4		
B39	581	Residual (530-539, 542, 544, 545, 573-576, 580, 582-587)	16	12	3	1	2	1	2	1	2	1	1		
B40	600-607	Diseases of the genito-urinary system	8	0	0	0	0	0	0	0	0	0	0		
B41	610-616	Syphilis and nephritis	32	15	12	1	1	1	1	1	2	3	8		
B42	620-624	Residual (600-606, 611-617, 620-623, 626-637)	18	6	11	1	1	1	1	1	2	3	16		
B43	700-702	Pregnancy, childbirth and the puerperium	11	3	3	1	4	4	1	1	1	1	1		
B44	700-710	Diseases of the skin and cellular tissue	3	1	2	1	2	1	1	1	1	1	1		
B45	720-729	Contusion of the bones and organs of movement	5	1	2	1	2	1	1	1	1	1	1		
B46	730-732	Certain diseases of early infancy	13	2	8	2	1	1	1	1	1	1	1		
B47	740-743	Birth injuries, postnatal asphyxia and atelectasis	10	10	12	8	4	4	13	4	12	5	1		
B48	750-758	Infections of the newborn	2	1	0	1	2	1	2	1	2	1	1		
B49	760-770	Other neonatal diseases	5	3	3	2	3	2	3	1	3	2	1		
B50	780-785	Obstetrical, puerperal to early infancy and immunity	12	2	6	1	3	12	4	1	1	1	1		
B51	800-809	Symptoms, senility and ill-defined conditions	76	41	22	10	10	10	4	4	2	4	2		
B52	810-813	Accidents, poisonings and violence	19	12	5	1	1	3	0	2	17	25	4		
B53	820-824	Motor vehicle accidents	20	16	6	6	2	4	1	1	5	0	0		
B54	830-835	All other accidents except falls	16	6	9	1	2	1	1	1	2	1	2		
B55	840-845	Falls	9	7	2	1	1	1	1	1	1	1	1		
B56	850-854	Suicide	2	2	1	1	1	1	1	1	1	1	1		
B57	860-864	Homicide	2	1	1	1	1	1	1	1	1	1	1		
B58	870-874	Police intervention, execution and operations of war	2	1	1	1	1	1	1	1	1	1	1		
B59	880-889	ALL CAUSES	1393	674	524	90	90	81	18	6	16	90	486	718	

July 1, 1932, Estimated Population, 127,000.

Total Resident Deaths, 1,393.

Rate per 1,000 Population, 11.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAPE MAY COUNTY FOR 1932 Classified by International Abridged List of Causes (9th Revision)

Table with columns: Abridged List No., Detail List No., CAUSE GROUPS, Total, White (Male/Female), Non-white (Male/Female), <1, 1-4, 5-14, 15-24, 25-44, 45-64, 65+ Unknown.

Table with columns: Abridged List No., Detail List No., CAUSE GROUPS, Total, White (Male/Female), Non-white (Male/Female), <1, 1-4, 5-14, 15-24, 25-44, 45-64, 65+ Unknown.

July 1, 1932, Estimated Population, 37,000.

Total Resident Deaths, 558.

Rate per 1,000 Population, 15.1.

TABLE 23. TABULATION OF DEATHS OF RESIDENTS OF CUMBERLAND COUNTY FOR 1932
Classified by International Abridged List of Causes (9th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White				Non-white		Age Groups by Years					65+	Unknown
			Total		Male		Female		1-4	5-14	15-24	25-44	45-64		
			Total	Male	Female	Male	Female	<	1-4	5-14	15-24	25-44	45-64		
B1	001-138	Infective and parasitic diseases	25	9	1	0	3	4	1	2	5	8	5	5	
B1	001-139	Tuberculosis of respiratory system	9	6	1	1	1	1	1	1	1	2	1	5	
B1	001-140	Tuberculosis, other forms	7	3	2	2	2	3	1	1	1	1	1	1	
B2	010-010	Syphilis and its sequelae	1	1	1	0	1	1	1	1	1	1	1	1	
B3	020-029	Cholera and fever	1	1	1	0	1	1	1	1	1	1	1	1	
B4	040	Dysentery, all forms	1	1	1	0	1	1	1	1	1	1	1	1	
B5	045-048	Scarlet fever and streptococcal sore throat	1	1	1	0	1	1	1	1	1	1	1	1	
B6	050-061	Diphtheria	1	1	1	0	1	1	1	1	1	1	1	1	
B7	065	Acute poliomyelitis	1	1	1	0	1	1	1	1	1	1	1	1	
B8	085	Scarlet fever	1	1	1	0	1	1	1	1	1	1	1	1	
B9	087	Measles	1	1	1	0	1	1	1	1	1	1	1	1	
B10	088	Measles with encephalitis	1	1	1	0	1	1	1	1	1	1	1	1	
B11	089	Scarlet fever	1	1	1	0	1	1	1	1	1	1	1	1	
B12	090	Measles	1	1	1	0	1	1	1	1	1	1	1	1	
B13	084	Measles	1	1	1	0	1	1	1	1	1	1	1	1	
B14	085	Measles	1	1	1	0	1	1	1	1	1	1	1	1	
B15	100-105	Malaria	1	1	1	0	1	1	1	1	1	1	1	1	
B16	110-117	Residual (030-039, 041-042, 044, 046, 052-054, 056-074, 081-083, 088-096, 136-138)	3	1	1	1	1	1	1	1	1	1	1	1	
B17	118	Residual (030-039, 041-042, 044, 046, 052-054, 056-074, 081-083, 088-096, 136-138)	140	70	63	4	6	6	1	1	1	1	1	6	
B18	140-205	Malignant neoplasms	142	70	69	4	5	1	1	1	1	1	1	2	
B19	210-239	Allergic, endocrine system, metabolic and nutritional diseases	29	11	10	1	1	1	1	1	1	1	1	1	
B20	260	Diseases of the blood and blood-forming organs	22	8	13	1	1	1	1	1	1	1	1	1	
B21	290-299	Diseases of the nervous system and sense organs	7	3	3	1	1	1	1	1	1	1	1	1	
B22	300-308	Diseases of the circulatory system	21	1	1	1	1	1	1	1	1	1	1	1	
B23	330-334	Arteriosclerosis	1	1	1	0	1	1	1	1	1	1	1	1	
B24	340	Arteriosclerosis	1	1	1	0	1	1	1	1	1	1	1	1	
B25	400-469	Rheumatic fever	446	223	188	21	14	1	1	1	1	1	1	8	
B26	470-487	Residual (240-245, 250-254, 270-277, 280-289)	227	172	128	14	13	1	1	1	1	1	1	7	
B27	490-502	Chronic rheumatic heart disease	10	8	8	1	1	1	1	1	1	1	1	1	
B28	490-502	Arteriosclerosis	61	33	34	1	1	1	1	1	1	1	1	1	
B29	444-447	Hypertension with heart disease	39	13	21	2	2	1	1	1	1	1	1	1	
B30	470-527	Residual (450-469, 490-498)	26	10	13	2	4	1	1	1	1	1	1	1	
B31	530-557	Diseases of the respiratory system	10	2	2	2	2	3	3	3	3	3	3	3	
B32	560-567	Pneumonia	10	2	2	2	2	3	3	3	3	3	3	3	
B33	570-575	Bronchitis	12	4	4	1	1	1	1	1	1	1	1	1	
B34	580-587	Diseases of the digestive system	45	10	10	1	1	1	1	1	1	1	1	1	
B35	540-541	Disease of the digestive system	11	28	11	2	2	2	2	2	2	2	2	2	
B36	550-553	Ulcer of stomach and duodenum	6	6	6	0	6	6	6	6	6	6	6	6	
B37	560, 561, 570	Appendicitis	3	3	3	0	3	3	3	3	3	3	3	3	
B38	580, 591, 572	Intestinal obstruction and hernia	4	2	2	2	2	2	2	2	2	2	2	2	
B39	543, 511, 572	Diseases of the blood and blood-forming organs	15	12	12	1	1	1	1	1	1	1	1	1	
B40	590-595	Chloroma of liver	15	12	12	3	3	3	3	3	3	3	3	3	
B41	600-607	Residual (530-539, 542, 544, 545, 575-578, 580, 585-587)	26	5	5	3	3	3	3	3	3	3	3	3	
B42	610	Diseases of the urinary system	25	11	11	3	1	1	1	1	1	1	1	1	
B43	620-629	Nephritis and nephroses	11	11	11	3	1	1	1	1	1	1	1	1	
B44	630-637	Hyperplasia of prostate	2	2	2	0	2	2	2	2	2	2	2	2	
B45	640-659	Pregnancy, childbirth and the puerperium	1	1	1	0	1	1	1	1	1	1	1	1	
B46	660-667	Diseases of the female genital tract	2	2	2	0	2	2	2	2	2	2	2	2	
B47	670-679	Diseases of the male genital tract	1	1	1	0	1	1	1	1	1	1	1	1	
B48	680-687	Congenital malformations	0	2	2	0	2	2	2	2	2	2	2	2	
B49	690-709	Certain diseases of early infancy	40	10	12	5	4	4	4	4	4	4	4	4	
B50	710-719	Birth injuries, postnatal asphyxia and atelectasis	20	10	6	1	3	2	2	2	2	2	2	2	
B51	720-729	Injuries of the newborn	2	1	1	0	1	1	1	1	1	1	1	1	
B52	730-770	Injuries of the newborn due to early infancy and late infancy	18	8	8	1	1	1	1	1	1	1	1	1	
B53	780-785	Symptoms, senility and ill-defined conditions	3	3	3	0	3	3	3	3	3	3	3	3	
B54	790-795	Accidents, poisonings and violence	70	30	18	13	13	13	13	13	13	13	13	13	
B55	800-809	Motor vehicle accidents	25	10	8	1	1	1	1	1	1	1	1	1	
B56	810-819	All other accidents except falls	17	9	9	1	7	7	7	7	7	7	7	7	
B57	820-829	Falls	14	6	7	1	1	1	1	1	1	1	1	1	
B58	830-839	Suicide	5	5	5	0	5	5	5	5	5	5	5	5	
B59	840-849	Police intervention, execution and operations of war	2	2	2	0	2	2	2	2	2	2	2	2	
B60	850-859	Residual (800-809, 810-819, 820-829, 830-839)	2	2	2	0	2	2	2	2	2	2	2	2	
B61	860-869	ALL CAUSES	664	450	398	64	48	63	67	209	609	200	572	672	
													Total Resident Deaths, 860.		
													July 1, 1932, Estimated Population, 91,000.		
													Total Population, 860.		
													Rate per 1,000 Population, 30.5.		

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF EAST ORANGE FOR 1952
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	001-198	Infective and parasitic diseases	13	4	5	1	8					2	5	3	
B2	001-199	Tuberculosis of respiratory system	8	3	2	1	1					1	1	1	
B3	010-019	Tuberculosis, other forms	1												
B4	020-029	Syphilis and its sequelae	1												
B5	040	Typhoid fever	1												
B6	048	Dysentery, all forms													
B7	045-049	Scarlet fever and streptococcal sore throat													
B8	061-069	Whooping cough													
B9	065	Diphtheria													
B10	067	Acute poliomyelitis													
B11	080	Plague													
B12	084	Smallpox													
B13	084	Scarlet fever and streptococcal diseases													
B14	085-105	Measles and other rickittsial diseases													
B15	116-119	Malaria													
B16	118-117	Residual (000-039, 041, 042, 044, 048, 052-054, 053-074, 081-083, 088-090, 120-185)	2									3	12	74	05
B17	140-239	Neoplasms, unspecified	188	93	82	4	4	2	1	2	1	10	78	93	
B18	140-239	Neoplasms, unspecified	184	93	79	4	5								
B19	240-289	Allegation and unspecified neoplasms	4												
B20	290	Allegrie, endocrine system, metabolic and nutritional diseases	18	7	10	1	1					2	4	12	16
B21	290-299	Diseases of the blood and blood-forming organs	6	2	2	1	1					2	4	12	16
B22	300-329	Residual (291-299) Toxic and personality disorders	1												
B23	330	Diseases of the nervous system and sense organs	2										1	4	20
B24	330-334	Neuritis, neuralgia and unspecified central nervous system vascular lesions affecting central nervous system	92	23	62	2	2					1	4	18	70
B25	340	Nonmeningeococcal meningitis	5	3	2								1	18	126
B26	400-489	Residual (341-349, 350-359, 370-389, 390-998)	493	227	224	21	21					1	18	126	348
B27	490-499	Chronic rheumatic fever	1	1											
B28	410-416	Chronic rheumatic heart disease	5	2	7	1	1								
B29	420-422	Chronic rheumatic heart disease	187	137	169	13	13						4	68	273
B30	430-434	Arterio-sclerotic and degenerative heart disease	382	20	1	1	1						1	18	42
B31	440-443	Other diseases of the heart	58	5	27	1	1						1	1	18
B32	440-443	Myocardial infarction with mention of heart hypertrophy	10	2	12	1	1						1	1	1
B33	470-527	Residual (460-466, 480-468)	27	9	13	3	3						2	4	17
B34	480-483	Diseases of the respiratory system													
B35		Influenza													
B36		Pneumonia	18	4	11	2	2						1	1	1
B37		Bronchitis	3	1	2										
B38		Residual (470-519, 520-527)	6	4											
B39		Ulcer of stomach and duodenum	8	2	19	1	1								
B40		Appendicitis	5	1	4										
B41		Intestinal obstruction and hernia	5	1	4										
B42		Gastritis, duodenitis, enteritis and colitis, except hemorrhagic	16	9	7	1	1								
B43		Cholelithiasis	16	9	7	1	1								
B44		Residual (530-539, 542, 544, 545, 573-575, 580, 582-587)	12	5	5	1	1								
B45		Diseases of the genito-urinary system	16	10	6	1	1								
B46		Nephritis and nephrosis	3	3											
B47		Hyperplasia of prostate	3	3											
B48		Residual (600-609, 611-617, 620-626, 680-637)	10	10	5	1	1								
B49		Frequency, urgency and the puerperium	4	1	3										
B50		Diseases of the bones and organs of movement	4	1	3										
B51		Congenital malformations	6	2	2	1	1								
B52		Certain diseases of early infancy	20	7	9	5	5								
B53		Birth injuries, postnatal asphyxia and atelectasis	10	4	4	1	1								
B54		Other diseases peculiar to early infancy and immature birth	10	3	5	4	4								
B55		Symptoms, senility and ill-defined conditions	45	13	26	4	4								
B56		Accidents, poisonings and violence	1	2	1	2	1								
B57		Motor vehicle accidents	1	2	1	2	1								
B58		All other accidents except falls	8	3	2	3	2								
B59		Falls	24	6	18										
B60		Asphyxia	1	1											
B61		Urticaria	1												
B62		Police intervention, execution and operations of war													
B63		All causes	998	490	498	48	51					37	1	4	8
B64		All causes													

July 1, 1952, Estimated Population, 81,000.

Total Resident Deaths, 998.

Rate per 1,000 Population, 12.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF IRVINGTON FOR 1952
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	001-138	Infective and parasitic diseases	9	8	1				1				5	1
B2	001-008	Tuberculosis of respiratory system	5	4	1							2	3	
B3	010-019	Tuberculosis, other forms												1
B4	020-029	Syphilis and its sequelae	2											1
B5	040	Cholera fever												
B6	045-048	Dysentery, all forms												
B7	050-051	Scarlet fever and streptococcal sore throat												
B8	065	Diphtheria												
B9	070	Epidemic typhus												
B10	085	Measles												
B11	083	Scarlet fever	1											
B12	080	Acute poliomyelitis												
B13	084	Stenopox												
B14	100-108	Typhus and other rickettsial diseases												
B15	110-117	Malaria												
B16	030-074, 081-083, 080-096, 120-138)	Residual (030-039, 041, 042, 044, 049, 052-054, 053-074, 081-083, 080-096, 120-138)	1	1								2	11	53
B17	140-200	Malignant neoplasms	186	74	61	1						2	10	52
B18	140-200	Benign and unspecified neoplasms	133	72	60	1						1	1	70
B19	210-250	Allergic, endocrine system, metabolic and nutritional diseases	3	2	1									
B20	240-250	Residual (240-245, 250-254, 270-277, 280-289)	10	6	13									18
B21	260-290	Diseases of the blood and blood-forming organs	1											1
B22	300-326	Psychic, psychoneurotic and personality disorders	2											
B23	330-334	Diseases of the nervous system and sense organs	52	27	24									37
B24	340-402	Vascular lesions affecting central nervous system	49	25	23									37
B25	410-443	Nonneoplastic neoplasms	3											3
B26	444-447	Diseases of the circulatory system	321	165	155	1						30	112	106
B27	400-408	Rheumatic fever	1											2
B28	400-402	Chronic rheumatic heart disease	1											2
B29	410-416	Arterio-sclerotic and degenerative heart disease	24	13	11									14
B30	420-423	Coronary artery disease	1											1
B31	430-443	Hypertension with heart disease	30	14	16									18
B32	444-447	Hypertension without mention of heart disease	10	4	6									8
B33	470-527	Residual (450-456, 460-468)	10	8	8							2	1	3
B34	430-433	Diseases of the respiratory system	16											10
B35	480-583	Influenza												

B36	590-593	Pneumonia	13	8	5										7
B37	590-592	Bronchitis													3
B38	530-537	Residual (470-475, 510-527)	3												3
B39	540-541	Diseases of the digestive system	21	12	12										1
B40	550-551	Ulcer of stomach and duodenum	6	6											5
B41	560-561, 570	Appendicitis	3												2
B42	570-571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	3	1	2										2
B43	581	Diarrhoea of newborn	3	2	1										1
B44	590-593	Chirrhosis of liver	5	2	3										1
B45	600-607	Diseases of the genito-urinary system	7	1	6										3
B46	610	Nephritis and nephrosis	1												4
B47	620-623	Hypertrophy of prostate	6	6											3
B48	630-633	Pregnancy, childbirth and the puerperium (630-633, 630-637)	2	2											6
B49	640-659	Diseases of the skin and cellular tissue	1												2
B50	720-749	Diseases of the bones and organs of movement													1
B51	750-759	Congenital malformations	4	2	2										2
B52	760-769	Birth injuries, postnatal asphyxia and asphyxia	17	6	11										8
B53	700-702	Infections of the newborn	1	1											1
B54	703-708	Other diseases peculiar to early infancy and immaturity unqualified and ill-defined conditions	5	2	3										5
B55	780-793	Accidents, poisoning and violence	30	20	10										8
B56	800-809	Motor vehicle accidents	8	4	4										11
B57	810-815	All other accidents except falls	22	16	6										6
B58	820-823	Falls	7	5	2										2
B59	830-833	Suicide	6	5	1										3
B60	840-843	Homicide	1												1
B61	850-853	Police intervention, execution and operations of war	1												1
B62	001-999	ALL CAUSES	643	341	298	8	1	10			31	5	30	217	303

July 1, 1952, Estimated Population, 61,000.

Total Resident Deaths, 643.

Rate per 1,000 Population, 10.5.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF NEWARK FOR 1952 Classified by International Abridged List of Causes (6th Revision)

Table with columns: Abridged List No., Detail List No., Cause Groups, Total, White (Male, Female), Non-white (Male, Female), Age Groups by Years (<1, 1-4, 5-14, 15-24, 25-44, 45-64, 65+, Unknown).

July 1, 1952, Estimated Population, 448,000. Total Resident Deaths, 5,295. Rate per 1,000 Population, 11.6.

Continuation of Table 22 on page 307, containing cause groups such as Pneumonia, Acute coronary thrombosis, and other conditions with their respective death counts.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HUDSON COUNTY FOR 1932
Classified by International Abridged List of Causes (4th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Group by Years								
			Total	Male	Female	Total	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-138	Infective and parasitic diseases	200	135	65	18	5	2	4	3	8	53	111	48	
B2	001-008	Tuberculosis of respiratory system	149	101	48	15	2	1	1	3	43	97	516	36	
B3	024-029	Syphilis and its sequelae	20	11	9	1	2			1	1	17	2		
B4	640	Typhoid fever	2	1	1										
B5	644-648	Cholera	2	1	1										
B6	649-654	Scarlet fever, all forms	1	1											
B7	655	Diphtheria	1	1											
B8	656	Whooping cough	1	1											
B9	657	Measles	1	1											
B10	658	Measles, non-specific	1	1											
B11	659	Scarlet fever	2	2											
B12	660	Scarlet fever, non-specific	3	3											
B13	100-105	Typhus and other rickettsial diseases	22	11	11										
B14	106-117	Typhoid fever, all forms	1346	728	618	10	10	1	1	2	4	4	9		
B15	118	Neisseria meningitidis	1323	715	608	18	20	1	1	5	8	0	97	516	670
B16	210-239	Brain and meningeal infections, bacterial	23	13	9	1	1	1	1	1	1	1	1	1	1
B17	240-259	Brain and meningeal infections, non-bacterial	210	87	123										
B18	260	Diabetes mellitus	104	58	46										
B19	260-269	Diseases of the blood and blood-forming organs	46	27	19										
B20	270	Residual (240-245, 250-254, 270-277, 280-286)	10	4	6										
B21	280-289	Diseases of the nervous system and sense organs	6	4	2										
B22	290-320	Mental, psychoneurotic and personality disorders	34	13	21	4	4	3	2	1	2	18	7	4	4
B23	330-389	Diseases of the nervous system and sense organs	692	302	390	16	14	14	7	1	6	28	227	460	
B24	390-444	Acute infectious fevers, central nervous system	629	269	359	16	12	2	1	1	4	20	22	46	
B25	445	Residual (391-395, 396-397, 400-408)	54	27	27										
B26	400-468	Diseases of the circulatory system	3970	1011	1959	52	45	45	2	11	108	1125	2031		
B27	469-500	Ischemic heart disease	17	4	13										
B28	501-511	Chronic rheumatic heart disease	295	161	134										
B29	512-522	Coronary artery disease	203	103	100										
B30	523-534	Other diseases of heart	53	20	33										
B31	535-544	Hypertension with heart disease	223	135	88	6	7	11	1	1	1	1	1	1	1
B32	545-554	Hypertension without mention of heart	48	23	25	1	1	3	2	1	1	1	1	1	1
B33	555-564	Residual (540-549, 560-569)	210	110	100	8	8	8	5	5	16	16	16	16	16
B34	565-574	Diseases of the respiratory system	210	110	100	12	6	27	5	5	16	16	16	16	16
B35	575-584	Influenza	1												

B31	400-408	Pneumonia	178	90	88	11	6	29	3	3	11	11	14	82	
B32	500-502	Residual (470-475, 510-527)	34	22	12			4	2	1	1	1	1	2	
B33	530-537	Diseases of the digestive system	319	184	135	0	4	5	3	1	1	53	115	14	101
B34	538-543	Diseases of the stomach and duodenum	47	33	14	1	1	1	1	1	1	1	1	1	1
B35	544-549	Intestinal obstruction and hernia	9	6	3										
B36	550-557	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	50	19	31	4	1	1	1	1	1	1	1	1	1
B37	558	Cirrhosis of liver	124	81	43	3	1	1	1	1	1	1	1	1	1
B38	590-597	Diseases of the genito-urinary system	69	35	34										
B39	598-604	Nephritis and nephrosis	132	87	45	2	4	1	1	2	10	31	24	24	
B40	610	Gonorrhoea	18	18											
B41	600-609	Pregnancy, childbirth and the puerperium	43	24	19	1	4	3	1	1	1	1	1	1	1
B42	610-716	Diseases of the skin and cellular tissue	8	2	6										
B43	720-749	Diseases of the bones and organs of movement	12	8	4										
B44	750-776	Congenital malformations	75	33	42	3	3	10	5	4	1	6	1	1	1
B45	780-782	Birth injuries, postnatal asphyxia and asolectasis	29	10	19	1	1	200	1	1	1	1	1	1	1
B46	783-788	Other diseases of the newborn	20	12	8	2	6	4	2	2	2	2	2	2	2
B47	790-796	Stomach, unclassified and ill-defined conditions	72	35	37	3	4	72	1	1	1	1	1	1	1
B48	800-809	Accidents, poisoning and violence	373	249	124	9	27	6	2	4	22	27	33	21	3
B49	810-835	Motor vehicle accidents	100	72	28	10	1	1	1	1	1	1	1	1	1
B50	836-844	All other accidents except falls	90	62	28	11	4	6	7	3	10	21	27	25	3
B51	850-854	Falls	90	61	29	3	3	4	1	1	1	1	1	1	1
B52	855-859	Suicide	68	50	18	2	2	3	1	1	1	1	1	1	1
B53	860-864	Police intervention, execution and operations of war	2	2											
B54	865-869	ALL CAUSES	7235	3972	3263	171	136	307	43	37	80	532	2513	3973	

July 1, 1932, Estimated Population, 601,000. Total Resident Deaths, 7,235. Rate per 1,000 Population, 10.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BAYONNE FOR 1962
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.....	29	11	6	1	1	1	1	1	1	1	1	1	1	1
B2	001-008	Diseases of the respiratory system.....	19	11	2	1	1	1	1	1	1	1	1	1	1	1
B3	001-009	Tuberculosis, other forms.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B4	023-029	Syphilis and its sequelae.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B5	04c	Epidemic typhus.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	04b	Epidemic typhus.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	050-051	Scarlet fever 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	087	Pneumococcal infections.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	088	Staphylococcal infections.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	090	Acute poliomyelitis.....	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	100-106	Typhus and other rickettsial diseases.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	110-117	Leishmaniasis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	030-074, 081-083, 084-086, 120-138	Icelandic (030-039, 041, 042, 044, 049, 052-053, 039-074, 081-083, 084-086, 120-138)	6	4	4	1	1	1	1	1	1	1	1	1	1	1
B18	140-239	Neoplasms.....	146	91	53	2	2	2	2	2	2	2	2	2	2	2
B19	240-245	Malignant neoplasms.....	142	89	52	2	2	2	2	2	2	2	2	2	2	2
B20	246-280	Benign neoplasms.....	4	2	1	1	1	1	1	1	1	1	1	1	1	1
B21	290-300	Diseases of the circulatory system.....	23	7	15	3	3	3	3	3	3	3	3	3	3	3
B22	300-326	Diseases of the heart.....	17	5	11	1	1	1	1	1	1	1	1	1	1	1
B23	327-334	Diseases of the blood and blood-forming organs.....	6	1	4	1	1	1	1	1	1	1	1	1	1	1
B24	400-408	Anemias.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B25	410-415	Mental, psychoneurotic and personality disorders.....	3	3	3	1	1	1	1	1	1	1	1	1	1	1
B26	420-422	Alcoholism.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3
B27	430-434	Vascular lesions affecting nervous system.....	68	38	32	3	3	3	3	3	3	3	3	3	3	3
B28	440-443	Nonmeningeal meningitis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B29	444-447	Diseases of the circulatory system.....	6	4	2	1	1	1	1	1	1	1	1	1	1	1
B30	470-527	Diseases of the respiratory system.....	361	205	151	4	4	4	4	4	4	4	4	4	4	4
B31	530-587	Infectious mononucleosis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B32	590-597	Diseases of the digestive system.....	274	165	104	1	1	1	1	1	1	1	1	1	1	1
B33	600-601, 670	Ulcer of stomach and duodenum.....	2	2	2	1	1	1	1	1	1	1	1	1	1	1
B34	602-603, 671, 672	Intestinal obstruction and hernia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B35	604-609	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn.....	2	2	2	1	1	1	1	1	1	1	1	1	1	1
B36	610-619	Chronic diseases of the liver.....	12	6	5	1	1	1	1	1	1	1	1	1	1	1
B37	620-629	Diseases of the biliary system.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B38	630-637	Diseases of the genito-urinary system.....	8	3	5	1	1	1	1	1	1	1	1	1	1	1
B39	640-649	Nephritis and nephrosis.....	9	5	3	1	1	1	1	1	1	1	1	1	1	1
B40	650-659	Diseases of the kidney.....	2	2	2	1	1	1	1	1	1	1	1	1	1	1
B41	720-749	Pregnancy, childbirth and the puerperium.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B42	750-759	Diseases of the skin and cellular tissue.....	8	2	6	1	1	1	1	1	1	1	1	1	1	1
B43	760-769	Diseases of the bones and organs of movement.....	27	17	9	1	1	1	1	1	1	1	1	1	1	1
B44	770-779	Congenital malformations.....	9	5	3	1	1	1	1	1	1	1	1	1	1	1
B45	780-789	Birth injuries.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B46	790-799	Other diseases of early infancy.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B47	800-809	Infections of the newborn.....	14	8	5	1	1	1	1	1	1	1	1	1	1	1
B48	810-819	Other diseases peculiar to early infancy and immaturity.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B49	820-829	Accidents, suicides and violence.....	55	37	11	6	6	6	6	6	6	6	6	6	6	6
B50	830-839	Motor vehicle accidents.....	29	12	0	2	2	2	2	2	2	2	2	2	2	2
B51	840-849	All other accidents except falls.....	11	8	6	2	2	2	2	2	2	2	2	2	2	2
B52	850-859	Falls.....	14	8	5	1	1	1	1	1	1	1	1	1	1	1
B53	860-869	Suicide.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B54	870-879	Homicide.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B55	880-889	Police intervention, execution and operations of war.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B56	890-899	All other causes.....	794	453	312	22	22	22	22	22	22	22	22	22	22	22

Rate per 1,000 Population, 19.1.

Total Resident Deaths, 794.

July 1, 1952, Estimated Population, 79,600.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HOBOKEN FOR 1962
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSES 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	14	14												
B1	001-008	Tuberculosis of respiratory system	11	11												
B1	001-009	Tuberculosis of other organs	3	3												
B3	030-020	Syphilis and its sequelae														
B4	040	Typhoid fever														
B5	043	Cholera														
B6	043-005	Dysentery, all forms														
B6	043-006	Dysentery, shigella and streptococcal sore throat														
B6	043-007	Dysentery, shigella														
B8	050	Diphtheria														
B9	056	Whooping cough														
B10	057	Meningococcal infections														
B11	058	Plague														
B11	058	Plague, bubonic														
B13	084	Smallpox														
B14	085	Measles														
B15	100-108	Typhus and other rickettsial diseases														
B17	110-117	Residual (030-030, 041, 042, 044, 049, 052-054, 030-074, 081-083, 086-090, 120-138)	113	66	65	2	2	2	2	2	2	2	2	2	2	2
B18	140-289	Neoplasms	108	54	53	1	1	1	1	1	1	1	1	1	1	1
B19	210-230	Malignant neoplasms of digestive organs	4	2	2											
B19	240-250	Malignant neoplasms of circulatory system	5	4	4											
B20	200	Diabetes mellitus	14	10	4											
B20	200-201	Diabetes mellitus, insulin dependent	9	6	3											
B20	200-202	Residual (200-200 and blood-forming organs)	5	4	1											
B21	290-293	Anemias	8	2	1											
B21	290-293	Residual (291-296)	8	2	1											
B22	300-320	Mental, psychoneurotic and personality disorders	91	27	25	1	1	1	1	1	1	1	1	1	1	1
B22	300-320	Residual (300-300 and circulatory system)	31	24	24	1	1	1	1	1	1	1	1	1	1	1
B22	330-354	Vascular lesions affecting central nervous system	27	8	8											
B23	340	Nonmeningococcal meningitis	6	3	3											
B23	340	Residual (341-345, 350-357, 360-368, 370-389, 390-398)	297	191	105	1	1	1	1	1	1	1	1	1	1	1
B24	400-408	Diseases of the circulatory system	245	163	81	1	1	1	1	1	1	1	1	1	1	1
B25	410-410	Chronic rheumatic heart disease	14	6	6											
B26	420-422	Arteriosclerotic and degenerative heart disease	245	163	81	1	1	1	1	1	1	1	1	1	1	1
B27	430-434	Other diseases of heart	6	5	1											
B28	440-443	Hypertension with heart disease	22	6	13											
B29	444-447	Hypertension without heart disease	4	1	3											
B29	444-447	Residual (400-460, 460-468)	18	13	5											
B30	470-527	Diseases of the respiratory system	18	13	5											
B30	480-483	Influenza														

B31	500-483	Pneumonia	13	9	4											
B32	500-502	Bronchitis	2	1	1											
B32	500-502	Residual (470-475, 510-527)	2	1	1											
B33	530-537	Diseases of the digestive system	2	1	1											
B34	540-543	Diseases of the stomach and duodenum	4	3	1											
B35	560, 561, 570	Intestinal obstruction and hernia	1	1	1											
B36	543-571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1	1											
B37	581	Cholera	7	7	7											
B37	581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	2	1	1											
B38	590-637	Diseases of the genito-urinary system	13	12	1											
B38	590-637	Gonorrhea and syphilis	4	4	4											
B39	640	Uterine cancer	3	3	3											
B40	610-689	Residual (600-609, 611-617, 620-626, 630-637)	2	2	2											
B41	690-710	Diseases of the skin and cellular tissue	2	2	2											
B41	700-770	Congenital malformation and organs of movement	1	1	1											
B42	700-770	Certain diseases of early infancy	2	2	2											
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	14	8	6											
B44	763-768	Infections of the newborn	4	4	4											
B44	763-770	Other diseases peculiar to early infancy and immature children	4	4	4											
B45	780-785	Symptoms, senility and ill-defined conditions	6	2	2											
B47	830-830	Accidents, poisonings and violence	31	21	1											
B47	830-830	Motor vehicle accidents	3	1	2											
B48A	830-835	All other accidents except falls	10	8	2											
B48B	8300-804	Falls	9	6	3											
B48C	8300-804	Stolids	8	8	8											
B48D	8300-804	Police intervention, execution and operations of war	1	1	1											
B48E	8381-809	ALT CAUSES	610	384	221	5	5	5	5	5	5	5	5	5	5	5

July 1, 1952; Estimated Population, 51,900.

Total Resident Deaths, 610.

Rate per 1,000 Population, 12.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF JERSEY CITY FOR 1962
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				85+
											15-24	25-44	45-64	Unknown	
B1	601-138	Infective and parasitic diseases	118	27	72	27	15	4	1	4	20	53	31	...	
B2	010-016	Tubercular and respiratory system	95	19	61	19	13	2	1	2	25	43	25	...	
B3	020-020	Syphilis and its sequelae	4	1	3	1	1	1	1	1	1	1	1	...	
B4	040	Ethioid fever	1	2	1	2	1	1	1	1	1	1	1	...	
B5	048	Cholera	1	1	1	1	1	1	1	1	1	1	1	...	
B6	049	Cholera, infantum	1	1	1	1	1	1	1	1	1	1	1	...	
B7	050-051	Scarlet fever and streptococcal sore throat	2	1	1	1	1	1	1	1	1	1	1	...	
B8	055	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	...	
B9	057	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	...	
B10	066	Meningococcal infections	1	1	1	1	1	1	1	1	1	1	1	...	
B11	080	Vague meningitis	1	1	1	1	1	1	1	1	1	1	1	...	
B12	084	Smallpox	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	...	
B14	085	Venues	1	1	1	1	1	1	1	1	1	1	1	...	
B15	100-108	Erysipelas and other rickettsial diseases	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	...	
B17	020-025	031, 019, 034, 046, 052-054, 059-074, 081-083, 089-096, 120-138, 140-239	627	93	327	293	15	28	1	1	1	2	2	...	
B18	140-239	Neoplasms	627	93	327	293	15	28	1	1	1	2	2	...	
B19	140-205	Malignant neoplasms	620	318	318	15	28	1	1	1	1	2	2	...	
B20	240-258	Benign and unspecified neoplasms	7	4	4	4	4	4	4	4	4	4	4	...	
B21	200	Diseases of the blood and blood-forming organs	63	45	30	45	1	1	1	1	1	1	1	...	
B22	200-203	Diabetes mellitus	75	45	29	45	1	1	1	1	1	1	1	...	
B23	200-205	Diseases of the blood and blood-forming organs	249	10	249	10	10	10	10	10	10	10	10	...	
B24	300-320	Mental, psychoneurotic and personality disorders	4	4	4	4	4	4	4	4	4	4	4	...	
B25	330-398	Diseases of the nervous system and sense organs	353	180	159	180	12	13	3	3	3	3	3	...	
B26	399-404	Neurotic disorders affecting central nervous system	253	124	124	178	12	11	2	2	2	2	2	...	
B27	410	Residual (341-345, 350-357, 300-350, 370-380, 390-398)	25	11	11	11	11	11	11	11	11	11	11	...	
B28	400-408	Diseases of the circulatory system	1083	869	650	869	42	42	2	2	2	2	2	...	
B29	400-402	Ischemic heart disease	4	3	3	3	3	3	3	3	3	3	3	...	
B30	400-405	Coronary atherosclerotic heart disease	66	29	44	29	2	2	1	1	1	1	1	...	
B31	420-422	Arteriosclerotic heart disease	152	73	79	73	44	2	2	2	2	2	2	...	
B32	420-424	Other diseases of heart	140	47	80	47	6	6	7	7	7	7	7	...	
B33	440-443	Hypertension with heart disease	21	8	13	8	1	1	1	1	1	1	1	...	
B34	444-447	Hypertension without mention of heart disease	69	35	31	35	3	3	2	2	2	2	2	...	
B35	470-527	Diseases of the respiratory system	110	40	40	40	30	0	3	3	3	3	3	...	
B36	480-483	Influenza	110	40	40	40	30	0	3	3	3	3	3	...	

July 1, 1962, Estimated Population, 300,000. Total Resident Deaths, 5,486. Rate per 1,000 Population, 11.4.

B37	581	Pneumonia	7	4	1	1	1	1	1	1	1	1	1	...	
B38	590-637	Diseases of the respiratory system	35	19	14	19	1	1	1	1	1	1	1	...	
B39	610-650	Diseases of the digestive system	65	30	18	30	7	2	8	8	8	8	8	...	
B40	650-653	Ulcer of stomach and duodenum	101	40	61	40	6	6	6	6	6	6	6	...	
B41	654	Appendicitis	13	12	6	12	1	1	1	1	1	1	1	...	
B42	655-657	Intestinal obstruction and hernia	23	8	12	8	3	3	3	3	3	3	3	...	
B43	658, 671, 672	Diarrhea of newborn, enteritis and colitis, except diarrhoea of liver	7	4	1	4	1	1	1	1	1	1	1	...	
B44	673	Diseases of the biliary system	70	46	28	46	1	1	1	1	1	1	1	...	
B45	680-687	Nephritis and nephrosis	65	39	16	39	7	2	8	8	8	8	8	...	
B46	688	Hyperplasia of prostate	27	1	1	1	1	1	1	1	1	1	1	...	
B47	690-695	Diseases of the kidney and the suprarenal glands	47	1	1	1	1	1	1	1	1	1	1	...	
B48	700-716	Diseases of the skin and organs of locomotion	53	1	1	1	1	1	1	1	1	1	1	...	
B49	720-729	Congenital malformations	6	2	4	2	4	4	4	4	4	4	4	...	
B50	730-733	Birth defects of early infancy	34	17	17	17	2	2	2	2	2	2	2	...	
B51	734-738	Birth defects of late infancy and childhood	88	43	27	43	10	10	10	10	10	10	10	...	
B52	739-743	Infectious of the newborn	51	24	17	24	1	1	1	1	1	1	1	...	
B53	744-747	Other diseases peculiar to early infancy and childhood	3	1	1	1	1	1	1	1	1	1	1	...	
B54	750-755	Starchy unquillity and ill-defined conditions	33	18	9	18	0	0	4	4	4	4	4	...	
B55	756-759	Accidents, poisonings, violence	175	104	42	104	6	6	6	6	6	6	6	...	
B56	760-762	Motor vehicle accidents	52	32	11	32	1	1	1	1	1	1	1	...	
B57	763-765	All other accidents except falls	40	25	12	25	0	0	8	8	8	8	8	...	
B58	766-768	Falls	40	31	14	31	1	1	1	1	1	1	1	...	
B59	769-771	Homeicide	20	17	5	17	1	1	1	1	1	1	1	...	
B60	772-773	Suicide	1	1	1	1	1	1	1	1	1	1	1	...	
B61	774-775	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	...	
B62	776-777	ALL CAUSES	5486	1813	1414	1813	130	123	133	20	21	33	303	1298	1708

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF UNION CITY FOR 1932

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	691-138	Infective and parasitic diseases	10	12	4	2	1	1	1	1	1	1	2	8	4	1
B2	030-016	Diseases of the respiratory system	11	9	4	2	1	1	1	1	1	1	2	2	4	3
B3	030-019	Tuberculosis, other forms	3	2	1	1	1	1	1	1	1	1	1	1	1	1
B4	040-029	Syphilis and its sequelae	3	2	1	1	1	1	1	1	1	1	1	1	1	1
B5	043	Zyphoid fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	050-051	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	050-051	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	056	Diphtheria	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
B10	057	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	057	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	060	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	064	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	065	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B15	100-105	Malaria and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	110-111	Residual (030-039, 041, 042, 044, 046, 052-054, 059-074, 081-083, 086-096, 120-138)	2	1	1	1	1	1	1	1	1	1	1	1	1	1
B18	140-239	Neoplasms	110	107	52	52	2	2	2	2	2	2	11	42	20	1
B19	240-259	Accidents, violence, and suicides	110	110	52	52	2	2	2	2	2	2	11	40	20	1
B20	260	Allergic, endocrine system, metabolic and nutritional diseases	22	8	13	13	8	13	8	13	8	13	8	13	8	13
B21	290-299	Diseases of the blood and blood-forming organs	15	3	3	12	3	12	3	12	3	12	3	12	3	12
B22	300-329	Arteriosclerosis and atherosclerosis	6	4	4	4	4	4	4	4	4	4	4	4	4	4
B23	330-334	Residual (294-296)	6	4	4	4	4	4	4	4	4	4	4	4	4	4
B24	400-408	Mental, psychoneurotic and psychomotor and sense organs	64	30	34	34	30	34	30	34	30	34	30	34	30	34
B25	410-414	Alcoholism and drug addiction	58	27	31	31	27	31	27	31	27	31	27	31	27	31
B26	420-422	Vascular lesions affecting central nervous system	58	27	31	31	27	31	27	31	27	31	27	31	27	31
B27	430-434	Nonmeningococcal meningitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B28	440-444	Residual (341-346, 350-357, 369-380, 370-389, 390-398)	316	170	150	150	1	1	1	1	1	1	21	80	206	1
B29	444-447	Chronic rheumatic heart disease	16	14	11	11	16	14	11	11	16	14	11	11	16	14
B30	450-457	Residual (450-456, 459-468)	25	11	11	11	11	11	11	11	11	11	11	11	11	11
B31	470-527	Diseases of the respiratory system	11	8	8	8	11	8	8	11	8	8	11	8	8	11
B32	480-487	Influenza	1	1	1	1	1	1	1	1	1	1	1	1	1	1

B33	590-597	Pneumonia	17	8	9	9	17	8	9	17	8	9	17	8	9	17
B34	598-599	Residual (470-475, 510-527)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B35	600-603	Diseases of the digestive system	20	14	12	12	20	14	12	20	14	12	20	14	12	20
B36	604-608	Diseases of the stomach and duodenum	6	4	4	4	6	4	4	6	4	4	6	4	4	6
B37	609-611, 612	Intestinal obstruction and hernia	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B38	613-615	Enteritis, duodenitis, enteritis and colitis, except hemorrhoids	3	1	1	1	3	1	1	3	1	1	3	1	1	3
B39	616-617, 618	Hemorrhoids	2	1	1	1	2	1	1	2	1	1	2	1	1	2
B40	619-622	Residual (609-628, 642, 644, 645, 673-678, 680, 682-687)	9	5	5	5	9	5	5	9	5	5	9	5	5	9
B41	640-650	Diseases of the genito-urinary system	10	7	3	3	10	7	3	10	7	3	10	7	3	10
B42	651-657	Hypernephritis and nephrosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B43	658-663	Hypertrophy of prostate	3	1	1	1	3	1	1	3	1	1	3	1	1	3
B44	664-670	Pregnancy (661-667, 668-672, 690-697)	3	1	1	1	3	1	1	3	1	1	3	1	1	3
B45	671-679	Diseases of the skin and cellular tissue	2	1	1	1	2	1	1	2	1	1	2	1	1	2
B46	680-684	Diseases of the bones and organs of movement	8	5	3	3	8	5	3	8	5	3	8	5	3	8
B47	685-689	Congenital malformations	16	8	8	8	16	8	8	16	8	8	16	8	8	16
B48	690-694	Birth injuries, post-natal infancy and tetanus	9	1	1	1	9	1	1	9	1	1	9	1	1	9
B49	695-699	Infections of the newborn	9	1	1	1	9	1	1	9	1	1	9	1	1	9
B50	700-702	Other diseases peculiar to early infancy and infancy	9	4	5	5	9	4	5	9	4	5	9	4	5	9
B51	703-708	Unqualified	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B52	709-710	Accidents, violence and suicides	24	22	3	3	24	22	3	24	22	3	24	22	3	24
B53	711-714	Motor vehicle accidents	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B54	715-719	All other accidents except falls	9	8	1	1	9	8	1	9	8	1	9	8	1	9
B55	720-729	Falls	5	4	1	1	5	4	1	5	4	1	5	4	1	5
B56	730-739	Police intervention, execution and operations of war	7	7	1	1	7	7	1	7	7	1	7	7	1	7
B57	740-749	Residual (720-739, 740-749)	636	305	200	200	636	305	200	636	305	200	636	305	200	636
B58	750-759	ALL CAUSES	636	305	200	200	636	305	200	636	305	200	636	305	200	636
B59	800-809	Total Resident Deaths, 650.														
B60	810-819	Estimated Population, 56,000.														
B61	820-829	Total Population, 117.														
B62	830-839	Rate per 1,000 Population, 11.7.														

July 1, 1932, Estimated Population, 56,000.

Total Resident Deaths, 650.

Rate per 1,000 Population, 11.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HUNTERDON COUNTY FOR 1952
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	1-4	5-14	15-24	25-44	45-64	65+ Unknown		
B1	001-138	Infective and parasitic diseases	7	0	1											
B12	001-003	Tuberculosis, other forms	6	5	1											
B14	020-023	Syphilis and its sequelae														
B15	040	Typhoid fever														
B16	043	Cholera, all forms														
B17	043-045	Scarlet fever and streptococcal sore throat														
B18	050-051	Diphtheria														
B19	056	Whooping cough														
B20	057	Measles														
B21	080	Measles and other rickettsial diseases														
B22	080	Measles and other rickettsial diseases														
B23	084	Acute poliomyelitis														
B24	085	Measles and other rickettsial diseases														
B25	100-105	Typhoid fever														
B26	110-111	Residual (030-039, 041, 042, 044, 046, 052-054, 053-074, 081-083, 086-088, 120-126)	1	1												
B27	140-229	Neoplasms	70	42	33											
B28	340-345	Neoplasms	70	42	33											
B29	240-239	Benign and unspecified neoplasms														
B30	200	Allergic, endocrine system, metabolic and nutritional diseases	10	6	5											
B31	200-203	Diabetes	6	4	2											
B32	300-326	Diseases of the nervous system and sense organs	6	4	2											
B33	320-324	Mental, psychoneurotic and personality disorders	2	2												
B34	340	Residual (204-226)	2	2												
B35	400-468	Diseases of the blood and blood-forming organs	17	9	8											
B36	420-422	Anemias	2	1	1											
B37	430-443	Residual (204-226)	15	8	7											
B38	444-447	Chronic rheumatic heart disease	6	6												
B39	448-451	Arteriosclerotic and degenerative heart disease	17	9	8											
B40	452-457	Other diseases of heart disease	3	1	2											
B41	458-468	Hypertension without mention of heart	3	1	2											
B42	469-483	Residual (410-466, 460-468)	20	10	10											
B43	470-527	Diseases of the respiratory system	1	1												
B44	480-483	Influenza														
B45	530-552	Pneumonia	24	12	11											
B46	553-557	Residual (470-475, 510-537)	7	4	3											
B47	558-563	Diseases of the digestive system	10	5	5											
B48	564-568	Ulcer of stomach and duodenum	3	2	1											
B49	569-570	Appendicitis	1	1												
B50	571-579	Intestinal obstruction and hernia	4	3	1											
B51	580-581, 572	Diarrhea of newborn, enteritis and colitis, except diarrhoea of newborn	2	2												
B52	582	Cirrhosis of liver	6	4	2											
B53	583-587	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587) of the circulatory system	3	3												
B54	588-594	Nephritis and nephrosis	10	7	3											
B55	610	Hypertrophy of prostate	2	2												
B56	640-650	Pregnancy, childbirth and the puerperium	2	2												
B57	720-749	Diseases of the bones and organs of movement	2	1	1											
B58	750-759	Congenital malformations	2	1	1											
B59	760-778	Certain diseases of early infancy	12	6	6											
B60	779-782	Other diseases of early infancy	5	2	3											
B61	783-785	Infection of the newborn, asphyxia and atelectasis	1	1												
B62	786-779	Other diseases peculiar to early infancy and immature unqualified	6	3	3											
B63	790-795	Symptoms, senility and ill-defined conditions	4	2	2											
B64	800-802	Motor vehicle accidents	19	17	2											
B65	803-805	All other accidents except falls	13	8	5											
B66	806-808	Falls	8	1	7											
B67	809-810	Suicide	8	5	3											
B68	811-812	Homicide	8	5	3											
B69	813-814	Police intervention, execution and operations of war														
B70	815-819	ALL CAUSES	536	300	210	4	3	27	5	8	10	29	134	315		

July 1, 1952, Estimated Population, 43,000.

Total Resident Deaths, 528.

Rate per 1,000 Population, 12.2.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF OCEAN COUNTY FOR 1952
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	601-138	Infective and parasitic diseases	7	4															
B1	601-005	Tuberculosis of respiratory system	6	4															
B1	601-010	Tuberculosis, other forms																	
B3	620-029	Syphilis and its sequelae	1																
B5	645	Cholera																	
B6	645-048	Dysentery, all forms																	
B7	650-051	Scarlet fever and streptococcal sore throat																	
B8	665	Diphtheria																	
B8	665	Diphtheria, except																	
B10	657	Meningococcal infections																	
B11	663	Acute poliomyelitis																	
B12	680	Smallpox																	
B13	684	Measles																	
B15	100-108	Cyphus and other rickettsial diseases																	
B16	110-117	Malaria																	
B17	140-230	Leishmaniasis (530-039, 641, 642, 644, 649, 652-654, 656-664, 661-663, 686-696, 720-738)	121	54															
B18	140-206	Malignant neoplasms	118	53															
B19	240-230	Benign and unspecified neoplasms	3	1															
B20-250		Allergic, endocrine system, metabolic and nutritional diseases	30	18															
B20	260	Diseases of the blood and blood-forming organs	21	11															
B20-290		Diseases of the circulatory system	4	3															
B21	300-326	Anemia (561-569)	1																
B21	300-326	Menstrual psychoneurotic and personality disorders	1																
B22	330-308	Diseases of the nervous system and sense organs	87	41															
B22	330-334	Neuronal lesions affecting central nervous system	76	37															
B23	340	Nonmeningococcal meningitis (530-350, 370-380, 390-395)	3	2															
B24	400-468	Diseases of the circulatory system	331	211															
B24	400-402	Rheumatic fever	1																
B25	410-410	Chronic rheumatic heart disease	8	5															
B26	420-422	Atherosclerotic and degenerative heart disease	283	171															
B26	420-422	Myocardial infarction	31	19															
B26	440-445	Hypertension with heart disease	7	3															
B26	444-447	Hypertension without mention of heart	29	9															
B29	470-527	Head and neck (450-486, 490-498)	24	12															
B30	480-483	Diseases of the respiratory system	1																
B30	480-483	Influenza																	

B31	490-403	Pneumonia	18	7															
B32	500-502	Bronchitis	5	15															
B32	500-502	Residual (470-473, 510-527)	10	8															
B32	530-587	Diseases of the digestive system	26	13															
B33	540-541	Ulcer of stomach and duodenum	1	4															
B33	550-563	Appendicitis	1	1															
B33	500-561, 570	Intestinal obstruction and hernia	6	3															
B30	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	3															
B37	581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	4															
B38	590-637	Diseases of the genito-urinary system	2	5															
B38	590-594	Nephritis and nephrosis	10	8															
B39	610	Sexually transmitted diseases (590-609, 611-617, 630-636, 630-637)	1	1															
B40	640-660	Pregnancy, childbirth and the puerperium	1	1															
B40	660-716	Diseases of the skin and cellular tissue	1	1															
B41	720-749	Diseases of the bones and organs of movement	1	1															
B41	750-770	Certain diseases of early infancy	1	2															
B42	790-782	Birth injuries, postnatal asphyxia and atelectasis	13	10															
B43	795-768	Infections of the newborn	1	1															
B44	700-770	Other diseases peculiar to early infancy and immaturity (760-769, 770-779)	4	5															
B45	780-795	Stomatitis, oral and ill-defined conditions	1	1															
B45	780-795	Accidents, poisonings and violence	52	39															
B47	810-835	Motor vehicle accidents	21	17															
B48A	830-865	All other accidents except falls	10	7															
B48B	830-865	Falls	9	5															
B49	870-879	Suicide	10	9															
B50A	890-985	Homicide	2	1															
B50B	890-985	Police intervention, execution and operations of war																	
B50C	001-909	ALL CAUSES	729	414															

July 1, 1952, Estimated Population, 85,000.

Total Resident Deaths, 729.

Rate per 1,000 Population, 12.6.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PASSAIC CITY FOR 1952
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							
			Males	Females	Males	Females	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown	
B1	001-138	Infective and parasitic diseases	14	17	1	1										
B2	001-008	Tuberculosis of respiratory system	8	8												
B3	001-009	Tuberculosis of other forms	1	1												
B4	040-029	Syphilis in its sequense	2	2												
B4	040	Typhoid fever														
B4	043	Cholera														
B4	045-048	Dysentery, all forms														
B4	049	Scarlet fever and streptococcal sore throat														
B8	060-061	Whooping cough														
B9	066	Measles														
B10	087	Whooping cough														
B11	083	Plague														
B11	084	Septicemic plague														
B12	084	Measles														
B14	085	Typhus and other rickettsial diseases														
B15	100-108	Neoplasms														
B16	110-117	Malaria														
B17	140-220	Neoplasms (100-111) 047, 044, 040, 052-054, 050-074, 083-085, 085-096, 120-138)	102	111	1	1										
B18	140-205	Malignant neoplasms	102	106	1	1										
B19	210-230	Benign and unspecified neoplasms	105	104	2	2										
B20	240-250	Alcohol, endocrine system, metabolic and nutritional diseases	3	2	1	1										
B20	260	Diabetes mellitus	23	0	17	1										
B20	260-269	Diseases of the nervous system and sense organs	15	2	3											
B21	280-293	Diseases of the blood and blood-forming organs	3	2	1	1										
B22	300-326	Mental, psychoneurotic and personality disorders	6	5	2	3										
B22	330-338	Noncurable lesions affecting central nervous system	69	84	23	23										
B23	340-344	Residual (341-345, 350-357, 360-360, 370-380, 390-398)	78	32	25	25										
B24	400-408	Diseases of the circulatory system	273	147	118	6										
B24	400-402	Ischemic heart disease	1	1												
B24	400-404	Coronary atherosclerosis	1	1												
B24	420-422	Arteriosclerosis and degenerative heart disease	29	6	2	3										
B27	430-434	Other diseases of heart	81	81	2	1										
B28	440-443	Hypertension with heart disease	38	10	24	1										
B29	444-447	Hypertension without mention of heart	9	9	2	2										
B30	470-527	Diseases of the respiratory system	14	9	15	1										
B30	480-483	Influenza	23	9	12	1										
B31	500-503	Purpura	8	8												
B32	500-502	Residual (470-475, 510-527)	1	1												
B33	530-537	Diseases of the digestive system	25	13	11											
B33	540-541	Ulcer of stomach and duodenum	9	4	1											
B33	540-541	Intestinal obstruction and hernia	2	2												
B33	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1												
B37	581	Cirrhosis of liver	7	7												
B38	590-597	Diseases of the genito-urinary system	10	2	7	1										
B38	590-594	Nephritis and nephrosis	15	9	3	1										
B38	610	Hypertension of renals	5	2	2	1										
B40	640-680	Pregnancy, childbirth and the puerperium	2	1	1											
B41	720-710	Diseases of the skin and cellular tissue	1	1												
B41	720-719	Congenital malformations of infancy	10	4	5	1										
B42	700-762	Birth injuries, postnatal asphyxia and atelectasis	4	3	1											
B43	703-768	Infections of the newborn	2	1	1											
B44	705-776	Other diseases peculiar to early infancy and immaturity	4	1	3											
B45	780-795	Symptoms, mental and ill-defined conditions	2	1	1											
B47	E810-835	Accidents, poisonings and violence	30	25	3	2										
B47	E810-835	Motor vehicle accidents	9	8	1	1										
B48A	E900-902	All other accidents except falls	0	7	1	1										
B48B	E900-904	Falls	7	0	1											
B49	E970-979	Suicide	5	4												
B50A	E980-988	Homicide	1	1												
B50B	E984-999	Police intervention, execution and operations of war	1	1												
B50B	901-999	ALL CAUSES	508	826	250	12	10	5	2	5	31	227	311			

July 1, 1952, Estimated Population, 58,000.

Total Resident Deaths, 698.

Rate per 1,000 Population, 10.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF SOMERSET COUNTY FOR 1952 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				65+ Unknown
											5-9	10-14	15-24	25-44	
B1	691-708	Infective and parasitic diseases	13	6	5	2	2	1	1	1	3	6	3	6	3
B2	709-726	Tuberculosis and its sequelae	10	5	3	2	2	1	1	1	3	5	2	5	2
B3	727-744	Syphilis and its sequelae	2	1	1	1	1	1	1	1	1	1	1	1	1
B4	745-762	Typhoid fever	2	1	1	1	1	1	1	1	1	1	1	1	1
B5	763-780	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1	1
B6	781-798	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1	1
B7	799-816	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1
B8	817-834	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1	1
B9	835-852	Streptococcal infections	1	1	1	1	1	1	1	1	1	1	1	1	1
B10	853-870	Plague	1	1	1	1	1	1	1	1	1	1	1	1	1
B11	871-888	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1	1
B12	889-906	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1	1
B13	907-924	Measles	1	1	1	1	1	1	1	1	1	1	1	1	1
B14	925-942	Scarlet fever and streptococcal infections	1	1	1	1	1	1	1	1	1	1	1	1	1
B15	943-960	Other diseases of the respiratory system	1	1	1	1	1	1	1	1	1	1	1	1	1
B16	961-978	Other diseases of the circulatory system	1	1	1	1	1	1	1	1	1	1	1	1	1
B17	979-996	Other diseases of the digestive system	1	1	1	1	1	1	1	1	1	1	1	1	1
B18	997-1014	Other diseases of the genitourinary system	1	1	1	1	1	1	1	1	1	1	1	1	1
B19	1015-1032	Other diseases of the nervous system	1	1	1	1	1	1	1	1	1	1	1	1	1
B20	1033-1050	Other diseases of the sense organs	1	1	1	1	1	1	1	1	1	1	1	1	1
B21	1051-1068	Other diseases of the endocrine system	1	1	1	1	1	1	1	1	1	1	1	1	1
B22	1069-1086	Other diseases of the circulatory system	1	1	1	1	1	1	1	1	1	1	1	1	1
B23	1087-1104	Other diseases of the blood and blood-forming organs	1	1	1	1	1	1	1	1	1	1	1	1	1
B24	1105-1122	Other diseases of the respiratory system	1	1	1	1	1	1	1	1	1	1	1	1	1
B25	1123-1140	Other diseases of the digestive system	1	1	1	1	1	1	1	1	1	1	1	1	1
B26	1141-1158	Other diseases of the genitourinary system	1	1	1	1	1	1	1	1	1	1	1	1	1
B27	1159-1176	Other diseases of the nervous system	1	1	1	1	1	1	1	1	1	1	1	1	1
B28	1177-1194	Other diseases of the sense organs	1	1	1	1	1	1	1	1	1	1	1	1	1
B29	1195-1212	Other diseases of the endocrine system	1	1	1	1	1	1	1	1	1	1	1	1	1
B30	1213-1230	Other diseases of the circulatory system	1	1	1	1	1	1	1	1	1	1	1	1	1

B31	400-408	Fractures	22	10	10	1	1	1	1	1	1	1	1	1	1
B32	500-502	Bronchitis	1	1	1	1	1	1	1	1	1	1	1	1	1
B33	503-507	Diseases of the digestive system	6	5	1	1	1	1	1	1	1	1	1	1	1
B34	508-511	Ulcer of stomach and duodenum	34	17	15	1	1	1	1	1	1	1	1	1	1
B35	512-515	Intestinal obstruction and hernia	3	3	1	1	1	1	1	1	1	1	1	1	1
B36	516-519	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	4	2	2	1	1	1	1	1	1	1	1	1	1
B37	520-522	Diarrhoea of newborn	5	1	3	1	1	1	1	1	1	1	1	1	1
B38	523-526	Stomach of liver	11	6	4	1	1	1	1	1	1	1	1	1	1
B39	527-530	Diseases of the genitourinary system	10	4	4	1	1	1	1	1	1	1	1	1	1
B40	531-534	Nephritis and nephrosis	17	10	4	1	1	1	1	1	1	1	1	1	1
B41	535-538	Pyelitis and pyelonephritis	9	3	3	1	1	1	1	1	1	1	1	1	1
B42	539-542	Prostatitis	6	6	1	1	1	1	1	1	1	1	1	1	1
B43	543-546	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1	1	1
B44	547-550	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1	1	1
B45	551-554	Diseases of the bones and organs of movement	2	1	1	1	1	1	1	1	1	1	1	1	1
B46	555-558	Congenital malformations in infancy	2	1	1	1	1	1	1	1	1	1	1	1	1
B47	559-562	Birth injuries, postnatal asphyxia and atelectasis	2	1	1	1	1	1	1	1	1	1	1	1	1
B48	563-566	Infections of the newborn	2	2	2	1	1	1	1	1	1	1	1	1	1
B49	567-570	Other diseases peculiar to early infancy and immaturity	2	2	2	1	1	1	1	1	1	1	1	1	1
B50	571-574	Sturdy unqualified and ill-defined conditions	15	9	5	1	1	1	1	1	1	1	1	1	1
B51	575-578	Accidents, poisonings and violence	3	3	3	1	1	1	1	1	1	1	1	1	1
B52	579-582	Motor vehicle accidents	21	19	1	1	1	1	1	1	1	1	1	1	1
B53	583-586	All other accidents except falls	27	15	4	1	1	1	1	1	1	1	1	1	1
B54	587-590	Falls	17	7	10	1	1	1	1	1	1	1	1	1	1
B55	591-594	Suicide	12	9	3	1	1	1	1	1	1	1	1	1	1
B56	595-598	Homicide	1	1	1	1	1	1	1	1	1	1	1	1	1
B57	599-602	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1	1
B58	603-606	ATI, CAUSES	855	477	374	13	9	49	8	5	11	61	222	590	1

July 1, 1952, Estimated Population, 103,090. Total Resident Deaths, 855. Rate per 1,000 Population, 8.3.

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 periods 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 1952-1953, 47,467 searches of the records were made and copies of certificates issued for which \$35,554.15 was received in fees. A total of 13,563 of the searches and certified copies was for purposes exempt from charge by law. Receipts were \$1,543.35 more than the amount collected during the preceding year. There was a decrease of 394 or 3 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 year approximately 207,000 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 82,000 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 eighty-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 three calls upon local registrars. 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-nine 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.

On October 1, 1952, the reports of communicable diseases including tuberculosis and venereal diseases were transferred from the Division of Preventable Diseases to the Division of Vital Statistics and Administration. The work incident to reporting and six transferred persons were placed under the supervision of the State Registrar.

GENERAL SUMMARY				
Certificates received, examined, coded, and permanently filed:	Calendar Years			
	1949	1950	1951	1952
Births	97,414	97,734	105,218	110,215
Stillbirths	1,972	1,845	1,993	2,002
Marriages	44,469	46,291	44,564	41,125
Remarriages	1,095	1,025	1,073	1,071
Deaths	47,706	48,837	50,098	51,430
Total	192,656	195,732	202,946	205,843

	Fiscal Years			
	1949	1950	1951	1952
Searches made and/or certified copies issued for which fees were received	22,779	28,115	33,233	33,904
Certified copies issued and searches made in pension and other cases for which no fees were received	23,223	18,456	13,957	13,563
Fees received for searches and certified copies	\$22,779.76	\$28,115.39	\$34,010.80	\$35,554.15

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