

# SEVENTY-THIRD ANNUAL REPORT

OF THE

# Department of Health

OF THE

# STATE OF NEW JERSEY

1950



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Trenton, New Jersey

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1951

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

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

STATE OF NEW JERSEY,

DEPARTMENT OF HEALTH,

TRENTON, N. J., July 1, 1950.

*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, 1950.

Respectfully submitted,

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

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HEALTH OF THE STATE OF NEW JERSEY, 1950

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# Report of the State Commissioner of Health

July 1, 1949—June 30, 1950

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By DANIEL BERGSMAN, M. D., M. P. H.

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In the last annual report submitted to you I listed two primary problems of State health administration and described what was being done to meet them. The first of these was the reorganization of the structure and services of the State Department of Health and the second and greater need, was that of securing adequate and comprehensive coverage of local health services throughout New Jersey.

Since the submission of that report, the reorganization of the Department has been virtually completed and significant steps have been taken to secure the legislation necessary before all of our communities can provide themselves with local public health services. New responsibilities for the protection of the public health have, however, been thrust upon us by the course of history and the very survival of our people may at some time depend upon the effectiveness of the planning, training and preparation now going forward in the field of medical and health preparedness for civil defense.

Atomic, chemical and bacteriological warfare or sabotage are words weighted with fear—especially the fear of the unknown. These are threats which we must face; they represent conditions we may encounter. However, the knowledge which we have concerning civilian protection against these threats, permits us to divest them of the fear caused by ignorance. We can protect ourselves to a significant degree against these forces.

Training of key personnel of this Department in civil defense was begun early in the year. This nucleus of trained professional personnel is now to be used in providing training courses in medical and health preparedness for large numbers of civil defense leaders and workers throughout New Jersey. We can also profit in our planning by close study of the experiences of the recent disaster at South Amboy. A complete and separate report on the medical and public health aspects of this explosion has been submitted to Governor Driscoll.

The work and planning which have been accomplished since the passage of the reorganization law in 1947 and the adoption of our new Constitution

in reorganizing the State Department of Health gives us a large advantage in civil defense, for if this work had not been completed it would be necessary to begin the task now in order to meet civil defense needs. We are that much ahead in our progress. But we have one vital and outstanding encumbrance to our civil defense in public health—the almost total lack of organized local public health services in large areas of New Jersey. Civil defense in public health is little more than paper planning for a community or area unless there exists in that area local health facilities and services. The dead weight to our progress in this field is the horse-and-buggy era law of 1887 which makes each municipality and township a separate unit of local health administration regardless of its population.

Recognition of this need culminated in the appointment of the Governor's Committee on Local Health Administration in February, 1950, under the chairmanship of Mrs. Gloanna W. MacCarthy of Maplewood. This committee has worked intensively, making a thorough study of the organization of local health services in New Jersey and the need for additional legislation to permit the formation of adequate local health departments in all parts of the State.

The results of the studies made by the Governor's Committee and a summary of its work up to that time were published by the Committee early in June in an interim report. This was followed by a public hearing conducted at the State House by the Committee. The objective of the Committee in its studies, in the interim report and in the public hearing is to secure permissive legislation which would make it possible for municipalities to join their resources on their own initiative to provide themselves with local public health services to meet their local needs.

#### REORGANIZATION OF DEPARTMENT BROUGHT TO COMPLETION

Progress reported last year in the organization of six departmental bureaus has been consummated during the past year. There has been some realignment of certain activities resulting in improved function and the nomenclature for major units is to be changed from bureaus to divisions. All of the six bureaus are now under the administration of a carefully selected and well-qualified bureau director.

We have seen progress in the growth of consultation services given by the Department as we change from a policy of direct services to people to the proper State function of providing consultative public health services to local health agencies. The shortage of properly trained public health personnel has been a delaying handicap. In some instances we have been able to provide special training for personnel already employed so that they have been enabled to do the work required in new programs. In-service training is a continuing function of the Department and has a two-fold result: it

provides us with better trained personnel and it affords to the staff the confidence and security of the opportunity of promotion within the ranks.

The Department operates under the physical handicaps of a very crowded laboratory, no space for our Central State Health District Headquarters and scattered office quarters in eight widely separated buildings in Trenton. Some progress has been made during the past year in consolidating quarters of individual units in the same building and we are hopeful of an early solution of at least some of these administrative handicaps.

#### CHILD HEALTH SERVICES IN A SINGLE BUREAU

By realigning some of the service units of the Department, it has been possible to bring together in the Bureau of Constructive Health all of the health functions which are most closely associated with the health of children. This is a logical and economical procedure which permits increased and improved services through closer integration of related personnel and facilities without additional cost and, indeed, in some instances, a reduction of cost has been possible.

Dental disease is the most common of all our afflictions. Yet there are certain preventive measures which communities may take to improve their dental health. One of these is the community dental health program based on early detection and treatment of dental disease in the beginning elementary grade levels. The Section on Dental Diseases has provided funds and supervision for 34 such programs in 18 counties of the State. These are demonstration programs and as the cost is assumed by the community, the funds released can be used to start another such program.

Application of sodium fluoride to the teeth is another preventive measure which has been continued as a part of the State-supervised dental health program. Fluoridation of community water supplies under proper supervision is a third and most effective preventive measure in the field of dental health and at least one community in New Jersey has initiated this practice. Several areas in New Jersey are provided with water having a natural fluoride content of the required concentration and the children who were born and live there have much healthier teeth than the average.

Our civil defense needs and the threat of atomic and bacteriological warfare on our soil have served to stress the importance of nutrition in public health. There is definite clinical proof that recovery from radiation sickness is dependent in large measure upon the nutrition of the individual. The relationship of nutrition to resistance and recovery from infectious diseases has long been known. The nutrition program of the Department has spread across the lines of bureaus and sections, since its application is so general in the field of public health. A demonstration pilot study in nutrition was conducted in Maple Shade, Burlington County, during the past year with the

help of a number of local, county and State agencies interested in nutrition. The report of this pilot study will serve as a guide to other communities in the State. As the work in nutrition has increased, an additional nutritionist has been provided in the Department.

Following the same method used to introduce the nutrition program through related activities in other units of the Department, a beginning has been made to integrate preventive or positive mental health in the various program activities of the Department. The anticipatory guidance work with mothers by public health nurses continues to pay its dividends in better parent-child relationships.

We have enjoyed our outstanding record of low infant and maternal mortality for so many years that it has become a part of what we normally expect as our way of life—yet a look at this record shows how much we owe to the medical, nursing, hospital and public health workers who have made this possible. If the infant mortality rate which prevailed only ten years ago had been effective during the past year, infant deaths would have been greater by 1,180; and if the rate of 20 years ago had prevailed, 4,223 more of our babies would have died. This is certainly a marvelous achievement and a record in which our State may take pride.

It must be noted, however, that many of our communities lack the public health nursing services and the baby keep-well stations which have contributed to our success in this field. These inequalities of those who have and those who have not, arise from the lack of adequate local health departments throughout New Jersey. It is this inequality toward which the Governor's Committee on Local Health Administration is directing its work.

Rheumatic fever, cerebral palsy and infantile paralysis are very real words to children crippled by these afflictions—words whose effect has been softened appreciably by the work of the Crippled Children Commission. For children crippled by these and other causes, the Commission provides hospital, pediatric, surgical, nursing and medical social services, for their care, training and eventual rehabilitation.

#### HEALTH FOR PRODUCTION; A CIVIL DEFENSE NEED

New Jersey demonstrated its industrial production power during World War II. We have here the industries, the machines, the know how, and the man and woman power to provide our share in the defense of democracy and individual liberty. Once more the health of the production worker—and the people behind it—become a vital part of our defense. The Section on Adult and Industrial Health, created during the last conflict to meet the health needs of industrial New Jersey, has now developed a well-rounded program of adult and industrial health.

Radiological health is no longer confined to such far removed spots as Bikini, but is a new health factor in New Jersey. The radiological aspects of civil defense are, of course, a serious problem; one which is being met and prepared for by the Health Department and allied agencies in the civil defense program. Aside from the radiological needs of civil defense, the increasing use of radioactive materials and radiation-producing machines in industry and business has created a new public health need. Consultation and services in radiological health and a program of supervision and guidance to industries in the use and disposal of radioactive materials and the use of x-rays in industry have been provided. Specialized training has been provided for certain members of the staff and radiological monitoring equipment has been purchased. Completed as a part of the regularly assigned task of the Section on Adult and Industrial Health before the Korean hostilities began, the radiological control program of the Department was already partially prepared to meet the radiological training demands of the State civil defense program.

Activities in the investigation and control of atmospheric pollution of communities surrounding industrial areas have been increased. Such investigations are complex and time-consuming since each problem commonly affects a group of plants which may be in two or more municipalities. New industrial hygiene field and laboratory equipment, including automatic recording devices and a trailer for use as a portable station, have been purchased for use in atmospheric pollution control. The present difficulty in this activity is the lack of sufficient research to set proper standards and the difficulty of proving in each case that a hazard to the public health exists even though there may be little doubt of its being a public nuisance.

Public health laboratory services are one of the long established functions of public health operating day-after-day and providing an unseen and generally unrecognized service for the health of the community. The Bureau of Laboratories of the Department continued to meet increased demands for services and instituted a number of new services and improved techniques. Three branch laboratories in Bivalve, Tuckerton and Newark, originally used for examination of shellfish waters, are now equipped to do examination of samples of milk, cream and milk, products collected in those areas by our inspectors. Rh testing of prenatal blood specimens was more than doubled and the Section of Pathology is completing a series of microscopic slides of tumor tissues for professional education.

#### ADMINISTRATIVE AND PERSONNEL CHANGES PERMIT IMPROVED SERVICES AT LOWER COST

The Bureau of Vital Statistics and Administration established in 1948 has devoted its efforts during the past year to a searching evaluation of the statistical, budgetary, accounting, and personnel methods and practices of the

Department as a basis for the development of better and more economical services. The continuing reorganization process of the Department required accompanying fiscal and personnel adjustments. New specifications were written for many positions in the Department and a new civil service coding for each position was completed and applied. Studies concerning the application of a merit system to all local health personnel were made.

The new improved accounting system has made possible regular monthly and quarterly reports to bureau directors and to section and program chiefs, paving the way for more effective use of available funds.

Reorganization of the activities of the Board of Barber Examiners and the Board of Beauty Culture Control in the Section on Examination, Licensing and Registration was brought to virtual completion with the appointment of a chief for that section. Throughout the year, administrative policy procedures were initiated to coordinate the administration of these boards with the general activities and structure of the Department. This reorganization was accomplished without delay in the issuance of licenses and while the section is not yet fully responsible for the entire examining and licensing program of the Department, it is planned to accomplish this objective as soon as necessary housing can be provided.

We have placed our public health statistical services on a current basis so that statistics derived from departmental data are now available for immediate use and study. Statistics are little more than numbers unless they are properly studied and analyzed for the preventive health information which they contain. New automatic equipment has made possible the issuance of weekly and monthly morbidity summaries and a statistical study of the tuberculosis records has shown the need for revising the morbidity reporting system. Special statistical studies were made in connection with a cancer survey and with several diabetes surveys; considerable statistical work was completed for the proposed evaluation studies of local health services.

Sources of statistical data in the field of public health exist in other departments of the State Government, and similarly, this Department has statistical information which is of use to other departments. During the past year, integration of statistical materials has been effected with the Department of Institutions and Agencies, particularly in regard to the use of tuberculosis records. Basic statistical data on specialized problems have also been furnished to several advisory committees including the Governor's Committee on Local Health Administration and the Governor's Temporary Committee on Chronically Ill.

New standard certificates for reporting of births and deaths were introduced. There was a 21 per cent increase in the number of certified copies of vital records provided without charge to servicemen and veterans, to assist them in completing their applications for dependency allotments and other service-controlled claims upon the Federal Government.

The centralized warehousing, printing, production and distribution of health education materials continued to prove its worth and to serve the Department and through it the people of New Jersey, both well and economically. New visual and graphic materials were produced during the year and four new permanent exhibits completed.

#### FURTHER HEALTH GAINS POSSIBLE IN PREVENTABLE DISEASES

Some of the diseases which attack us are preventable; another group while not completely preventable with our present knowledge can be substantially reduced using similar epidemiological and control methods. Since public health efforts for the control of these diseases are functionally related, they have been grouped together in the Department as the Bureau of Preventable Diseases. This has provided a closely-knit team of professional, technical and other personnel skilled and experienced in preventive public health methods. Interchange of knowledge, personnel and equipment has been facilitated to the end that we no longer have a series of independent efforts within the Department aimed at single disease entities, but a working group in the preventable disease field.

The first State conference on heart disease in this country was called by Governor Driscoll on September 30, 1949. This marked the beginning of the Department's participation in the broad field of diseases of the circulatory system, which began with a three-step program of studying existing cardiac facilities, of ascertaining future needs and of reviewing existing programs in New Jersey.

Plans have been completed for three cardiac demonstration and training centers in selected areas of the State. The first of these training centers is already in operation at St. Michael's Hospital in Newark and the second and third centers are to serve the central and southern areas of New Jersey. The goal of the program is the prevention of heart disease through public education, the training of physicians in new techniques of early cardiac case-findings and the establishment of diagnostic centers for the early detection of heart disease.

Early detection is the key to control of a number of diseases and from this fact has developed the public health technique of multi-phasic screening—giving large numbers of people a series of tests at one time for a number of diseases. The State Department of Health has conducted a number of pilot studies in multi-phasic screening, using various techniques with general population groups, community groups and industrial groups. Chest x-rays for tuberculosis and other diseases of the chest, capillary blood and urine tests for diabetes, serology tests for syphilis and determination of anemia from a blood sample were among the tests employed.

Alcoholism, long regarded only as a moral problem, has now been recognized as a disease having public health significance. Since the report of the Commission on Alcoholism and Promotion of Temperance was issued, the Department has instituted a limited program of activity in this field, including efforts to secure facilities for treatment in general hospitals, limited out-patient service to some individuals and education. One organized service unit has been established in a general hospital. The work is closely related with that of Alcoholics Anonymous.

An occupational cancer survey was sponsored jointly with the United States Public Health Service and the first phase of it is nearing completion. The survey is expected to reveal additional information regarding the relationship of occupation and environmental conditions to the development of cancer.

We had a new record low of only three deaths from diphtheria and no smallpox at all; nine persons died from measles, six of them under five years; and seven children under five years died from whooping cough. The high number of poliomyelitis cases in 1949 and the cases occurring since placed an increased load on the staff of the Crippled Children Commission.

#### LOCAL HEALTH DEPARTMENTS NEEDED FOR COMMUNICABLE DISEASE CONTROL

Tuberculosis is a real public health problem today in New Jersey—it stands in the list of the top ten killers. During the past year statistical methods have been used in planning the use of personnel and facilities so that chest x-ray surveys have been conducted increasingly in areas and among population groups where the largest number of cases can be found for each dollar spent. The responsibility for mass x-ray surveys, processing of tuberculosis morbidity reports and transmission of x-ray report data to local health agencies has been centered in the Tuberculosis Control Program. Tuberculosis clinic work, formerly a part of the Department of Institutions and Agencies, was transferred to the Department of Health.

Penicillin provides simple and effective treatment for syphilis and has completely converted the control program from emphasis on long-term treatment facilities to one of early detection of cases and prompt treatment. The venereal diseases remain with us and so do many of the problems which come with venereal disease, but the problem of treatment has been solved.

In all communicable disease control, including the venereal diseases and the great killer, tuberculosis, we need the well-knit services of a local health department for the preventive measures, the epidemiology and control measures and the educational work. It is not surprising, but at the same time it is not comforting, particularly to the people who live there, to note that

counties where local health services are lacking or are grossly inadequate, have a higher incidence of certain of the communicable diseases.

Environmental sanitation, the oldest part of public health, tends to become a routinized and habitual program unless regularly evaluated. The reorganization of the Department of Health and the organization of the Bureau of Environmental Sanitation has provided the occasion for an evaluation and remolding of these essential services and efforts have been started in a number of new fields.

An engineer with special training has been assigned for full-time work in housing, providing technical assistance and advice to local municipalities upon request and promoting coordinated efforts of the various agencies concerned with housing. Veterinary public health activities have been increased by the assignment of a veterinarian to work full-time on those phases of environmental sanitation, involving specialized biological and epidemiological training in the control of animal diseases transmissible to man. A proposed State plumbing code has been prepared by the Plumbing Code Advisory Committee and a similar State restaurant code is in preparation by the Advisory Committee on Eating and Drinking Establishments. Chemical control by spraying has made possible the control of hay fever pollen producing plants in built-up communities, along highways and in public parks. A program to encourage such control by municipalities has been started.

The program of bathing place control has been expanded from one of supervising ocean beaches, to one involving pool and lake bathing as well. A code governing swimming pools for adoption by municipalities is being drafted and a uniform control program for lake bathing is being completed for local boards of health. Assignment of special personnel to study and survey work in rodent control and in municipal garbage and refuse disposal has served to secure direct action and additional or improved services in these fields in a number of municipalities. Inspectional control of the apple cider industry, discontinued in 1942, was resumed with an appreciable improvement in the sanitary quality of our apple cider. Direct microscopic examination of milk in the field by our inspectors was instituted, adding another selective tool to milk control.

Increase of inspection services is being secured without increasing the staff by changing from a policy of limited inspections in a large territory by individual sanitarians to a policy of generalized inspections in a small territory by all field inspectors with technical assistance in special instances supplied by a small group of specialized technicians at the central headquarters. As the State district health offices are placed in operation, the inspectional work in each district will be done by the inspectors assigned to the respective offices, reducing travel time and cost and making possible more work at no increase in cost. In-service training of the inspection staff to permit a generalized



inspection program has been necessary and this together with a complete reclassification of all inspector positions in the Department to provide step-by-step opportunity for advancement has served to improve the quality of the work done.

#### PUBLIC HEALTH NURSING CONSULTATION SERVICES INCREASE

In the field of public health nursing, emphasis has continued to shift from a program of direct services to one of consultation and leadership. The Section on Public Health Nursing provides public health nurse consultants in various specialized fields and there will be a district chief public health nurse in each of the four State health districts. The work to improve educational and professional experience of Department nurses was continued through the past year and a significant improvement in our present level of public health nurse training and education has been achieved. As the reorganization of the public health nursing services in the Department nears completion, increasing consultation services will be provided for local public health agencies as a means of strengthening local health services throughout New Jersey.

One of the most encouraging factors in being State Commissioner of Health is the willing and productive work of the many skilled and talented persons who serve on the advisory committees which have been appointed to deal with certain public health needs. The work of these committees and their recommendations have already been reflected in new policies, new regulations and new activities. Their work continues as a valued and dependable source of expert advice and opinion based on the experience and training of a large body of qualified persons who give their time and effort in this service.

#### DISTRICT STATE HEALTH OFFICE ESTABLISHED FOR CENTRAL JERSEY

Organization of the Bureau of Local Health Services was brought closer to completion by the appointment of Dr. G. Frederick Moench as Director in June, 1950. The appointment of the first of four district State health officers will be announced shortly. Knowledge of local health services and resources is necessary before informed action can be taken by a community to improve its local health services. To help communities determine their needs and resources, an evaluation team is being organized in the Bureau of Local Health Services which will give assistance in making evaluations to communities requesting such help.

Organization of the district State health offices marks the beginning of the final stage of the reorganization of the Department. When these four offices are in operation, the original plan of June, 1948, will be completed. We will have a State Department of Health with an able central staff and four decentralized field units to provide consultative services to our local health

agencies. In many areas, however, we will have a motor without a drive shaft, for the local health departments which should provide the direct services to the people do not exist in many places in New Jersey or are grossly inadequate. With the continued help of the many active supporters of better public health in New Jersey and the leadership of the Governor's Committee on Local Health Administration, significant progress should be made during the coming year toward providing a workable legislative method of securing better local public health services for all of New Jersey.

#### ANIMAL EXPERIMENTATION

On February 17, 1950, under the provisions of R. S. 4:22-16, a permit was issued to the Merck Institute for Therapeutic Research, Rahway, 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. On the same date a permit issued to Merck and Company, Inc., on January 10, 1933, was canceled with the consent of the aforesaid Merck and Company, Inc.

#### EXAMINATION FOR LICENSING OF HEALTH OFFICERS AND INSPECTORS

Examinations were held on November 4, 1949, February 24, 1950 and June 30, 1950. Two hundred and twenty-two candidates were admitted to these examinations. Fees collected from these candidates totaled \$3,112.50. Licenses were issued to those receiving a general average of 70 per cent or more as follows:

<i>Examination</i>	<i>No. of Applicants Issued Licenses</i>
Health Officers .....	10
Sanitary Inspectors 1st Grade .....	30
Milk Inspectors .....	2
Food and Drug Inspectors .....	0
Meat Inspectors .....	1
Sanitary Inspectors, 2nd Grade .....	47
Plumbing Inspector, 1st Grade .....	27
Plumbing Inspector, 2nd Grade .....	32

The following members were appointed to the Board of Examiners of Health Officers and Inspectors for the year beginning May 1, 1950:

CARL E. WEIGELE, M. D., M. P. H., Chairman  
 Director, Division of Preventable Diseases, State Department of Health

JOHN E. BACON, Secretary  
 Chief, Bureau on Chemistry, State Department of Health

FRED D. BAUMANN, SR., Union

CHARLES A. KIENZT, JR., Health Officer, North Arlington

RALPH P. SHAW, JR., State Civil Service Commission

DENNIS J. SULLIVAN, Chief Health Officer, Jersey City

ARMOUR C. WOOD, D. V. M., Trenton

These members of the Board of Examiners were the same as for the preceding year, with the exception of Harrold A. Murray, M. D., Newark, who was not reappointed at his own request.

Chapter 119, P. L. 1950, effective July 1, 1950, provides that public health laboratory technicians be examined and licensed by the State Department of Health, in addition to health officers and inspectors. The aforesaid law establishes the fee of \$10.00 for each examination for a public health laboratory technician's license.

The 39th Annual Conference of State and Local Health Officials of New Jersey was held in the State House on Friday, March 24, 1950. The program of the Conference was as follows:

#### MORNING SESSION

Presiding: Alfred H. Fletcher, Director, Bureau of Environmental Sanitation

- 10:30 A. M. *Collecting a Sample of Food for Analysis*  
 Mr. Milton Ruth, Assistant Chief, Section on Food and Drugs
- 11:30 A. M. *What is a Public Health Nuisance and What Evidence Shall be Brought Into Court to Prove its Existence?*  
 Robert Peacock, Deputy Attorney General

#### AFTERNOON SESSION

Presiding: Dr. Daniel Bergsma, State Commissioner of Health

- 2:00 P. M. *The Public Health Significance of New Developments in Antibiotics and Steroids*  
 Dr. C. Paul Silirie, Medical Division, Merck & Co., Inc.
- 2:45 P. M. *Reorganization of State Health Districts*  
 Comments by Dr. Daniel Bergsma, State Commissioner of Health

- 3:00 P. M. *Preventing Heart Diseases*  
 Dr. Jerome G. Kaufman, Chairman Cardiovascular Committee, Medical Society of New Jersey
- 3:30 P. M. *A Local Rheumatic Fever Project*  
 Mr. Frank Osborne, Health Officer, East Orange
- 4:00 P. M. *Present-Day Communicable Disease Control*  
 Dr. Abraham Gelperin, Chief Bureau of Communicable Disease and Venereal Disease Control, New Haven City Health Department, Connecticut

#### PUBLIC HEALTH LEGISLATION IN 1950

The following legislation of interest to health officials was enacted by the 1950 Legislature:

S-35, Chap. 137 (Bodine). Limits existing right of counties to raise or extend money for mobile dental clinics, to counties in which clinics are permanently located.

S-105, Chap. 188 (Littell). Provides procedure by which local Board of Health may enact, amend or supplement ordinances to establish codes dealing with health and sanitation standards.

S-131, Chap. 49 (Herbert). Prohibits pollution of fresh or tidal waters of State by refuse from oil tanks or vessels, of vitriol or its compounds; increases penalties for violation from \$200 to \$500 for first offense; adds penalty of \$1,000 for subsequent offense.

S-137, Chap. 238 (Van Alstyne). Extends to all counties the provisions of P. L. 1947, Chap. 34, presently applicable to counties having population over 400,000, authorizing boards of chosen freeholders to establish county hospitals for the sick, aged, mentally ill, tubercular, or persons having communicable diseases; authorizes board to acquire real property, erect necessary buildings, appropriate monies, and accept bequests or gifts for this purpose; authorizes consolidation of existing similar agencies.

S-350, Chap. 291 (Hand). Limits amount which municipalities, having no municipal hospital, may appropriate to private, nonprofit hospitals to not in excess of 1/5 of 1% of total assessed valuation of real and personal property.

S-375, Chap. 265 (Mathis). Amends incinerator authority act (Chap. 348, P. L. 1948) by removing requirement that cooperating municipalities be an integral body of territory.

S-379, Chap. 242 (O'Mara). Permits board of freeholders, first-class counties, to use a hospital for communicable diseases as an annex to county almshouse.

SJR-3, Chap. JR. 2 (Young). Declares month of April "Cancer Control Month."

SJR-4, Chap. JR. 12 (Van Alstyne). Creates nine-member commission to study and recommend program to carry out one or more regional intrastate projects for cooperative discharge of regional problems and to submit a financing plan therefor.

SJR-8, Chap. JR. 13 (Farley). Creates a commission of nine members to study the problems of the misdemeanant alcoholic and drug addicts; prescribes powers and duties of said commission; appropriates \$5,000.

SJR-11, Chap. JR. 11 (Farley, Herbert, Mathis, Cafiero). Creates commission of 12 to study inland waterways; appointment by Governor, President of Senate, Speaker of Assembly; term two years.

A-71, Chap. 9 (Wilson). Extends changes under A-69 and A-70 to act concerning control of Bang's disease.

A-111, Chap. 299 (Mackey). Provides for filing proof of death in war service, by an appropriate agency of the National Military Establishment, with State Registrar of Vital Statistics.

A-217, Chap. 88 (Russell). Authorizes filling of prescriptions for narcotic drugs, written by duly licensed physicians of other States, for patients residing in New Jersey.

A-221, Chap. 118 (Cavinato). Eliminates the making of a duplicate of marriage certificate by local registrar; substitutes a form; increases time to transmit same from 24 hours to five days.

A-229, Chap. 152 (Russell). Permits Board of Pharmacy to enforce provisions of Uniform Narcotics Drug Law applicable to pharmacy owners and pharmacists.

A-254, Chap. 155 (Mehorter). Gives municipal courts authority to enforce laws pertaining to beauty culture; gives Superior Court discretionary power to prevent and restrain violations, changes terminology of Beauty Culture Act to conform with new judicial and State reorganization laws.

A-311-a, Chap. 119 (Russell). Defines "public health laboratory technician"; prescribes examination for license and extends to same provisions of law concerning health officers.

A-314, Chap. 99 (Cavinato). Provides that birth certificate of an adopted person contain like information as birth certificate of one not adopted; establishes fee of \$1 to be paid State registrar for issuance of new birth certificate following judgment in adoption proceedings.

A-320, Chap. 244 (Russell). Authorizes State Department of Health to make regulations for proper inspection of meat.

A-365, Chap. 126 (Dwyer). Permits parent to treat an ill child in accordance with religious faith of any church without becoming subject to violation of R. S. 9:6-1, which defines abuse, abandonment, cruelty and neglect.

A-372, Chap. 187 (Mackey). Provides that barber shop licenses remain valid until expired, despite dissolution of partnership holding the license; authorizes continuance of business of a deceased barber for the benefit of his widow or estate.

A-397, Chap. 256 (Russell). Regulates cremation of dead human bodies; requires license to engage in such business.

A-398, Chap. 303 (Russell). Provides for reimbursement by a municipality to a hospital which has rendered assistance to an indigent resident of the municipality.

A-402, Chap. 28 (A. Smith). Requires physicians to report cases of cerebral palsy to local board of health.

A-442, Chap. 29 (Russell). Changes nomenclature of act concerning creation of State Department of Health to conform with State's reorganization program.

ACR-16. Filed with Secretary of State (Jones). Creates commission of 12 to study abatement of air pollution and report to 1951 Legislature.

AJR-1, Chap. JR. 4 (A. Smith). Creates New Jersey Medical College Commission of 20 members to study need for a medical college in New Jersey and to formulate a plan for its creation and maintenance.

The following bills of interest to health officials were introduced in the 1950 Legislature, but did not become law:

S-43 (Hannold). Provides for payment by municipality of damage done to poultry or domestic animals, except dogs or cats, by a dog or dogs.

S-148 (Farley). Authorizes local boards of health to enact ordinances relating to milk or food, by reference to "code." (Vetoed.)

S-238 (Davis). Regulates production, handling, processing, distribution, sale and inspection of milk and dairy products; authorizes Secretary of Agriculture to license persons engaged in production of milk; establishes fees; provides health and sanitation requirements.

S-240 (Young). Provides that agents and officers of local boards of health in municipalities having adopted civil service, subtitle 3 of title 11, shall be placed in the classified service without examination.

S-244 (Clapp). Authorizes diversion of potable water by any governmental body or agency for public use without recourse by any citizen except where such citizen is left with insufficient amount of water for his land. (Vetoed.)

S-253 (Hannold). Makes various changes in law relating to distribution, sale, sanitary requirements and licensing of ice cream and other frozen products; re-defines such products.

S-259 (Van Alstyne). Provides for payment of fees by a municipality, on receipt of notice of birth or death from other municipal registration district.

S-261 (Van Alstyne). Requires registrar of vital statistics of registration district to remit \$1 fee to another district that sends it notice that a birth or death belonging to remitting district.

S-266 (Littell). Establishes in Department of Agriculture, a Division of Dairy Economics, to gather information and cost data affecting milk industry; appropriates \$25,000.

S-318 (Littell). Requires a license for milk plants and handlers to be issued by Office of Milk Industry, a certificate of inspection from Commissioner of Health is a prerequisite; fixes license fees.

S-319 (Littell). Substitutes a "certificate of inspection" for "permit" in act concerning milk plants and distribution of milk; provides said certificate shall not constitute a license which is also required.

S-340 (Bodine). Places new restrictions on "special account" provided in act concerning licensing of dogs and kennels; increases from \$2 to \$5 the maximum dog license fee; provides method of reimbursement by municipality for injury to sheep, lambs, domestic animals or poultry caused by dogs.

S-341 (Hannold). Makes it obligatory for Director of Milk Control to fix minimum price at which milk shall be bought, sold or distributed taking into consideration competitive economic factors and availability of milk.

S-344 (Littell). Creates New Jersey Water Authority to build and operate water supplies; acquire existing supplies by purchase or condemnation; acquire lands, public or private water rights and rights of flowage; sell water at rates not subject to regulation or supervision; cut and shut off water from real property in arrears; sell bonds without restrictions as to amount but without pledge of State credit; Authority to be exempt from taxes on property owned or income therefrom.

SCR-7 (Bodine). Creates a commission of ten persons to study and report to the Legislature upon the advisability of extending the office of Chief Medical Examiner to all counties and for the assumption by such chief medical examiner of the powers and duties of coroners.

A-2 (Frazer). Authorizes creation of Regional Local Health Districts by ordinance of two or more municipalities with approval of State Commissioner of Health; civil service law to apply to employees; board members to be chosen by governing bodies of component municipalities.

A-110 (W. H. Jones). Provides for Air Pollution Prevention and Abatement Authority in any county by resolution of board of chosen freeholders; requires State Department of Health to make regulations to abate air pollution from smoke, gases and other sources; provides for abatement engineers and licensing of furnaces, stacks and other apparatus that might cause air pollution; violators subject to 90 days in jail, \$200 fine.

A-122 (N. C. Smith). Requires registration of insecticides and allied products before distribution; prescribes standards of purity, labeling and information to be given State chemist upon registration; fixes registration fees.

A-124 (Fowler). Amends act concerning issuance of licenses to milk dealers by adding restrictions to their issuance.

A-168 (Wilson and Simmill). Creates Board of Chiropractic Examiners in Department of Law and Public Safety, Division of Professional Boards, to be appointed by Governor; each member to receive \$250 for attendance at each examination held; requires license from board to practice chiropractic in State; operation of board on funds from licenses and penalties.

A-207 (Cavinato). Provides that license fees of ice cream manufacturers be used to defray cost of inspection; doubles schedule of fees.

A-208 (Cavinato). Fixes license fee for pasteurization of milk or cream at \$50, said fee to be used to defray cost of inspection; enables State Department to revoke license for noncompliance with act; sets June 13th of each year as expiration date of license.

A-209 (Cavinato). Includes poultry in act regulating and licensing slaughterhouses and abattoirs; fixes \$50 license fee to be used to defray cost of inspection; sets June 13th of each year as expiration date of license.

A-210 (Cavinato). Fixes license fee of creameries at \$50 to be used to defray cost of inspection; empowers Department of State to suspend or revoke license for violation of act; sets June 13th of each year as expiration date of license.

A-211 (Cavinato). Establishes license fee of \$50 for a business bottling water or any nonalcoholic drink; fee to be applied to defraying cost of inspection.

A-212 (Cavinato). Sets up schedule of license fees for cold storage warehouses; bases fees on cubic footage, ranging from \$25 to \$500; fixes expiration date for license as June 30th of each year; empowers Department of State to suspend, or revoke, a license for violation of department rules or regulations.

A-213 (Cavinato). Permits State Commissioner of Health, with approval of Director, Division of Budget and Accounting, to fix charges for statistical data distributed to interested persons.

A-214 (Cavinato). Increases cost of permit to operate a goat dairy from \$10 to \$25 per year.

A-215 (Cavinato). Increases license fee of businesses handling, distributing or processing cream, milk or milk products, by substituting a graduated schedule ranging from \$50 to \$350 for present fee of \$25.

A-216 (Mehorter). Regulates manufacture of drugs, medicines and cosmetics; requires manufacturers of such articles be licensed by Board of Pharmacy; establishes powers and duties of that board with regard to the manufacture of such articles; defines drugs; medicines, and cosmetics; provides penalties for violations.

A-222 (Russell). Subjects contents of birth certificates to State Department rules and regulations.

A-224 (Russell). Empowers local boards of health to regulate heat in residences occupied by more than one family; heretofore confined to residences occupied by more than two families.

A-228 (Russell). Substitutes certificate of stillbirth, subject to State Department rules and regulations, in place of death certificate for fetal death; provides stillborn child to be registered as fetal death. (Vetoed.)

A-246 (Musto). Forbids physicians, surgeons, dentists, or nurses to disclose in court, or to any public officer, any confidential communication, or information acquired while attending a patient in professional capacity, unless information indicates patient was victim of a crime; dentist may disclose information necessary for identification purposes; patients may waive these restrictions.

A-258 (Curtis). Requires sale of bulk ice cream and other frozen products by weight; provisions not applicable to hotels, restaurants, soda fountains and similar retail establishments.

A-311-b (Russell). Provides that Public Health Council shall prescribe qualifications of public health nurses; authorizes Commissioner of Health to issue public health nurse certificates; provides for suspension or revocation of certificate.

A-323 (N. C. Smith). Authorizes township committees to establish by ordinance, compensation to be paid members of local boards of health for attending board meetings. (Vetoed.)

A-352 (Wilson). Places new restrictions on "special account" provided in act concerning licensing of dogs and kennels; increases from \$2 to \$5 the maximum dog license fee; provides method of reimbursement by municipality for injury to sheep, lambs, domestic animals or poultry caused by dogs.

A-359 (Mehorter). Provides that payment of penalty for an alleged violation of Beauty Culture Act shall be deemed equivalent to a conviction of the alleged violation.

A-362 (C. W. Haines). Removes present requirement that pasteurized milk containers be marked with the date of pasteurization.

A-373 (M. D. Haines). Regulates practice of psychology; creates State Board of five Examiners of Psychologists; prescribes duties and powers of board; authorizes board to examine and license psychologists; establishes qualifications; makes communications between psychologist and client privileged; provides for enforcement of act; defines practice of psychology.

A-376 (Marggraff). Permits boards of health to enact ordinances establishing a building code by reference to such Building Code Adoption Act without inclusion of the text thereof.

A-393 (Simmill). Requires members of board of beauty culture be holder of manager-operator license; defines beauty shop, increases education prerequisites to teachers license from two to four years of high school; limits temporary permits for full-time practice to 30 days; fixes license registration fee of \$10 for demonstrators or teachers, \$2 for students, \$25 for temporary permit, \$10 examination fee for license; gives holder of expired license 90 days from expiration date to get new license without examination (heretofore two years); provides 60 days grace for renewal of shop license.

A-395 (Shannon). Specifies qualifications required in order to take examination for license to practice medicine or surgery.

A-429 (Wilson). Requires containers of milk or cream produced in New Jersey to be so labelled; requires containers of out-of-State milk or cream to display date of production; prohibits mixing of domestic and out-of-State milk or cream for sale as fluid milk or cream.

A-441 (Russell). Sets fee of State registrar for search of records, minimum 50¢, and 25¢ for each year searched in excess of three years.

A-469 (Russell). Increases penalties provided in act regulating practice of medicine and surgery; sets \$1,000 penalty for third or subsequent violations; provides for confinement of 90 to 200 days for failure to pay \$1,000 penalty.

A-484 (Miller). Authorizes municipality to purchase the privately-owned water company supplying and located therein; provides for condemnation in lieu of voluntary sale.

ACR-4 (Saiber). Creates committee of seven, appointed by Governor, to study and report upon production, importation, processing and distribution of milk and the sale thereof.

AJR-8 (Fowler). Creates commission of nine members to study problems related to the milk industry; authorizes appropriation of \$2,500.

AJR-14 (A. M. Smith). Creates Cerebral Palsy Commission to study and formulate plan for the care of persons handicapped by cerebral palsy.

## Report of the Bureau of Constructive Health

July 1, 1949—June 30, 1950

\_\_\_\_\_  
 GEOFFREY W. ESTY, M. D., F. A. A. P., *Director*  
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Section on Adult and Industrial Health.....MARIE A. SENA, M. D., M. P. H.  
*Chief*

Section on Maternal and Child Health.....JULIUS LEVY, M. D.  
*Chief*

Nutrition Program.....MARGARET P. ZEALAND  
*Nutritionist*

Section on Public Health Nursing.....GLADYS JACOBY WILSON, R. N., M. P. H.  
*Chief*

## Bureau of Constructive Health

As indicated in the annual report of 1948-49, the Bureau of Constructive Health is comprised of the Sections on Maternal and Child Health, Adult and Industrial Health, Public Health Nursing, and the program on Nutrition. The activities of these Sections are functionally related and are broadly directed toward the positive aspects or the cultivation of better health for all age groups in the community. The program of nutrition has been integrated, not only throughout the activities of this Bureau, but through related activities of the Bureau of Environmental Sanitation and Preventable Diseases. Although there is to date no official program of mental health, a beginning has been made to integrate preventive or positive mental health in the various program activities of this Bureau in a similar manner to the nutrition program.

In addition to the administrative supervision and direction, program planning and inter-departmental coordination, the Director has been active in establishing effective liaison between this Bureau and the Departments of Institutions and Agencies and Education, and also between many lay and professional State organizations. The major purpose of such activities has been to acquaint and assist the citizens of New Jersey in laying the foundations of more effective constructive health. Among the activities and membership of the Director have been the following: chairman of the Mental Health Committee of the New Jersey Welfare Council; member of the State Nutrition Council; member of the New Jersey State Council for the Improvement of School Health Services; member of the Governor's Committee on Youth and the White House Conference Committee; the Planning and Sponsoring Committee of the Parents Group for Retarded Children; chairman of the Arthur Brisbane Group Committee, which is planning a coordinated program for State-wide mental hygiene facilities for children; and member of the Advisory Committee for the New Jersey Nursing Survey.

In August 1949, the Director gave a series of radio broadcasts on constructive health over a Trenton station. In October, he assisted in the arrangements and performance of the State-wide diabetes detection program. During the year he gave a two-semester course in Understanding, Care and Guidance of Children for public health nurses under the auspices of Seton Hall College. In addition to many public speaking engagements to groups such as schools and Parent-Teachers' Associations, the Director spoke on Constructive Health in New Jersey at the Annual Conference of the New Jersey Welfare Council. He addressed the Trenton State Hospital in their speakers series. He conducted a panel on mental health at the New Jersey

Health and Sanitary Association Conference, and also at the joint Spring Conference of the Woman's Auxiliary to the State Medical Society and the New Jersey State Council for the Improvement of Child Health Services.

Among the organizational meetings in which the Director participated or in which he contributed during the year were the Newark Safety Council, New Jersey State Council on Industrial Safety, New Jersey Adult Education Association; American Industrial Hygiene Association; American Congress of Industrial Health; the Child Study Association of America; the New York Maternity Center; the National Conference on Family Relations; the New Jersey Child Caring Group, and the Regional Health Education Council.

## Section on Adult and Industrial Health

### INTRODUCTION

With the reorganization of the State Department of Health, the Bureau on Adult and Industrial Health revamped its basic program in order to place the major emphasis in developing a well rounded program of adult and industrial health and with a definite plan as to the development of a long term program for the advancement of wholesome living in the working place, the home, and the community. The inability to find medical personnel has prevented the desirable expansion in medical and nursing services of the Bureau.

To properly evaluate and control the wide variety of occupational and non-occupational factors important in the promotion and conservation of the health of the State's productive workers, the Bureau personnel conducted surveys and studies of intra-plant and extra-plant (atmospheric pollution) industrial health problems. The promotion of (1) general health procedures in industry; (2) control of discharge of industrial wastes into atmosphere; (3) the coordination of the Bureau's program with the local health program, was effected through close correlation with other divisions of the State and local health departments.

The Bureau has had to increasingly accept the challenge of two newly recognized health problems, namely, atmospheric pollution and radiant energy.

### ATMOSPHERIC POLLUTION

Because the Bureau has the equipment and the trained, experienced personnel in sampling, analyzing and evaluating a wide-range of air contamination from industrial operations, it has had to increase its activities in the investigation and control of atmospheric pollution of communities surrounding industrial areas. The present difficulty in this expanded activity lies in the complete lack of standards and the difficulty of proving that a health hazard

exists. Furthermore, each problem commonly affects a group of plants in an industrial community. Investigations of this nature, therefore, have proven very complex and time consuming, and, under present conditions, have caused an apparent neglect of the industrial hygiene activity. However, the health of our citizens as well as the economic security of our State, requires this use of public health technical skills, knowledge and experience. All atmospheric pollution complaints received, although scattered throughout the State, have been investigated. It is hoped that, within the year, there will be forthcoming, from the national standard-setting agencies, practical and reliable standards which the Bureau may use in controlling atmospheric pollution.

### RADIANT ENERGY

The increasingly widespread use of radioactive material and radiation producing machines in industry and business has made it necessary for the Bureau to provide consultation and services in the field of radiological health; and in the dissemination of pertinent information in this new health field. Here, too, the Bureau was confronted with lack of standards and uniform methods of collection, sampling and analysis of suspected radioactive materials and wastes. Lack of such standards has made it difficult to determine with some precision what constituted the public health hazard in all instances.

### AUXILIARY PERSONNEL FROM OTHER DIVISIONS OF STATE DEPARTMENTS OF HEALTH

In addition to the Bureau personnel participating in the field activities (summarized in our statistical report), there was available to the Bureau:

1. The public health nursing consultant of the Bureau on Public Health Nursing who was permitted to give 80% of her time as part of industrial health team.
2. Two toxicological chemists of the Bureau on Chemistry, who together, spent approximately 27% of their time as participants in the bureau's team activities. The remaining 73% of their time was spent in the laboratory analyzing the suspected materials collected by the industrial hygiene teams.
3. In order to evaluate the adequacy of the feeding program for industries, the nutrition consultant of the Bureau of Constructive Health contributed about 33 $\frac{1}{3}$ % of her time in joint surveys of feeding facilities in plants. Suggestions were made to the production industries or the box lunch companies for the improvement of existing facilities in the plant or at the box lunch packing companies. Reports to the plant managements were handled in the same manner as are all other industrial health reports.
4. Public health veterinarian of the Bureau on Environmental Sanitation, who, upon request, accompanied the industrial team for the purpose of aiding industry in the control of food epidemics, and for the promotion of sanitation and approved food handling techniques for industrial cafeterias.

5. Personnel of the Bureau on Administrative and Vital Statistics edited and printed the bureau's technical and popular educational material.
6. Other divisions of the State Health Departments, district health officers and local health departments have also contributed services to industry within their respective specialties. Particularly important in the composite picture of services-to-industry are:
  - a. personnel of the Bureau on Preventable Diseases in the promotion to and in the offering to industry of the multiphasic screening surveys through its tuberculosis, venereal disease, heart disease, diabetes, cancer, etc., control programs;
  - b. engineering personnel of the Bureau of Environmental Sanitation in industrial water supplies, sewage disposal and industrial wastes;
  - c. personnel of the Bureau on Vital Statistics in its morbidity analyses of records of the State's Cash Sickness Benefit plan and its epidemiological mortality studies in rates and distribution by occupation of the more common diseases of adults.

#### SPECIAL PROJECTS

The bureau has also conducted the following projects, i.e.

#### I. COMMUNITY-WIDE INDUSTRIAL SURVEYS

The survey of a community begun in the 1948 fiscal year was completed. Another community-wide survey was conducted and completed; one was partially completed within this fiscal year. The primary objective of such a project is the promotion of constructive and preventive aspects of an Adult Health Program. Considerable interest has been manifested by several other communities for this type of service but lack of time and personnel did not permit the bureau to undertake them this year.

#### II. ATMOSPHERIC POLLUTION INVESTIGATIONS

During the year, the bureau was called in on air pollution problems including

Carteret-Staten Island Study  
Linden area  
Newark and adjacent communities  
Elizabeth-Union area  
Kearny area  
Westville area

Studies were done in industrial plants and air samples taken at various locations in the neighborhood. These studies demonstrated that atmospheric pollution in the various communities emanated from a considerable number of different sources in these highly industrialized areas. Rarely were toxic concentrations of pollutants demonstrated outside the plant. The medical phase of the Carteret-Staten Island study has been indefinitely delayed because of inability on the part of the U. S. Public Health Service, New York and New Jersey to supply the equipment, personnel and time necessary to devote to the engineering aspect of the problem.

#### III. RADIOLOGICAL HEALTH

In addition to supervision and guidance to the industries in the use and disposal of radioactive materials and the use of industrial X-rays and fluoroscopes, a study was conducted of all X-ray units of the State Department of Health and of some local health departments.

#### IV. IN-SERVICE TRAINING

1. A program of in-service training was set up for the nurse and engineers from the Cancer Bureau. The purpose of this training was to acquaint the nurse and engineers with the principles and techniques involved in conducting an adult health epidemiological study of the industrial population.
2. Public health sanitarians and the district health officers and physicians of the State Department of Health were given a one-week course in radiological aspects of public health and a panoramic view of the "total health" activities of the Bureau on Adult and Industrial Health by the medical personnel.
3. A physician was sent to special courses at Massachusetts Institute of Technology and to a one-week intensive training course sponsored by the Atomic Energy Commission at the Johns Hopkins University. This physician now serves as "resource person" in assisting with the State's Civil Defense Program.
4. An engineer was sent to the University of Michigan for training in atmospheric pollution. (The Commissioner of the State Department of Health attended the U. S. President's Conference on Atmospheric Pollution in May 1950.)
5. An engineer received intensive training in industrial aspects of Radiological Health at the New York University and a six weeks' training course in radiological aspects at the Brookhaven Laboratory, Atomic Energy Commission. This person now also serves as "resource person" in the State's Civil Defense Program.

#### V. DIABETES CASE FINDING

A demonstration case-finding study in the industries of Trenton was sponsored by the Trenton Board of Health, State Medical Society and this bureau. The actual fieldwork in the industries was accomplished by personnel of this bureau, assisted by a chemist from the Division of Laboratories. Valuable information in the development of forms for collection of data, in the interpretation of findings, and the estimation of the worker's likely acceptance of multiphasic screening was secured from this demonstration-activity.

#### VI. NUTRITION

Medical and nursing personnel of the bureau initiated and participated in a five-day demonstration course with lectures and visual aids stressing the preparation of safe food, safe from both the nutritional and sanitary aspects.

Furthermore, the bureau was instrumental in procuring the participation of industries in the Rutgers University Nutritional Survey.

#### VII. SPECIAL HAZARDS STUDY

1. Beryllium—The investigation of fluorescent beryllium bulb industry still progresses, though slowly. Deaths reported as due to beryllium in the fluorescent tube industries and two cases of alleged beryllium illness in the metal-fabricating industry were investigated. It is noteworthy that although it has been reported that the fluorescent bulb industry has discontinued the use of beryllium, analyses of "grab samples" from one plant detected beryllium.



2. Dermatitis Outbreak in Department of Institutions and Agencies—110 dermatitis cases at two of our large institutions were investigated. It was felt that the employment of inmates of these and other institutions may have caused errors or inefficiencies in the laundry-product manufacturing and in the laundry procedure so that undesirable residual chemicals may have been present in the laundered materials and irritated the skin of the involved inmates.
3. State Buildings in Trenton—Illumination and Ventilation Studies. Such studies have been conducted by the engineering personnel of this bureau.

#### NEW EQUIPMENT

The purchase of a house-type trailer has permitted this Section to equip it with automatic recording devices used in the determination of climatological and atmospheric pollution conditions. A \$2,000.00 sulphur dioxide auto-meter, windial assembly, hygrothermograph recorder, sound and vibration measuring devices have been installed in addition to usual industrial hygiene field and laboratory equipment.

This Section is second to none in the types of radiation detection and measuring instruments it has been permitted to buy. These instruments have also served a useful purpose in the orientation and training of civil defense personnel. The radiological unit of the U. S. Public Health Service has expressed its approval of the Section's recognition of the State's problem, its program and equipment. Personnel monitoring devices serve the dual purpose of monitoring our own personnel as well as other individuals suspected of having an exposure.

#### PRESENT AND CONTEMPLATED PLANS

In addition to the continuation of routine services with which this Section is charged, it is planned to emphasize the following:

1. Intensive promotion of plans for cooperative health units for small industries.
2. Special studies in atmospheric pollution and radiological health.
3. Promotion of multiphasic case-finding programs in industry.
4. Promoting of routine, periodic multiphasic screening examination of all civil service employees.
5. Provision of graduate training for members of professional staff.
6. In-plant follow-up of mass chest surveys which reveal above average amounts of lung or heart pathology.

#### STATISTICAL SUMMARY ON ADULT AND INDUSTRIAL HYGIENE ACTIVITIES FISCAL YEAR—1950

##### *Plant Activities*

	<i>Total</i>
Total number of different plants serviced .....	492 (1)
Total number of workers in plants serviced .....	360,069
Total number of plant visits made .....	519 (2)

##### *Source of Service*

Self-initiated .....	159
Request from management, labor, etc. ....	299
Official reports of occupational diseases .....	38
<b>Total</b> .....	<b>492</b>

##### *General Type of Service Given*

	<i>No. of Plants In Which Service Was Given</i>	<i>No. of Times Service Was Given</i>
Introductory or promotional visits .....	239	274
Surveys of working environment .....	214	237
Technical studies of potential health hazards .....	113	143
Appraisals of plant medical department .....	369	369
Assistance with o.d. diagnosis (in plant) .....	27	27
Consultations regarding:		
Problems of the working environment .....	131	149
Medical programs .....	244	244
Nursing services specifically .....	244	244
Dental services specifically .....	3	3 (3)
Other services specifically .....	262	262
Nuisance complaints investigated .....	29	33
Follow-up on compliance with recommendations .....	42	42

	<i>No. of Types of Improvements</i>	<i>No. of Plants</i>	<i>No. of Workers Affected</i>
<i>Improvements Recommended Regarding:</i>			
Working environment .....	102	144	131,547
Health and welfare services .....	12	400	350,000

##### *Improvements Carried Out:*

Working environment .....	19	14	15,160
Health and welfare services .....	14	12	3,301
Estimated cost of improvements to industry .....			over \$238,000

## SPECIFIC SERVICES

	Bureau of Adult & Ind. Health	Bureau Chem.	Totals (4)
Samples collected for laboratory analysis or examination ..	328	43	371
Number of laboratory analyses and examinations .....	66	225	291 (5)
Field determinations of atmospheric contaminants .....	694	142	836
Field determinations of physical conditions .....	645	124	769
Medical examinations of workers .....	..	..	..
Examination of plans for control equipment .....	..	..	..
Occupational diseases reported (officially) .....	..	38	38
Occupational diseases investigated or found on investigation ..	..	142	142
Chest X-rays taken (or read) .....	..	..	..

(In addition 826 urines collected and analyzed for Diabetic Program.)

## OTHER ACTIVITIES

Professional meetings attended ....	139	Inquiries on industrial hygiene answered .....	7,608
Lectures and talks given .....	19	Literature distributed to industry	7,408
Publications .....	19	Monthly bulletins—4 issues, 2500 per month	

## FOOTNOTES ON STATISTICAL SUMMARY

- (1) Our bureau personnel accompanied at times by auxiliary personnel, conducted surveys and studies of industrial health problems, atmospheric pollution, radiological hazards, illumination and noise complaints in 492 different plants.
- (2) Because some studies required additional visits to the plants a total of 519 plant visits were made.  
Thus, during the fiscal year, roughly 3% of New Jersey plants and a mere 4% of our entire industrial population was covered by our field. Statistically, we find that 299 or 61% of all field visits were requested or begun for other reasons than just routine visits of the Section.
- (3) Among the field trips, 262 or 53%, included plant surveys done for collection of atmospheric pollution data. Thus, with the present staff, development of other activities such as civil defense planning, guidance to cancer-control program, etc., will further divert the Section from its routine activities such as promotion of (1) medical, nursing, engineering and dental services in industry, (2) general health procedures in industry. With the appointment of G. F. Moench, M. D., M. P. H., Director of Division of Local Health Services in 1950, there was noted an increased co-ordination of local health programs with those of the Section. It may be that the increased training and the use of local health officers in the preliminary investigation of atmospheric pollution and industrial complaints may afford some relief to the Section's crowded schedule.
- (4) In addition, 826 urines were collected at Trenton industrial plants and analyzed during the Diabetic Case-Finding Program.
- (5) Laboratory analyses upon all samples submitted by the bureau to the chemical laboratory are correlated with the medical and engineering data so that there may be an adequately and impartial evaluation of the actual hazards. Thereby, a more intelligent and comprehensive report may be submitted to the industry concerned.

## Section on Maternal and Child Health

## MATERNAL MORTALITY

The maternal mortality rate in New Jersey consistently continues to decrease. In 1949 there were 72 maternal deaths which make a rate of less than one (0.7) per 1,000 live births.

If the 1939 rate of 2.9 had prevailed, there would have been 210 more maternal deaths in 1949, or a total of 282 instead of 72.

If the 1929 rate of 5.3 had prevailed, there would have been 444 more maternal deaths in 1949.

New Jersey continues to present one of the lowest maternal mortality rates in the country.

TABLE I—MATERNAL DEATHS BY SPECIFIC CAUSE

Toxemias of pregnancy .....	7
Other hemorrhage of pregnancy .....	2
Ectopic pregnancy .....	4
Other complications arising from pregnancy .....	3
Total complications of pregnancy .....	16
Abortion:	
Without mention of sepsis or toxemia .....	4
With sepsis .....	9
With toxemia without mention of sepsis .....	2
Total abortions .....	15
Delivery:	
Complicated by placenta praevia or antepartum hemorrhage...	2
Complicated by retained placenta .....	2
Complicated by other postpartum hemorrhage .....	9
Complicated by disproportion or malposition of foetus .....	1
Complicated by prolonged labor of other origin .....	1
With trauma .....	9
With other complications of childbirth .....	1
Total delivery with specified complications .....	25
Sepsis of childbirth and the puerperium .....	4
Puerperal phlebitis and thrombosis .....	1
Puerperal pulmonary embolism .....	2
Puerperal eclampsia .....	4
Other forms of puerperal toxemia .....	1
Other and unspecified complications of the puerperium .....	4
Total complications of the puerperium .....	16
All causes .....	72

(Prepared by Division of Vital Statistics and Administration.)

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

Cause and Color	Age Group		
	All Ages	15-24	25-44
Complications of Pregnancy .....	16	4	12
White .....	12	1	11
Non-white .....	4	3	1
Abortion .....	15	6	9
White .....	8	2	6
Non-white .....	7	4	3
Delivery with Specified Complications .....	25	5	20
White .....	21	4	17
Non-white .....	4	1	3
Complications of the Puerperium .....	16	3	13
White .....	14	3	11
Non-White .....	2	..	2
All Causes .....	72	18	54
White .....	55	10	45
Non-white .....	17	8	9

(Prepared by Division of Vital Statistics and Administration.)

### INFANT MORTALITY

In 1949 New Jersey acquired 97,414 live-born babies. During the same year the State lost by death 2,521 infants. This loss occurred at the rate of 25.9 infant deaths for each 1,000 live births as compared to 26.6 per 1,000 live births in 1948.

The lowest infant mortality rate for 1949 among the counties of the State was the rate of 20 for Somerset and Sussex Counties, and among the cities of the State was the rate of 13 for Union City. The highest rates, 37 and 47, were observed in Atlantic County and Atlantic City, respectively.

If the 1939 rate of 38 had prevailed, there would have been 1,180 more infant deaths in 1949.

If the 1929 rate of 60 had prevailed, there would have been 4,223 more infant deaths in 1949, or a total of 5,403 deaths instead of 2,521 in 1949.

In 1949 the incidence of prematurity, based on the weight of 2,500 gms. was 8.8%. About 2,000 premature births weighed less than 2,000 gms. Therefore, we can say that about 30% of the premature births present a serious problem.

When the total 2,521 infant deaths are considered in terms of causes with and without public health significance, four-fifths or 2,023 of the 2,521 deaths were charged to causes which should be of concern to public health workers. Nearly one-third of the 2,023 infant deaths from causes with public health significance was classified as prematurity unqualified—really no cause at all. However, an additional 438 deaths designated with immaturity had assigned causes. This is a distinct advantage in cause assignment made possible through the use of the 6th Revision of the International List.

One-tenth of the deaths assigned to causes which are thought to have public health significance was charged to birth injuries. This is a medical problem which can and should be reviewed by a medical committee as have been the maternal deaths. New Jersey's medical profession can take justifiable pride in the State's low maternal death rate. In 1949, only 72 mothers died, a rate of 7 maternal deaths for each 10,000 live births.

On the other hand, public health workers should be concerned with the 158 deaths which constitute two-thirds of the deaths classified as diseases of the respiratory system. Together with the 78 deaths indicated as pneumonia of the new born, deaths due to diseases of the respiratory system accounted for nearly one-eighth of the deaths considered to have public health significance.

Of the 498 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for better than four-fifths of this group. Recent knowledge indicates that prenatal malnutrition, especially in the first trimester of pregnancy may contribute to this malformation number.

In 1949 New Jersey lost 46 infants by accidental mechanical suffocation in bed or cradle and an additional 27 with causes classified as diseases of the thymus gland. Studies have shown that diagnoses in those categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider these deaths from the autopsy record in the hospitals.

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

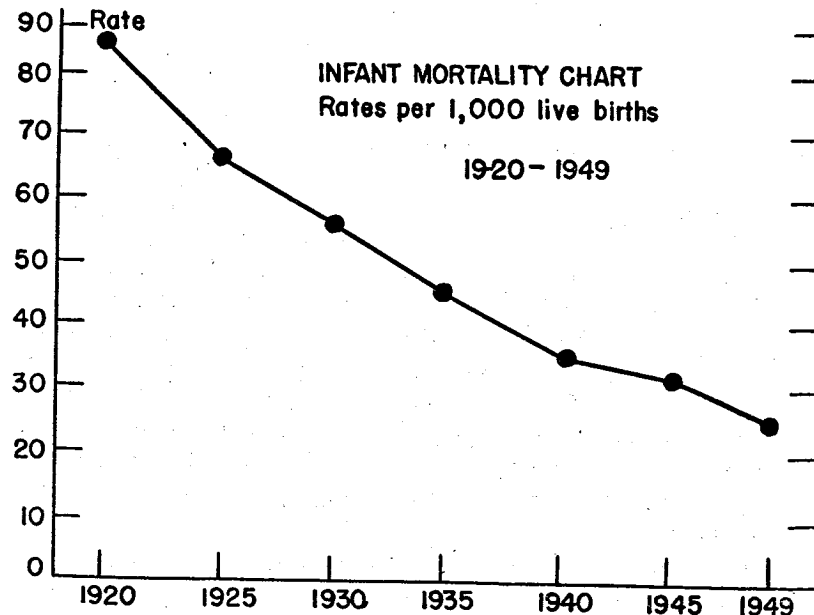
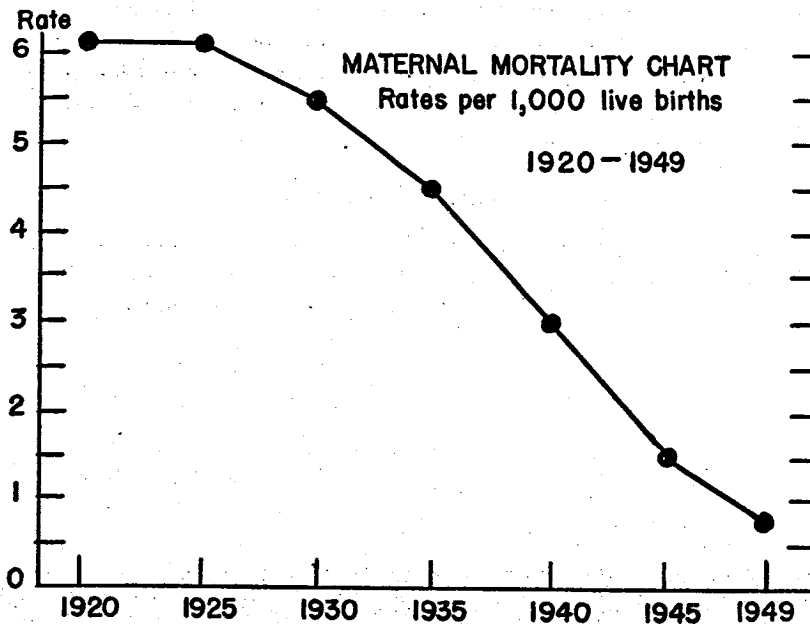
TABLE III—INFANT DEATHS BY AGE AND IMMATUREITY

Time Alive	Total		Immature on Death Certificate		Not designated Immature	
	#	%	#	%	#	%
Total	2,521	100.0	1,100	100.0	1,421	100.0
1 day	987	39.2	661	60.1	326	22.9
1 week	1,681	66.7	1,008	91.6	673	47.4
1 month	1,910	75.8	1,086	98.7	824	58.0

(Prepared by Division of Vital Statistics and Administration.)

Nearly two-fifths of those babies who died in 1949 failed to live beyond the first day of life. Before one week elapsed, two-thirds of the 2,521 babies had died. Before the end of the first month of life—the usually designated neo-natal period—three-fourths of the 2,521 babies had completed their short lives.

The immature babies so designated on their death certificates contributed 1,100 or 44 per cent of the total infant deaths in 1949. Of these 1,100, three-fifths died within the first day of life. The immature babies dying within their first day of life accounted for two-thirds of all infant deaths occurring within the first day of life. Before attaining one week of age, 92 per cent of these 1,100 immature babies had failed to survive. Approximately 99 per cent of the immature babies who died had died before attaining one month of age. This contrasts sharply with the 58 per cent of the mature babies who died during their neo-natal period.



Two-thirds of all the deaths in the first year occurred in the first week. Since most of the births occur in hospitals, a reduction in the mortality from prematurity, which is the principal cause of death, will have to come primarily from two sources: (1) more effective prenatal care; and, (2) better care of the newborn in hospitals.

#### HOME DELIVERY NURSING SERVICE

The use of the home delivery nursing service continues to decrease. There were only 54 home deliveries where 11 registered nurses assisted the physician. Obstetrical consultants are available for home deliveries. A consultant was called in only one case.

#### BABY KEEP-WELL STATIONS

There were 158 Baby Keep-well Stations conducted throughout the State under the supervision of the Bureau on Maternal and Child Health. Physicians served in 109 of these stations. Doctors in 97 of these stations were paid by the State Department of Health. In 12 of the stations doctors in attendance were paid locally or served without compensation.

The doctors in the stations made 13,129 examinations of infants and 6,332 of preschool children, and advised all mothers in the care, feeding, and management of their infants. Efforts have been made through films and conferences to stimulate interest in the well baby and the teaching of mothers.

#### EDUCATIONAL ACTIVITIES

The education of the nurses under the supervision of the Bureau has continued with special emphasis on Anticipatory Guidance in relation to parent-child relationships. For this purpose all new nurses have taken special courses given under the auspices of Seton Hall College. Our psychologist has then continued discussions of special situations with small groups for the purpose of helping the nurses properly to present the Anticipatory Guidance program to the mothers. We have received very gratifying reports of the effectiveness of this method of approaching mental hygiene. Our work has been particularly recognized by the School of Public Hygiene and Health at Johns Hopkins University. It has been the practice in recent years for Paul V. Lemkau, M. D., Director, Mental Hygiene Study, to assign each year a number of his students to observe at first hand the work our nurses are doing in the field. During the past year one physician came from India and one from the Phillipines.

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

We have been using about ten carefully selected films. The district supervisors have arranged for the showing of these films before nurse groups, Parent-Teachers' groups, and special groups organized through the Baby Keep-well Stations. All films have stressed and emphasized the general theme of the understanding of emotional and mental development of children and the improvement of parent-child relations through Anticipatory Guidance.

#### MATERNITY HOMES

There were 15 maternity homes inspected by the physician on the Maternal and Child Health staff. Twelve of these homes were recommended to the Licensing Board of the Department of Institutions and Agencies for licensing. Three of these homes were licensed by the State Department of Health without fee. Homes with one bed only are licensed by the State Department of Health.

#### EXTENSION OF ACTIVITIES

Of the 264 field nurses under the supervision of the Bureau of Maternal and Child Health, 202 were paid entirely by the communities in which they work, 56 were paid partly by the State and partly by the communities in which they work, and 6 were paid entirely by the State.

The 264 nurses had under their supervision 14,228 expectant mothers, 21,413 postpartums, 44,465 infants, 59,594 children between one and six, and 144,540 school children.

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

*Atlantic County*—Mullica Township, Egg Harbor Township.

*Bergen County*—Dumont, Palisades Park, Moonachie, Maywood.

*Camden County*—Stratford, Pine Hill.

*Cumberland County*—Maurice River Township, Millville, Commercial Township,

Bridgeton.

*Gloucester County*—Washington Township, Harrison Township.

*Hunterdon County*—Delaware Township, East Amwell Township, Frenchtown, High Bridge, West Amwell Township, Clinton Township, Stockton, Alexandria Township,

Kingwood Township.

*Middlesex County*—South Amboy.

*Morris County*—Dover.

*Salem County*—Alloway Township, Quinton Township.

*Somerset County*—South Bound Brook, Raritan, Montgomery Township, Branchburg Township.

*Sussex County*—Hamburg.

*Warren County*—Belvidere, Frelinghuysen Township, White Township.

The following are the total amounts of contributions made by local communities toward the salaries of Maternal and Child Health nurses placed in their communities for demonstration of the Maternal and Child Health program:

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

#### STATISTICAL SUMMARY OF THE 264 NURSES' WORK

Home visits made by the nurse .....	409,112
To expectant mothers .....	42,772
To postpartums .....	51,128
To infants .....	188,633
To children 1 to 6 .....	175,376
To school children .....	51,203
Visits to Baby Keep-well Stations .....	37,879
By babies .....	24,890
By children 1 to 6 .....	12,989
Child Hygiene Leagues (classes conducted) .....	152
Mothers' classes conducted .....	36
Dental sessions, nurse assisting .....	641
Children under one year of age immunized .....	11,830
Children one to five years of age immunized .....	6,756
Children vaccinated .....	15,935
School children supervised .....	144,540
Inspections (annual, assisting doctor or general) .....	546,921

Among the many valuable activities of the Maternal and Child Health nurses perhaps special attention should be directed to the effectiveness of having babies immunized against diphtheria and whooping cough. Our records indicate that of 19,735 infants reaching the age of one year, 75% were immunized. This, of course, does not guarantee that babies will not develop whooping cough as the protection is far from being as effective as the immunization against diphtheria.

#### ILLEGITIMATE BIRTHS

There were 2,413 illegitimate births among New Jersey residents. This represented 2.4% of the total births for the State. Percentage-wise, 2% were born to mothers under 15 years of age, 37% between 15 and 19, 34% between 20 and 24, 15% between 25 and 29, 7% between 30 and 34, and 4% over 35.

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

#### MIDWIFERY

There were 137 licensed, registered midwives in New Jersey in 1949 or 10 less than in 1947. Of these, 126 were supervised by the State Department of Health and 11 by a local department.

#### ADVISORY SERVICE TO HOSPITALS

While the licensing of hospitals is carried on by a special Licensing Board under the Department of Institutions and Agencies, we have continued to make available to the hospitals a special advisory service under a physician and nurse. This concerns itself entirely with maternity services and the care of the newborn. Many improvements have been made in the techniques and in the facilities. We have maintained close cooperation with the representatives of the Licensing Board. In accordance with one of the regulations of the Licensing Board of the Department of Institutions and Agencies we have set up standards for maternity and newborn services. These have been distributed to the hospitals and have been very well received. Before final preparation, conferences were held with representatives of the State Medical Society, New Jersey Hospital Association, and the New Jersey Chapter of the Academy of Pediatrics.

## Nutrition Program

### GOAL

To stimulate and establish good food habits for every citizen in New Jersey by bringing him a better understanding of nutrition and proper foods for optimum health.

Nutrition cuts across every specialized public health field, and it is the aim of this service that it be applied wherever needed as part of the total health program.

### FIELD ACTIVITIES

In any area throughout the State the Nutrition Service is available to assist the official health agency in determining the need.

#### I. INTERPRETATION OF PROGRAM

In order to interpret what services are available to a local community a demonstration pilot study in nutrition was conducted in Maple Shade, New Jersey. Because there was no local nutritionist available, the Burlington County Home Agent of the Extension Service, College of Agriculture, Rutgers University, acted as local nutrition consultant and the State Nutritionist was consultant on the State level. The published report of this pilot study is in the form of a handbook and will be available as a guide for all local communities in the State. In this way the nutrition services can be interpreted to health departments, other agencies—both public and private, the general public and all professional associations.

#### II. CONSULTATION SERVICES

Consultation services form the bulk of the work performed. It is felt that by this method of approach, the nutrition program is best able to serve the greatest number of people. It has enabled nutrition to be presented as a part of a total program offered by other bureaus. This has been accomplished through participation in staff meetings, conferences with individuals and groups, periodic nutrition releases, radio programs and circulation of current materials.

#### III. CO-OPERATION WITH OTHER ORGANIZED GROUPS

This program is correlated whenever possible with other services of the Department of Health and with other programs of private and public agencies to make best use of resources within the State.

#### IV. SERVICES TO INSTITUTIONS

The nutritionist was asked to give consultation regarding food service and adequacy of menus in the State hospitals and institutions under the Department of Institutions and Agencies. The nutritionist visited institutions with Miss Flemming, Dietician Consultant for Institutions and Agencies and prepared recommendations for the consideration of the inter-department committee of the State Department of Health and State Department of Institutions and Agencies.

#### V. SERVICES TO INDUSTRY

The nutritionist served as part of a team of the Section on Adult and Industrial Health in doing health surveys in industry. This service has been very well received by the industries. After consultation with managements and medical personnel of several plants, a demonstration program of nutrition and food handling was set up. These courses were given by the personnel of the State Department of Health with the cooperation of management and the local health departments. The industries receiving this service showed interest in setting up their own refresher courses, using visual aids and material supplied by the State Department of Health with lecturers selected from their own medical and food service department's representatives who had attended the demonstration course. One of the large plants now gives the responsibility for setting up this education program to the plant's regular training supervisor.

#### VI. PREPARATION OF MATERIAL FOR EXHIBITS

The nutritionist prepared material for a nutrition exhibit for the Cavalcade of Progress held in Asbury Park, New Jersey, the week of April 17, 1949. An exhibit on the Maple Shade Nutrition Pilot Study has been on display at various fairs throughout the State and is available for group meetings. A portfolio on this study will be on display at the A. P. H. A. Convention in St. Louis and then will be on loan to schools of public health throughout the country.

As a member of the State Nutrition Council the nutritionist served as Chairman of the Bibliography Committee and has taken an active part in the Candy Committee in an effort to curtail the sale of candy in the schools. A Nutrition Bibliography has been prepared. This bibliography is set up for the general public, public health workers, physicians, nurses, dentists and educators.

During the year, several thousand pamphlets and posters on nutrition were distributed.

A number of lectures on nutrition have been given at Seton Hall College to the nurses, and talks have also been given to P. T. A.'s, National Foundation for Infantile Paralysis and other groups.

### Section on Public Health Nursing

The Public Health Nursing Section now comprises the Chief, eight public health nurse consultants and three clerks. The consultants function in the following programs: Adult and Industrial Health, Venereal Diseases, Rheumatic Fever, Tuberculosis Control, Maternal and Child Health, Orthopedic Nursing and Cerebral Palsy. At the present time there is no generalized public health nursing consultant on the staff, but with the establishment of the State Health Department District Offices a chief nurse will be available in each district. All other nurses in the Department, with the exception of those nurses responsible to the Haddonfield District Health Office, are assigned to the various special programs. Actually, the creation of the Public

Health Nursing Section represents, to date, the addition of only one nurse, the Chief, to the staff of the State Department of Health.

While the creation of the Public Health Nursing Section involved changes in title, salary range and administrative responsibility, consultants are still responsible for carrying on functions and duties in their specific programs and for various special commitments made prior to the establishment of the Section.

In the beginning of the year the Section, then four months old, was confronted with the major problem of integrating and coordinating nursing services throughout the Department in order to render more effective services in conjunction with other departmental activities. Many conferences were devoted to the interpretation of the proper use of a public health nursing service. Every effort is being made to cooperate with other State-wide and local services for the improvement of health.

One of the outstanding needs is to improve the educational and professional experience of Department nurses, in order that they meet recognized standards. Policies and procedures have been established relative to study programs to be followed by public health nurses employed in the Department. Study privileges were granted to 26 State Department of Health nurses and to 36 partially State-paid nurses in order that they might attend approved courses in Public Health Nursing.

Credentials showing educational attainment for all nurses employed by the Department have been compiled in the Section. This was necessary in order to determine needs for study privileges to be granted in accordance with the formulated policies and standards, and to aid in guiding State Department of Health nurses in the continuation of their study in Public Health Nursing.

Group conferences of the consultants and Chief have been continued throughout the year on a regular basis with representatives from State and national organizations participating in many of these.

Uniform and regular reporting of the consultants' activities has been effected, while monthly plans and weekly itineraries have been exchanged. This provided an opportunity to plan more effective field trips.

The Chief of the Public Health Nursing Section has participated in the regular Bureau Director's conferences called by the State Commissioner of Health. This permitted an exchange of ideas and information leading toward maximum service. Consultants' participation in staff nurse conferences provided further dissemination of facts.

Numerous consultations and other services have been requested from the Section Chief and the consultants by Bureau Directors and Program Chiefs in carrying out special programs. Intra-departmental conferences involved in

the process of reorganization consumed a major portion of the time of the Section Chief.

Working relationships have been established and continued with numerous personnel from national, State and local agencies, both official and non-official, in behalf of public health nursing.

Several communities in the process of setting up or reorganizing public health nursing services, received consultative services from the Chief and some of the consultants in response to special requests relative to generalized nursing. Field visits to State and local health agencies in behalf of specialized programs, however, involved a considerable portion of the consultants' time.

The Section has been active in stimulating nurses' interest in public health and in recruiting nurses for public health nursing positions in New Jersey. This has involved considerable counseling and guidance. Close contact has been maintained with the Counselling and Placement Service of the State Nurses' Association. Consultants, as well as the Chief, have also participated by assisting in the integration of public health in the nursing schools' curricula.

Recruitment of nurses for a special cancer survey carried on by the State Department of Health was a project in which this Section rendered a service.

The current roster of public health nurses and agencies within the State has been maintained. A complete revision of this system was made this year in order to facilitate the availability and usefulness of the information so generously supplied by the public health nurses and agencies in New Jersey. Data obtained through this procedure is utilized in supplying the United States Public Health Service with New Jersey's figures for the annual nationwide census of public health nurses.

A Survey of Nursing Resources which was sponsored by the State Nurses' Association in cooperation with the United States Public Health Service, involved the Bureau Director, Section Chief and two Public Health Nurse Consultants.

The Department was represented at various institutes and educational meetings throughout the State by personnel of the Public Health Nursing Section and highlights of the meetings attended were exchanged.

The Section has cooperated closely with nursing organizations in the State. Leadership has been provided by the participation of three consultants functioning in four major offices in our State Nurses' Organizations. In addition, various contributions to special committees have been made by the majority of the members of the Section staff, while the Chief was the official representative of the Department to the Board of the State Organization for Public Health Nursing.



The Section Chief has also represented the State Department of Health in various other State-wide and regional organizations, by serving on committees, public speaking, and giving direct individual consultation.

Other activities of the Section included: the general interpretation of information on the National Structure Pattern for all phases of nursing; specific recommendations for the American Nurses' Association Code of Ethics; suggested revisions of the American Public Health Association Evaluation Schedule for departmental use; suggested changes and additions in State laws relative to public health, and participation in various studies and surveys carried on a nation-wide basis.

Needs to be met this year are: the delineation of consultant functions as special program requirements are adequately determined; preparation of departmental policies relative to nursing, and continued attempts to increase public health nursing consultation services to local public health agencies. In order to carry out the current needs, additional nursing personnel for administrative activities is definitely indicated.

Efforts will continue toward the improvement of nursing standards; the coordination of all nursing services within the Department; the integration of such services with other departmental activities, and the increased cooperation and correlation with other State-wide and local services for the improvement of health.

## Report of the Bureau of Environmental Sanitation

July 1, 1949—June 30, 1950

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Section on Food and Drugs.....	LOUIS M. LOUNSBERY, D. V. M. <i>Chief</i>
Section on Public Health Engineering.....	ROBERT S. SHAW, B. S. E., M. P. H. <i>Acting Chief</i>
Rabies Control Unit.....	J. S. MCDANIEL, D. V. S. <i>Veterinarian in Charge</i>

## Bureau of Environmental Sanitation

The work of this Bureau was expanded considerably during the year. Several new but important phases of environmental sanitation were initiated including a special effort to integrate veterinary public health into the entire sanitation program. The activities of the Section on Public Health Engineering, the Section on Food and Drugs and a program of Rabies Control still represent the basic work of the Bureau, but an aggressive effort has been made to develop a number of planned positive type programs dealing with some of the more important problems of environmental sanitation not covered last year by the Bureau. The following programs have been given the most attention in this new development: housing, plumbing, the control of pollens which cause hay fever; swimming pools and lake sanitation, private sewage disposal, the disposal of garbage and refuse and the control of rodents and insects. A program of airplane spraying of mosquitoes was carried on during the summer of 1949 with actual spraying operations getting under way on July 23, 1949. An effort has been made to cooperate with local health departments through the Advisory Committee on Local Health Services and the Health Officers Association of New Jersey.

### HOUSING

It is generally agreed that poor substandard housing has an adverse effect on health and that healthful housing is a necessary foundation on which to build other public health programs. A number of different departments and agencies of the State are carrying on housing activities in several somewhat unrelated programs. An engineer has been assigned full time to develop a program for the improvement of housing and to promote coordination of effort on the part of the various agencies to more effectively deal with the problem. An engineer was sent to Syracuse, New York, for a five weeks' course at a School of Housing sponsored by the United States Public Health Service and to receive special instructions in appraising housing conditions, using a technique developed by the Committee on the Hygiene of Housing of the American Public Health Association. Several meetings have been held with those officials in the Department of Conservation and Economic Development who are concerned with several phases of housing to discuss mutual problems and to develop plans for coordinating the efforts of the two Departments in the field of housing. At the invitation of the New Jersey Health and Sanitary Association, representatives from the Department of Health and the Department of Conservation and Economic Development participated in a panel on housing at their 74th annual meeting held on April 5, 1950, at

Princeton, New Jersey. The Bureau is now in a position to render technical assistance and advice to local municipalities interested in improving housing conditions. A survey of several blocks in a substandard housing area in Trenton is now being planned.

#### PLUMBING

An Advisory Committee was appointed on November 3, 1949, to draft a plumbing code which could be recommended to local municipalities for adoption by reference. Representatives of the Plumbing Industry interested in promoting a State law were referred to the State Department of Health by the Department of Conservation and Economic Development and the appointment of the Advisory Committee was made in response to this request for action. A series of meetings of the Advisory Committee have been held and the task of drafting various parts of the code were assigned to subcommittees. The ground work of the subcommittees has been completed and the final draft of the code is now in preparation. The plumbing code when completed will become Chapter III in the State Building Code, which is being drafted under the general over-all guidance of the Department of Conservation and Economic Development.

#### POLLEN CONTROL

The recent discovery of 2, 4-D (2, 4-dichlorophenoxyacetic acid) opened a new field in public health. This chemical is effective in killing ragweed plants, the principal cause of pollen hay fever, and at the same time, encourages the growth of other plants providing competition which discourages the growth of new ragweed plants. A broad program to encourage the elimination of hay fever pollen producing plants in built-up communities, along highways, and in connection with the growing of agricultural crops is being developed. The most important phase of the program is the spraying of ragweed in built-up communities. It is now known that 70 municipalities in New Jersey, two-thirds of which are in the heavily populated metropolitan area of the State, carry on ragweed elimination programs. It is conservatively estimated from data obtained in a survey that approximately \$15,000.00 was spent in 1949 for weed control programs, not including the cost of health department and other regular municipal supervisory and inspection personnel or the capital cost of spraying equipment.

#### BATHING PLACE SANITATION

The problem of supervising bathing places in New Jersey can be divided into three classifications, swimming pools, lake sanitation, and ocean bathing and three separated programs are being carried on to cope with the different types of problems.

#### (a) *Ocean Bathing*

During the year the Department continued making its customary surveys of the coastal bathing waters. Four surveys were made—July, 1949, and April, May and June, 1950.

Based upon the bacteriological data obtained from the examination of samples collected during the four surveys it was determined that all ocean beaches from Sea Bright to Beach Haven were satisfactory for bathing.

In the Raritan and Sandy Hook Bay areas several beaches were found to be unsatisfactory for bathing. The Department recognized that this area is subject to pollution entering from Arthur Kill and the Raritan River. The clean-up of those sources of pollution is considered a long-range program which is being prosecuted by the State Department of Health and the Interstate Sanitation Commission.

It is evident that the high quality of the ocean beaches and some of the beaches in the bay area can be attributed largely to the effective operation of municipal sewage treatment plants. The operators in charge of these plants are to be complimented for the interest shown by them in securing the discharge of plant effluents which are not affecting, detrimentally, the quality of the bathing waters.

The Department, in conjunction with its activities in preventing the pollution of our coastal waters, is well aware of the fact that certain shipping interests have been responsible for the discharge of sewage, garbage, bilge water and/or oil to the waters of this State, including the waters of Raritan Bay, Sandy Hook Bay, Barnegat Bay, Atlantic Ocean and Delaware River and Bay. During the year numerous conferences were held, at which time the cooperation of Federal, State and municipal authorities was assured in an effort to control such pollution. As a result the number of complaints during the latter part of the fiscal year were reduced to a minimum. The United States Coast Guard and the State Department of Conservation and Economic Development have been especially helpful in controlling the pollution of the State waters by vessels passing along our shores.

#### (b) *Swimming Pools*

The design and standards for the satisfactory operation of swimming pools have been generally accepted as those recommended by the Joint Committee on Bathing Places of the Conference of State Sanitary Engineers and the American Public Health Association for the past thirty years. It was decided to furnish advice and assistance to local municipalities on request and to work with the local health departments through the Advisory Committee on Local Health Services and the Health Officers Association in offering a two-day course in Swimming Pool Sanitation at Rutgers University. Over 100 persons, largely health officials, attended. A list of swimming pools through-

out the State and their addresses, together with the operators has been prepared. A code is being drafted that can be recommended by the State Health Department to local municipalities for adoption by reference.

(c) *Lake Sanitation*

The need for a program of lake sanitation was discussed with the Advisory Committee of Local Health Services. It was decided to develop such a program with the cooperation of the Health Officers Association. The initial meeting of a committee of the Health Officers Association dealing with the problem was held on April 25th. The general plan calls for the State Health Department to provide over-all supervision and guidance in the development of a lake sanitation program beginning the first year with six or eight lakes of various sizes. An effort will be made to secure the assistance of a local laboratory willing to cooperate to the extent of analyzing weekly samples from these six or eight lakes. The field work will be done by cooperating local health officials. An engineer from the State Health Department will visit the area once a week to review the results of the sampling for the week previous and correlate the results with the sanitary survey and inspections. In general the aim of the program is to make the eight lakes satisfactory for bathing in accordance with State-wide sanitation standards.

No information or statements regarding the sanitary conditions at these lakes will be released until after all sources of pollution have been eliminated and the lakes considered satisfactory.

In general the objective of the program is to encourage the operators of lakes throughout the northern section of New Jersey to request such supervision so that their lake may have the stamp of approval of health authorities. It is suggested that with State Health Department guidance and the cooperation of local health officials a program will be worked out which will be uniform throughout New Jersey and will effectively cover all of the recreational lakes. One engineer of the Department of Health has been assigned to spend one day a week during the summer months to this program.

PRIVATE SEWAGE DISPOSAL

An engineer has been assigned to cooperate with the Federal Housing Administration in reviewing plans for individual sewage disposal systems for houses in the larger housing projects built under their supervision. Before insuring the mortgage for these large projects the application is referred to the Bureau for investigation and report as to the suitability of site and soil conditions for the installation of individual cesspools or septic tanks. Mortgages are not insured by the Federal Housing Association unless the application is approved by the State Health Department. An illustrated bulletin outlining the principles and methods of sewage disposal for individual

homes and other buildings is now in preparation. It is planned to cooperate with the Department of Sanitation of the Research Experiment Station of Rutgers University in the preparation of the bulletin.

DISPOSAL OF GARBAGE AND REFUSE

When judged by complaints and requests for assistance by local health officials, garbage and refuse stand first in importance as a public health problem. Simply answering complaints, however, has not been effective in convincing municipal authorities that garbage and refuse collection and disposal are part and parcel of their local public health services. The result is that this fundamental sanitary work is too often undertaken without engineering status and technical direction. A sanitarian is now giving approximately half time to the study of methods of garbage and refuse disposal and the promotion and planning of such systems. Only those complaints that seem to offer opportunities to secure satisfactory programs are accepted by this Bureau and in those cases aggressive steps are being taken to bring that about successfully. It is recognized that frequently the local health department has little to say about the decisions that are made in planning such programs, in selecting and operating dumps and in letting contracts.

RODENTS AND INSECT CONTROL

A rodent control specialist on loan from the United States Public Health Service is devoting full time to rodent control work as a part of a State-wide program. Surveys have been made in two municipalities, namely Plainfield and Trenton. Local inspectors are trained to recognize and evaluate degree of rodent infestation and to eliminate it. The work of local exterminators are observed and careless work brought to the attention of guilty concerns. Study is also underway as to possible legislation, codes or licensing systems for effective control of exterminators and fumigators. Both the sanitarian and the supervisor assigned to this work are also trained and experienced in insect identification and control. Since the discovery of antu and DDT following World War II a number of very poisonous and effective rodenticides have been developed which require greater care to prevent the poisoning or even possible death of pets and children. Some of the larger cities already have ordinances requiring the licensing of exterminators and all operating personnel in order to ensure that only qualified persons familiar with the chemicals and their use and poisonous nature are distributing such poisons, in kitchens, homes, stores, dumps, public buildings and other such places where children may play. Such ordinances and programs are being studied in relation to their application to the problem in this State.

## MOSQUITO CONTROL BY AIRPLANE SPRAYING

Under Chapter 89, P. L. of 1949, the Legislature appropriated \$50,000.00 to the New Jersey State Department of Health to develop and conduct an airplane spraying program for mosquito control in cooperation with the County Mosquito Extermination Commissions of the four Atlantic seashore counties of Monmouth, Ocean, Atlantic and Cape May. An Advisory Committee was appointed, consisting of a representative of each of the four Atlantic seashore county mosquito extermination commissions, the Agricultural Experiment Station, the Monmouth County Health Officers Association, the State Department of Conservation and Economic Development, and the State Department of Health. Consultants from the U. S. Public Health Service, U. S. Department of Interior (Fish and Wildlife Service) and the State Department of Defense were also appointed to this committee.

The plan of action was developed by the Advisory Committee. The purpose of the program was to reduce as much as possible, the adult mosquito population in these four counties without damage to fish and wildlife, watersheds, agricultural area, and plant life. An adulticiding campaign was instituted as early as possible in the mosquito breeding season after the moneys appropriated were made available. The airplane spraying began on July 23rd. During the season more than 237,000 spray acres were covered in these four counties at a cost of 18.1 cents per acre for the application. The adulticide contained 0.8 of a pound of DDT per gallon of oil solution.

The following table illustrates the number of spray acres covered in each county, the number of gallons of insecticide used during the mosquito breeding season and the total cost of this operation:

<i>County</i>	<i>Acres Sprayed</i>	<i>Gallons of Insecticide Used</i>	<i>Total Cost</i>
Monmouth .....	59,496	7,437	\$12,150.06
Ocean .....	59,160	7,395	12,104.70
Atlantic .....	59,360	7,420	12,129.48
Cape May .....	59,360	7,420	8,866.90
Totals .....	237,376	29,672	\$45,251.14

In order to evaluate the program, mosquito traps were set up at various points in the four counties by the County Mosquito Extermination Commissions and the Entomology Department of the Agricultural Experiment Station. Mosquitoes as well as other insects attracted to these electric light traps were collected for each 24-hour period. In a study of the trap records it was found that the dates set for airplane spraying in many instances coincided with a high mosquito trap collection.

This one year's experience in an airplane spraying program for the control of adult mosquitoes to supplement the regular ditching and larvicidal programs of the Mosquito Extermination Commissions emphasized the need for more entomological assistance in determining the places of breeding and the resting places of the adults in order to most effectively control the flight of the adult mosquitoes. Adulticides applied for mosquito control should be carefully chosen to be as strong as possible in order to be most effective, but without damage to fish and wildlife. It was also found that flights of large numbers of mosquitoes from nearby uncontrolled areas may nullify mosquito control efforts of the areas where proper mosquito control programs are conducted.

It is recommended that the program be broadened and made more flexible so that it will most effectively supplement the regular work of the Extermination Commissions of the four Atlantic seashore counties, permitting adjacent areas to be sprayed when entomological studies indicate that it is desirable, and permitting the use of other types of motorized equipment for adulticiding or even larviciding operations if necessary and practicable to control breeding that cannot be controlled by the regular control work of the Commissions or by the airplane spraying.

## VETERINARY PUBLIC HEALTH

There is attached to the Office of the Director, a Senior Public Health Veterinarian who assists the Director in the over-all supervision and planning of those phases of Environmental Sanitation involving specialized biological and epidemiological training in the control of animal to man diseases.

It is through this veterinary assistant that contact is maintained with the other preventable disease programs of the Department and coordination of efforts is achieved. Veterinary public health activities involve the control of "Animal and Man" diseases such as Rabies, Salmonellosis, Encephalitides and the wide variety of arthropod Rickettsial diseases such as Rocky Mountain Spotted Fever, Tularemia and Plague. This assistant promotes for the director, by means of special assignments, action in a wide variety of the phases of environmental sanitation. This past year work undertaken involved meat and poultry inspection activities, general food handling practices, the quality control of milk, and program planning in rabies control in dogs and wildlife.

## Section on Food and Drugs

### PERSONNEL

During the fiscal year ending June 30, 1950, Louis M. Lounsbury, D.V.M., Veterinarian in Charge, was promoted to the position of Chief, Section on Foods and Drugs.

There has been no major change among personnel of the Section. One food and drug inspector who was a specialist on cold storage, retired during the year. His vacancy was not filled.

An in-service training program for field personnel was completed during the past year. Field representatives of this Section were assigned to work with personnel of the Division of Local Health Services, permitting an exchange of practical experience in each other's field of work. In addition to the above training, one of our field representatives completed a course in installation and checking High Temperature Short Time pasteurizing equipment at Temple University; one field representative worked with personnel of the New York City Department of Health and the United States Treasury Department, Narcotics Bureau, to familiarize himself with inspection and enforcement techniques as applied to drug manufacturing plants; one field agent worked with members of the United States Food and Drug Administration inspecting tomato canneries in this State to exchange experiences in sanitary control of such establishments.

### FOOD AND DRUG CONTROL PROGRAM

The Section on Food and Drugs enforces laws passed by the Legislature to prevent the adulteration and misbranding of foods, drugs, devices and cosmetics and laws and regulations designed to prevent the insanitary handling, preparation, storage and transportation of foods and drugs.

Considerable time was devoted during the year to the preparation of new legislation, discussion of new inspection reporting forms as well as program planning.

A general food establishment inspection form has been developed with the assistance of the Advisory Committee on Local Health Services for the inspection of all types of food establishments including eating and drinking establishments, except the three forms used for dairies, milk plants and High Temperature Short Time pasteurization plants and the form used for the inspection of shellfish production and shucking plants. This form was used by the inspectors and found to be satisfactory. It was generally reported that such forms save time but require alert well trained inspectors, thoroughly familiar with the problems of inspecting the different types of food establishments. The present program of the Section is designed to train all inspectors

for generalized food inspection work so that it seems feasible and practicable to use this general form to replace the dozen or more individual type inspection forms in use at the present time.

An increase was noted in our liaison work with Federal, State and local agencies. Numerous requests for assistance and cooperation from local departments of health, other State agencies and certain Federal agencies were fulfilled during the year.

### APPLE CIDER

Inspection of apple cider pressing establishments, a project which was almost entirely discontinued since 1942, due to travel restrictions and lack of personnel, was resumed by agents of this Section during the past fiscal year. Investigations were made of 84 such establishments. Our inspections revealed a considerable decrease in compliance with the sanitary practices, partly due to the lack of supervision by this Department and local boards of health. Reinspections of those places found to be unsatisfactory revealed some improvement had been made. Although considerable work remains to be done in order to improve sanitary conditions, it is felt a great step forward has been made during the past season.

### AUCTION MARKETS

During the past fiscal year, attention was directed by this Department to the rapid increase in the number of auction markets established throughout the rural areas in this State.

Investigations were made to determine the type of foods handled at the concessions and the manner in which foods were being handled and served. Samples of foods were collected to determine if they were adulterated and/or misbranded.

These investigations disclosed many unsatisfactory conditions. Letters were forwarded to concessionaires calling their attention to the unsatisfactory conditions. Reinspections showed a considerable amount of improvements were made.

### INSECT AND RODENT CONTAMINATION OF FOOD

Representatives of this Section investigated the stocks of foods as stored by retail and wholesale establishments to determine if they were adulterated or misbranded. Our representatives found large quantities of such foods as flour, cereals, candy and miscellaneous bakery ingredients which were adulterated due to insect or rodent contamination. In some cases foods were found to be improperly stored in that new stocks were placed in front of older stocks in the establishment rooms and because of the practice certain of the older stocks were not used for lengthy periods of time. This practice

resulted in insect contamination in older stock. Our representatives supervised the segregation of the adulterated food from the food which was found to be fit for use and also supervised the destruction of the stocks of food which were found to be unfit for use. Some foods which were contaminated were allowed for use as food for animals.

#### BAKERY INVESTIGATIONS

During the year, 1,908 sanitary inspections of bakeries were made. Special attention was given to the cleanliness of all equipment coming in contact with food and to the methods employed by bakers to prevent the contamination of food. Careful inspections were made of the quality and condition of all raw materials and of the conditions under which raw materials were stored. In the inspection of large bakeries where conveyors and storage bins for flour are used, inspections were made of closed compartments to detect insect breeding places. Where insect contamination was found, operators were advised to clean these compartments at more frequent intervals.

Many letters were forwarded to operators of bakeries giving advice and/or warnings where unsatisfactory conditions were found. Reinspections were made in order to determine if the unsatisfactory conditions had been corrected. Where unsatisfactory conditions had not been corrected, hearings were held and recommendations were forwarded to the Department of Law and Public Safety for institution of action for collection of statutory penalties.

#### OTHER FOOD ESTABLISHMENTS

Sanitary control of food establishments other than bakeries, cider plants and auction markets, was continued during the year by agents of this Section.

Emphasis on sanitation in eating establishments was lessened especially in cities and towns maintaining full time health personnel. Inspections of eating establishments were made, however, in a number of municipalities requesting assistance with unusual problems and training of local inspectors, as well as in certain municipalities not employing full time personnel.

Supervision was also exercised in the sanitary control of such establishments as non-alcoholic bottling plants, candy factories, canning plants, cold storage warehouses, drug manufacturing plants, meat and poultry slaughterhouses, and all others engaged in the preparation, handling and storage of foods and drugs.

During sanitary inspections and collection of samples of foods for analysis, the following articles were found to be adulterated and were condemned and destroyed under the supervision of agents of this Department and certain local boards of health:

Article	Amount
Bakery ingredients .....	4,202 pounds
Candy .....	187 pounds
Canned goods .....	141 cans
Canned goods .....	190 pounds
Cereal products .....	637 pounds
Eggs .....	30 pounds
Flour .....	7,041 pounds
Fruits and vegetables .....	1,172,330 pounds
Meats .....	2,595 pounds
Milk and milk products .....	267 pounds
Miscellaneous packages .....	55 gallons
Miscellaneous pounds .....	25,794 pounds
Poultry .....	14 pounds
Spices .....	380 pounds
Sugar .....	110 pounds

#### MILK AND ICE CREAM PROGRAM

Supervision of dairy products produced, manufactured, sold or distributed in New Jersey was conducted by 14 inspectors. During the year these sanitarians inspected 1,361 milk plants, 5,544 dairies and 1,075 ice cream factories. In addition they made and read 10,778 Breed smears and took 2,153 bacteria and 2,924 chemical samples. Reports received from local boards of health have also been utilized in determining the degree of compliance with our laws and regulations.

The conversion of one shellfish laboratory located at Tuckerton, New Jersey, to include the making of bacteria counts of milk and milk products has increased the field of control. Plans have already been made and conversions nearly completed to include the shellfish laboratories located at Bivalve and Newark, New Jersey, in the milk sampling program. The addition of these facilities to those already available at Trenton will increase the amount of coverage now possible.

Additional microscopes have been obtained from other departmental bureaus. These microscopes were modified for milk work and distributed to sanitarians of this Section for examination of milk and milk products in the field.

During the year the list of milk plants approved by this Department was reviewed on the basis of information submitted and by the end of the year approximately 15% of the fluid milk permits issued had been discontinued.

This is the first year that sufficient funds were available to cover the expense of out-of-State inspection work and, as a result, all of the plants holding fluid permits were inspected by representatives of this Department.

In November, the State Commissioner of Health adopted a resolution revising and tightening the controls previously adopted requiring that all milk reaching the ultimate consumer in the raw state be produced by herds showing negative brucella blood tests.

During the 1949-1950 session of the Legislature, several bills dealing primarily with the economic aspects of the milk industry were introduced. The bills were not passed by the Legislature. As a result, this Department was asked to adopt some of the requirements contained in the bills as Departmental regulations. Several new regulations were being drafted at the close of the fiscal year.

An attempt was made to bring the laws pertaining to the production and handling of ice cream and related products up to date, but this resulted in disagreement between members of the ice cream industry. The revision is still under discussion and it is hoped that the bill will be in proper form for presentation at the next session of the Legislature.

#### SHELLFISH CONTROL PROGRAM

Supervision of the growing, wholesale handling, shucking and the retail sale of shellfish in New Jersey continued during this period. Supervision of retail outlets of shellfish was expanded through more intensive investigation of labeling, handling, storage and source of shellfish during routine inspections of food markets, roadside stands, restaurants and similar establishments.

Inspection of facilities at wholesale handling and shucking establishments was also continued. Special attention was directed to the type of equipment used in the large oyster shucking plants in the State. Verbal and written recommendations were made to shucking plant operators that all unsatisfactory equipment used in handling shucked shellfish be replaced by stainless steel, monel or other non-rusting metal by September 1, 1950. Inspections made at the end of the year indicate that all shucking plants have been or will be equipped with blowers, washers, skimmers, water and air lines made of metal acceptable to this Department.

In addition, two existing shucking houses have been completely rebuilt and a number of others extensively altered in order to comply with regulations governing the construction and operation of such establishments.

During 1949, a comprehensive survey of shellfish waters in Raritan Bay was completed by agents of this Section in cooperation with representatives of the Bureau of Marine Fisheries of the New York State Department of Conservation. The results of the survey were evaluated and it was decided

that the condition of the New Jersey portion of the bay waters had neither improved nor deteriorated sufficiently enough to warrant opening any condemned shellfish waters or closing additional sections of the bay for the taking of shellfish.

Shellfish personnel also participated in cooperative surveys of bathing beach waters in this State. Assistance was rendered by the Section on Public Health Engineering during these sampling surveys.

During the year a long range shellfish program was formulated to provide more adequate control of the shellfish industry. One feature of the program provided for conducting sanitary bacteriological surveys of all condemned and seasonally condemned shellfish waters.

A number of conferences were held to discuss the plan and preparations were made to initiate studies of two closed shellfish areas during the early part of the next fiscal year.

The services of the shellfish laboratory boat "Inspector" were dispensed with, and the craft was overhauled, prepared for sale and sold during the current year.

There were collected during the past fiscal year 1,981 shellfish water samples and 829 shellfish samples for analyses. Shellfish personnel also assisted with the collection of approximately 368 samples of bathing beach waters.

Sanitary inspections of shellfish handling establishments for the year totaled 1,735 of which 1,294 were wholesale shellfish shipping establishments, 279 were retail shellfish establishments and 162 were shellfish shucking establishments.

Four hundred and fifty-six establishments were granted shipping certificates during the year.

#### COLD STORAGE WAREHOUSES

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



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

Quantity	Article	Extension Granted
275 boxes	Cheese	6 months
67 cases	Cheese	6 months
100 boxes	Meat	4 months
356 cartons	Meat	3 months
370 boxes	Meat	3 months
51 packages	Meat	3 months
12,286 pounds	Beef Testes	3 months
3,213 cans	Eggs (whites)	3 months
7,135 cans	Eggs (whole)	3 months
1,665 cans	Eggs (yolks)	3 months
28 boxes	Fish	3 months
16 barrels	Milk (sweetened skim condensed)	3 months
88 cartons	Poultry	3 months
18 packages	Poultry	3 months
40 crates	Poultry	2 months

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

ANNUAL COLD STORAGE REPORT  
1949 — 1950

Article	July 1949	August 1949	September 1949	October 1949	November 1949	December 1949	January 1950	February 1950	March 1950	April 1950	May 1950	June 1950
Eggs, cases, lbs. ....	125,350	84,090	76,709	38,296	14,935	6,027	41,320	54,717	74,188	181,535	238,855	230,142
Eggs, broken, lbs. ....	3,403,594	3,538,296	2,569,710	2,010,205	2,474,301	2,039,701	2,379,855	2,992,728	3,054,614	3,273,193	3,644,612	4,036,292
Cheese, lbs. ....	5,009,448	4,731,227	4,404,186	3,843,685	3,631,076	3,005,508	2,121,899	2,529,591	2,008,789	2,251,948	2,354,859	2,561,542
Butter, lbs. ....	6,068,046	6,122,548	5,393,057	3,904,959	3,215,691	2,600,805	3,470,841	2,100,190	2,138,030	2,585,001	3,505,195	5,801,906
Poultry, lbs. ....	2,937,503	3,134,751	3,847,969	6,241,446	9,543,041	13,601,103	13,982,243	12,471,211	10,541,846	7,252,063	4,568,079	3,788,454
Fresh meats, lbs. ....	8,733,001	6,368,789	8,195,297	10,728,036	10,299,772	13,277,624	56,777,869	17,545,046	16,762,797	13,566,934	11,674,713	9,989,045
Fresh fish, lbs. ....	8,922,036	9,182,567	8,725,503	9,303,720	8,565,160	7,571,937	7,014,812	8,054,982	7,467,568	8,715,789	8,329,695	9,028,047
Milk and milk products, lbs. ....	2,015,910	3,048,672	2,800,418	2,734,555	1,948,418	1,549,488	905,419	555,008	698,844	629,891	788,101	1,105,960
Edible fats and oils, lbs. ....	256,207	472,207	168,005	394,548	483,874	611,806	880,695	833,016	736,959	698,831	491,531	782,204
Game, lbs. ....	740	904,104	.....	60	6,415	15,839	21,806	.....	4,884	6,264	4,814	814
Miscellaneous, articles, packages .....	336,259	276,503	232,853	246,937	225,410	177,859	171,933	183,450	162,494	253,828	312,992	306,525

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

	<i>Inspections</i>
Bakeries .....	1,908
Candy factories .....	72
Canning factories .....	44
Cold storage warehouses .....	151
Dairies (In-State) .....	2,115
Dairies (Out-of-State) .....	3,393
Drug manufacturing establishments .....	17
Drug stores .....	15
Egg breaking establishments .....	18
Food auction markets .....	169
Food markets .....	549
Goat dairies .....	36
High temperature short time units .....	69
Ice cream manufacturing plants (In-State) .....	1,056
Ice cream manufacturing plants (Out-of-State) .....	19
Meat markets .....	33
Meat processing plants .....	65
Milk plants (In-State) .....	1,204
Milk plants (Out-of-State) .....	157
Miscellaneous .....	690
Non-alcoholic beverage establishments .....	437
Pickling plants .....	3
Poultry slaughterhouses .....	17
Restaurants .....	1,923
Shellfish shipping establishments .....	1,294
Shellfish establishments (retail) .....	279
Shellfish shucking plants .....	162
Slaughterhouses .....	878
	16,773

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

	<i>Above Standard</i>	<i>Below Standard</i>	<i>Misbranded</i>	<i>Total</i>
Milk and cream .....	2,866	40	18	2,924
Foods .....	1,152	143	7	1,302
Drugs .....	435	16	106	547
	4,453	199	131	4,773

PENALTIES

During the year, \$1,660.00 was collected in penalties for violations of the Food and Drug Laws.

FEEES

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

605 Milk permits .....	@	\$25.00	\$15,125.00
17 Goat milk permits .....	@	10.00	170.00
1 Goat milk permit .....	@	3.33	3.33
1 Goat milk permit .....	@	1.67	1.67
31 Ice cream plant licenses .....	@	100.00	3,100.00
12 Ice cream plant licenses .....	@	50.00	600.00
16 Ice cream plant licenses .....	@	25.00	400.00
52 Ice cream plant licenses .....	@	10.00	520.00
659 Ice cream plant licenses .....	@	5.00	3,295.00
90 Cold storage licenses .....	@	10.00	900.00
5 Narcotic drug licenses .....	@	50.00	250.00
44 Narcotic drug licenses .....	@	5.00	220.00
			1,533
			\$24,585.00

Section on Public Health Engineering

This year marked the beginning of operation of this Section as a unit in the new Bureau of Environmental Sanitation, a part of the original reorganization plan of the Department. At the outset of this fiscal year there was little significant change in the Section's operating fields and procedures. As time passed, however, marked changes were made.

The most important action affecting the Section's operation was the direct supervision of Section details by the Bureau Director. This gave the Director a full knowledge of Section functions as he assumed responsibility for all correspondence and reports originating in the Section as well as responsibility for the work of individual employees in the Section. Some of this can be attributed to the prolonged absence, due to illness, of the Section Chief. The important thing about it is that it gave the Director a better opportunity to effect changes in operations and procedures.

The next most important factor in the evolution of change was the transfer of employees from established lines of work to new fields or to fields formerly covered in the Section but suspended some years ago. One engineer was transferred from the Section to the Director's staff; one engineer was transferred to a new field of work; namely, sanitation of F.H.A. large realty developments; two engineers were transferred to the industrial wastes pro-

gram sponsored by the Federal Government (see later discussion). The latter was not a new activity but it was one which had been suspended because of lack of personnel at the onset of World War II. Another engineer was assigned about 50% of his time to work with the Bureau on Food and Drugs. Another engineer was on leave of absence for schooling for more than eight months. Thus, the equivalent of the services of six engineers was lost to the Section during the fiscal year; the total staff at the beginning of the year was 14 engineers, including the Chief of the Section. The loss of six engineers meant a 43% reduction in staff for established lines of work. At the year's end the said reduction was 50%, an additional engineer having been transferred to a new field; namely, lake sanitation.

The net effect of the changes outlined above has been to transform greatly the place of the Section in the State's public health program. The transformation has been in line with the over-all reorganization pattern. The Section gradually is being changed from a direct service unit to a consulting unit even though some direct service is being continued. In order to accomplish the transformation and the broadened field of interest and activities it has been necessary gradually to discontinue established direct services. Routine inspections of water supplies was dropped as was that of rural school supplies. Field work in regard to sewage treatment was curtailed and there was a general reduction in field assignments in the old established lines of work. It is contemplated that much of this discontinued work will be resumed through the Department's District offices and through local health departments when the reorganization program has been completed. In the meantime these services are suspended.

The broadening of the Section's interests is taking it into realty subdivisions, bathing (swimming pools, lakes, and other places), shellfish sanitation, school sanitation, institution sanitation, garbage and refuse disposal, and camp sanitation, all of which are almost entirely new activities; and, it is resuming the water pollution control program on a scale approaching that of fifteen years ago. In all these fields the trend is toward consultation rather than direct service.

NUMBER OF WATER AND SEWERAGE PROJECTS EXAMINED AND APPROVED FROM  
JULY 1, 1949 TO JUNE 30, 1950

Type of Projects	No. of Projects	No. of Plans	Engineers' Estimates of Costs
<i>Water:</i>			
Alterations, improvements and additions to waterworks .....	53	146	\$1,811,020.10
New systems and supplies .....	10	25	243,937.00
Total .....	63	171	\$2,054,957.10

*Sewage:*

Sewer extensions .....	110	270	\$1,439,738.16
Alterations and additions to sewerage systems, sewage and/or industrial waste treatment plants .....	22	154	3,645,855.61
New sewage and/or industrial waste treatment plants, systems and appurtenances ...	17	258	4,179,026.77
Total .....	149	682	\$9,264,619.54

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

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

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

Drainage Basin	Sewage and Industrial Wastes Treatment Plants	Stream Surveys	Investigation of Complaints and Special Surveys	Special: Factory Sites (a) Slaughterhouses (b) Bathing Waters (c)	Conferences: Interstate Sanitation Commission; Federal and State Agencies; In-County and Other Bodies	Total Hours All Activities
Delaware River .....	248	265	188	19(c)	174	894
Raritan River .....	159	70	98	10(c); 2(a)	82	421
Passaic River .....	218	318	405	8(a)	47	996
Hackensack River .....	101	22	43	..	136	302
Atlantic Coastal Plain ...	568	123	49	485(c)	192	1,417
Other Rivers .....	50	12	40	..	126	228
Special Works .....	18	..	81	..	430	529
Total hours .....	1,362	810	904	524	1,187	4,787
Total hours potable waters .....	715	692	546	10	323	2,286

## MAN-HOURS IN FIELD ON WATER SUPPLY SOURCES AND TREATMENT

*Public Water Supplies*

Inspections, including water treatment plants .....	919
Inspections on potable watersheds .....	2,286
Investigations of complaints .....	1,042
Conferences .....	69

*Cross-connections*

Inspections of installations .....	56
Conferences .....	8

*Certification of Interstate Carriers*

Inspections .....	115
Conferences .....	...

*Rural School Supplies*

Inspections .....	179
Conferences .....	...

Total hours .....	4,674
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## SUMMARY OF MAN-HOURS

(1) In field on sewage, industrial wastes, stream pollution (less potable watersheds) .....	2,501
(2) In field on water supplies and supply sources (including potable watersheds) .....	4,674
(3) Man-hours required in office on plans, reports, conferences, etc. ....	13,422
Total man-hours .....	20,597
(4) Total man-hours overtime, field and office .....	2,904
Total man-hours expended .....	23,501

## NOTICES, ORDERS AND OTHER LEGAL ACTIONS

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

*Notices or Orders issued:*

R. S. 58:10, et seq. ....	8
R. S. 58:11, et seq. ....	33
R. S. 58:12, et seq. ....	6
R. S. 58 and R. S. 32 .....	6
Chapter 195, P. L. 1945 .....	1

Orders of Necessity issued (R. S. 40:16, "g") .....	7
Orders rescinded (R. S. 58:11, et seq.) .....	10

*Cases referred to Department of Law and Public Safety for violation of:*

R. S. 58:10, et seq. ....	3
R. S. 58:11, et seq. ....	3
R. S. 58:12, et seq. ....	2

*Department of Law and Public Safety requested to withdraw, hold in abeyance or discontinue certain cases for violation of:*

R. S. 58:10, et seq. ....	2
R. S. 58:11, et seq. ....	4
R. S. 58:12, et seq. ....	1

*Records of Department changed:*

Public water supplies .....	1
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*Applications disapproved:*

Public water supplies .....	1
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## ORDERS OF NECESSITY

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

There follows a summary of the orders issued:

*September, 1949—Borough of Sayreville.*

The order requires the construction of partial sewer systems to serve the Morgan, President Park and Rose's Corner sections of the borough; the extension of the existing sewer system to serve Washington Road and Ernston Road in the borough; and, the construction of sewage treatment works to serve the Morgan section of the borough.

*November, 1949—Town of Phillipsburg.*

The order requires the construction of proposed sewerage works consisting of sewer extensions, main pumping station and a sewage treatment plant.

*March, 1950—Township of East Brunswick.*

The order requires the township to construct a proposed new source of water supply and appurtenances for the purpose of supplying water for potable and domestic use to the existing municipal public potable water supply system.

*April, 1950—Borough of Chatham.*

The order requires that the borough, in joint participation with the borough of Madison, construct certain additions and alterations to the existing sewerage system and treatment plant owned jointly by the said municipalities.

*April, 1950—Borough of Fair Lawn.*

The order requires that the borough of Fair Lawn augment its existing water supply, as follows: (1) locate three proposed wells, two in the Westmoreland Field and one in Brookdale Park; (2) construct three 12-inch wells in the Westmoreland Field; (3) install treatment devices to treat water derived from the Westmoreland Field; and (4) construct additional storage facilities.

*June, 1950—City of Garfield.*

The order requires that the city construct and/or install additional pumping and storage facilities, with appurtenances, to augment existing water supply facilities.

*June, 1950—Town of West New York.*

The order requires that the town construct an interceptor sewer, storm flow sewer, and sewage treatment works.

CROSS-CONNECTIONS

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

Municipality	Permit Holder	Permit No.
Sewaren	Shell Oil Company	197-A
Morristown	Farmers & Consumers Dairy, Inc.	217
Woodbury	Atlantic Theatres, Inc.	218 & 222
Morris Plains	The Maltine Co.	219
Plainfield	Queen City Bottling Co.	220
Plainfield	Muhlenberg Hospital	221
Mendham	Sisters of Christian Charity	223
New Brunswick	Szabo Food Market	224
Mendham	J. C. Pitney	225

ESTABLISHMENT OF FACTORIES WITHIN POTABLE WATERSHEDS

In conformity with the provisions of R. S. 58:10-17, et seq., any industry (factory, workshop or place for the manufacture of materials or goods) desiring to locate or establish on any watershed in this State, above the point at which any public supply of potable water is taken, must make application to the State Department of Health for a written permit to so locate or estab-

lish the same. The aforementioned statute was enacted to prevent wet process and certain dry process industries from polluting the potable waters of the State.

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

Location	Name of Concern	Permit No.
Cranford Twp.	Wood & Selick Sweetened Coconut Co.	296
Cranford Twp.	Boyle-Midway, Inc.	297
Caldwell Twp.	Sun Dial Corp.	298
Boonton	Quality Plating & Finishing Co., Inc.	299
Mount Olive Twp.	Culerk Corp.	300
Orange	Tell Manufacturing Co.	301
New Providence	Air Reduction Co., Inc.	302
Rockaway	Reaction Motors, Inc.	303
East Hanover Twp.	Sandoz Pharmaceuticals	304
Blairstown	Payne Cutlery Corp.	305
Kenilworth	Volco Brass & Copper Co.	306
Roxbury Twp.	Netcong Chemical Co., Inc.	307
Shrewsbury Twp.	Monmouth County Abattoir	308

ACTIVITIES IN CONJUNCTION WITH FEDERAL POLLUTION CONTROL PROGRAM

The Federal Security Agency, Public Health Service, by authority granted to it by Public Law 845, known as the Water Pollution Control Act, passed by the 80th Congress in June 1948 is sponsoring and financially supporting a nation-wide stream pollution program for the conduct of studies, surveys, research and investigation of stream pollution caused by industrial wastes. The said program is conducted by the State Agencies having control over stream pollution, which in New Jersey is the State Department of Health.

The Act authorized the appropriation to the Federal Security Agency for each of five years the sum of one million dollars to be allotted equitably and paid to the States, territories and Interstate Agencies for expenditure by them for the prevention and control of water pollution by industrial wastes. New Jersey received a grant of \$18,085.

The program in New Jersey was started about November 1, 1949. One sanitary engineer and one chemical engineer were employed by the State and one sanitary engineer, employed by the Interstate Commission on the Delaware River Basin (Incodel) was turned over to the State Department of Health, for inspections in the Delaware River Basin in New Jersey. Field work was started about March 1, 1950.

There are approximately 13,500 industries in New Jersey. The first screening, eliminating the obviously non-waste producing industries, reduced the number to about one-half. The second screening, eliminating for the present industries employing less than ten persons again reduced the likely waste producing industries by about one-half. The remaining 3,500 to 3,600 industries were divided into three groups: (1) industries discharging wastes directly into streams, (2) industries discharging wastes to a municipal sewer system without a treatment works and (3) industries discharging wastes to a municipal or privately owned sewerage system including treatment works.

The Department is investigating those industries in group I or those discharging wastes directly to streams. If the industry is found to be discharging wastes of a polluting nature, corrective measures are being required in accordance with the laws and policies of the Department.

The Interstate Sanitation Commission is investigating the industries discharging either directly or through municipal sewer systems into the waters under their control: Newark Bay, Arthur Kill, Kill VanKull, Upper New York Bay and the Hudson River. The data collected are to be made available to the State Department of Health.

The data secured by the national surveys will be incorporated into documents officially known as comprehensive reports. When completed, the reports will provide exhaustive inventories of factors contributing to and conditions created by polluted waters. They will then serve as the basis for comprehensive programs of water pollution control designed to combat conditions which are threatening the quality of the nation's water resources.

#### SOUTH AMBOY DISASTER

One of the most serious emergencies occurring during the year was the South Amboy explosion, resulting from the detonation of land mines and other explosives which were being transferred from freight cars to barges tied up at a loading pier in South Amboy.

The explosion occurred at approximately 7:27 P. M. on Friday, May 19, 1950, and representatives of the Department reached South Amboy about 10:45 P. M. The Commissioner of Public Works was immediately interviewed and arrangements made to inspect the water and sewage treatment plants.

At the water plant it was noted that, while the blast damage to the buildings at the plant site was extensive, operation of the water supply appurtenances was not affected. There were no power failures and pump operations remained normal. It was determined, however, that the water pressure being maintained was below normal, indicating the possibility of breaks in the distribution system, presumably in close proximity to the blast center.

The existence of such a break was later confirmed and repairs made as soon as possible.

While no serious difficulty was experienced in the operation of the South Amboy water supply facilities as a result of the blast, it is significant to note that if a serious main break had resulted from the blast an extreme emergency would have developed due to a possible water shortage, since it was impossible to enter the blast area to effect immediate repairs to the existing breaks.

At the South Amboy sewage treatment plant the blast damage was very great, due to the close proximity to the explosion center. In addition to the damage, power failures interfered with normal plant operations for several hours. No serious difficulty was experienced, however, in the operation of the sewerage system. It was necessary, however, to by-pass the plant for several hours.

One significant conclusion derived as a result of the South Amboy explosion is that each and every municipality in this State should have available, for immediate reference, and at several locations, a master plan of its water supply and sewerage systems, indicating thereon all valves, cutoffs, hydrants, manholes, and other important data of value in locating leaks or breaks. This is of special importance in the preparation of any Civil Defense Plan organized by any political subdivision in New Jersey.

#### Rabies Control Unit

##### PERSONNEL

During the calendar year ending December 31, 1949, the changes in personnel of the Rabies Control Unit consisted in the promotion of the Principal Clerk and Junior Clerk Stenographer to other activities and the addition of a Junior Clerk Stenographer.

Further adjustment of the clerical force will be made at a later date.

##### REVENUE

Registration tag fees collected by the State Department of Health amounted to \$79,230.00; total expenditures for the same period were \$60,995.26.

##### PREVALENCE OF RABIES

The prevalence of rabies during the year 1949 amounted to 40% below the previous year; 65 dogs, 1 cat and 1 human being succumbing to the disease. Since rabies infection has for several years spread in a southward direc-

tion in a fixed pattern at the rate of one tier of counties each year, it was possible to predict with reasonable accuracy what the situation would be in 1949. Of the total of 67 cases, 61 were discovered in the enzootic area comprising the counties of Mercer, Middlesex, Monmouth, Somerset and Union. Most of the cases (90%) occurred during the first six months of the year, and the outbreaks subsided following an accelerated dog pick-up campaign and mass vaccination of dogs. Near the close of the year the enzootic area had been cleared of actual rabies cases with the exception of a small persistent focus of infection in one county.

Sporadic cases apprehended in five additional counties were promptly reported and thoroughly studied epidemiologically. District and local health and municipal officials in cooperation with dog owners in these infected areas had previously established facilities to prevent the spread of rabies by contact between normal and healthy animals.

#### WARDEN ACTIVITIES

An orderly flow of dog pick-up services to locations in which emergent need for strengthening the local dog control program exists is maintained. An operational schedule is prepared so that each member of the staff knows well in advance the amount and character of work he is expected to achieve. Each member of the staff is required to prepare and submit daily activity reports. These reports serve as the basis for evaluating work accomplished. The value of continuous helpful assistance by the Rabies Control State agency is reflected in a conspicuous reduction in the number of stray and unlicensed dogs found running at large.

#### VACCINATION PROGRAM

The vaccination program which was inaugurated in 1948 has increased in popularity in practically all areas in which rabies has existed in recent years. During the year, 186,700 cc. of canine antirabies vaccine was distributed free by the State Department of Health and administered by local veterinarians in a program established and supervised by local municipal and health officials.

Dog management and vaccination are regarded by the State Department of Health as companion procedures, each having a specific role in the over-all rabies control effort.

Innumerable demonstrations of the efficiency of vaccine when applied jointly with an adequate pick-up service have resulted in the temporary elimination of rabies throughout the year from those counties comprising the endemic area.

#### EDUCATION

The media used in dispensing information to the public and responsible municipal and health officials include talks before a great variety of groups, comprising Parent-Teacher Associations, school children, sportsmen's clubs, farm organizations, service and civic associations.

Since municipalities constitute a separate political subdivision, each one must be treated as a separate entity. In promoting an educational program, agents of this Unit make a serious attempt to describe accurately the situation as it exists in each municipality of the State. Furthermore, pamphlets, posters and news releases are utilized in appropriate places to heighten interest in the over-all program of rabies control. The plan initiated during 1948 to enlist the interest of school children in dogs and rabies control by means of elementary talks and audio-visual aids was continued with the result that 150,000 individuals were reached during the year.

On November 2, 1949 a pre-school age child was bitten by an unapprehended dog. The child was not given prophylactic treatment at the proper time to avoid the development of hydrophobia. The State Department of Health took immediate action to call together on a county-wide basis the health officials, police officers, dog wardens, sanitary inspection personnel and other local officials to be sure that the essential techniques of dog management and rabies control and the need for coordination of effort on the part of the several local officials involved in the program are thoroughly understood and accepted.

#### CONFERENCE OF THE REGIONAL CONTINUING COMMITTEE ON RABIES CONTROL

The technical Sub-Committee of the Interstate Regional Committee on Rabies Control met at the Hotel Hildebrecht, Trenton, New Jersey, on August 9, 1949. The primary objective of the Committee was to formulate a rabies control program embodying all available knowledge of rabies and experience in successful methods of control as the basis for uniform State legislative action. Early in the discussions it was found that there was no common denominator. Programs were organized in different ways to meet different problems in each of the States. However, complete agreement was reached in other essential details, and a resumé of the Conference was prepared for submission to the Joint Legislative Committee on Interstate Cooperation at a subsequent date.

## GENERAL MATTERS

The inspection of kennels, pet shops, shelters and pounds was continued co-operatively with local health officials throughout the year and improvements were noted in the construction and maintenance at such shelters.

An effort is being made to improve the keeping of records at dog pounds in order to facilitate the study of data to evaluate the effectiveness of rabies control programs.

## LEGAL ACTION

Legal action at State level brought against violators of public health laws and local ordinances was originally intended to demonstrate technique and procedure, which was later to become the responsibility of local officials, with the understanding that State agents would be made available if and when troublesome problems that transcend local powers are encountered. As a consequence, there was a decided reduction in the amount of money collected by the State Department as a result of legal action.

THE NUMBER OF CASES OF RABIES REPORTED TO THE RABIES CONTROL UNIT OF THE NEW JERSEY STATE DEPARTMENT OF HEALTH FROM JANUARY 1, 1949 TO DECEMBER 31, 1949

County	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total for County
Atlantic	..	..	..	..	..	..	..	..	..	..	..	..	..
Bergen	..	..	..	..	..	..	..	..	..	..	..	..	..
Burlington	..	..	..	..	..	..	..	..	..	..	..	..	..
Camden	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape May	..	..	..	..	..	..	..	..	..	..	..	..	..
Cumberland	..	..	..	..	..	..	..	..	..	..	..	..	..
Essex	..	..	..	..	..	..	..	..	..	..	..	..	..
Gloucester	..	..	..	..	..	..	..	..	..	..	..	..	..
Hudson	..	*1	..	..	..	..	..	..	..	..	..	..	1
Hunterdon	1	..	..	..	..	..	..	..	..	..	..	..	1
Mercer	2	1	..	..	..	..	..	..	..	..	..	..	3
Middlesex	4	1	2	3	3	4	1	1	..	2	..	†2	23
Monmouth	7	2	1	1	..	..	..	..	..	..	..	..	11
Morris	..	..	..	..	..	..	..	..	..	..	..	..	..
Ocean	..	..	2	..	..	..	..	..	..	..	..	..	2
Passaic	..	..	1	..	..	..	..	..	..	..	..	..	1
Salem	..	..	..	..	..	..	..	..	..	..	..	..	..
Somerset	..	1	7	1	1	..	..	..	2	1	..	..	13
Sussex	..	..	..	..	..	..	1	..	..	..	..	..	1
Union	2	1	2	4	..	1	1	..	..	..	..	..	11
Warren	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	16	7	15	9	4	5	3	1	2	3	..	..	67

\* 1 Cat

† 1 Human

65 Dogs

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67 Total



**Report of the Bureau of Laboratories**

July 1, 1949—June 30, 1950

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

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Section on Bacteriology—JOHN H. SPOONER, JR., *Chief*

Section on Chemistry—JOHN E. BACON, *Chief*

Section on Pathology—ELMER L. SHAFFER, PH.D., *Senior Histologist*

Section on Serology—

## Bureau of Laboratories

The Section on Chemistry now includes laboratory work in industrial hygiene in addition to the examination for pollution of water supplies and the laboratory examinations of foods and drugs.

The Section on Bacteriology has made more provision for field work in the examination of water and milk through three branch laboratories located in Bivalve, Newark and Tuckerton.

The Section on Pathology has been re-organized and made a part of the Division of Laboratories. In addition to the Senior Histologist, two additional Histologists were appointed as assistants to complete the technical staff. The re-equipping and remodeling of the room assigned to this Section at 17 West State St., was completed about May 1, so that the Section has been in full operation but a few months. The Section on Pathology is now actively engaged in processing tissues for teaching and consultations. Routine cancer diagnostic work is done by local pathologists and not by the State.

The Rh testing of blood in the Section on Serology has been increased in the case of prenatal blood sent in for an examination for syphilis. A branch serological laboratory in Camden largely does work in advancing the tests for syphilis of the blood and spinal fluid.

### Section on Bacteriology

The report of the activities of the Section on Serology, which previously has been included in the Section on Bacteriology, follows as a separate report.

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

A total of 51,327 bacteriological and parasitological specimens were examined during the fiscal year in the central bureau and 3,283 shellfish

waters, shellfish products, milk, cream and milk products in the branch laboratories, totaling 54,610. There was an increase in all categories of examinations made except diphtheria and gonorrhoea; tuberculosis examinations increased 1,294 specimens; blood agglutinations 1,009; enteric diseases 288 and miscellaneous specimens 149. Diphtheria examinations decreased by 937 and gonorrhoea by 300.

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

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

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

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

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

TABLE I

## NUMBER OF SPECIMENS EXAMINED DURING YEAR ENDING JUNE 30, 1950

Diphtheria .....	4,061	
Tuberculosis .....	15,585	
Blood agglutinations .....	8,444	
Enteric diseases (feces and urine) .....	11,071	
Gonorrhoea .....	7,560	
Miscellaneous specimens .....	4,606	
		51,327
Tuckerton Laboratory .....	2,325	
Bivalve Laboratory .....	597	
Newark Laboratory .....	361	
		3,283
Total .....		54,610

Total specimens listed as miscellaneous also increased during the year. This increase is shown in the categories of bacterial infections and hemolytic streptococci, where the physician has requested the laboratory to identify the organisms, in *M. tuberculosis* (body fluids, feces, pus and urine for tuberculosis examination) and in feces specimens for ova and parasites.

There were 39 less animal heads received for examination during the year and happily there were only 14 heads found positive, as compared with 87 last year. No positive smears for malaria were found as compared with 61 in 1946.

TABLE II

## MISCELLANEOUS SPECIMENS EXAMINED DURING YEAR ENDING JUNE 30, 1950

<i>Specimen for</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>
Rabies .....	14	232	8
<i>B. abortus</i> (blood) .....	..	1	..
Bacterial infection (body fluids, blood, pus, sputum, urine, etc.) .....	459	56	10
Gonococcus infection (eye smears) .....	3	31	1
Hemolytic streptococci .....	154	490	..
Malaria .....	..	27	2
Meningococci .....	..	1	..
Occult blood .....	2	4	2
Ova and parasites .....	32	1,132	5
<i>H. pertussis</i> .....	..	14	..
Pneumonia .....	1	2	..
<i>Treponema pallida</i> .....	..	1	..
Trichinosis .....	..	1	..
<i>M. tuberculosis</i> (body fluids, pus, feces, urine, etc.) .....	191	1,163	10
Vincent's angina .....	26	232	5
Undulant fever (milk reaction for) .....	..	1	..
Other unusual examinations .....	73	208	12
	955	3,596	55
Total .....	4,606		

## RABIES SPECIMENS (SPECIES OF ANIMALS) EXAMINED DURING YEAR ENDING JUNE 30, 1950

Dogs .....	Positive, 14; negative, 184, unsatisfactory, 7.
Cats .....	Negative, 25; unsatisfactory, 1.
Raccoons .....	Negative, 3.
Rabbits .....	Negative, 6.
Deer .....	Negative, 1.
Foxes .....	Negative, 2.
Hamsters .....	Negative, 1.
Squirrels .....	Negative, 4.
Cows .....	Negative, 2.
Mice .....	Negative, 1.
Skunks .....	Negative, 2.
Rats .....	Negative, 1.

## YEARLY TOTALS OF ANIMALS EXAMINED FOR RABIES FROM 1941 TO 1950, INCLUSIVE

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Positive .....	76	45	8	8	12	60	114	62	87	14
Negative .....	144	129	103	90	104	94	237	294	289	232
Unsatisfactory .....	7	17	15	7	18	8	28	10	19	8
Total .....	227	191	126	105	134	162	379	366	395	254

## MUNICIPALITIES, ARRANGED BY COUNTIES, FROM WHICH RABID ANIMALS WERE RECEIVED DURING YEAR ENDING JUNE 30, 1950

Middlesex County—Metuchen, 1; Milltown, 3; New Brunswick, 4; Perth Amboy, 1.  
Somerset County—North Plainfield, 1; Somerville, 2.  
Union County—Plainfield, 1; Westfield, 1.

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

TABLE III  
MICE INOCULATIONS FOR RABIES

Material	Positive	Negative	Unsatisfactory
Dog brain .....	..	150	..
Cat brain .....	..	23	..
Raccoon brain .....	..	2	..
Rabbit brain .....	..	5	..
Hamster brain .....	..	1	..
Squirrel brain .....	..	3	..
Fox brain .....	..	1	..
Rat brain .....	..	2	..
Cow brain .....	..	1	..
Skunk brain .....	..	1	..
		—	
		189	

There were 7,360 smear examinations for gonorrhea made during the year. Nearly 11% were reported as containing typical intracellular Gram negative diplococci.

TABLE IV  
SPECIMENS EXAMINED FOR NEISSERIA GONORRHEA (PUS SMEARS)  
DURING YEAR ENDING JUNE 30, 1950, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July .....	76	561	13	650
August .....	95	664	21	780
September .....	92	547	21	660
October .....	64	603	14	681
November .....	69	502	19	590
December .....	60	452	13	525
January .....	74	516	8	598
February .....	65	474	16	555
March .....	77	580	8	665
April .....	34	453	7	494
May .....	64	632	15	711
June .....	60	570	21	651
	830	6,554	176	7,560

The number of throat culture specimens examined for *C. diphtheriae* continued to show a yearly decrease; 4,061 for 1950 as compared with 4,998 for 1949 and 5,688 for 1948. Animal inoculations and bio-chemical culture reactions were performed on all specimens showing organisms microscopically and morphologically similar to *C. diphtheriae* before they were reported positive. There were 23 animal inoculation virulence tests performed.

TABLE V  
SPECIMENS EXAMINED FOR CORYNEBACTERIUM DIPHTHERIAE DURING YEAR  
ENDING JUNE 30, 1950, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July .....	1	419	44	464
August .....	1	281	12	294
September .....	1	239	13	253
October .....	1	454	29	484
November .....	..	248	15	263
December .....	..	226	16	242
January .....	..	210	15	225
February .....	..	256	23	279
March .....	1	318	29	348
April .....	2	275	19	296
May .....	1	338	27	366
June .....	1	513	33	547
	9	3,777	275	4,061

Virulence tests—23

Specimens for examination for *M. tuberculosis* continued their annual increase. There were 1,294 more specimens with an increase in requests for culture and animal inoculation. This is shown by a comparison of this year's figure of 15,585 with 14,291 for 1949, 12,978 for 1948 and 11,909 for 1947. Because of the time-consuming procedure necessary in tuberculosis examinations it is estimated that more than 50% of the working day of the Bureau on Bacteriology is devoted to tuberculosis work, which includes sputa examinations and culture work with the preparation of culture media and guinea pig inoculations. At the present time routine culture work on all specimens received cannot be attempted.

TABLE VI

SPECIMENS EXAMINED FOR MYCOBACTERIUM TUBERCULOSIS (SPUTUM) DURING YEAR  
ENDING JUNE 30, 1950, BY MONTHS

Month	Positive	Negative	Unsatisfactory	Total
July .....	91	1,086	16	1,193
August .....	156	1,048	38	1,242
September .....	105	846	12	963
October .....	133	1,253	38	1,424
November .....	110	1,039	32	1,181
December .....	104	1,053	26	1,183
January .....	124	1,020	30	1,174
February .....	107	1,085	43	1,235
March .....	134	1,597	59	1,790
April .....	158	1,114	31	1,303
May .....	125	1,091	37	1,253
June .....	117	1,461	66	1,644
	1,464	13,693	428	15,585

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

TABLE VII (A)

GUINEA PIG INOCULATIONS FOR MYCOBACTERIUM TUBERCULOSIS

Material	Positive	Negative	Unsatisfactory
Sputa .....	2	132	4
Urine .....	10	250	7
Gastric contents .....	2	42	2
Pleural fluid .....	6	114	3
Spinal fluid .....	1	21	2
Body exudates .....	4	23	..
	25	582	18

Total—625

The volume of work in tuberculosis culture doubled over that of last year. The following table shows the results of culture inoculations for *M. tuberculosis* on Petraghani's and Lowenstein's media. The Petraghani method gave a slightly higher number of positive cultures and less contamination or unsatisfactory results as compared with the Lowenstein findings.

TABLE VII (B)

Material	Petraghani's			Lowenstein's		
	Positive	Negative	Uns.	Positive	Negative	Uns.
Sputa .....	20	273	7	19	271	10
Urine .....	16	281	4	18	277	6
Gastric contents .....	23	291	6	17	290	13
Pleural fluid .....	10	135	2	10	132	5
Spinal fluid .....	..	19	2	..	19	2
Body exudates .....	5	27	..	5	27	..
	74	1,026	21	69	1,016	36

Blood agglutination tests are performed for typhoid O and H antigens, paratyphoid A and B, undulant fever, tularemia and the Weil-Felix reaction for typhus and Rocky Mountain spotted fever. The laboratory prepared its own antigens for these tests and used both OX19 and OX2 for the Weil-Felix reaction. There was an increase in the number of blood agglutination tests requested during the year; 8,444 this year as compared with 7,435 last year.

TABLE VIII

BLOOD AGGLUTINATION TESTS DURING YEAR ENDING JUNE 30, 1950

	Positive	Negative	Unsatisfactory	Total
Typhoid fever .....	158	2,388	135	2,681
Paratyphoid fever .....	53	1,953	47	2,053
Undulant fever .....	68	3,343	58	3,469
Rocky Mountain spotted and typhus fevers	15	150	39	204
Tularemia .....	..	36	1	37
	294	7,870	280	8,444

Cultural examinations (feces and urine) for enteric pathogens increased by 388 over the number made last year.

TABLE IX

SPECIMENS OF FECES AND URINE EXAMINED FOR ENTERIC PATHOGENS DURING YEAR ENDING JUNE 30, 1950

	Positive	Negative	Unsatisfactory	Total
Eberthella typhosa .....	15	3,440	211	3,666
Salmonellas .....	22	3,433	211	3,666
Shigellas .....	..	3,455	211	3,666
No examination .....	..	..	73	73
	<hr/>	<hr/>	<hr/>	<hr/>
	37	10,328	706	11,071

This work includes the more complete identification of the Salmonellas into their respective groups. Results of specimens are reported to the physician and culture of the Salmonella organisms sent to the Salmonella Typing Center at Communicable Disease Center, Atlanta, Georgia. Cultures so identified are as follows:

S. cholerae-suis, var. kuzendorf .....	1
S. derby .....	7
S. enteriditis .....	1
S. montevideo .....	3
S. paratyphi B .....	3
S. typhimurium .....	2
	<hr/>
	17

The shellfish laboratories located at Tuckerton, Bivalve and Newark were placed under the Bureau of Laboratories, Section on Bacteriology, during the reorganization. These laboratories were originally used only for shellfish work, but during the year they have been receiving equipment for the additional work of performing bacterial counts on milk, cream and milk products. The equipment was completed for the Tuckerton laboratory and 440 such samples were analyzed there during the fiscal year as outlined in the Table below. The Bivalve laboratory established itself in new quarters during the year. A larger, better lighted, better equipped and generally improved location was the result. Mr. Newcomb, assistant bacteriologist-in-charge, did an excellent job of making and installing laboratory benches, tables and stands. Specimens analyzed at the three branch laboratories are shown in Table X.

TABLE X

Type of Sample Analyzed	Number of Samples Analyzed at:		
	Tuckerton	Bivalve	Newark
Shellfish waters .....	1,413	373	294
Shell oysters .....	120	48	..
Shucked oysters .....	45	166	39
Frozen oysters .....	4	5	1
Hard clams .....	291	5	8
Soft clams .....	11	..	12
Frozen clams .....	1	..	5
Mussels .....	..	..	2
Milk, cream and milk products .....	440	..	..
	<hr/>	<hr/>	<hr/>
Total—3,283	2,325	597	361

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

The New Jersey Laws of 1938, Chapter 41, state that blood tests for pre-natal serology shall be made in a laboratory approved by the Director of Health.

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

Chapter VI, Reg. 34a, states that cultures taken for release from quarantine for typhoid fever shall be made in a laboratory approved by the Director of Health.

Rules and regulations have been incorporated for such laboratory approval in the Sanitary Code, Chapter VI, Reg. 41. There are 105 such approved laboratories in New Jersey. These laboratories consist of one State laboratory, one United States laboratory, 13 municipal or county laboratories, 50 hospital laboratories and 40 private laboratories. These laboratories were all visited during the last fiscal year by a representative of the Section on Bacteriology. From 25 to 100 check specimens were submitted to each laboratory and results compared with the findings of the Section on Serology and the United States Public Health Service, Venereal Disease Control, Communicable Disease Center, at Atlanta, Georgia. There were 2,328 check specimens submitted during the year. The approved laboratories of the State, other than the Section on Bacteriology and the one United States laboratory mentioned above, examined a total of 567,492 specimens during the last fiscal year, divided as follows:

## SYPHILIS

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	12,511	8,244	233,107
Hospital laboratories .....	4,442	1,257	110,340
Private laboratories .....	322	109	16,110
	<u>17,275</u>	<u>9,610</u>	<u>359,557</u>

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

## PREMARITAL

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	282	134	36,235
Hospital laboratories .....	55	11	3,807
Private laboratories .....	61	8	5,461
	<u>398</u>	<u>153</u>	<u>45,503</u>

## PRENATAL

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	165	87	20,642
Hospital laboratories .....	332	77	11,056
Private laboratories .....	27	1	7,659
	<u>524</u>	<u>165</u>	<u>39,357</u>

## EXAMINATIONS FOR DIPHTHERIA

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	60	11	8,129
Hospital laboratories .....	155	14	8,526
Private laboratories .....	109	4	457
	<u>324</u>	<u>29</u>	<u>17,112</u>

## EXAMINATIONS FOR ENTERIC PATHOGENS

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	16	5	373
Hospital laboratories .....	533	8	6,826
Private laboratories .....	45	4	1,059
	<u>594</u>	<u>17</u>	<u>8,258</u>

## EXAMINATIONS FOR TUBERCULOSIS (SMEARS)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	2,892	6	36,395
Hospital laboratories .....	1,096	37	24,798
Private laboratories .....	65	2	1,025
	<u>4,053</u>	<u>45</u>	<u>62,218</u>

## EXAMINATIONS FOR TUBERCULOSIS (CULTURES)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	338	..	1,151
Hospital laboratories .....	237	10	25,072
Private laboratories .....	15	..	206
	<u>590</u>	<u>10</u>	<u>26,429</u>

## EXAMINATIONS FOR GONORRHEA (SMEARS)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	2,987	367	26,930
Hospital laboratories .....	581	172	9,571
Private laboratories .....	287	66	1,336
	<u>3,855</u>	<u>605</u>	<u>37,837</u>

## EXAMINATIONS FOR GONORRHEA (CULTURES)

	<i>Positive</i>	<i>Doubtful</i>	<i>Negative</i>
Municipal laboratories .....	694	87	3,516
Hospital laboratories .....	159	10	3,952
Private laboratories .....	54	8	129
	<u>907</u>	<u>105</u>	<u>7,597</u>

## TOTAL NUMBER OF EXAMINATIONS

State Laboratory, Bureau on Bacteriology .....	51,327
State Laboratory, Section on Serology .....	298,810
State laboratories, Tuckerton, Bivalve and Newark .....	3,283
Municipal laboratories .....	336,819
Total—New Jersey Public Health Laboratories .....	<u>690,239</u>
Hospital laboratories .....	209,261
Private laboratories .....	21,412

MAILING CASES FOR THE COLLECTION AND TRANSMISSION OF SPECIMENS SUPPLIED TO  
PHYSICIANS AND LOCAL HEALTH DEPARTMENTS THROUGHOUT THE  
STATE DURING YEAR ENDING JUNE 30, 1950

Diphtheria mailing cases .....	5,333
Tuberculosis mailing cases .....	19,295
Typhoid fever mailing cases .....	655
Malaria mailing cases .....	21
Gonorrhea mailing cases .....	8,175
Feces and urine mailing cases .....	4,633
Syphilis mailing cases .....	242,573
Ophthalmia neonatorum mailing cases .....	19
Total .....	280,704

The Section on Bacteriology supplies media to other Sections in the Bureau and local and private laboratories throughout the State. The Bureau prepared and supplied 3,373,100 c.c. of various kinds of media during the fiscal year, an increase of more than 1,000,000 c.c. over that furnished last year.

### Report of the Section on Chemistry

The Section on Chemistry makes chemical, bacteriological, microscopical and toxicological examinations of samples of food, drugs, water, sewage and trade wastes collected by the Department's representatives in the enforcement of the public health laws of New Jersey. Studies of health hazards within industrial plants are made in cooperation with the engineering personnel of the Section on Adult and Industrial Health, and samples of dust and possible air contaminants are collected and analyzed to assist in safeguarding the health of the workers. The facilities of the laboratory are also extended to local boards of health, State Department of Education, Department of the Treasury, Department of Law and Public Safety, State Department of Agriculture, State Department of Institutions and Agencies, and the State Department of Conservation and Economic Development. Analyses are also made of various samples of foods and supplies purchased under specifications for institutional use; rural school waters submitted by local boards of education; drinking water, lakes and streams from camps maintained by benevolent associations and other miscellaneous samples.

Assistance is given to local boards of health and water works laboratories desiring to install chemical control or supplement existing laboratory facilities. Instructions in chemical procedures are given to the personnel of such laboratories when requested.

There were 20,281 samples of food, drugs, water, sewage and miscellaneous preparations examined during the past year, an increase of 25% over the previous fiscal year. This was due to a full year's field inspection service instituted by the Section on Food and Drugs during which time over 2,700 samples were collected and submitted for examination to assist in the enforcement of the bacteriological standards for milk, cream, and milk products adopted by the State Department of Health on April 20, 1949. A further considerable increase in the number of samples tested was caused by the submission of over 2,600 samples of urine from State employees for sugar determinations during the department's diabetic campaign.

The Toxicologists in the Industrial Hygiene Laboratory made 36 plant visits during the year to industrial plants and performed 545 field and laboratory determinations. While the procedures followed in some of these examinations are now standardized, in many others the toxicological examinations are complicated and methods must be developed, adopted or improvised after critically reviewing the scientific literature.

The attached tabulations show in detail the number and nature of various kinds of chemical, toxicological and bacteriological examinations performed.

NUMBER AND CHARACTER OF SAMPLES EXAMINED IN FOOD AND DRUG LABORATORY  
JULY 1, 1949, TO JUNE 30, 1950

<i>Foods</i>	<i>Standard Above</i>	<i>Standard Below</i>	<i>Total</i>
Milk—chemical .....	1,804	25	1,829
Milk—phosphatase .....	887	30	917
Milk—bacteriological .....	1,907	809	2,716
Cream—chemical .....	255	6	261
Cream—phosphatase .....	154	5	159
Cream—bacteriological .....	154	32	186
Sour cream .....	40	3	43
Ice cream .....	51	2	53
Goat's milk .....	6	4	10
Chocolate milk—chemical .....	43	1	44
Chocolate milk—phosphatase .....	19	1	20
Cheese .....	4	4	8
Butter .....	6	5	11
Carbonated beverages .....	303	12	315
Carbonated beverages—for lead .....	3	5	8
Carbonated waters—for lead .....	65	52	117
Tomato products .....	36	22	58
Ground beef .....	173	24	197
Olive oil .....	43	1	44
Sherbets .....	1	5	6
Nuts .....	47	34	81
Canned asparagus .....	29	6	35
Bakery products .....	8	2	10
Horseradish .....	40	7	47
Sausage .....	33	5	38
Chocolate drink—chemical .....	20	0	20
Chocolate drink—phosphatase .....	22	0	22



DEPARTMENT OF HEALTH

<i>Foods</i>	<i>Standard Above</i>	<i>Standard Below</i>	<i>Total</i>
Vegetable and salad oils .....	3	0	3
Dried fruits .....	65	10	75
Baking mixes .....	138	22	160
Cereals .....	24	5	29
Egg products—for arsenic .....	12	0	12
Potatoes—for arsenic .....	0	4	4
Miscellaneous foods .....	33	10	43
<b>Total food samples .....</b>	<b>6,428</b>	<b>1,153</b>	<b>7,581</b>
<i>Drugs</i>			
Argyrol .....	23	1	24
Tincture of iodine .....	2	0	2
Leaves—for marihuana .....	2	0	2
Lime waters .....	81	3	84
Insecticides—D.D.T. ....	4	0	4
Camphorated oil .....	55	0	55
Brown mixture .....	63	0	63
Mineral oil .....	36	0	36
Alkali solution .....	2	2	4
Paregoric .....	76	0	76
Chloroform liniment .....	59	2	61
Arom. spirits of ammonia .....	77	9	86
Chloroform .....	8	0	8
Miscellaneous drugs .....	7	0	7
<b>Total drug samples .....</b>	<b>495</b>	<b>17</b>	<b>512</b>
Urinalyses .....	2,637	..	2,637
Blood counts .....	18	..	18
Jersey City. Health Dept. Trade Works ..	3	..	3
Crayons—neg. for sulphides .....	2	..	2
Thermometers tested .....	1	..	1
Seed poison .....	1	..	1
<b>Total .....</b>	<b>2,662</b>	<b>0</b>	<b>2,662</b>
<b>Total .....</b>	<b>9,585</b>	<b>1,170</b>	<b>10,755</b>

BUREAU OF LABORATORIES

SAMPLES ANALYZED IN WATER AND SEWAGE LABORATORY—JULY 1, 1949—JUNE 30, 1950

<i>Months</i>	<i>Public Water Supplies</i>	<i>Pay Samples</i>	<i>Miscellaneous Samples</i>	<i>Camp Samples</i>	<i>State and County Institutions Samples</i>	<i>Dairy Samples</i>	<i>Bottled Water Samples</i>	<i>School Supplies</i>	<i>Bathing Waters and Swimming Pools</i>	<i>Stream Samples</i>	<i>Sewage Samples</i>	<i>Trade Waste</i>	<i>Surf Samples</i>	<i>Sand Samples</i>	<i>Experimental Samples</i>	<i>Total</i>
1949																
July .....	665	19	137	102	21	1	5	9	35	76	118	6	182	0	20	1,396
August .....	591	34	198	13	10	3	0	1	30	135	68	57	56	1	16	1,213
September .....	431	14	119	2	9	3	0	38	6	62	42	3	0	0	12	741
October .....	513	23	88	0	21	2	6	84	0	34	10	1	0	2	11	795
November .....	294	26	91	1	8	1	0	85	2	15	18	6	0	0	8	555
December .....	410	28	75	1	13	2	0	133	0	24	43	2	0	0	11	742
1950																
January .....	309	8	109	0	17	7	0	56	1	15	5	7	0	0	8	542
February .....	315	6	71	0	9	5	0	55	1	6	4	3	0	0	5	480
March .....	364	17	83	0	13	0	0	60	1	6	4	27	0	0	12	587
April .....	269	11	82	1	21	3	0	41	1	15	4	38	90	0	75	651
May .....	396	12	76	6	7	6	32	49	2	17	7	43	99	0	55	807
June .....	434	18	101	19	13	0	13	3	22	32	76	42	210	0	34	1,017
<b>Totals .....</b>	<b>4,991</b>	<b>216</b>	<b>1,230</b>	<b>145</b>	<b>162</b>	<b>33</b>	<b>56</b>	<b>614</b>	<b>101</b>	<b>437</b>	<b>399</b>	<b>235</b>	<b>637</b>	<b>3</b>	<b>267</b>	<b>9,526</b>

REPORT OF FIELD DETERMINATIONS AND LABORATORY ANALYSES  
FISCAL YEAR 1949-1950

Type Substance	Field Determinations		Chemical Laboratory Analyses		Com- bined Total
	Physical	Chemical	Atmos.	Non-Atmos.	
Acetic acid .....	..	..	3	..	3
Acrolein .....	..	..	3	..	3
Alkali .....	..	..	2	..	2
Arsenic .....	..	..	1	2	3
Beryllium .....	..	..	5	5	10
Butyl acetate .....	..	..	3	..	3
Cadmium .....	..	..	..	2	2
Chlorinated hydrocarbons .....	..	26	..	1	27
Chromic acid .....	..	..	11	..	11
Copper .....	..	..	11	2	13
Dust counts (silica) .....	..	53	..	..	53
Formaldehyde .....	..	..	8	..	8
Formic acid .....	..	..	5	..	5
Hand cleaner .....	..	..	..	1	1
Hydrogen cyanide .....	..	..	4	..	4
Hydrogen fluoride .....	..	..	7	..	7
Lead .....	..	..	83	17	100
Manganese .....	..	..	8	..	8
Mercaptan, xylene .....	..	..	..	2	2
Oxides of nitrogen .....	..	18	7	..	25
Phenol .....	..	..	..	1	1
Phthalic anhydride .....	..	..	2	..	2
Relative humidity .....	18	..	..	..	18
Silica, free .....	..	..	..	10	10
Solvents .....	..	150	..	10	160
Sulfuric acid .....	..	..	13	..	13
Temperatures .....	20	..	..	..	20
Urine—sugar .....	..	..	..	1	1
Urine—albumin .....	..	..	..	1	1
Ventilation readings .....	23	..	..	..	23
Welding fume, total .....	..	..	4	..	4
Wind direction .....	2	..	..	..	2
Totals .....	63	247	180	55	545
Combined totals .....		310		235	

## Section on Pathology

The first objective of the Section on Pathology was to prepare a series of microscopic slides of tumor tissues for general educational purposes, to be distributed to hospitals throughout the State. These slides are to be used for teaching purposes for members of hospital staffs desiring experience in recognizing the microscopy of benign and malignant tumors. Approximately 75 to 100 different slides are to be included in this series and 100 sets of such slides are being prepared. To date, over thirty different tumor specimens have been thus prepared, each comprising 100 slides. This work is being continued and before the end of the year it is hoped the entire series will be ready for distribution. Each of the slides comprising this series will have a photographic record and descriptive legend to be filed for reference and use to interested physicians. At the same time, other special series of microscopic slides are being developed and accumulated for later distribution. These will be used as references in the special fields of surgery and medicine, such as dermatology, urology, neurology, gynecology, etc.

In co-operation with the New Jersey Society of Clinical Pathologists, the Section has undertaken to process and distribute slides of special tumors that may be referred to it through the Consulting Committee of the Society. The Section on Pathology will, in addition to supplying the technical processing of such material, maintain a registry of these problem type tissues as well as supply clerical assistance necessarily incident thereto. Close liaison between this Section and the New Jersey Society of Clinical Pathologists is being maintained by the appointment of the Chief of the Section as secretary of the Society's consulting board. It is expected that members of the Society will co-operate in sending to the Section on Pathology types of tumor material occurring in their laboratories that might be of interest to other pathologists and for the building up of a comprehensive library of slides in the Section on Pathology. The Section is presently in the process of distributing collecting jars to pathologists throughout the State for the accumulation of tumor tissues to be sent to us for this purpose. The chief of the Section is making frequent field trips to visit various institutions in the State to maintain close co-operation between the hospital pathologists and the Section on Pathology. To date, a number of tissues have already been referred to us for our general educational series and also for study by the Consulting Board.

We have also offered the facilities of our laboratory to pathologists who may have need of special staining methods of tissues for special studies. We have had some requests for such services. Photographic equipment is now being set up for use, and color films of all slides in our files will be made as well as films to be made on request of pathologists where such facilities are not available.

In general it can be said that the first six months of operation of the Section on Pathology has laid the groundwork for the future attainment of its objectives, which are: (1) to establish a laboratory where histological specimens can be prepared for microscopic study by institutional pathologists in the study of cancer and related diseases; (2) build up a registry as well as a library of representative and rare tumor tissues to be used for study and reference; (3) maintain complete photographic and descriptive records of such material filed in a manner for easy access; (4) develop special techniques in histology and offer these for use of pathologists in special cases; (5) maintain a reference library of modern books and journals in pathology for use by qualified scientists.

In addition, the Section on Pathology is co-operating with the officers of the State Society of Pathologists in arranging its scientific meetings, one of which will be held in Trenton in the early fall.

A recent important acquisition in equipment was the purchase of a Scopicon projection and photomicrographic outfit. This is the most modern type of projection apparatus for demonstrating microscopic slides to large audiences. An addition to this equipment permits simultaneous viewing of the same microscopic slide by ten persons. This will enable small group conferences to intimately discuss cytological problems, and in teaching groups interested in the study of cancer.

### Section on Serology

The activities of the Section on Serology included the sera-diagnostic examination of blood for syphilis; the examination of spinal fluid for syphilis and increased protein; testing for the blood groups A, B and O, the Rh factor and the presence of Rh antibodies; testing for heterophile antibodies as an aid in the diagnosis of infectious mononucleosis; the preparation and distribution of test sera of known reactivity for the purpose of evaluating serological tests performed in approved laboratories throughout the State; the preparation and distribution of Mazzini antigen to laboratories within the State; and testing new technics and methods. This laboratory participated in the annual evaluation study conducted by the United States Public Health Service.

TABLE I—NUMBER OF SPECIMENS EXAMINED DURING THE YEAR ENDING JUNE 30, 1950

Syphilis .....	267,168
Rh factor .....	20,005
Blood type .....	10,609
Infectious Mononucleosis .....	1,038
Total .....	298,810

There were 267,168 specimens of blood and spinal fluid received during the year for examination for syphilis. This is a decrease of 5% compared with the number received last year. This decrease may be the result of newer and more effective methods of treatment. Of the total number of specimens received, 6.3% were reported as positive, 2.34% were reported as doubtful and 88.92% were reported as negative. The number of specimens which were unsatisfactory for examination because of leakage or breakage in transit, hemolysis or contamination was 2.39% of the total.

The tests used in the sera-diagnosis of syphilis were the standard qualitative and quantitative Mazzini, the standard qualitative V.D.R.L. slide test and the two-tube qualitative and quantitative Kolmer tests. In this group were represented two microscopic flocculation tests, one of which employs a cardiolipin-lecithin antigen, and a complement fixation test. The Mazzini flocculation test was performed on all specimens. Specimens which showed a reaction of four plus (4+) in the qualitative test had a quantitative Mazzini test performed on them. Those specimens which gave a doubtful Mazzini result were tested by the V.D.R.L. slide test and the Kolmer complement fixation test. The results of all the tests performed were reported to the physician with an interpretation of positive, doubtful or negative.

A quantitative Kolmer test was performed on all spinal fluids. A protein determination was made when requested. Total protein determinations are to be made routinely on all spinal fluids and colloidal gold curves charted when requested during the coming year.

TABLE II—SPECIMENS OF BLOOD AND SPINAL FLUID EXAMINED FOR SYPHILIS DURING THE YEAR ENDING JUNE 30, 1950, BY MONTHS

Month	Positive	Doubtful	Negative	Unsatisfactory	Total
July .....	1,464	618	18,238	1,040	21,360
August .....	1,608	699	20,976	1,029	24,312
September .....	1,392	751	21,087	540	23,770
October .....	1,200	675	19,062	488	21,425
November .....	1,169	617	16,593	435	18,814
December .....	1,279	510	14,426	351	16,566
January .....	1,728	385	19,633	404	22,150
February .....	1,336	314	16,414	533	18,597
March .....	1,559	465	21,498	554	24,076
April .....	1,252	285	18,914	278	20,729
May .....	1,457	375	23,705	323	25,860
June .....	1,506	560	27,001	442	29,509
	16,950	6,254	237,547	6,417	267,168

TABLE III—NUMBER OF TESTS PERFORMED FOR SYPHILIS

Number of Mazzini tests performed .....	265,288
Number of quantitative Mazzini tests .....	13,191
Number of V. D. R. L. slide tests .....	17,425
Number of qualitative Kolmer tests on blood specimens .....	13,272
Number of quantitative Kolmer tests on blood specimens .....	576
Number of quantitative Kolmer tests on spinal fluids .....	1,880
Number of protein determinations on spinal fluids .....	23
Total .....	311,655

Rh factor determinations were made on 20,005 of the blood specimens received. This is an increase of 32.16% over last year. Our records show 18% of the specimens were Rh negative. All Rh negative specimens were tested for the presence of the Rh antibody and, if found, were reported to the physician according to specificity in the highest dilution of the serum showing a reaction. The determination of blood groups A, B and O was made when requested on prenatal specimens. Such examinations totalled 10,609, an increase of 243% over last year. Requests for the Rh factor determination and the blood groups were honored only on prenatal specimens. Lack of funds and personnel limited the examinations to this group.

Tests for the detection of the heterophile antibody of infectious mononucleosis were performed on 1,038 specimens of blood. All specimens which gave a positive reaction (above 1:56 dilution) were absorbed with guinea pig kidney antigen, retested and the true titre of the reaction reported to the physician.

The Section on Serology prepared and distributed 97 sets of control serums consisting of 24 specimens each, to various laboratories throughout the State. Laboratories seeking State approval for the sera-diagnosis of syphilis must report 90% sensitivity and 99% specificity on the control specimens.

Mazzini antigen, prepared and standardized in the Camden laboratory of the State Department of Health, was distributed where requested. By supplying standardized Mazzini antigen to laboratories it is hoped that the sensitivity of the tests of the various laboratories will be the same.

Many new techniques and methods were tested and those which were found to improve the accuracy and efficiency of our work were adopted as standard procedures. Among those adopted was a screen test for the presence of the heterophile antibody in serum and the adsorption of the non-specific antibodies by the use of guinea pig kidney antigen. The hemagglutination technique for the detection of tuberculosis antibodies was performed experimentally on known cases of tuberculosis. Further investigation in this technique is being carried on.

The Section on Serology participated in the annual evaluation study conducted by the United States Public Health Service. Over 300 unknown specimens were received and examined. The control on the evaluation was performed by the author of the various tests. Results are considered satisfactory by the United States Public Health Service rating when the specificity tests are 99% and the sensitivity is within 10% of the author standard. It should be noted that in one out of the three tests the sensitivity results of the Section on Serology were higher than the author control, while in two tests our sensitivity was within the allowable limit of 10% of the author control. Our specificity rating was 100% in all three tests.

Following are the results obtained in the Section on Serology on 224 known syphilitic specimens and 150 non-syphilitic specimens in the 1950 evaluation study:

	<i>Sensitivity</i>	<i>Specificity</i>
V. D. R. L. Slide (flocculation):		
Author control .....	71.7	100
Section on Serology .....	77.7	100
Mazzini (flocculation):		
Author control .....	78.2	100
Section on Serology .....	76.8	100
Kolmer (complement fixation):		
Author control .....	78.1	100
Section on Serology .....	68.8	100

**Report of the Bureau of Local Health Services**

July 1, 1949—June 30, 1950

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G. FREDERICK MOENCH, M. D., M. P. H., *Director*

## Bureau of Local Health Services

During the fiscal year ending June 30, 1950, the Bureau of Local Health Services continued to advise with local officials on many kinds of local health problems and also to perform field work along various lines.

The present Director of the Bureau assumed the position on June 19, 1950. Vacancies previously existing in the field force of the Bureau were not filled although, owing to the delay in the consummation of reorganization plans for the Bureau, the seven District Offices maintained in 1949 were continued. These offices were located at Hackensack, Dover, Highland Park, Freehold, Mount Holly, Pitman, and Mays Landing. The force in these District Offices at the end of the year consisted of five District Health Officers, six sanitarians, eight office workers, one nurse for communicable disease work, and one Public Health Nurse Supervisor. From the District Office to which the Public Health Nurse Supervisor was assigned, three nurses employed by the County Board of Freeholders of Atlantic County were engaged in communicable disease control work. These nurses, except when one or more of the positions were temporarily vacant, worked under the direction and supervision of the District Health Officer and the Public Health Nursing Supervisor, in the inland section of the county. Advisory supervision was also extended through this District Office to two nurses working in the field of communicable disease control in Cape May County, one employed by the County Board of Freeholders and one by a Regional Health Commission. Office facilities at the District Health Offices were also utilized by employees assigned to other Divisions of the Department.

The general work of the Bureau, in addition to encouraging the employment of local health agents, consisted of investigation of complaints of nuisances and private water supplies, field investigations of cases of communicable diseases, inspection of camps, inspection of restaurants and lunch rooms in rural areas, and conferences with local health officials on problems involving application of local health ordinances and State health laws.

During the year, employees assigned to the Bureau attended 51 meetings of local boards of health and recorded 5,040 conferences with local health officials on various public health matters. Over 8,000 conferences on public health matters with other than local health officials were also recorded. Active participation was given in special lecture courses for local health officials and 30 other talks were given or papers read on public health subjects.

Food-vending establishments inspected in rural and semi-rural areas numbered 642 and 1,382 reinspections at such establishments were made.

Inspection was made at summer recreation camps to the extent practical and certificates of approval were issued when basic sanitary conditions warranted the issuance of such a certificate.

A total of 803 cases of communicable diseases were investigated in an effort to determine the source of infection or to check on preventative measures. Data collected in these investigations were transmitted to the Bureau of Preventable Diseases. Eleven cases of scarlet fever occurring on premises at which milk was produced for sale were investigated. Arrangements were consummated at each of the premises so that it was unnecessary to prohibit the sale of the milk to prevent spread of infection.

A total of 1,206 special inspections of local insanitary conditions or alleged public health nuisances were made, of which 279 were made in company with a local health official.

Specimens collected by employees in the Bureau for bacteriological and chemical examination at the laboratory of the Department included the following: Water, 636; blood and body discharges for evidence of communicable disease infection, 75; food, 5.

Employees assigned to the Bureau actively participated in the work of venereal disease and tuberculosis clinics at the District Office at Mays Landing and at clinics, including the cancer clinic, at the Health Center at Hammonton. From District Health Offices specific steps were taken to encourage local health boards in financially supporting venereal disease clinics either through Regional Health Commissions or under other local arrangements.

Employees assigned to the Bureau participated actively at meetings and on special committees of State-wide health organizations, including the New Jersey Tuberculosis League, the New Jersey Health Officers Association, and the New Jersey Health and Sanitary Association. District Health Officers also similarly participated in county health and welfare organizations and groups. Data in annual reports of local boards of health for the local fiscal year ending December 31, 1949, were studied and tabulated. For the purpose of collecting this basic information, a special report form was supplied each local health board for its convenience in making an annual report to this Department as required by statute.

The total number of local boards of health in New Jersey is 569. 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 Inter-State Park.

The total amount reported by the local boards of health as available for their use for all purposes during the calendar year 1949 was \$4,762,269.52, an increase of \$73,755.31 over the 1948 figure. In a few instances, part of the local appropriations to health boards include funds to be expended for

contagious disease hospitals and for garbage and refuse collection and disposal. If the sums reported as spent by local boards of health during 1949 for these specific purposes are subtracted from the total appropriations, there remained \$4,449,234.94 available in 1949 for the use of local health units. This is equivalent to \$0.926 per capita based upon an estimated population of 4,801,000. The total amount reported as expended by these local health units in 1949, less the sums spent for hospitals and for garbage and refuse disposal, was \$4,292,853.21, or \$0.894 per capita based upon the estimated population of the State. The combined per capita expenditures reported by all local boards of health in the various counties ranged from \$1.80 in Essex down to \$0.15 in Gloucester County. In the following table, the reported combined expenditures for each county is set forth:

REPORTED EXPENDITURES BY LOCAL HEALTH BOARDS LESS AMOUNTS SPENT FOR HOSPITALS AND FOR GARBAGE AND REFUSE DISPOSAL

County	Total	Per Capita
Atlantic .....	\$78,334.86	\$0.536
Bergen .....	356,905.35	0.686
Burlington .....	27,125.29	0.246
Camden .....	114,993.39	0.387
Cape May .....	26,496.78	0.736
Cumberland .....	33,253.57	0.386
Essex .....	1,650,705.79	1.808
Gloucester .....	13,137.26	0.152
Hudson .....	620,661.48	0.908
Hunterdon .....	8,425.98	0.205
Mercer .....	230,520.43	1.02
Middlesex .....	179,955.84	0.702
Monmouth .....	93,661.18	0.441
Morris .....	100,210.95	0.622
Ocean .....	16,434.94	0.342
Passaic .....	341,324.22	0.975
Salem .....	14,995.33	0.306
Somerset .....	34,237.85	0.364
Sussex .....	14,424.50	0.424
Union .....	321,142.27	0.808
Warren .....	15,905.95	0.284
State .....	\$4,292,853.21	\$0.894

As of December 31, 1949, there were employed by the local health boards in the State, 54 licensed health officers serving on a full time basis. These officials served 84 municipalities having a total population of about 2,130,000 based upon the census of 1940. In 80 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.

# Report of the Bureau of Preventable Diseases

July 1, 1949—June 30, 1950

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

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Section on Cancer Control .....

Section on Communicable Disease Control:

Tuberculosis Control Program ..... A. JOSEPH HUGHES, M. D.,  
*Chief*

Veneral Disease Control Program ..... ADELE C. SHEPARD, M. D., M. P. H.,  
*Chief*

Section on Dental Diseases ..... EARLE G. LUDLAM, D. D. S., M. P. H.,  
*Chief*

Section on Rehabilitation:

Alcoholism Program .....

Crippled Children Commission ..... ALBERT LEON,  
*Director and Chairman*

MRS. JOSEPH G. BUCH,  
*Executive Director*

Heart Disease Control Program ..... MARIAN R. STANFORD, M. D.,  
*Chief*



## Bureau of Preventable Diseases

The pattern of organization, as established last year for the Bureau of Preventable Diseases, was continued without change. It consists of the following Sections and programs:

- Section on Cancer Control
- Section on Communicable Disease Control
  - Tuberculosis Control Program\*
  - Venereal Disease Control Program\*
- Section on Dental Diseases\*
- Section on Rehabilitation
  - Alcoholism Program
  - Crippled Children Commission\*
  - Heart Disease Control Program\*

This year further progress was made by both professional and clerical staffs of the various units of the Bureau in developing a coordinate relationship with one another. Vacancies in professional positions delayed some phases of the Bureau program, especially communicable disease control and cancer control.

Various units of the Bureau (indicated above by an asterisk) have submitted individual reports of their accomplishments and future plans; therefore, this report deals only with activities of the Bureau Director and those units of the Bureau to which a chief has not been appointed.

### GOVERNOR'S CONFERENCE ON HEART DISEASE

Health officials, medical leaders, civic group representatives, interested citizens, and State, county, and municipal officials met at the State House, September 30, 1949, for the first Governor's Heart Disease Conference to be held in this country.

The proceedings and talks of the conference were published in the December 1949 issue of *Public Health News* and were widely distributed. The Conference marked the beginning of the Department's participation in the broad field of diseases of the circulatory system. In February 1950 a physician was assigned to full time service in this program.

### SCREENING TESTS FOR DIABETES

So successful was the first mass screening by capillary blood tests last year in Asbury Park, that the program was repeated at the State Fair in

\* Individual reports of these units follow.

Trenton in September 1949. The U. S. Public Health Service again assisted by furnishing part of the personnel and equipment needed. Of 2,874 persons who volunteered for the test, 183 had findings that warranted referral to their physicians for further study and advice.

This year another plan to detect diabetics was tried at the Cavalcade of Progress in Asbury Park. Containers for mailing urine specimens were given to 590 persons who visited the Department exhibit. They were instructed to mail their specimens to the State Laboratory. Of the 590 containers distributed, only 201 were returned. There were six specimens which contained sugar.

Several local health departments experimented with programs for detecting diabetes through free examination of urine specimens.

#### COOPERATION WITH STATE DEPARTMENT OF INSTITUTIONS AND AGENCIES

The Bureau participated in joint conferences between the State Departments of Health and Institutions and Agencies. Definite suggestions for the control of tuberculosis and venereal disease in institutions were presented in mimeographed form for the use of superintendents and doctors in institutions. A permanent committee of representatives of both Departments was appointed, of which the Director is a member.

#### ALCOHOLISM

Efforts were continued toward establishing facilities for the treatment of alcoholism in a general hospital. Considerable time was spent in certain areas of the State to acquaint physicians, members of the legal profession, hospital administrators, and other influential citizens with the opportunity such a clinic would have in providing educational, medical, and psychiatric treatment for the alcoholic. The prospect that the effort will eventually bear fruit is brighter for the coming year.

A limited service to individuals has been maintained by personal contact and by referral to existing sources of help. Plans have been worked out for supplying libraries with a "book shelf" dealing with various aspects of alcoholism.

In October 1949, Dr. Sheldon D. Bacon, of Yale, met with the New Jersey State Advisory Committee on Alcoholism for informal discussion of the Connecticut program and the programs of other States. Dr. Bacon warned against a one-directional program and advised rather some service, some research, some education of youth, and efforts towards reaching doctors.

#### DISABILITY INSURANCE SERVICE

The Department continued to provide the medical services needed to authorize the payment of benefits. Physicians of the Bureau of Preventable Diseases rotated in their assignment to Disability Insurance Service.

Assistance was given to development of procedures for consultation services in illnesses of unusually long duration; the preparation of claim forms and special forms for obtaining facts related to medical care; attendance at hearings related to questions affecting payments of benefits; and the preparation of medical and statistical reports.

#### CANCER

The cancer control program devoted most of its attention to the Occupational Cancer Survey jointly sponsored by the Department and the U. S. Public Health Service. The first two phases of this research project have been completed.

In the first phase death certificates numbering 4,113 for the period from January 1, 1947, to August 30, 1949, obtained from our vital statistics records were selected for study. Pertinent data appearing on the death certificates were transcribed to specially prepared forms. In the second phase additional data regarding habits, hobbies, diseases, accidents, type of employment were obtained through interviews with relatives or friends of the deceased. Eighteen staff nurses and 29 other nurses employed for the study successfully completed interviews of 3,209 of the 4,113 cases included in the study. Inability to locate a relative or friend of the deceased was responsible for failure in most of the other cases.

The third phase of the study involving verification of the diagnosis is now in progress. This is being done largely by physicians on the staff or temporarily employed for this study. Hospital records are studied and private physicians are visited to secure accurate medical data relative to the cause of death.

The final phase involving the study of conditions associated with the work of the individual will be carried out with the assistance of the Section on Adult and Industrial Health. Industrial plants will be visited to obtain employment histories and to evaluate the effects of occupation and environmental conditions on the development of cancer.

#### EXAMINING BOARD

The Director of the Bureau, acting as Chairman of the Board of Examiners of Health Officers and Inspectors, participated in the development of new licensing examinations and procedures.

## MIGRANT WORKERS

As in past years special clinics were operated for migrant agricultural workers during July, August and September. Funds allotted by the Migrant Labor Board were used to maintain the clinics in the amount of \$5,827.85. The clinics were held one evening a week at Cranbury, Freehold and Implants-town (serving Mercer, Middlesex and Monmouth Counties). In Cumberland County full time clinics were operated at Orchard Center and Gelston Village. The planning and the medical and administrative supervision was provided by staff members of the State Department of Health; in addition, eight local physicians were employed on an hourly basis to serve in the clinics, also five nurses and nine clerks on an hourly basis and two full time nurses.

Examination of new patients included inspection of eyes, ears, nose, mouth and throat, and examination when indicated of heart, lungs and blood pressure. Serologic tests for syphilis were taken on all patients over 13 years of age. Women were examined for conditions of the uterus and cervix and men were inspected for evidence of pathology of the external genitalia. As usual the venereal diseases received major attention at the clinics and accordingly a more detailed report of the VD work is contained in the report of the Venereal Disease Control Program.

A total of 1,714 migrant workers made 2,439 visits to the clinics. Following is a crude classification of diseases and abnormalities found:

## Venereal diseases:

Syphilis .....	197
Gonorrhoea .....	92
Other .....	5
	— 294

## Allergic, Endocrine Metabolic:

Diabetes .....	4
Thyroid enl. ....	2
	— 6

Blood (Anemia) .....	2
Bones, Organs of Movement (chiefly lacerations) .....	63
Circulatory System .....	48
Dental System .....	9
Digestive System .....	23
Infective and Parasitic .....	11
Neoplasms Fibroid .....	4
Nervous System and Sense Organs .....	12
Respiratory System .....	45
Skin and Cellular Tissue (chiefly abrasions, burns and lacerations) .....	89
	— 606

## COMMUNICABLE DISEASES

There were 109,797 cases of the 39 diseases declared reportable by State regulations recorded during the calendar year 1949 (exclusive of tuberculosis and venereal diseases). Chickenpox, measles, and whooping cough accounted for 75% of the total number. The total number of cases of "the 39 diseases" reported in 1948 was 115,325.

The 1949 diphtheria record of 97 cases and three deaths was the lowest ever recorded in this State.

No cases of smallpox were reported.

The 1,513 cases and 121 deaths from poliomyelitis in 1949 exceeded the number for any year since the epidemic of 1916.

Scarlet fever was more prevalent in 1949, with 3,245 cases, than in the previous year, 2,500 cases. One death was reported.

Two-thirds of the total deaths from measles (9) and all of the deaths from whooping cough (7) were among children under five years of age.

Whooping cough cases in 1949 (4,563) increased greatly over 1948 (2,704). However, 1948 was an exceptional year. The average number of cases for the five-year period, 1944-1948, inclusive, was 5,696, well above this year's total. Only seven deaths occurred in 1949 as against six deaths in 1948 when the number of cases was low.

Reported cases of tuberculosis (3,629) showed an increase over previous years. The average for the preceding five years is 3,262. Fewer deaths were reported than in previous years (1,298).

One death from rabies was recorded.

## REPORTED CASES AND DEATHS FROM TYPHOID FEVER IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year .....	0	0	0	0	0	0
1 to 4 years .....	4	0	3	0	1	0
5 to 14 years .....	8	0	7	0	1	0
15 to 24 years .....	11	0	6	0	5	0
25 to 44 years .....	10	1	5	1	5	0
45 to 64 years .....	6	0	2	0	4	0
65 years and over .....	0	0	0	0	0	0
State total .....	39	1	23	1	16	0

REPORTED CASES AND DEATHS FROM SCARLET FEVER IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	13	0	4	0	9	0
1 to 4 years	816	1	433	1	383	0
5 to 14 years	2262	0	1123	0	1139	0
15 to 24 years	34	0	55	0	55	0
25 to 44 years	34	0	15	0	19	0
45 to 64 years	8	0	5	0	3	0
65 years and over	0	0	0	0	0	0
State total	*3245	1	1635	1	†1609	0

Totals includes: \* 2 cases { 1 age and sex unknown.  
 † 1 age unknown, female.

REPORTED CASES AND DEATHS FROM MENINGOCOCCAL MENINGITIS IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	10	2	5	2	5	0
1 to 4 years	33	4	22	4	11	0
5 to 14 years	16	2	11	1	5	1
15 to 24 years	10	2	5	1	5	1
25 to 44 years	9	1	7	1	2	0
45 to 64 years	8	2	6	1	2	1
65 years and over	3	0	1	0	2	0
State Total	89	13	57	10	32	3

REPORTED CASES AND DEATHS FROM ACUTE ANTERIOR POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	85	1	15	1	20	0
1 to 4 years	380	14	219	10	161	4
5 to 14 years	708	50	439	37	269	13
15 to 24 years	214	22	104	13	110	9
25 to 44 years	168	30	75	19	93	11
45 to 64 years	7	4	6	4	1	0
65 years and over	0	0	0	0	0	0
State total	*1515	121	858	84	654	37

\* Total includes one case of which the age and sex is unknown.

REPORTED CASES AND DEATHS FROM STREPTOCOCCIC SORE THROAT IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	1	1	1	0	0	1
1 to 4 years	11	3	7	3	4	0
5 to 14 years	42	1	19	0	23	1
15 to 24 years	71	1	39	0	32	1
25 to 44 years	27	2	14	0	13	2
45 to 64 years	11	4	5	2	6	2
65 years and over	3	1	0	0	3	1
State total	*167	15	*86	5	81	8

\* Total includes one male case, age unknown.

REPORTED CASES OF ACUTE ANTERIOR POLIOMYELITIS IN NEW JERSEY

For the Calendar Year 1949, by County and Month

COUNTY	Total	NUMBER OF CASES											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Atlantic	1	0	0	0	0	0	0	0	0	1	0	0	0
Bergen	178	1	0	0	0	1	2	13	57	56	38	8	2
Burlington	9	0	0	0	0	0	1	5	2	0	1	0	
Camden	11	1	0	0	0	0	1	5	2	1	0	1	
Cape May	3	0	0	0	0	0	1	1	0	1	0	0	
Cumberland	1	0	0	0	0	0	0	0	0	0	1	0	
Essex	237	1	0	0	1	0	1	11	82	66	45	23	
Gloucester	1	0	0	0	0	0	0	0	1	0	0	0	
Hudson	263	3	0	0	1	2	1	41	92	77	83	18	
Hunterdon	8	0	0	0	0	0	1	0	5	1	1	0	
Mercer	41	1	0	1	0	0	1	0	2	7	17	8	
Middlesex	118	0	0	0	1	0	0	4	39	41	26	7	
Monmouth	265	9	9	11	5	7	5	12	113	46	32	15	
Morris	42	0	0	0	0	0	1	14	6	13	8	0	
Ocean	20	0	0	0	0	0	1	9	8	2	0	0	
Passaic	47	0	0	0	0	0	4	16	19	6	2	0	
Salem	2	0	0	0	0	1	0	1	0	0	0	0	
Somerset	38	0	1	0	0	0	0	12	2	9	13	1	
Sussex	8	0	0	0	0	0	0	3	4	0	1	0	
Union	157	1	0	0	0	0	5	73	37	24	12	5	
Warren	51	0	0	0	0	0	1	9	28	6	5	2	
*State institutions	6	0	0	0	0	0	0	0	0	0	6	0	
*Military posts	1	0	0	0	0	0	0	1	0	0	0	0	
State total	1513	17	10	12	8	10	11	97	534	408	260	123	

\* Cases reported by State institutions and military posts not included in county total.

REPORTED CASES AND DEATHS FROM DIPHTHERIA IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	2	0	1	0	1	0
1 to 4 years	25	0	16	0	9	0
5 to 14 years	32	3	16	0	16	3
15 to 24 years	18	0	11	0	7	0
25 to 44 years	15	0	7	0	8	0
45 to 64 years	3	0	0	0	3	0
65 years and over	1	0	1	0	0	0
State total	*97	3	52	0	*45	3

\* Total includes one female case, age unknown.

REPORTED CASES AND DEATHS FROM WHOOPING COUGH IN NEW JERSEY

For the Calendar Year 1949, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	361	5	187	5	174	0
1 to 4 years	1445	2	689	1	756	1
5 to 14 years	2663	0	1300	0	1363	0
15 to 24 years	41	0	18	0	23	0
25 to 44 years	41	0	10	0	31	0
45 to 64 years	7	0	1	0	6	0
65 years and over	2	0	1	0	2	0
State total	*4563	7	2206	6	†2356	1

Totals include: \* 2 cases { 1 age and sex unknown.  
 † 1 age unknown, female.

REPORTED CASES AND DEATHS; CASE, DEATH AND CASE FATALITY RATES FOR CERTAIN REPORTABLE DISEASES FOR 1949

DISEASE	Cases	*Cases per 100,000 Population	Deaths	*Deaths per 100,000 Population	Per Cent Fatality
Chickenpox	43,333	905.4	2	0.04	†0.1
Diphtheria	97	2.0	3	0.1	3.1
German measles	9,462	197.7	0	0.0	0.0
Influenza	155	3.2	39	0.8	25.1
Measles	24,524	721.4	9	0.2	†0.1
Meningitis, meningococcal	89	1.9	13	0.3	14.6
Mumps	9,070	189.5	1	†0.1	†0.1
Pneumonia	3,194	66.7	809	16.9	25.3
Pollomyelitis, acute anterior	1,513	31.6	121	2.5	8.0
Rocky Mountain spotted fever	16	0.3	0	0.0	0.0
Scarlet fever	3,245	67.8	1	†0.1	†0.1
Typhoid fever	39	0.8	1	†0.1	2.6
Whooping cough	4,563	95.3	7	0.1	0.2

\* Rates figured on an estimated population of 4,786,000.  
† 0.1 indicates less than 0.1.

REPORTED CASES AND DEATHS; CASE AND DEATH RATES FOR TOTAL REPORTABLE DISEASES\* BY COUNTY FOR 1949

COUNTY	Estimated† Population	Cases		Deaths	
		Number	Rate‡	Number	Rate‡
Atlantic	132,000	1987	1505.3	38	28.8
Bergen	532,000	12965	2437.0	60	16.9
Burlington	135,000	1322	979.3	29	21.5
Camden	298,000	4048	1358.4	79	26.5
Cape May	36,000	276	766.7	7	19.4
Cumberland	88,000	953	1083.0	37	42.0
Essex	896,000	37232	4155.0	206	23.0
Gloucester	91,000	1042	1145.1	22	24.2
Hudson	642,000	7430	1157.3	202	31.5
Hunterdon	42,000	394	938.1	20	47.6
Mercer	226,000	2406	1063.7	70	31.0
Middlesex	262,000	2638	1014.5	62	23.7
Monmouth	223,000	4590	2056.7	95	22.4
Morris	163,000	4038	2477.3	63	18.4
Ocean	56,000	359	998.2	6	18.1
Passaic	353,000	6060	2059.8	79	20.0
Salem	49,000	402	1916.3	10	20.4
Somerset	38,000	1590	1622.4	25	25.5
Sussex	34,000	603	1773.5	5	14.7
Union	394,000	15742	3995.2	75	19.0
Warren	54,000	465	1918.1	22	40.7
State institutions	§	306	§	3	§
Military posts		698		1	
State total	1,786,000	106097	2294.1	1159	24.2

\* Exclusive of tuberculosis and venereal disease.  
† Rounded to nearest thousand.  
‡ Rate expressed per 100,000 estimated population.  
§ Method of charging cases and deaths to institutions would make rates very misleading.  
|| Not available.

CASES AND DEATHS FROM OTHER REPORTABLE DISEASES FOR 1949

DISEASE	Cases	Deaths	DISEASE	Cases	Deaths
Anthrax	2	0	Psittacosis	0	0
Botulism	1	1	Rabies in human	0	1
Dysentery, amoebic	101	2	Smallpox	0	0
Bacillary	36	0	Streptococcal sore throat	167	13
Unspecified	2	0	Tetanus	12	10
Encephalitis, infectious	27	22	Trachoma	0	0
Food poisonings	25	2	Trichinosis	24	1
Infectious diarrhea of the new-born	1	14	Tularemia	1	0
Malaria	26	0	Typhus fever	1	0
Ophthalmia, neonatorum	8	0	Undulant fever	35	3
Paratyphoid fever	19	1			

REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1949

COUNTIES	Chickenpox	Diphtheria	Dysentery, Amoebic	Dysentery, Bacillary	Dysentery, Unspecified	Encephalitis, Infectious	Food Poisonings, Infectious	Infectious Diarrhea of the Newborn	Influenza	Malaria	Measles	Measles, German	Meningitis	Mumps
Atlantic	712	3	0	0	0	2	0	0	0	0	761	49	1	400
Bergen	7,751	1	1	0	0	0	0	0	0	0	1,797	1,123	8	394
Burlington	155	1	0	0	0	0	0	0	0	0	1,546	184	2	103
Camden	862	12	0	0	0	0	0	0	0	2	1,362	470	10	454
Cape May	42	3	0	0	0	0	0	0	0	0	109	20	1	61
Cumberland	87	6	0	0	0	0	0	0	0	0	545	22	1	167
Essex	15,201	1	1	0	0	7	12	59	0	0	12,046	2,167	15	3,786
Gloucester	184	5	0	0	0	0	0	3	0	0	667	10	3	42
Hudson	2,598	13	28	80	0	0	0	1	0	0	2,920	306	8	114
Hunterdon	96	0	0	0	0	0	0	1	0	0	211	6	1	31
Mercer	718	16	0	0	1	0	0	3	0	1	1,089	100	4	73
Middlesex	1,143	5	1	1	0	0	0	2	0	1	554	485	1	70
Monmouth	1,512	2	4	0	0	2	0	0	0	1	2,724	301	8	465
Morris	1,494	3	7	3	0	4	0	0	1	1	1,622	112	1	481
Ocean	165	0	0	0	0	0	0	7	0	1	151	93	1	44
Passaic	3,827	8	4	0	0	2	0	60	0	1	1,073	504	6	680
Salem	50	4	0	0	0	0	0	0	0	0	204	4	3	8
Somerset	400	1	0	0	0	0	0	1	0	0	583	297	1	89
Sussex	200	0	0	0	0	0	0	0	0	0	158	7	0	138
Union	5,564	9	1	1	0	2	0	8	0	0	4,935	2,942	8	1,176
Warren	116	2	1	0	0	0	0	1	0	0	99	18	0	120
State institutions	70	2	50	0	1	0	0	0	0	0	20	34	0	50
Military posts	56	0	2	0	0	1	0	0	0	16	128	237	4	52
State total	43,333	97	101	36	2	27	25	1	155	26	34,524	9,462	89	9,070

DEPARTMENT OF HEALTH

REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1949—Continued

COUNTIES	Ophthalmia Neonatorum	Paratyphoid Fever	Pneumonia	Acute Anterior Poliomyelitis	Rocky Mountain Spotted Fever	Scarlet Fever	Streptococcal Sore Throat	Tetanus	Trichinosis	Typhemia	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Atlantic	0	0	8	1	5	35	1	1	0	0	2	0	1	8
Bergen	1	3	59	178	0	357	17	1	0	0	4	0	0	1,032
Burlington	0	0	55	9	0	92	0	0	0	0	0	0	0	62
Camden	0	0	139	11	2	474	1	0	0	0	5	0	0	202
Cape May	0	0	3	3	0	12	0	0	0	0	0	0	0	10
Cumberland	0	0	56	287	2	57	1	0	0	0	0	0	2	0
Essex	6	1	1,518	297	0	865	31	2	6	0	3	0	5	1,324
Gloucester	0	0	21	1	0	81	1	0	0	0	2	0	0	22
Hudson	0	0	106	268	0	335	5	1	0	0	9	0	2	633
Hunterdon	0	1	14	8	0	5	0	0	0	0	0	0	0	0
Mercer	0	1	204	41	0	60	10	3	2	0	2	0	1	59
Middlesex	0	4	46	118	1	107	0	0	0	0	0	0	3	115
Monmouth	0	0	54	243	3	88	0	1	0	0	2	0	0	156
Morris	1	0	111	42	0	78	3	0	0	0	4	0	7	87
Ocean	0	0	54	20	0	5	0	0	0	0	0	0	0	10
Passaic	0	0	27	47	0	213	2	2	1	0	3	0	1	470
Salmon	0	0	3	2	1	35	0	1	0	0	0	0	1	0
Somerset	0	4	32	38	0	28	0	0	2	0	0	0	0	7
Sussex	0	0	31	8	0	33	0	0	0	0	2	0	3	22
Union	0	5	102	157	0	257	7	0	4	0	1	1	5	119
Warren	0	0	16	51	0	22	0	0	0	1	0	0	3	184
State Institutions	0	0	31	6	0	2	39	0	0	0	0	0	0	0
Military posts	0	0	444	1	0	6	38	0	0	0	0	0	0	0
State total	8	19	3,194	1,513	16	3,245	107	12	24	1	30	1	35	4,563

Other Diseases: Asiatic cholera 0, Filariasis 0, Giardiasis 0, Glanders 0, Leprosy 0, Plague 0, Psittacosis 0, Rabies in Human 0, Smallpox 0, Trachoma 0, Yellow fever 0.

BUREAU OF PREVENTABLE DISEASES

RECORDED DEATHS FROM COMMUNICABLE DISEASES BY COUNTIES FOR 1949

COUNTIES	Anthrax	Botulism	Chickpox	Diphtheria	Dysentery, Amoebic	Dysentery, Bacillary	Dysentery, Unspecified	Encephalitis, Infectious	Food Poisonings	Infectious Diarrhea of the Newborn	Influenza	Malaria	Measles	Measles, German	Meningococcal Meningitis	Mumps
Atlantic	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Bergen	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Burlington	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0
Camden	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0
Cape May	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
Essex	0	1	1	0	0	0	0	10	0	0	0	0	3	0	1	0
Gloucester	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Hudson	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0
Hunterdon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middlesex	0	0	1	2	0	0	1	0	0	3	0	0	1	0	0	0
Monmouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morris	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Ocean	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Passaic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0
Somerset	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Sussex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Union	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warren	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State Institutions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State total	0	1	2	3	2	0	0	24	2	14	39	0	9	0	13	1

RECORDED DEATHS FROM COMMUNICABLE DISEASES BY COUNTIES FOR 1949—Continued

COUNTIES	Ophthalmia Neonatorum	Paratyphoid Fever	Pneumonia	Acute Anterior Poliomyelitis	Rabies in Human	Rocky Mountain Spotted Fever	Scarlet Fever	Streptococcal Sore Throat	Tetanus	Trichinosis	Typhemia	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Atlantic .....	0	0	29	1	0	0	0	0	1	0	0	0	0	0	0
Bergen .....	0	0	59	18	0	0	0	0	0	0	0	0	0	0	0
Burlington .....	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0
Camden .....	0	0	69	1	0	0	0	0	0	0	0	0	0	0	0
Cape May .....	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Cumberland .....	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
Essex .....	0	0	135	19	0	0	0	0	0	0	0	0	0	0	0
Gloucester .....	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
Hudson .....	0	0	147	28	0	0	0	0	0	0	0	0	0	0	0
Hunterdon .....	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
Mercer .....	0	0	46	6	0	0	0	0	0	0	0	0	0	0	0
Middlesex .....	0	0	39	13	0	0	0	0	0	0	0	0	0	0	0
Monmouth .....	0	0	38	5	0	0	0	0	0	0	0	0	0	0	0
Morris .....	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
Ocean .....	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Passaic .....	0	0	48	5	0	0	0	0	0	0	0	0	0	0	0
Salem .....	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Somerset .....	0	0	17	7	0	0	0	0	0	0	0	0	0	0	0
Sussex .....	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0
Union .....	0	0	49	14	0	0	0	0	0	0	0	0	0	0	0
Warren .....	0	0	15	3	0	0	0	0	0	0	0	0	0	0	0
State institutions.	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Military posts ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State total ...	0	1	809	121	1	0	13	10	1	1	0	1	0	3	1

Other Diseases: Asiatic cholera 0, Filariasis 0, Glanders 0, Leprosy 0, Plague 0, Psittacosis 0, Smallpox 0, Trachoma 0, Typhoid fever 0.

MALARIA IN NEW JERSEY—1941-1949

Year	Total No. Reported Cases	No. Cases in Military Personnel	No. Cases in Civilians	Probable Place of Infection for Out of State	Probable Place of Infection for Civilian Cases New Jersey	Doubtful
1941 .....	13	0	13	13	0	0
1942 .....	20	4	16	9	7	0
1943 .....	20	16	4	3	0	1
1944 .....	826	788	38	32	5	1
1945 .....	1,412	1,397	15	10	5	0
1946 .....	931	917	14	8	15	1
1947 .....	99	49	50	48	2	0
1948 .....	36	23	13	11	2	0
1949 .....	26	16	10	6	4	0
Totals .....	3,383	3,210	173	140	30	3

\* Two of these cases infected through blood transfusion.  
† One of these cases infected through blood transfusion.

Section on Communicable Disease Control

TUBERCULOSIS CONTROL PROGRAM

This report of activities covers the calendar year 1949 instead of the fiscal year. The report therefore contains information previously presented for the period January 1, 1949, through June 30, 1949, in addition to new information for July 1, 1949, through December 31, 1949.

ACTIVITIES

X-ray and accessory equipment was provided in March for a new chest clinic at Cape May Court House, making eleven clinics using State equipment. The new clinic was made possible through the co-operative efforts of the Cape May County Board of Chosen Freeholders, the District Health Officer, Dr. N. E. Newbury, the Cape May County Tuberculosis and Health Association and the New Jersey State Department of Health.

In May the routine referral to family physicians and health officials of persons exhibiting gross cardiovascular abnormalities in mass X-ray surveys was begun. Previously only persons showing additional pulmonary abnormalities were so referred.

Additional departmental responsibilities were delegated to the program during the year. The following activities were removed from the Bureau of Local Health Services to this program in June: (a) the follow-up of mass X-ray survey suspects; (b) the collection and preliminary processing for tabulation of tuberculosis morbidity reports; and (c) the transmission to local agencies of tuberculosis case data involving veterans and others.

In July the two chest clinicians, Dr. Max Gross and Dr. Alan J. Stolor were transferred from the Department of Institutions and Agencies to the Department of Health, and were assigned to this program. Conferences were held with these clinicians in order to clarify the new relationships.

Throughout the year the Bureau of Vital Statistics and Administration and the program made arrangements for a critical evaluation of the existing tuberculosis control situation in this State. This report contains only a part of the data so far accumulated. It is believed that the technical assistance of the Bureau of Vital Statistics and Administration will prove valuable for future program revisions. Dr. Emil Frankel, of the Department of Institutions and Agencies, has freely provided sanatorium information which will be of great assistance in this evaluation.

The St. Francis Hospital, Trenton, continued its use of a State-owned photofluorograph for the routine X-raying of its admissions and out-patients.

In September the program temporarily lost the services of Dr. Thomas F. Pugh, Medical Assistant. Doctor Pugh was sent to the Harvard School of Public Health for a year's training.

### RESULTS

Mass x-ray survey work for 1949 is presented in Table I for the various types of surveys conducted. Referrals, it should be noted, do not include referrals for follow-up primarily because of cardiovascular abnormalities. The low referral rate for schools and the high rates for mental hospitals and training schools are noteworthy.

TABLE I—TYPES OF MASS CHEST X-RAY SURVEYS, NUMBER OF READABLE FILMS AND REFERRALS FOR FOLLOW-UP BECAUSE OF PULMONARY AND OTHER NON-CARDIOVASCULAR ABNORMALITIES—1949

Code	Survey Type	Readable Films	Referrals	
			No.	%
0	Industrial .....	75,928	2,489	3.3
1	Community .....	55,257	1,871	3.4
2	School .....	11,527	175	1.5
3	Mental Hospitals .....	11,826	1,145	9.7
4	Reformatories .....	2,160	51	2.4
5	Training Schools .....	4,160	224	5.4
6	Government Employees, State, Federal, Local Welfare Organizations .....	4,507	81	1.8
7	Homes .....	107	26	24.3
8	General Hospital Employees .....	387	8	2.1
9	T.B. Preventoriums .....	45	5	11.1
10	Fairs .....	9,148	233	2.5
	Total .....	175,052	6,308	3.6

Table II shows the pulmonary and other non-cardiovascular referral rates resulting from industrial and community surveys conducted in the various counties. The counties indicated are the counties in which the surveys were conducted and are not necessarily indicative of county of residence of the per-

sons X-rayed. The high rate for Mercer County is probably in keeping with its high death rate.

TABLE II—REFERRALS FOR FOLLOW-UP BECAUSE OF PULMONARY AND OTHER NON-CARDIOVASCULAR ABNORMALITIES  
INDUSTRIAL AND COMMUNITY X-RAY SURVEYS BY COUNTIES OF SURVEYS—1949

	INDUSTRIES			COMMUNITIES			TOTAL		
	Readable Films	Referrals No.	%	Readable Films	Referrals No.	%	Readable Films	Referrals No.	%
Atlantic .....	2,765	65	2.4	6,501	240	3.7	9,266	305	3.3
Bergen .....	25	.....	.....	.....	.....	.....	25	.....	.....
Burlington .....	1,812	62	3.4	3,369	115	3.4	5,181	177	3.4
Camden .....	4,680	154	3.3	3,580	121	3.4	8,260	275	3.3
Cape May .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland .....	3,995	122	3.1	4,228	128	3.0	8,223	250	3.0
Essex .....	15,291	548	3.6	363	7	1.9	15,654	555	3.5
Gloucester .....	2,557	75	2.9	1,232	63	5.1	3,789	138	3.6
Hudson .....	4,752	130	2.7	.....	.....	.....	4,752	130	2.7
Mercer .....	5,755	242	4.2	1,824	57	3.1	7,579	299	4.0
Middlesex .....	5,141	156	3.0	660	14	2.1	5,801	170	2.9
Monmouth .....	5,302	151	2.9	969	38	3.9	6,271	189	3.0
Morris .....	3,911	148	3.8	7,613	226	3.0	11,524	374	3.3
Ocean .....	.....	.....	.....	129	1	0.8	129	1	0.8
Passaic .....	9,276	286	3.1	18,262	649	3.5	27,538	935	3.4
Salem .....	1,515	30	3.3	2,002	66	3.3	3,517	116	3.3
Somerset .....	1,680	34	2.0	3,908	129	3.3	5,588	163	2.9
Sussex .....	128	5	3.9	.....	.....	.....	128	5	3.9
Union .....	6,826	242	3.5	617	17	2.8	7,443	259	3.5
Warren .....	517	19	3.7	.....	.....	.....	517	19	3.7
Total .....	75,928	2,489	3.3	55,257	1,871	3.4	131,185	4,360	3.3

From May there were 728 (0.7%) cardiovascular referrals for follow-up from 98, 918 readable films taken in industries and communities. These figures do not include persons with both suspected significant chest disease and cardiovascular abnormalities, such referrals having been already included in the group of non-cardiovascular referrals.

There were 4,238 photofluorograms taken by St. Francis Hospital. Follow-up referral rates comparable to the ones indicated above are not available because of classification differences.

Table III presents a summary of the clinic work performed in the clinics using State-owned equipment. The admission to sanatoria of 214 persons from these clinics is gratifying.

TABLE III—SUMMARY OF CERTAIN ACTIVITIES OF CHEST CLINICS OPERATED BY LOCAL AGENCIES WITH STATE-OWNED X-RAY EQUIPMENT—1949

Number of X-rays taken .....	11,763
(a) Number of persons X-rayed for first time at these clinics .....	7,543
(b) Number of persons re-X-rayed at these clinics .....	4,220
Number of sputum specimens collected .....	2,542
Number of persons with one or more positive specimens .....	102
Number of persons admitted to sanatoria from these clinics .....	214

As a result of joint study by the Bureau of Vital Statistics and Administration and this program it was determined that only 61 persons referred for pulmonary and other non-cardiovascular follow-up from community and



industrial surveys entered New Jersey sanatoria within six months of their survey X-rays. This indicates a yield for this year of 4.7 promptly institutionalized active cases of tuberculosis per 10,000 industrial and community X-rays.

Tuberculosis morbidity data for 1949 is presented in Table IV, which was prepared by the Bureau of Vital Statistics and Administration.

TABLE IV—REPORTED CASES OF TUBERCULOSIS BY SEX, COLOR AND AGE GROUPS  
NEW JERSEY—1949

SEX AND COLOR	All Ages	AGE GROUPS							Unknown
		—1	1-4	5-14	15-24	25-44	45-64	65	
White Male .....	1,902	2	19	23	152	576	847	279	4
Non-White Male .....	407	5	14	21	56	162	123	26	..
White Female .....	1,054	1	19	25	165	466	274	102	2
Non-White Female .....	266	1	1	19	77	112	41	15	..
Total .....	3,629	9	53	88	450	1,316	1,286	422	6

## Section on Communicable Disease Control

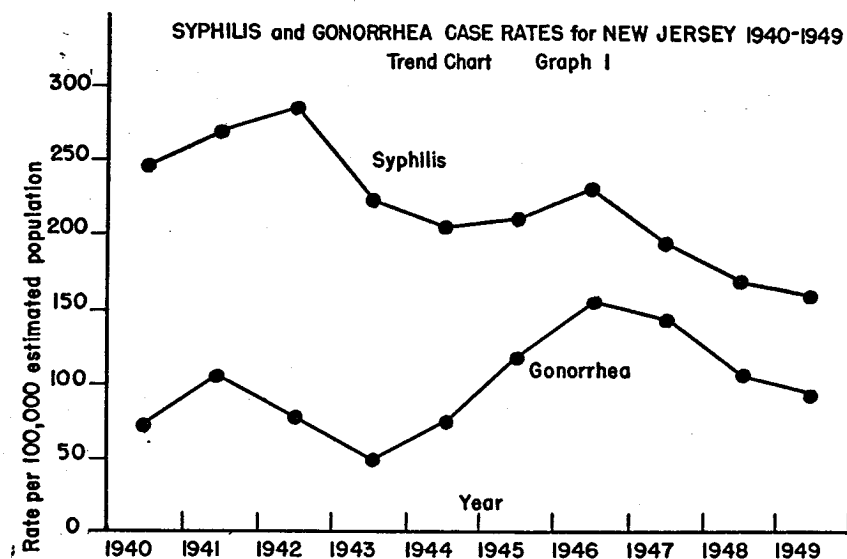
### VENEREAL DISEASE CONTROL PROGRAM

The activities of the Venereal Disease Control Program have been particularly directed in 1949 toward case finding with special emphasis on mass screening in high prevalence groups, and on contact tracing. The expanded use of the simple and effective penicillin treatment regimes emphasizes the importance of the discovery of early cases. Other phases of venereal disease control are currently under consideration, including records, educational campaign, and co-operation with other agencies. Improved techniques of case finding are being intensively studied.

### GENERAL MORBIDITY TRENDS

The following comments are all necessarily predicated on the assumption that the reporting of cases is similarly effective in all areas.

Consistent with the national trend, the reporting of the total incidence of syphilis and particularly cases of early infectious syphilis in New Jersey showed a continued decline in 1949 (Graph 1). This fact, though encouraging, does not permit any relaxation of effort toward control since it is generally stated that more than half the cases of early syphilis still remain undiscovered.



In Table I it is of interest to note that reported cases of primary and secondary syphilis decreased by 34.8% over 1948 and cases of early latent syphilis decreased by 15.6%, a total decrease in reported infectious syphilis of 21.1%. On the other hand, since 1947 there has been an increase in reported cases of late and late latent syphilis. In addition, for the first time since 1945 the number of late and late latent cases reported has actually exceeded the number of infectious cases reported. These facts emphasize the large number of cases that were not apparent at the time of greatest communicability.

It is interesting to observe that morbidity reporting of syphilis by private doctors exceeds, for the first time since 1945, reporting by clinics and other sources. The increase might be attributed to the increased awareness of the availability of free penicillin. A total of 2,769 ten c.c. vials of penicillin was distributed to 513 private physicians this year, as compared with 1948 when 501 physicians utilized 2,322 vials of penicillin.

### CONGENITAL SYPHILIS

In 1949 there were 246 cases of congenital syphilis in New Jersey, a gain of 14.2% over 1948. (See Table I.) Since 1946 there has been a disheartening increase in reported cases of congenital syphilis. This would appear to represent a failure in prevention and case finding among pregnant

TABLE I—REPORTED CASES OF GONORRHEA AND SYPHILIS BY STAGE AND REPORTING AGENCY  
NEW JERSEY, 1946-1949

Disease	1949			1948			1947			1946			1945		
	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total	Private Doctor	Clinics and Others*	Total
Syphilis	3,969	3,876	7,795†	4,126	4,226	8,352	4,355	4,380	8,735	4,810	5,071	9,881	4,723	4,178	8,901
Primary and Secondary	379	892	1,271	529	1,182	1,711	711	959	1,670	804	1,206	2,010	614	703	1,317
Early Latent	1,145	1,366	2,511	1,356	1,622	2,978	1,285	1,853	3,138	1,463	1,900	3,363	1,273	1,421	2,694
Late and Latent	2,369	1,832	4,241	2,122	1,765	3,887	2,224	1,448	3,672	2,370	1,736	4,106	2,638	1,854	4,492
Congenital	108	138	246	94	117	211	94	98	192	137	118	255	164	146	310
Not Stated	28	98	126	23	69	94	41	22	63	36	21	57	34	54	88
Gonorrhoea	1,229	3,229	4,449‡	1,505	2,504	4,009	2,215	4,234	6,449	2,785	3,683	6,468	2,313	2,577	4,892

\* Hospitals, jails, reformatories, other institutions.  
† Includes 109 cases whose residence is outside of State.  
‡ Includes 29 cases whose residence is outside of State.

women. It must be kept in mind, however, that the cases reported do not necessarily represent the true attack rate during this year. Many of these instances of congenital syphilis are being diagnosed for the first time in older children. An additional difficulty in interpreting these data on congenital syphilis is the fact that, in many instances, cases reported as congenital syphilis in infants are not syphilis at all but, rather, are individuals having positive blood tests due to rein transfer from the mother.

AGE, RACE AND SEX DISTRIBUTION

The question of race distribution cannot be overlooked in any discussion of the incidence of syphilis. Reference to Tables II-A and II-B indicates that there are roughly twice as many cases of syphilis among non-whites as among whites, and four times as many cases of gonorrhoea. New Jersey has a total

TABLE II-A—SYPHILIS CASES\* BY AGE, RACE, AND SEX

Age Groups	White			Non-White			Not Stated		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	2,550	1,437	1,113	5,036	2,378	2,658	209	113	96
Under 1	8	5	3	16	11	5	0	0	0
1-4	3	3	0	15	11	4	0	0	0
5-14	21	8	13	54	18	36	1	0	1
15-19	63	17	46	333	88	245	1	0	1
20-24	235	93	142	923	367	556	11	4	7
25-29	230	114	116	929	390	539	11	5	6
30-34	214	103	111	697	325	372	11	5	6
35-44	493	254	239	1,079	567	512	22	11	11
45-64	964	639	325	793	496	297	25	18	7
65 and over	189	129	60	60	43	17	7	6	1
Not stated	130	72	58	137	62	75	120	64	56

\* Cases reported to the New Jersey State Department of Health include New Jersey residents, migrants, and out-of-State cases.

TABLE II-B—GONORRHEA CASES\* BY AGE, RACE, AND SEX

Age Groups	White			Non-White			Not Stated		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	875	614	261	3,501	2,732	769	73	48	25
Under 1	0	0	0	10	5	7	0	0	0
1-4	4	0	4	26	3	23	0	0	0
5-14	18	3	15	42	9	33	3	1	2
15-19	98	47	51	538	342	196	5	3	2
20-24	270	198	72	1,419	1,137	282	10	6	4
25-29	199	158	41	869	732	137	10	7	3
30-34	107	75	32	287	245	42	5	3	2
35-44	107	87	20	208	178	30	1	0	1
45-64	48	34	14	55	44	11	0	0	0
65 and over	9	1	8	0	0	0	0	0	0
Not stated	15	11	4	47	39	8	39	28	11

\* Cases reported to the New Jersey State Department of Health include New Jersey residents, migrants, and out-of-State cases.

population of 4,786,000 (estimated July 1, 1949). Seventy per cent of the new cases of venereal diseases occurred in the non-white group, representing only 5½% of the population. While these facts undoubtedly reflect differ-

ences in socio-economic and educational status rather than race difference *per se*, the fact still remains that venereal disease control efforts must be further directed at this group.

The age and sex distribution of all syphilis and gonorrhoea is indicated in Tables II-A and II-B. Although the prevalence of syphilis is apparently greatest in the older age groups, it is still true that infectious syphilis remains a problem of the young adult.

GEOGRAPHICAL DISTRIBUTION OF THE VENEREAL DISEASES

The accompanying Tables III and IV show the geographical distribution of the venereal diseases in the State. The four counties showing the highest reported incidence of syphilis are Cumberland, Atlantic, Monmouth and Mercer Counties. The mean case rate of 341.8 (expressed per 100,000 estimated population) for these four counties is more than twice as great as the case rate of 160.6 for the State as a whole. Similarly, the highest incidence of gonorrhoea is in Essex, Atlantic, Mercer and Monmouth Counties. The mean incidence of 189.8 is again much greater than the rate of 92.4 for the State as a whole.

TABLE III  
SYPHILIS AND GONORRHEA CASES\*, DEATHS AND RATES† BY COUNTY  
NEW JERSEY—1949

	SYPHILIS				GONORRHEA			
	Cases		Deaths		Cases		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
New Jersey .....	7,686	160.6	219	4.6	4,420	92.4	3	0.1
Atlantic County .....	488	369.7	21	15.9	196	148.5	0	0.0
Bergen County .....	275	51.7	18	3.4	93	17.5	0	0.0
Burlington County .....	150	111.1	9	6.7	64	47.4	0	0.0
Camden County .....	309	103.7	11	3.7	256	85.9	0	0.0
Cape May County .....	78	216.7	4	11.1	25	69.4	0	0.0
Cumberland County .....	471	535.2	5	5.7	71	80.7	0	0.0
Essex County .....	2,099	234.3	49	5.5	1,980	221.0	0	0.0
Gloucester County .....	151	165.9	3	3.3	73	80.2	0	0.0
Hudson County .....	729	113.6	22	3.4	309	48.1	0	0.0
Hunterdon County .....	35	83.3	2	4.8	9	21.4	0	0.0
Mercer County .....	648	286.7	12	5.3	328	145.1	0	0.0
Middlesex County .....	400	152.7	8	3.1	105	40.1	0	0.0
Monmouth County .....	680	304.9	14	6.3	299	134.1	1	0.4
Morris County .....	93	57.1	2	1.2	76	46.6	0	0.0
Ocean County .....	88	157.1	3	5.4	24	42.9	0	0.0
Passaic County .....	329	98.2	15	4.5	234	69.9	1	0.3
Salem County .....	113	230.6	6	12.2	53	108.2	0	0.0
Somerset County .....	71	72.4	0	0.0	17	17.3	0	0.0
Sussex County .....	21	61.8	0	0.0	4	11.8	1	2.9
Union County .....	423	107.4	13	3.3	194	49.2	0	0.0
Warren County .....	35	64.8	1	1.9	10	18.5	0	0.0
Military Establishments .....	.....	.....	1	.....	.....	.....	.....	.....
Out-of-State Residents† .....	109	.....	.....	.....	29	.....	.....	.....

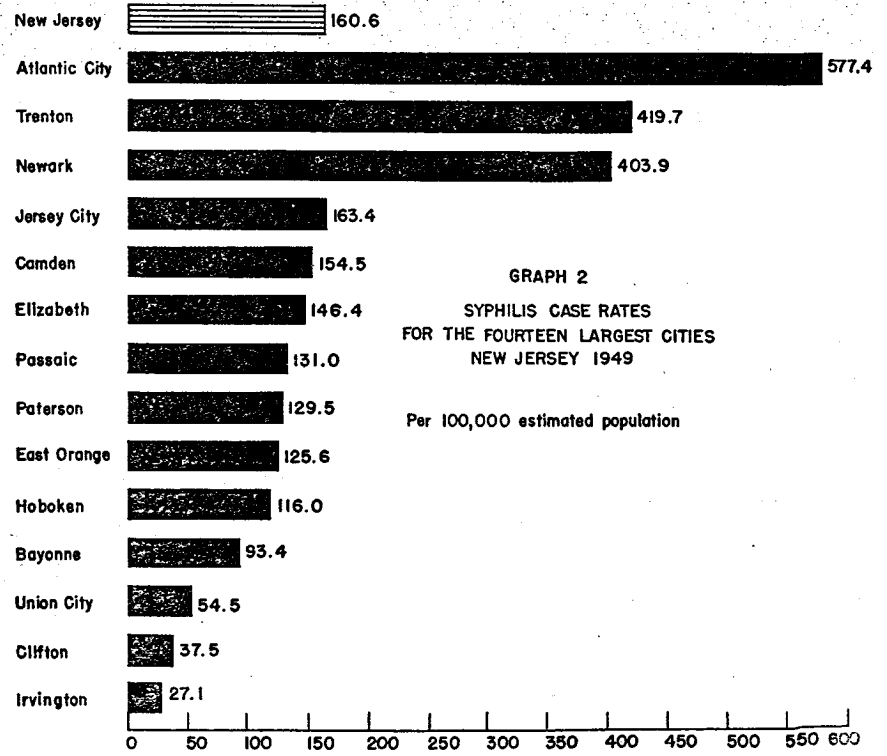
\* Include migrants.  
† Rates expressed per 100,000 estimated population.  
‡ Out-of-State residents are not included in the New Jersey total.

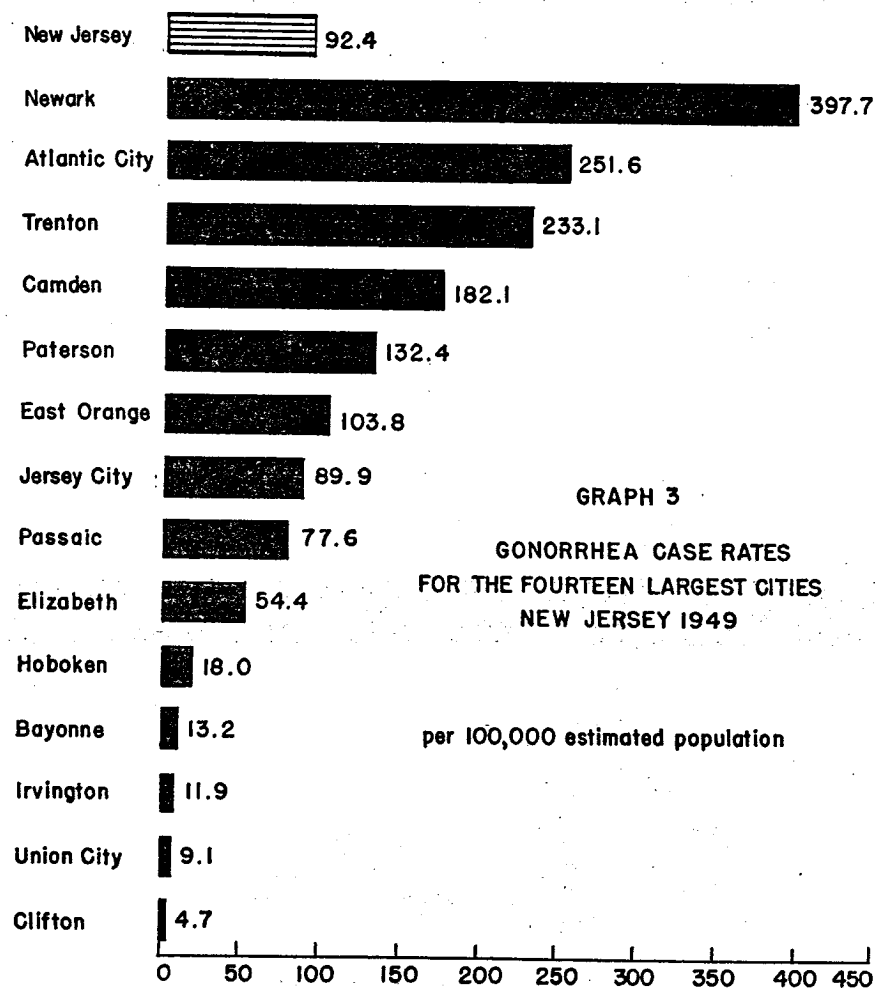
TABLE IV  
SYPHILIS AND GONORRHEA CASES AND RATES\* BY RESIDENCE FOR CERTAIN CITIES  
OF NEW JERSEY, 1949

	Syphilis		Gonorrhoea	
	Number	Rate	Number	Rate
Atlantic City .....	358	577.4	156	251.6
Camden .....	190	154.5	224	182.1
East Orange .....	98	125.6	81	103.8
Irvington .....	16	27.1	7	11.9
Newark .....	1,753	403.9	1,726	397.7
Bayonne .....	71	93.4	10	13.2
Hoboken .....	58	116.0	9	18.0
Jersey City .....	487	163.4	268	89.9
Union City .....	30	54.5	5	9.1
Trenton .....	533	419.7	296	233.1
Clifton .....	24	37.5	3	4.7
Passaic .....	76	131.0	45	77.6
Paterson .....	180	129.5	184	132.4
Elizabeth .....	164	146.4	61	54.4

\* Rates expressed per 100,000 estimated population.

Graphs 2 and 3 show strikingly that the three cities leading in attack rates for both syphilis and gonorrhoea are Atlantic City, Trenton and Newark.





GRAPH 3  
GONORRHEA CASE RATES  
FOR THE FOURTEEN LARGEST CITIES  
NEW JERSEY 1949

per 100,000 estimated population

#### ANALYSIS OF CONTACT INVESTIGATION AS A CASE-FINDING PROCEDURE

Contact investigation includes all processes involved in obtaining from cases of infectious venereal disease the names of all persons from whom the patient may have acquired his disease or to whom the patient may have given his disease plus examining such contacts and placing them under treatment if indicated.

In fiscal year 1950 there were reported for investigation 1,983 civilian contacts to all venereal diseases. This represents a 21% decline over the number of contacts reported in fiscal year 1949 when there were 2,512 re-

ported. This decrease seems due, to a large extent, to the decline in the total number of syphilis and gonorrhea cases reported during the year.

Of the 1,983 named contacts to all venereal disease 857 were never located, a failure rate of 43.2%. It would appear that in many instances interviewers are not obtaining the information necessary to find a contact. Of the individuals who were examined 361 persons, or 32.5%, were brought to treatment. The remainder did not require therapy.

The military installations accounted for 362 contacts to be investigated, the greatest proportion being contributed by the Army. Of this number 253 or 69.9% were reported with incomplete information, a factor which contributed to the inordinately high percentage of contacts that could not be located. Although only 117 persons were located and examined 56 of these, or 47.9%, were found to be infected with some venereal disease.

During the fiscal year 1950 there were 2,538 reported cases of primary, secondary and early latent syphilis. From this group of infectious individuals only 680 contacts were obtained. Assuming, then, that each of these 680 contacts accounts for one case there would be over 1,800 actually and potentially infectious cases of syphilis who were either never interviewed or from whom contacts were not elicited. A similarly unhappy situation exists with regard to gonorrhea. There were 3,992 cases of gonorrhea treated in fiscal year 1950 and only 1,114 contacts named for investigation.

#### MIGRANT PROGRAM

As in previous years, special clinics for migrant agricultural workers were operated in the summer of 1949. These clinics were located at Cranbury, Freehold, Imlaystown, Orchard Center, Gelston Village and Glassboro. Serological tests for syphilis were taken on all patients between the ages of thirteen and seventy. Those persons diagnosed as having early syphilis were treated with six million units of procaine penicillin in oil with 2% aluminum monostearate in two doses. While this schedule was only experimental, it was thought to be the only feasible method because of the unco-operativeness and extreme transiency of many of the migrants.

In both sexes a discharge from the genito-urinary tract was considered to be presumptive evidence of clinical gonorrhea and the patient was treated with one injection of 300,000 units of penicillin.

While it is generally recognized that those individuals attending the migrant clinics constitute a high prevalence group, it is thought undesirable, at this time, to include statistical data in this report, since there have been no reliable criteria established for designating migrant status on the morbidity report form. Appropriate changes in this form are contemplated.

In addition to the agricultural migrant project, this program gave assistance in the examination of other migrant workers employed at the race tracks, in some fertilizer and fish product plants and food packing plants.

#### SURVEYS

As an additional case-finding procedure, serologic surveys were carried out in both industry and the community. In some instances these were performed in a co-operative project with the Tuberculosis Control Program.

#### HOSPITALIZATION VS. AMBULATORY TREATMENT OF SYPHILIS

The number of individuals hospitalized for the treatment of syphilis decreased markedly in the fiscal year 1950. During the year, 572 cases were hospitalized as compared with 1,335 cases in 1949. The decline was probably in part due to the extended use of the ambulatory treatment programs and in part due to the apparent decline in cases of infectious syphilis. The number of individuals treated on an ambulatory basis by both private physicians and clinics rose from 3,081 cases in the fiscal year 1949 to 3,636 cases in the fiscal year 1950.

#### DRUGS

Drugs for the treatment of the venereal diseases are distributed without charge to hospitals, clinics and private physicians. These include penicillin, streptomycin, aureomycin, sulfathiazole, arsenic and bismuth. The latter two drugs are being provided only until the present supplies are exhausted.

During the fiscal year 1950, 24,982 million units of penicillin were utilized for syphilis in comparison with 26,305 million units for the previous year. For the treatment of gonorrhoea, 1,836 million units of penicillin were administered during the fiscal year 1950, compared with 1,242 million units in the preceding year. Although various preparations were previously being distributed, only procaine penicillin with 2% aluminum monostearate is currently in use. For the treatment of granuloma inguinale 403 gms. of streptomycin have been dispensed in the period July 1, 1949 to June 30, 1950. The distribution of aureomycin for the treatment of lymphogranuloma venereum was begun in May, 1950, since which time 656 capsules of 250 mg. each have been supplied. Five thousand six hundred tablets of sulfathiazole were used during the past year.

#### VENEREAL DISEASE EDUCATION AND INFORMATION

The educational program of the Bureau of Venereal Disease Control was closely integrated with the health education activities of the Section on Administrative Services. Numerous venereal disease and sex education pamphlets, motion picture films, posters and other educational media were made available to local health departments, community groups, and individuals. More than 33,038 pieces of printed material were distributed.

There were twelve films utilized during the year for educational purposes. They had 399 showings with an attendance of 21,722 persons. The average attendance per showing was 55 persons.

By letters and visits to individual physicians, through the department's page in the Journal of the State Medical Society, and by circularization of all physicians, information about diagnosis, treatment and control has been given. Three issues of the Vee Dee Newsletter were distributed to local health officials, clinics and other interested persons.

An organized program of co-operation with the State Department of Institutions and Agencies has recently been instituted. The consultative services of the program have been made available through an increasing number of personal visits.

In-service training for personnel of the program is another important phase of educational work. As the opportunities arose, staff members were recommended for training.

Educational privileges included part-time and full-time study. Thirteen staff nurses received a total of 139 credits toward their basic major in Public Health Nursing or towards a B.S. degree. One nurse received her B.S. degree in Education with a Public Health Nursing major and two nurses completed their field work training. The Chief of the program was awarded an M.P.H. degree by Columbia University in February 1950.

The enthusiasm of the nurses was further reflected in their attendance at the intensive course in contact interviewing techniques at Alto Medical Center, Alto, Georgia. The course was given under the joint sponsorship of the U. S. Public Health Service and the Georgia Health Department. Sixteen public health nurses attended the one-week course. Thirteen nurses were representatives of the State Department of Health, one was from a local health department and two were from private agencies.

#### PERSONNEL

The Bureau consists of a staff of 32 persons, 18 of whom are public health nurses. There are 1 senior investigator and 1 field representative. The remainder are engaged in clerical work.

On January 1, 1950, Adele C. Shepard, M.D., M.P.H., was appointed Chief of the Bureau of Venereal Disease Control. She had served previously as Acting Chief of the Venereal Disease Control Program since June 1949.

Miss Elizabeth T. Harris, R.N., Assistant Supervising Nurse, resigned June 15, 1950, after fourteen years of service with the program. Miss Anabel Cadwallader, Administrative Assistant, was transferred to the Division of Preventable Diseases, having served for thirty years.

### Section on Dental Diseases

Public interest in the dental health of the children of this State has increased tremendously during the past several years, and in many communities parents, teachers, school nurses, and other interested persons have been untiring in their efforts to obtain the necessary dental services. Numerous requests for the services of this Section could not be fulfilled this past year as the "demand was greater than the supply." However, many local and county groups have increased their appropriations, which has enabled us to expand the program in some areas and keep apace (with some exceptions) in the remaining areas.

The fine working relationships between this Section and the New Jersey State Dental Society were continued during the year and were strengthened in many ways. Much time and effort was spent in arranging the program for Children's Dental Health Day on February 6, 1950. This Section was responsible for the preparation and presentation of a kit of guides, source material, radio scripts and lectures which were distributed in conjunction with the State Society's Council of Dental Health, to members for use on the local level. Children's Dental Health Day proved very successful.

The New Jersey State Dental Health Committee has also been quite active this past year, and has been of great value in making the Dental Health Program in the State of New Jersey a success. As has been stated in previous reports, the Dental Program revolves around a nucleus of lay and professional, voluntary and official support. The New Jersey State Dental Health Committee, officially designated as the Advisory Committee for the Dental Bureau, includes representatives from State health, State welfare, and State educational agencies, both official and non-official. Also named to this Committee are representatives of local and county dental health committees, who help to administer the various dental health programs of the State Department of Health.

At first glance, it would seem that the Dental Section only concerns itself with the dental care program for children of low income families in rural and suburban communities. Actually, the Section is primarily interested in preventing dental caries, malocclusion, and other disorders of the teeth and supporting tissues. The service program and the committees associated with the program also contribute to the fulfillment of educational, investigatory, and consultative responsibilities. Undoubtedly the progress of the New Jersey State Dental Program is due largely to the willingness of representatives of health education and welfare agencies to participate in the activities of State, county and local dental health committees.

In essence, the following report is an attempt to evaluate the efforts of the Section on Dental Diseases this past year, in obtaining better dentistry for the children in the State of New Jersey.

The educational phases of the Dental Program included two accredited courses in Dental Health Education for graduate nurses working towards a Bachelor of Science degree at Seton Hall College. Lectures were presented in different phases of public health dentistry at New York University College of Dentistry; School of Dental and Oral Surgery of the Faculty of Medicine, Columbia University; Thomas W. Evans Museum and Dental Institute, School of Dentistry, University of Pennsylvania; and Temple University School of Dentistry. The Section participated in a panel discussion on Nutrition and Dental Health at the annual convention of the Dental Hygienists Association of the State of New York. A lecture was given at Rutgers University in the Basic Public Health Course, describing the pattern and functions of the New Jersey State Dental Program. Many addresses were delivered to Rotary Clubs, P.T.A.'s, etc., describing the efforts of the State Department of Health in promoting better dental health throughout the State.

Two papers (The Public Health Aspects of Periodontology, and Some Public Health Aspects of Periodontal Diseases) which had been presented before the American Dental Association in Chicago in 1948, were published during the fiscal year 1949-50.

The Section on Dental Diseases has been trying for several years to curtail the sale of candy and other refined carbohydrates in New Jersey schools. During this past year, a committee of the State Nutrition Council working with this Bureau, took definite action to bring this about. The State Department of Education has requested that all public schools refrain from selling candy to their pupils. This is the first co-ordinated effort of several voluntary and official agencies to restrict the consumption of those foods which are, to a large extent, responsible for dental decay.

The Section on Dental Diseases conducted a survey of dental programs in local communities throughout the State. This was performed by means of questionnaires sent by the State Department of Health and State Depart-

ment of Education, and may be considered a part of the overall evaluation schedule of health activities in the State.

The Dental Section analyzed the findings of dental surveys in Morristown and Maple Shade. In the former community, the resulting data served to stimulate the municipal authorities to add fluoride to the public water supply. In the latter community, the analysis was part of the overall consultative activity of this Section with the Nutrition Project co-ordinated by the State Nutritionist attached to the Bureau of Constructive Health.

The Dental Health educational materials were inventoried and examined and the following revisions and additions were made to our present listing:

*Revised Pamphlets*

The Useful Baby Molars  
Going Through School with Healthy Teeth  
The Expectant Mother

*New Pamphlets*

Prevention Dental Caries and Control  
The Care of Children's Teeth (Questions and Answers)  
Some Public Health Aspects of Periodontal Diseases

*New Films*

It's Your Health  
Save Those Teeth

As part of the overall program of prevention of dental and oral diseases, the Section on Dental Diseases has sponsored four one week full-time courses in Oral Cancer for members of the New Jersey State Dental Society. A total of \$12,000 of Federal funds earmarked for cancer control, was assigned to the Section on Dental Diseases through the Section on Cancer Control, for this purpose.

A total of eighty practicing dentists (twenty for each course) was selected by the local component dental societies to participate in these courses. The participants have served as a focus of interest, in their local dental groups, in the early recognition of oral malignancies. The first course was held at New York University, College of Dentistry, and Bellevue Hospital in New York on January 9 through 13. This was followed by a course at the Thomas W. Evans Museum and Dental Institute, School of Dentistry, University of Pennsylvania and the American Oncologic Hospital in Philadelphia on January 16 through 20. The third and fourth courses were held at these same institutions on May 8 through 12. Very favorable reactions to these courses have been received from all over the country. In addition, a syllabus on the postgraduate teaching of oral cancer has been developed by New York University and the Section on Dental Diseases which has received quite favorable comment.

The results of this first excursion of the State Health Department into the field of postgraduate-in-service dental education has given hope that additional funds will be available to continue this program. In addition, postgraduate training courses in children's dentistry, already in operation through other State Health Departments, are greatly needed.

A brief resume of some of the activities of the Section on Dental Diseases follows:

A meeting of the Executive Committee of the New Jersey State Dental Health Committee was held on September 14, 1949. A meeting of the entire Dental Health Committee was held during this past year. The activities comprised items such as election of officers, committee appointments and general business pertaining to the betterment of the New Jersey State Dental Health Program.

In October, the Chief and Assistant Chief of the Dental Section were in attendance at different sessions of the annual meeting of the American Public Health Association, held in New York City.

In January, a very interesting meeting of the New Jersey Society of Dentistry for Children was held in the Medical Center, Jersey City, New Jersey. Table clinics were presented by our members, latest dental health films and materials were shown, and the day's activities proved quite interesting and instructive.

In March, a visit was made by the Chief of the Dental Section to the Kiddie Keep Well Camp in Roosevelt Park, Metuchen, New Jersey. Doctor Gale, operating dentist on the mobile dental clinic, conducted an examination of every boy and girl enrolled during July and August. All were given dental treatments and the percentage of completed cases was very high.

The Chief and Assistant Chief of the Dental Section attended at different sessions of the New Jersey State Dental Society meeting in Atlantic City, in April. Both members participated in the scientific sessions, trustee meetings, and clinics.

A dental examination of thirty pre-school children was conducted by this Section at the Alfred Reed School in Trenton, in May.

The Chief of the Dental Section attended the annual meeting of the State and Territorial Dental Directors in Washington, D. C., in June.

In October of this past year, Doctor Julius Kahn was appointed Supervisor for the Dental Program in Middlesex, Monmouth, and Ocean Counties. This appointment was made by the Chief of the Dental Section with the approval of the New Jersey State Dental Society, following the resignation of Doctor Edmond de Monseigele, the former supervisor.

During the past year, the following renovations and additions were made to the present equipment being used to conduct the New Jersey State Dental Program:

Camden County: Mobile clinic painted and refurbished.  
 Deans Clinic (Middlesex): New aspirator.  
 Warren County: New filing cabinet for mobile clinic.  
 Atlantic and Cape May Counties: New heater for mobile clinic.

Recommendations for consideration to the betterment of the New Jersey State Dental Program:

1. It is quite important for the dentists working in our State Program to be familiar with the latest advances in children's dentistry. In a number of states, refresher courses have been arranged for the dental personnel of the state dental programs in nearby dental schools. The need has been felt for some time to have the key dental personnel of our program attend such a refresher course. This could readily be arranged at one of the dental schools in Philadelphia or New York, if funds were made available for this purpose.

2. Fluoridation of Commercial Water Supplies: As requests for information regarding this subject reach this office, the Chief of the Dental Section be authorized to state the policy adopted by the New Jersey State Dental Society, the State and Territorial Dental Directors, and the American Water Works Association. In view of the recommendations of these groups, it is felt that every effort should be made to encourage local communities to fluorinate public water supplies, providing that such action is under the proper dental, medical, and engineering supervision.

3. The Section on Dental Diseases has requested, for the past three years, a new mobile dental unit for rural areas. The health needs of rural New Jersey have received a great amount of attention the past year through the activities of the State Medical Society and the Division of Local Health Services of the State Department of Health. The Section on Dental Diseases therefore requests, once again, a new mobile dental unit to be used specifically to improve dental conditions in rural communities.

4. Dental hygienists were licensed to practice in New Jersey two years ago. Since that time, a school of dental hygienists has been established in this State and requests have been received from hygienists licensed in this State for positions in our dental program. Almost every state dental program has utilized the services of these auxiliary dental personnel with excellent results. To date, the New Jersey State Dental Program has been unable to employ dental hygienists because of financial limitations. The need for such personnel is great and the services which they can render would be invaluable. It is hoped that funds will be made available to employ at least one dental hygienist in the New Jersey State Dental Program.

5. The Section on Dental Diseases has realized for some time that special care must be provided for non-institutional physically handicapped children and for children in the dental treatment program who present special treatment problems. In the past, children presenting acute infections requiring hospitalization or special surgical procedures have been referred to facilities which are available in the local area. This has not proven too satisfactory in many instances because of the varying type of available facilities, particularly in the rural areas. Physically handicapped children, i.e., cleft palate cases, cerebral palsy, etc., pose a special problem. State agencies are often called upon to supply medical and dental care, and as yet there are no provisions in the dental program for these children. This problem must eventually be faced and the Section on Dental Diseases is willing to co-operate, to the best of its resources, with any feasible plan.

6. In 1945 the prevailing fee scale for operating dentists was raised to \$4.00 per hour for dentists working outside their own offices and \$6.00 per hour for dentists using their own equipment and supplies. During the past five years, the cost of living has increased markedly so that this rate of compensation for professional services is very low. It is, therefore, recommended that every effort be made to adjust this hourly salary rate to an equitable level.

The Chief of the Dental Section wishes to take this opportunity to thank all the members of the New Jersey State Dental Program, the supervisors, the secretarial force, and the many interested persons for performing the many varied duties each has been called upon to do throughout the year, all over the State. Because of budgetary limitations, all of these people have had to cope with additional problems.

Part of this additional load has been the management of the large number of requests for State assistance in the establishment of new local dental programs. Because of the success of the State Dental Program during the past several years, many local communities have been motivated to start their own programs. Because of the initial financial requirements, many communities have been unable to initiate these programs on their own. By the same token, the funds of the State Dental Section have been completely tied up in the existing dental programs. It has, therefore, been felt by the Section on Dental Diseases that it would be advisable to establish the principle of a revolving fund. In this manner, a new dental program might be financed in part by State or Federal funds during the first year of operation. During the following years, State assistance might gradually be reduced until the local community provides most of the funds. In this way, the State funds which are released from this local program might be applied to the new community programs.



In the following pages, the statistical tabulation of treatment activities are presented for the fiscal year of 1949-50.

PERSONNEL

- 1—Chief of Section on Dental Diseases
- 1—Assistant Chief (part-time basis)
- 4—Dental Supervisors
- 1—Dental Aide
- 1—Field Representative
- 1—Public Health Nurse
- 1—Senior Clerk-Stenographer
- 2—Clerk-Typists
- 110—Operating Dentists
  - (9—Full-Time Dentists)
  - (101—Part-Time Dentists)

BUDGET—SECTION ON DENTAL DISEASES—1949-1950

<i>Items</i>	<i>State</i>	<i>Federal</i>
Salaries: (State) .....	\$11,130.00	
Including the following: Chief, 1 Field Representative, 1 Dental Aide.		
Bonus .....	82.38	
Operating Dentists Fees .....	59,689.00	
Supervisors Fees .....	5,267.00	
Salaries: (Federal) .....		\$11,490.00
Including the following: Assistant Chief, 1 Public Health Nurse, 1 Senior Clerk-Stenographer, 2 Clerk-Typists.		
Others:		
Scientific Supplies .....	468.88	247.16
Motor Vehicle Transportation Supplies .....	432.02	
Educational, Recreational and Library Supplies .....	490.07	
Travel .....	882.32	672.71
C. R. Auto Equipment .....	514.24	
C. R. Office Equipment .....		40.00
Dental Health .....	422.60	
Totals .....	\$79,378.51	\$12,449.87
State Funds .....	\$79,378.51	
Federal Funds .....	12,449.87	
Local Contributions .....	67,367.54	
	\$159,195.92	

BUDGET—SECTION ON DENTAL DISEASES

NEW JERSEY STATE DEPARTMENT OF HEALTH—1939-1950

Year	Federal Contributions (U.S.P.H.S.)		State Contributions		Local Contributions		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
1939-40 .....	\$5,240	100	0	0	0	0	\$5,240	100
1940-41 .....	12,968	80	0	0	\$3,200	20	16,168	100
1941-42 .....	14,615	46	\$12,000	38	4,900	16	31,515	100
1942-43 .....	14,972	46	12,187	37	4,900	17	32,059	100
1943-44 .....	15,021	20	51,755	69	8,500	11	75,316	100
1944-45 .....	16,270	21	50,900	66	9,967	13	77,137	100
1945-46 .....	19,369	18	64,707	61	22,800	21	106,876	100
1946-47 .....	23,233	15	101,017	65	30,000	20	154,250	100
1947-48 .....	20,049	17	65,406	55	34,150	28	119,605	100
1948-49 .....	20,227	15	74,030	53	41,377	30	135,634	100
1949-50 .....	12,450	8	79,379	50	67,367	42	159,196	100



DEPARTMENT OF HEALTH

Program	Type of Program	Dentist Hours		Number of Children Treated		Percentage of Completed Cases		Number of Permanent Extractions Per 100 Children Treated		Operations per Child	Number of Fluorine Treatments
		1948-49	1949-50	1948-49	1949-50	1948-49	1949-50	1948-49	1949-50		
Atlantic County Program	Mo. Cl.	532	508	628	288	22.8%	57.9%	7.8	13.5	34.3	299
Bergen County Program	P. O.	214	225	83	89	48.3	43.8	18.2	17.9	8.0	163
North Arlington	Cl.	681	688	387	382	98.0	98.4	4.3	6.0	10.4	0
Rutherford	Cl.	158	142	45	52	77.7	84.6	15.5	15.3	12.6	187
Burlington County Program	P. O.	290	337	238	295	38.3	36.2	38.2	41.3	6.1	432
Camden County Program	Mo. Cl.	1,067	836	630	534	80.3	88.2	5.9	3.7	10.2	1,443
Lawsdale	P. O.	33	48	56	64	17.7	64.0	2.1	20.8	3.7	70
Cape May County Program	Mo. Cl.	532	507	739	319	17.3	50.4	10.6	28.8	22.1	94
Middle Township	P. O.	33	30	97	39	64.3	51.2	1.0	5.1	4.8	40
Cumberland County Program	P. O.	606	620	275	294	42.1	54.4	25.0	23.4	8.3	725
Essex County Orange Program	Cl.	726	941	393	425	83.8	89.4	1.2	4.7	6.8	346
Montclair	Cl.	812	852	418	409	32.3	94.1	3.3	0.7	9.5	793
Gloucester County Program	Mo. Cl.	958	958	557	616	31.5	95.5	17.2	5.1	11.6	427
Hunterdon County Program	Cl.	385	385	342	318	20.4	17.2	4.3	5.3	4.9	1,497
Middlesex County Program	Cl.	882	267	128	132	46.8	34.8	18.7	40.1	8.7	883
Kiddle-Keep-Well Camp	Tr.	171	170	248	280	28.6	27.8	0.4	0.3	2.3	332
Deans	Cl.	137	128	53	26	45.2	80.7	18.8	34.6	8.5	119
Monmouth County Program	P. O.	1,060	928	468	433	56.8	60.9	21.1	22.4	8.4	862
Matawan	Cl.	119	186	128	142	15.6	38.7	4.6	13.3	2.2	125
Coller Foundation	Cl.	39	35	34	30	0	0	35.2	23.3	9.0	4
Union Beach	Cl.	75	33	24	60	58.3	26.3	8.3	13.3	7.7	33
Morris County Program	P. O.	1,405	1,631	670	643	53.3	68.4	19.8	21.9	10.1	42
Ocean County Program	P. O.	433	441	192	300	44.7	32.3	36.9	22.6	8.4	1,477
Traller	Tr.	398	698	101	168	57.4	34.8	8.4	9.4	10.1	1,229
Passaic County Program	P. O.	42	0	23	0	26.0	0	47.8	24.0	10.4	522
Bloomingtondale	Cl.	87	101	36	37	70.0	16.2	0	0	11.5	859
Wanaque	Cl.	50	100	21	23	42.8	17.3	41.6	27.0	12.0	33
Paterson	Cl.	2,031	1,682	931	841	92.9	85.2	14.2	60.8	10.8	143
Somerset County Program	Cl.	838	924	471	487	78.3	81.9	1.0	4.8	11.4	76
Sussex County Program	Tr.	377	467	183	193	57.9	61.6	21.8	27.4	6.7	3,199
Clark Township	P. O.	174	216	76	72	13.1	52.7	9.2	27.4	8.9	1,315
Kentworth	Cl.	188	181	47	54	76.5	48.1	2.1	5.5	5.1	494
Winfield	P. O.	39	80	21	38	0	36.8	9.5	7.8	8.2	90
Warren County Program	Mo. Cl.	1,144	1,064	199	287	89.9	82.1	11.1	6.6	11.0	184
Totals (18 counties)	....	16,314	16,407	8,782	8,340	60.7	67.3	12.6	13.1	8.4	18,084
										8.0	11,354

Code for Type of Program: P. O.—Private office; Cl.—Clinic; Tr.—Trailer (moved by another vehicle); Mo. Cl.—Mobile clinic (travels on own power).

BUREAU OF PREVENTABLE DISEASES

INCREASE OF ACTIVITIES  
Dental Treatment Program of the New Jersey State Department of Health—1940-1950

	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50
Number of children treated	839	2,088	2,840	3,613	5,094	5,752	7,713	8,539	8,782	8,340
Number of communities included	25	39	109	160	171	171	188	189	170	191
Number of counties included	2	8	10	16	17	17	17	18	18	18
Number of mobile units	0	1	1	2	2	3	3	6	6	6

During July 1, 1949, to June 30, 1950, 67.3 per cent of the children included in the program were given all necessary fillings and extractions.

## Section on Rehabilitation

## Crippled Children Commission

## ADMINISTRATIVE REPORT

One of the earliest reports of the Crippled Children Commission states that they were organized to function as a clearing house through which all services to crippled children would be co-ordinated. The Executive Director stands at the central point, constantly receiving reports of services needed. These come from physicians throughout the State, hospitals, Commission personnel, and many other individuals and agencies.

If the case is a new one, the Executive Director forwards the request with recommendations to the appropriate section of the department, or, if it is indicated, informs some unofficial agency of the services it can provide. If a child previously known to the Commission needs some additional service, the Executive Director reviews the case record, evaluates the request, and makes the appropriate referral. Decisions involving finances must be carefully handled as the limited resources must be used for the child who needs the service most.

The routine work of the Commission is a small part of the total. All full-time professional personnel attached to the central office are requested to be in that office one day each week in order that they may confer with each other and with the Executive Director. In the case of the professional personnel not attached to the central office, the Executive Director confers with them in the field. She visits the regional offices and the cerebral palsy treatment centers at regular intervals, and also attends other clinics under Commission auspices.

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

The work of the Commission is financed through many sources: the Federal, State and County governments, and in addition, numerous non-governmental agencies. For both the Federal and State funds, the Executive Director must prepare specific detailed plans indicating the financial needs, and forward them in time for the officials to study them prior to their appropriation of funds. Regular reports are then sent to the proper officials indicating the actual disposition of funds.

With regard to funds provided by the counties, there must be numerous conferences with the freeholders according to the needs that arise.

Non-governmental agencies. Since the founding of the Commission, non-governmental agencies have participated financially in the work; and through the years they have accepted increased responsibilities, paying for both services and equipment as requested. The Executive Director has frequent consultations with these agencies to acquaint them with both past accomplishments and future needs.

All activities involved in or related to the work so far discussed form the basis of the agenda for each regular Commission meeting. Thus the Crippled Children Commission is constantly informed of the progress of the work. This is supplementary to the plans and reports submitted directly to the State Department of Health for approval.

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

- The Governor and members of the Legislature,
- Members of the Children's Bureau and their staff,
- Members of all co-operating State departments,
- The county boards of freeholders,
- The National Foundation for Infantile Paralysis and their county chapters,
- The National Society for Crippled Children and Adults, Inc.,
- The hospitals and schools which have opened their doors to us,
- The orthopedic, plastic and neuro-surgeons who, since the inception of the Commission, have rendered extensive service without cost, and
- All other co-operating agencies and individuals.

## NURSING DIVISION

This report includes the activities of:

- The Public Health Nurse Consultant (orthopedic);
- The six Regional Supervisors of Public Health Nurses;
- The 30 public health nursing agencies which hold contracts with the Commission;
- Other official and non-official agencies that have co-operative working relationships with the Commission.

DEVELOPMENT OF NURSING PROGRAM

During the period covered by this report, the nursing program shows an increase in services over that of last year. The expansion has not been as great as previous years because of curtailment of funds, which in turn necessitated a reduction in staff and in some areas of services. The fact that the program still shows an increase in cases and visits is due to the extra work of the present staff.

THE STATE'S WORST POLIOMYELITIS EPIDEMIC

The year 1949 was the year of the worst epidemic of poliomyelitis this nation has ever known. During the year, 42,375 persons were stricken. While eight states had more cases than New Jersey, our State had 1,580 cases which was also the largest number of cases ever reported in New Jersey. Of the 1,580 cases, 259 were over 21 years of age; these were referred directly to the N. J. Chapter of the National Foundation for Infantile Paralysis. The remaining 1,321 cases were registered and referred to the Nursing Division of the Commission for follow-up. While this epidemic taxed our nursing facilities to the limit, our Regional Supervisors with the help of the contract and co-operating Agencies, managed to handle the follow-up care including convalescent care without extra help.

The long established Commission's policy of developing the nursing work through the use of approved local visiting nurse associations and other official and nonofficial co-operating agencies was continued.

Agencies which have definite working relationships with the Commission have continued to develop and enrich their services through the aid given to them by the five regional supervisors and the State Consultant staff. The Division of Maternal and Child Health of the State Department of Health include crippled children's services in many rural areas. At present 93 municipalities are covered by Maternal and Child Health nurses.

CONTRACT AGENCIES

Although some changes occurred in the contract agencies, the municipalities covered and the number of contract agencies remained about the same. Twenty-nine contracts were renewed, one contract was cancelled and two approved Public Health Nursing Agencies covering 9 municipalities were granted new contracts. At the end of the fiscal year 30 contracts covering 318 municipalities were in force.

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

County	Name of Organization	Municipalities Covered	
Bergen	Central Bergen Visiting Nurse Service	28	
	Public Health Nursing Out-Patient Dept. of Englewood Hospital	26	
	Northern Bergen Nursing Service	6	
	Nursing Service, Inc., Ridgewood	7	
	Passaic Visiting Nurse Association (covers Garfield and Wallington in Bergen County)	2	
Burlington	Moorestown Visiting Nurse Association	4	
Camden	Haddonfield Visiting Nurse Association	9	
	Merchantville-Pennsauken Visiting Nurse Association	2	
Essex	*Visiting Nurse Association of Camden	1	
	Bloomfield Chapter of the American Red Cross Nursing Service	2	
	Nutley Chapter of the American Red Cross Nursing Service	1	
	Visiting Nurse Association of the Oranges and Maplewood	5	
	Visiting Nurse Association of Millburn Township	1	
	West Essex Chapter of the American Red Cross Public Health Nursing Service	9	
	Gloucester	Visiting Nurse Association of Woodbury, Inc.	7
Hudson	Bayonne Visiting Nurse Association	1	
Hunterdon	Hunterdon County Public Health Association	26	
Mercer	Trenton Visiting Nurse Association	34	
Middlesex	Visiting Nurse Association of New Brunswick	12	
Monmouth	Monmouth County Organization for Social Service, Inc.	51	
Morris	Morristown Visiting Nurse Association	34	
	Somerset	Community Service Society of Bound Brook	6
		*Somerset Valley Visiting Nurse Association	8
Union	Visiting Nurse Association of Somerset Hills	8	
	Cranford Visiting Nurse Association	2	
	District Nursing Association of Westfield	2	
	Rahway Chapter of the American Red Cross Public Health Nursing Service	2	
	Summit Chapter of the American Red Cross Public Health Nursing Service	3	
	Visiting Nurse Association of Eastern Union County	9	
	Visiting Nurse Association of Plainfield and North Plainfield	10	
Total		318	

\* New contracts granted 1949-50.

## COURSE IN ORIENTATION TO ORTHOPEDIC NURSING

A course in Orientation to Orthopedic Nursing carrying four points of college credit was given in February, 1950, at Seton Hall. It enables nurses to meet the requirements established by the Commission for eligibility for a "Contract for Public Health Nursing Services to Crippled Children."

Eight nurses, five of whom were employed by agencies holding contracts with the Commission, completed the course.

## STATE NURSING STAFF

Under the re-organization plan of the State Department of Health, a division of Public Health Nursing was created and placed under the Bureau of Constructive Health. In August, 1949, the State Supervisor of Public Health Nurses, the Pediatric Nursing Consultant and the Cerebral Palsy Nursing Consultant were transferred to the Public Health Nursing Division and in November their titles were changed to Public Health Nurse Consultants. Since that time they have carried their previous work programs with the Crippled Children Commission and also participated in and carried their new assignments in the Public Health Nursing Division.

## REGIONAL NURSING STAFF

For the first six months of the fiscal year the Regional staff consisted of six Regional Supervisors and for the last six months five. On January 1, 1950, one Regional Supervisor resigned and she was not replaced due to shortage of funds. The extra work has been carried by the five Regional Supervisors and the Consultants. The Regional Supervisor assigned to the Newark office assists one day a week at the Crippled Children Commission's Rheumatic Fever clinic. The Orthopedic Nursing Consultant was assigned part-time to the Newark office, which in turn necessitated a curtailment of the State supervisory program.

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

Supervisory visits to regional offices .....	35
Relief work—Newark office .....	30 days
Consultant visits to contract and co-operating agencies .....	12
Visits to hospitals and institutions .....	5
Conferences with bureau directors, section chiefs and Executive Director, Crippled Children Commission .....	34
Nursing section, consultant meetings attended .....	19
Interviews and conferences—Trenton office of Crippled Children Commission ..	8
Institutes, demonstrations and conventions .....	10
Other meetings attended .....	9

During part of the year, the Public Health Nurse Consultant (Orthopedic) served on the following committees:

*Chairman*—Program Committee of the State Organization for Public Health Nursing.  
Member of the Health Committee of the New Jersey Welfare Council.

*Special Projects:*

- July, 1949—In co-operation with the Regional Supervisors, compiled according to our five regions a State-wide list of municipalities covered by:  
Direct service areas served by Regional Supervisors.  
Municipalities covered by contract agencies.  
Municipalities covered by co-operating official and non-official agencies.
- Sept., 1949—Completed a detailed report of the records used by the Nursing Section of the Crippled Children Commission and the contract agencies.
- May, 1950—Revised the contract form for contract agencies and wrote a manual of procedures.  
In co-operation with the Regional Supervisors compiled, according to the five regions, a State-wide list of clinics, day and hour held and physician in charge. The clinics listed included:  
Orthopedic and plastic.  
Cardiac and rheumatic fever.  
Cerebral palsy clinics and cerebral palsy out-patient treatment centers.  
Copies of these lists were sent to the Regional Supervisors, contract and co-operating agencies.

## REPORT OF WORK DONE BY THE REGIONAL SUPERVISORS

A comparison of the work with that of the previous year shows an increase in both new and reopened cases admitted to nursing service.

The following table shows a total of 5,654 cases admitted to nursing service, an increase of 407 admitted over the previous year.

*Cases*

New cases admitted to nursing service through direct service given by Regional Supervisors .....	1,190
New cases admitted to nursing service through authorizations issued to contract agencies .....	1,466
Total new cases .....	2,656
Re-admitted cases admitted to nursing service through direct service given by Regional Supervisors .....	809
Re-admitted cases admitted to nursing service through authorizations issued for nursing visits .....	2,189
Total re-admitted cases .....	2,998
Total cases admitted .....	5,654

*Increase Over Previous Year:*

New and re-admitted cases, direct service by Regional Supervisors .....	102
New and re-admitted cases—contract service .....	305
	407

## NURSING VISITS

The following table shows a total of 8,822 nursing visits made which is an increase of 22 visits over the previous year.

Nursing visits through direct service by Regional Supervisors .....	3,193
Authorized nursing visits made by contract agencies .....	5,629
Total .....	8,822

From January 1, 1950, to June 30, 1950, a count was kept of the visits made by co-operating agencies. For this six months' period, the total was 1,123. In addition many more free visits were made by contract and co-operating agencies which were not reported to the Commission.

The Regional Supervisors made 196 supervisory visits with nurses employed by contract and co-operating agencies. These visits are not included in the above report of visits.

## STATE CRIPPLED CHILDREN COMMISSION CLINICS ATTENDED BY REGIONAL SUPERVISORS

Cerebral palsy .....	36
Rheumatic fever .....	54

## STAFF MEETINGS

During the year three Regional Supervisors' staff meetings were held in the Trenton office.

## EDUCATIONAL AND SUPERVISORY WORK OF THE REGIONAL SUPERVISORS

Case conferences and supervisory visits held at the offices of contract visiting nurse associations .....	83
Case conferences and supervisory visits to co-operating agencies that do not hold contracts with the Commission .....	81
Conferences and interviews at hospitals, clinics, schools, and convalescent homes ..	78
Talks and lectures given .....	16
Institutes attended .....	16
In-service training sessions for contract agencies .....	4

## IN-SERVICE TRAINING PROGRAMS

The Visiting Nurse Association of the Oranges and Maplewood requested an in-service training program on orthopedics. A series of six lectures was planned. Three of these have been given and included the following:

1. Good Body Mechanics, illustrated by slides.
2. Orthopedic conditions, including Perthe's Disease, osteomyelitis, scoliosis, post poliomyelitis and Osgood Schlatter's Disease.
3. Nursing care including body mechanics of patients in casts.  
Demonstration of crutch walking by a physically handicapped patient and a physical therapist.

An average of 25 nurses was present at each session.

## MONMOUTH COUNTY ORGANIZATION FOR SOCIAL SERVICE, INC.—LECTURE AND DEMONSTRATION

Inspection of new-born for orthopedic and plastic deformities.

Forty-five nurses and supervisors attended.

One Regional Supervisor participated in a three-day institute on poliomyelitis which was held June 13, 14, and 15 at Muhlenberg Hospital, Plainfield. She gave lectures on the Nursing Care of Poliomyelitis Patients and Demonstrations of Hot Packing and Nursing Care of Patients in Respirators.

## MEDICAL SOCIAL SERVICE DIVISION

In view of the fact that there was a lack of personnel until March 1, 1950, this report covers only the period from March 1, 1950 to June 30, 1950.

March 1950 was considered an orientation period for the new medical social consultant and no formal record was kept for that month. The period was utilized largely in the rheumatic fever program, taking social histories on new cases and becoming conversant with the problems of the old cases; and visiting the rheumatic fever clinic and the unit at St. Michael's Hospital in Newark. Orientation also included opportunities for the medical social worker to become acquainted with the Commission staff throughout the State, and the entire State program of the Commission. The medical social worker

also participated in weekly conferences of the Executive Director and other professional members of the staff.

Total cases carried .....	97
Clinic interviews .....	73
Office interviews .....	52
Home visits .....	9
Telephone consultations .....	12
Consultations with staff members of Commission .....	41
Visits and telephone consultations with staffs of other agencies..	71
Contacts with schools and social agencies .....	1
Visits to hospitals and convalescent centers .....	6
Clinics attended—Cardiac .....	12
Hospital rounds—Cardiac .....	12
Clinics attended—Cerebral Palsy .....	3
Participation in conferences and round table .....	1
Meetings attended .....	4
Trenton office .....	8 days
Newark office .....	30½ days
Field .....	9½ days

#### *Observed Community Needs.*

1. There is a need for convalescent care for handicapped adolescent boys and girls.
2. Thus far there is no provision in the State for care either free or at a nominal fee for cerebral palsied children who are suitable for training and teaching in a resident school.
3. Although there are a few summer camps for handicapped children, there is need for a considerably greater number of camps for handicapped children of all races, and in particular for handicapped girls.
4. There are almost no housekeeping and home services at nominal fees for temporary care in households where the homemaker has become incapacitated, or temporarily overburdened.
5. Employment opportunities for handicapped children of employable age are extremely limited. Although the State and private organizations have counseling and vocational services for the handicapped, there is a need for a placement program.
6. Adequate housing, especially for large families with low incomes, is an urgent need in most of our communities.

The medical social consultant has taken every opportunity to interest persons and agencies in the community in understanding these needs and, wherever possible, has endeavored to cooperate with whatever groups are attempting to fulfill these needs.

#### CEREBRAL PALSY PROGRAM

The following report is a summary of the work done by the Cerebral Palsy Program, whose staff members include:

The Medical Director  
 The Assistant Medical Director  
 The Psychologist  
 The Public Health Nurse Consultant  
 The Four Senior Cerebral Palsy Physical Therapists  
 The Five Public Health Nurse Supervisors  
 A Speech Therapist  
 An Occupational Therapist  
 A Stenographer and Clerk-Typist

The services of the speech therapist are paid for by the National Society for Crippled Children and Adults, and those of the occupational therapist are paid for by the Passaic County Elks. The Crippled Children Commission pays for services of all other personnel.

#### CEREBRAL PALSY MEDICAL CLINICS

Thirty-eight medical clinics were held throughout the State at various centers. Any potential cerebral palsy case is eligible for examination on referral by a doctor and reports are sent back to the doctor. A total of 644 cases were examined; 244 were new cases and 397 were re-examination. These clinics were observed by many professional people, and they are an excellent source of learning about cerebral palsy.

Patients may receive treatment for the cerebral palsy condition at the treatment center: for follow-up in pediatric care, medication, nutrition, and surgical measures, the patients are referred back to their doctors. In examining the cerebral palsy patient, the total child is taken into consideration.

#### CEREBRAL PALSY TREATMENT CENTERS

Treatment centers are located at:

Camden Center—Bonsall School, Mt. Ephraim Avenue, Camden.  
 Trenton Center—Junior School No. 2, Cuyler Avenue, Trenton.  
 Red Bank Center—MCOSS Building, Riverside Avenue, Red Bank.  
 Passaic Center—School No. 10, Harrison Street and Parker Avenue, Passaic.  
 Newton Center—Sussex County Service Building, Church Street, Newton.

Treatment services offered at the Camden, Trenton and Red Bank centers consist of physical therapy and speech. In February of this past year the Red Bank center was moved from Long Branch to the present location. Its



present site brings it in closer contact with welfare and nursing agencies which are located in the same building. Physical, occupational and speech therapy are all offered at the Passaic Treatment Center. The treatment center located at Newton is open for one day every three weeks. Nursing groups frequently observe at the treatment centers during some part of their training course.

The centers have continued to operate on a teaching therapeutic basis. The patient is only at the out-patient treatment center for a very short period of the day; therefore, it is necessary for the muscle education and functional activity program to be carried out at home.

During the past year a total of 229 patients were treated at the centers and 5,722 treatments were given. One result from the treatment is that many children are attending school who were unable to do so previously.

Present caseload for the treatment centers:

Camden Center .....	63
Trenton Center .....	56
Red Bank Center .....	38
Passaic Center .....	57
Newton Center .....	22

Cerebral palsy cases on a county basis registered with the State:

County	
Atlantic .....	22
Bergen .....	333
Burlington .....	42
Camden .....	128
Cape May .....	10
Cumberland .....	14
Essex .....	429
Gloucester .....	40
Hudson .....	276
Hunterdon .....	20
Mercer .....	88
Middlesex .....	102
Monmouth .....	83
Morris .....	49
Ocean .....	12
Passaic .....	131
Salem .....	16
Somerset .....	45
Sussex .....	16
Union .....	162
Warren .....	23
Total .....	1,936

### Other Activities

January 31st a Cerebral Palsy Program was presented to the District Nurses Meeting at Fitkin Hospital, Neptune.

June 2nd the assistant to the medical director gave a talk and showed slides to the parents of the Mercer County Cerebral Palsy Association.

The consultant in charge of this program attended meetings and conferences related to Cerebral Palsy in Public Health. She arranged and set up all medical clinics and supervised the activities of the units. The consultant also gave treatments at the Newton Treatment Center and made many consultation visits to the homes with the interested nurse and had several conferences with nurses and therapists in the centers to co-ordinate services.

### RHEUMATIC FEVER PROGRAM

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

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

The staff of the Rheumatic Fever Unit and Clinic is composed of pediatricians and internists, physiologists and the allied staff of St. Michael's Hospital.

### MEMBERS OF THE STAFF

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

## STATISTICAL REPORT

The following is a statistical report of the activities of the Clinic and Unit from July 1, 1949, to June 30, 1950:

Number of clinics held .....	41
New patients examined .....	91
Patients re-examined .....	861
Staff evaluations .....	141
Dental examinations .....	100+
Number of hospital days paid for at Rheumatic Fever Unit.....	3,055
Number of convalescent days .....	1,840
Children who have been hospitalized .....	73
Number of children who have had convalescent care .....	16

## OCCUPATIONAL THERAPY

An occupational therapist is provided by the National Society for Crippled Children and Adults. She reported 1,647 treatments during the year.

## CONGENITAL HEART PROGRAM

A Congenital Heart Program has been established in the hospital and a staff in the Rheumatic Fever Clinic works with the Congenital Heart Program. The hospital assumes the financial responsibility for the cardiac surgeon and his assistant. This group functions as a team. Standards and procedures for care have been worked out very carefully with all of the doctors participating. Patients may be referred to the Congenital Heart Program from all over the State.

## DENTAL CLINIC

The Dental Clinic has continued to function every Wednesday and the patients under the Rheumatic Fever Program receive dental care. Standards for prophylactic care have been written by our pediatrician and Dr. Nicholas Antonius. The Dental Program has been a very satisfactory one. The Clinic has also served as a training center for public health nurses from Essex, Passaic, Morris and other counties.

In evaluating the progress of this Clinic it was arranged to have a three-year survey which would be a factual analysis of the case records and the case load for the three-year period. This survey was planned for by the staff of the Rheumatic Fever Clinic, the co-ordinator and a volunteer did a complete survey. This survey has been completed and a conference held with members of the staff and the professional staff of the hospital. It was decided that a paper would be prepared on this material for publication in the "State Medical Journal."

## NURSING STAFF IN THE RHEUMATIC FEVER PROGRAM

Under the Reorganization Plan of the State Department of Health, the State Commissioner of Health created a section of Public Health Nursing, which was placed under the Bureau of Constructive Health. In August, 1949, the Pediatric Nursing Consultant was transferred to the Public Health Nursing Section and in November the title was changed to Public Health Nurse Consultant. Since that time, the previous work program with crippled children was carried and the Public Health Nurse Consultant also carried her assignments in the Public Health Nursing Division.

The regional supervisor assigned to the Newark office assists one day a week at the Crippled Children Commission Rheumatic Fever Clinic. Due to the resignation of the Medical Social Consultant, the Rheumatic Fever Program was without a medical social worker for eight months. Some of the duties and functions of the medical social worker were carried by the Public Health Nurse Consultant.

## COURSE IN ORIENTATION TO THE RHEUMATIC FEVER PROGRAM

The Public Health Nursing Consultant was assigned the responsibility of:

1. Orienting the medical social worker in the field.
2. Three of the regional supervisors with two public health nurse consultants and the medical social worker were oriented to the Rheumatic Fever Program. Routines and procedures and policies were discussed in detail.

The payment for nursing visits on rheumatic fever patients is limited to patients under the Rheumatic Fever Clinic and in Essex County.

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

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

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

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

New cases admitted to nursing service through direct service given by consultant .....	80	
New cases admitted to nursing service through authorization issued to contract agencies .....	14	
Total new cases .....		94
Readmitted cases admitted to nursing service through direct service given by consultant .....	181	
Readmitted cases admitted to nursing service through authorizations issued for nursing visits .....	50	
Total readmitted cases .....		231
Total cases admitted .....		325

ANALYSIS OF VISITS AND INTERVIEWS

Homes with nurse .....	0
Homes .....	3
Clinic and hospital .....	237
Physician .....	53
School .....	31
Nursing agency .....	6
Authorized contract .....	68
Convalescent Home .....	4
Interviews in office .....	41
Total .....	443

INTERVIEWS

Clinic .....	225
Consultation .....	43
Office conference .....	21
Total .....	289

NUMBER OF CLINICS ATTENDED

Cardiac Clinic .....	39
Cerebral palsy .....	2
Total .....	41

CONSULTATION SERVICES AND CONFERENCES

1. Commission Staff

a. Executive Director .....	38
b. Cerebral Palsy Consultant .....	38
c. Supervisor of Nurses .....	24
d. Medical Social Consultant .....	31
e. Psychologist .....	35
f. Physicians .....	43
g. Physiotherapists .....	0
h. Regional Supervisors .....	32
i. Statistician .....	14
Total .....	255

2. Staffs of Other Agencies

a. Public Health Nursing Agency .....	15
b. Social Agency .....	3
c. Hospital or Convalescent Center Personnel .....	31
d. Physicians .....	12
e. School Personnel .....	35
f. Occupational Therapist .....	27
g. Physiotherapists .....	0
h. Speech Therapist .....	0
i. Spiritual Advisor .....	4
Total .....	127

SPECIAL PROJECTS

(1) Accompanied a regional supervisor to the Orange Visiting Nurse Association and planned an educational program on orthopedic nursing. Lectures were set up and guest speakers were obtained.

(2) Orientation of the medical social worker to the Crippled Children Commission.

(3) Due to the illness of one of the public health nurse consultants in orthopedics, participated in the work of the Crippled Children Orthopedic Program. Made field visits with the regional supervisor in the Newark area and went over policies and procedures.

(4) Worked on a special committee to simplify crippled children's records.

## NURSING ORGANIZATION WORK

President of the New Jersey State Organization for Public Health Nursing Board of Directors of New Jersey S. N. A.

## ALLIED NURSING ORGANIZATION

Member of the Advisory and Executive Committee of Survey of Nursing Resource.

A committee member of S. N. A. Committee to study the need for a medical school in New Jersey.

Chairman of Legislation and Structure Study Committee of District No. 1, New Jersey State Nurses Association.

## PSYCHOLOGY DIVISION

A summary of work for the year is concisely stated in the tables accompanying this report insofar as this work consisted of psychological examinations and consultations about them.

There were, in addition, numerous conferences with professional personnel on general phases of the work and conferences concerning specific cases which were not held at the time of a psychological examination, totaling 110 in all.

Speeches or lectures have constituted a small part of the work. Each year the psychologist speaks to combined classes at the Newark State Teachers' College. In addition, there was one address at the Roseville Community Club and a broadcast prepared and delivered on the psychological problems of the cerebral palsied.

The psychologist participated in the educational measures in preparing nurses for more adequate dealing with poliomyelitis.

Five series of counseling sessions were held, four with women and one with men. Each series consisted of six meetings which lasted from one and a half to two hours each. Reports have been prepared on this work.

Twenty-one cerebral palsy clinics were attended.

Two articles have been published during the year, one entitled "Two Steps Toward the Improvement of Psychological Services for the Cerebral Palsied" appeared in the Journal on Mental Deficiency, while an article on the "Interpretation of Psychological Examinations" was published in Public Health Nursing. Two additional articles have been prepared and accepted for publication; one of these is entitled "Counseling Mothers of the Cerebral Palsied" and the other "Fathers Participate in a Counseling Series."

Total cases examined ..... 341  
Conferences on cases ..... 652

*Conferences on Cases*

Parents .....	288
Physicians .....	57
Schools .....	64
Nurses .....	139
Social workers .....	54
Physiotherapists .....	16
Psychologists .....	6
Other .....	28

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*Places of Examinations*

Homes .....	152
Hospitals .....	56
Schools .....	42
Regional offices .....	28
Units .....	19
Trenton office .....	12
Other .....	32

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*Major Problems Involved*

General mental development .....	131
Education and training .....	145
Institutional placement .....	30
Eligible for services .....	1
Behavior .....	2
Emotional .....	13
Vocational .....	15
Handedness .....	3
Other .....	1

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*Diagnoses*

Superior .....	12
Normal in general intelligence .....	70
Dull normal .....	36
Deferred .....	13
Borderline .....	35
Feebleminded .....	170
Handedness .....	2
Emotional .....	2
Vocational .....	1

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TABLE I—CHILDREN ON STATE REGISTER

1 Line No.	2 Register Items	3 Sub-Total	4 Total
1	Cases on State Register July 1, 1949 .....		14,792
2	New cases placed on State Register during year .....		2,904
3	Cases on State Register during year .....		17,696
4	Cases removed from State Register .....		1,434
	a. Crippling condition cured .....	601	
	b. Age of 21 reached .....	394	
	c. Residence established in another state .....	116	
	d. Death of registrant .....	131	
	e. Registration found ineligible .....	154	
	f. Registration found misspelled name duplicate .....	38	
5	Cases on State Register June 30, 1950 .....		16,262
6	Cases reported for registration but eligibility not determined at end of year .....		502

TABLE II—AGENCY SOURCE OF CRIPPLED CHILDREN'S REFERRALS

1 Line No.	2 Agency	3 Sub-Total	4 Total
1	All agencies .....		2,904
2	Crippled Children's Commission personnel .....	330	
3	Elks lodges .....	49	
4	Health agency .....	233	
5	Hospital or clinic .....	493	
6	New Jersey State, county and municipal departments .....	965	
7	Others .....	33	
8	Out-of-State .....	23	
9	Physicians .....	32	
10	School cards .....	254	
11	Visible congenital deformity birth certificates .....	492	

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

1 Line No.	2 County	3 Sub-Total	4 Total
1	State Total .....		2,904
2	Atlantic .....	19	
3	Bergen .....	285	
4	Burlington .....	28	
5	Camden .....	87	
6	Cape May .....	6	
7	Cumberland .....	25	
8	Essex .....	810	
9	Gloucester .....	38	
10	Hudson .....	388	
11	Hunterdon .....	26	
12	Mercer .....	103	
13	Middlesex .....	166	
14	Monmouth .....	213	
15	Morris .....	96	
16	Ocean .....	31	
17	Passaic .....	142	
18	Salem .....	16	
19	Somerset .....	58	
20	Sussex .....	26	
21	Union .....	270	
22	Warren .....	71	

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

1	2	3	4	5	6	7	8	9	10
Line No.	Color and Sex	Total	Under 1	1-4 Years	5-9 Years	10-14 Years	15-19 Years	20 Years	Age Unknown
1	Grand Total .....	2,904	666	770	726	468	248	26	0
2	White, total .....	2,560	517	699	671	420	229	24	0
3	White, male .....	1,415	278	373	407	225	121	11	0
4	White, female .....	1,143	237	326	264	195	108	13	0
5	White, sex unknown ...	2	2	0	0	0	0	0	0
6	Colored, total .....	342	149	71	55	47	18	2	0
7	Colored, male .....	187	83	35	28	26	13	2	0
8	Colored, female .....	155	66	36	26	22	5	0	0
9	Colored, sex unknown ..	0	0	0	0	0	0	0	0
10	Other, total .....	2	0	0	0	1	1	0	0
11	Other, male .....	1	0	0	0	0	1	0	0
12	Other, female .....	1	0	0	0	1	0	0	0
13	Other, sex unknown ....	0	0	0	0	0	0	0	0

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

1	2	3	4	5
Para-graph No.	Code	Standard Etiological Categories	Sub-Total	Total
1	All	All categories .....		2,904
2	0	Diseases due to prenatal influences .....	1,198	
3	1	Diseases due to lower plant and animal parasites ....	1,285	
4	2	Diseases due to higher plant and animal parasites ...	0	
5	3	Diseases due to intoxication .....	3	
6	4	Diseases due to trauma or physical agents .....	96	
7	5.0	Diseases secondary to circulatory disturbance .....	0	
8	5.5	Diseases secondary to disturbance of innervation or psychic control .....	57	
9	6	Diseases due to or consisting of static mechanical abnormality (obstruction, calculus, displacement or gross change in form) due to unknown cause .....	1	
10	7	Diseases due to disorder of metabolism growth or nutrition .....	16	
11	8	New growths .....	20	
12	9	Diseases due to unknown or uncertain cause with the structural reaction (degenerative, infiltrative, inflammatory, proliferative, sclerotic or reparative) alone manifest; hereditary and familial diseases of this nature .....	170	
13	X	Diseases due to unknown or uncertain causes with the functional reaction alone manifest; hereditary and familial diseases of this nature .....	0	
14	Y	Diseases of undetermined cause .....	58	

TABLE VI—SERVICES PROVIDED REGISTERED CRIPPLED CHILDREN

1	2	3	4
Line No.	Services Clinics	Sub-Total	Total
1	Admissions .....		335
2	Visits by children to clinics .....		1,596
3	Field or office visits in lieu of service at clinic .....		0
<i>Hospital Care</i>			
4	Children under care July 1, 1949 .....		121
5	Admissions to care during year .....		727
	a. Of children not previously under care during year ...	636	
	b. Of children previously under care during year .....	91	
6	Total under care during year .....		848
7	Discharges during year .....		648
8	Children under care June 30, 1950 .....		200
9	Days care provided during year .....		23,201

1 Line No.	2 Services Clinics	3 Sub-Total	4 Total
<i>Convalescent Care</i>			
10	Children under care July 1, 1949 .....		70
11	Admissions to care during year .....		92
	a. Of children not previously under care during year ....	88	
	b. Of children previously under care during year .....	4	
12	Total under care during year .....		162
13	Discharges during year .....		49
14	Children under care June 30, 1950 .....		113
15	Days care provided during year .....		13,320
<i>Foster Home Care</i>			
16	Foster home care .....		Pending
<i>Public Health Nursing Service</i>			
17	Admissions .....		5,835
18	Field or office visits .....		9,265
<i>Physical Therapy Service</i>			
19	Admissions .....		229
20	Visits by children to treatment centers .....		5,722
21	Field or office visits .....		0
<i>Medical Social Service</i>			
22	Admissions .....		197
<i>Vocational Rehabilitation</i>			
23	Children referred for vocational services .....		492
<i>Prosthetic Appliances</i>			
24	Purchased .....		521
<i>Blood Transfusions</i>			
25	Fees .....		3
<i>Biologicals and Drugs</i>			
26	Purchases .....		140
<i>Psychological Service</i>			
27	Examinations .....		341
28	Consultations .....		652
<i>Overage Rehabilitation</i>			
29	Overage 21 cases referred to Rehabilitation Commission ...		757

TABLE VII—BUDGETED EXPENDITURES FOR REGISTERED CRIPPLED CHILDREN

1 Line No.	2 Budget Items	3 Total All Funds	4 State Funds	5 County Funds	6 Federal Fund A	7 Federal Fund B	8 Federal Fund R.B.
1	Hospital and convalescent care .....	\$141,309.58	\$43,001.28	\$61,476.78	\$10,961.30	\$4,142.62	\$21,727.60
2	Prosthetic appliances .....	28,943.77	6,507.64	15,474.08	4,277.78	499.96	2,184.31
3	Contract nursing agencies .....	8,880.00	.....	.....	720.00	7,995.00	165.00
4	Clinics .....	1,922.00	.....	.....	1,372.74	.....	1,922.00
5	Biologicals and drugs .....	1,432.74	.....	.....	22.75	.....	60.00
6	Blood transfusions .....	22.75	.....	.....	773.64	.....	336.95
7	Office supplies .....	1,318.21	207.62	.....	47.95	.....	116.44
8	Scientific supplies .....	164.39	.....	.....	269.13	.....	225.07
9	Office equipment .....	494.20	.....	.....	.....	.....	.....
10	Scientific equipment .....	.....	.....	.....	.....	.....	.....
11	Communication .....	3,750.00	750.00	.....	2,500.00	.....	500.00
12	Printing and binding .....	1,755.34	.....	.....	1,303.43	.....	451.91
13	Publications free .....	58.95	.....	.....	20.00	.....	38.95
14	Contingent .....	198.54	.....	.....	115.06	.....	83.48
15	Postage .....	1,238.63	934.67	.....	3.96	.....	300.00
16	Rent, Central Offices .....	4,500.00	3,500.00	.....	1,000.00	.....	.....
17	Rent, District Offices .....	3,190.00	.....	.....	2,590.00	.....	600.00
18	Rent, File storage .....	.....	.....	.....	.....	.....	.....
19	Tuition .....	.....	.....	.....	.....	.....	.....
20	Salaries .....	116,559.61	13,962.10	.....	64,470.39	.....	38,127.12
21	Travel .....	5,011.22	465.67	.....	2,370.63	.....	2,174.92
22	Fees .....	1,250.00	.....	.....	.....	.....	1,250.00
23	Totals .....	\$321,999.93	\$69,328.98	\$76,950.86	\$92,818.76	\$12,637.58	\$70,263.75

TABLE VIII—FREEHOLDER'S APPROPRIATIONS CALENDAR YEAR 1949

1 Line No.	2 County	3 Sub-Total	4 Total
1	State Total .....		\$171,400.00
2	Atlantic .....	\$9,400.00	
3	Bergen .....	3,500.00	
4	Burlington .....	2,700.00	
5	Camden .....	4,000.00	
6	Cape May .....	1,000.00	
7	Cumberland .....	3,900.00	
8	Essex .....	30,000.00	
9	Gloucester .....	4,000.00	
10	Hudson .....	11,000.00	
11	Hunterdon .....	1,500.00	
12	Mercer .....	30,000.00	
13	Middlesex .....	6,000.00	
14	Monmouth .....	5,000.00	
15	Morris .....	4,000.00	
16	Ocean .....	17,600.00	
17	Passaic .....	19,000.00	
18	Salem .....	800.00	
19	Somerset .....	9,000.00	
20	Sussex .....	1,500.00	
21	Union .....	5,500.00	
22	Warren .....	2,000.00	

POLIOMYELITIS STATISTICAL REPORT No. 8  
CALENDAR YEAR 1949

## SUMMARY

Item	Sub-Total	Total	Polio Per Cent
1. Total Number of Cases Reported as Poliomyelitis .....		1,580	
2. Incorrect Diagnosis Cases .....		49	
A. Alive .....	46		
B. Deceased .....	3		
3. Poliomyelitis cases .....	1,531	100.00	
A. Poliomyelitis cases deceased .....	100	6.53	
B. Poliomyelitis cases alive .....	1,431	93.47	
C. Poliomyelitis cases cured .....	136	8.88	
D. Active poliomyelitis cases .....	1,295	84.59	
E. Active poliomyelitis cases not paralyzed .....	693	45.27	
F. Active poliomyelitis cases paralyzed .....	602	39.32	
4. Poliomyelitis cases by age, sex and race .....	1,531	100.00	
A. Age .....			
Under 1 year .....	29	1.89	
1-4 .....	388	25.34	
5-9 .....	461	30.11	
10-14 .....	257	16.79	
15-20 .....	135	8.82	
21-30 .....	164	10.71	
31-40 .....	85	5.55	
41-50 .....	9	.59	
Over 50 years .....	1	.07	
Unknown .....	2	.13	
B. Sex .....			
Male .....	859	56.11	
Female .....	672	43.89	
C. Race .....			
White .....	1,447	94.51	
Colored .....	84	5.49	



DETAIL				Polio
Item	Sub-Total	Sub-Total	Total	Per Cent
5. Incorrect diagnosis cases total.....			49	
A. <i>Alive</i> .....		46		
Anxiety Hysteria .....	2			
Common Cold .....	4			
Encephalitis .....	1			
Encephalopathy .....	1			
Enterocolitis, acute .....	1			
Gastritis .....	1			
Influenza .....	2			
Meningitis .....	1			
Meningitis Streptococcus .....	1			
Meningitis, Tuberculosis .....	2			
Mononucleosis, infectious .....	2			
Myositis .....	1			
Myositis, Rheumatoid .....	1			
Myositis, Rheumatoid (Fibrositis) .....	1			
Neuritis .....	1			
Osteochondrosis of femur, bil. ....	1			
Osteomyelitis suspected .....	1			
Paralysis of upper extremity .....	1			
Parotitis .....	1			
Pertussis .....	1			
Pharyngitis, acute .....	1			
Rheumatic Fever .....	2			
Rhinitis, acute .....	1			
Talipes flaccid, calcaneovalgus .....	1			
Tonsillitis .....	1			
Tonsillitis, acute .....	2			
Disease none .....	1			
Undiagnosed disease .....	10			
B. <i>Deceased</i> .....		3		
Brain infection unspecified, inflammation..	1			
Meningitis, tuberculosis .....	2			
6. Poliomyelitis cases by place where care was received during acute period.				
Total .....			1,531	100.00
In hospitals .....	1,407			91.90
In patient's residences .....	124			8.10
A. <i>Deceased</i> .....		100		6.53
In hospitals .....	96			6.27
In patient's residences .....	4			.26

Item	Sub-Total	Sub-Total	Total	Polio Per Cent
C. <i>Cured</i> .....			136	8.88
In hospitals .....	125			8.16
In patient's residences .....	11			.72
E. <i>Not Paralyzed</i> .....			693	45.27
In hospitals .....	644			42.07
In patient's residences .....	49			3.20
F. <i>Paralyzed</i> .....			602	39.32
In hospitals .....	542			35.40
In patient's residences .....	60			3.92

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

COUNTY	TOTAL	Under 1	1-4	5-9	10-14	15-20	21-30	31-40	41-50	Over 50	Unknown
Atlantic County	1				1						
Changed Diag.											
Bergen County	177	2	40	55	26	17	25	11	1		
Changed Diag.	4			1	1		2				
Burlington County	9		2	2	2						
Changed Diag.	1						1				
Camden County	11		2	3	2	1		2			
Changed Diag.											
Cape May County	2			2							
Changed Diag.											
Cumberland County	1				1						
Changed Diag.											
Essex County	242	2	63	68	39	20	23	20	2		
Changed Diag.	18		6	4	2	1	6				
Gloucester County	1		1								
Changed Diag.											
Hudson County	273	8	83	85	43	25	18	9			
Changed Diag.	7	1	2	1	3						
Hunterdon County	8		3		4		1				
Changed Diag.	1										
Mercer County	43	1	7	18	5	4	5	3			
Changed Diag.	1			1							
Middlesex County	181	3	35	41	25	9	12	6			
Changed Diag.	2	0	1			1					
Monmouth County	233	2	55	68	42	22	27	16	1		
Changed Diag.	7	1	1	3	2						
Morris County	40	1	7	16	6	3	4	2		1	
Changed Diag.	1										
Ocean County	16	1	4	3	3	1	3	1			
Changed Diag.	1			1							
Passaic County	48		8	11	9	6	10	3	1		
Changed Diag.	2					1					
Salem County	2		1					1			
Changed Diag.											
Somerset County	34	2	7	8	7	2	6		2		
Changed Diag.	1										
Sussex County	8		1	4	1	1	1				
Changed Diag.	1		1								
Union County	159	4	39	51	24	11	18	9	2		1
Changed Diag.	1										
Warren County	49	3	14	14	6	7	5				
Changed Diag.	1			1							
SUB-TOTAL	1488	29	379	449	246	130	158	85	9	1	2
CHANGED DIAG.	49	2	13	13	5	8	8				
Out-of-State	43		9	12	11	5	6				
Changed Diag.											
TOTAL POLIO	1531	29	388	461	257	135	164	85	9	1	2
CHANGED DIAG.	49	2	13	13	5	8	8				
GRAND TOTAL	1580	31	401	474	262	143	172	85	9	1	2

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

COUNTY	Male	Female	White	Colored	Deceased	Cured
Atlantic County .....	1	..	1	..	..	..
Changed Diag. ....	..	..	..	..	..	..
Bergen County .....	98	79	176	1	13	9
Changed Diag. ....	3	1	4	..	..	..
Burlington County .....	5	4	9	..	..	1
Changed Diag. ....	1	..	1	..	..	..
Camden County .....	7	4	11	..	1	2
Changed Diag. ....	..	..	..	..	..	..
Cape May County .....	1	1	2	..	1	..
Changed Diag. ....	..	..	..	..	..	..
Cumberland County .....	1	..	1	..	..	..
Changed Diag. ....	..	..	..	..	..	..
Essex County .....	138	104	224	18	15	17
Changed Diag. ....	8	10	17	1	1	0
Gloucester County .....	1	0	1	0	0	0
Changed Diag. ....	..	..	..	..	..	..
Hudson County .....	151	122	255	18	23	53
Changed Diag. ....	4	3	7	..	..	..
Hunterdon County .....	7	1	8	..	..	2
Changed Diag. ....	1	..	1	..	1	..
Mercer County .....	23	20	41	2	9	1
Changed Diag. ....	..	1	1	..	..	..
Middlesex County .....	78	53	127	4	9	1
Changed Diag. ....	1	1	2	..	..	..
Monmouth County .....	133	100	211	22	5	5
Changed Diag. ....	4	3	7	..	1	..
Morris County .....	24	16	40	..	..	8
Changed Diag. ....	0	1	1	..	..	..
Ocean County .....	6	10	16	..	..	..
Changed Diag. ....	1	..	1	..	..	..
Passaic County .....	25	23	47	1	3	5
Changed Diag. ....	1	1	2	..	..	..
Salem County .....	2	..	2	..	..	..
Changed Diag. ....	..	..	..	..	..	..
Somerset County .....	16	18	34	..	7	1
Changed Diag. ....	1	..	1	..	..	..
Sussex County .....	6	2	8	..	1	2
Changed Diag. ....	0	1	1	..	..	..
Union County .....	85	74	141	18	7	27
Changed Diag. ....	..	1	1	..	..	..
Warren County .....	29	20	49	..	3	2
Changed Diag. ....	1	..	1	..	..	..
SUB-TOTAL .....	837	651	1404	84	97	136
CHANGED DIAG. ....	26	23	48	1	3	..
Out-of-State .....	22	21	43	..	3	..
Changed Diag. ....	..	..	..	..	..	..
TOTAL POLIO .....	859	672	1447	84	100	136
CHANGED DIAG. ....	26	23	48	1	3	..
GRAND TOTAL .....	885	695	1495	85	103	136

## Section on Rehabilitation

## Heart Disease Control Program

The Heart Disease Control Program was organized during the middle of the third quarter of the fiscal year of 1950. The activities to be initiated first were those of becoming acquainted with the cardiac facilities already existing in the State of New Jersey. At the same time a study was started to ascertain the future needs of this State in order to meet the challenge of the rising toll of death and disability of our residents from rheumatic fever and cardiovascular diseases which is higher in New Jersey than in most other States. Also, a review of the programs of the various State and voluntary organizations was made to determine where the heart program might best be co-ordinated with already successfully functioning health services for the control of chronic disease.

Through co-operation with the New Jersey State Tuberculosis Control Section abnormal cardiac findings discovered during mass chest X-ray surveys are being referred to private physicians for further diagnostic evaluation. Plans are under way for the integration of a nutrition and mental hygiene consultation service in conjunction with the Division of Constructive Health. With the assistance of the Division of Vital Statistics records are to be kept which will permit an adequate evaluation of the Heart Disease Control Program. Also it is planned to co-ordinate cardiac educational activities with the New Jersey State Community Health Organization.

As heart disease is a community responsibility, its control should be included in a public health community program. In this way, emphasis will not be placed on heart disease alone. The attainment of an adequate public health community program necessitates the education of everyone to the value of the early recognition and treatment of cardiac diseases. Also, unnecessary fear of heart disease will be eliminated. The layman should be instructed in the role which he can play in the promotion of cardiac research and the provision of additional facilities for the treatment of those who suffer from heart disease.

Plans are being formulated to build community educational programs around three cardiac demonstration and training centers which are being established in carefully selected areas of the State. The first of these centers is located at St. Michael's Hospital in Newark. The second and third centers are to be placed so that the southern and central parts of the State will also benefit from the Heart Disease Control Program.

At the first of the centers, St. Michael's Hospital, heart disease control funds have been used to purchase X-ray equipment for multiphasic screening of all outpatients and hospital personnel. Because St. Michael's Hospital ad-

mits annually 12,000 patients to its outpatient department from surrounding densely populated areas, it is anticipated that a screening for cardiovascular diseases will also yield significant numbers of undiscovered cases of tuberculosis and other chest conditions.

Another allocation of heart funds has been used to purchase equipment for the establishment of a cardiovascular and congenital heart surgical program at St. Michael's Hospital. This program is being conducted by Dr. Charles Bailey, a well-known pioneer in the field of cardiovascular surgery and one of the first surgeons to perform operations within the heart itself. This cardiovascular surgical clinic is open to all patients, regardless of age, who reside in New Jersey. During the past six months 22 patients, referred by physicians from various parts of the State, have successfully undergone heart surgery and are now freed from lives of invalidism. Included among the operated cases were cases of congenital heart, cirrhosis of the liver and mitral stenosis.

Also, heart funds have been used to purchase fluoroscopes, blood pressure machines and other equipment to expand the facilities of present approved heart clinics and to establish new heart clinics. These clinics, to which physicians may refer patients for the diagnosis of heart disease, are equipped with a trained staff of cardiologists and the expensive tools needed for the early and accurate diagnosis of heart disease. After the patient has been examined and diagnosis determined, the patient will be returned to the referring private physician with a report of the findings and, if desired, a recommendation for treatment.

To summarize, the goal of the heart disease control program is the prevention of heart disease through public education, the training of physicians in new techniques of early cardiac case finding, and the establishment of diagnostic centers to which residents of the State of New Jersey will have easy access so that they may benefit from early cardiac case finding made possible by modern equipment and trained personnel. By these means it is hoped that death and disability caused by heart disease will decrease and that the citizens of the State of New Jersey will benefit from an economic as well as a humanitarian viewpoint.

## Report of the Bureau of Vital Statistics and Administration

July 1, 1949—June 30, 1950

MARGUERITE F. HALL, PH.D., *Director*

Section on Administrative Services .....	JOHN B. VAN ELLIS, <i>Chief</i>
Section on Examination, Licensing and Registration..	E. POWERS MINCHER, <i>Chief</i>
Section on Personnel and Accounts .....	WILLIAM R. PEEBLES, <i>Chief</i>
Section on Public Health Statistics .....	F. MERTON SAYBOLT, M. S. P. H., <i>Assistant Chief</i>
State Registrar of Vital Statistics .....	WALTER R. SCOTT, <i>State Registrar</i>

## Bureau of Vital Statistics and Administration

Although the Bureau of Vital Statistics and Administration was the first bureau established under the reorganization of the State Department of Health, the year 1949 was very definitely an experimental one.

Significant achievements were made by the Section on Personnel and Accounts in clarifying and establishing personnel policy and records. The improved accounting system, following the close of the fiscal year 1948-49, made possible regular monthly and quarterly reports to bureau directors, and to the section and program chiefs. Reconciliation of accounts and factual data paved the way for more realistic budgets.

Progress was made toward the establishment of the Section on Examination, Licensing and Registration. Some of the irregularities inherited by the Department of Health with the transfer of the Boards of Barber Examiners and Beauty Culture Control, were resolved.

Centralized control of housekeeping activities was maintained through the Section on Administrative Services.

The Section on Public Health Statistics carried out its functions via registration, processing and analysis.

New standard certificates for birth and death reporting were adopted; the Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death became the guide for coding and interpreting mortality and morbidity data. Comparisons with the National Office of Vital Statistics on cause of death coding indicated a high level of agreement between Washington and New Jersey. This also showed the excellent co-operation and understanding by the medical profession of its responsibility in the new emphasis on medical certification in the standard death certificate. Registration continued at a high level of completeness and accuracy.

The IBM unit was installed. Beginning with the April data, regular weekly and monthly morbidity summaries were released. Patterns for the analysis of mortality data were fairly well established. Natality data were considered in relation to infant, maternal and stillbirth mortality.

This Bureau accepted the responsibility of handling statistics for the Department. Program chiefs were encouraged to indicate data needed for their programs. Statistical services led the way with factual data towards evaluating and planning a more effective tuberculosis program by high-lighting all phases of the existing program. Consultation and guidance were given to the chiefs responsible for programs in venereal disease control and maternal and child health.

The Bureau gave material assistance to the Cancer Survey, the several Diabetes Surveys, and did considerable spade work for the proposed Evaluation Study, as well as handling special studies for dental health and nutrition.

Integration was effected between the Department of Institutions and Agencies and the Department of Health for processing and using hospital records for tuberculosis cases. Statistical services were begun in December for Disability Insurance Service in the Division of Employment Security of the Department of Labor and Industry. Integration with the two departments proved to be mutually beneficial to them as well as to the Department of Health.

Basic data were furnished several advisory committees appointed by the Governor, namely: the committees to study proposed local health units and chronic illnesses. Assistance was given members of the Pennsylvania State Department of Health in their thinking on establishing a division comparable to the Bureau of Vital Statistics and Administration, in the New Jersey State Department of Health.

### Section on Administrative Services

Functions of the Section on Administrative Services include production of health education materials, health education display bookings, maintenance of films and audio-visual aids, distribution of printed materials, warehousing and distribution of department supplies, distribution of biologics, operation of department print shop, mimeograph and mailing services, and preparation of specifications for departmental printing and other graphic needs.

Personnel at the end of the year totaled fourteen with two vacancies existing.

The Section is presently situated at four separate locations. A centralized location for all functions would permit greater utilization of personnel and facilities, which would in turn enable the Section to render a better service to the entire Department.

### HEALTH EDUCATION SERVICES

A large portion of time and effort was expended in providing assistance to the Department through the production of health education materials. The close relationship with the Community Health Organization Consultant of the Office of the Commissioner continued.

Many new visual-aids including posters, graphs, charts, signs, etc., were produced in addition to a considerable amount of original art work which was used for reproduction purposes. Four additional permanent displays were designed and constructed at the request of the Bureaus concerned.

The Section on Administrative Services installed and maintained fifteen major exhibits throughout the State in addition to several smaller exhibits.

Exhibit space at the State Fair in Trenton was increased to adequately provide for the Diabetes Demonstration co-operatively sponsored by the Department and the United States Public Health Service.

Photographic equipment and dark room facilities are still available, but the staff does not include a photographer. A few photographic needs were filled through commercial sources, although funds did not permit frequent use of these sources.

As planned last year, placement of audio-visual equipment in the District Health Offices was started. A 16 mm. sound film projector was placed in each of the District Offices at Mays Landing, Dover, and Hackensack. A sound film-strip projector was placed in each of the District Offices at Highland Park and Pitman. Additional audio-visual equipment is now on order.

Again this year, sufficient funds were not available to notably increase the lay film library of the Department. A few new films were purchased and several prints of older films no longer usable, were replaced. However, the film library remains deficient in several fields.

Lay film bookings were made for the Department by the New Jersey State Museum. Attendance reports received from the museum indicate that these films were seen by an audience of at least 187,000. Many film showings were provided for various Bureaus of the Department. In addition, several bookings of professional films were made to other health agencies.

All mailing lists on addressograph plates are maintained by this section. In addition to the regular mailings of Public Health News, the Project Reporter, the Annual Report and all news releases, many special mailings were prepared for other offices of the Department.

The print shop produced several new pieces of health education material and reprinting of previously created pieces continued. Requests for printing of such items as departmental forms, regulations, etc., increased over printing requests for health education materials.

### WAREHOUSE

Warehousing and shipping facilities were provided on a consolidated basis for many items, including printed materials, office supplies, and Maternal and Child Health field supplies. Perpetual inventories were maintained for all items in addition to which an accurate cost system was kept on all office supplies. A monthly cost report on office supplies was provided for Bureaus and Sections.

Considerable time was expended in order to provide many additional services such as mimeographing, special truck deliveries, erecting and dismantling exhibits, storage of office equipment and supervising departmental moving activities by commercial movers.

As the weight-load at the warehouse was reached some time ago, additional materials could not be accepted and in some instances, commercial storage facilities were used.

#### BIOLOGICAL, DRUG AND VACCINE DISTRIBUTION

Diphtheria toxoid (alum precipitated), smallpox vaccine, pertussis-diphtheria-tetanus (fluid), pertussis-diphtheria-tetanus (alum refined), typhoid vaccine, measles globulin, and rocky mountain spotted fever vaccine were made available to physicians, and also to local boards of health for clinic purposes, at 63 distributing stations located at strategic points throughout the State. Rabies vaccine (human) was made available at key distributing stations.

Reports received for the fiscal year indicate that at least 16,109 persons received diphtheria toxoid distributed by the State Department of Health. Twenty thousand six hundred and ninety-two reports were received for the use of smallpox vaccine and 36,971 reports were received for the use of pertussis-diphtheria-tetanus.

Eighteen hundred packages of typhoid-paratyphoid vaccine, containing 5 c.c. each, were released. This was sufficient for 3,600 immunizations against typhoid fever.

Seven hundred and forty-eight packages of rocky mountain spotted fever vaccine were distributed and sufficient rabies vaccine (human) was released to cover the complete treatment of 14 doses each for 238 persons.

Immune serum globulin (measles) was also made available at the established distributing stations. This material was provided without charge to the Department by the American Red Cross. During the year a total of 33,000 packages of immune serum globulin, containing 2 c. c. each, was distributed.

This section was also given the responsibility of storing and shipping penicillin drugs and canine rabies vaccine for the Venereal Disease Program and the Rabies Control Unit respectively.

All distributing stations throughout the State were visited periodically, at which time the expired materials were collected and local problems regarding biologic distribution were corrected.

Additional venereal disease drugs were stored and distributed at the department warehouse.

#### Section on Examination, Licensing and Registration

Reorganization and co-ordination of the activities and functions of this Section to accomplish the objectives of Chapter 444, P. L. 1948, transferring the powers, duties, records and property of the Board of Barber Examiners

and the Board of Beauty Culture Control to the Section on Examination, Licensing and Registration in the State Department of Health, continued during the first part of the year. The appointment of a Section Chief concluded the major organizational changes accomplished during the year. Throughout the year, administrative policy procedures were initiated to co-ordinate the administration of these boards with that of the Department. All reorganization and/or procedural changes were accomplished without delay in the issuance of licenses. While reorganization has not progressed to the extent that the Section is fully responsible for the examining and licensing program of the entire Department, it is believed that this objective will be accomplished during the ensuing year.

Total revenues of the Section, including fines paid for violations of beauty culture laws, amounted to \$140,081.71; total expenditures of the Section were \$88,620.63.

#### Section on Personnel and Accounts

During the fiscal year 1949-50, the Section on Personnel and Accounts continued with the problems of reclassification and fiscal adjustments made necessary by the progressing reorganization of the State Department of Health.

The personnel unit was again primarily concerned with the proper classification of individual employees, and with efforts to have the Civil Service Commission adjust the salary ranges of many position titles. Much time and effort were devoted to the development of the personnel structure necessary for the new District State Health Offices, some of which are to be opened during the next fiscal year. New specifications were written for each position in the Department, and a new Civil Service coding for each position was developed and applied. Studies pertinent to the application of a merit system to all local health personnel were made, training meetings conducted, service rating as prescribed by the Civil Service law continued, and the departmental employees' handbook was completed.

The accounts unit of the Section was again concerned with the proper accounting of all funds received and expended by the various units of the Department, and with the changing of accounting procedures necessary to meet the demands of the reorganization program. New procedures and new material routing were instituted in an effort to achieve greater fiscal control, and further budgetary consolidation of federal accounts was achieved. Travel regulations were reviewed and suggestions forwarded to the Department of the Treasury for inclusion in the new Standard State Travel Regulations to be effective July 1, 1950. A complete housing study was undertaken, and the development of adequate inventory records was continued.

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, 1950.

STATE DEPARTMENT OF HEALTH—FINANCIAL STATEMENT

FISCAL YEAR 1949-1950

Receipts

Received for Transfer to State Treasury:

Licenses and permit fees .....	\$248,102.70
Penalties .....	3,105.00
Certified certificates .....	22,586.16
Examination fees .....	3,300.00
Miscellaneous (including analysis) .....	5,538.70
Net total .....	<u>\$282,632.56</u>

Received for Disbursement:

State appropriation and transfers .....	\$1,164,771.86
Federal Security Agency, United States Public Health Service .....	870,052.66
United States Children's Bureau .....	397,420.33
Commonwealth Fund .....	4,412.36
Net total .....	<u>\$2,436,657.21</u>

DEPARTMENTAL ALLOCATIONS

	State	Federal	Other Accounts	Total State	Total Federal	Total All Funds
Vital statistics and adm. ....	\$204,081.25	\$108,616.25	\$77,081.06	\$281,162.81	\$151,907.70	\$432,470.01
Laboratories .....	115,681.77	99,841.57	36,166.99	151,848.76	125,261.20	277,109.96
Preventable diseases .....	75,699.87	248,197.48	83,722.96	159,422.83	556,708.17	716,131.00
Environmental sanitation .....	197,936.80	70,055.45	102,254.00	800,190.80	97,977.69	898,168.49
Constructive health .....	66,990.56	58,500.00	5,435.06	72,445.62	97,741.67	170,187.29
Local health services .....	189,720.98	174,673.17	14,992.92	204,113.90	288,476.56	442,590.46
Totals .....	\$850,111.23	\$759,883.92	\$319,072.99	\$1,169,184.22	\$1,267,472.99	\$2,436,657.21

DEPARTMENTAL EXPENDITURES

	State	Federal	Other Accounts	Total State	Total Federal	Total All Funds
Vital statistics and adm. ....	\$197,114.59	\$108,541.09	\$74,575.99	\$271,690.58	\$146,328.13	\$418,018.71
Laboratories .....	111,064.00	99,806.57	34,815.33	145,819.33	123,614.08	269,433.41
Preventable diseases .....	66,717.98	238,423.80	64,476.89	131,194.87	499,500.64	630,695.51
Environmental sanitation .....	188,614.03	64,180.51	92,979.03	281,593.08	88,656.17	370,279.25
Constructive health .....	62,312.79	52,540.65	5,197.52	67,510.31	80,612.18	148,122.49
Local health services .....	181,053.60	170,152.49	13,917.92	194,971.52	237,927.81	432,899.33
Totals .....	\$808,816.99	\$733,650.11	\$285,962.70	\$1,092,779.69	\$1,166,669.01	\$2,259,448.70
Balances, June 30, 1950 .....	\$43,294.24	\$26,293.81	\$33,110.29	\$76,404.53	\$100,803.98	\$177,208.51

## Section on Public Health Statistics

## Statistics for the Calendar Year 1949

The year 1949 could well be called an experimental one for this Section. In addition to carrying on and amplifying the annual tabulations previously done in the State Registrar's office, an attempt has been made to furnish current information in a form best suited for use. The Section is truly one of service and exists only because of the services it can give in determining the extent of public health problems, controlling the operations of programs designed to solve the problems and evaluating the results of such operations.

The research and statistics force is divided into two units. One unit mans the electrical tabulation machinery and a smaller unit prepares materials for machine processing, analyzes the tabulations made and determines the best method of presenting the results. This research unit consults with other sections and divisions of the Department in an effort to devise proper forms for the collection of data.

During 1949 a great deal of time was spent in linking the tuberculosis records from case reports, survey suspects, and institutionalized cases in the files of the State Department of Institutions and Agencies. The study has revealed information of sufficient importance to warrant an overhauling of the entire morbidity reporting system.

As a co-operative project morbidity data from claim records in the files of the Disability Insurance Section of the State Department of Labor were analyzed. Valuable data of both an administrative and medical nature were secured.

The machine unit, in addition to the special studies and its processing of data from records of births, marriages, deaths and stillbirths, furnished monthly and annual alphabetic indexes for the use of the State Registrar's office. Weekly and monthly tabulations of morbidity data averaging 100,000 annually; and personnel, budget and expenditure lists and tabulations were also prepared by the machine unit.

Anticipating the needs and requests of the other divisions, voluntary agencies and individuals was another duty of the Section.

The amount of service given is naturally limited by the machine and personnel time permitted by the budget. Although there has been an expansion during the last year, the demands have also grown. It is therefore essential that a routine pattern of operations is not established and blindly repeated from year to year. Public health problems change and the emphasis on statistical data for each problem may also change. This concept of change has guided the selection of tabulations for inclusion in this annual report. Many tables formerly used have not been included, and will never appear again unless the disease or group of diseases which they concern again become of



sufficient importance to New Jersey health. Among these are tables and/or charts on typhoid fever, malaria, measles, scarlet fever, whooping cough and diphtheria.

New tables have been added and former tables on cancer mortality and accidental deaths have been revised. These changes reflect the increasing importance of these fatalities from a public health viewpoint.

Prior to this year rates for neonatal deaths, infant mortality, maternal deaths and stillbirths were published for counties and municipalities. Due to the chance errors inherent in rates based on small numbers and the danger of falsely interpreting such rates, only the numbers for each event have been given. It is believed that agencies or individuals who cannot compute the rates from the basic data given will not recognize the possibility of false interpretation and consequently should not use rates.

New tables giving detailed birth, marriage and stillbirth information have been inserted so that similar information computed in later years may have some basis for comparison to detect significant changes in the New Jersey experience. Efforts have been made to indicate the important aspects of each series of tabulations.

## TABLES AND CHARTS—1949

- Table 1. Population: Numbers and rates for births, marriages and deaths, 1879-1949. (Births and deaths adjusted for residence.)
- Chart 1. Births and deaths per 1,000 population, 1880-1949.
- Table 1a. Births, marriages and deaths in New Jersey by month of occurrence, 1949.
- Table 1b. Births, marriages, deaths, stillbirths, maternal deaths, infant deaths and neonatal deaths by counties and municipalities, 1949. (Births, deaths and stillbirths adjusted for residence.)
- Table 2. Deaths by age groups; number and percentage for past decade.
- Table 3. Illegitimate births by color and age of mother, 1949.
- Table 4. Number of births, deaths under one year, deaths under one month, stillbirths and maternal deaths, with rates per 1,000 live births, 1949.
- Table 5. Total stillbirths by weight by age of mother, 1949.
- Table 5a. White stillbirths by weight by age of mother, 1949.
- Table 5b. Non-white stillbirths by weight by age of mother, 1949.
- Table 6. Maternal deaths by specific cause, 1949.
- Table 6a. Maternal deaths by color, cause and age groups, 1949.
- Table 7. Marriages by age of husband versus age of wife, 1949.
- Table 7a. Marriages by previous marital status, 1949.
- Table 12. Deaths from malignant neoplasms by site, sex, color and age groups; benign and unspecified neoplasms by sex, color and age groups, 1949.
- Table 12a. Deaths from neoplasms by sex, color and age groups for each site group, 1949.
- Chart 2. Deaths from malignant neoplasms per 100,000 population, 1880-1949.
- Table 13a-1. Deaths in New Jersey from transportation accidents by cause groups and month of death, 1949.
- Table 13a-2. Deaths in New Jersey from non-transportation accidents by cause groups and month of death, 1949.

- Table 13a-3. Deaths in New Jersey from suicide, homicide and war by cause groups and month of death, 1949.
- Table 13b. Motor vehicle deaths in New Jersey by primary cause of death, sex and age groups, 1949.
- Table 13c. Accidental deaths in New Jersey by immediate cause of death and type of accident, 1949.
- Table 13d. Accidental deaths in New Jersey by immediate cause of death and county of accident, 1949.
- Table 13e. Non-transport accidental deaths in New Jersey by primary cause of death and place of accident, 1949.
- Table 13f. Accidental deaths in New Jersey by immediate cause of death by age groups, 1949.
- Table 14. Causes of death as percentage of total deaths; with percentage by sex for each cause, 1949.
- Table 15. Death rates: total, white and non-white by abridged list cause, 1949.
- Table 17. Deaths by abridged list cause by sex, color and age groups, 1949.
- Chart 3. Deaths from respiratory tuberculosis per 100,000 population, 1880-1949.
- Table 18. Infant deaths by cause and age groups, 1949.
- Table 18a. Infant deaths by age and immaturity, 1949.
- Table 19. Principal causes of death by age groups; numbers and percentages, 1949.
- Table 20. Deaths from each cause, detailed international list, by sex, color and age groups, 1949.
- 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, 1949.

Population.—With the release of the preliminary census figures for 1950 more accurate population data became available. The population estimate for New Jersey as of July 1, 1949 was 4,786,000. This figure and the estimates for the counties and major cities as shown at the end of Table 22 were obtained by subtracting the nine months' excess of births over deaths for the period July 1, 1949 to April 1, 1950, from the 1950 census count and rounding each estimate to the nearest thousand.

No attempt has been made to present population estimates for the smaller civil divisions of New Jersey. Any rates which would be based on such estimates would be subject to large chance errors resulting from the small numbers of events and populations for these divisions.

Births.—The 97,414 live births reported in 1949 represented a crude birth rate of 20.4 per 1,000 estimated population. This was the fourth consecutive year in which the annual number of births exceeded 95,000 and the birth rate was greater than 20.0. The all-time high of 106,086 live births reported in 1947 is almost double the number of births registered in each of the years 1933 through 1939. Boards of education have become increasingly concerned with the school problems which such increases present.

Of the 88,109 births in 1949 to white mothers 1,127 or 1.3 per cent were reported as illegitimate. Of the 9,304 births to non-white mothers 1,286 or

13.8 per cent were listed as illegitimate. Although the percentage figure for illegitimate births has not appreciably changed over the past decade such births in 1949 were 1,000 or almost 71 per cent greater than the 1939 figure. Efforts of social agencies and nurses to help these mothers and babies must accordingly receive greater consideration.

Except where otherwise specified all births have been allocated to the usual residence of the mother.

**Marriages.**—The crude marriage rate for 1949 was 9.3 per 1,000 estimated population. The total of 44,469 marriages reported was 7,444 or 14.3 per cent less than in 1948. Although the numbers of marriages have decreased each year since 1946 when the number reached an all-time high of 61,020 the marriage rates for these years were consistently higher than the rates prior to 1940.

Appearing for the first time in the annual report are two tables, Numbers 7 and 7a, giving information on marriages by ages and previous marital status of the individuals. The text associated with the tables may contain information of interest to many agencies.

All marriage tabulations are by place of occurrence.

**Deaths.**—A total of 47,706 resident deaths from all causes was recorded for New Jersey in 1949. The crude death rate of 10.0 per 1,000 estimated population was the lowest in the state's experience.

As of January 1, 1949, two important changes occurred in the mortality registration and classification system. A new standard certificate of death form was put in use and the 6th Revision of the International Classification of Diseases, Injuries and Causes of Death was used in selecting the underlying cause of death. The introduction of these changes, with their accompanying rules and regulations for use, may have resulted in making some totals for certain causes or groups of causes not strictly comparable to prior years.

In addition to the routine tabulations of mortality a new table, Number 19, has been inserted. This table 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.

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 1949 there were 2,521 infant deaths for New Jersey. The resulting mortality rate of 25.9 per 1,000 live births was the lowest ever experienced in New Jersey since rates were first computed. When New Jersey in 1921, by virtue of its meeting high standards of reporting, was admitted to the United States Birth Registration Area its infant mortality rate was 73.8. The rapid and consistent decrease in the rates as shown in

Table 4 has been tremendously influenced by the extensive baby welfare work carried on in New Jersey.

The white infant mortality rate in 1949 was 23.3 and for non-white infants the rate was 50.0.

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 1949 there were 72 maternal deaths, representing a rate of 0.7 per 1,000 live births. This was the lowest rate since 1906 when such rates were first computed. The non-white maternal mortality rate was 1.8.

Tables 6 and 6a may serve to indicate more clearly where greater emphasis can be placed if fewer mothers are to die as a result of conceiving and bearing children.

Stillbirths.—The 1,972 stillbirths reported for 1949 almost approximated the 1948 figure of 1,964. For each year the crude rate was the same, being 20.2 per 1,000 live births.

The 1949 rate for the non-white population was 31.1.

Cancer.—The number of deaths from malignant neoplasms for 1949 was 8,321 and the rate was 173.9 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 1949 was 1,298, of which 1,202 were charged to tuberculosis of the respiratory system. The rates per 100,000 estimated population were 27.1 and 25.1, respectively.

There were 968 deaths of white persons from all forms of tuberculosis and 330 deaths of non-white persons. Per 100,000 estimated population the white rate was 21.4 and the non-white rate was 125.4. 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 Preventable Diseases.

TABLE 1. POPULATION: NUMBERS AND RATES FOR BIRTHS, MARRIAGES AND DEATHS  
(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	Marriage rate per 1,000 population	Number of deaths	Death rate per 1,000 population
1879	1,110,480	23,116	26.8	7,096	6.3	20,440	18.4
1880	1,133,731	23,650	20.8	7,963	7.0	18,967	16.7
1881	1,165,112	23,484	20.1	8,109	6.9	20,812	17.8
1882	1,198,493	23,108	19.3	8,837	7.3	25,959	21.6
1883	1,227,874	24,430	19.8	9,166	7.4	23,310	18.9
1884	1,259,256	25,263	20.0	8,968	7.1	21,716	17.2
1885	1,290,638	24,077	18.6	8,989	6.9	23,807	18.4
1886	1,322,020	25,497	19.2	12,351	9.3	22,734	17.1
1887	1,353,402	27,340	20.2	15,416	11.3	24,331	17.9
1888	1,384,784	28,074	20.2	16,025	11.5	27,173	19.6
1889	1,416,166	29,099	20.5	15,726	11.1	26,543	18.7
1890	1,448,588	30,103	20.7	15,564	10.7	28,530	19.6
1891	1,482,482	28,882	19.3	15,305	10.2	28,840	19.3
1892	1,536,336	30,627	19.9	16,082	10.4	32,685	21.2
1893	1,580,209	32,285	20.4	17,178	10.8	30,596	19.3
1894	1,624,083	33,662	20.7	16,245	10.0	30,004	18.4
1895	1,667,957	31,742	19.0	15,873	9.5	30,634	18.3
1896	1,711,881	31,207	18.2	18,370	10.7	30,767	17.9
1897	1,755,705	31,595	17.9	18,171	10.3	29,822	16.9
1898	1,799,578	32,515	18.0	13,213	7.3	27,837	15.1
1899	1,843,452	29,419	15.9	13,336	7.2	30,999	16.8
1900	1,889,184	32,270	17.0	14,611	7.7	31,474	16.6
1901	1,935,361	34,812	17.8	16,539	8.4	31,739	16.2
1902	2,021,539	35,116	17.3	18,150	8.9	31,319	15.4
1903	2,087,716	37,242	17.8	19,512	9.3	31,820	15.2
1904	2,153,893	38,751	17.9	18,919	8.7	35,298	16.3
1905	2,220,070	39,689	17.8	20,572	9.2	33,864	15.2
1906	2,286,247	42,677	18.6	21,580	9.4	35,670	15.6
1907	2,352,424	44,651	18.9	23,649	10.0	37,408	15.9
1908	2,418,601	47,405	19.6	26,155	10.8	35,597	14.7
1909	2,484,778	47,508	19.1	29,724	11.9	36,359	14.6
1910	2,550,445	53,942	21.1	27,912	10.9	39,494	15.4
1911	2,614,177	58,133	22.2	25,014	9.5	38,612	14.7
1912	2,677,909	60,073	22.4	28,821	10.0	37,772	14.1
1913	2,741,642	61,432	22.4	27,697	10.1	39,425	14.3
1914	2,805,374	65,403	23.3	28,528	10.1	39,967	14.2
1915	2,869,106	66,476	23.1	27,694	9.6	39,435	13.7
1916	2,932,838	70,211	23.9	31,169	10.6	43,376	14.7
1917	2,996,569	75,309	25.1	30,060	10.0	43,532	14.5
1918	3,060,301	74,549	24.3	23,989	7.8	60,852	19.8
1919	3,124,034	70,935	22.7	29,281	9.3	39,979	12.7
1920	3,199,082	76,431	23.8	31,327	9.7	40,820	12.7
1921	3,285,475	78,172	23.7	27,815	8.4	37,362	11.3
1922	3,371,859	74,479	22.0	27,114	8.0	40,086	11.8
1923	3,458,243	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	72,386	19.4	28,424	7.6	44,896	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	68,282	16.9	28,499	7.0	43,190	10.7
1931	4,056,200	64,078	15.8	28,468	6.5	44,135	10.9
1932	4,068,100	61,215	15.0	22,840	5.6	42,826	10.5
1933	4,080,000	56,072	13.7	24,453	6.0	43,380	10.6
1934	4,091,800	54,841	13.4	28,091	7.1	43,547	10.6
1935	4,103,700	55,039	13.4	29,724	7.2	43,267	10.5
1936	4,115,600	54,145	13.2	32,771	8.0	44,659	10.9
1937	4,127,500	55,197	13.4	36,180	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	41,959	9.9	45,206	10.9
1941	4,199,900	67,104	16.0	46,538	11.1	45,971	10.9
1942	4,226,423	80,812	19.1	50,498	11.9	46,270	10.9
1943	4,235,233	82,356	19.4	46,064	9.7	49,781	11.8
1944	4,167,540	75,652	18.2	36,064	8.7	47,340	11.4
1945	4,200,941	76,995	18.3	39,711	9.5	47,633	11.3
1946	4,304,261	95,044	22.1	61,020	14.2	46,261	10.7
1947	4,435,000	106,086	23.9	55,802	12.6	48,276	10.9
1948	4,729,000	97,278	20.6	51,913	11.0	48,107	10.2
1949	4,786,000	97,414	20.4	44,469	9.3	47,706	10.0

**NEW JERSEY  
BIRTHS AND DEATHS  
AND AVERAGE POPULATION  
FIVE YEAR  
RATES  
PER  
1,000 POPULATION**

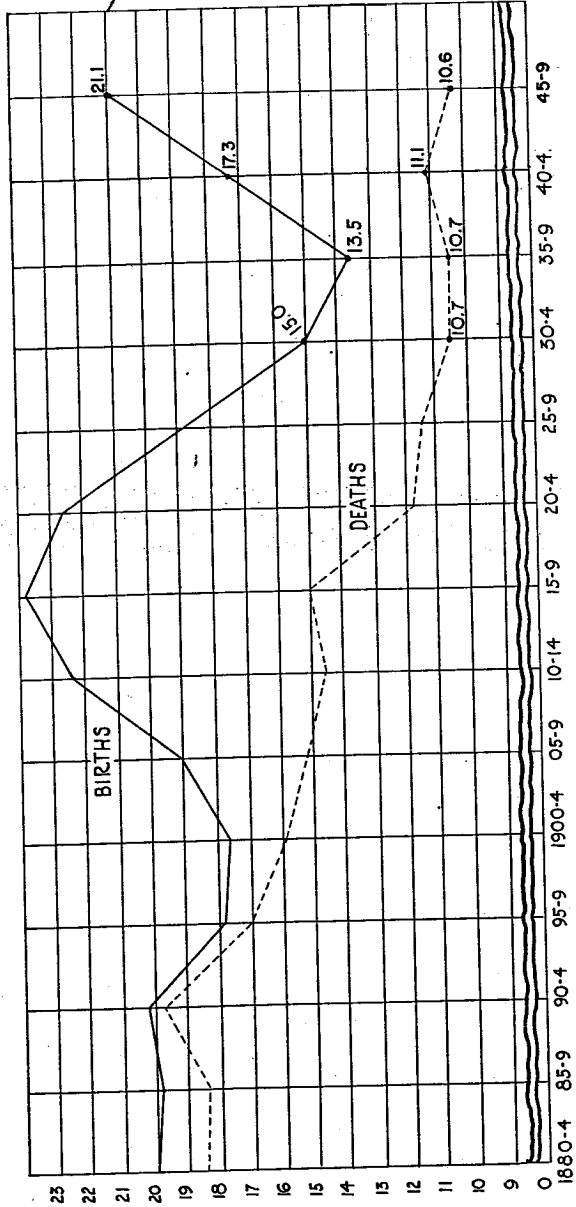


CHART 1

TABLE 1a. BIRTHS, MARRIAGES AND DEATHS: 1949

Month	Births	Marriages	Deaths
January .....	7,805	3,071	4,148
February .....	7,414	3,319	3,811
March .....	8,129	1,995	4,143
April .....	7,296	3,869	3,866
May .....	7,614	3,969	3,854
June .....	7,506	5,924	3,770
July .....	8,481	3,656	3,919
August .....	8,375	2,956	3,629
September .....	8,269	5,006	3,619
October .....	8,324	4,478	3,886
November .....	7,747	3,660	3,746
December .....	7,672	2,566	4,462
Total .....	94,632	44,469	46,853

As a result of a different public health philosophy it should be noted that Table 1a for 1949 differs slightly from similar data for previous years. The birth and death data have not been adjusted for residence, but 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: 1949

(Births, deaths and stillbirths adjusted for residence)

ATLANTIC COUNTY

NAME OF PLACE	Births	Marriages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Absecon City .....	70	7	26	2	...	2	2
Atlantic City .....	1173	766	975	30	1	55	50
Brigantine City .....	25	6	10	...	...	...	...
Buena Borough .....	15	7	11	1	...	1	1
Buena Vista Township .....	69	38	27	1	...	2	2
Corbin City .....	5	2	2	...	...	...	...
Egg Harbor City .....	112	2	2	...	...	...	...
Egg Harbor Township .....	81	81	42	1	...	2	1
Estelle Manor City .....	49	18	53	...	...	3	2
Folsom Borough .....	7	5	10	...	...	...	...
Galloway Township .....	7	2	2	...	...	...	...
Hamilton Township .....	58	8	49	2	...	4	3
Hammonton Town .....	78	20	49	1	...	...	...
Linwood City .....	194	65	84	4	...	5	2
Longport Borough .....	37	13	23	1	1	1	1
Margate City .....	4	1	2	...	...	...	...
Mullica Township .....	83	26	47	1	...	2	2
Northfield City .....	31	10	24	...	...	1	...
Pleasantville City .....	69	25	45	...	...	2	2
Port Republic City .....	263	180	159	3	...	5	3
Somers Point City .....	3	1	6	...	...	...	...
Ventnor City .....	60	32	36	2	...	3	2
Weymouth Township .....	136	103	119	5	...	7	5
Total .....	2566	1370	1813	54	2	95	78

DEPARTMENT OF HEALTH

BERGEN COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Allendale Borough	54	14	28	2	...	1	1
Alpine Borough	18	7	3	1	...	2	2
Bergenfield Borough	354	95	128	10	...	10	7
Bogota Borough	120	69	97	...	...	4	4
Carl tadt Borough	117	36	49	2	...	1	1
Cliffside Park Borough	297	102	133	7	...	1	1
Clicster Borough	58	19	35	2	...	1	1
Cresskill Borough	69	21	29	...	...	4	4
Demarest Borough	35	14	9	6	...	8	5
Dumont Borough	254	65	103	6	...	3	3
East Paterson Borough	310	49	64	9	...	4	4
East Rutherford Borough	153	70	69	...	...	...	...
Edgewater Borough	70	156	57	1	...	...	...
Emerson Borough	28	13	16	...	...	11	10
Englewood City	455	308	211	12	...	...	...
Englewood Cliffs Borough	15	2	9	...	...	17	14
Fair Lawn Borough	540	85	134	19	...	1	1
Fairview Borough	191	145	53	6	...	8	8
Fort Lee Borough	226	159	111	8	...	2	2
Franklin Lakes Borough	29	8	17	1	...	9	8
Garfield Borough	565	254	194	16	...	5	5
Glen Rock Borough	132	23	66	5	...	14	11
Hackensack City	558	376	274	9	...	...	...
Harrington Park Borough	25	9	14	...	...	3	1
Hasbrouck Heights Borough	145	88	63	1	...	1	1
Haworth Borough	19	9	16	1	...	2	1
Hillsdale Borough	74	18	31	...	...	1	1
Hohokus Borough	31	14	19	...	...	4	4
Leonia Borough	137	44	58	2	...	5	4
Little Ferry Borough	113	55	46	1	...	4	2
Lodi Borough	353	113	115	9	...	8	6
Lyndhurst Township	414	165	158	8	...	2	1
Mahwah Township	83	36	41	1	...	3	3
Maywood Borough	205	25	52	3	...	...	...
Midland Park Borough	100	37	35	4	...	1	1
Montvale Borough	28	7	27	1	...	1	1
Moonachie Borough	36	6	14	4	...	1	1
New Milford Borough	109	17	30	...	...	4	2
North Arlington Borough	395	91	99	8	...	...	...
Northvale Borough	33	19	12	1	...	2	2
Norwood Borough	43	13	23	...	...	...	...
Oakland Borough	30	5	14	2	...	...	...
Old Tappan Borough	12	2	4	1	...	...	...
Oradell Borough	65	22	27	...	...	...	...
Palisade Interstate Park Borough	...	...	...	...	...	7	4
Palisade Park Borough	205	69	72	4	...	...	...
Paramus Borough	82	18	44	1	...	2	1
Park Ridge Borough	62	37	48	2	...	2	1
Ramsey Borough	77	47	58	1	...	2	2
Ridgefield Borough	204	49	55	3	...	3	3
Ridgefield Park Village	238	87	120	4	...	4	3
Ridgewood Village	236	165	165	5	...	6	6
River Edge Borough	187	37	56	2	...	2	2
River Vale Township	38	1	16	1	...	1	1
Rochelle Park Township	112	21	24	...	...	...	...
Rockleigh Borough	...	...	1	...	...	7	6
Rutherford Borough	329	147	199	5	...	...	...
Saddle River Borough	16	8	9	...	...	3	2
Saddle River Township	128	15	28	1	...	2	...
South Hackensack Township	30	1	12	3	...	11	7
Tenack Township	568	194	249	9	...	1	1
Tenafly Borough	130	58	67	2	...	2	...
Teterboro Borough	...	2	...	...	...	...	...
Upper Saddle River Borough	17	7	4	...	...	...	...
Walwick Borough	58	9	25	1	...	...	...
Wallington Borough	182	56	63	5	1	5	5
Washington Township	16	...	8	...	...	2	2
Westwood Borough	184	68	60	...	...	1	1
Woodcliff Lake Borough	20	3	15	1	...	1	1
Wood Ridge Borough	101	53	53	...	...	2	2
Wyckoff Township	95	31	28	2	...	...	...
Total	10,343	4066	4278	215	1	213	172



BURLINGTON COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Bass River Township	11	2	13	...	...	...	...
Beverly City	89	25	40	...	...	...	...
Bordentown City	142	63	49	4	1	3	2
Bordentown Township	31	5	20	...	...	3	3
Burlington City	304	114	141	7	...	3	3
Burlington Township	39	18	25	1	...	12	9
Chesterfield Township	29	12	9	1	...	3	2
Cinnaminson Township	20	24	20	...	...	3	2
Delanco Township	55	9	40	1	...	1	...
Delran Township	44	13	22	...	...	1	1
Eastampton Township	16	...	10	1	...	2	1
Edgewater Park Township	16	12	10	...	...	2	2
EvESHAM Township	55	7	17	...	...	1	...
Fieldsboro Borough	13	2	7	...	...	1	...
Florence Township	140	66	69	5	...	1	...
Hainesport Township	31	18	18	1	...	10	7
Lumberton Township	32	1	16	...	...	...	...
Mansfield Township	38	5	17	1	...	1	1
Maple Shade Township	129	76	55	5	...	2	2
Medford Lakes Borough	11	14	6	...	...	...	...
Medford Township	49	20	35	1	...	...	...
Moorestown Township	222	89	111	1	...	1	1
Mount Holly Township	206	75	123	6	1	5	5
Mount Laurel Township	47	8	24	2	...	4	3
New Hanover Township	15	1	6	1	...	2	2
North Hanover Township	13	4	12	...	...	...	...
Palmyra Borough	157	46	57	...	...	1	...
Pemberton Borough	63	14	12	3	...	5	4
Pemberton Township	152	40	40	2	...	...	...
Riverside Township	170	74	81	4	1	3	2
Riverton Borough	61	37	16	...	...	6	4
Shamong Township	9	1	5	1	...	...	...
Southampton Township	52	21	23	3	...	1	1
Springfield Township	21	4	15	1	...	...	...
Tabernacle Township	15	10	8	...	...	2	1
Washington Township	11	2	6	...	...	...	...
Westampton Township	29	5	4	1	...	1	1
Willingboro Township	3	...	3	...	...	1	...
Woodland Township	7	...	7	...	...	...	...
Wrightstown Borough	69	13	7	...	...	...	...
Total	2616	950	1199	55	3	81	60

CAMDEN COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Aubudon Borough	176	67	97	1	...	6	3
Aubudon Park Borough	14	2	5	...	...	...	...
Barrington Borough	50	10	20	1	...	1	...
Bellmawr Borough	150	5	17	1	...	2	2
Berlin Borough	72	62	28	3	...	3	2
Berlin Township	30	4	14	...	...	2	2
Brooklawn Borough	54	11	25	...	...	2	...
Camden City	2824	1483	1395	68	3	63	46
Chestlhurst Borough	3	2	3	...	...	...	...
Clementon Borough	61	14	45	...	...	2	1
Collingswood Borough	333	135	176	5	1	6	6
Delaware Township	83	12	52	1	...	2	1
Gibbsboro Borough	10	3	15	...	...	...	...
Gloucester City	289	124	168	9	...	7	3
Gloucester Township	148	45	66	1	...	1	1
Haddonfield Borough	306	132	151	5	...	5	4
Haddon Heights Borough	128	63	72	2	...	...	...
Haddon Township	113	64	84	1	...	5	3
Hi Nella Borough	5	...	...	...	...	...	...
Laurel Springs Borough	41	11	13	...	...	2	1
Lawnside Borough	34	8	15	1	...	...	...
Lindenwold Borough	74	45	40	1	...	2	1

## DEPARTMENT OF HEALTH

## CAMDEN COUNTY—Continued

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Magnolia Borough .....	47	11	28	1	...	4	2
Merchantville Borough .....	291	98	97	3	...	3	1
Mount Ephraim Borough .....	87	32	36	3	...	...	...
Oaklyn Borough .....	130	36	54	3	...	5	5
Pennsauken Township .....	326	112	174	6	...	9	7
Pine Hill Borough .....	36	23	28	...	...	2	2
Pine Valley Borough .....	1	...	...	...	...	...	...
Runnemede Borough .....	98	42	36	1	...	3	2
Somerdale Borough .....	39	8	15	1	...	2	2
Stratford Borough .....	28	13	20	...	...	2	...
Tavistock Borough .....	...	...	...	...	...	...	...
Voorhees Township .....	11	5	10	1	...	1	1
Waterford Town-ship .....	77	24	28	2	...	1	1
Winslow Township .....	92	36	53	2	...	5	3
Wood Lynne Borough .....	59	22	34	1	...	1	1
Total .....	6320	2769	3114	124	4	148	102

## CAPE MAY COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Avalon Borough .....	5	5	9	...	...	...	...
Cape May City .....	78	41	66	2	...	7	6
Cape May Point Borough .....	4	...	3	...	...	...	...
Dennis Township .....	28	11	31	2	1	1	1
Lower Township .....	32	22	28	1	...	1	...
Middle Township .....	99	34	48	2	...	2	2
North Wildwood City .....	34	21	37	2	...	2	2
Ocean City .....	109	64	94	2	...	1	1
Sea Isle City .....	17	18	14	...	...	1	1
Stone Harbor Borough .....	9	7	13	...	...	2	1
Upper Township .....	40	15	30	...	...	...	...
West Cape May Borough .....	12	3	16	1	...	...	...
West Wildwood Borough .....	3	2	3	...	...	3	2
Wildwood City .....	124	102	95	2	1	1	1
Wildwood Crest Borough .....	19	4	14	...	...	...	...
Woodbine Borough .....	26	15	11	3	...	21	17
Total .....	639	364	512	17	2	21	17

## CUMBERLAND COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Bridgeton City .....	445	202	256	9	...	24	13
Commercial Township .....	93	18	34	4	...	1	1
Deerfield Township .....	50	11	24	1	...	2	2
Downe Township .....	36	15	18	...	...	1	1
Fairfield Township .....	70	27	26	...	...	5	2
Greenwich Township .....	21	7	18	...	...	4	1
Hopewell Township .....	55	1	17	1	...	1	...
Lands Township .....	366	113	145	9	1	7	6
Lawrence Township .....	45	16	31	...	...	1	1
Maurice River Township .....	43	23	32	4	...	2	2
Millville City .....	305	122	203	5	...	11	6
Shiloh Borough .....	10	2	7	...	...	...	...
Stow Creek Township .....	32	1	9	...	...	...	...
Upper Deerfield Township .....	103	32	30	2	...	2	2
Vineland Borough .....	169	73	112	3	...	2	1
Total .....	1843	663	962	38	1	63	38

ESSEX COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Belleville Town .....	659	254	259	15	...	14	13
Bloomfield Town .....	919	320	426	9	...	22	17
Caldwell Borough .....	133	105	59	3	...	3	3
Caldwell Township .....	17	4	9	...	...	...	...
Cedar Grove Township .....	106	6	38	2	...	...	...
East Orange City .....	1459	564	906	30	...	28	21
Essex Fells Borough .....	25	20	10	...	...	1	1
Glen Ridge Borough .....	92	38	88	3	...	3	3
Irrington Town .....	1056	479	556	19	...	29	22
Livingston Township .....	187	23	66	6	...	3	3
Maplewood Township .....	302	159	234	5	...	6	6
Millburn Township .....	193	118	115	4	1	5	5
Montclair Town .....	869	484	483	14	...	19	14
Newark City .....	9386	5636	4965	214	11	309	225
North Caldwell Borough .....	22	4	15	...	...	9	7
Nutley Town .....	517	229	220	8	2	18	15
Orange City .....	828	468	401	16	1	1	1
Roseland Borough .....	41	6	17	1	...	3	3
South Orange Village .....	205	186	150	3	...	6	5
Verona Borough .....	178	71	78	1	...	1	...
West Caldwell Borough .....	75	12	40	3	...	8	6
West Orange Town .....	495	167	260	4	1	...	...
Total .....	17766	9353	9391	360	16	485	368

32.9

GLOUCESTER COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Clayton Borough .....	74	24	32	3	1	1	1
Deptford Township .....	106	38	61	2	...	5	3
East Greenwich Township .....	50	9	20	...	...	...	...
Elk Township .....	25	6	13	...	...	...	...
Franklin Township .....	74	22	39	...	1	3	2
Glassboro Borough .....	145	66	78	5	...	...	...
Greenwich Township .....	54	27	26	1	...	...	...
Harrison Township .....	61	11	29	...	...	3	2
Logan Township .....	42	7	11	2	...	...	...
Mantua Township .....	100	29	47	2	...	2	...
Monroe Township .....	110	40	48	3	...	2	2
National Park Borough .....	53	16	21	2	...	1	...
Newfield Borough .....	47	9	14	1	1	2	2
Paulsboro Borough .....	189	70	72	6	...	2	1
Pitman Borough .....	113	61	108	3	...	5	5
South Harrison Township .....	8	1	9	...	...	...	...
Swedesboro Borough .....	80	36	31	4	...	1	1
Washington Township .....	39	19	30	...	...	1	2
Wenonah Borough .....	31	9	21	...	...	1	1
West Deptford Township .....	75	47	45	...	...	3	2
Westville Borough .....	110	56	55	...	...	2	2
Woodbury City .....	388	117	105	8	1	7	6
Woodbury Heights Borough .....	40	7	7	...	...	...	...
Woolwich Township .....	15	1	5	...	...	...	...
Total .....	1979	728	927	42	4	43	32

## DEPARTMENT OF HEALTH

## HUDSON COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Bayonne City .....	1615	717	708	35	2	43	36
East Newark Borough .....	38	27	28	...	...	1	1
Guttenberg Town .....	76	44	47	1	...	10	9
Harrison Town .....	303	150	128	7	...	26	18
Hoboken City .....	1002	933	628	20	2	189	141
Jersey City .....	6573	3647	3393	104	2	13	9
Kearny Town .....	805	298	384	29	1	11	8
North Bergen Township .....	746	218	404	17	1	2	1
Secaucus Borough .....	138	52	65	4	...	14	11
Union City .....	1069	689	604	13	...	5	5
Weehawken Township .....	202	124	165	9	...	16	12
West New York Town .....	770	651	406	8	1		
Total .....	18337	7530	6960	247	9	330	251

## HUNTERDON COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Alexandria Township .....	19	4	7	1	...	...	...
Bethlehem Township .....	14	...	11	1	...	...	...
Bloomsbury Borough .....	17	5	5	2	...	...	...
Califon Borough .....	17	5	4	...	...	3	3
Clinton Town .....	33	12	15	...	...	2	2
Clinton Township .....	45	11	32	2	...	...	...
Delaware Township .....	37	10	15	1	...	1	1
East Amwell Township .....	35	2	24	1	...	1	...
Flemington Borough .....	55	59	45	...	...	2	1
Franklin Township .....	30	8	13	1	...	1	...
Frenchtown Borough .....	35	11	26	...	...	...	...
Glen Gardner Borough .....	13	3	15	1	...	...	...
Hampton Borough .....	21	11	18	1	...	2	2
High Bridge Borough .....	26	20	20	...	...	1	1
Holland Township .....	12	1	7	...	...	...	...
Holland Township .....	21	12	11	...	...	...	...
Kingville City .....	111	45	65	2	...	...	...
Lambertville City .....	22	3	6	2	...	...	...
Lebanon Borough .....	28	1	14	1	...	1	1
Lebanon Township .....	44	14	10	...	...	1	1
Milford Borough .....	48	3	29	2	...	5	4
Raritan Township .....	79	80	48	...	...	...	...
Readington Township .....	11	3	8	...	...	...	...
Stockton Borough .....	22	2	15	...	...	1	...
Tewksbury Township .....	16	3	9	...	...	2	2
Union Township .....	25	1	13	...	...	...	...
West Amwell Township .....							
Total .....	836	279	486	19	...	23	18

## MERCER COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
East Windsor Township .....	27	1	8	1	...	8	5
Ewing Township .....	324	63	115	3	...	24	20
Hamilton Township .....	853	257	337	21	1	4	4
Hight-town Borough .....	86	36	62	1	...	1	1
Hopewell Borough .....	46	22	26	2	...	3	2
Hopewell Township .....	75	20	36	2	...	6	6
Hopewell Township .....	162	48	86	6	...	1	1
Lawrence Township .....	19	25	20	...	...	7	5
Pennington Borough .....	229	147	114	1	1	3	3
Princeton Borough .....	193	7	26	...	1	80	70
Princeton Township .....	2501	1454	1437	56	2	1	1
Trenton City .....	49	10	14	1	...	1	...
Washington Township .....	44	23	15	...	...	1	...
West Windsor Township .....							
Total .....	4539	2115	2296	94	5	148	118

MIDDLESEX COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Carteret Borough	256	121	95	2	1	7	6
Cranbury Township	66	11	33	...	...	3	2
Dunellen Borough	183	118	67	4	...	2	2
East Brunswick Township	98	25	26	3	...	2	1
Helmetta Borough	11	4	13	2	1	1	...
Highland Park Borough	233	97	77	4	...	1	...
Jamesburg Borough	67	34	39	...	...	4	3
Madison Township	137	54	72	5	...	5	3
Metuchen Borough	259	96	84	5	...	7	4
Middlesex Borough	94	45	37	5	...	4	4
Milltown Borough	83	39	32	2	...	3	3
Monroe Township	42	5	19	...	...	1	...
New Brunswick City	905	531	415	32	1	16	10
North Brunswick Township	147	16	44	1	...	5	4
Perth Amboy City	789	474	334	18	1	17	15
Piscataway Township	205	23	78	3	...	6	6
Raritan Township	19	+	5	...	...	...	...
Sayreville Borough	295	67	117	6	...	11	9
South Amboy City	176	66	76	1	...	3	2
South Brunswick Township	200	81	89	2	...	10	8
South Plainfield Borough	84	16	34	1	...	2	1
South River Borough	204	41	58	6	...	10	8
Spotswood Borough	232	118	82	9	...	4	2
Woodbridge Township	72	10	23	2	...	2	2
	726	220	275	15	1	23	20
Total	5598	2325	2274	128	5	149	115

MONMOUTH COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Allenhurst Borough	18	5	6	1	...	...	...
Allentown Borough	33	23	13	...	...	1	...
Asbury Park City	356	263	249	10	...	12	9
Atlantic Highlands Borough	92	42	37	...	...	2	2
Atlantic Township	24	5	12	2	...	...	...
Avon Borough	16	23	16	...	...	...	...
Belmar Borough	89	64	64	1	...	1	1
Bradley Beach Borough	81	36	30	...	...	5	5
Brielle Borough	20	10	12	...	...	...	...
Deal Borough	17	13	19	2	...	1	1
Eatontown Borough	131	30	33	1	...	4	3
Englishtown Borough	35	26	16	...	...	1	1
Fair Haven Borough	76	17	30	...	...	1	1
Farmingdale Borough	14	13	10	1	...	...	...
Freehold Borough	157	99	95	2	...	1	1
Freehold Township	81	...	40	2	...	3	2
Highlands Borough	80	30	8	...	...	1	1
Holmdel Township	25	8	7	...	...	...	...
Howell Township	128	35	54	5	1	...	...
Interlaken Borough	12	4	18	...	...	1	...
Keansburg Borough	125	68	70	4	...	...	...
Keypoint Borough	122	107	63	3	...	5	4
Little Silver Borough	36	13	21	...	...	...	...
Long Branch City	548	206	243	6	...	16	13
Manalapan Township	68	13	18	...	...	2	2
Manasquan Borough	70	46	66	...	...	3	2
Marlboro Township	38	24	28	3	...	4	3
Matawan Borough	115	20	51	1	...	2	2
Matawan Township	86	16	30	...	...	...	...
Middletown Township	275	84	152	7	...	9	7
Millstone Township	35	7	21	1	...	3	2
Monmouth Beach Borough	17	2	14	1	...	...	...
Neptune City Borough	83	24	21	2	...	...	...
Neptune Township	295	64	174	7	1	6	5
Ocean Grove Camp Meeting Association	...	...	2	...	...	...	...
Oceanport Borough	81	22	17	...	...	3	3

## DEPARTMENT OF HEALTH

## MONMOUTH COUNTY—Continued

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Ocean Township .....	117	19	50	1	1	2	2
Raritan Township .....	69	1	12	1	...	9	6
Red Bank Borough .....	308	201	192	7	...	1	1
Roosevelt Borough .....	14	1	2	...	...	1	...
Rumson Borough .....	93	32	47	3	...	1	1
Sea Girt Borough .....	30	8	10	...	...	1	...
Sea Bright Borough .....	22	7	15	...	...	...	...
Sea Girt Borough .....	30	6	13	...	...	2	1
Shrewsbury Borough .....	66	10	21	...	...	...	...
Shrewsbury Township .....	15	3	10	...	...	1	1
South Belmar Borough .....	36	32	46	2	...	...	...
Spring Lake Borough .....	30	9	17	1	...	7	7
Spring Lake Heights Borough .....	61	12	30	2	...	4	3
Union Beach Borough .....	47	5	27	1	...	4	3
Upper Freehold Township .....	160	44	74	2	...	2	2
Wall Township .....	37	20	16	1	...	...	...
West Long Branch Borough .....	...	...	...	...	...	...	...
Total .....	4644	1874	2333	85	3	122	97

## MORRIS COUNTY - 1949

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Boonton Town .....	137	64	79	2	...	7	7
Boonton Township .....	10	5	9	1	...	1	1
Butler Borough .....	186	46	43	1	...	4	4
Chatham Borough .....	136	41	53	...	...	1	1
Chatham Township .....	30	1	13	1	...	...	...
Chester Borough .....	24	13	13	1	...	...	...
Chester Township .....	17	1	4	...	...	...	...
Denville Township .....	121	34	54	1	1	11	9
Dover Township .....	223	132	120	4	...	1	1
Dover Town .....	27	12	12	...	...	1	1
East Hanover Township .....	57	4	25	1	...	3	3
Florham Park Borough .....	104	41	37	...	...	...	...
Hanover Township .....	31	7	5	...	...	2	1
Harding Township .....	72	11	28	4	...	2	2
Jefferson Township .....	19	2	8	...	...	1	1
Kinnelon Borough .....	65	12	32	...	...	11	9
Lincoln Park Borough .....	220	97	92	6	...	1	1
Madison Borough .....	26	17	22	...	...	...	...
Mendham Borough .....	25	8	8	...	...	1	1
Mendham Township .....	43	9	17	1	...	1	1
Mine Hill Township .....	86	19	59	1	...	...	...
Montville Township .....	47	28	33	...	...	8	7
Morris Plains Borough .....	440	168	227	8	1	2	1
Morristown Town .....	117	34	62	1	...	...	...
Morris Township .....	39	24	20	1	...	1	1
Mountain Lakes Borough .....	18	8	11	...	...	1	...
Mount Arlington Borough .....	53	13	34	1	...	1	...
Mount Olive Township .....	...	...	...	...	...	...	...
Mt. Tabor Camp Meeting Association .....	35	45	18	...	...	1	1
Netcong Borough .....	183	30	37	4	...	1	1
Parsippany Troy Hills Township .....	53	21	24	2	...	1	1
Passaic Township .....	116	27	22	3	...	3	2
Pequanock Township .....	97	11	26	1	...	1	...
Randolph Township .....	31	9	19	1	...	3	3
Riverdale Borough .....	89	43	44	...	...	4	3
Rockaway Borough .....	99	11	30	4	...	4	1
Rockaway Township .....	122	32	40	4	...	1	1
Roxbury Township .....	26	9	25	...	...	5	3
Washington Township .....	78	35	59	4	...	...	...
Wharton Borough .....	...	...	...	...	...	...	...
Total .....	3201	1124	1449	58	2	83	68

OCEAN COUNTY - 1949

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Barnegat City Borough	2	...	...	...	...	...	...
Bay Head Borough	16	4	12	1	...	...	...
Beach Haven Borough	23	15	16	1	...	...	...
Beachwood Borough	41	6	11	1	...	...	...
Berkeler Township	26	13	25	1	...	3	2
Brick Township	86	10	55	3	...	6	6
Dover Township	174	87	104	3	...	5	4
Eagleswood Township	8	6	9	1	...	...	...
Harvey Cedars Borough	1	3	2	...	...	...	...
Island Beach Borough	...	...	...	...	...	...	...
Island Heights Borough	27	5	9	...	...	1	1
Jackson Township	47	13	26	...	...	...	...
Lacey Township	33	3	18	3	...	1	1
Lakelhurst Borough	99	14	15	2	...	2	2
Lakewood Township	220	123	124	9	...	5	3
Lavallette Borough	12	6	5	...	...	...	...
Little Egg Harbor Township	2	1	5	...	...	...	...
Long Beach Township	11	5	5	...	...	...	...
Manchester Township	6	9	8	...	...	...	...
Mantoloking Borough	3	1	3	...	...	...	...
Ocean Gate Borough	18	5	6	...	...	...	...
Ocean Township	10	6	6	2	...	...	...
Pine Beach Borough	19	...	3	...	...	...	...
Plumstead Township	63	21	25	1	...	2	1
Point Pleasant Beach Borough	29	50	21	...	...	...	...
Point Pleasant Borough	99	18	52	1	...	3	3
Seaside Heights Borough	17	11	11	...	...	...	...
Seaside Park Borough	13	12	20	2	...	...	...
Ship Bottom Beach Arlington Borough	3	5	11	...	...	...	...
South Toms River Borough	8	3	1	...	...	...	...
Stafford Township	26	11	19	...	...	1	...
Surf City Borough	5	...	5	...	...	...	...
Tuckerton Borough	26	6	20	1	...	1	1
Union Township	18	22	17	...	...	...	...
Total	1191	494	669	32	...	30	24

PASSAIC COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Bloomingtondale Borough	80	18	19	3	...	1	...
Clifton City	1255	287	450	29	1	27	21
Haledon Borough	101	54	43	1	...	1	1
Hawthorne Borough	259	101	123	6	1	5	4
Little Falls Township	137	62	68	3	...	1	1
North Haledon Borough	52	12	20	2	...	...	...
Passaic City	1098	847	560	28	...	38	26
Paterson City	2709	1576	1605	63	...	71	57
Pompton Lakes Borough	94	75	30	2	...	1	1
Prospect Park Borough	76	64	43	1	...	1	...
Ringwood Borough	38	6	9	3	...	...	...
Totowa Borough	85	26	36	3	...	1	1
Wanaque Borough	113	22	41	2	...	2	...
Wayne Township	208	52	82	2	...	3	3
West Milford Township	80	18	36	...	...	1	1
West Paterson Borough	74	28	28	3	...	4	2
Total	6459	3248	3191	151	2	157	118

DEPARTMENT OF HEALTH

SALEM COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Alloway Township	48	8	15	1	...	1	1
Elmer Borough	46	13	23	...	...	...	...
Elsinboro Township	19	4	6	...	...	...	...
Lower Alloway Creek Township	28	1	9	1	...	3	3
Lower Penns Neck Township	146	32	57	5	...	...	...
Mannington Township	32	4	13	1	...	1	...
Oldmans Township	47	4	16	3	...	6	3
Penns Grove Borough	185	75	83	4	...	2	...
Pilesgrove Township	40	6	23	1	...	1	1
Pittsgrove Township	49	7	14	...	...	1	1
Quinton Township	42	8	14	...	1	5	4
Salem City	210	100	123	8	1	1	1
Upper Penns Neck Township	86	20	34	1	...	3	1
Upper Pittsgrove Township	47	3	26	4	...	5	4
Woodstown Borough	50	39	24	1	...	...	...
<b>Total</b>	<b>1085</b>	<b>324</b>	<b>498</b>	<b>30</b>	<b>1</b>	<b>29</b>	<b>19</b>

SOMERSET COUNTY

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Bedminster Township	24	21	11	...	...	2	2
Bernards Township	73	29	41	1	...	1	1
Bernardsville Borough	70	34	38	1	...	4	3
Bound Brook Borough	232	117	87	5	2	...	...
Branchburg Township	48	3	12	...	...	...	...
Bridgewater Township	194	27	65	4	2	1	1
East Mill-tone Town	5	8	10	...	...	1	...
East Mill-tone Township	10	4	10	...	...	6	2
Far Hills Borough	10	25	61	3	...	...	...
Franklin Township	217	3	3	...	...	2	2
Green Brook Township	21	17	32	1	...	4	2
Hillsborough Township	87	89	52	7	1	...	...
Hillsborough Township	242	2	1	...	...	...	...
Millstone Borough	7	12	19	...	...	4	4
Millstone Township	72	12	19	...	1	...	...
Montgomery Township	231	113	114	5	1	...	...
North Plainfield Borough	29	13	20	1	...	2	2
Peapack Gladstone Borough	86	103	53	4	...	...	...
Raritan Town	16	5	9	1	...	10	9
Rocky Hill Borough	16	97	116	3	...	4	2
Somerville Borough	308	14	29	...	...	1	1
South Bound Brook Borough	86	16	25	1	...	...	...
Warren Township	60	32	15	...	...	...	...
Watchung Borough	30	...	...	...	...	...	...
<b>Total</b>	<b>2153</b>	<b>734</b>	<b>823</b>	<b>37</b>	<b>6</b>	<b>42</b>	<b>31</b>



BUREAU OF VITAL STATISTICS AND ADM.

SUSSEX COUNTY 1949

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Andover Borough	9	4	4	...	...	...	...
Andover Township	27	2	7	1	...	1	...
Branchville Borough	23	16	14	...	...	1	...
Byram Township	24	1	9	...	...	1	...
Frankford Township	33	1	20	3	1	1	1
Franklin Borough	99	26	38	2	...	2	2
Fredon Township	16	2	6	...	...	...	...
Green Township	5	17	5	...	...	...	...
Hamburg Borough	31	20	17	...	...	...	...
Hampton Township	11	2	5	1	...	...	...
Hardyston Township	28	1	11	2	...	1	...
Hopatcong Borough	25	3	11	1	...	4	3
Lafayette Township	18	8	12	1	...	...	...
Montague Township	5	2	5	...	...	...	...
Newton Town	127	63	69	2	...	1	...
Ogdensburg Borough	30	8	16	...	...	1	1
Sandyston Township	16	4	7	1	...	...	...
Sparta Township	68	28	26	...	...	1	1
Stanhope Borough	25	13	11	...	...	1	1
Stillwater Township	21	5	13	1	...	...	...
Sussex Borough	45	44	25	1	...	...	...
Vernon Township	30	9	14	2	...	1	1
Walpack Township	4	...	1	...	...	...	...
Wantage Township	60	7	25	...	...	...	...
Total	785	286	371	18	1	16	10

UNION COUNTY

NAME OF PLACE	Births	Mar- riages	Deaths	Still- Maternal		Infant Deaths by Age at Death	
				births	Deaths	Total	Under 1 month
Clark Township	99	14	24	1	...	1	1
Cranford Township	429	117	120	3	...	13	10
Elizabeth City	2376	1135	1147	60	...	56	39
Fanwood Borough	65	14	27	...	...	1	1
Garwood Borough	107	38	27	1	...	4	3
Hillside Township	340	99	159	5	...	10	8
Kenilworth Borough	113	13	13	2	1	...	...
Linden City	626	215	203	12	...	16	12
Mountinside Borough	27	7	7	1	...	...	...
New Providence Borough	69	24	21	1	1	3	3
New Providence Township	64	7	25	3	...	1	1
Plainfield City	970	444	436	17	...	27	25
Rahway City	439	165	206	9	...	13	10
Roselle Borough	387	157	141	4	...	12	9
Ro'elle Park Borough	193	44	89	3	1	3	2
Scotch Plains Township	176	41	50	4	...	4	2
Springfield Township	136	61	59	4	...	1	1
Summit City	340	163	175	2	...	4	2
Union Township	717	197	258	10	1	18	13
Westfield Township	394	136	219	6	...	16	8
Winfield Township	75	...	10	...	...	2	1
Total	8142	3111	3431	148	4	205	151

DEPARTMENT OF HEALTH

WARREN COUNTY

Infant Deaths by Age at Death

NAME OF PLACE	Births	Mar-riages	Deaths	Still- births	Maternal Deaths	Infant Deaths by Age at Death	
						Total	Under 1 month
Allamuchy Township .....	17	1	5	...	...	2	2
Alpha Borough .....	46	23	18	...	...	1	1
Belvidere Town .....	55	15	30	1	...	...	...
Blairstown Township .....	32	16	22	...	...	1	1
Franklin Township .....	28	13	21	1	...	...	...
Frelinghuysen Township .....	10	4	13	...	...	...	...
Greenwich Township .....	10	15	14	...	...	2	...
Hackettstown Town .....	36	89	54	1	...	...	...
Hardwick Township .....	89	1	3	...	...	1	1
Harmony Township .....	10	17	11	...	...	1	1
Hope Township .....	52	5	9	...	...	1	1
Independence Township .....	14	15	10	2	...	1	1
Knowlton Township .....	15	8	12	...	...	1	1
Liberty Township .....	25	9	1	...	...	...	...
Lopatcong Township .....	9	...	9	...	...	1	...
Mansfield Township .....	14	5	13	...	...	1	1
Oxford Township .....	20	12	25	...	1	1	1
Pahaquarry Township .....	40	12	1	...	...	16	12
Phillipsburg Town .....	...	...	220	8	...	...	...
Pohatcong Township .....	421	179	22	1	...	3	...
Washington Borough .....	41	4	58	2	...	1	...
Washington Township .....	87	49	18	1	...	...	...
White Township .....	36	8	14	1	...	...	...
Total .....	31	7	14	1	...	31	20
STATE INSTITUTIONS .....	1128	431	608	18	1	2	1
MILITARY POSTS .....	6	...	51	...	...	5	4
	238	281	20	2	...	...	...

TABLE 2. DEATHS BY AGE GROUPS; NUMBER AND PERCENTAGE FOR PAST DECADE

YEAR	AGE GROUPS														Unknown		
	Total Deaths		Under 1 year		1 to 4		5 to 14		15 to 24		25 to 44		45 to 64			65 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%
1940.....	45,208	2,094	4.6	412	0.9	554	1.2	1,125	2.5	4,705	10.5	15,051	33.3	21,205	47.0	.....	.....
1941.....	45,971	2,392	5.2	417	0.9	548	1.2	1,038	2.3	4,705	10.2	15,324	33.3	21,532	47.0	.....	.....
1942.....	46,270	2,355	5.0	426	0.9	429	0.9	1,087	2.3	4,660	9.9	15,280	33.0	21,983	47.5	.....	.....
1943.....	49,781	2,732	5.5	476	1.0	493	1.0	1,022	2.1	4,667	9.4	16,193	32.5	24,148	48.4	.....	.....
1944.....	47,840	2,667	5.6	493	1.0	490	1.0	941	2.0	4,664	9.2	15,558	32.5	22,927	48.5	.....	.....
1945.....	47,639	2,470	5.2	478	1.0	499	1.0	840	1.8	4,127	8.7	15,070	32.9	23,554	49.4	.....	.....
1946.....	48,261	2,705	5.6	436	0.9	398	0.9	879	1.8	3,895	8.4	15,066	32.8	22,886	48.4	.....	.....
1947.....	48,276	2,639	5.5	428	0.9	347	0.7	708	1.5	3,956	8.2	15,602	32.3	24,976	50.8	.....	.....
1948.....	48,107	2,589	5.4	419	0.9	377	0.8	682	1.4	3,710	7.7	15,489	32.2	24,841	51.6	.....	.....
1949.....	47,700	2,521	5.3	414	0.9	355	0.7	686	1.4	3,586	7.5	15,295	32.1	24,848	52.1	.....	< 0.1

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TABLE 3. ILLEGITIMATE BIRTHS BY COLOR AND AGE GROUPS OF MOTHERS: 1949

<i>Age of Mother</i>	<i>Total</i>	<i>White</i>	<i>Non-white</i>
All Ages .....	2,413 100.0	1,127 100.0	1,286 100.0
10-14 .....	45 1.9	13 1.2	32 2.5
15-19 .....	887 36.8	315 28.0	572 44.5
20-24 .....	816 33.8	412 36.5	404 31.4
25-29 .....	380 15.7	218 19.3	162 12.6
30-34 .....	176 7.3	105 9.3	71 5.5
35-39 .....	80 3.3	50 4.4	30 2.3
40-44 .....	26 1.1	13 1.2	13 1.0
Unknown .....	3 0.1	1 0.1	2 0.2

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

Year	Births Reported	Deaths Under 1 Year of Age	Rates per 1,000 Live Births	Deaths Under 1 Month of Age	Rates per 1,000 Live Births	Stillbirths	Rates per 1,000 Live Births	Maternal Deaths	Rates per 1,000 Live Births
1906	42,677	7,773	183.1	2,543	59	2,899	56	822	7.5
1907	44,651	7,792	173.2	2,602	58	2,580	56	889	6.8
1908	47,405	7,823	163.2	2,655	56	2,617	55	929	6.9
1909	47,508	7,858	161.2	2,661	56	2,589	53	971	6.3
1910	53,942	8,352	154.8	2,801	51	2,737	50	977	6.9
1911	58,135	8,842	151.4	2,887	49	2,754	47	977	7.3
1912	60,073	9,457	154.4	2,886	47	2,953	49	477	6.9
1913	61,432	9,549	152.7	2,903	45	2,896	46	445	6.9
1914	65,403	9,781	148.6	2,995	45	3,074	46	490	7.4
1915	66,476	9,977	148.6	2,862	43	3,075	45	516	6.3
1916	70,211	9,348	133.6	3,075	43	3,231	45	380	5.8
1917	75,309	9,477	125.8	3,256	43	3,183	42	383	5.4
1918	74,549	8,372	111.4	3,175	42	3,525	42	411	5.4
1919	70,988	8,111	112.3	2,696	38	3,047	42	366	5.5
1920	76,481	8,472	110.8	2,961	38	3,221	42	479	5.1
1921	78,173	8,773	112.3	2,830	36	3,242	41	464	5.1
1922	74,479	8,864	118.9	2,773	37	3,033	41	466	5.9
1923	74,611	8,368	112.1	2,621	35	3,169	42	424	5.4
1924	76,530	8,109	105.9	2,739	35	3,177	41	466	5.7
1925	72,799	7,689	105.9	2,607	35	3,010	40	461	5.7
1926	72,386	7,090	97.3	2,432	33	3,018	41	394	5.4
1927	72,799	6,571	90.3	2,402	33	3,074	42	450	5.7
1928	68,207	6,116	88.4	2,435	35	2,804	42	406	5.7
1929	68,282	5,616	82.3	2,333	32	2,707	40	367	5.3
1930	64,078	5,870	91.6	2,107	30	2,647	40	390	5.7
1931	61,215	5,649	92.3	2,064	32	2,578	38	378	5.7
1932	56,072	5,089	90.8	1,862	32	2,343	40	351	6.0
1933	58,431	4,853	83.1	1,833	29	2,073	35	280	4.7
1934	55,059	4,681	85.0	1,634	29	2,025	36	294	5.1
1935	54,145	4,383	80.9	1,560	28	1,905	34	249	4.5
1936	55,197	4,440	80.5	1,449	26	1,846	34	202	3.7
1937	56,802	4,170	73.2	1,327	24	1,731	31	182	3.2
1938	56,859	3,983	69.9	1,395	24	1,609	28	191	3.3
1939	59,328	3,853	64.8	1,412	23	1,609	26	173	2.9
1940	67,104	3,592	53.5	1,422	21	1,543	22	172	2.6
1942	80,312	2,892	36.0	1,321	16	1,066	13	166	2.0
1943	82,356	2,535	30.8	1,192	14	1,066	12	152	1.8
1944	76,652	1,895	24.7	1,065	14	1,378	18	151	1.9
1945	76,395	1,567	20.5	1,066	14	1,444	19	119	1.6
1946	95,044	1,680	17.7	1,066	11	1,444	15	118	1.3
1947	106,086	2,470	23.2	2,020	19	1,327	12	119	1.1
1948	97,278	2,317	23.8	2,017	21	2,265	23	105	1.0
1949	97,414	2,521	25.9	1,910	20	1,984	20	76	0.8
						1,972			0.7

TABLE 5. TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1949

WEIGHT	AGE GROUP										Total
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown		
5 lbs. 9 oz. and over	....	22	118	154	142	70	19	2	2	Unknown	
over 2500 grams	....	9	36	45	41	16	4	....	....	....	
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	....	9	29	32	34	21	3	2	....	....	
2001-2500 gms. incl.	....	9	34	44	29	24	9	....	....	....	
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	....	18	60	55	35	30	8	1	7	7	
1501-2000 gms. incl.	....	37	146	207	166	123	43	7	53	53	
2 lbs. 8 oz. to 3 lbs. 4 oz. incl.	....	114	423	537	447	284	86	12	65	65	
1001-1500 gms. incl.	....	4	4	4	4	4	4	4	4	4	
less than 2 lbs. 8 oz.	....	4	4	4	4	4	4	4	4	4	
less than 1000 gms.	....	4	4	4	4	4	4	4	4	4	
Unknown	....	4	4	4	4	4	4	4	4	4	
Total	788	114	423	537	447	284	86	12	65	65	
	*1972	4	4	4	4	4	4	4	4	4	

\* Includes 10 stillbirths of unknown color.

TABLE 5a. WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1949

WEIGHT	AGE GROUP									
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Unknown
5 lbs. 9 oz. and over	454	....	12	95	131	128	68	16	2	2
over 2500 grams										
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	127	....	6	25	40	37	15	4	....	....
2001-2500 gms. incl.										
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	107	....	6	22	25	31	18	3	2	....
1501-2000 gms. incl.										
2 lbs. 3 oz. to 3 lbs. 4 oz. incl.	125	....	10	24	39	26	17	8	....	1
1001-1500 gms. incl.										
less than 2 lbs. 3 oz.	178	....	11	52	45	31	26	8	1	4
less than 1000 gms.										
Unknown	682	....	23	150	180	148	111	39	6	45
Total	1673	....	68	348	460	401	253	78	11	52

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TABLE 5b. NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1949

WEIGHT	AGE GROUP										Unknown
	Total	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
5 lbs. 9 oz. and over	75	.....	10	23	23	14	2	3	.....	.....	
over 2500 grams											
4 lbs. 7 oz. to 5 lbs. 8 oz. incl.	24	.....	3	11	6	4	1	.....	.....	.....	
2001-2500 gms. incl.											
3 lbs. 5 oz. to 4 lbs. 6 oz. incl.	23	.....	3	7	7	3	3	.....	.....	.....	
1501-2000 gms. incl.											
2 lbs. 3 oz. to 3 lbs. 4 oz. incl.	35	.....	0	10	5	3	7	1	.....	.....	
1001-1500 gms. incl.											
less than 2 lbs. 3 oz.	33	.....	7	8	10	4	4	.....	.....	.....	
less than 1000 gms.	99	4	14	16	27	17	12	4	1	4	
Unknown						45	29	8	1	4	
Total	289	4	46	75	77						



TABLE 6. MATERNAL DEATHS BY SPECIFIC CAUSES: 1949

Toxemias of pregnancy .....	7	
Other hemorrhage of pregnancy .....	2	
Ectopic pregnancy .....	4	
Other complications arising from pregnancy .....	3	
	—	
Total complications of pregnancy .....		16
Abortion without mention of sepsis or toxemia .....	4	
Abortion with sepsis .....	9	
Abortion with toxemia without mention of sepsis .....	2	
	—	
Total abortions .....		15
Delivery complicated by placenta prævia or antepartum hemorrhage .....	2	
Delivery complicated by retained placenta .....	2	
Delivery complicated by other postpartum hemorrhage .....	9	
Delivery complicated by disproportion or malposition of fœtus .....	1	
Delivery complicated by prolonged labor of other origin .....	1	
Delivery with other trauma .....	9	
Delivery with other complications of childbirth .....	1	
	—	
Total delivery with specified complications .....		25
Sepsis of childbirth and the puerperium .....	4	
Puerperal phlebitis and thrombosis .....	1	
Puerperal pulmonary embolism .....	2	
Puerperal eclampsia .....	4	
Other forms of puerperal toxemia .....	1	
Other and unspecified complications of the puerperium .....	4	
	—	
Total complications of the puerperium .....		16
	—	
All Causes .....		72

TABLE 6a. MATERNAL DEATHS BY COLOR, CAUSE AND AGE GROUPS: 1949

Cause* and Color	All Ages	Age Group	
		15-24	25-44
Complications of Pregnancy (640-649) .....	16	4	12
White .....	12	1	11
Non-white .....	4	3	1
Abortion (650-652) .....	15	6	9
White .....	8	2	6
Non-white .....	7	4	3
Delivery with Specified Complications (670-678) .....	25	5	20
White .....	21	4	17
Non-white .....	4	1	3
Complications of the Puerperium (680-689) .....	16	3	13
White .....	14	3	11
Non-white .....	2	..	2
All Causes (640-689) .....	72	18	54
White .....	55	10	45
Non-white .....	17	8	9

\* Cause numbers are those of International List (6th Revision).

TABLE 7. MARRIAGES BY AGE-GROUPS: 1949

WIFE'S AGE GROUP	HUSBAND'S AGE GROUP										Total			
	Judicial Consent		Parents' Consent		21-24 1	25-29 2	30-34 3	35-39 4	40-44 5	45-49 6		50-59 7	60-69 8	70 plus 9
	10-17 R	18-19 X	18-19 X	20 O										
R 10-15	28	50	17	33				1						132
X 16-17	69	360	211	693				7						1455
1 18-19	30	634	724	3662				30	3					4988
2 20-24	4	240	688	9047				141	84					18128
3 25-29		3	88	1100				375	278					7078
4 30-34			5	135				378	537					8959
5 35-39			2	17				328	599					2437
6 40-44				5				686	599					1560
7 45-49				17				232	372					1049
8 50-59				5				46	141					1104
9 60-69								8	37					321
70 plus									1					24
TOTAL	131	1287	1685	14667	11908	5935	3191	2053	1420	1849	796	187		44469

TABLE 7a. MARRIAGES BY PREVIOUS MARITAL STATUS: 1949

<i>Wife's Status</i>	<i>Total</i>	<i>Husband's Status</i>			
		<i>Single</i>	<i>Widowed</i>	<i>Divorced</i>	<i>Unknown</i>
Single .....	36,367	32,004	748	3,248	367
Widowed .....	2,601	803	1,110	662	26
Divorced .....	5,248	2,543	596	2,066	43
Unknown .....	253	84	21	39	109
Total .....	44,469	35,434	2,475	6,015	545

## DISCUSSION OF TABLES 7 AND 7a

Although the age groups below 21 years in Table 7 differ for males and females, this variation is necessary to correctly reflect the legal requirements of marriage in New Jersey.

Of 44,469 married males 3,103 or 7.0 per cent, were less than 21 years of age and had to furnish parental consent. There were 1,587 or 3.6 per cent of the 44,469 females who, being under 18 years of age, had to receive consent.

Of all males required to furnish parental consent 131 or 4.2 per cent, being less than 18 years old, had to receive judicial approval of the parental consent. Of females under 18 years 132 or 8.3 per cent were less than 16 years old and had to receive similar judicial approval of parental consent.

It is interesting to note that there is not too great a disparity between the ages of the individuals involved. Both the highest percentage of males and females marry after 20 and before becoming 25.

Using the basic data it would be possible to develop percentages by sex within each age group to determine whether females of a particular age group have a greater tendency to marry younger males than do males of the same age group to marry younger females.

From a study of Table 7a, one may make some interesting observations. In 32,004 marriages, or 72.0 per cent, both parties were single. Of those who were married again there seemed to be a fairly consistent pattern of like attracting like. In other words of the divorced males 54 per cent married single women, 34 per cent married divorcees and 11 per cent married widows. Of the divorced females 48 per cent married single males, 39 per cent married divorced males and 11 per cent married widowers.

Of the widowers 45 per cent married widows, 30 per cent married single women and 24 per cent married divorcees. The widows partially followed a similar pattern with 43 per cent marrying widowers but 31 per cent preferred single men and 25 per cent married divorced males.













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TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1949—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS													75 and over	Unknown			
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64			65 to 69	70 to 74	
Nose, Nasal Cavities, Middle Ear and Accessory Sinuses	160	Total	10		1						3	1	1	1	1	1	1	2	
		White Male	3							1	1							1	
		White Female	5																1
		Non-white Male	2		1														
		Non-white Female																	
LARYNX	161	Total	93					1	1	2	7	11	18	20	20	14	14	19	
		White Male	82					1	1	2	6	7	17	17	16	14	14	19	
		White Female	8							1	1	4			3				
		Non-white Male	3					1											
		Non-white Female																	
Trachea, and of Bronchus and Lung Specified as Primary	162	Total	282				5	7	13	38	46	61	48	48	48	84	96		
		White Male	237				3	6	8	30	42	56	44	44	44	28	58		
		White Female	36				2	1	5	8	4	2	5	4	4	8	16		
		Non-white Male	7					1	2	2	1	1					2		
		Non-white Female	2								2								
Lung and Bronchus, Unspecified as to Primary or Secondary	163	Total	506				4	15	39	45	102	102	87	87	57	57	57		
		White Male	392				2	11	27	35	88	82	66	46	46	32	32		
		White Female	87				1	2	7	8	16	18	18	10	10	10	10		
		Non-white Male	19				1	1	4	2	6	4	4	1	1	1	1		
		Non-white Female	8				1	1	1	1	1	1	1	2	2	1	2		



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TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1948—Continued

SITE, SEX AND COLOR	Last No.	AGE GROUPS													75 and over	Unknown		
		Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64			65 to 69	70 to 74
Corpus Uteri	172	Total	31					2			2	8	5	7	5	2		
White Male																		
White Female		31					2					8	5	7	5	2		
Non-white Male																		
Non-white Female																		
Other Parts of Uterus, Including Chorioepithelioma	173	Total	8						1						1		1	
White Male		2						1										
White Female																		
Non-white Male		1																
Non-white Female																		
Uterus, Unspecified	174	Total	297					6	14	20	20	39	39	38	39	51		
White Male																		
White Female		244					6	11	16	19	19	37	37	33	38	46		
Non-white Male																		
Non-white Female		23					8	4	1	2	2	2	2	5	1	5		
Ovary, Fallopian Tube and Broad Ligament	175	Total	230					6	12	24	43	28	39	24	21	26		
White Male																		
White Female		219					5	12	23	40	26	37	23	20	20	26		
Non-white Male																		
Non-white Female		11					1	3	1	2	2	2	1	1	1			







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TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1949—Continued

SITE, SEX AND COLOR	Last No.	AGE GROUPS													75 and over	Unknown			
		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
Bone, Including Jaw Bone	196	Total	84	1	1	6	1	1	1	1	2	6	9	11	13	7	13	13	
White Male		46	1	1	3	1	1	1	1	2	4	5	5	6	8	2	9	9	
White Female		37	1	1	3	1	1	1	1	2	2	2	3	3	5	5	4	4	8
Non-white Male		1																	
Non-white Female																			
Connective Tissue	197	Total	9					1					1	4	2			1	
White Male		2												2					
White Female		5												1	1				1
Non-white Male		2																	
Non-white Female																			
Lymph Nodes, Secondary and Unspecified	198	Total	30			1				1	1	2	2	6	7	4	8	8	
White Male		17			1				1	1	1	2	1	2	5	3	1	1	
White Female		10											1	1	2	1	2	1	1
Non-white Male		2																	
Non-white Female		1													1				
Other and Unspecified Sites	199	Total	243	1	1	1	2	2	10	10	15	20	25	26	43	30	31	53	
White Male		113	1	1	3	5	6	10	11	8	6	10	11	11	26	13	14	23	
White Female		115	1	1	1	4	7	9	12	5	7	9	12	15	16	16	16	27	
Non-white Male		8																	1
Non-white Female		9							2	1	1	1	1	1	2	1	1	1	2







TABLE 12a. DEATHS FROM NEOPLASMS BY SEX, COLOR AND AGE GROUPS FOR EACH SITE GROUP: 1949

GROUP	Group Total	Total	Malignant					Other and Unspecified	Lymph and Blood	Benign or Unspecified
			Buccal Cavity and Pharynx	Digestive and Peritoneum	Respiratory	Genito-urinary				
All ages .....	8,514	8,321	200	3,569	904	2,424	680	544	193	
1 year .....	6	2	...	...	...	...	1	1	4	
1-4 .....	59	54	...	1	...	10	13	30	5	
5-14 .....	44	41	...	1	...	6	9	24	3	
15-24 .....	83	75	1	7	3	11	18	35	8	
25-44 .....	676	636	7	167	42	252	81	87	41	
45-64 .....	3,610	3,521	90	1,396	497	1,010	309	219	89	
65 plus .....	4,036	3,992	102	1,997	361	1,135	249	148	44	
Male .....	4,354	4,274	171	1,978	754	684	369	318	80	
Female .....	4,160	4,047	29	1,591	150	1,740	311	226	113	
White .....	8,068	7,893	192	3,397	863	2,268	656	517	175	
Non-white .....	446	428	8	172	41	156	24	27	18	

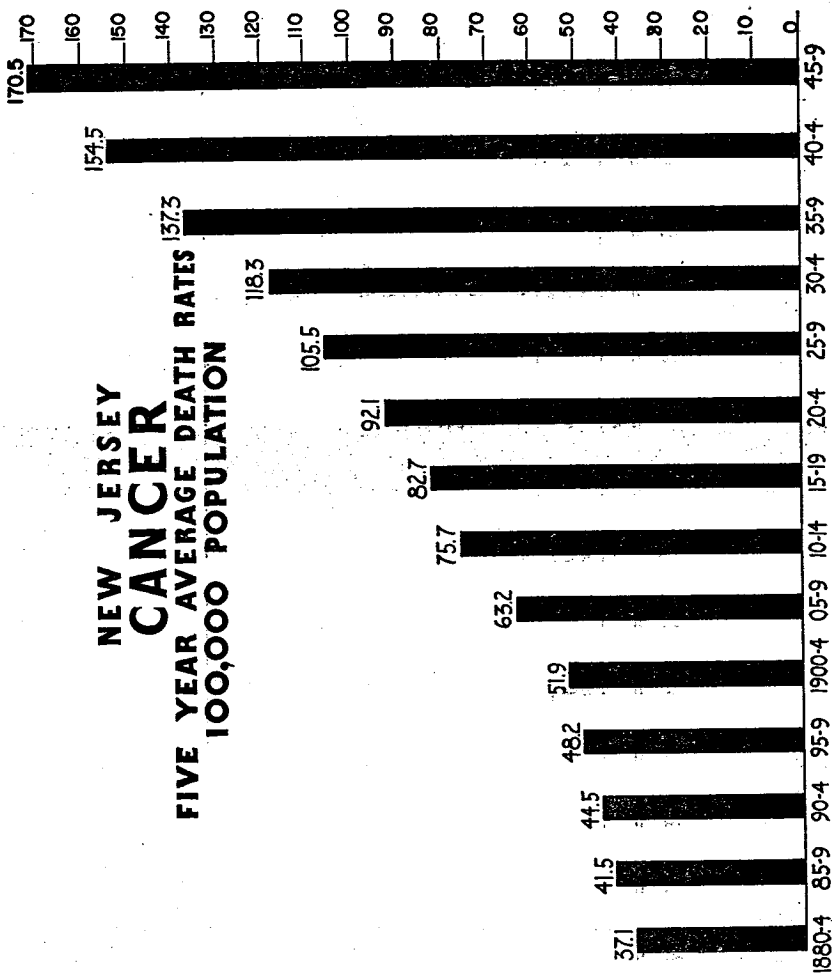


CHART 2



## DEPARTMENT OF HEALTH

TABLE 18a-2. DEATHS IN NEW JERSEY FROM NON-TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH: 1949  
International List (6th Revision) Numbers 870-969, 961-962

PRIMARY CAUSE	List No.	MONTH OF DEATH											
		January	February	March	April	May	June	July	August	September	October	November	December
Total		137	93	113	99	86	119	119	112	98	108	108	115
Poisoning by solid and liquid substances	870-962	40	3	1	4	2	6	1	4	6	3	2	3
Poisoning by gases and vapors	870-888	24	13	11	14	8	1	2	..	5	9	11	8
Falls	890-895	690	61	58	40	52	67	53	62	53	63	54	60
Fire and explosion of combustible material	900-904	118	17	12	17	6	3	8	4	3	12	12	19
Mechanical suffocation in bed or cradle	916	48	..	6	5	2	4	4	2	5	5	5	5
Drowning	924	145	12	5	11	9	32	25	21	14	8	4	..
Other causes	910-915, 917-925, 925-928, 931-936, 961-962	182	13	17	19	10	11	29	19	7	6	15	24



TABLE 13b. MOTOR VEHICLE DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH, SEX AND AGE GROUPS: 1949

PRIMARY CAUSE	International List No.	Total	Male	Female	AGE GROUPS							65 and Over	Unknown
					Under 1 year	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over		
Total	810-835, 960	628	487	141	1	24	39	106	149	164	145	..	
Collision with													
Railway train	810	11	10	1	..	..	..	2	5	8	1	..	
Street car	811	..	..	..	..	..	..	..	..	..	..	..	
Pedestrian	812, 830	209	212	57	..	20	23	10	23	80	108	..	
Pedal cyclist	813, 817, 831	19	13	2	..	..	..	3	2	2	..	..	
Motorcycle	815, 832	11	10	7	..	..	..	8	3	..	..	..	
Other motor vehicle	816, 833	167	120	47	1	1	3	86	63	64	19	..	
Horse or horse-drawn vehicle	818	..	..	..	..	..	..	..	..	..	..	..	
Fixed object	814, 819	74	56	18	..	2	1	20	30	12	9	..	
Non-collision	820-824, 834	67	56	11	..	1	1	24	27	8	6	..	
Other and unspecified	825, 835, 960	14	10	4	..	..	1	3	3	6	2	..	



TABLE 13c. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND TYPE OF ACCIDENT: 1949  
International List (6th Revision) Numbers 800-962

TYPE OF ACCIDENT	IMMEDIATE CAUSE									
	Poisonous Gas and Smoke	Burns	Mechanical Suffocation	Drown- ing	Cutting or Piercing	Falls	Crushing, Fractures and Landslides	Electric Current	Foreign Bodies	Other Accidents
Total	143	106	49	172	6	683	722	16	24	122
Home	128	74	49	9	1	504	6	4	22	69
Occupational motor vehicle	9	3	...	...	...	3	41	...	...	...
Other occupational	...	16	...	9	1	54	56	10	1	17
Public place non-occupational motor vehicle	...	8	...	1	8	9	532	...	...	2
Public place non-occupational and non-motor vehicle	6	5	...	153	1	102	68	2	1	27
Not specified or unknown	...	...	...	...	...	11	1	...	...	7

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 184. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND COUNTY OF ACCIDENT: 1949  
International List (8th Revision) Numbers 800-983

	Total	Poisonous Gas and Smoke		Burns	Mechanical Suffocation	Drown- ing	Cutting or Piercing	Falls	Crushing, Fractures and Lacerations		Electric Current	Foreign Bodies	Other Accidents
Atlantic County .....	85	5		5	1	8	...	34	28	...	...	...	4
Bergen County .....	109	6		7	4	8	...	42	37	4	...	...	8
Burlington County .....	81	8		2	2	11	...	9	39	...	...	1	4
Camden County .....	135	5		2	4	4	...	40	64	1	...	1	4
Cape May County .....	24	6		1	...	7	...	8	6	...	...	...	1
Cumberland County .....	64	5		1	...	9	...	9	28	...	...	...	1
Essex County .....	327	30		12	17	10	...	153	74	2	...	6	22
Gloucester County .....	82	4		1	1	8	...	7	24	...	...	2	2
Hudson County .....	219	10		12	5	28	...	93	55	...	...	1	15
Hunterdon County .....	12	1		...	...	1	...	8	6	...	...	...	...
Mercer County .....	129	6		15	3	3	...	31	63	...	...	...	6
Middlesex County .....	137	9		10	1	10	...	41	57	1	...	1	7
Monmouth County .....	119	8		8	...	15	...	29	50	1	...	2	6
Morris County .....	82	3		...	1	11	...	22	36	...	...	1	6
Ocean County .....	51	5		1	1	7	...	10	21	...	...	1	8
Passaic County .....	123	5		2	3	10	...	57	30	2	...	1	5
Salem County .....	38	6		6	...	6	...	7	8	2	...	1	2
Somerset County .....	45	4		5	1	2	...	12	17	...	...	1	2
Sussex County .....	24	1		...	...	3	...	7	11	...	...	2	2
Union County .....	133	17		15	3	6	...	38	39	...	...	1	...
Warren County .....	33	1		2	1	8	...	13	11	...	...	...	2
State Institutions .....	19	...		1	...	...	...	13	1	...	...	...	4
Military Posts .....	12	...		...	...	2	...	1	8	...	...	1	...
Other States .....	...	...		...	...	...	...	...	...	...	...	...	...
Total .....	2048	143		106	49	172	6	683	722	10	24	24	122

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 136. NON-TRANSPORT ACCIDENTAL DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH AND PLACE OF ACCIDENT: 1949  
International List (8th Revision) Numbers 870-938

PRIMARY CAUSE	Total	Place									
		Home	Farm	Mine and Quarry	Industrial Premises	Place for Recreation and Sport	Street and Highway	Public Building	Resident Institution	Other Specified Place	Place Not Specified
Total	1293	823	7	6	113	85	70	32	61	119	27
Poisoning by solid and liquid substances	40	29	1	1	4	1	1	1	4	1	2
Poisoning by gases and vapors	106	94	1	1	6	1	2	1	4	1	2
Falls	660	476	1	2	37	3	4	2	46	8	14
Fire and explosion of combustible material	118	99	1	1	11	1	54	19	3	2	1
Mechanical suffocation in bed or cradle	48	47	1	1	1	1	1	3	2	1	1
Drowning	145	7	1	1	1	24	1	1	1	103	7
Other causes	176	71	4	4	54	7	12	6	7	7	4

TABLE 137. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH BY AGE GROUPS: 1949  
International List (8th Revision) Numbers 800-962

IMMEDIATE CAUSE	All Ages	AGE GROUPS						
		<1 year	1-4	5-14	15-24	25-44	45-64	65+
Total	2043	88	79	96	101	386	513	720
Poisonous gas and smoke	143	4	11	3	7	28	43	47
Burns	106	6	12	3	12	19	26	28
Mechanical suffocation	49	47	2	1	1	1	1	1
Drowning	172	1	12	38	25	27	61	37
Cutting or piercing	6	1	1	2	2	2	2	2
Falls	683	1	7	7	10	54	150	466
Crushing, fractures, lacerations	722	3	23	40	120	183	190	194
Electric current	16	1	1	2	2	2	3	1
Foreign bodies	24	10	4	1	1	7	2	1
Other accidents	122	11	7	5	11	34	89	15
								Unknown

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.

## DEPARTMENT OF HEALTH

TABLE 14. CAUSES OF DEATH AS PERCENTAGE OF TOTAL 47,706 DEATHS; WITH PERCENTAGE BY SEX FOR EACH CAUSE, NEW JERSEY: 1949

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Per Cent		
			Total	Male by Sex Female	
	001-138	Infective and parasitic diseases	3.8	67.7	32.3
B1	001-008	Tuberculosis of respiratory system	2.5	70.0	30.0
B2	010-019	Tuberculosis, other forms	0.2	53.1	46.9
B3	020-029	Syphilis and its sequelae	0.5	72.6	27.4
B4	040	Typhoid fever	0.1	100.0	...
B5	043	Cholera	...	...	...
B6	045-048	Dysentery, all forms	0.1	...	100.0
B7	050, 051	Scarlet fever and streptococcal sore throat	0.1	42.9	57.1
B8	055	Diphtheria	0.1	...	100.0
B9	058	Whooping cough	0.1	85.7	14.3
B10	057	Meningococcal infections	0.1	65.0	35.0
B11	058	Plague	...	...	...
B12	080	Acute polyomyelitis	0.3	69.4	30.6
B13	084	Smallpox	...	...	...
B14	085	Measles	0.1	33.3	66.7
B15	100-108	Typhus and other rickettsial diseases	...	...	...
B16	110-117	Malaria	...	...	...
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-133)	0.2	51.4	48.6
	140-239	Neoplasms	17.8	51.1	48.9
B18	140-205	Malignant neoplasms	17.4	51.4	48.6
B19	210-239	Benign and unspecified neoplasms	0.4	41.5	58.5
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	2.7	36.2	63.8
B20	260	Diabetes mellitus	2.1	32.0	68.0
		Residual (240-245, 250-254, 270-277, 280-289)	0.6	50.5	49.5
	290-299	Diseases of the blood and blood-forming organs	0.3	43.7	56.3
B21	290-293	Anemias	0.2	43.8	56.2
		Residual (294-299)	0.1	43.3	56.7
	300-326	Mental, psychoneurotic and personality disorders	0.5	63.6	36.4
	330-398	Diseases of the nervous system and sense organs	10.0	47.7	52.3
B22	330-334	Vascular lesions affecting central nervous system	9.1	46.2	53.8
B23	340	Nonmeningococcal meningitis	0.1	60.8	39.2
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	0.8	63.3	36.7
	400-468	Diseases of the circulatory system	44.9	55.9	44.1
B24	400-402	Rheumatic fever	1.7	41.0	59.0
B25	410-416	Chronic rheumatic heart disease	0.1	47.0	53.0
B26	420-422	Arteriosclerotic and degenerative heart disease	30.9	60.1	39.9
B27	430-434	Other diseases of heart	7.0	58.2	41.8
B28	440-443	Hypertension with heart disease	7.0	43.8	56.2
B29	444-447	Hypertension without mention of heart	1.2	48.4	51.6
		Residual (450-456, 460-468)	3.0	49.4	50.6
	470-527	Diseases of the respiratory system	2.6	59.8	40.2
B30	480-483	Influenza	0.1	43.6	56.4
B31	490-493	Pneumonia	1.7	57.6	42.4
B32	500-502	Bronchitis	0.2	62.5	37.5
		Residual (470-475, 510-527)	0.6	67.1	32.9
	530-587	Diseases of the digestive system	4.1	59.9	40.1
B33	540, 541	Ulcer of stomach and duodenum	0.7	84.7	15.3
B34	550-553	Appendicitis	0.3	63.7	36.3
B35	560, 561, 570	Intestinal obstruction and hernia	0.6	50.7	49.3
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	0.4	56.4	43.6
B37	581	Cirrhosis of liver	1.2	63.7	36.3
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	0.9	44.0	56.0
	590-637	Diseases of the genito-urinary system	2.1	59.7	40.3
B38	590-594	Nephritis and nephrosis	1.4	52.6	47.4
B39	610	Hyperplasia of prostate	0.3	100.0	...
		Residual (600-609, 611-617, 620-626, 630-637)	0.4	50.8	49.2
B40	640-689	Pregnancy, childbirth and the puerperium	0.2	...	100.0
	690-716	Diseases of the skin and cellular tissue	0.1	37.5	62.5
	720-749	Diseases of the bones and organs of movement	0.2	40.9	59.1
B41	750-759	Congenital malformations	1.0	49.7	50.3
	760-776	Certain diseases of early infancy	3.5	57.0	43.0
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	1.4	57.9	42.1
B43	763-768	Infections of the newborn	0.2	58.9	41.1
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	1.8	56.0	44.0
B45	780-795	Symptoms, senility and ill-defined conditions	0.4	51.1	48.9
BE47	E800-999	Accidents, poisonings and violence	5.8	67.7	32.3
	E810-833	Motor vehicle accidents	1.3	77.7	22.3
BE48A	E840-895	All other accidents except falls	1.5	70.6	29.4
BE48B	E900-904	Falls	1.4	50.4	49.6
BE49	E970-979	Suicide	1.3	71.5	28.5
BE50A	E980-983	Homicide	0.3	73.8	26.2
BE50B	E984-999	Police intervention, execution and operations of war	0.1	100.0	...
	001-999	All causes	100.0	55.0	45.0

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**TABLE 15. DEATH RATES: TOTAL, WHITE AND NON-WHITE BY CAUSE, NEW JERSEY: 1949**  
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	RATE PER 100,000 ESTIMATED POPULATION		
			Total	White	Non-white
B1	001-138	Infective and parasitic diseases .....	37.7	29.8	172.1
B2	001-008	Tuberculosis of respiratory system .....	25.1	20.1	111.3
B3	010-019	Tuberculosis, other forms .....	2.0	1.3	14.1
B3	020-029	Syphilis and its sequelae .....	4.6	2.7	36.8
B4	040	Typhoid fever .....	<0.1	<0.1	...
B5	043	Cholera .....	<0.1	<0.1	...
B6	045-048	Dysentery, all forms .....	<0.1	<0.1	...
B7	050, 051	Scarlet fever and streptococcal sore throat .....	0.3	0.2	0.4
B8	055	Diphtheria .....	0.1	0.1	1.1
B9	056	Whooping cough .....	0.1	0.1	...
B10	057	Meningococcal infections .....	0.4	0.4	0.8
B11	058	Plague .....	2.5	2.6	1.5
B12	080	Acute poliomyelitis .....	...	...	...
B13	084	Smallpox .....	0.2	0.2	0.4
B14	085	Measles .....	...	...	...
B15	100-108	Typhus and other rickettsial diseases .....	...	...	...
B16	110-117	Malaria .....	...	...	...
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138) .....	2.3	2.1	4.9
B18	140-239	Neoplasms .....	177.9	178.4	169.4
B19	210-239	Benign and unspecified neoplasms .....	173.9	174.5	162.6
B20	240-289	Allergic, endocrine system, metabolic and nutritional diseases .....	4.0	3.9	6.8
B20	260	Diabetes mellitus .....	27.0	26.6	33.4
B21	290-299	Residual (240-245, 250-254, 270-277, 280-289) .....	20.9	20.8	23.9
B21	290-293	Diseases of the blood and blood-forming organs .....	6.1	5.9	9.5
B22	300-326	Anemias .....	3.0	2.9	4.2
B23	330-398	Residual (294-299) .....	2.3	2.2	4.2
B23	330-334	Mental, psychoneurotic and personality disorders .....	0.6	0.7	...
B23	340	Diseases of the nervous system and sense organs .....	4.8	4.4	10.3
B24	400-468	Vascular lesions affecting central nervous system .....	100.1	98.1	133.3
B25	400-402	N meningococcal meningitis .....	91.4	89.9	117.4
B26	410-416	Residual (341-345, 350-357, 360-369, 370-389, 390-398) .....	1.1	0.9	4.2
B27	420-422	Diseases of the circulatory system .....	7.6	7.4	11.8
B28	430-434	Rheumatic fever .....	447.8	447.6	451.3
B29	444-447	Chronic rheumatic heart disease .....	1.3	1.1	4.6
B30	470-527	Arteriosclerotic and degenerative heart disease .....	16.8	16.7	19.8
B31	480-483	Other diseases of heart .....	308.4	312.1	245.0
B32	490-493	Hypertension with heart disease .....	9.7	9.4	14.4
B32	500-502	Hypertension without mention of heart .....	69.3	66.4	120.8
B33	530-587	Residual (450-456, 460-463) .....	11.8	11.3	20.5
B34	540, 541	Diseases of the respiratory system .....	30.5	30.7	26.2
B35	550-553	Influenza .....	25.8	23.9	58.1
B36	560, 561, 570	Pneumonia .....	0.8	0.6	3.8
B37	581	Bronchitis .....	16.9	15.5	41.4
B38	590-637	Residual (470-475, 510-527) .....	1.8	1.6	5.3
B39	610	Diseases of the digestive system .....	6.2	6.1	7.6
B40	640-689	Ulcer of stomach and duodenum .....	40.8	40.1	51.7
B41	690-716	Appendicitis .....	6.4	6.4	6.8
B42	720-749	Intestinal obstruction and hernia .....	3.1	3.1	2.7
B43	750-759	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn .....	6.4	6.1	9.9
B44	760-776	Cirrhosis of liver .....	3.9	3.3	14.8
B45	780-795	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587) .....	11.9	12.1	8.7
BE47	800-899	Diseases of the genito-urinary system .....	9.1	9.1	8.7
BE48A	900-904	Nephritis and nephrosis .....	21.0	19.9	39.9
BE49	910-919	Hyperplasia of prostate .....	13.9	13.1	28.5
BE50A	920-929	Residual (600-609, 611-617, 620-626, 630-637) .....	3.3	3.3	3.0
BE50B	930-939	Pregnancy, childbirth and the puerperium .....	3.8	3.6	8.4
BE51	940-949	Diseases of the skin and cellular tissue .....	1.5	1.2	6.5
BE52	950-959	Diseases of the bones and organs of movement .....	0.8	0.8	1.9
BE53	960-969	Congenital malformations .....	1.9	1.9	1.9
BE54	970-979	Certain diseases of early infancy .....	10.4	10.1	16.0
BE55	980-983	Birth injuries, postnatal asphyxia and atelectasis .....	34.6	29.8	115.5
BE56	984-999	Infections of the newborn .....	14.2	12.9	86.5
BE57		Other diseases peculiar to early infancy and immature unqualified .....	2.0	1.5	9.5
BE58		Symptoms, senility and ill-defined conditions .....	18.4	15.4	69.5
BE59		Accidents, poisonings and violence .....	3.8	3.6	7.2
BE60		Motor vehicle accidents .....	58.0	54.7	113.6
BE61		All other accidents except falls .....	13.0	12.2	26.6
BE62		Falls .....	15.1	13.4	44.4
BE63		Suicide .....	14.1	14.3	11.4
BE64		Homicide .....	12.7	12.9	8.4
BE65		Police intervention, execution and operations of war .....	3.0	1.9	22.4
BE66		001-999	0.1	<0.1	0.4
		All causes .....	996.8	974.1	1386.2

TABLE 17. TABULATION OF DEATHS OF RESIDENTS OF NEW JERSEY FOR 1949  
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							55+	Unknown
			Total	Male	Female	Male	Female	Under 1	1-4	5-14	15-24	25-44	45-64				
														Male	Female		
B1	001-128	Infective and parasitic diseases	1803	936	414	285	168	27	57	77	120	475	718	329			
B2	001-008	Tuberculosis of respiratory system	1202	650	259	192	101	2	2	5	79	360	520	224			
B3	010-019	Tuberculosis, other forms	96	35	24	16	21	..	16	6	11	19	33	11			
B4	020-029	Syphilis and its sequelae	219	97	25	62	35	3	..	1	1	36	117	61			
B5	040	Typhoid fever	1	1	..	..	..	..	..	..	..	..	..	..			
B6	043	Cholera	..	..	..	..	..	..	..	..	..	..	..	..			
B7	045-048	Dysentery, all forms	2	1	1	..	1	..	..	..	..	..	2	..			
B8	050, 051	Scarlet fever and streptococcal sore throat	14	5	6	1	2	1	4	1	1	2	4	1			
B9	055	Diphtheria	3	3	..	..	..	..	..	3	..	..	..	..			
B10	057	Whooping cough	7	4	1	2	..	5	2	..	..	..	..	..			
B11	058	Meningococcal infections	20	12	6	1	1	1	4	5	2	1	2	1			
B12	065	Plague	..	..	..	..	..	..	..	..	..	..	..	..			
B13	080	Acute poliomyelitis	121	81	36	3	1	1	14	50	22	30	4	..			
B14	084	Smallpox	..	..	..	..	..	..	..	..	..	..	..	..			
B15	085	Mumps	9	2	6	1	..	1	5	2	..	..	..	..			
B16	100-108	Typhus and other rickettsial diseases	..	..	..	..	..	..	..	..	..	..	..	..			
B17	110-117	Malaria	..	..	..	..	..	..	..	..	..	..	..	..			
B18	140-289	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-133)	109	40	47	7	6	10	10	9	4	26	36	20			
B19	210-239	Neoplasms	8314	4138	3935	221	225	6	59	44	83	676	3610	4036			
B20	240-259	Malignant neoplasms	8321	4059	3834	215	213	2	54	41	75	636	3521	3992			
B21	260	Benign and unspecified neoplasms	193	74	101	6	12	4	5	3	8	40	89	44			
B22	290-299	Allergic, endocrine system, metabolic and nutritional diseases	1293	442	763	26	62	35	10	7	18	76	471	676			
B23	300-329	Diabetes mellitus	1002	308	631	13	50	10	3	8	8	43	300	587			
B24	330-339	Residual (240-245, 250-254, 270-277, 280-289)	291	134	132	13	13	12	35	9	4	10	33	111	89		
B25	340-349	Diseases of the blood and blood-forming organs	142	54	77	8	3	3	7	7	7	13	30	73			
B26	350-359	Anemias	112	41	60	8	8	1	7	5	5	18	22	64			
B27	360-369	Residual (294-299)	30	13	17	2	2	2	..	2	7	8	9	..			
B28	370-379	Mental, psychoneurotic and personality disorders	228	129	72	10	11	4	..	4	5	10	53	78	77		
B29	380-389	Diseases of the nervous system and sense organs	4790	2101	2233	180	171	22	20	24	321	207	1360	3128			
B30	390-394	Vascular lesions affecting central nervous system	4374	1897	2198	193	154	2	2	3	11	133	1216	3008			
B31	840	Nonmeningococcal meningitis	31	27	13	4	..	10	6	6	2	8	14	6			
B32	400-408	Residual (341-345, 360-367, 369-369, 370-389, 390-398)	363	210	124	21	10	10	22	16	19	68	121	112			
B33	400-408	Diseases of the circulatory system	21432	11368	8876	620	668	3	2	34	945	6721	13656				

BUREAU OF VITAL STATISTICS AND ADM.

Code	Description	61	22	27	31	29	8	20	32	26	10	10	12	22	22	208	363	177	7
B24	Rheumatic fever	61	22	27	31	29	8	20	32	26	10	10	12	22	22	208	363	177	7
B25	Chronic rheumatic heart disease	808	347	407	477	407	356	289	1	1	18	18	39	208	363	177	9432	4827	165
B26	Arteriosclerotic and degenerative heart disease	14760	8510	6605	5665	5665	289	1	1	1	1	1	11	488	4827	165	257	1097	2205
B27	Other diseases of heart	464	249	177	177	177	1	1	1	1	1	1	2	103	1097	2205	104	346	186
B28	Hypertension with heart disease	3819	1314	1687	141	177	1	1	1	1	1	1	6	33	33	33	186	1232	538
B29	Hypertension without mention of heart	864	349	261	24	30	1	1	1	1	1	1	24	95	323	538	10	18	18
B30	Residual (450-456, 460-468)	1458	677	712	43	26	1	1	1	1	1	1	6	33	33	186	1232	538	
B31	Diseases of the respiratory system	1234	646	435	92	61	158	74	21	24	21	24	24	95	323	538	10	18	18
B32	Influenza	30	14	15	2	1	1	1	1	1	1	1	6	33	33	186	1232	538	
B33	Pneumonia	809	400	300	66	43	128	42	12	19	60	180	370	88	20	98	113	719	110
B34	Residual (470-473, 510-527)	298	184	94	16	4	19	15	8	4	26	113	813	113	719	110	148	110	49
B35	Diseases of the digestive system	1951	1088	720	73	63	87	31	17	20	258	813	719	110	49	50	148	110	49
B36	Ulcer of stomach and duodenum	307	246	203	14	4	1	1	1	1	1	1	8	21	54	49	108	152	108
B37	Appendicitis	146	90	49	3	4	2	7	8	3	18	108	152	108	152	108	152	108	152
B38	Intestinal obstruction and hernia	304	144	134	10	16	20	7	1	3	18	108	152	108	152	108	152	108	152
B39	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	188	80	69	26	13	59	10	5	10	12	41	51	101	302	41	51	101	302
B40	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	570	300	197	13	10	1	1	1	1	1	1	1	101	302	41	51	101	302
B41	Diseases of the genito-urinary system	436	185	228	7	16	8	7	2	4	56	167	107	56	167	107	548	206	328
B42	Nephritis and nephrosis	1007	545	357	56	49	1	9	9	23	122	206	328	206	328	206	328	206	328
B43	Hyperplasia of prostate	686	312	278	38	37	1	8	7	18	98	206	328	206	328	206	328	206	328
B44	Residual (600-609, 611-617, 620-628, 630-637)	183	100	78	8	10	12	17	1	2	5	24	68	83	83	83	83	83	83
B45	Pregnancy, childbirth and the puerperium	72	55	55	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B46	Diseases of the skin and cellular tissue	40	13	22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B47	Congenital malformations	83	37	51	1	4	6	6	6	6	6	6	6	6	6	6	6	6	6
B48	Birth injuries, postnatal asphyxia and atelectasis	497	223	232	24	18	4	4	4	4	4	4	4	4	4	4	4	4	4
B49	Infections of the newborn	1654	708	582	174	130	1654	679	85	99	233	664	817	881	881	881	881	881	881
B50	Other diseases peculiar to early infancy and immaturely unqualified	679	335	248	58	38	679	6	6	6	6	6	6	6	6	6	6	6	6
B51	Symptoms, senility and ill-defined conditions	880	396	301	97	86	880	8	8	8	8	8	8	8	8	8	8	8	8
B52	Accidents, poisonings and violence	182	82	81	11	8	10	6	6	6	6	6	6	6	6	6	6	6	6
B53	Motor vehicle accidents	2774	1656	819	221	78	68	85	99	233	664	817	881	881	881	881	881	881	881
B54	All other accidents except falls	622	431	121	52	23	41	115	136	159	145	145	145	145	145	145	145	145	145
B55	Falls	722	426	179	84	33	83	52	51	62	148	208	123	208	123	208	123	208	123
B56	Self-suicide	675	322	328	18	12	1	6	4	7	48	152	457	152	457	152	457	152	457
B57	Homicide	607	417	168	17	5	10	6	4	8	34	164	290	164	290	164	290	164	290
B58	Police intervention, execution and operations of war	145	58	28	49	10	1	1	1	1	1	1	1	1	1	1	1	1	1
B59	All causes	47706	24231	19826	2010	1639	2621	414	355	686	3585	15295	24848	2	2	2	2	2	2

Rate per 1,000 Population, 10.0.

July 1, 1949, Estimated Population, 4,788,000. Total Resident Deaths, 47,706.

# NEW JERSEY TUBERCULOSIS - RESPIRATORY SYSTEM FIVE YEAR AVERAGE DEATH RATES 100,000 POPULATION

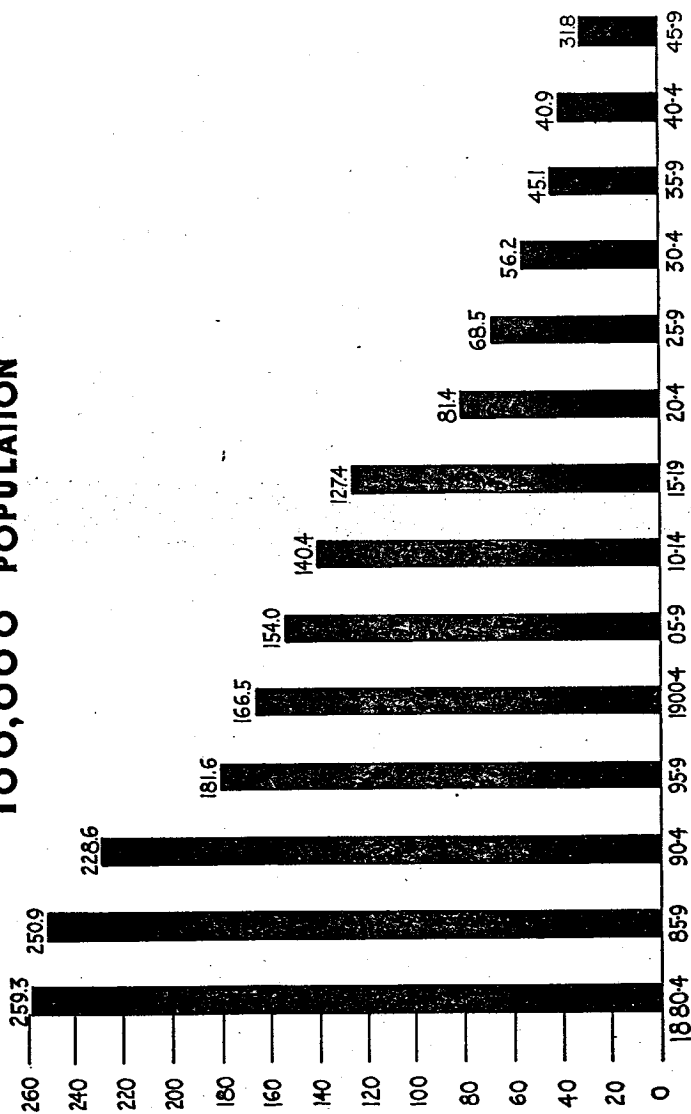


CHART 3





TABLE 16. INFANT DEATHS BY CAUSE AND AGE GROUPS: 1949.—Continued  
(Separated into Those Causes With and Without Public Health Significance)

Showing International List (6th Revision) Numbers	Cause of Death	Total Infant Deaths	Under 1 Day		1 Week but < 1 Mo.		1 Month but < 2 Mo.		2 Months but < 3 Mo.		3 Months and over
			1 Day	< 1 Wk.	1 Week	< 1 Mo.	1 Month	< 2 Mo.	2 Months	< 3 Mo.	
	Infective and parasitic diseases (001-138) .....	27	1	2	2	2	2	2	8	17	3
	Other causes of public health significance .....	163	32	33	24	17	12	12	12	39	8
	Accidental mechanical suffocation in bed or cradle (924)* .....	46	1	1	4	11	8	8	8	22	2
	Asthma (241) .....	2	..	..	..	..	..	..	..	2	2
	Avitaminoses and other metabolic diseases (280-289) .....	2	..	..	..	..	..	..	..	2	2
	Ill-defined diseases of early infancy (772-773) .....	96	26	30	17	6	4	4	4	18	3
	Without immaturity .....	59	14	16	9	4	4	3	3	13	3
	With immaturity .....	37	12	14	8	2	1	1	1	..	..
	Other diseases of early infancy (765-769) .....	17	6	8	3	..	..	..	..	..	..
	Without immaturity .....	5	2	2	3	..	..	..	..	..	..
	With immaturity .....	12	4	6	..	..	..	..	..	..	..
	Total causes without public health significance .....	498	102	101	67	49	28	28	28	151	151
	Congenital malformations and mental deficiencies (325, 750-759) .....	414	97	95	59	40	22	22	22	101	101
	Other causes without public health significance .....	84	5	6	8	9	6	6	6	50	50
	Diseases of the thymus gland (273)* .....	27	..	..	2	5	5	5	5	12	12
	Diseases of the nervous system and sense organs (330-338) .....	22	..	1	3	1	1	1	1	17	17
	Neoplasms (140-239) .....	6	2	..	..	..	..	..	..	3	3
	Diseases of the bone and organs of movement (720-749) .....	6	..	..	..	..	..	..	..	3	3
	Diseases of the circulatory system (400-468) .....	3	..	..	..	..	..	..	..	1	1
	Diseases of the skin and cellular tissue (800-716) .....	2	..	..	..	..	..	..	..	1	1
	Diseases of the genito-urinary system (500-637) .....	1	..	..	1	..	..	..	..	..	..
	Diseases of the adrenal glands (274) .....	4	1	1	..	..	..	..	..	1	1
	Diseases of the blood and blood-forming organs (290-299) .....	3	..	..	..	..	..	..	..	2	2
	Symptoms and ill-defined conditions (780-789, 798) .....	10	2	1	2	2	2	2	2	3	3

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

Note: Diseases in which immaturity was either the only cause or a contributory cause represented a grand total of 1,100 infants. The age distribution was as follows: under 1 day, 661; 1 day but under 1 week, 347; 1 week but under 1 month, 78; 1 month but under 2 months, 8; 2 months but under 3 months, 4; 3 months and over, 2.

In 1949 New Jersey acquired 97,414 live-born babies. During the same year the State lost by death 2,521 infants. This loss occurred at the rate of 26 infant deaths for each 1,000 live births.

In Table 18 the total 2,521 infant deaths are considered in terms of causes with and without public health significance. Four-fifths, or 2,023, of the 2,521 deaths were charged to causes which should be of concern to public health workers. Nearly one-third of the 2,023 infant deaths from causes with public health significance was classified as immaturity unqualified—really no cause at all. However, an additional 438 deaths designated with immaturity had assigned causes. This is a distinct advance in cause assignment made possible through the use of the 6th Revision of the International List.

One-tenth of the deaths assigned to causes which are thought to have public health significance was charged to birth injuries. This is a medical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. New Jersey's medical profession can take justifiable pride in the State's low maternal death rate. In 1949, only 72 mothers died, a rate of seven maternal deaths for each 10,000 live births.

On the other hand, public health workers should be concerned with the 158 deaths which constitute two-thirds of the deaths classified as diseases of the respiratory system. Together with the 78 deaths indicated as pneumonia of the new born, deaths due to diseases of the respiratory system accounted for nearly one-eighth of the deaths considered to have public health significance.

Of the 498 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for more than four-fifths of this group.

In 1949 New Jersey lost 46 infants by accidental mechanical suffocation in bed or cradle and an additional 27 with causes classified as diseases of the thymus gland. Studies have shown that diagnoses in those categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider these deaths from the autopsy record in the hospitals.

If New Jersey's live-born babies die, they experience death early in their brief existence. (Table 18a.)

TABLE 18a. INFANT DEATHS BY AGE AND IMMATURITY: 1949

Time alive	Total		Immature on death certificate		Not designated immature	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total .....	2,521	100.0	1,100	100.0	1,421	100.0
1 day .....	987	39.2	661	60.1	326	22.9
1 week .....	1,681	66.7	1,008	91.6	673	47.4
1 month .....	1,910	75.8	1,086	98.7	824	58.0

Nearly two-fifths of those babies who died in 1949 failed to live beyond the first day of life. Before one week elapsed, two-thirds of the 2,521 babies had died. Before the end of the first month of life—the usually designated neo-natal period—three-fourths of the 2,521 babies had completed their short lives.

The immature babies so designated on their death certificates contributed 1,100 or 44 per cent of the total infant deaths in 1949. Of these 1,100, three-fifths died within the first day of life. The immature babies dying within their first day of life accounted for two-thirds of all infant deaths occurring within the first day of life. Before attaining one week of age, 92 per cent of these 1,100 immature babies had failed to survive. Approximately 99 per cent of the immature babies who died had died before attaining one month of age. This contrasts sharply with the 58 per cent of the mature babies who died during their neo-natal period.

#### PRINCIPAL CAUSES OF DEATH BY AGE GROUPS: 1949

In the selection of causes of death certain groupings were made when the causes were functionally or etiologically related. Although symmetry would demand the inclusion of ten principal causes for each age group such arbitrary selection would, in some instances, place undue emphasis upon the causes at the end of such a list. In the age groups of less than one year and one through four years the numerical totals of causes of death at the end of the lists become so nearly alike that one cannot truly rank one above the other.

An attempt has been made to include in each age group, where the numbers are meaningful, the same ten principal causes of death which affected the total population regardless of age. Exceptions were made to this policy when the numbers of deaths from such causes were so small that one could not justify listing them as principal causes of death for that particular age group. This was the case in the age groups one through four and fifteen through twenty-four.

There were two deaths in which the age was unknown.

As yet time has not permitted the ranking of causes of death by sex within age groups. In some instances this may cause a marked change in rank. Of particular importance in this respect is the tenth cause (complications of pregnancy, etc.) in the age group fifteen through twenty-four years. Since this cause is restricted to females any ranking of causes by sex in this group would undoubtedly advance this cause to fifth or sixth place.

An examination of the causes of death affecting persons forty-five years of age and over clearly indicates what segments of the population are responsible for the cause ranking of deaths irrespective of age. It is particularly alarming to note the number of deaths from tuberculosis under forty-five years of age. A total of 500 such deaths occurred. This was 39 per cent of all

tuberculosis deaths. Tuberculosis appeared as a principal cause of death in each age group except in the group under one year. Malignant neoplasms were also one of the chief causes of death in every age group above one year. Although it is possible that some of the deaths in young adults were due to leukemia the numbers are large enough to warrant stressing the need for early diagnosis and treatment.

The occurrence of 34 deaths from suicide by persons under twenty-five and 424 such deaths in persons between twenty-five and sixty-five years of age stresses the importance of having mental health clinics which perhaps could prevent the emotional and economic problems created by these individuals' actions.

When 457 deaths of persons sixty-five years of age and over are caused by falls, thought must certainly be given to safety measures which could reduce the number of such deaths.

The 45 deaths from drowning for children under fifteen should alert parents to the need for supervised play and bathing.

Careful study of the causes in each age group, with particular reference to those which may be considered to be of a preventable nature, may reveal problems, hitherto unsuspected, which will require all our resources to combat.

## DEPARTMENT OF HEALTH

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;  
NUMBERS AND PERCENTAGES: 1949

ALL AGES

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468) .....	21,432	44.9
2	Malignant neoplasms (140-205) .....	8,321	17.4
3	Vascular lesions (330-334) .....	4,374	9.2
4	Tuberculosis (001-019) .....	1,298	2.7
5	Immaturity unqualified and diseases with immaturity (775-776, 760-774 with 0.5 or more) .....	1,100	2.3
6	Diabetes (260) .....	1,002	2.1
7	Influenza, pneumonia and bronchitis (480-502) .....	936	2.0
8	Falls (900-904) .....	675	1.4
9	Nephritis and nephrosis (590-594) .....	666	1.4
10	Motor vehicle accidents (810-835) .....	622	1.3
	All other .....	7,280	15.3
	Total deaths .....	47,706	100.0

UNDER 1 YEAR

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Immaturity unqualified (774-776) .....	662	26.3
2	Postnatal asphyxia and atelectasis (762) .....	469	18.6
3	Congenital malformations and mental deficiencies (325, 750-759) .....	414	16.4
4	Birth injuries (760-761) .....	210	8.3
5	Pneumonia and pneumonia of the newborn (490-493, 763) .....	204	8.1
6	Gastro-enteritis and colitis; diarrhea of the newborn (570-571, 764) .....	90	3.6
7	Hemolytic disease of the newborn (770) .....	79	3.1
	All other .....	393	15.6
	Total deaths .....	2,521	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;  
NUMBERS AND PERCENTAGES: 1949—Continued

## 1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Influenza, pneumonia and bronchitis (480-502) .....	59	14.3
2	Malignant neoplasms (140-205) .....	54	13.0
3	Congenital malformations and mental deficiencies (325, 750-759) .....	44	10.6
4	Motor vehicle accidents (810-835) .....	23	5.6
5	Fire and explosion of combustible material (816) .....	19	4.6
6	Tuberculosis (001-019) .....	18	4.3
7	Poliomyelitis (080-081) .....	14	3.4
8	Drowning (929) .....	12	2.9
	All other (see text) .....	171	41.3
	Total deaths .....	414	100.0

## 5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Poliomyelitis (080-081) .....	50	14.1
2	Motor vehicle accidents (810-835) .....	41	11.5
3	Malignant neoplasms (140-205) .....	41	11.5
4	Diseases of the circulatory system (400-468) .....	34	9.6
5	Drowning (929) .....	33	9.3
6	Congenital malformations and mental deficiencies (325, 750-759) .....	15	4.2
7	Influenza, pneumonia and bronchitis (480-502) .....	13	3.7
8	Tuberculosis (001-019) .....	11	3.1
9	Appendicitis (550-553) .....	8	2.3
10	Nephritis and nephrosis (590-594) .....	7	2.0
	All other .....	102	28.7
	Total deaths .....	355	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;  
NUMBERS AND PERCENTAGES: 1949—Continued

## 15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Motor vehicle accidents (810-835) .....	115	16.8
2	Tuberculosis (001-019) .....	90	13.1
3	Malignant neoplasms (140-205) .....	75	10.9
4	Diseases of the circulatory system (400-468) .....	71	10.3
5	Suicide (970-979) .....	34	5.0
6	Poliomyelitis (080-081) .....	22	3.2
7	Influenza, pneumonia and bronchitis (480-502) .....	20	2.9
8	Drowning (929) .....	19	2.8
9	Congenital malformations and mental deficiencies (325, 750-759) .....	19	2.8
10	Complications of pregnancy, childbirth and the puerperium (640-689) .....	18	2.6
	All other (see text) .....	203	29.6
	Total deaths .....	686	100.0

## 25-44 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468) .....	945	26.4
2	Malignant neoplasms (140-205) .....	636	17.7
3	Tuberculosis (001-019) .....	379	10.6
4	Suicide (970-979) .....	164	4.6
5	Motor vehicle accidents (810-835) .....	136	3.8
6	Vascular lesions (330-334) .....	133	3.7
7	Cirrhosis of liver (581) .....	101	2.8
8	Nephritis and nephrosis (590-594) .....	98	2.7
9	Influenza, pneumonia and bronchitis (480-502) .....	69	1.9
10	Homicide (980-983) .....	67	1.9
	All other .....	857	23.9
	Total deaths .....	3,585	100.0



TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS;  
NUMBERS AND PERCENTAGES: 1949—Continued

45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468) .....	6,721	44.0
2	Malignant neoplasms (140-205) .....	3,521	23.0
3	Vascular lesions (330-334) .....	1,215	7.9
4	Tuberculosis (001-019) .....	553	3.6
5	Diabetes (260) .....	360	2.4
6	Cirrhosis of the liver (581) .....	302	2.0
7	Suicide (970-979) .....	260	1.7
8	Influenza, pneumonia and bronchitis (480-502) .....	210	1.4
9	Nephritis and nephrosis (590-594) .....	206	1.3
10	Motor vehicle accidents (810-835) .....	159	1.0
	All other .....	1,788	11.7
	Total deaths .....	15,295	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) .....	13,656	54.9
2	Malignant neoplasms (140-205) .....	3,992	16.1
3	Vascular lesions (330-334) .....	3,008	12.1
4	Diabetes (260) .....	587	2.4
5	Falls (900-904) .....	457	1.8
6	Influenza, pneumonia and bronchitis (480-502) .....	426	1.7
7	Nephritis and nephrosis (590-594) .....	328	1.3
8	Tuberculosis (001-019) .....	245	1.0
9	Cirrhosis of liver (581) .....	163	0.7
10	Suicide (970-979) .....	147	0.6
	All other .....	1,839	7.4
	Total deaths .....	24,848	100.0







161. Malignant neoplasm of larynx .....	93	82	8	3	2	38	53
162. Malignant neoplasm of trachea, and of bronchus and lung specified as primary .....	282	237	36	7	1	16	157
163. Malignant neoplasm of lung and bronchus, unspecified as to whether primary or secondary .....	506	392	87	19	8	288	193
164. Malignant neoplasm of mediastinum .....	12	9	3	1	1	2	8
165. Malignant neoplasm of thoracic organs (secondary) .....	802	10	765	37	2	118	376
170. Malignant neoplasm of breast .....	244	207	37	37	1	57	112
171. Malignant neoplasm of cervix uteri .....	31	31	207	37	1	7	74
172. Malignant neoplasm of corpus uteri .....	31	31	207	37	1	2	15
173. Malignant neoplasm of other parts of uterus, including chorionepithelioma .....	3	2	2	1	1	1	14
174. Malignant neoplasm of uterus, unspecified .....	297	244	24	23	2	21	118
175. Malignant neoplasm of ovary, Fallopian tube, and broad ligament .....	290	210	11	11	2	118	128
176. Malignant neoplasm of other and unspecified female genital organs .....	27	25	2	2	2	5	8
177. Malignant neoplasm of prostate .....	349	325	24	24	1	6	14
178. Malignant neoplasm of testis .....	21	21	1	1	1	75	273
179. Malignant neoplasm of other and unspecified male genital organs .....	12	11	1	1	4	6	4
180. Malignant neoplasm of kidney .....	126	70	49	8	5	10	58
181. Malignant neoplasm of bladder and other urinary organs .....	312	212	87	7	1	8	44
190. Malignant melanoma of skin .....	29	14	15	1	1	107	196
191. Other malignant neoplasm of skin .....	76	51	25	9	1	13	7
192. Malignant neoplasm of eye .....	13	9	3	1	1	22	53
193. Malignant neoplasm of brain and other parts of nervous system .....	158	97	60	1	2	4	5
194. Malignant neoplasm of thyroid gland .....	29	21	2	1	8	87	12
195. Malignant neoplasm of other endocrine glands .....	10	6	3	1	2	14	13
196. Malignant neoplasm of bone (including jaw bone) .....	84	49	37	1	1	3	1
197. Malignant neoplasm of connective tissue .....	9	6	1	1	2	3	3
198. Secondary and unspecified malignant neoplasm of lymph nodes .....	30	12	3	1	7	39	33
199. Malignant neoplasm of other and unspecified sites .....	30	17	10	2	1	1	1
200. Lymphosarcoma and reticulosarcoma .....	243	115	10	1	1	24	103
201. Hodgkin's disease .....	189	82	48	6	1	70	114
202. Other forms of lymphoma (reticulososis) .....	88	56	32	1	8	21	34
203. Multiple myeloma (plasmocytoma) .....	37	11	7	5	1	3	24
204. Leukaemia and aleukaemia .....	263	143	110	5	1	28	12
205. Mycosis-fungoides .....	3	2	1	1	20	41	83
210. Benign neoplasm of buccal cavity and pharynx .....	1	1	1	1	1	1	2
211. Benign neoplasm of other parts of digestive system .....	7	5	2	1	1	1	4
212. Benign neoplasm of respiratory system .....	2	1	1	1	1	1	1
213. Benign neoplasm of breast .....	2	1	1	1	1	1	1
214. Uterine fibromyoma .....	27	22	5	5	5	20	2
215. Other benign neoplasm of uterus .....	3	2	2	2	3	6	5
216. Benign neoplasm of ovary .....	13	12	1	1	3	3	2
217. Benign neoplasm of other female genital organs .....	1	1	1	1	1	1	1
218. Benign neoplasm of male genital organs .....	3	2	1	1	1	1	1
219. Benign neoplasm of kidney and other urinary organs .....	3	2	1	1	1	1	1
220. Benign melanoma of skin .....	2	2	1	1	1	1	1
221. Pilonidal cyst .....	2	2	1	1	1	1	1
222. Other benign neoplasm of skin .....	2	2	1	1	1	1	1
223. Benign neoplasm of brain and other parts of nervous system .....	26	12	13	1	1	7	14
224. Benign neoplasm of endocrine glands .....	7	4	3	1	1	6	3
225. Benign neoplasm of bone and cartilage .....	2	2	1	1	1	1	1
226. Lipoma .....	2	2	1	1	1	1	1
227. Other benign neoplasm of muscular and connective tissue .....	3	2	1	1	1	1	1
228. Haemangioma and lymphangioma .....	3	2	1	1	1	1	1











TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1949—Continued

CAUSE OF DEATH	White		Non-white		Age Groups							
	Male		Female		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	Total	Female	Total	Male								
492. Primary atypical pneumonia .....	73	40	27	1	10	2	1	2	8	21	20	..
493. Pneumonia, other and unspecified .....	8	3	4	..	1	1	..	1	..	..	3	..
500. Acute bronchitis .....	20	7	7	3	3	3	..	1	1	6	3	..
501. Bronchitis unqualified .....	31	14	11	2	6	11	1	..	2	3	9	..
602. Chronic bronchitis .....	37	27	8	2	..	..	..	..	..	..	26	..
510. Hypertrophy of tonsils and adenoids .....	7	3	4	..	..	2	2	1	..	..	..	..
511. Peritonsillar abscess (quinsy) .....	..	..	..	..	..	..	..	..	..	..	..	..
512. Chronic pharyngitis and nasopharyngitis .....	..	..	..	..	..	..	..	..	..	..	..	..
513. Chronic sinusitis .....	2	1	1	..	..	..	..	..	2	..	..	..
514. Deflected nasal septum .....	..	..	..	..	..	..	..	..	..	..	..	..
515. Nasal polyp .....	..	..	..	..	..	..	..	..	..	..	..	..
516. Chronic laryngitis .....	..	..	..	..	..	..	..	..	..	..	..	..
517. Other diseases of upper respiratory tract .....	8	4	2	2	2	1	2	..	..	2	1	..
518. Empyema .....	3	3	..	..	..	..	..	..	..	3	..	..
519. Pleurisy .....	12	3	7	1	..	1	1	1	1	6	3	..
520. Spontaneous pneumothorax .....	3	2	1	..	..	..	..	..	..	..	..	..
521. Abscess of lung .....	17	12	3	2	..	..	..	..	..	..	..	..
522. Pulmonary congestion and hypostasis .....	18	8	9	1	..	..	..	..	..	15	4	..
523. Pneumocystis due to silica and silicates (occupational) .....	31	26	2	3	..	..	..	..	..	3	14	..
524. Other specified pneumoconiosis and pulmonary fibrosis of occupational origin .....	2	2	..	..	..	..	..	..	..	2	17	12
525. Other chronic interstitial pneumonia .....	35	24	9	1	1	1	..	..	..	1	1	..
526. Bronchiectasis .....	96	60	33	1	..	..	..	..	..	19	13	..
527. Other diseases of lung and pleural cavity .....	22	16	3	3	2	1	1	2	11	36	44	..
530. Dental caries .....	..	..	..	..	..	..	..	..	..	4	8	8
531. Abscesses of supporting structures of teeth .....	2	1	1	..	..	..	..	..	..	..	..	..
532. Other inflammatory diseases of supporting structures of teeth .....	..	..	..	..	..	..	..	..	..	..	..	..
533. Disorders of occlusion, eruption, and tooth development .....	1	1	..	..	..	..	..	..	..	..	..	..
534. Toothache from unspecified cause .....	1	1	..	..	..	..	..	..	..	..	..	..
535. Other diseases of teeth and supporting structures .....	3	1	2	..	..	..	..	..	2	1	..	..
536. Stomatitis .....	..	..	..	..	..	..	..	..	..	..	..	..
537. Diseases of salivary glands .....	2	1	1	..	..	..	..	..	..	..	..	..
538. Other diseases of buccal cavity .....	3	2	1	..	..	..	..	..	..	1	1	..
539. Diseases of oesophagus .....	10	6	3	1	1	1	..	..	2	4	4	..
540. Ulcer of stomach .....	171	131	26	12	22	22	..	..	31	78	62	..
541. Ulcer of duodenum .....	136	115	17	2	2	2	..	..	19	68	48	..
542. Gastrojejunal ulcer .....	4	4	..	..	..	..	..	..	..	..	..	..
543. Gastritis and duodenitis .....	10	6	2	2	..	..	..	..	1	3	6	..
544. Disorders of function of stomach .....	2	1	1	..	..	..	..	..	..	..	..	..
545. Other diseases of stomach and duodenum .....	3	2	1	1	..	..	..	..	..	..	..	..
550. Acute appendicitis .....	133	84	44	1	2	6	8	..	17	50	42	..
551. Appendicitis unqualified .....	5	2	2	1	..	..	..	..	..	2	2	..
552. Other appendicitis .....	3	3	..	..	..	..	..	..	..	1	1	..
553. Other diseases of appendix .....	5	1	3	1	..	..	..	..	..	3	1	..
500. Hernia of abdominal cavity without mention of obstruction .....	35	18	16	2	8	1	1	1	1	16	14	..



















B31	490-493	Pneumonia	29	13	6	6	4	5	1	1	2	12	9
B32	500-502	Bronchitis	8	4	2	2	2	1	1	1	1	2	4
B33	530-537	Residual (470-475, 510-527)	6	4	4	4	4	1	1	1	1	2	3
B34	540, 541	Diseases of the digestive system	66	38	17	17	7	1	2	2	10	32	21
B35	550-553	Ulcer of stomach and duodenum	14	10	4	4	2	1	1	1	5	2	2
B36	560, 561, 570	Appendicitis	5	2	2	2	2	1	1	1	1	2	1
B37	543, 571, 572	Intestinal obstruction and hernia	12	3	5	5	2	1	1	1	1	6	5
		Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	3	1	1	1	1	1	1	1	1	1	1
	581	Cirrhosis of liver	17	12	4	4	1	1	1	1	2	11	4
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	15	10	4	4	1	1	1	1	7	10	8
B38	590-597	Diseases of the genito-urinary system	34	16	6	6	8	1	1	1	6	10	19
B39	590-594	Nephritis and nephrosis	28	13	4	4	7	4	4	4	6	10	12
B40	610	Hyperplasia of prostate	3	2	4	4	1	1	1	1	1	1	3
B41	640-689	Residual (600-609, 611-617, 620-626, 630-637)	3	1	2	2	1	1	1	1	1	1	1
B42	690-716	Pregnancy, childbirth and the puerperium	2	1	1	1	1	1	1	1	1	1	1
B43	720-749	Diseases of the skin and cellular tissue	2	1	1	1	1	1	1	1	1	1	1
B44	750-759	Diseases of the bones and organs of movement	2	1	2	2	1	1	1	1	1	1	1
B45	760-778	Congenital malformations	17	10	4	4	1	1	1	1	1	1	1
		Certain diseases of early infancy	70	28	23	23	11	14	1	1	1	1	1
		Birth injuries, postnatal asphyxia and atelectasis	25	9	10	10	4	25	2	2	2	2	2
		Infections of the newborn	45	19	13	13	7	45	6	6	6	6	6
		Other diseases peculiar to early infancy and immaturity unqualified	7	3	4	4	1	1	1	1	1	1	1
B46	780-795	Symptoms, senility and ill-defined conditions	94	50	34	34	5	3	3	3	8	27	37
B47	E810-835	Accidents, poisonings and violence	19	16	3	3	1	1	1	1	4	2	5
		Motor vehicle accidents	28	14	5	5	3	1	2	2	5	7	4
BE48A	E840-895	All other accidents except falls	27	8	15	15	2	2	2	2	2	4	21
BE48B	E900-904	Falls	21	11	10	10	1	1	1	1	5	9	6
BE49	E970-979	Suicide	4	1	1	1	1	1	1	1	1	2	1
BE50A	E980-983	Homicide	1813	802	680	680	148	95	9	14	24	04	548
BE50B	E984-999	Police intervention, execution and operations of war	1813	802	680	680	148	95	9	14	24	04	548
	001-999	ALL CAUSES	1813	802	680	680	148	95	9	14	24	04	548

July 1, 1949, Estimated Population, 132,000.

Rate per 1,000 Population, 13.7.

Total Resident Deaths, 1,813.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ATLANTIC CITY FOR 1949  
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
B1	001-138	Infective and parasitic diseases	51	9	18	12	9	18	12	1	1	4	9	25	11	..
B1	001-008	Tuberculosis of respiratory system	20	6	9	9	6	9	6	..	3	7	7	14	5	..
B2	010-019	Tuberculosis, other forms	2	1	1	..	..	..	..	1	..	..	..	..	..	..
B3	020-029	Syphilis and its sequelae	16	1	7	..	2	6	..	..	..	1	9	6	..	..
B4	040	Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B5	043	Sholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B6	045-048	Dysentery, all forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B7	050-051	Scarlet fever and streptococcal sore throat	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B8	053	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B9	058	Whooping cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B10	057	Meningococcal infections	1	..	1	..	..	..	..	..	1	..	..	..	..	..
B11	053	Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B12	058	Acute poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B13	080	Smallpox	1	..	..	..	..	..	..	..	..	..	..	..	..	..
B14	085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B15	100-108	Typhus and other rickettsial diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B16	110-117	Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B17	Residual (080-089, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)		2	1	1	..	..	..	..	..	1	..	..	..	..	..
B18	140-239	Neoplasms	150	53	65	17	13	13	..	..	2	3	6	63	70	..
B19	210-230	Malignant neoplasms	149	54	65	17	13	13	..	..	2	3	6	63	70	..
B20	240-280	Benign and unspecified neoplasms	1	..	..	..	..	..	..	..	..	1	..	..	..	..
B20	260	Allergic, endocrine system, metabolic and nutritional diseases	33	7	17	1	1	8	..	..	..	1	9	21	..	..
B20	280	Diabetes mellitus	28	5	15	1	1	7	..	..	1	1	7	19	..	..
B20	290-299	Residual (240-243, 250-254, 270-277, 280-289)	5	2	2	2	2	1	..	..	..	..	2	2	..	..
B21	290-293	Diseases of the blood and blood-forming organs	2	..	..	..	..	..	..	..	..	..	..	..	..	..
B21	290-293	Anemias	2	..	..	..	..	..	..	..	..	..	..	..	..	..
B21	290-293	Residual (294-299)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B22	300-326	Mental, psychoneurotic and personality disorders	3	1	1	..	..	..	..	..	..	..	..	..	..	..
B22	300-398	Diseases of the nervous system and sense organs	98	49	26	10	13	13	..	..	..	2	33	63	..	..
B23	330-334	Vascular lesions affecting central nervous system	89	44	23	10	12	12	..	..	..	2	30	59	..	..
B23	340	Nonmeningococcal meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B24	400-468	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	9	5	3	..	..	..	..	..	..	..	2	3	..	..
B24	400-402	Diseases of the circulatory system	449	187	151	63	48	48	..	..	1	16	144	288	..	..
B24	400-402	Rheumatic fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B24	400-402	Chronic rheumatic heart disease	10	2	6	..	..	..	..	..	..	..	2	1	..	..
B25	410-416	Arterio-sclerotic and degenerative heart disease	201	134	98	38	26	26	..	..	1	9	98	184	..	..
B26	420-422	Other diseases of heart	33	19	9	2	3	3	..	..	..	3	17	16	..	..
B27	430-434	Hypertension with heart disease	73	22	10	13	13	13	..	..	..	8	18	52	..	..
B28	440-443	Hypertension without mention of heart	17	5	4	6	2	2	..	..	..	1	8	8	..	..
B29	444-447	Residual (450-456, 460-468)	23	5	11	5	4	4	..	..	..	2	2	22	..	..
B29	470-527	Diseases of the respiratory system	27	6	8	7	6	6	..	..	1	1	2	8	15	..
B30	480-483	Influenza	3	..	..	..	..	..	..	..	..	..	..	1	..	..

B31	490-493	Pneumonia	17	4	5	6	2	1	1	7	9
B32	500-502	Bronchitis	4	1	1	2	2	1	1	2	2
		Residual (470-475, 510-527)	3	1	1	1	1	1	1	2	2
B33	530-537	Diseases of the digestive system	40	21	8	4	7	2	7	19	12
B34	540, 541	Ulcer of stomach and duodenum	9	6	1	1	1	1	4	4	1
B35	530-533	Appendicitis	2	2	2	2	2	1	1	1	4
B36	560, 561, 570	Intestinal obstruction and hernia	8	2	2	2	2	1	1	4	4
B37	543, 571, 572	Jartritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	2	1	2	1	1	1	1	1	1
	581	Cirrhosis of liver	10	7	2	1	1	1	2	7	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	5	3	3	1	1	1	8	5
B38	590-637	Diseases of the genito-urinary system	19	5	3	8	3	1	4	7	8
B39	590-594	Nephritis and nephrosis	16	4	2	7	3	1	3	7	6
	610	Hyperplasia of prostate	2	1	1	1	1	1	1	2	2
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	1	1	1	1	1	1	1	1	1
	690-716	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1
	720-749	Diseases of the skin and cellular tissue	2	2	2	2	2	1	1	1	1
B41	750-759	Congenital malformations	11	6	2	11	2	9	1	1	1
B42	760-776	Diseases of early infancy	45	14	14	11	6	45	1	1	1
B43	760-762	Certain diseases of early infancy	16	5	6	4	4	1	1	1	1
B44	763-768	Birth injuries, postnatal asphyxia and atelectasis	16	5	6	4	1	16	1	1	1
	769-776	Infections of the newborn	20	9	8	7	5	29	1	1	1
B45	780-795	Other diseases peculiar to early infancy and immaturity unqualified	44	21	16	4	3	1	4	14	16
BE47	E800-999	Symptoms, senility and ill-defined conditions	6	5	1	1	1	1	1	1	1
	E810-825	Accidents, poisonings and violence	8	4	2	2	2	1	3	3	2
BE48A	E800-802	Motor vehicle accidents	16	6	7	2	1	1	2	3	11
BE48A	E840-895	All other accidents except falls	11	6	5	1	2	1	4	5	2
BE48B	E810-869	Falls	3	1	1	1	2	1	1	1	1
BE49	E800-904	Suicide	8	3	1	1	2	1	1	1	1
BE50A	E870-979	Homicide	975	385	323	144	123	55	4	5	513
BE50B	E880-888	Police intervention, execution and operations of war	385	323	144	123	55	4	5	16	513
	E984-999	ALL CAUSES	975	385	323	144	123	55	4	5	513

July 1, 1949, Estimated Population, 62,000.

Total Resident Deaths, 975.

Rate per 1,000 Population, 15.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BERGEN COUNTY FOR 1949  
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown	
																Male
B1	001-133	Infective and parasitic diseases	121	69	54	8	10	7	10	33	41	22				
B2	001-008	Tuberculosis of respiratory system	69	39	20	5	5	5	5	21	27	16				
B3	010-019	Tuberculosis other forms	3	1	1	1	1	1	1	1	1	1				
B4	020-029	Syphilis and its sequelae	18	12	2	2	2	1	1	4	9	5				
B5	040	Typhoid fever														
B6	043	Sholera														
B7	045-048	Dysentery, all forms														
B8	050, 051	Scarlet fever and streptococcal sore throat	1	1												
B9	055	Diphtheria	3	3												
B10	056	Whooping cough	1	1												
B11	057	Meningococcal infections	1	1												
B12	058	Plague														
B13	060	Acute poliomyelitis	18	10	8	8	8	2	7	3	6					
B14	065	Smallpox														
B15	100-108	Measles														
B16	110-117	Typhus and other rickettsial diseases														
B17		Malaria														
B18	140-239	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-086, 120-138)	8	3	3	3	2									
B19	140-205	Neoplasms	842	425	401	10	6	1	6	6	8	1	5	1		
B20	210-239	Malignant neoplasms	820	417	387	10	6	1	6	6	8	1	5	1		
B21	240-289	Benign and unspecified neoplasms	22	8	14											
B22	260	Allergic, endocrine system, metabolic and nutritional diseases	107	34	68	1	4	1	1	1	6	42	52			
B23	290-299	Diabetes mellitus	78	23	52	1	3	1	1	1	4	27	46			
B24	290-293	Diseases of the blood and blood-forming organs	29	11	16	1	1	1	1	1	2	13	6			
B25	300-308	Anemias	12	3	9											
B26	300-326	Residual (294-296)	11	2	9											
B27	330-338	Mental psychoneurotic and personality disorders	1	1												
B28	330-334	Diseases of the nervous system and sense organs	15	7	7											
B29	340	Vascular lesions affecting central nervous system	470	203	252	5	5	1	3	3	2	6	6			
B30	400-468	Nonmeningococcal meningitis	487	186	241	5	5	1	1	1	1	24	120	316		
B31		Residual (341-345, 350-357, 360-368, 370-389, 390-398)	3	3												
B32	400-402	Diseases of the circulatory system	30	19	11											
B33	400-402	Chronic rheumatic fever	1919	1038	884	25	22	1	1	2	11	9	7			
B34	410-416	Arterio-sclerotic and degenerative heart disease	6	3	3											
B35	420-422	Other diseases of heart	86	43	42	1	1	1	1	1	1	1	1			
B36	430-434	Hypertension with heart disease	1347	784	538	14	11	1	1	8	21	39	23			
B37	440-443	Hypertension without mention of heart	21	9	11											
B38	444-447	Residual (450-456, 460-468)	251	103	134	6	8	1	1	45	43	872				
B39		Diseases of the respiratory system	53	23	27	4	1	1	1	3	79	169				
B40	470-527	Influenza	135	71	79	4	1	1	1	6	13	33				
B41	480-483		95	55	38	2	2	1	1	5	18	133				
B42			2	1	1					6	6	1	2	5	22	53

B31	490-493	Pneumonia	59	30	28	1	1	6	2	1	2	3	12	33
B32	500-502	bronchitis (residual) (470-475, 510-527)	25	7	1	1	1	1	2	1	1	1	1	5
B33	530-537	Diseases of the digestive system	9	17	8	1	1	1	1	1	1	1	8	15
B34	540-541	Ulcer of stomach and duodenum	174	102	68	3	1	3	2	3	2	21	76	67
B35	550-553	Appendicitis	29	24	4	1	1	1	1	1	1	3	17	9
B36	560, 561, 570	intestinal obstruction and hernia	5	4	1	1	1	1	1	1	1	1	4	1
B36	543, 571, 572	Jacchia, duodenitis, enteritis and colitis, except diarrhoea of newborn	25	13	10	1	1	2	1	1	1	2	8	13
B37	581	Cirrhosis of liver	9	4	5	1	1	1	2	1	1	1	1	3
B37	582-587	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	70	45	24	1	1	1	1	1	1	11	31	26
B38	590-597	Diseases of the genito-urinary system	36	12	24	1	1	1	1	1	1	4	15	15
B38	590-594	Nephritis and nephrosis	102	61	39	1	1	1	1	1	1	15	22	63
B39	610	Glyperplasia of prostate	71	37	32	1	1	2	1	1	1	12	18	40
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	14	14	14	1	1	1	1	1	1	1	1	13
B40	690-716	Pregnancy, childbirth and the puerperium	17	10	7	1	1	1	1	1	1	3	3	10
B41	720-749	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1	2
B41	750-759	Diseases of the bones and organs of movement	5	2	3	1	1	1	1	1	1	1	1	3
B42	760-762	Congenital malformations	3	2	1	1	1	1	1	1	1	1	1	1
B43	763-768	Certain diseases of early infancy	58	28	23	1	1	48	6	2	1	1	1	3
B44	769-776	Birth injuries, postnatal asphyxia and atelectasis	140	80	53	2	5	140	6	2	1	1	1	1
B45	780-795	Infections of the newborn	59	37	17	2	3	59	3	1	1	1	1	1
B45	800-809	Other diseases peculiar to early infancy and immaturely unqualified	15	6	8	1	1	15	1	1	1	1	1	1
BE47	810-815	Symptoms, senility and ill-defined conditions	68	37	28	1	1	68	1	1	1	1	1	15
BE48A	820-825	Accidents, poisonings and violence	197	10	10	6	6	6	8	6	18	36	64	64
BE48B	830-835	Motor vehicle accidents	33	26	7	7	7	33	3	3	6	3	12	9
BE49	840-845	All other accidents except falls	54	36	13	5	5	54	3	2	7	7	21	9
BE50A	850-855	Falls	51	18	33	1	1	51	1	1	1	3	11	36
BE50B	860-865	Sticide	54	38	16	1	1	54	4	4	21	19	10	10
BE50C	870-875	Police intervention, execution and operations of war	5	4	1	1	1	5	1	1	1	2	1	1
BE50D	880-885	ALL CAUSES	4278	2242	1917	63	56	213	34	31	52	203	1342	2313

Rate per 1,000 Population, 8.0.

Total Resident Deaths, 4,278.

July 1, 1940, Estimated Population, 532,000.





E31	490-493	Pneumonia	22	12	7	2	1	4	8	1	2	7	5
E32	500-502	Bronchitis	3	4	3	1	1	1	1	1	1	2	3
		Residual (470-475, 510-527)	3	4	1	1	1	1	1	1	1	2	3
E33	530-537	Diseases of the digestive system	39	28	9	1	1	5	1	4	4	11	17
E34	540, 541	Ulcer of stomach and duodenum	0	0	0	1	1	1	1	1	1	3	2
E35	550-553	Appendicitis	3	2	1	1	1	1	1	1	1	1	4
E36	560, 561, 570	Intestinal obstruction and hernia	6	2	4	1	1	1	1	1	1	1	4
E37	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	8	2	4	1	1	1	1	1	1	1	4
	581	Cirrhosis of liver	7	5	1	1	1	4	1	1	1	4	2
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	7	2	1	1	1	1	1	1	4	5
E38	590-637	Diseases of the genito-urinary system	28	14	10	1	1	1	1	1	1	2	5
E39	610	Nephritis and nephrosis	19	8	9	2	2	1	1	1	2	6	10
		Hyperplasia of prostate	3	3	1	1	1	1	1	1	1	4	10
E40	640-659	Residual (600-609, 611-617, 620-626, 630-637)	6	3	1	1	2	1	1	1	1	1	4
		"pregnancy, childbirth and the puerperium	3	3	3	1	1	1	1	1	1	1	4
E41	660-716	Diseases of the skin and cellular tissue	3	1	1	1	1	1	1	1	1	1	2
		Congenital malformations	16	4	11	1	1	16	1	1	1	1	2
E42	720-749	Certain diseases of infancy	50	20	19	7	4	50	1	1	1	1	2
E43	750-759	Birth injuries, postnatal asphyxia and atelectasis	17	8	6	2	4	17	1	1	1	1	2
E44	760-776	Infections of the newborn	4	2	1	1	1	4	1	1	1	1	2
		Other diseases peculiar to early infancy and infancy unqualified	20	10	13	4	2	20	1	1	1	2	5
E45	780-795	Symptoms, senility and ill-defined conditions	5	1	3	1	1	5	1	1	1	2	3
E47	E800-835	Accidents, poisonings and violence	82	43	23	8	8	4	5	8	18	20	19
		Motor vehicle accidents	21	14	7	2	1	2	3	4	4	5	6
BE48A	E840-805	All other accidents except falls	28	9	7	0	0	4	0	2	3	0	4
BE48B	E910-905	Falls	12	4	8	1	1	1	1	1	1	2	7
BE49	E970-979	Stirole	10	15	1	1	1	1	1	1	1	7	7
BE50A	E980-983	Homicide	2	1	1	1	1	1	1	1	1	1	2
BE50B	E984-909	Police intervention, execution and operations of war	1199	601	490	55	53	81	19	17	19	75	370
	001-999	ALL CAUSES	1199	601	490	55	53	81	19	17	19	75	370

July 1, 1949, Estimated Population, 135,000. Total Resident Deaths, 1,199. Rate per 1,000 Population, 8.9.



B31	480-493	Pneumonia	69	37	18	10	4	7	3	2	1	11	15	30	...
B32	500-502	Bronchitis	1	4	4	1	1	2	2	2	2	2	3	8	...
B33	530-537	Residual (470-475, 510-527)	24	12	10	2	2	2	3	3	...	...	11	8	...
B34	540, 541	Diseases of the digestive system	105	54	43	6	2	2	4	1	...	11	45	42	...
B35	550-553	Ulcer of stomach and duodenum	13	10	3	1	...	...	...	...	...	2	9	8	...
B36	500, 501, 570	Appendicitis	2	3	2	...	...	...	...	...	...	1	1	3	...
B36	543, 571, 572	Intestinal obstruction and hernia	22	12	9	1	...	1	3	...	...	2	4	12	...
B37	581	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	10	5	4	1	...	1	1	1	...	...	4	3	...
B37	581	Cirrhosis of liver	25	12	10	2	1	...	...	...	...	5	13	7	...
B37	581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	24	7	15	1	1	...	...	...	...	1	14	9	...
B38	590-637	Diseases of the genito-urinary system	73	34	29	4	6	...	...	1	3	3	21	45	...
B39	610	Nephritis and nephrosis	54	24	23	1	6	...	1	3	2	2	15	33	...
B40	640-689	Hypertrophia of prostate	7	5	...	2	...	...	...	...	...	...	1	6	...
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	12	5	6	1	1	...	...	1	3	1	5	6	...
B41	690-716	Pregnancy, childbirth and the puerperium	4	...	3	...	...	1	...	...	...	...	...	...	...
B41	720-749	Diseases of the skin and cellular tissue	2	...	1	...	...	1	...	...	...	...	...	...	...
B41	750-759	Congenital malformations	8	4	4	...	...	...	...	...	...	...	...	2	...
B42	760-773	Diseases of the bones and organs of movement	37	16	18	2	1	29	8	2	...	3	2	2	...
B42	780-782	Certain diseases of early infancy	80	45	20	11	4	89	20	...	...	1	2	...	...
B43	793-798	Birth injuries, postnatal asphyxia and atelectasis	49	23	17	7	2	49	...	...	...	...	...	...	...
B44	798-776	Infections of the newborn	4	1	2	...	...	4	...	...	...	...	...	...	...
B45	780-785	Other diseases peculiar to early infancy and immaturity unqualified	36	21	10	4	1	36	1	...	...	...	...	...	...
B45	780-785	Symptoms, senility and ill-defined conditions	14	7	5	1	1	...	...	...	...	...	...	...	...
BE47	8300-839	Accidents, poisonings and violence	195	111	70	10	4	7	10	8	2	2	4	5	...
BE47	8310-835	Motor vehicle accidents	55	37	14	2	2	1	4	3	10	12	10	9	...
BE48A	8340-836	All other accidents except falls	37	21	11	3	2	5	3	2	5	9	8	5	...
BE48B	8310-935	Falls	44	15	28	1	...	...	...	1	...	3	12	23	...
BE49	8900-904	Suicide	36	23	11	2	...	...	...	...	2	15	10	8	1
BE50A	8970-979	Homicide	23	15	6	2	...	...	...	3	2	10	3	3	...
BE50B	8984-989	Police intervention, execution and operations of war	...	...	...	...	...	...	...	...	...	...	...	...	...
001-999	ALL CAUSES		3114	1544	1908	152	110	148	35	26	47	248	896	1613	1

July 1, 1949, Estimated Population, 298,000. Total Resident Deaths, 3,114. Rate per 1,000 Population, 10.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAMDEN CITY FOR 1949  
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Male	Female	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-138	Infective and parasitic diseases	74	37	14	14	9	2	6	18	25	21	65+	Unknown	
B2	001-008	Tuberculosis of respiratory system	54	29	10	10	5	2	5	15	22	12			
B3	010-019	Tuberculosis, other forms	6	2	1	1	2	1	1						
B4	020-029	Syphilis and its sequelae	8	4	3	3	1	1							
B5	040	Typhoid fever													
B6	043	Cholera													
B7	045-048	Dysentery, all forms													
B8	050, 051	Scarlet fever and streptococcal sore throat													
B9	055	Diphtheria													
B10	056	Whooping cough													
B11	057	Meningococcal infections													
B12	058	Plague	1	1											
B13	080	Acute poliomyelitis													
B14	084	Smallpox													
B15	085	Measles													
B16	100-108	Typhus and other rickettsial diseases													
B17	110-117	Malaria													
		Residual (080-089, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-135)	5	1	3	3	1	1							
B18	140-209	Neoplasms	244	112	110	12	10	1	1	3	20	101	121	1	
B19	210-239	Malignant neoplasms	238	110	108	11	9	1	1	1	1	20	99	118	
		Benign and unspecified neoplasms	6	2	2	1	1	1							
		Allergic, endocrine system, metabolic and nutritional diseases													
B20	280	Diabetes mellitus	46	18	25	2	1	1	1	1	1	25	18		
		Residual (240-245, 250-254, 270-277, 280-289)	38	13	23	1	1	1	1	1	1	18	17		
B21	280-289	Diseases of the blood and blood-forming organs	8	5	2	1	1	1							
		Anemias	2	1	1	1	1	1							
		Residual (294-299)	2	1	1	1	1	1							
B22	300-326	Mental, psychoneurotic and personality disorders	1	1	1	1	1	1							
B23	330-398	Diseases of the nervous system and sense organs	136	51	64	11	10	1	2	1	9	43	80		
		Vascular lesions affecting central nervous system	124	44	61	10	9	1	1	1	6	40	77		
		Nonmeningococcal meningitis	3	1	1	1	1	1							
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	9	6	2	1	2	1	1	1	1	2	3	3	
B24	400-468	Diseases of the circulatory system	592	291	221	45	35	2	2	3	36	206	345		
B25	400-402	Chronic rheumatic heart disease	2												
B26	410-416	Arteriosclerotic and degenerative heart disease	28	9	17	1	2	1	1	1	5	12	8		
B27	420-422	Other diseases of heart	377	202	138	20	17	1	1	2	23	144	270		
B28	430-434	Hypertension with heart disease	14	5	8	1	1	1							
B29	444-447	Hypertension without mention of heart disease	119	46	52	8	13	3	3	3	4	34	81		
		Residual (450-456, 460-468)	12	7	3	3	2	1	1	1	1	3	6		
B30	470-527	Diseases of the respiratory system	40	22	13	13	4	3	3	3	3	8	23		
		Influenza	48	22	11	11	4	2	3	1	7	17	18		
		Residual	3	1	2	2	1	1	1	1	1	2	2		

B31	490-493	Pneumonia	32	14	6	8	4	2	1	7	10	12
B32	500-502	Bronchitis	3	2	..	1	..	..	..	..	1	..
		Residual (470-476, 510-527)	10	5	3	2	..	..	..	..	8	4
B33	530-537	Diseases of the digestive system	48	30	12	4	2	1	4	4	27	13
B34	540, 541	Ulcer of stomach and duodenum	12	11	..	1	..	..	1	1	7	4
B35	550-553	Appendicitis	..	..	1	..	..	..	..	..	1	..
B36	560, 561, 570	Intestinal obstruction and hernia	4	3	1	..	..	..	..	..	1	3
	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	5	3	1	1	..	1	..	2	2	1
B37	581	Cirrhosis of liver	15	7	6	1	1	..	..	2	7	6
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	11	6	3	1	1	..	..	1	9	1
R38	590-637	Diseases of the genito-urinary system	31	10	12	3	6	..	1	1	10	17
R39	610	Nephritis and nephrosis	21	6	8	1	0	..	1	1	7	10
		Hyperplasia of prostate	3	2	..	1	..	..	..	..	..	8
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	7	2	4	1	..	..	..	..	3	4
		Pregnancy, childbirth and the puerperium	3	..	2	..	1	..	1	2	1	..
		Diseases of the skin and cellular tissue	2	..	1	..	1	..	..	3	1	..
B41	720-749	Diseases of the bones and organs of movement	4	2	2	..	..	..	..	..	2	1
		Congenital malformations	17	5	9	2	1	14	1	..	..	..
B42	760-776	Certain diseases of early infancy	39	14	13	10	2	39	..	..	..	..
B43	780-792	Birth injuries, postnatal asphyxia and atelectasis	24	7	9	6	2	23	..	..	..	..
B44	793-798	Infections of the newborn	..	..	..	..	..	..	..	..	..	..
		Other diseases peculiar to early infancy and immaturity unqualified	15	7	4	4	..	15	..	..	..	..
B45	780-795	Symptoms, senility and ill-defined conditions	8	5	1	1	1	..	..	2	1	4
RE47	ES10-835	Accidents, poisonings and violence	98	50	38	7	3	7	4	6	23	33
		Motor vehicle accidents	24	15	5	2	2	2	1	3	6	6
BE48A	ES10-965	All other accidents except falls	19	9	7	2	1	2	1	1	4	5
BE48B	E900-904	Falls	25	7	17	1	..	..	1	..	6	17
BE49	E970-979	Suicide	15	9	5	1	1	..	1	6	3	5
BE50A	E990-983	Homicide	15	10	4	1	1	3	1	1	6	2
BE50B	E984-999	Police intervention, execution and operations of war	..	..	..	..	..	..	..	..	..	..
	001-999	ALL CAUSES	1395	649	537	123	86	63	17	10	23	490

Rate per 1,000 Population, 11.3.

Total Resident Deaths, 1,395.

July 1, 1949, Estimated Population, 123,000.



B31	400-403	Pneumonia	4	1	1	1	1	1	1	1	1	1	1	2
B32	500-502	Bronchitis	2	2	2	2	2	2	2	2	2	2	2	1
B33	580-587	Residual (470-475, 510-527)	2	2	2	2	2	2	2	2	2	2	2	1
B34	540, 541	Diseases of the digestive system	15	6	8	1	1	1	1	1	1	1	1	3
B35	550-553	Ulcer of stomach and duodenum	1	1	1	1	1	1	1	1	1	1	1	1
B36	500, 501, 570	Appendicitis	4	1	2	1	1	1	1	1	1	1	1	1
B37	543, 571, 572	Intestinal obstruction and hernia	2	1	2	1	1	1	1	1	1	1	1	1
		Jasiritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	2	1	2	1	1	1	1	1	1	1	1	1
	581	Cirrhosis of liver	2	1	2	1	1	1	1	1	1	1	1	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	2	2	2	2	2	2	2	2	1
B38	590-637	Diseases of the genito-urinary system	8	3	3	1	1	1	1	1	1	1	1	6
B39	590-594	Nephritis and nephrosis	7	2	2	1	1	1	1	1	1	1	1	4
B40	610	Gonorrhoea of prostate	1	1	1	1	1	1	1	1	1	1	1	1
		Residual (600-609, 611-617, 620-626, 630-637)	4	1	1	1	1	1	1	1	1	1	1	1
B41	640-689	Pregnancy, childbirth and the puerperium	2	1	2	1	1	1	1	1	1	1	1	1
	690-716	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1	1
	720-749	Diseases of the bones and organs of movement	1	1	1	1	1	1	1	1	1	1	1	1
	750-759	Congenital malformations	1	1	1	1	1	1	1	1	1	1	1	1
B42	700-776	Communicable diseases of early infancy	17	8	6	2	2	2	2	2	2	2	2	1
B43	700-762	Birth injuries, postnatal asphyxia and atelectasis	10	6	2	1	1	1	1	1	1	1	1	1
B44	703-768	Infections of the newborn	10	6	2	1	1	1	1	1	1	1	1	1
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	7	2	4	1	1	1	1	1	1	1	1	1
B45	780-795	Symptoms, senility and ill-defined conditions	6	4	1	1	1	1	1	1	1	1	1	6
BE47	B800-909	Accidents, poisonings and violence	24	10	6	1	1	1	1	1	1	1	1	10
BE48A	B810-835	Motor vehicle accidents	8	4	2	1	1	1	1	1	1	1	1	2
BE48B	B840-896	All other accidents except falls	7	6	1	1	1	1	1	1	1	1	1	2
BE49	B900-904	Falls	5	3	2	1	1	1	1	1	1	1	1	1
BE50A	B970-979	Suicide	4	3	1	1	1	1	1	1	1	1	1	1
BE50B	B980-983	Homicide	5	3	2	1	1	1	1	1	1	1	1	1
BE50B	001-999	Police intervention, execution and operations of war	512	251	209	26	26	26	26	26	26	26	26	308

July 1, 1949, Estimated Population, 36,000.

Total Resident Deaths, 512.

Rate per 1,000 Population, 14.2.





B31	490-493	Pneumonia	11	4	5	1	2	1	1	21	7
B32	500-502	Bronchitis	6	1	1	1	1	1	1	2	1
		Residual (470-475, 530-527)	4	1	1	1	1	1	1	2	1
B33	530-537	Diseases of the digestive system	10	1	1	1	1	1	1	2	4
B34	540, 541	Ulcer of stomach and duodenum	27	9	3	3	2	2	2	14	4
B35	550-553	Appendicitis	8	5	3	1	1	1	1	6	6
B36	560, 561, 570	Intestinal obstruction and hernia	3	1	1	1	1	1	1	2	2
B37	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	7	2	3	3	2	2	2	2	1
	581	Cirrhosis of liver	6	2	3	1	2	2	2	2	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	1	2	2	2	3	1
B38	590-537	Diseases of the genito-urinary system	3	1	2	1	1	1	1	1	2
B39	590-594	Nephritis and nephrosis	14	14	2	1	1	1	1	2	1
B40	610	Hyperplasia of prostate	25	10	14	1	1	1	1	3	23
		Residual (600-608, 611-617, 620-626, 630-637)	2	2	2	1	1	1	1	3	2
B41	640-689	Pregnancy, childbirth and the puerperium	4	2	2	1	1	1	1	1	3
		Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1
B42	690-716	Diseases of the bones and organs of movement	11	5	3	1	1	1	1	1	1
B43	720-749	Congenital malformations	31	13	2	4	1	1	1	1	1
B44	750-776	Certain diseases of early infancy	10	4	5	1	1	1	1	1	1
		Birth injuries, postnatal asphyxia and atelectasis	10	4	5	1	1	1	1	1	1
		Infections of the newborn	2	1	1	1	1	1	1	1	1
		Other diseases peculiar to early infancy and immaturity unqualified	19	8	1	2	10	1	1	1	1
B45	780-795	Symptoms, senility and ill-defined conditions	9	3	4	2	1	1	1	1	7
BE47	E800-809	Accidents, poisonings and violence	63	38	13	8	4	5	7	19	21
		Motor vehicle accidents	25	18	3	3	1	3	4	11	15
BE48A	E840-895	All other accidents except falls	17	7	5	4	1	2	2	5	8
BE48B	E900-904	Falls	10	4	4	1	1	1	1	2	7
BE49	E970-979	Suicide	8	1	1	1	1	1	1	2	6
BE50A	E980-983	Homicide	8	1	1	1	1	1	1	1	1
BE50B	E984-999	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1
		ALL CAUSES	962	470	388	63	12	7	10	65	255
	001-999	ALL CAUSES	962	470	388	63	12	7	10	65	255

July 1, 1949, Estimated Population, 88,000.

Total Resident Deaths, 962.

Rate per 1,000 Population, 10.9.



B31	490-493	Pneumonia	135	54	51	13	17	9	3	1	7	80	64
B32	500-502	Bronchitis	15	5	5	2	3	4	4	1	1	4	5
		Residual (470-475, 510-527)	73	47	17	7	2	5	4	1	11	27	22
B33	530-587	Diseases of the digestive system	441	246	155	20	20	6	5	3	64	190	158
B34	540-541	Ulcer of stomach and duodenum	78	61	12	5	1	1	1	1	14	39	24
B35	550-555	Appendicitis	33	21	10	1	1	2	3	1	3	13	11
B36	560, 561, 570	Intestinal obstruction and hernia	61	29	26	1	5	3	1	1	5	20	32
B37	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	39	13	14	7	5	4	2	1	3	11	9
	581	Cirrhosis of liver	131	79	45	5	2	1	1	1	25	68	37
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	99	43	48	1	7	1	1	1	14	39	45
B38	590-637	Diseases of the genito-urinary system	181	95	61	12	13	1	1	5	22	57	95
B39	590-594	Nephritis and nephrosis	112	49	50	7	6	1	1	5	16	37	52
	610	Hyperplasia of prostate	33	31	1	1	1	1	1	1	1	3	30
B40	640-639	Residual (600-609, 611-617, 620-626, 630-637)	36	15	11	3	7	1	1	1	6	17	13
	690-716	Pregnancy, childbirth and the puerperium	16	2	11	1	6	1	1	4	2	4	5
B41	720-749	Diseases of the skin and cellular tissue	21	7	7	1	1	1	1	1	2	8	9
	750-759	Congenital malformations	86	38	39	6	3	8	2	3	1	2	1
B42	760-762	Certain diseases of early infancy	322	115	96	61	50	8	2	3	1	2	1
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis	112	46	41	13	12	112	41	13	12	112	41
B44	769-776	Infections of the newborn	20	4	7	7	2	20	4	1	1	1	1
		Other diseases peculiar to early infancy and immaturely unqualified	190	65	48	41	36	190	48	1	1	1	1
B45	780-795	Symptoms, senility and ill-defined conditions	18	8	8	1	1	1	1	1	1	1	1
BE47	E810-835	Accidents, poisonings and violence	518	261	179	65	23	24	15	7	20	105	146
		Motor vehicle accidents	87	48	19	16	4	5	2	4	25	23	28
BE48A	E840-895	All other accidents except falls	119	54	37	18	10	22	9	5	20	32	26
BE48B	E900-904	Falls	157	65	82	7	3	1	1	1	12	28	116
BE49	E970-979	Suicide	120	75	37	6	2	1	1	7	30	54	29
BE50A	E980-983	Homicide	34	9	4	17	4	2	1	4	17	9	2
BE50B	E984-999	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1
001-999		ALL CAUSES	9391	4425	3795	614	557	485	79	59	120	753	3147
													4748

Rate per 1,000 Population, 10.5.

Total Resident Deaths, 9,391.

July 1, 1949, Estimated Population, 896,000.



B81	490-493	Pneumonia	15	4	7	2	1	1	1	2	10
B82	500-502	Tronchitis	1	1	1	1	1	1	1	1	1
	590-587	Diseases of the digestive system	7	4	2	1	1	1	1	1	1
B83	540-541	Ulcer of stomach and duodenum	48	22	21	5	8	8	8	16	23
B84	550-553	Appendicitis	12	8	2	2	1	1	1	5	4
B85	500-501, 570	Intestinal obstruction and hernia	1	1	1	1	1	1	1	1	1
B86	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	1	6	1	1	1	1	1	6
B87	581	Cirrhosis of liver	17	10	3	1	1	1	1	8	8
	582-587	Residual (590-598, 542, 544, 545, 573-578, 580, 582-587)	7	3	4	2	1	1	1	3	6
B88	590-637	Diseases of the genito-urinary system	20	13	4	1	1	1	1	4	9
B89	610	Nephritis and nephrosis	10	6	3	1	1	1	1	4	12
	640-680	Hyperplasia of prostate	5	5	1	1	1	1	1	5	4
B40	690-716	Pregnancy, childbirth and the puerperium	5	2	1	2	1	1	1	1	3
	720-749	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1
B41	750-759	Congenital malformations	8	4	4	1	5	2	1	1	1
B42	760-776	Certain diseases of early infancy	18	5	10	2	18	7	1	1	5
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	7	3	4	1	7	1	1	1	1
B44	763-768	Infections of the newborn	7	3	4	1	7	1	1	1	1
B45	790-795	Other diseases peculiar to early infancy and immaturity unqualified	11	2	6	2	11	1	1	1	8
BE47	800-802	Symptoms, senility and ill-defined conditions	5	2	2	1	1	1	1	1	8
BE48A	800-802	Accidents, poisonings and violence	14	29	27	1	1	2	14	14	30
BE48B	800-802	Motor vehicle accidents	14	6	5	2	1	1	4	4	5
BE49	890-904	All other accidents except falls	10	6	4	1	1	1	1	1	8
BE50A	890-904	Falls	21	5	15	1	1	2	2	5	19
BE50B	890-904	Suicide	15	12	2	1	1	1	5	7	8
BE50C	890-904	Homicide	1	1	1	1	1	1	1	1	1
BE50D	890-904	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1
BE50E	890-904	ALL CAUSES	906	392	437	44	28	7	60	234	548

Rate per 1,000 Population, 11.6.

Total Resident Deaths, 906.

July 1, 1949, Estimated Population, 78,000.



B31	400-493	Pneumonia	7	5	2	1	1	1	1	3	2	1	1
B32	500-502	Bronchitis	1	1	1	1	1	1	1	1	1	1	1
B33	530-537	Residual (470-475, 510-527)	3	9	2	2	2	2	2	2	2	2	2
B34	540, 541	Diseases of the digestive system	13	9	6	1	1	1	1	1	1	1	1
B35	550-553	Ulcer of stomach and duodenum	3	2	1	1	1	1	1	1	1	1	1
B36	560, 561, 570	Appendicitis	2	2	1	1	1	1	1	1	1	1	1
B37	543, 571, 572	Intestinal obstruction and hernia	4	3	1	1	1	1	1	1	1	1	1
B38	581	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	1	1	1	1	1	1	1	1	1	1
B39	582-587	Cirrhosis of liver	4	1	3	1	1	1	1	1	1	1	1
B40	640-689	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	5	4	4	4	4	4	4	4	4	4
B41	690-716	Diseases of the genito-urinary system	1	1	1	1	1	1	1	1	1	1	1
B42	720-749	Nephritis and nephrosis	3	3	3	3	3	3	3	3	3	3	3
B43	750-759	Hyperplasia of prostate	1	1	1	1	1	1	1	1	1	1	1
B44	760-776	Diseases of the skin and cellular tissue	10	10	10	10	10	10	10	10	10	10	10
B45	780-795	Pregnancy, childbirth and the puerperium	3	3	3	3	3	3	3	3	3	3	3
BE47	800-802,	Diseases of the bones and organs of movement	10	10	10	10	10	10	10	10	10	10	10
BE48A	804-806,	Congenital malformations	3	3	3	3	3	3	3	3	3	3	3
BE48B	808-809,	Certain diseases of early infancy	10	10	10	10	10	10	10	10	10	10	10
BE49	810-813	Birth injuries, postnatal asphyxia and atelectasis	6	6	6	6	6	6	6	6	6	6	6
BE50A	814-817	Infectious of the newborn	3	3	3	3	3	3	3	3	3	3	3
BE50B	818-822	Other diseases peculiar to early infancy and immaturity unqualified	10	5	5	5	5	5	5	5	5	5	5
BE50C	823-827	Symptoms, senility and ill-defined conditions	33	21	12	12	12	12	12	12	12	12	12
BE50D	828-833	Accidents, poisonings and violence	4	1	8	8	8	8	8	8	8	8	8
BE50E	834-839	Motor vehicle accidents	9	6	8	8	8	8	8	8	8	8	8
BE50F	840-845	All other accidents except falls	11	6	6	6	6	6	6	6	6	6	6
BE50G	846-849	Falls	9	8	1	1	1	1	1	1	1	1	1
BE50H	850-853	Suicide	1	1	1	1	1	1	1	1	1	1	1
BE50I	854-859	Homicide	1	1	1	1	1	1	1	1	1	1	1
BE50J	860-869	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1
BE50K	870-879	ALL CAUSES	556	293	262	262	262	262	262	262	262	262	262

July 1, 1949, Estimated Population, 59,000. Total Resident Deaths, 556. Rate per 1,000 Population, 9.4.

DEPARTMENT OF HEALTH

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF NEWARK FOR 1949  
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					65+	
									1-4	5-14	15-24	25-44	45-64		
B1	001-138	Infective and parasitic diseases	311	132	39	88	52	4	6	3	31	103	117	47	..
B1	001-008	Tuberculosis of respiratory system	230	105	27	64	34	1	..	..	25	82	84	38	..
B3	010-019	Tuberculosis, other forms	23	6	3	4	10	..	..	..	4	5	7	3	..
B3	020-029	Syphilis and its sequelae	33	8	4	16	5	..	..	..	..	11	18	4	..
B4	040	Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..
B5	043	Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..
B6	045-048	Dysentery, all forms	..	..	..	..	..	..	..	..	..	..	..	..	..
B7	050, 051	Scarlet fever and streptococcal sore throat	4	1	1	1	1	..	..	..	..	1	2	..	..
B8	055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..
B9	056	Whooping cough	..	..	..	..	..	..	..	..	..	..	..	..	..
B10	057	Meningococcal infections	8	2	..	..	1	..	..	..	..	..	..	..	..
B11	058	Plague	..	..	..	..	..	..	..	..	..	..	..	..	..
B12	080	Acute poliomyelitis	7	3	4	..	..	..	..	..	..	..	..	..	..
B13	084	Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..
B14	085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..
B15	100-108	Typhus and other rickettsial diseases	..	..	..	..	..	..	..	..	..	..	..	..	..
B16	110-117	Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..
B17	..	Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	..	..	..	..	..	..	..	..	..	..	..	..	..
B18	140-239	Neoplasms	11	7	..	3	1	..	..	..	..	..	..	..	..
B18	140-205	Malignant neoplasms	838	419	324	41	54	1	5	6	11	76	401	338	2
B19	210-239	Benign and unspecified neoplasms	817	410	315	41	51	..	4	6	9	69	393	336	..
B20	240-289	Allergic, endocrine system, metabolic and nutritional diseases	21	9	9	..	8	..	1	..	2	7	8	2	..
B20	260	Diabetes mellitus	150	44	82	5	19	4	1	1	2	7	64	71	..
B20	290-299	Residual (240-243, 250-254, 270-277, 280-289)	122	30	72	3	17	..	..	..	..	..	..	..	..
B21	290-293	Diseases of the blood and blood-forming organs	28	14	10	2	2	4	1	1	1	2	7	50	65
B21	290-293	Anemias	16	5	8	2	2	2	1	1	1	1	6	2	6
B21	290-293	Residual (294-299)	10	1	6	2	1	1	1	1	1	2	3	7	..
B22	300-326	Mental, psychoneurotic and personality disorders	6	4	2	..	..	..	..	..	..	..	..	..	..
B22	330-398	Diseases of the nervous system and sense organs	42	20	15	3	8	1	1	1	1	1	8	16	15
B23	330-334	Vascular lesions affecting central nervous system	222	171	175	38	88	3	1	3	5	17	158	235	..
B23	340	Nonmeningococcal meningitis	384	153	164	32	35	..	..	..	..	..	..	..	..
B24	400-468	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	8	3	..	..	..	..	..	..	..	..	..	..	..
B24	400-468	Rheumatic fever	35	16	11	6	2	1	1	1	1	3	6	14	7
B24	400-402	Chronic rheumatic heart disease	2171	1077	809	151	184	2	1	2	8	115	756	1280	..
B25	410-416	Arteriosclerotic and degenerative heart disease	6	1	3	2	..	..	..	..	..	..	..	..	..
B26	420-422	Other diseases of heart	79	28	33	12	6	1	1	6	1	6	26	20	11
B27	430-434	Hypertension with heart disease	1447	812	495	76	64	..	..	..	..	..	..	..	..
B28	440-443	Hypertension without mention of heart	33	13	15	2	8	..	..	..	..	..	..	..	..
B29	444-447	Residual (450-456, 460-468)	425	146	181	41	57	..	..	..	..	..	..	..	..
B29	444-447	Diseases of the respiratory system	57	29	21	6	1	..	..	..	..	..	..	..	..
B30	470-527	Residual (450-456, 460-468)	124	48	61	12	8	..	..	..	..	..	..	..	..
B30	480-483	Influenza	114	58	27	13	18	23	9	3	1	11	80	37	..



B31	490-493	Pneumonia	68	28	18	7	15	17	6	1	1	5	17	22
B32	500-502	Bronchitis	5	1	1	2	2	1	1	1	1	5	1	2
		Residual (470-475, 510-527)	41	27	5	2	1	5	3	2	2	6	12	13
B33	530-537	Diseases of the digestive system	244	134	76	15	19	14	6	2	3	39	104	77
B34	540, 541	Ulcer of stomach and duodenum	37	28	9	3	3	1	1	2	1	8	21	7
B35	550-553	Appendicitis	21	19	7	1	1	1	1	2	1	2	9	6
B36	560, 561, 570	Intestinal obstruction and hernia	34	17	11	1	5	3	1	1	1	3	12	15
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	27	9	7	6	5	9	4	1	1	2	6	5
B37	581	Cirrhosis of liver	75	45	25	3	2	1	1	1	1	15	36	23
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	50	23	20	1	6	1	1	1	1	9	20	21
B38	590-637	Diseases of the genito-urinary system	93	45	34	7	7	1	1	1	2	10	37	42
B38	590-594	Nephritis and nephrosis	90	25	27	4	4	1	1	1	2	9	23	24
B39	610	Hypertrophia of prostate	14	12	7	2	2	1	1	1	1	1	2	2
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	19	8	7	1	3	3	1	1	1	1	12	6
		Pregnancy, childbirth and the puerperium	11	1	6	1	6	1	1	1	1	7	12	6
		Diseases of the skin and cellular tissue	10	1	4	1	1	1	1	1	1	1	2	3
		Diseases of the bones and organs of movement	16	5	3	1	1	2	1	1	1	1	2	6
B41	720-749	Congenital malformations	37	18	13	5	5	3	2	1	1	1	6	2
		Certain diseases of early infancy	207	61	48	50	48	207	1	1	1	1	1	1
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	68	24	22	10	12	68	1	1	1	1	1	1
B43	763-768	Infections of the newborn	15	2	4	7	2	15	1	1	1	1	1	1
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	124	35	22	33	34	124	1	1	1	1	1	1
B45	780-785	Symptoms, senility and ill-defined conditions	9	5	3	1	1	9	1	1	1	1	1	1
BE47	E800-899	Accidents, poisonings and violence	284	120	89	55	55	17	10	4	13	62	79	99
		Motor vehicle accidents	46	24	6	13	8	13	4	2	2	13	11	14
BE48A	E840-895,	All other accidents except falls	70	26	21	15	8	15	6	2	6	14	15	15
	E910-995	Falls	81	33	40	5	3	1	1	1	1	1	1	1
BE49	E900-904	Suicide	56	30	19	5	2	1	1	1	1	1	1	1
BE50A	E970-979	Homicide	31	7	3	17	4	2	1	1	1	1	1	1
BE50B	E980-983	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1
001-999	ALL CAUSES		4965	2311	1755	475	424	308	42	33	86	460	1776	2269

July 1, 1949, Estimated Population, 452,000. Total Resident Deaths, 4,965. Rate per 1,000 Population, 11.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF GLOUCESTER COUNTY FOR 1949  
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years					
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown
B1	001-138	Infective and parasitic diseases	27	8	13	4	2	2	1	3	0	0	6	6
B2	001-008	Tuberculosis of respiratory system	17	0	8	2	2	1	2	1	0	0	6	6
B3	010-019	Tuberculosis, other forms	2	1	1	1	1	1	1	1	1	1	1	4
B4	020-029	Syphilis and its sequelae	3	1	1	1	1	1	1	1	1	1	1	2
B5	040	Lymphoid fever	1	1	1	1	1	1	1	1	1	1	1	1
B6	046	Cholera	1	1	1	1	1	1	1	1	1	1	1	1
B7	043-048	Dysentery, all forms	1	1	1	1	1	1	1	1	1	1	1	1
B8	060, 061	Scarlet fever and streptococcal sore throat	1	1	1	1	1	1	1	1	1	1	1	1
B9	065	Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1
B10	066	Whooping cough	1	1	1	1	1	1	1	1	1	1	1	1
B11	087	Meningococcal infections	2	1	1	1	1	1	1	1	1	1	1	1
B12	088	Plague	1	1	1	1	1	1	1	1	1	1	1	1
B13	084	Acute poliomyelitis	1	1	1	1	1	1	1	1	1	1	1	1
B14	085	Smallpox	1	1	1	1	1	1	1	1	1	1	1	1
B15	100-108	Measles	1	1	1	1	1	1	1	1	1	1	1	1
B16	109-117	Typhus and other rickettsial diseases	1	1	1	1	1	1	1	1	1	1	1	1
B17	110-117	Malaria	1	1	1	1	1	1	1	1	1	1	1	1
B18	140-239	Residual (030-039, 041, 042, 044, 049, 052-054, 050-074, 081-083, 086-096, 120-138)	3	1	2	1	2	1	1	1	1	1	1	1
B19	210-239	Neoplasms	132	69	62	5	6	1	1	1	1	1	1	1
B20	240-289	Malignant neoplasms	129	68	61	4	6	1	1	1	1	1	1	1
B21	290-299	Benign and unspecified neoplasms	3	1	1	1	1	1	1	1	1	1	1	1
B22	300-326	Allergic, endocrine system, metabolic and nutritional diseases	29	9	17	2	1	2	2	2	2	2	2	2
B23	330-398	Diabetes mellitus	23	8	14	1	1	1	1	1	1	1	1	1
B24	400-468	Diseases of the blood and blood-forming organs	6	1	3	1	1	2	2	2	2	2	2	2
B25	470-527	Anemias	1	1	1	1	1	1	1	1	1	1	1	1
B26	480-483	Residual (294-299)	1	1	1	1	1	1	1	1	1	1	1	1
B27	300-326	Mental, psychoneurotic and personality disorders	4	3	1	1	1	1	1	1	1	1	1	1
B28	330-398	Diseases of the nervous system and sense organs	82	27	43	5	7	1	1	1	1	1	1	1
B29	400-443	Vascular lesions affecting central nervous system	77	24	42	5	6	1	1	1	1	1	1	1
B30	444-447	Nonmeningococcal meningitis	6	3	3	1	1	1	1	1	1	1	1	1
B31	448-468	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5	3	2	1	1	1	1	1	1	1	1	1
B32	400-402	Rheumatic fever	435	228	164	26	17	1	1	1	1	1	1	1
B33	410-416	Chronic rheumatic heart disease	1	1	1	1	1	1	1	1	1	1	1	1
B34	420-422	Arteriosclerotic and degenerative heart disease	24	11	10	2	2	1	1	1	1	1	1	1
B35	430-434	Other diseases of heart	277	161	91	10	6	1	1	1	1	1	1	1
B36	440-443	Hypertension with heart disease	14	8	6	1	1	1	1	1	1	1	1	1
B37	444-447	Hypertension with heart disease	81	34	37	8	7	1	1	1	1	1	1	1
B38	448-468	Residual (450-456, 460-468)	15	6	8	1	1	1	1	1	1	1	1	1
B39	470-527	Diseases of the respiratory system	23	8	11	2	2	1	1	1	1	1	1	1
B40	480-483	Influenza	28	11	12	3	2	1	1	1	1	1	1	1

B31	490-493	Pneumonia	17	7	8	1	8	1	1	8	2	1	7
B32	500-502	Bronchitis	5	4	3	1	3	1	1	1	1	4	3
B33	530-537	Readjust (470-475, 610-627)	6	20	15	1	15	4	1	1	4	8	1
B34	540-541	Diseases of the digestive system	38	6	8	3	8	4	4	1	1	3	23
B35	550-553	Ulcer of stomach and duodenum	6	2	2	1	2	1	1	1	1	1	5
B36	560, 561, 570	Appendicitis	2	2	4	1	4	1	1	1	2	1	9
B37	580, 571, 572	Intestinal obstruction and hernia	7	1	4	1	4	1	1	1	2	1	9
		Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	7	2	3	1	3	1	1	1	2	1	9
		Cirrhosis of liver	2	4	3	1	3	1	1	1	1	1	9
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	14	6	8	2	8	2	2	1	6	10	1
B38	590-637	Diseases of the genito-urinary system	31	16	8	5	8	1	1	1	6	22	1
B39	640-649	Nephritis and nephrosis	28	14	8	4	8	1	1	2	6	20	1
B40	650-659	Hyperplasia of prostate	1	1	1	1	1	1	1	1	1	1	1
		Residual (600-609, 611-617, 620-626, 630-637)	2	1	1	1	1	1	1	1	1	1	1
B41	640-689	Pregnancy, childbirth and the puerperium	4	1	3	1	3	1	1	1	1	1	1
		Diseases of the skin and cellular tissue	4	1	2	1	2	1	1	1	1	1	1
		Diseases of the bones and organs of movement	7	6	2	2	2	2	2	1	4	4	4
B42	690-716	Congenital malformations	4	1	2	1	2	1	1	1	1	1	4
B43	720-749	Certain diseases of early infancy	28	11	11	4	11	2	2	1	4	1	4
B44	750-776	Birth injuries, postnatal asphyxia and atelectasis	15	7	5	2	5	1	1	1	1	1	1
		Infections of the newborn	2	1	1	1	1	2	1	1	1	1	1
		Other diseases peculiar to early infancy and immaturity unqualified	11	4	5	1	5	1	1	1	2	2	2
B45	780-785	Symptoms, senility and ill-defined conditions	5	5	5	1	5	1	1	5	17	28	1
BE47	ES10-ES35	Accidents, poisonings and violence	72	18	6	2	6	1	1	8	8	5	9
		Motor vehicle accidents	26	18	6	2	6	1	1	8	8	5	9
BE48A	ES40-ES55	All other accidents except falls	20	14	5	1	5	1	1	4	4	2	3
BE48B	ES60-ES85	Falls	12	5	7	1	7	1	1	1	2	1	7
BE49	ES90-904	Suicide	12	11	1	1	1	1	1	1	4	1	9
BE50A	ES95-983	Homicide	2	2	1	1	1	1	1	1	1	1	1
BE50B	ES94-999	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1
		ALL CAUSES	927	463	361	58	361	48	17	10	68	245	527

July 1, 1949, Estimated Population, 91,000. Total Resident Deaths, 927. Rate per 1,000 Population, 10.2.



B31	490-493	Pneumonia	147	83	53	5	4	25	7	3	2	10	36	64
B32	500-502	Bronchitis	4	2	12	1	1	1	2	2	1	4	17	11
		Residual (470-475, 510-527)	35	21	138	7	2	17	3	3	6	59	154	101
B33	530-537	Diseases of the digestive system	343	186	39	10	1	1	1	2	2	11	20	17
B34	540-541	Ulcer of stomach and duodenum	48	39	14	1	1	1	1	1	1	6	11	7
B35	550-553	Appendicitis	30	15	22	1	1	3	2	1	1	4	25	20
B36	560, 561, 570	Intestinal obstruction and hernia	54	31	16	6	1	13	1	1	3	2	9	9
B37	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	86	13	35	1	1	1	1	1	1	28	57	22
	581	Cirrhosis of liver	105	70	41	1	1	1	1	1	1	10	32	26
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	70	29	74	2	8	1	1	1	1	18	52	59
B38	590-637	Diseases of the genito-urinary system	138	74	43	1	8	1	1	1	4	15	34	29
B39	610	Nephritis and nephrosis	83	37	22	1	1	1	1	1	4	15	34	29
		Hyperplasia of prostate	22	21	16	1	1	1	1	1	4	3	14	12
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	33	16	7	1	2	1	1	1	2	7	1	3
		Pregnancy, childbirth and the puerperium	9	4	2	1	1	1	1	1	1	2	5	6
		Diseases of the skin and cellular tissue	6	6	8	1	1	1	1	1	1	3	1	1
B41	690-716	Diseases of the bones and organs of movement	14	6	29	4	1	5	6	3	3	5	1	1
B42	720-749	Congenital malformations	65	29	31	4	1	1	1	1	1	1	1	1
B43	750-759	Certain diseases of early infancy	216	94	17	17	11	216	6	1	1	24	69	122
B44	760-762	Birth injuries, postnatal asphyxia and atelectasis	131	54	61	9	7	131	1	1	1	10	15	12
	763-768	Infections of the newborn	12	8	8	4	1	12	1	1	1	15	12	12
	769-776	Other diseases peculiar to early infancy and infancy unqualified	73	32	29	8	4	73	1	1	1	3	2	6
B45	780-795	Symptoms, senility and ill-defined conditions	12	4	5	3	1	1	1	1	1	3	2	5
BE47	E800-835	Accidents, poisonings and violence	330	229	79	17	5	8	7	10	24	69	122	90
BE48A	E840-895	Motor vehicle accidents	60	49	8	3	1	1	2	5	10	15	15	12
BE48B	E900-904	All other accidents except falls	89	65	19	4	1	6	3	4	8	23	33	12
BE49	E970-979	Falls	92	58	28	2	4	1	2	1	1	7	33	47
BE50A	E980-983	Suicide	66	47	18	1	1	1	1	1	1	13	33	18
BE50B	E984-999	Homicide	22	9	6	7	1	1	1	1	3	11	7	1
		Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1	1
		ALL CAUSES	6960	3763	2920	155	122	330	55	47	106	598	2595	3229

Rate per 1,000 Population, 10.8.

Total Resident Deaths, 6,960.

July 1, 1949, Estimated Population, 642,000.



B31	490-493	Pneumonia	18	8	9	1	8	1	1	1	1	6	7
B32	500-502	Bronchitis	4	3	1	1	1	1	1	1	1	1	1
B33	530-537	Residual (470-475, 510-527)	4	3	1	1	1	1	1	1	1	1	1
B34	540, 541	Diseases of the digestive system	26	11	15	1	1	1	1	1	1	1	1
B35	550-553	Ulcer of stomach and duodenum	4	4	2	1	1	1	1	1	1	1	1
B36	560, 561, 570	Appendicitis	3	1	2	1	1	1	1	1	1	1	1
B37	543, 571, 572	Intestinal obstruction and hernia	3	1	2	1	1	1	1	1	1	1	1
		Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	3	1	2	1	1	1	1	1	1	1	1
	581	Cirrhosis of liver	1	1	1	1	1	1	1	1	1	1	1
		Residual (530-539, 542, 544, 545, 573-578, 680, 582-587)	12	5	7	1	1	1	1	1	1	1	1
B38	590-637	Diseases of the genito-urinary system	3	1	2	1	1	1	1	1	1	1	1
B39	590-594	Nephritis and nephrosis	8	7	1	1	1	1	1	1	1	1	1
	610	Hypertrophy of prostate	6	5	1	1	1	1	1	1	1	1	1
B40	640-689	Residual (600-649, 611-617, 620-629, 630-637)	2	2	1	1	1	1	1	1	1	1	1
	690-716	Pregnancy, childbirth and the puerperium	4	1	3	1	1	1	1	1	1	1	1
	720-749	Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1
B41	750-759	Diseases of the bones and organs of movement	4	2	2	1	1	1	1	1	1	1	1
	760-779	Congenital malformations	7	3	4	1	1	1	1	1	1	1	1
B42	780-779	Certain diseases of early infancy	32	13	17	1	1	1	1	1	1	1	1
B43	700-762	Birth injuries, postnatal asphyxia and atelectasis	14	2	11	1	1	1	1	1	1	1	1
B44	763-768	Infections of the newborn	1	1	1	1	1	1	1	1	1	1	1
	769-776	Other diseases peculiar to early infancy and immaturely unqualified	1	1	1	1	1	1	1	1	1	1	1
B45	790-795	Symptoms, senility and ill-defined conditions	17	11	6	1	1	1	1	1	1	1	1
BE47	8500-989	Accidents, poisonings and violence	1	1	1	1	1	1	1	1	1	1	1
	8510-835	Motor vehicle accidents	35	31	3	1	1	1	1	1	1	1	1
	8500-802,		10	9	1	1	1	1	1	1	1	1	1
BE48A	8540-886,	All other accidents except falls	11	10	1	1	1	1	1	1	1	1	1
BE48B	8540-965	Falls	7	6	1	1	1	1	1	1	1	1	1
BE49	8370-879	Suicide	5	5	1	1	1	1	1	1	1	1	1
BE50A	8380-853	Homicide	2	1	1	1	1	1	1	1	1	1	1
BE50B	8394-969	Police intervention, execution and operations of war	2	1	1	1	1	1	1	1	1	1	1
001-989		ALL CAUSES	708	408	276	14	12	43	11	4	7	65	275
													308

July 1, 1949, Estimated Population, 87,000. Total Resident Deaths, 708. Rate per 1,000 Population, 8.1.





B31	480-493	Pneumonia	0	1	1	8	2	1	1	1	4	1
B32	500-502	Bronchitis	3	2	2	1	1	1	1	1	1	1
B33	500-537	Residual (470-475, 510-527)	4	23	18	1	4	1	1	7	10	1
B34	540, 541	Diseases of the digestive system	5	5	5	1	1	1	1	2	2	4
B35	550-553	Ulcer of stomach and duodenum	5	5	5	1	1	1	1	2	2	4
B36	560, 561, 570	Appendicitis	7	4	3	1	1	1	1	2	2	8
B37	543, 571, 572	Intestinal obstruction and hernia	0	1	1	1	1	1	1	2	1	8
		Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	7	5	1	4	1	1	2	1	1
	581	Cirrhosis of liver	9	3	6	1	1	1	1	2	6	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	15	9	6	1	1	1	1	2	6	1
B38	500-637	Diseases of the genito-urinary system	0	2	4	1	1	1	1	2	6	2
B39	590-594	Nephritis and nephrosis	4	3	2	1	1	1	1	2	5	2
	610	Hyperplasia of prostate	5	4	4	1	1	1	1	2	2	2
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	2	1	2	1	1	1	1	2	8	2
	680-716	Pregnancy, childbirth and the puerperium	3	1	1	1	1	1	1	2	8	2
B41	720-749	Diseases of the skin and cellular tissue	2	1	1	1	1	1	1	2	8	2
	750-759	Diseases of the bones and organs of movement	3	2	1	1	1	1	1	2	1	1
B42	760-776	Congenital malformations	16	9	7	1	1	1	1	8	1	1
B43	780-782	Certain diseases of early infancy	10	6	4	1	1	1	1	16	6	1
B44	783-788	Birth injuries, postnatal asphyxia and atelectasis	1	1	1	1	1	1	1	10	6	1
	768-776	Infections of the newborn	5	2	8	1	1	1	1	1	1	1
		Other diseases peculiar to early infancy and immaturity unqualified	2	1	1	1	1	1	1	5	1	1
B45	780-785	Symptoms, senility and ill-defined conditions	22	18	4	1	1	1	1	2	10	8
BE47	E810-835	Accidents, poisonings and violence	1	1	1	1	1	1	1	1	1	1
BE48A	E800-802	Motor vehicle accidents	2	2	2	1	1	1	1	2	1	1
	E840-805	All other accidents except falls	11	7	4	1	1	1	1	1	1	1
BE48B	E900-904	Falls	4	4	4	1	1	1	1	1	2	6
BE49	E870-974	Suicide	4	4	4	1	1	1	1	1	2	1
BE50A	E880-983	Homicide	4	4	4	1	1	1	1	1	2	1
BE50B	E984-999	Police intervention, execution and operations of war	628	372	253	2	1	1	1	25	5	2
	001-999	ALL CAUSES	628	372	253	2	1	1	1	25	5	2
										83	238	302

Rate per 1,000 Population, 12.6.

Total Resident Deaths, 628.

July 1, 1949, Estimated Population, 50,000.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF JERSEY CITY FOR 1949  
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total		White		Non-white		Age Groups by Years						
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+ Unknown	
															Male
B1	001-138	Infective and parasitic diseases	168	99	37	17	15	1	7	12	11	44	77	16	..
B2	001-008	Tuberculosis of respiratory system	116	75	19	13	9	1	1	3	3	36	63	12	..
B3	010-019	Tuberculosis, other forms	8	4	1	1	2	..	1	1	1	4	..	..	..
B4	020-029	Syphilis and its sequelae	12	6	1	2	3	..	1	1	2	6	8	..	..
B5	040	Typhoid fever	1	1	..	..	..	..	..	..	..	..	..	..	..
B6	043	Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..
B7	045-048	Dysentery, all forms	..	..	..	..	..	..	..	..	..	..	..	..	..
B8	050, 051	Scarlet fever and streptococcal sore throat	1	1	..	..	..	..	..	..	..	..	..	..	..
B9	055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..
B10	058	Whooping cough	..	..	..	..	..	..	..	..	..	..	..	..	..
B11	057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..
B12	068	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..
B13	080	Plague	..	..	..	..	..	..	..	..	..	..	..	..	..
B14	084	Acute poliomyelitis	19	10	7	1	1	..	1	11	5	..	2	..	..
B15	085	Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..
B16	100-108	Measles	3	..	..	..	..	..	..	..	..	..	..	..	..
B17	110-117	Typhus and other rickettsial diseases	..	..	..	..	..	..	..	..	..	..	..	..	..
B18	140-239	Residual (080-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 085-086, 120-133)	7	2	..	..	..	..	..	..	..	..	..	..	..
B19	210-239	Neoplasms	628	314	289	13	12	..	1	1	1	2	3	1	..
B20	240-289	Malignant neoplasms	614	309	281	12	12	..	3	1	6	51	304	263	..
B21	290-299	Benign and unspecified neoplasms	14	5	8	1	..	..	2	1	5	50	298	259	..
B22	300-326	Allergic, endocrine system, metabolic and nutritional diseases	68	19	48	..	..	..	1	1	1	2	27	36	..
B23	330-334	Diabetes mellitus	54	12	41	..	..	..	1	1	1	2	23	30	..
B24	340	Residual (240-245, 250-254, 270-277, 280-289)	14	7	7	..	..	..	1	1	1	2	4	6	..
B25	350-359	Anemias	6	3	3	..	..	..	..	..	..	..	..	..	..
B26	360-369	Residual (294-299)	1	..	..	..	..	..	..	..	..	..	..	..	..
B27	370-379	Mental, psychoneurotic and personality disorders	21	16	4	..	..	..	..	..	..	..	..	..	..
B28	380-388	Diseases of the nervous system and sense organs	849	155	171	15	8	..	2	1	2	10	7	2	..
B29	390-394	Vascular lesions affecting central nervous system	327	144	164	12	12	..	2	1	2	16	133	182	..
B30	400-468	Nonmeningococcal meningitis	9	5	4	..	..	..	2	1	1	13	123	191	..
B31	470-527	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	13	6	3	3	4	..	1	1	2	2	7	1	..
B32	530-539	Diseases of the circulatory system	1453	753	624	35	41	..	1	2	10	81	560	800	..
B33	540-549	Rheumatic fever	5	..	..	..	..	..	..	..	..	..	..	..	..
B34	550-559	Chronic rheumatic heart disease	63	22	39	1	1	..	..	..	..	..	..	..	..
B35	560-569	Arteriosclerotic and degenerative heart disease	1071	603	414	26	28	..	2	7	14	33	7	..	..
B36	570-579	Other diseases of heart	21	13	8	..	..	..	..	..	..	..	..	..	..
B37	580-584	Hypertension with heart disease	205	82	110	6	7	..	..	..	..	..	..	..	..
B38	585-589	Hypertension without mention of heart	30	11	15	1	3	..	..	..	..	..	..	..	..
B39	590-594	Residual (460-466, 460-468)	58	23	35	..	..	..	..	..	..	..	..	..	..
B40	600-609	Diseases of the respiratory system	108	60	39	5	4	..	3	2	7	33	48	..	..
B41	610-619	Influenza	1	1	..	..	..	..	15	3	2	7	8	48	..

B31	490-493	Pneumonia	88	45	30	6	3	14	2	2	6	19	40
B32	500-502	Bronchitis	1	1	9	1	1	1	1	1	1	1	8
B33	530-537	Residual (470-475, 510-527)	23	13	9	7	2	10	1	2	2	13	48
B34	540, 541	Diseases of the digestive system	195	92	64	7	2	10	2	9	27	73	48
B35	550-563	Ulcers of stomach and duodenum	20	15	5	1	1	1	1	1	1	3	4
B36	560, 561, 570	Appendicitis	13	4	8	1	1	2	1	1	3	6	2
B36	543, 571, 572	Intestinal obstruction and hernia	25	16	8	1	1	2	1	1	3	13	10
B37	581	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	19	4	8	6	1	8	2	2	2	4	3
B38	590-657	Cirrhosis of liver	59	41	18	1	1	1	1	1	15	31	13
B39	660-684	Residual (650-659, 642, 544, 545, 573-578, 580, 582-587)	29	12	17	2	3	17	1	1	2	10	18
B40	640-680	Diseases of the genito-urinary system	74	35	34	2	3	34	1	3	9	30	31
B41	720-749	Nephritis and nephrosis	36	12	21	1	1	1	1	1	6	17	11
B42	750-759	Hyperplasia of prostate	14	13	1	1	1	1	1	1	1	3	11
B43	760-776	Residual (600-609, 611-617, 620-628, 630-637)	24	10	13	1	1	1	2	2	3	10	9
B44	780-795	Pregnancy, childbirth and the puerperium	2	1	1	1	1	1	1	1	1	1	1
B45	800-899	Diseases of the skin and cellular tissue	2	1	1	1	1	1	1	1	1	1	1
BE47	900-909	Diseases of the bones and organs of movement	36	2	3	1	1	1	1	1	1	1	2
BE48A	910-965	Congenital malformations	3	1	1	1	1	1	1	1	1	1	2
BE48B	960-970	Certain diseases of early infancy	17	14	4	4	1	28	3	2	3	1	2
BE49	970-979	Birth injuries, postnatal asphyxia and atelectasis	124	46	52	16	10	154	8	2	14	44	64
BE50A	980-983	Infections of the newborn	30	30	8	8	7	81	1	3	6	10	8
BE50B	984-989	Other diseases peculiar to early infancy and immaturity unqualified	8	5	3	3	3	8	1	1	1	1	1
BE50C	990-999	Symptoms, senility and ill-defined conditions	35	11	13	8	8	35	1	1	1	1	1
BE51	1000-1009	Accidents, poisonings and violence	7	1	3	3	3	8	1	1	1	1	1
BE52	1010-1019	Motor vehicle accidents	176	117	41	13	5	8	2	5	14	44	39
BE53	1020-1029	All other accidents except falls	35	24	8	8	8	1	1	3	6	10	8
BE54	1030-1039	Falls	48	33	10	4	1	7	2	4	15	15	5
BE55	1040-1049	Suicide	49	28	15	2	4	1	1	1	5	23	19
BE56	1050-1059	Homicide	25	20	4	1	1	1	1	1	6	11	7
BE57	1060-1069	Police intervention, execution and operations of war	18	11	4	3	3	1	1	1	3	8	6
BE58	1070-1079	ALL CAUSES	1	1	1	1	1	1	1	1	1	1	1
BE59	1080-1089	ALL CAUSES	3293	1731	1428	130	104	190	20	25	58	308	1314
BE60	1090-1099	ALL CAUSES	3293	1731	1428	130	104	190	20	25	58	308	1314

July 1, 1949, Estimated Population, 298,000. Total Resident Deaths, 3,393. Rate per 1,000 Population, 11.4.



B31	490-493	Pneumonia	9	4	6	1	1	2	1	1	2	2	4
B32	500-502	Bronchitis	1	1	1	1	1	1	1	1	1	1	1
		Residual (470-475, 510-527)	1	1	1	1	1	1	1	1	1	1	1
B33	530-537	Diseases of the digestive system	31	18	18	1	1	2	2	2	2	2	4
B34	540, 541	Ulcer of stomach and duodenum	7	5	2	1	1	1	1	1	1	1	2
B35	550-553	Appendicitis	3	2	1	1	1	1	1	1	1	1	2
B36	560, 561, 570	Intestinal obstruction and hernia	6	2	4	1	1	1	1	1	1	1	2
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	3	3	1	1	1	1	1	1	1	2
B37	581	Cirrhosis of liver	5	5	2	1	1	1	1	1	1	1	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	1	6	1	1	1	1	1	1	1	1
B38	590-637	Diseases of the genito-urinary system	15	10	6	1	1	1	1	1	1	1	1
B38	590-594	Nephritis and nephrosis	13	8	5	1	1	1	1	1	1	1	1
B39	610	Hypertrophias of prostate	1	1	1	1	1	1	1	1	1	1	1
B40	640-680	Residual (600-609, 611-617, 620-626, 630-637)	1	1	1	1	1	1	1	1	1	1	1
		Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1
		Diseases of the skin and cellular tissue	1	1	1	1	1	1	1	1	1	1	1
B41	700-749	Diseases of the bones and organs of movement	4	4	4	1	1	1	1	1	1	1	1
		Congenital malformations	4	4	4	1	1	1	1	1	1	1	1
B42	750-773	Certain diseases of early infancy	8	5	3	1	1	1	1	1	1	1	1
B42	700-762	Birth injuries, postnatal asphyxia and atelectasis	8	5	3	1	1	1	1	1	1	1	1
B43	763-768	Infections of the newborn	6	4	2	1	1	1	1	1	1	1	1
B44	769-776	Other diseases peculiar to early infancy and immaturely unqualified	2	1	1	1	1	1	1	1	1	1	1
B45	780-785	Symptoms, senility and ill-defined conditions	1	1	1	1	1	1	1	1	1	1	1
BE300-899		Accidents, poisonings and violence	33	24	9	1	1	2	8	7	13	7	1
BE310-535		Motor vehicle accidents	8	8	8	1	1	2	1	1	4	4	1
BE300-502,		All other accidents except falls	8	6	2	1	1	1	1	1	3	2	1
BE48A	BE910-935	Falls	8	5	3	1	1	1	1	1	1	1	1
BE49B	BE900-904	Suicide	8	5	3	1	1	1	1	1	1	1	1
BE49	BE970-979	Homicide	8	5	3	1	1	1	1	1	1	1	1
BE50A	BE980-983	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1
BE50B	BE984-999	ALL CAUSES	604	349	255	14	5	5	11	42	109	328	109

July 1, 1949, Estimated Population, 65,000.

Total Resident Deaths, 604.

Rate per 1,000 Population, 11.0.









B31	490-493	Pneumonia	46	16	23	4	3	3	1	7	9	23
B32	500-502	Bronchitis	5	2	1	2	2	2	1	1	1	7
B33	530-537	Residual (470-475, 510-527)	14	8	4	2	2	2	1	2	3	7
B34	540, 541	Diseases of the digestive system	84	39	33	5	9	1	5	8	31	85
B35	550-553	Ulcer of stomach and duodenum	11	8	2	7	3	1	2	2	6	3
B36	560, 561, 570	Appendicitis	3	1	2	1	1	1	1	1	3	2
B36	543, 571, 572	Gastritis, duodenitis and hernia	16	9	6	1	1	1	1	1	3	12
B37	581	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	11	2	4	3	9	2	4	2	15	8
B37	582-587	Cirrhosis of liver	25	15	10	1	1	1	2	2	15	8
B38	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	18	4	11	1	2	2	2	3	7	8
B38	590-594	Diseases of the genito-urinary system	53	25	21	3	4	2	2	4	13	30
B39	610	Nephritis and nephrosis	41	19	15	8	4	2	2	4	10	23
B40	640-689	Hypertrophies of prostate	5	5	6	1	1	1	1	1	3	4
B40	690-718	Residual (600-609, 611-617, 620-626, 630-637)	7	1	6	1	1	1	1	1	3	4
B41	720-746	Pregnancy, childbirth and the puerperium	5	1	1	1	1	1	1	1	3	4
B41	750-759	Diseases of the skin and cellular tissue	5	4	1	1	1	1	1	1	3	4
B42	760-770	Diseases of the bones and organs of movement	26	8	13	2	3	2	2	1	2	8
B42	780-793	Congenital malformations	99	38	36	6	16	8	24	1	1	3
B43	790-792	Certain diseases of early infancy	25	15	8	1	1	1	1	1	3	4
B43	793-798	Birth injuries, postnatal asphyxia and atelectasis	4	2	2	2	4	4	25	1	1	3
B44	780-770	Infections of the newborn	2	1	1	1	1	1	1	1	3	4
B44	780-770	Other diseases peculiar to early infancy and immaturely unqualified	4	2	2	2	4	4	25	1	1	3
B45	780-795	Symptoms, senility and ill-defined conditions	70	21	28	6	15	70	70	1	1	3
BE47	E300-839	Accidents, poisonings and violence	5	3	1	1	1	1	1	1	1	3
BE47	E310-835	Motor vehicle accidents	133	69	85	19	7	7	8	19	32	34
BE48A	E340-836, 837	All other accidents except falls	38	22	7	4	3	3	2	11	9	6
BE48A	E310-905	Falls	38	17	7	10	4	6	2	1	5	7
BE49	E370-979	Suicide	23	15	10	1	1	1	1	2	2	5
BE50A	E380-983	Homicide	23	14	10	1	1	1	1	1	9	11
BE50B	E384-989	Police intervention, execution and operations of war	8	1	4	3	1	1	1	1	2	4
001-999	ALL CAUSES		2296	1129	949	129	89	148	18	16	44	180
												717
												1178

July 1, 1949, Estimated Population, 229,000.

Total Resident Deaths, 2,290.

Rate per 1,000 Population, 10.2.



B81	490-493	Pneumonia	34	11	18	21	8	2	3	4	17
B82	500-502	Bronchitis	4	1	1	2	2	2	3	4	1
B83	530-537	Residual (470-475, 510-527)	8	4	2	2	2	2	2	2	1
B84	540, 541	Diseases of the digestive system	62	26	28	5	8	7	1	8	24
B85	550-553	Ulcer of stomach and duodenum	8	6	2	2	2	2	2	2	2
B86	560, 561, 570	Appendicitis	1	1	1	1	1	1	1	1	1
B87	543, 571, 572	Intestinal obstruction and hernia	0	4	4	0	0	0	0	0	0
B87	581	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	8	1	2	3	2	7	7	1	2
B88	590-637	Cirrhosis of liver	21	13	8	8	8	8	8	2	12
B88	590-594	Residual (630-639, 642, 644, 645, 673-678, 680, 682-687)	15	4	9	9	9	9	9	3	6
B89	610	Diseases of the genito-urinary system	32	16	14	1	1	1	1	2	11
B40	640-689	Nephritis and nephrosis	26	11	12	1	2	2	2	2	8
B41	690-716	Hyperplasia of prostate	8	3	3	2	2	2	2	1	14
B42	720-749	Residual (600-609, 611-617, 620-626, 630-637)	3	1	2	2	2	2	2	1	2
B43	750-759	Pregnancy, childbirth and the puerperium	2	1	1	1	1	1	1	1	1
B44	760-776	Diseases of the skin and cellular tissue	4	3	1	4	4	4	4	1	1
B45	780-796	Diseases of the bones and organs of movement	11	5	4	4	4	4	4	1	10
BE47	800-802	Congenital malformations	65	28	18	7	14	10	1	65	2
BE48A	810-865	Certain diseases of early infancy	17	11	4	1	1	1	1	17	1
BE48B	870-876	Birth injuries	3	2	2	2	2	2	2	3	2
BE49	880-883	Postnatal asphyxia and atelectasis	45	13	14	5	13	45	45	1	2
BE50A	890-893	Infections of the newborn	66	40	18	10	8	1	1	1	1
BE50B	894-899	Motor vehicle accidents	21	13	8	3	2	1	1	4	18
001-999		All other accidents except falls	16	9	2	4	1	1	1	2	3
		Symptoms, senility and ill-defined conditions	1	1	1	1	1	1	1	1	1
		Accidents, poisonings and violence	66	40	18	10	8	1	1	4	18
		Motor vehicle accidents	21	13	8	3	2	1	1	4	18
		All other accidents except falls	16	9	2	4	1	1	1	2	3
		Falls	15	9	5	1	1	1	1	2	4
		Suicide	11	9	6	1	1	1	1	2	4
		Homicide	11	9	6	1	1	1	1	2	3
		Police intervention, execution and operations of war	3	1	1	2	2	2	2	2	6
		ALL CAUSES	1437	717	589	75	56	89	12	8	473
											722

July 1, 1949, Estimated Population, 127,000. Total Resident Deaths, 1,437. Rate per 1,000 Population, 11.3.



B81	400-493	Pneumonia .....	59	20	14	4	1	8	1	3	5	10	12	.....
B82	500-502	Bronchitis .....	4	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Residual (470-475, 510-527) .....	17	11	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
B83	580-587	Diseases of the digestive system .....	87	57	27	2	1	6	1	11	37	31	6	.....
B84	540, 541	Ulcer of stomach and duodenum .....	10	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B85	550-553	Appendicitis .....	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B86	560, 561, 570	Intestinal obstruction and hernia .....	17	9	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
B86	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn .....	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B87	581	Cirrhosis of liver .....	30	21	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587) .....	23	13	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
B88	590-637	Diseases of the genito-urinary system .....	49	28	20	1	1	1	1	2	10	9	.....	.....
B89	610	Nephritis and nephrosis .....	27	12	15	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Hyperplasia of prostate .....	10	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	640-659	Residual (600-609, 611-617, 620-626, 630-637) .....	12	7	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Pregnancy, childbirth and the puerperium .....	5	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Diseases of the skin and cellular tissue .....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Diseases of the bones and organs of movement .....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	720-749	Congenital malformations .....	25	12	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Certain diseases of early infancy .....	105	59	37	.....	.....	.....	.....	.....	.....	.....	.....	.....
B42	760-776	Birth injuries, postnatal asphyxia and atelectasis .....	47	26	18	.....	.....	.....	.....	.....	.....	.....	.....	.....
B43	783-788	Infections of the newborn .....	5	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
B44	789-776	Other diseases peculiar to early infancy and immaturely unqualified .....	53	30	19	.....	.....	.....	.....	.....	.....	.....	.....	.....
B45	790-795	Symptoms, senility and ill-defined conditions .....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE47	8300-999	Accidents, poisonings and violence .....	105	106	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Motor vehicle accidents .....	41	30	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE48A	8840-895,	All other accidents except falls .....	44	30	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8910-965	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE48B	8970-904	Falls .....	38	19	16	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE49	920-979	Suicide .....	32	24	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE50A	980-983	Homicide .....	10	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
BE50B	984-999	Police intervention, execution and operations of war .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
001-999		ALL CAUSES .....	2274	1249	918	64	43	149	25	17	37	212	763	1071

July 1, 1949, Estimated Population, 262,000.

Total Resident Deaths, 2,274.

Rate per 1,000 Population, 8.7.



B31	480-483	Pneumonia	382	6	20	9	3	4	1	1	9	20	1
B32	500-502	Bronchitis	2	2	6	1	1	1	1	1	1	1	1
		Residual (470-475, 510-527)	15	8	6	4	1	1	1	1	1	1	1
B33	530-587	Diseases of the digestive system	100	53	35	4	8	4	2	1	12	89	42
B34	540, 541	Ulcer of stomach and duodenum	21	19	1	1	1	1	1	1	2	7	12
B35	550-553	Appendicitis	18	18	1	1	1	1	1	1	2	4	12
B36	560, 561, 570	Intestinal obstruction and hernia	14	5	5	1	1	1	1	1	2	7	12
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	12	12	9	3	1	1	1	1	2	4	12
B37	581	Cirrhosis of liver	12	5	4	8	1	1	1	1	1	5	6
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	24	15	8	1	1	1	1	1	2	10	6
B38	590-637	Diseases of the genito-urinary system	17	6	8	1	2	1	1	1	5	2	10
B38	590-594	Nephritis and nephrosis	40	24	10	4	2	1	1	1	3	14	23
B39	610	Hyperplasia of prostate	28	17	8	2	1	1	1	1	3	12	13
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	6	5	2	1	1	1	1	1	2	6	6
		Pregnancy, childbirth and the puerperium	3	2	2	1	1	1	1	1	2	2	4
		Diseases of the skin and cellular tissue	4	4	1	1	1	1	1	1	2	4	4
B41	720-749	Diseases of the bones and organs of movement	3	2	1	1	1	1	1	1	2	4	4
		Congenital malformations	29	14	11	2	2	2	1	3	4	2	2
B42	700-776	Certain diseases of early infancy	83	42	27	10	4	2	1	1	8	2	2
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	31	14	9	7	1	1	1	1	3	1	1
B44	763-768	Infections of the newborn	4	2	2	2	1	1	1	1	1	1	1
		Other diseases peculiar to early infancy and immaturely unqualified	48	26	16	8	9	4	1	1	1	10	1
B45	780-795	Symptoms, senility and ill-defined conditions	12	6	4	6	2	1	1	1	1	1	1
BE47	E800-999	Accidents, poisonings and violence	150	92	44	18	4	3	10	16	21	61	52
		Motor vehicle accidents	42	25	10	5	2	1	6	10	4	13	8
BE48A	E840-885	All other accidents except falls	46	26	7	11	2	5	2	4	8	11	12
BE48B	E900-904	Falls	32	12	10	1	1	1	1	1	1	6	26
BE49	E970-979	Suicide	33	27	6	2	1	1	1	1	2	6	1
BE50A	E980-983	Homicide	5	1	2	1	1	1	1	1	2	3	6
BE50B	E984-999	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1	1	1	1
001-999	ALL CAUSES		2383	1186	934	150	118	122	15	23	37	137	679

July 1, 1949, Estimated Population, 223,000.

Total Resident Deaths, 2,383.

Rate per 1,000 Population, 10.7.









B31	490-493	Pneumonia	7	5	2	1	1	1	1	5
B32	500-502	Bronchitis	1	1	1	2	2	1	1	1
		Residual (470-475, 510-527)	4	2	1	1	3	10	10	10
B33	530-537	Diseases of the digestive system	24	18	4	1	1	2	3	3
B34	540, 541	Ulcer of stomach and duodenum	6	5	1	1	1	2	2	1
B35	560-563	Appendicitis	4	4	1	1	1	2	2	3
B36	560, 561, 570	Intestinal obstruction and hernia	5	4	1	1	1	1	1	3
B37	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	2	1	2	1	1	2	2	3
	581	Cirrhosis of liver	5	2	1	1	1	2	2	3
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	2	2	1	1	1	1	1	7
B38	590-637	Diseases of the genito-urinary system	14	6	8	2	2	5	5	7
B39	590-594	Nephritis and nephrosis	11	3	8	1	2	4	4	5
	610	Hypertasia of prostate	1	1	1	1	1	1	1	1
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	2	2	1	1	1	1	1	2
		Pregnancy, childbirth and the puerperium	2	1	1	1	1	1	1	2
B41	680-716	Diseases of the skin and cellular tissue	3	1	2	2	2	1	1	1
	720-749	Diseases of the bones and organs of movement	3	1	2	2	2	1	1	1
B42	750-759	Congenital malformations	21	16	5	2	21	5	5	5
B43	760-776	Certain diseases of early infancy	9	4	4	1	5	4	4	4
B44	760-762	Birth injuries, postnatal asphyxia and atelectasis	5	2	1	1	3	3	3	3
	763-768	Infections of the newborn	3	2	1	1	3	2	2	2
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	13	10	2	1	13	4	4	4
B45	780-795	Symptoms, semility and ill-defined conditions	5	3	2	2	2	4	4	4
BE47	E800-899	Accidents, poisonings and violence	46	33	11	2	4	10	14	11
	E810-835	Motor vehicle accidents	19	15	4	1	3	7	4	3
BE48A	E840-885	All other accidents except falls	12	9	3	2	2	1	2	2
BE48B	E900-904	Falls	7	4	3	1	1	3	3	4
BE49	E970-979	Suicide	7	5	1	1	1	4	4	2
BE50A	E980-983	Homicide	1	1	1	1	1	1	1	1
BE50B	E984-999	Police intervention, execution and operations of war	1	1	1	1	1	1	1	1
	001-999	ALL CAUSES	669	384	263	7	30	45	187	392

Rate per 1,000 Population, 11.9.

Total Resident Deaths, 669.

July 1, 1949, Estimated Population, 56,000.



B31	490-493	Pneumonia	48	29	17	2	4	1	1	1	4	16	22
B32	500-502	Bronchitis	7	10	3	.....	.....	.....	.....	.....	.....	.....	.....
		Residual (470-475, 510-527)	14	4	4	.....	.....	.....	.....	.....	.....	.....	.....
B33	580-587	Diseases of the digestive system	127	74	44	4	6	.....	.....	.....	.....	44	59
B34	540, 541	Ulcer of stomach and duodenum	15	15	.....	.....	.....	.....	.....	.....	.....	7	6
B35	560-563	Appendicitis	7	6	1	.....	.....	.....	.....	.....	.....	.....	.....
B36	560, 561, 570	Intestinal obstruction and hernia	22	9	12	1	2	.....	.....	.....	.....	5	14
	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	10	3	4	.....	.....	.....	.....	.....	.....	.....	.....
B37	581	Cirrhosis of liver	43	25	15	2	4	.....	.....	.....	.....	.....	.....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	30	16	12	.....	.....	.....	.....	.....	.....	.....	.....
B38	580-637	Diseases of the genito-urinary system	65	40	21	1	.....	.....	.....	.....	.....	.....	.....
B39	590-594	Nephritis and nephrosis	40	22	15	1	.....	.....	.....	.....	.....	.....	.....
	610	Hyperplasia of prostate	13	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
B40	640-639	Residual (600-609, 611-617, 620-626, 630-637)	12	5	6	.....	.....	.....	.....	.....	.....	.....	.....
		Pregnancy, childbirth and the puerperium	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Diseases of the skin and cellular tissue	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B41	720-749	Diseases of the bones and organs of movement	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	750-759	Congenital malformations	40	17	19	2	.....	.....	.....	.....	.....	.....	.....
	760-776	Certain diseases of early infancy	39	42	46	7	4	.....	.....	.....	.....	.....	.....
B42	780-782	Birth injuries, postnatal asphyxia and atelectasis	29	15	12	2	29	.....	.....	.....	.....	.....	.....
B43	763-768	Infections of the newborn	5	.....	4	1	.....	.....	.....	.....	.....	.....	.....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	65	27	30	6	65	.....	.....	.....	.....	.....	.....
B45	780-785	Symptoms, senility and ill-defined conditions	9	4	5	.....	.....	.....	.....	.....	.....	.....	.....
BEA7	E800-999	Accidents, poisonings and violence	187	116	62	7	3	.....	.....	.....	.....	.....	.....
	E810-835	Motor vehicle accidents	37	27	8	2	.....	.....	.....	.....	.....	.....	.....
BE4SA	E840-802	All other accidents except falls	23	18	6	4	.....	.....	.....	.....	.....	.....	.....
BE4SB	E910-965	Falls	48	25	23	.....	.....	.....	.....	.....	.....	.....	.....
BE49	E970-979	Suicide	68	42	24	1	.....	.....	.....	.....	.....	.....	.....
BE50A	E980-983	Homicide	5	4	1	.....	.....	.....	.....	.....	.....	.....	.....
BE50B	E984-989	Police intervention, execution and operations of war	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	001-999	ALL CAUSES	3191	1681	1985	79	46	157	23	15	48	235	1081
													1682

Rate per 1,000 Population, 9.5.

Total Resident Deaths, 3,191.

July 1, 1949, Estimated Population, 335,000.









B31	490-498	Pneumonia	7	2	4	1	1	2	1	1	1	1	2
B32	500-503	Bronchitis	2	1	1	1	1	1	1	1	1	1	2
B33	530-537	Residual (470-475, 510-527)	28	14	8	2	4	8	4	4	4	11	10
B34	540, 541	Diseases of the digestive system	1	1	1	1	1	1	1	1	1	1	1
B35	550-553	Ulcer of stomach and duodenum	2	2	2	2	2	2	2	2	2	2	1
B36	560, 561, 570	Appendicitis	4	2	2	2	2	2	2	2	2	2	1
B36	560, 561, 570	Intestinal obstruction and hernia	2	2	2	2	2	2	2	2	2	2	1
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of newborn	4	2	2	2	2	2	2	2	2	2	1
B37	581	Cirrhosis of liver	10	5	3	1	1	1	1	1	1	1	2
B37	581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	2	3	1	1	1	1	1	1	1	2
B38	590-637	Diseases of the genito-urinary system	12	6	6	1	2	6	1	1	1	6	6
B38	590-594	Nephritis and nephrosis	7	4	2	1	1	1	1	1	1	3	3
B39	610	Hyperplasia of prostate	2	2	2	2	2	2	2	2	2	2	1
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	8	8	8	8	8	8	8	8	8	8	1
B40	640-689	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	1	1	1
B40	690-716	Diseases of the skin and cellular tissue	8	2	2	1	1	2	1	1	1	1	1
B41	720-749	Diseases of the bones and origins of movement	8	2	2	1	1	2	1	1	1	1	1
B41	750-759	Congenital malformations	24	9	11	3	1	24	7	1	1	24	1
B42	760-776	Certain diseases of early infancy	6	2	2	1	1	5	1	1	1	5	1
B42	780-782	Birth injuries, postnatal asphyxia and atelectasis	3	2	2	1	1	3	1	1	1	3	1
B43	793-798	Infectious of the newborn	8	3	3	1	1	5	1	1	1	5	1
B44	799-776	Other diseases peculiar to early infancy and humanity unqualified	10	7	5	3	1	16	1	1	1	16	1
B45	790-795	Syphilis, senility and ill-defined conditions	3	1	2	2	2	3	1	1	1	3	1
BB47	E800-999	Accidents, poisonings and violence	28	15	10	10	10	28	2	2	2	16	6
BB47	E810-825	Motor vehicle accidents	8	1	2	2	2	8	1	1	1	2	1
BB48A	E840-892	All other accidents except falls	5	2	2	2	2	5	1	1	1	1	2
BB48B	E910-993	Falls	4	2	2	2	2	4	1	1	1	1	2
BB49	E900-906	Suicide	13	10	3	3	3	13	2	2	2	8	1
BB49	E970-976	Homicide	1	1	1	1	1	1	1	1	1	1	2
BB50A	E980-983	Police intervention, execution and operations of war	560	285	239	20	16	560	38	7	3	40	225
BB50B	E984-989	ALL CAUSES	560	285	239	20	16	560	38	7	3	40	225
001-999			560	285	239	20	16	560	38	7	3	40	225

July 1, 1949, Estimated Population, 58,000. Total Resident Deaths, 560. Rate per 1,000 Population, 9.7.



B31	490-493	Pneumonia	22	14	8	1	2	1	8	10
B32	500-502	Bronchitis	3	1	6	1	1	1	1	6
		Residual (470-476, 510-527)	10	7	8	1	1	1	1	1
B33	530-537	Diseases of the digestive system	52	28	21	1	1	1	1	4
B34	540, 541	Ulcer of stomach and duodenum	9	0	1	1	1	1	1	4
B35	550-553	Appendicitis	1	1	1	1	1	1	1	4
B36	560, 561, 570	Intestinal obstruction and hernia	9	3	5	1	1	1	1	7
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	2	2	1	1	1	1	7
B37	581	Cirrhosis of liver	17	8	8	1	1	1	1	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	13	7	6	1	1	1	1	6
B38	590-637	Diseases of the genito-urinary system	28	18	8	2	1	1	1	13
B38	590-594	Nephritis and nephrosis	16	9	6	1	1	1	1	6
B39	610	Hyperplasia of prostate	7	2	2	1	1	1	1	6
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	5	2	2	1	1	1	1	2
		Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	2
		Diseases of the skin and cellular tissue	4	1	1	1	1	1	1	1
B41	720-749	Diseases of the bones and organs of movement	4	4	4	1	1	1	1	1
B41	750-759	Congenital malformations	17	8	7	1	1	1	1	1
B42	760-776	Certain diseases of early infancy	46	15	24	4	4	4	4	1
B43	780-782	Birth injuries, postnatal asphyxia and atelectasis	15	7	6	2	2	2	2	1
B44	793-768	Infections of the newborn	1	1	1	1	1	1	1	1
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	30	8	18	1	1	1	1	1
B45	780-795	Symptoms, senility and ill-defined conditions	2	2	2	1	1	1	1	1
BE47	E810-835	Accidents, poisonings and violence	95	57	30	7	1	1	1	1
BE48A	E840-895	Motor vehicle accidents	18	14	2	2	2	2	2	4
BE48B	E910-965	All other accidents except falls	13	9	4	1	1	1	1	1
BE49	E970-979	Falls	28	12	16	1	1	1	1	1
BE50A	E980-983	Suicide	33	19	12	1	1	1	1	1
BE50B	E984-999	Homicide	8	8	8	1	1	1	1	1
001-999		Police intervention, execution and operations of war	1905	811	718	47	81	8	7	18
		ALL CAUSES	1905	811	718	47	81	8	7	18
										118
										490
										893

July 1, 1949, Estimated Population, 139,000.

Total Resident Deaths, 1,605.

Rate per 1,000 Population, 11.5.







B31	490-493	Pneumonia	17	14	1	1	1	1	2	9
B32	500-502	Bronchitis	3	1	2	1	1	1	1	1
		Residual (470-475, 510-527)	43	28	16	5	14	22	1	1
B33	530-537	Diseases of the digestive system	5	5	5	1	2	2	1	2
B34	540, 541	Ulcer of stomach and duodenum	2	1	2	1	1	1	1	1
B35	550-553	Appendicitis	8	6	2	1	1	1	1	6
B36	560, 561, 570 543, 571, 572	Intestinal obstruction and hernia Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	5	1	1	2	2	2	2
B37	581	Cirrhosis of liver	9	4	5	1	1	6	2	2
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12	5	7	7	1	10	2	10
B38	590-637	Diseases of the genito-urinary system	21	14	7	4	1	3	17	7
B39	610	Nephritis and nephrosis	11	7	4	1	3	7	3	7
B40	640-689	Hyperplasia of prostate	3	3	3	3	3	3	3	3
		Residual (600-609, 611-617, 620-626, 630-637)	8	6	6	6	6	6	6	6
B41	690-716	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1
		Diseases of the skin and cellular tissue	11	3	7	1	1	9	1	1
B42	720-749	Diseases of the bones and organs of movement	24	18	6	6	24	8	1	8
B43	750-759	Congenital malformations	8	5	3	3	8	1	1	1
B44	760-776	Certain diseases of early infancy	1	1	1	1	1	1	1	1
B45	780-795	Birth injuries, postnatal asphyxia and atelectasis	15	13	2	2	15	6	6	6
BE47	E800-802, E810-835	Infections of the newborn Other diseases peculiar to early infancy and immaturity unqualified	8	3	3	3	8	6	6	6
BE48A	E840-895, E910-965	Symptoms, senility and ill-defined conditions	55	41	14	3	13	18	18	18
BE48B	E900-904	Accidents, poisonings and violence	14	11	3	3	5	2	3	2
BE49	E970-979	Motor vehicle accidents	15	11	4	4	1	6	1	3
BE50A	E980-983	All other accidents except falls	13	7	6	6	1	11	1	11
BE50B	E984-999	Falls	12	12	1	1	4	5	2	2
		Suicide	1	1	1	1	1	1	1	1
		Homicide	1	1	1	1	1	1	1	1
		Police intervention, execution and operations of war	823	458	345	9	64	239	448	448
		ALL CAUSES	823	458	345	9	64	239	448	448

Rate per 1,000 Population, 8.4.

Total Resident Deaths, 823.

July 1, 1949, Estimated Population, 98,000.









B81	490-493	Pneumonia .....	49	29	16	2	8	2	1	2	4	8	25
B82	500-502	Bronchitis .....	4	4	8	2	1	1	1	1	1	7	11
	580-587	Residual (470-475, 510-527) .....	22	14	8	3	3	1	2	5	13	71	47
B83	540, 541	Diseases of the digestive system .....	143	74	58	8	8	3	2	5	13	71	47
B84	550-553	Ulcer of stomach and duodenum .....	15	8	4	2	1	1	1	1	2	10	8
B85	560, 561, 570	Appendicitis .....	17	10	7	2	1	1	1	1	2	12	8
B86	543, 571, 572	Intestinal obstruction and hernia .....	15	9	5	1	1	1	1	1	2	10	8
		Gastritis, duodenitis, enteritis and colitis, except .....	10	5	4	1	1	1	1	1	5	5	8
B87	581	Diarrhea of newborn .....	10	5	4	1	1	1	1	2	5	8	2
		Cirrhosis of liver .....	48	24	19	1	2	1	1	2	5	26	15
		Residual (530-539, 542, 544, 545, 573-578, 580, .....	582-587)	40	18	19	3	2	2	1	6	15	16
B88	590-637	Diseases of the genito-urinary system .....	59	31	18	8	2	2	1	2	11	20	16
B89	590-594	Nephritis and nephrosis .....	35	15	10	8	2	1	1	2	9	20	24
B90	610	Hypertrophy of prostate .....	14	14	14	1	1	1	1	2	9	12	10
B40	640-689	Residual (600-609, 611-617, 620-628, 630-637) .....	10	2	8	1	1	1	1	1	2	5	11
	690-718	Pregnancy, childbirth and the puerperium .....	4	2	8	1	1	1	1	1	2	5	8
	720-749	Diseases of the skin and cellular tissue .....	2	1	1	1	1	1	1	1	1	1	1
B41	750-759	Diseases of the bones and organs of movement .....	10	8	2	1	1	1	1	1	2	4	4
	760-776	Congenital malformations .....	36	22	12	1	1	1	1	4	2	4	4
B42	780-789	Conjunctival diseases of early infancy .....	140	71	38	25	8	140	4	1	1	1	1
B43	700-762	Birth injuries, postnatal asphyxia and atelectasis .....	50	29	12	8	1	50	7	7	11	12	9
B44	763-768	Infectious of the newborn .....	7	2	1	4	7	7	7	7	7	7	7
	769-776	Other diseases peculiar to early infancy and immature unqualified .....	83	40	25	11	7	83	3	3	3	3	3
B45	790-795	Symptoms, senility and ill-defined conditions .....	33	13	15	6	5	33	1	1	5	6	17
BE47	E810-836	Accidents, poisonings and violence .....	211	116	69	22	4	5	5	26	49	63	53
	E800-802,	Motor vehicle accidents .....	45	30	7	6	2	2	2	11	11	12	9
BE48A	E840-895,	All other accidents except falls .....	66	33	25	7	1	5	4	6	8	16	21
	E910-905	Falls .....	43	21	19	2	1	1	1	1	5	8	29
BE49	E970-978	Suicide .....	49	31	18	7	1	1	1	5	12	23	9
RE60A	E980-983	Homicide .....	8	1	1	7	1	1	1	2	5	1	1
BE50B	E984-999	Police intervention, execution and operations of war .....	3431	1784	1455	189	108	205	32	25	56	274	1152
	001-999	ALL CAUSES .....	3431	1784	1455	189	108	205	32	25	56	274	1152

Rate per 1,000 Population, 8.7.

Total Resident Deaths, 3,431.

July 1, 1940, Estimated Population, 394,000.



B31	490-498	Pneumonia	17	13	3	1	1	2	1	2	2	10
B32	500-502	Bronchitis	2	2	3	1	1	1	1	2	2	10
		Residual (470-475, 510-527)	10	7	8	1	1	1	1	1	4	5
B33	530-537	Diseases of the digestive system	43	28	12	3	1	1	1	3	23	13
B34	540, 541	Ulcer of stomach and duodenum	6	6	2	1	1	1	1	1	5	1
B35	550-553	Appendicitis	3	2	3	1	1	1	1	1	4	1
B36	560, 561, 570	Intestinal obstruction and hernia	6	4	2	1	1	1	1	1	1	4
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	2	2	1	1	1	1	1	1	4
B37	581	Cirrhosis of liver	11	9	2	1	1	1	1	1	1	1
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12	6	5	1	1	1	1	1	6	4
B38	590-637	Diseases of the genito-urinary system	30	14	11	4	1	1	1	2	7	2
B39	590-594	Nephritis and nephrosis	18	7	6	4	1	1	1	6	12	10
B39	610	Hyperplasia of prostate	6	6	1	1	1	1	1	5	8	3
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	6	1	5	1	1	1	1	1	2	4
B40	690-718	Pregnancy, childbirth and the puerperium	1	1	1	1	1	1	1	1	2	2
B40	720-749	Diseases of the skin and cellular tissue	2	2	1	1	1	1	1	1	2	3
B41	750-759	Congenital malformations	2	2	1	1	1	1	1	1	2	3
B41	760-776	Diseases of the bones and organs of movement	12	6	4	1	1	1	1	1	1	1
B42	780-782	Certain diseases of early infancy	38	16	12	8	2	10	2	1	1	1
B43	760-782	Birth injuries, postnatal asphyxia and atelectasis	11	6	4	1	1	38	1	1	1	1
B44	763-768	Infections of the newborn	3	1	1	1	1	11	1	1	1	1
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	24	9	8	2	2	3	3	1	2	3
B45	780-795	Symptoms, senility and ill-defined conditions	7	3	4	5	2	24	2	1	1	5
BE47	E800-999	Accidents, poisonings and violence	72	42	25	5	1	3	3	5	14	80
BE47	E800-802	Motor vehicle accidents	12	11	1	1	1	8	3	14	80	17
BE48A	E840-895,	All other accidents except falls	26	13	11	2	2	2	2	4	3	8
BE48B	E900-904	Falls	19	9	4	1	1	3	3	1	4	12
BE49	E970-979	Suicide	13	9	4	1	1	1	1	1	7	10
BE50A	E880-983	Homicide	2	2	1	1	1	2	2	3	8	8
BE50B	E984-999	Police intervention, execution and operations of war	2	2	1	1	1	1	1	2	2	2
	001-999	ALL CAUSES	1147	617	460	38	32	56	11	8	16	85
												401
												570

July 1, 1949, Estimated Population, 128,000. Total Resident Deaths, 1,147. Rate per 1,000 Population, 9.0.















### State Registrar of Vital Statistics

The State Registrar has the custody of more than twelve million records of births, marriages, and deaths which date back to 1848. The records for the period 1848 to 1887 were collected by the Secretary of State and turned over to the Bureau of Vital Statistics when the health laws were revised by the Legislature during the session of 1887. The new law provided for a State Board of Health and Bureau of Vital Statistics. Prior to that year annual statistical reports, which have been published since 1879, were prepared from records not in the custody of the Bureau.

As required by law the State Registrar supervised the issuance of marriage licenses and the registration of births, marriages and deaths throughout the State and supplied to local registrars and others the forms necessary to obtain registration.

Certified copies of birth, marriage and death records were issued to individuals, interested organizations and agencies. During the fiscal year 1949-1950, 46,002 searches of the records were made and copies of certificates issued for which \$22,779.76 was received in fees. A total of 23,223 of the searches and certified copies was for purposes exempt from charge by law. Receipts were \$759.75 more than the amount collected during the preceding year. There was an increase of 4,089 or 21 per cent in the number of certificates issued without charge, which records were requested mainly for use as proof when applying for dependency allotments and in furthering other claims against the Federal Government due to service with the armed forces. During the previous year there was an increase of 4,595 certificates or 32 per cent over the number for the preceding year. Additional personnel should be provided to meet present and anticipated increases in order that it will not be necessary to curtail other important activities of the section.

During the year approximately 195,000 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 88,000 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.

A total of 1,605 original birth records was 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 30 calls on local registrars. He attended a cause of death coding class conducted by representatives of the National

Office of Vital Statistics in New York City from Nov. 14 to 17, 1949. During a three-day session, December 5 to 7, 1949, he imparted the information obtained to twenty-five local registrars and others who had indicated they intended to code deaths according to the recent revision of the rules for classifying deaths by causes. The class of instruction was conducted in the Newark City Hall through the courtesy of Harry S. Reichenstein, City Clerk and Registrar of Vital Statistics, and the Commissioners of the City of Newark.

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. A total of 2,476 veterans was 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.

Six bills for the improvement of vital statistics laws and procedures were introduced into the Legislature. Three of the bills were approved and became law. One of the new laws will save local registrars of vital statistics the necessity of making complete copies of marriage certificates when the licenses for the marriages were obtained in other municipalities. A statement of names, place and date of marriage and marriage license number only is required by the new statute.

The second of the laws applies to birth certificates for adopted children. A previous requirement that the names of the adopting parents appear in the certificate was eliminated in order that birth certificates for all children will be identical and contain only the name, sex, date and place of birth. It is possible to obtain a certificate containing parents' names upon special request. The law also extends coverage to children born in New Jersey and adopted in other countries and prescribes a fee of one dollar (\$1.00) for establishing a new certificate of birth under the name obtained by adoption. Previously the law only applied to adoption in this and other states of the United States and no fee for services was required.

A third law clarified and improved the law controlling the licensing and operation of crematoriums.

A bill pertaining to the recording in New Jersey of deaths of members of the armed forces in other states and countries and providing for issuance of copies of such records without charge became law. The Department in opposing passage claimed no need for duplicate recording with resultant expense to the State.

## DEPARTMENT OF HEALTH

Bills sponsored by the Department for improvements in the laws specifying the content of birth and death certificates; the reporting of stillbirths and the increasing of fees for searching and issuing certificates, were lost in Legislative committees or were vetoed by the Governor. An effort to obtain approval will be made at the next session of the Legislature.

## GENERAL SUMMARY

	Calendar Years			
	1920	1930	1940	1949
Births registered, coded .....	76,431	68,282	59,328	97,414
Stillbirths registered, coded .....	3,221	2,647	1,543	1,972
Marriages registered, coded .....	31,327	28,499	41,059	44,469
Deaths registered, coded .....	40,820	43,190	45,206	47,706
Remarriages registered, coded .....	.....	.....	.....	1,095
Total records received, coded and permanently filed .....	151,799	142,618	147,136	192,656

	Fiscal Years			
	1920	1930	1940	1949
Searches made and/or certified copies issued for which fees were received .....	4,664	10,523	38,431	22,779
Certified copies issued and searches made in pension and other cases for which no fees were received .....	4,232	6,938	11,300	23,223
Fees received for searches and certified copies	\$4,051	\$9,601	\$31,614	\$22,779.76

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